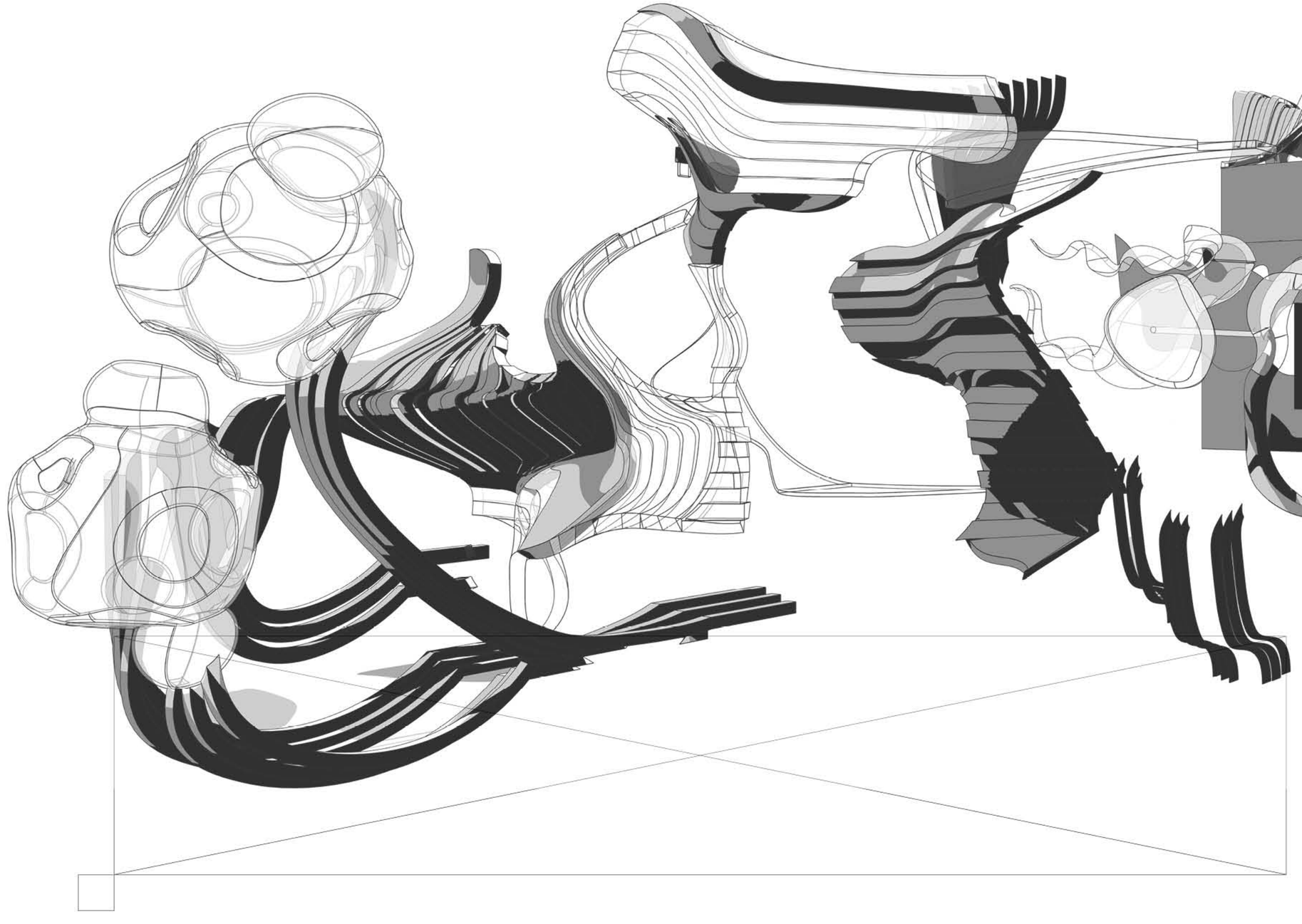
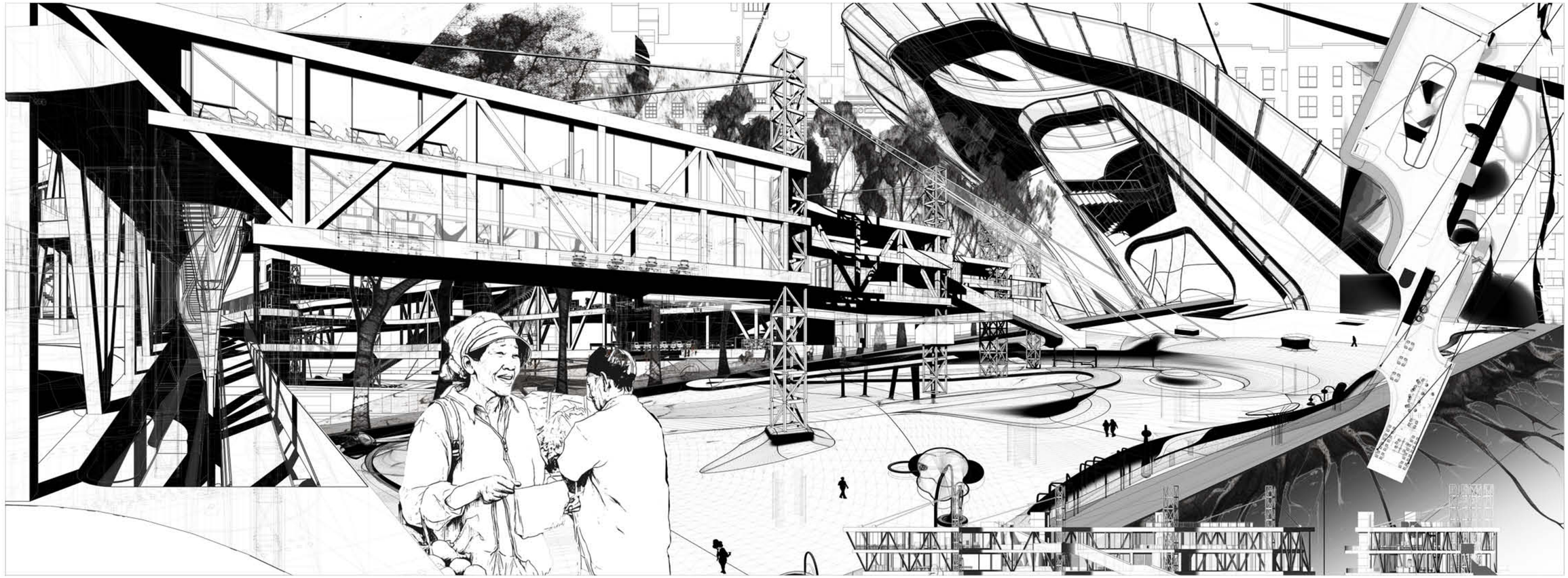
ARCHITECTURE

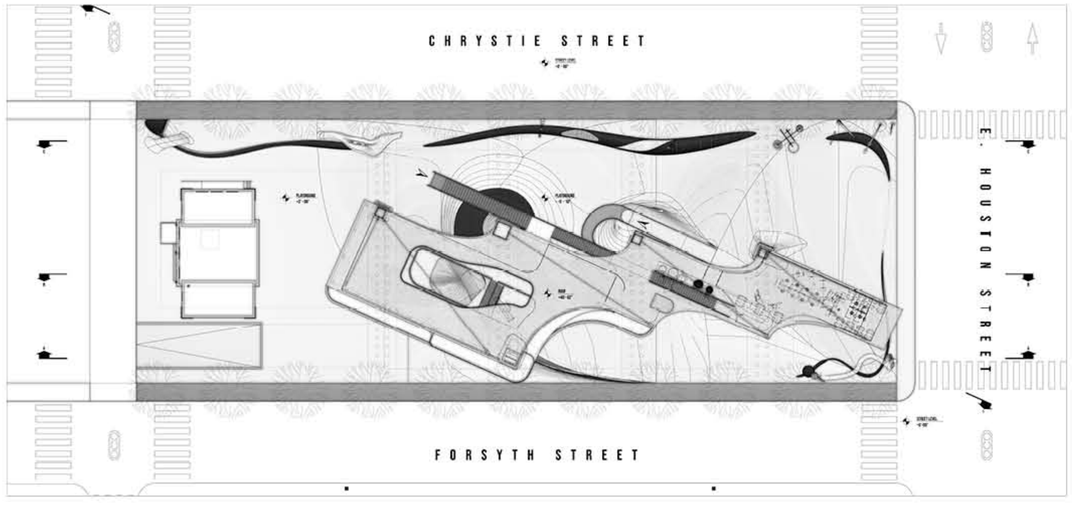


L [QIRUI] FANG
PORTFOLIO

Pratt Institute School of Architecture
B. Arch 2025

PROJECTS OVERVIEW





PARKSIDE EXCHAGE

Sara D. Roosevelt Park, East Houston, New York
Public Marketplace / Community Center / Public Park
Integrated Design 302 - Spring 2023

The Parkside Exchange is an innovative multi-purpose market and community center complex situated at the northern end of Sarah D. Roosevelt Park, nestled in the vibrant core of Lower Manhattan. Amidst the dense urban fabric of New York City, where green spaces are a rare commodity, this project emerges as a beacon of urban rejuvenation and sustainability.

The vicinity of Sarah D. Roosevelt Park, though rich in potential, currently suffers from neglect and an uptick in criminal activities, which dissuades the local populace from utilizing the park's facilities. The Parkside Exchange project is designed to breathe new life into this underutilized space by introducing a variety of programs, including a farmer's market, communal classrooms, and versatile social spaces, thereby re-establishing the area as a communal hub.

To harmonize with the existing park landscape while minimizing our ecological footprint, the entire complex is elevated using an innovative cable suspension system. This design choice not only preserves the park's existing open spaces and greenery but also allows for a creative reimagining of the landscape through thoughtful topographical adjustments. Embracing sustainability, the project utilizes green building materials, such as Cross-Laminated Timber (CLT), and integrates advanced geothermal climate control systems, setting a new standard for environmentally conscious urban development.

Strategically positioned between Chinatown and the Lower East Side, the Parkside Exchange stands at a cultural crossroads, offering a unique opportunity to foster community interaction and engagement. By serving as a dynamic platform for cultural exchange and social integration, the Parkside Exchange aims to unite diverse groups across cultural, ethnic, and economic lines, paving the way for a more inclusive and interconnected urban fabric.

S PARKSIDE EXCHANGE 302_SP2023

RENDER

TWINMOTION + PS-BETA

ヽ(°○°)/

DAY RENDER
NIGHT RENDER

During the day, the Parkside Exchange stands as a vibrant hub of community activity amidst lush greenery, while at night, its illuminated architectural design and inviting ambiance transform it into a bustling night market, creating a captivating vision of modernity and warmth within the urban landscape.

DRAWINGS PARKSIDE EXCHANGE 302_SP2023

RHINO + AI + PS

PLAN DRAWING

CHRYSTIE STREET

FORSYTH STREET

TEMPORARY MARKET SPACE

FLOOR_0

FLOOR_1

FLOOR_2

OFFICE ZONE

CLASSROOM ZONE

OUTDOOR TERRACE

COMMUNITY SPACE

MARKET STALLS

CAFETERIA

ARTIFACT 01
RECREATIONAL LAMP

ARTIFACT 02
BENCH SLIDE

ARTIFACT 03
HOOP TABLE

ARTIFACT 04
MONKEY BAR TABLE

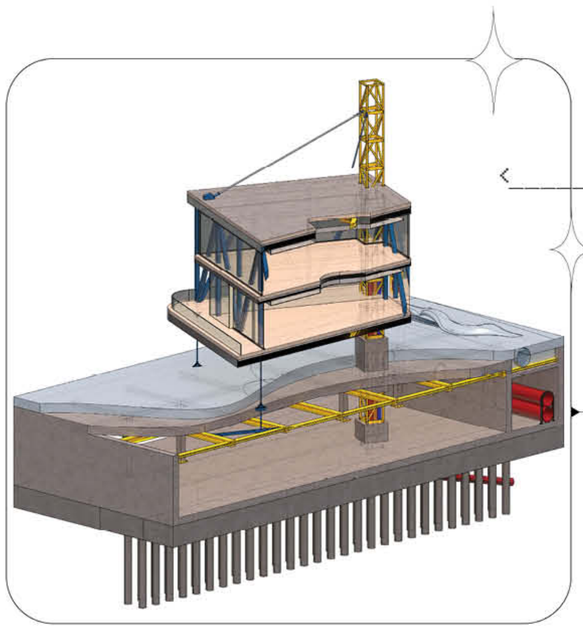
ARTIFACT 01.1
RECREATIONAL LAMP

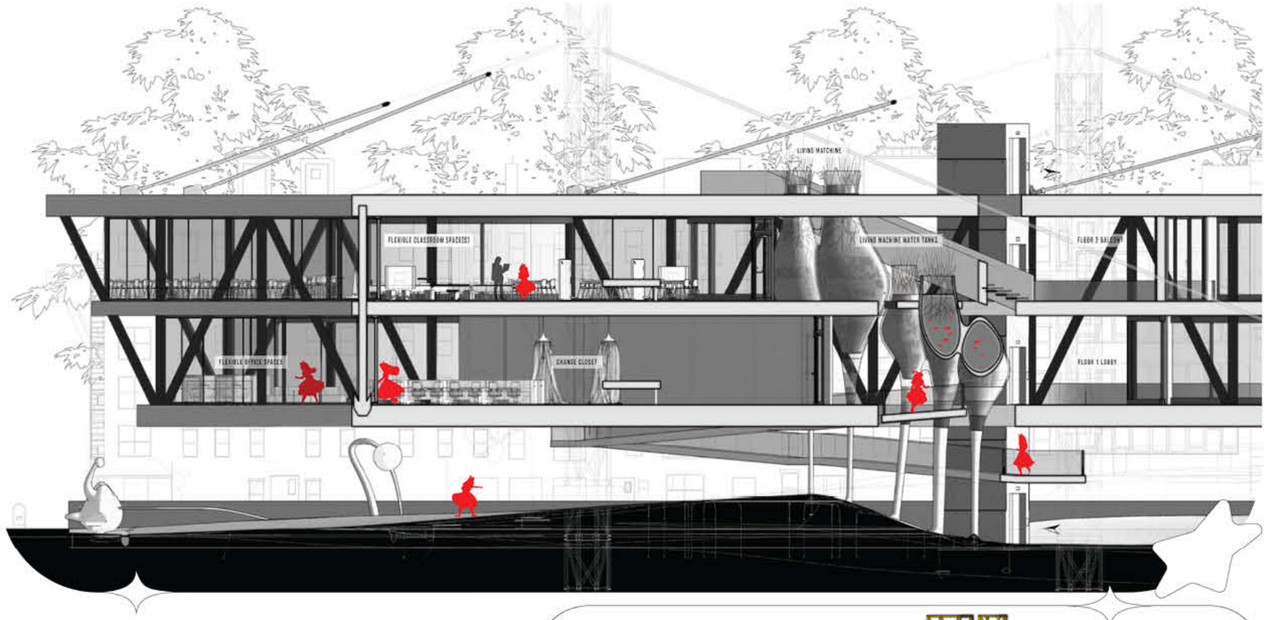
DRAWINGS PARKSIDE EXCHANGE 302_SP2023

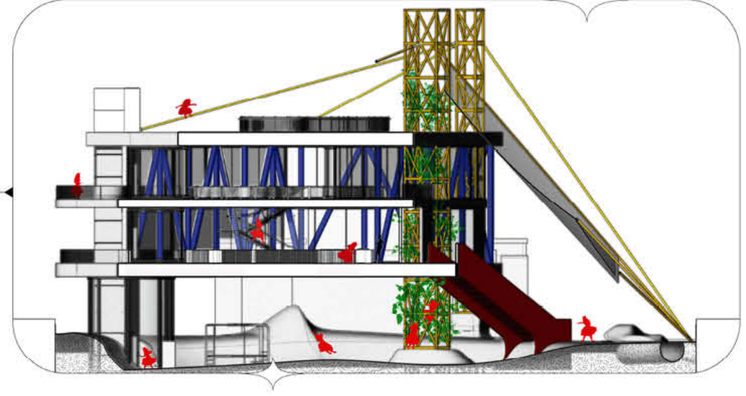
RHINO + AI + PS

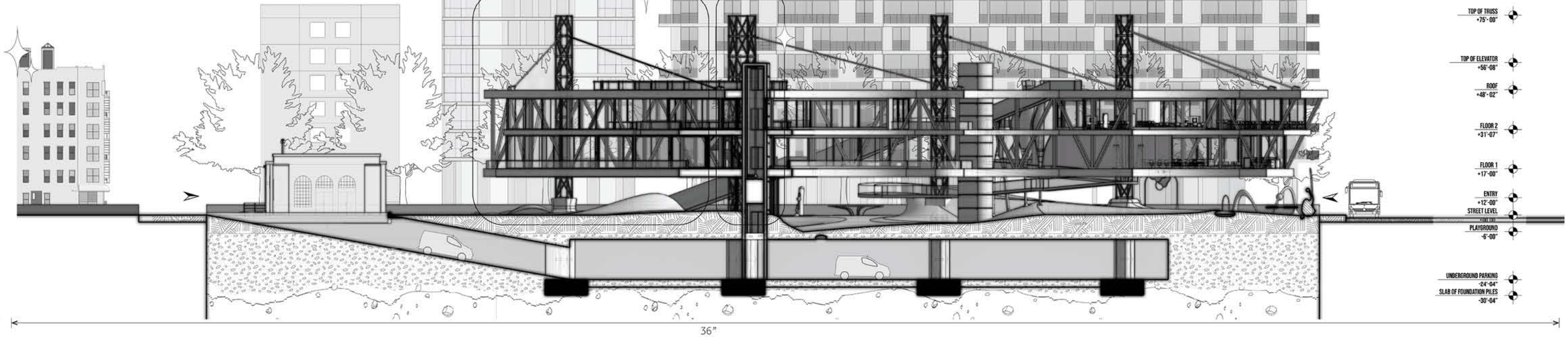
ELEVATION
SECTION DETAILS

NORTH ELEVATION
24"X36"
1/8"=1'-00"







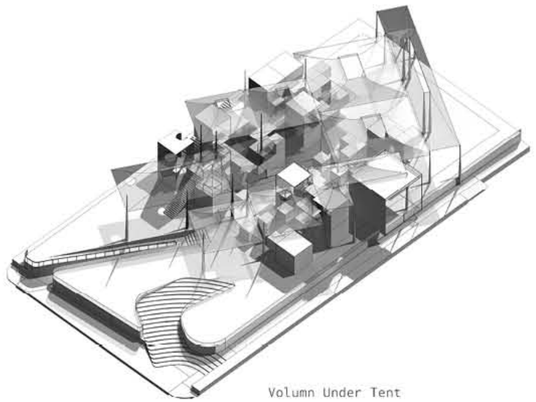


36"

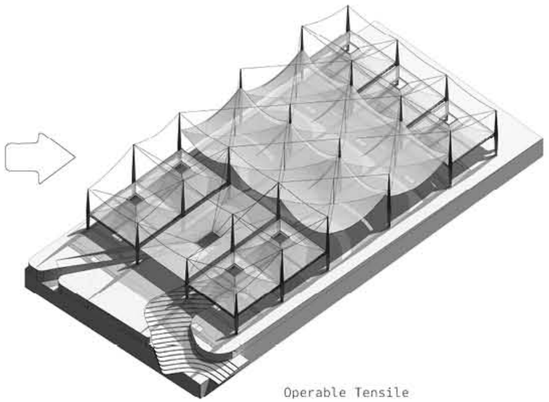
MODELS PARKSIDE EXCHANGE 302_SP2023

LASER + CNC + 3D-PRINT

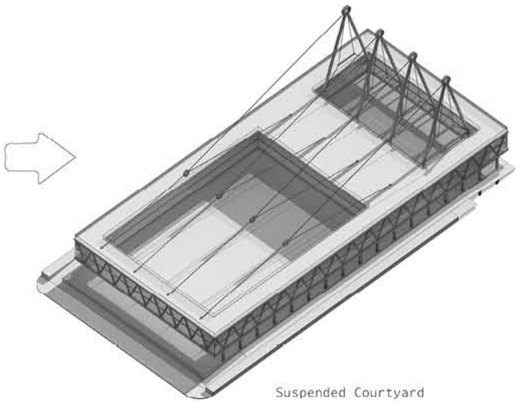
PHYSICAL MODELS



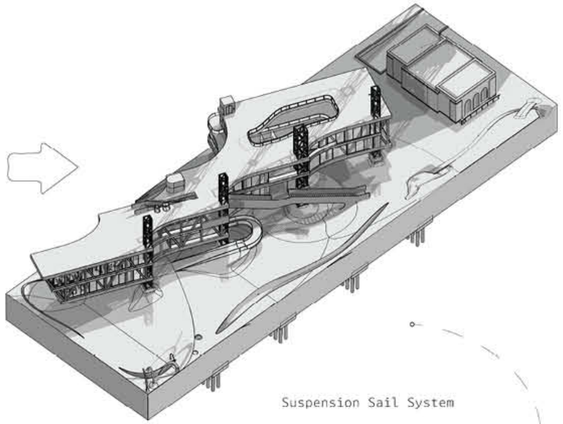
Volumn Under Tent



Operable Tensile

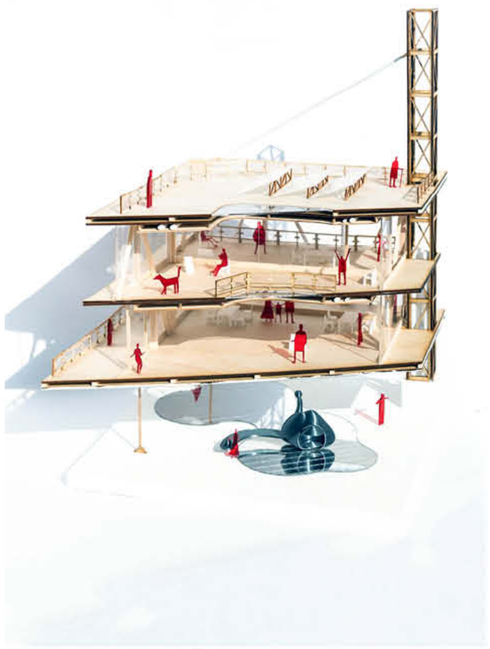


Suspended Courtyard

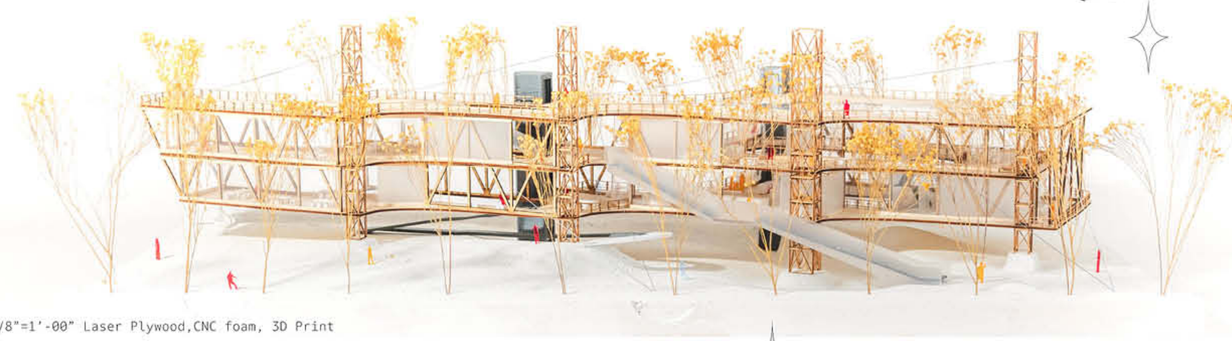


Suspension Sail System

1/8"=1'-00" Final Model



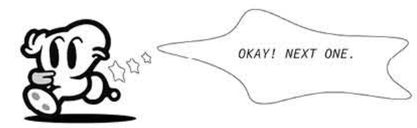
1/4"=1'-00" Final Chunk Model



1/8"=1'-00" Laser Plywood,CNC foam, 3D Print

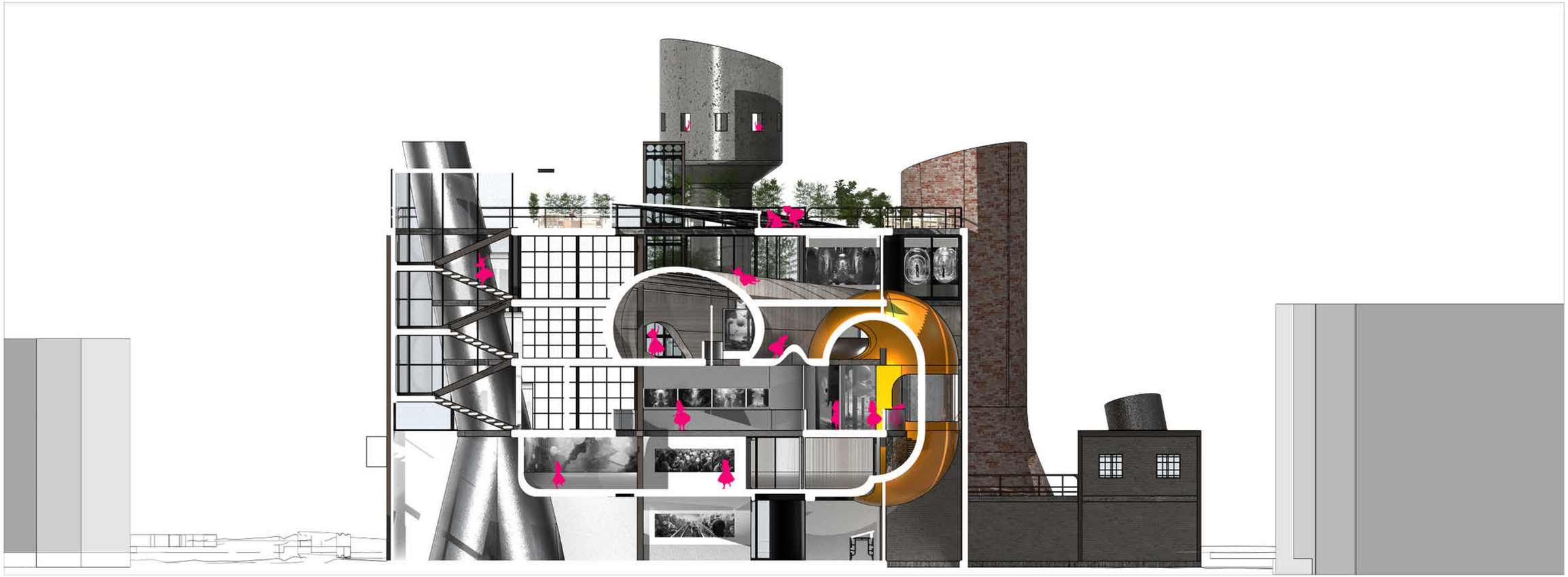
1/32"=1'-00" Iteration Basswood Model

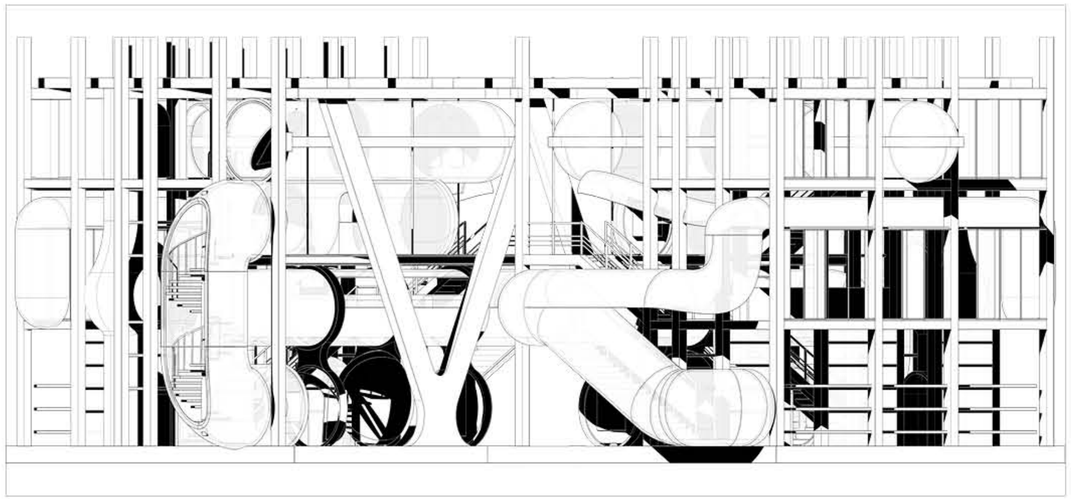
1/16"=1'-00" Chunk Iteration Broken :_(



INTRODUCTION PHOTO FACTORY 402_FA2023

RHINO + PS + AI + VRAY





PHOTOGRAPHY FACTORY MUSEUM

Bush Terminal Industrial City, Brooklyn, New York
Museum for Photography and Viewing
Advance Design 402 - Fall 2023 - Prof. Adam Elstein

The fascination with industrial typologies sparked the inception of the Museum of Photography project, exploring the visual interests captured through the lens. Both photographers and architects, such as the Beckers and Le Corbusier, have found industrial forms to be captivating spaces for creative production. Le Corbusier famously referred to silos as 'the first fruits of the New Age' in "Vers une architecture." The raw, functional beauty of industrial structures provides a unique canvas for artistic expression and appreciation.

With the advent of AI, design technology has undergone a significant shift. AI has absorbed and analyzed vast amounts of information within just 18 months of its public introduction. By leveraging AI as a vast language library, designers can swiftly curate iterations through simple commands and descriptions, shaping a methodology for both schematic and developmental design processes. This symbiotic relationship between human creativity and artificial intelligence promises to push the boundaries of design in unprecedented ways.

Just as the birth of the camera revolutionized art, one ponders the potential impact of AI on creative processes. Could AI, armed with information equivalent to humanity's collective knowledge, render cameras obsolete, relying solely on imaginative descriptions? This project explores these questions and yields a valuable design process methodology applicable to the initial phases of future projects.

Driven by personal interest and the studio's focus, the museum program became a natural fit. Placing the museum gallery within an industrial context in Brooklyn, particularly in the vibrant areas of Red Hook and Sunset Park, aligns with the community's rich creative heritage. A museum with industrial-inspired architecture provides a fitting platform for local photographers to exhibit their work, fostering a symbiotic relationship between art and the community's textile fabric. The design project was selected as an advanced studio distinguished project, which was given a platform to showcase, discuss, and receive feedback from architecture industry professionals.

NORTH SECTION
ITERATION-02
DRAWINGS

"A FINAL PRODUCT"

Image: Exterior Day View of Museum
Site: Redhook, Brooklyn, New York
Program: Photography Museum

402_FA2023

PHOTO FACTORY

“JOINTERS”

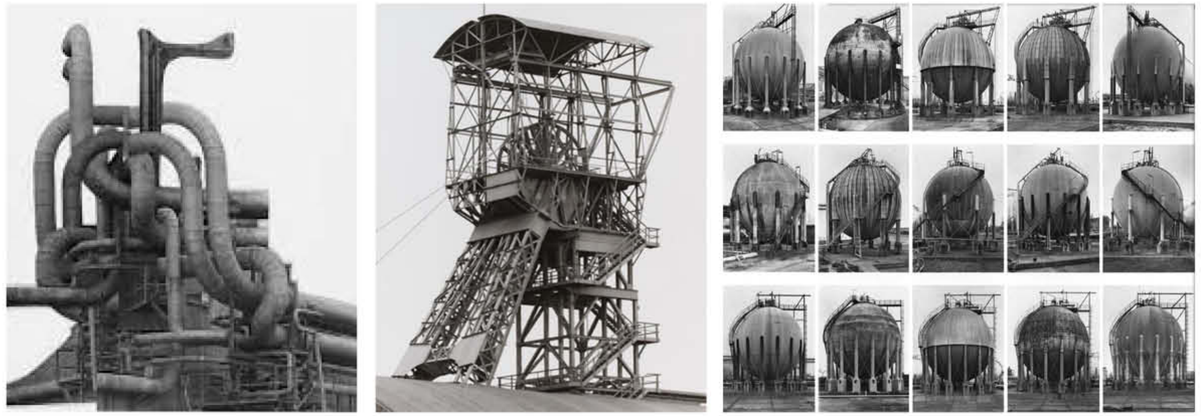
CANON R6 + LRCC + PS

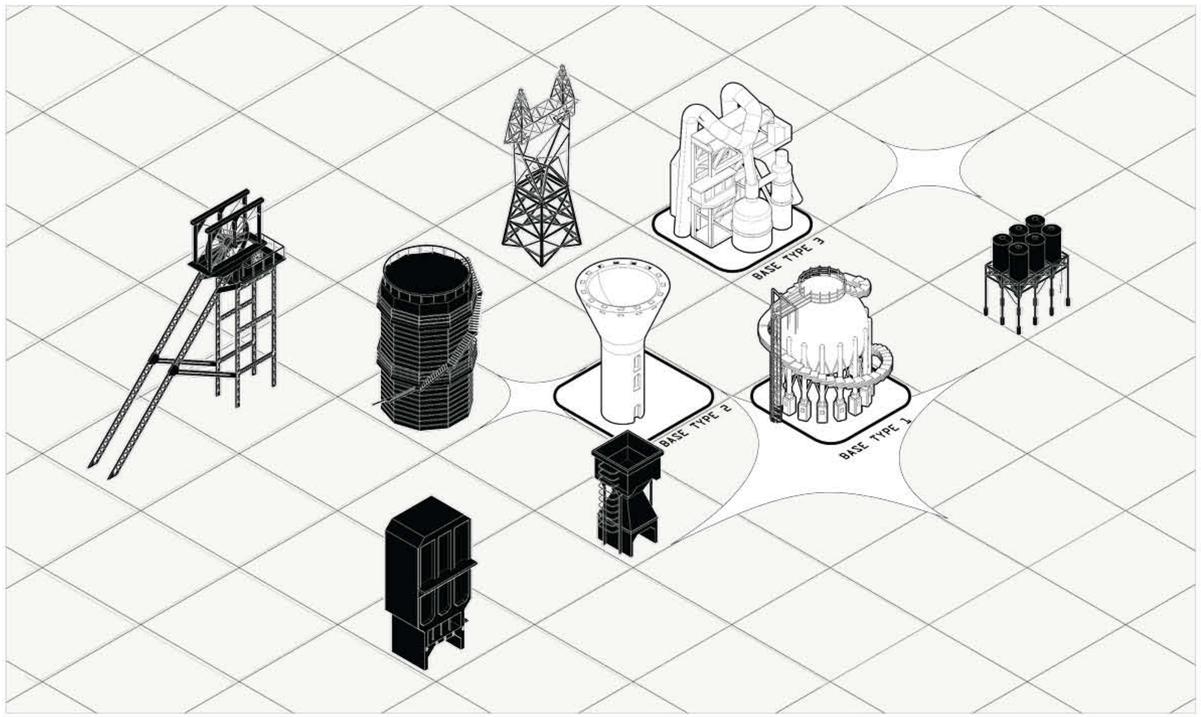
SUNSET PARK
BK-ARMY-TERMINAL
INDUSTRIAL CITY

The Museum of Photography project began with an exploration of what captures the eye through the camera lens, igniting an interest in industrial typologies. Both the eye and lens are consistently drawn to industrial scenes characterized by raw materials, vivid colors, striking geometry, and sheer scale. This visual fascination with the industrial world sparked the desire to create an exhibition space celebrating photographic works that document these captivating industrial aesthetics.

ANALYSIS OF INDUSTRIAL TYPOLOGIES

BERND & HILLA BECHER INDUSTRIAL LANDSCAPES AND COLLAGES





Type 01: Gas Tanks
Type 02: Water-towers
Type 03: Blast Furnaces

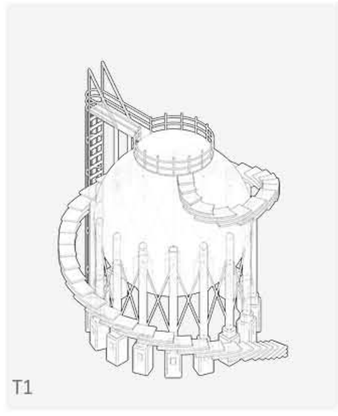
RESEARCH
PERCEIVE
ANALYSIS

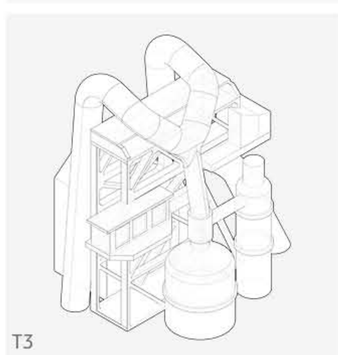
AI ANALYSIS OF INDUSTRIAL TYPOLOGIES (PART-01)

BASE MODEL IMAGE

NO HUMAN INTERFERENCE

HUMAN INTERFERENCE





Photographers are drawn to the captivating geometric beauty and the interplay of light and shadow in industrial environments. Through typology studies and the integration of AI, the design process has advanced, navigating the complexities of intellectual property by leveraging proprietary materials. This innovative approach ensures that human creativity remains at the forefront while harnessing the capabilities of AI.

AI FEEDBACK FORMATION LIBRARY (PART-02)

AI + HUMAN INTERFERENCE

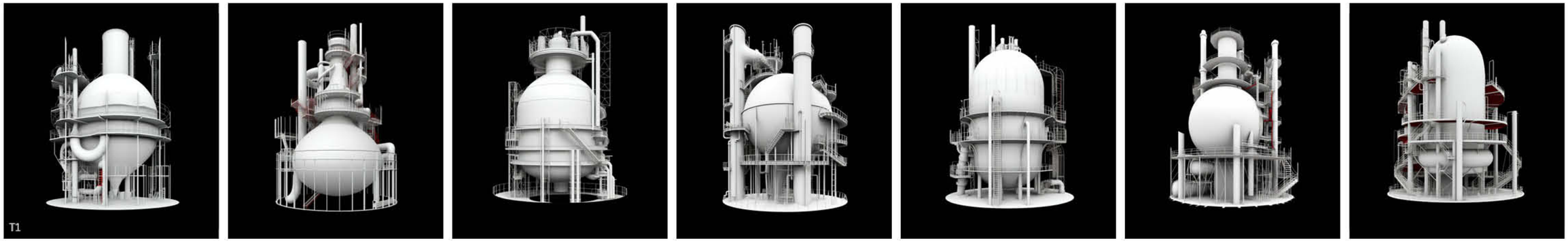
Full prompts & library avalible upon request

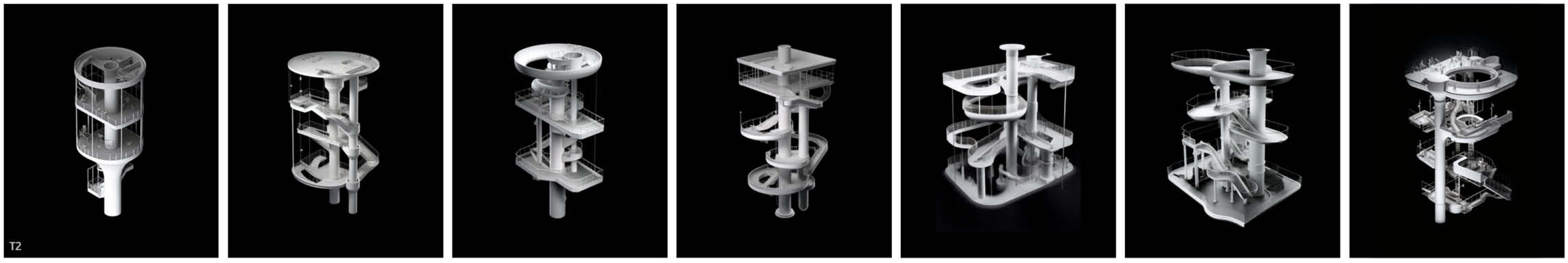
402_FA2023

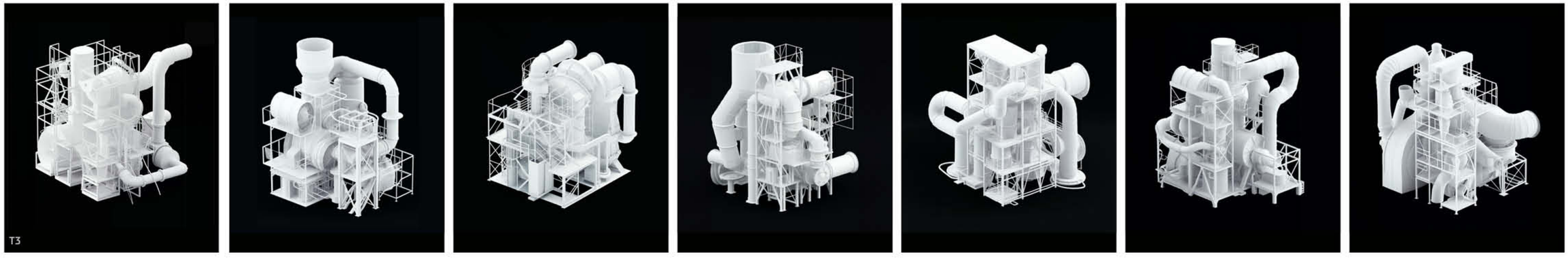
PHOTO FACTORY

TYPOLOGY LIBRARY

MID-JOURNEY





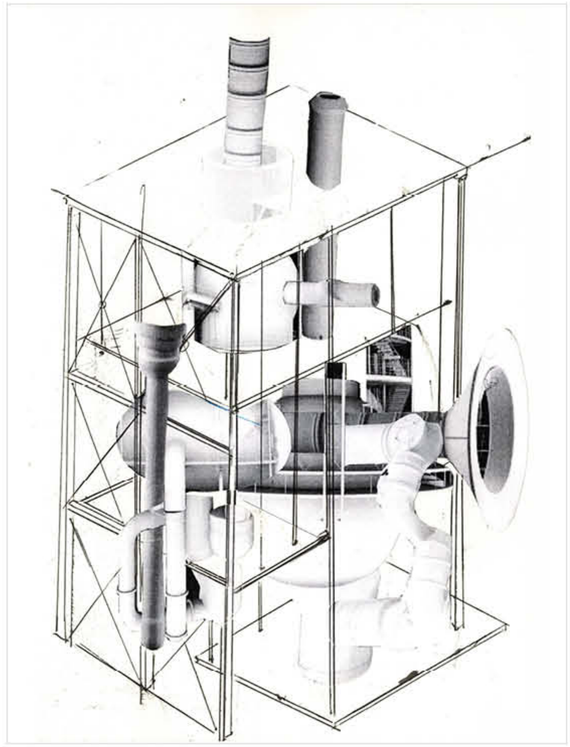


AI GENERATED
INDUSTRIAL
FORMS

No Human Interference: AI independently analyzes and describes based on a base model image, without human input.
Human Interference: AI is guided by a prompt related to design programs, with the base model image serving as a reference.
AI + Human Interference: Collaboration involves AI-generated images blended with previous ones under human prompt guidance.

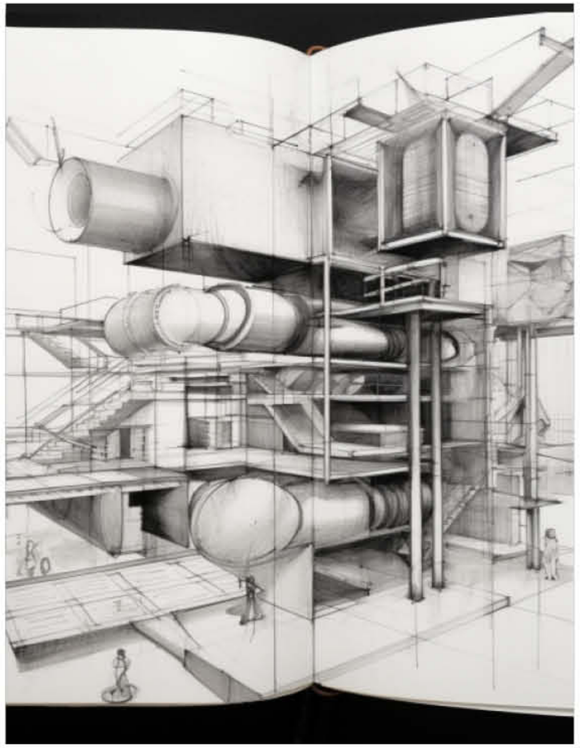
AI-MASSING DEVELOPMENT (PART-03)

BASE MODEL IMAGE:



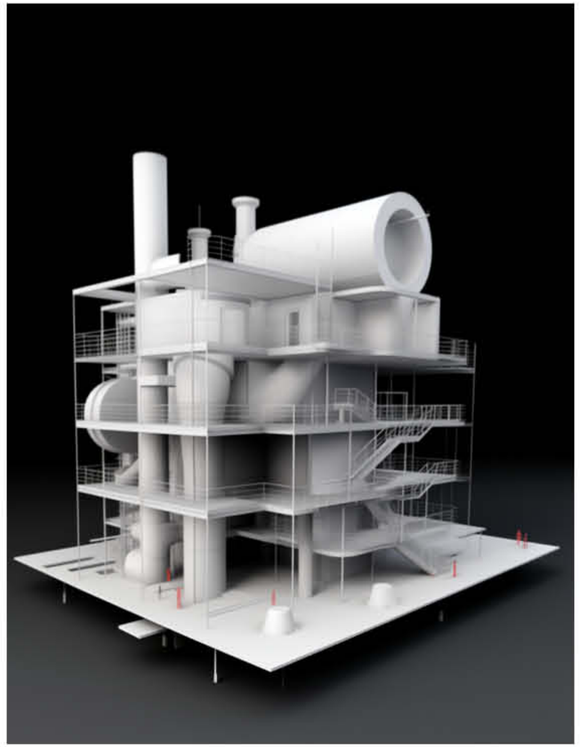
Hand-cut and glued collage from previous ai typologies

NO HUMAN INTERFERENCE



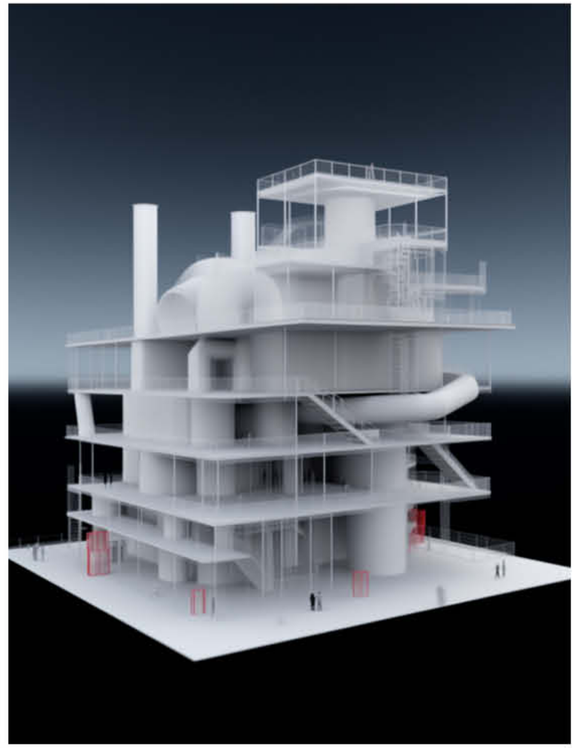
/Imagine : prompt : collage image as reference, architecture drawing, museum, pipes, volume, suspended floors, tension

HUMAN INTERFERENCE



/Blend: [image # 1: Ai Collage Redevelope], [image # 2: TYPE-X IMAGE], a museum design, architecture, pipes, volumes, suspended floors.

AI + HUMAN INTERFERENCE



/imagine : prompt : [round-2-image], architecture rendering, museum design, architecture, pipes, volumes, suspended floors.

MORE AI GENERATIONS/FORMATIONS

[Full library can be provided upon request]

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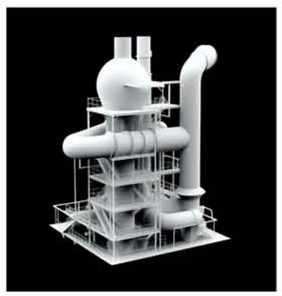
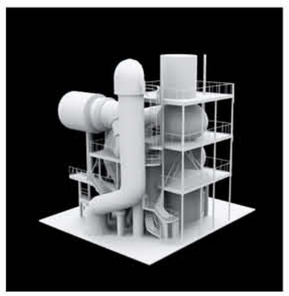
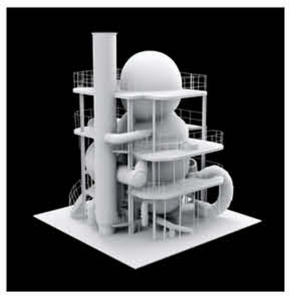
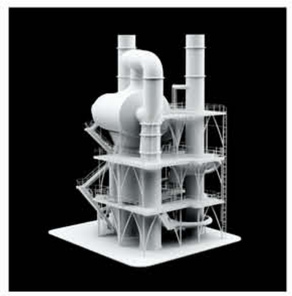
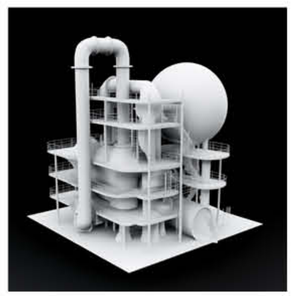
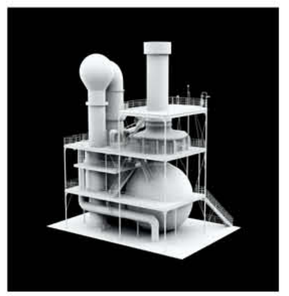
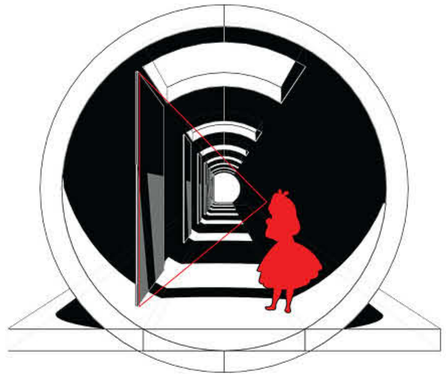
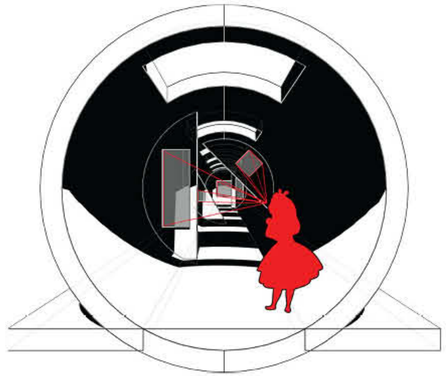
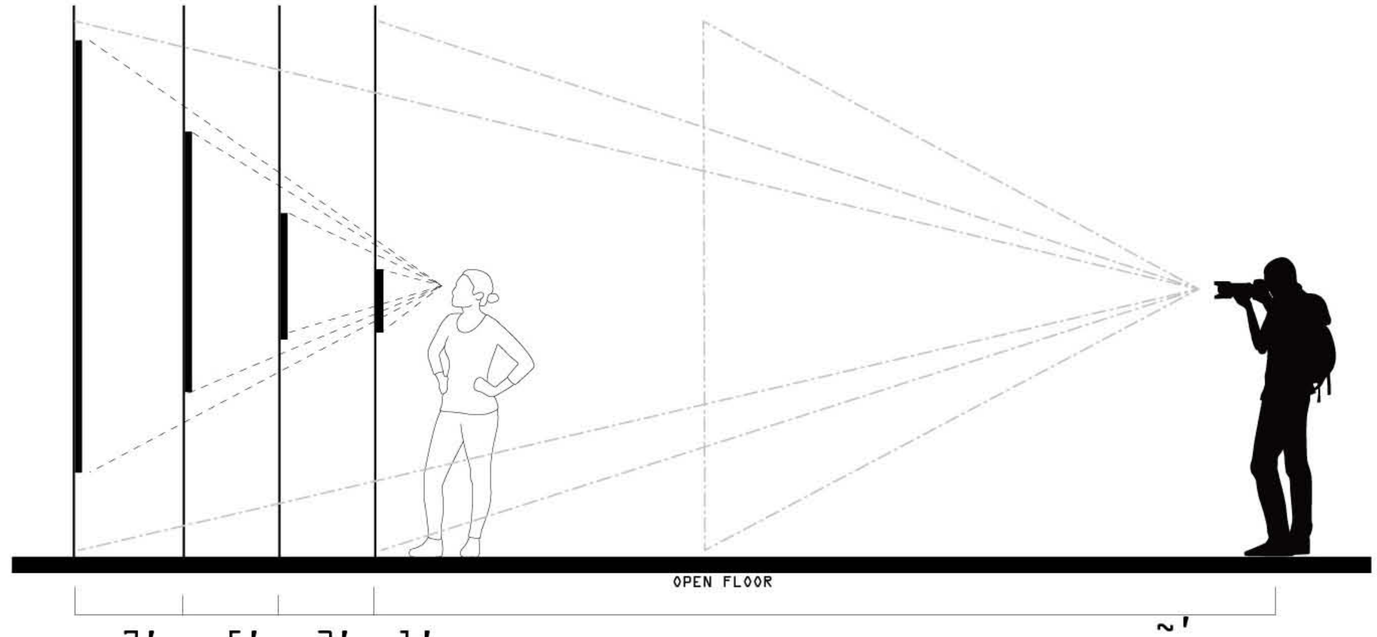







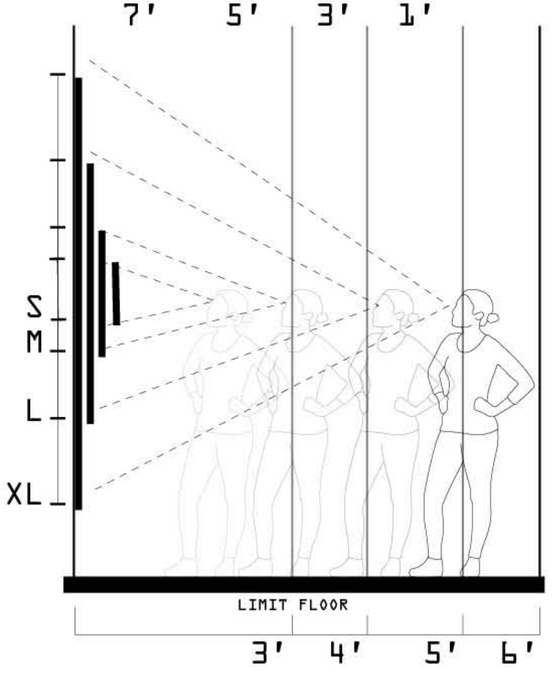
Part 01: AI analyzes and builds upon Bechers' works.
Part 02: AI generates designs from reference & base model.
Part 03: AI & Humans collaborate blend images with prompts.

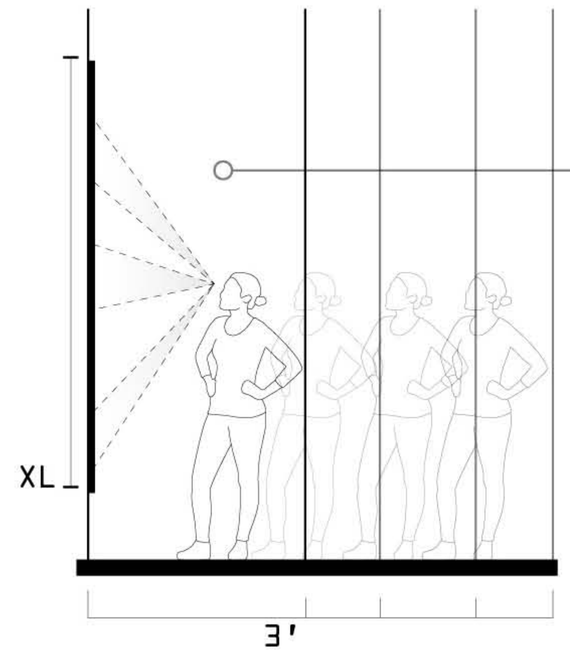
SCHEMATIC DESIGN
PROCESS
FORM MASSING









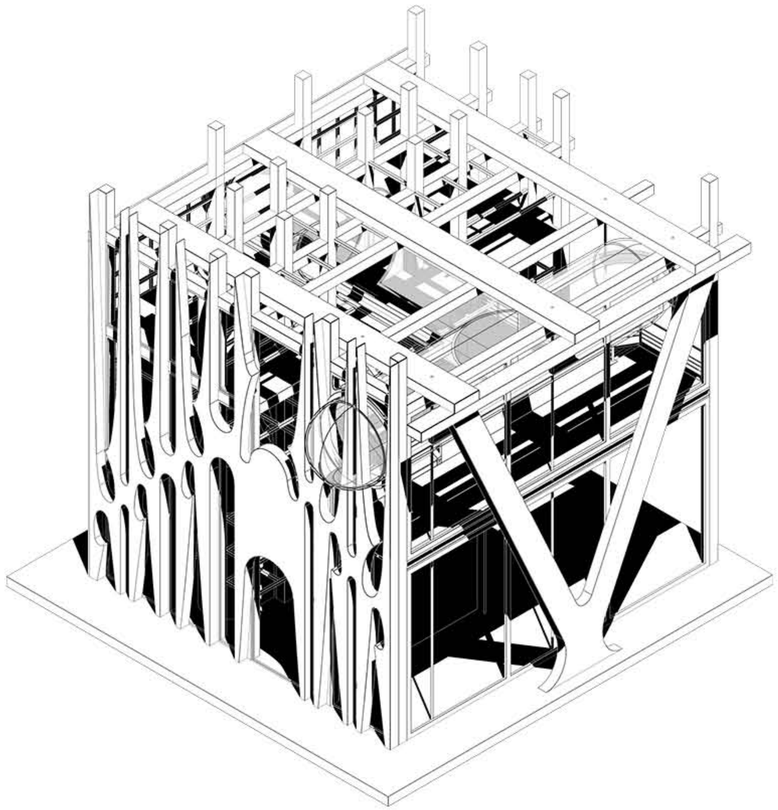


IMMERSIVE VIEWING PERSPECTIVES

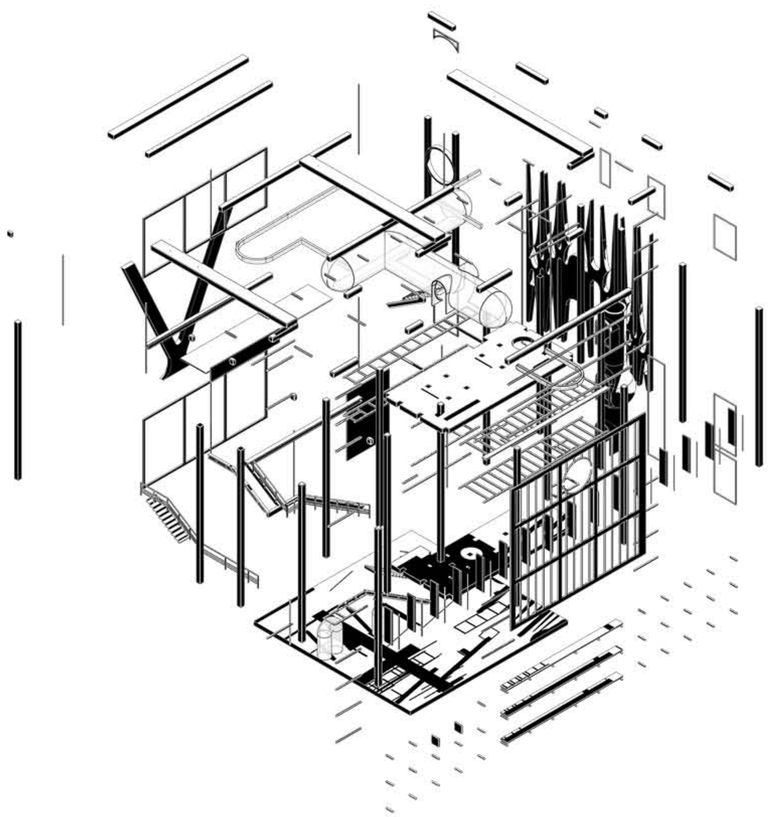
CHUNK EXPERIMENTS PHOTO FACTORY 402_FA2023

RHINO + PS + AI

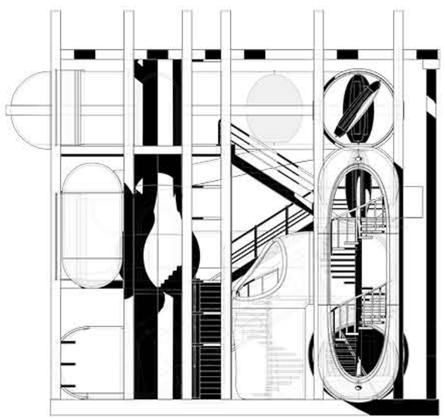
ITERATION_01 ISO

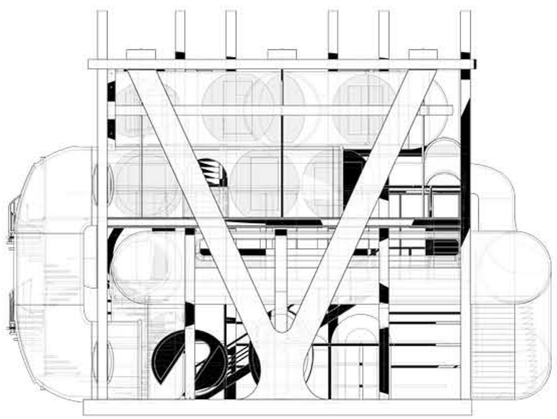


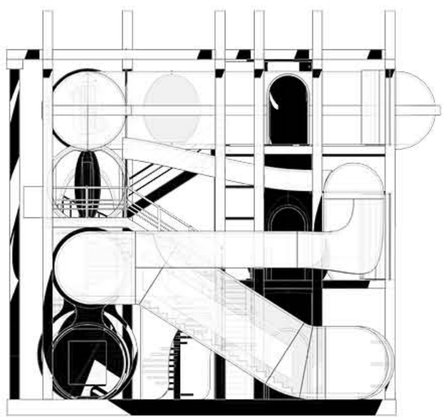
ITERATION_01
EXPLODED ISO

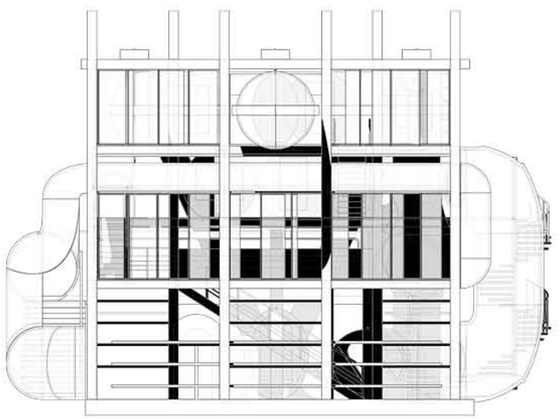


ITERATION_02 ELEVATIONS

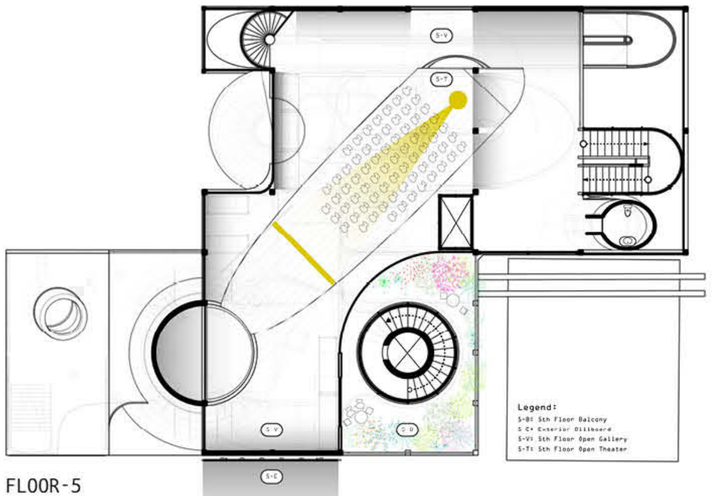




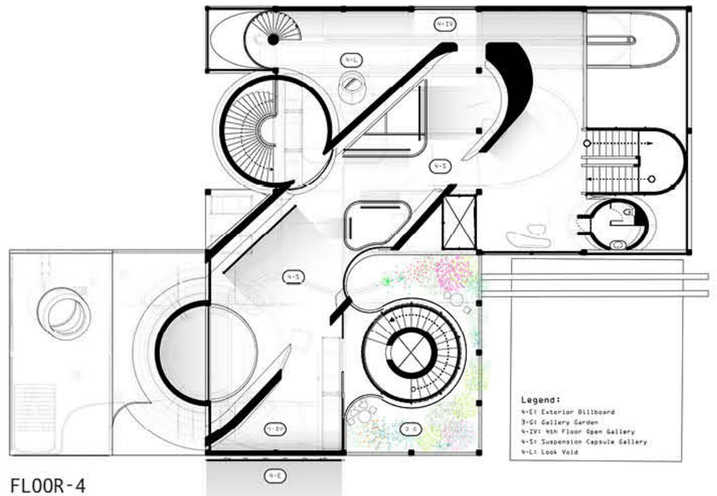




VIEWING DEVICE
CHUNK MODEL
30’X 30’X 30’



FLOOR-5



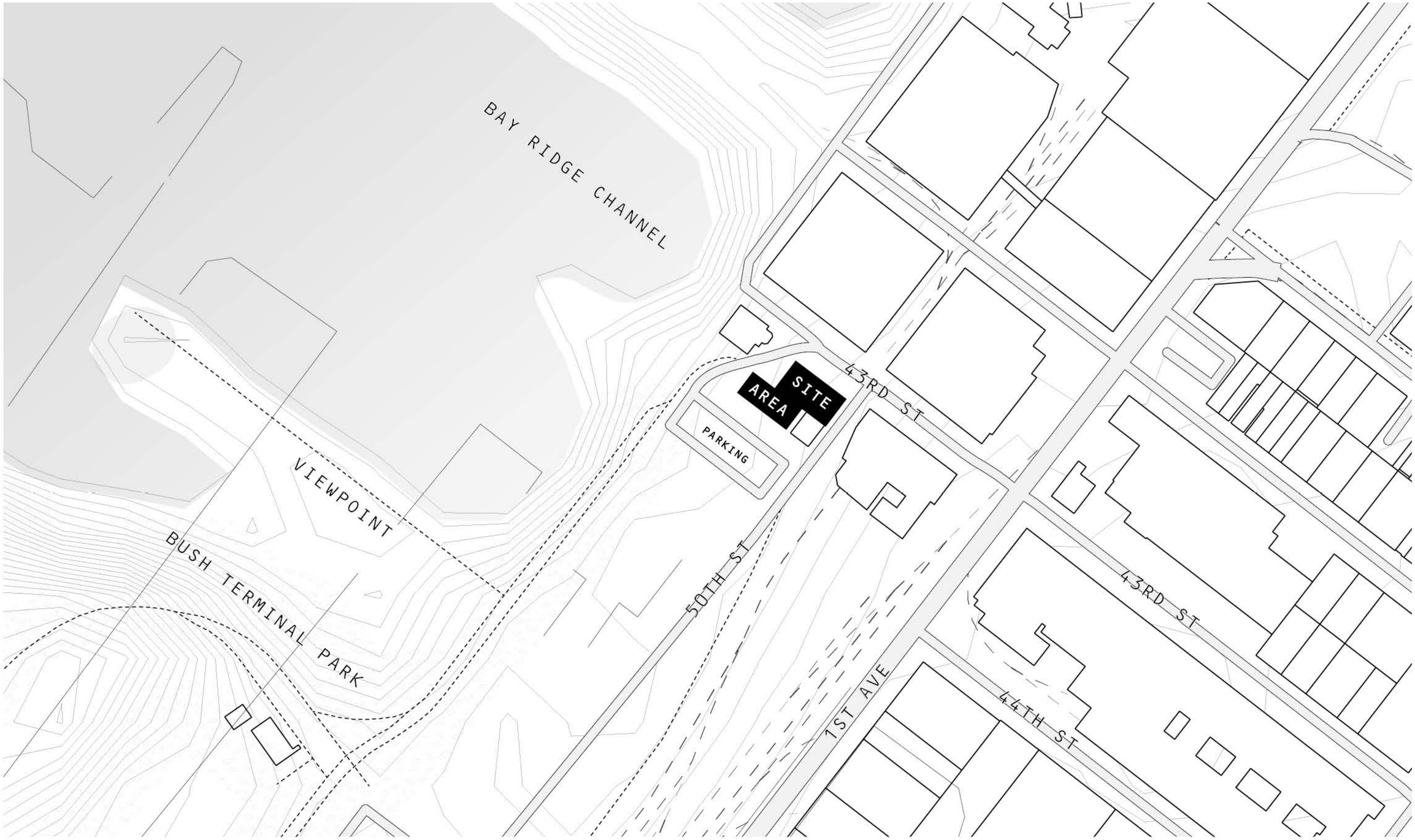
FLOOR-4

PLAN & ELEVATION
24”X36”
1/8”= 1’-00”

The final design emerged from meticulous extraction and curation, utilizing a self-collected AI library to identify forms. These forms were then merged in Rhino to sculpt the massing of the major exhibition spaces. The museum features three prominent gallery spaces, ranging from immersive to open, a café/bookstore, and accessible photography studios. These are complemented by a publicly accessible rooftop and additional amenities designed to nurture artistic expression within the community.

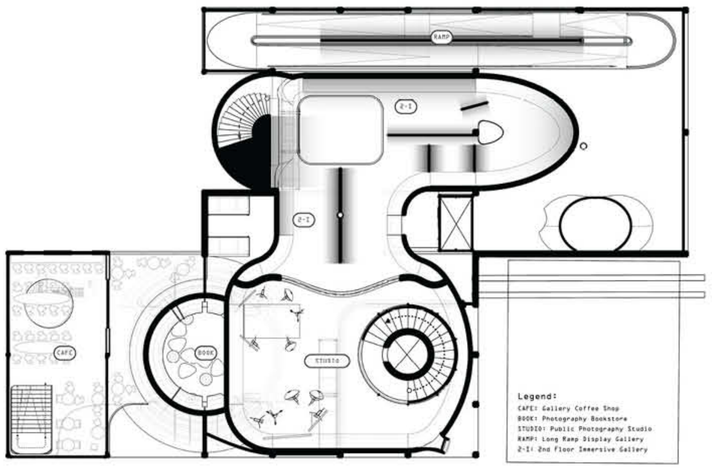
SITE PLAN PHOTO FACTORY 402_FA2023

RHINO + PS + AI

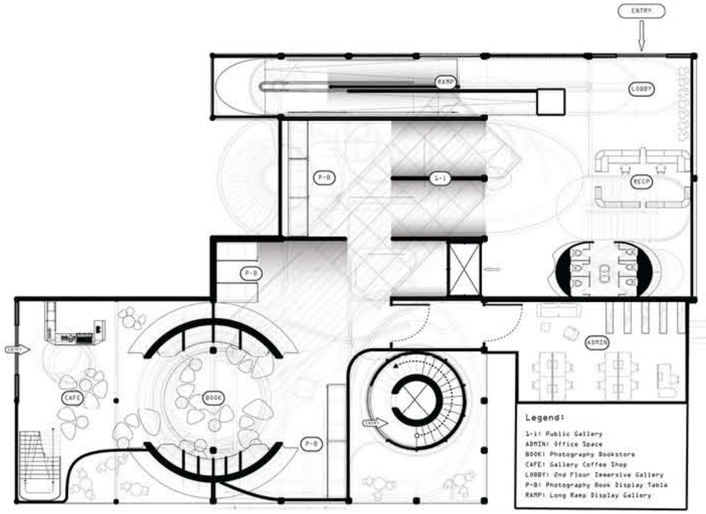


SITE MAP
11” X 17”
1/128”= 1’-00”

The site, neighboring Red Hook’s Bush Terminal Park in Brooklyn, was once a segment of the renowned Bush Terminal industrial complex. Providing serene waterfront vistas of New York Harbor, the park stands as a cherished haven for artists, creators, and locals alike. It offers not only abundant space for creative activities but also recreational amenities that enhance the urban landscape, making it a unique blend of natural beauty and community engagement.



FLOOR-2



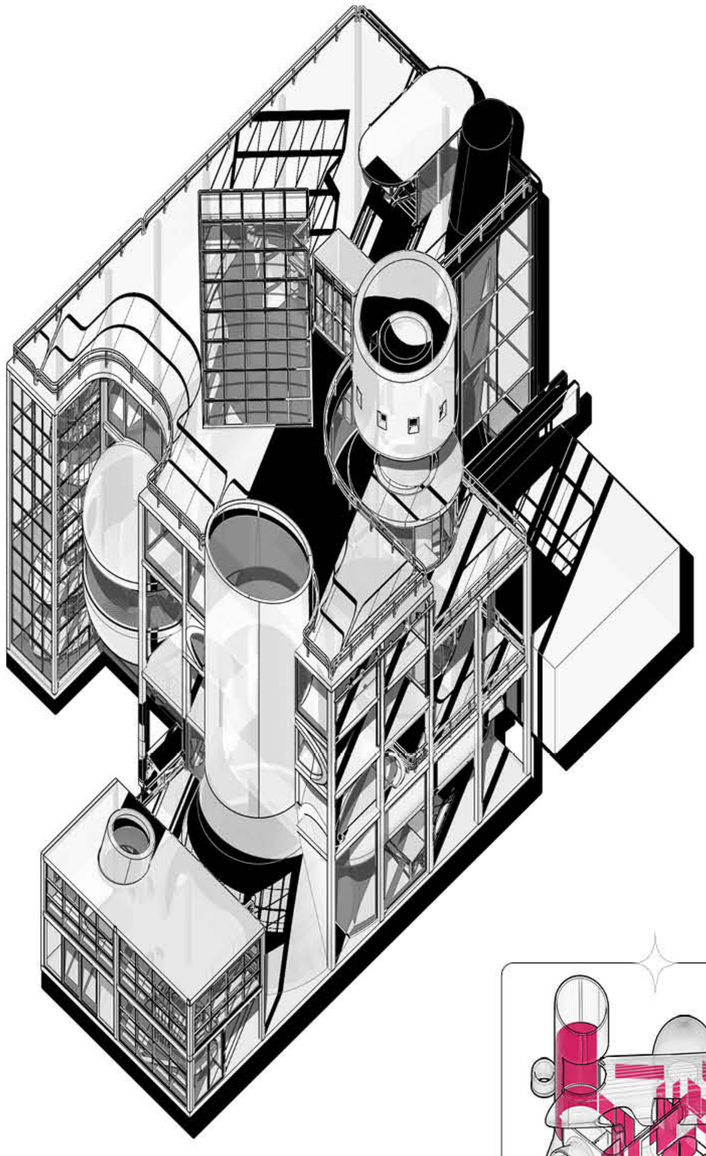
FLOOR-1

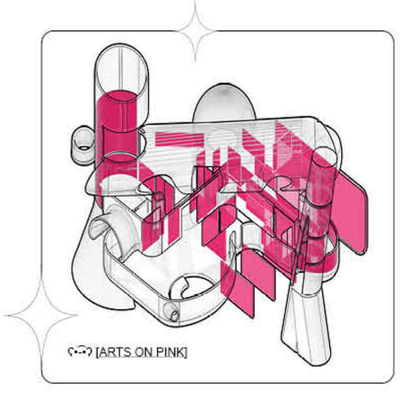
Spaces within the tubes, silos, and curved forms are meticulously crafted to provide immersive viewing experiences, strategically employing walls, floors, and voids to modulate the viewer's distance from the photography pieces. Meanwhile, the open grid plan offers more versatile viewing galleries, catering to artworks meant for specific contexts while still fostering engagement with the artistic narrative.

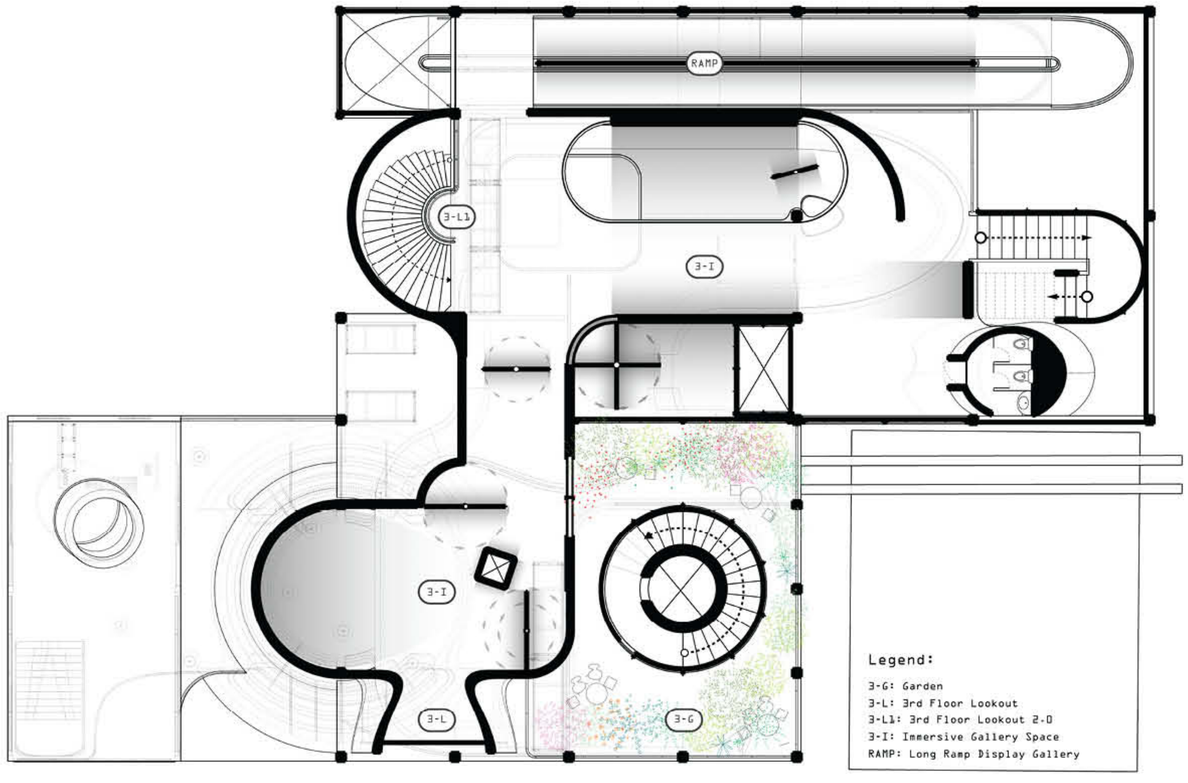
PLANS & SECTIONS
24"X36"
1/8"= 1'-00"

DRAWINGS PHOTO FACTORY 402_FA2023

RHINO + AI + PS



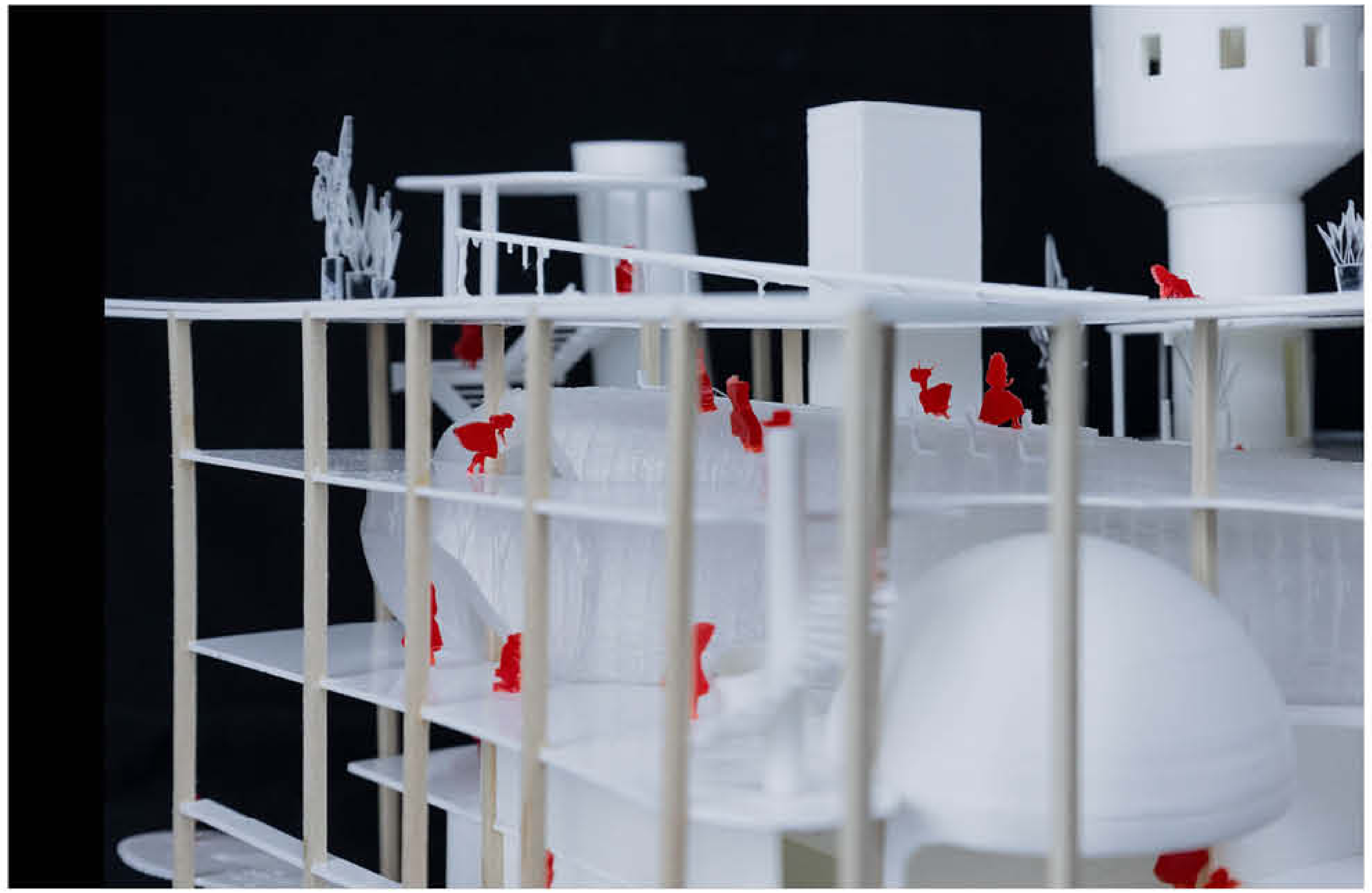




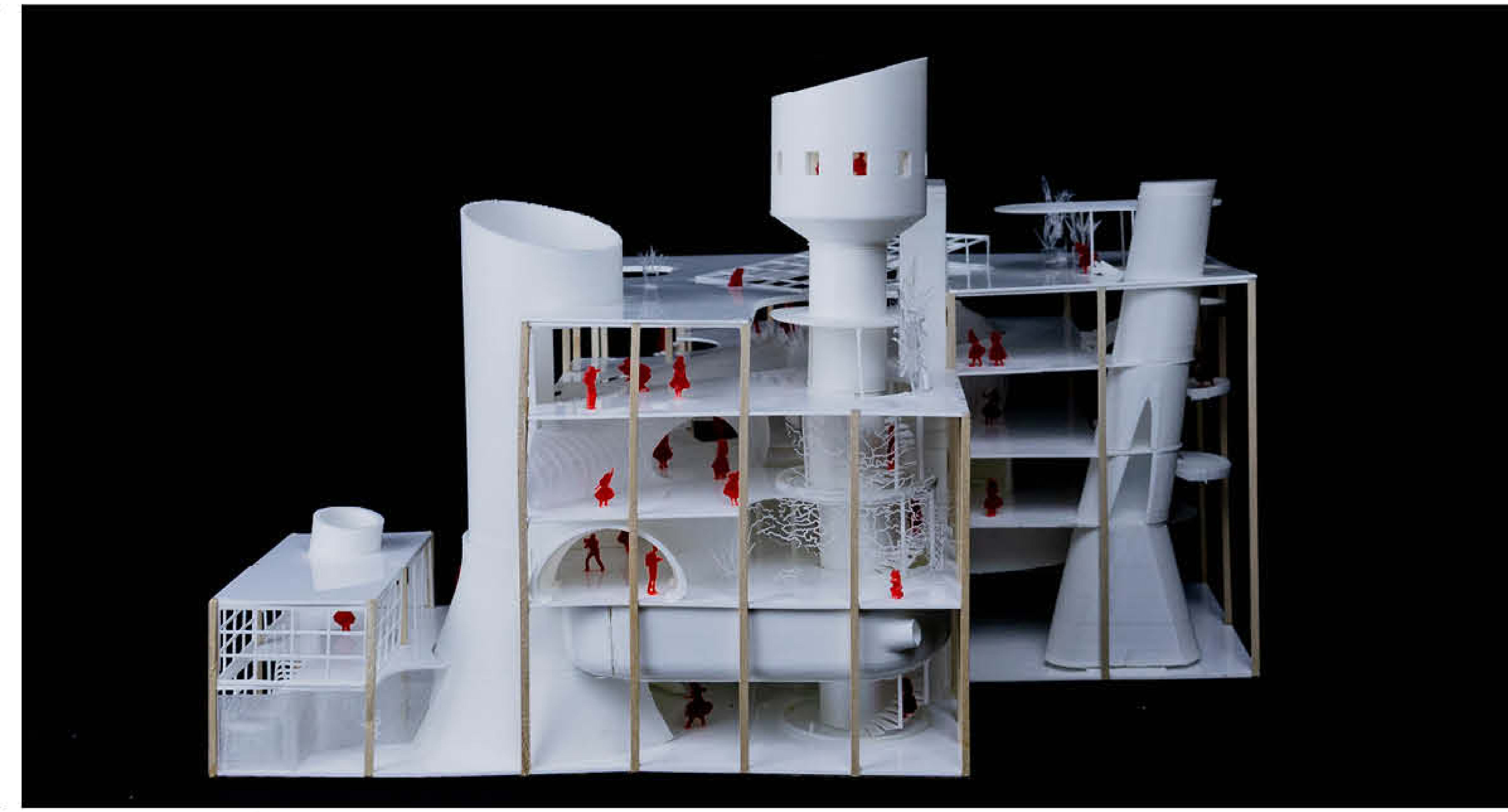
FLOOR-3

The floor plan clearly distinguishes between immersive viewing spaces within volumetric areas and expansive open spaces. It integrates rotating display walls within these viewing areas, enabling close engagement with the artwork and fostering diverse viewing perspectives. This dynamic approach cultivates a captivating and innovative exhibition experience for both art enthusiasts and creators, offering a refreshing take on traditional gallery layouts.

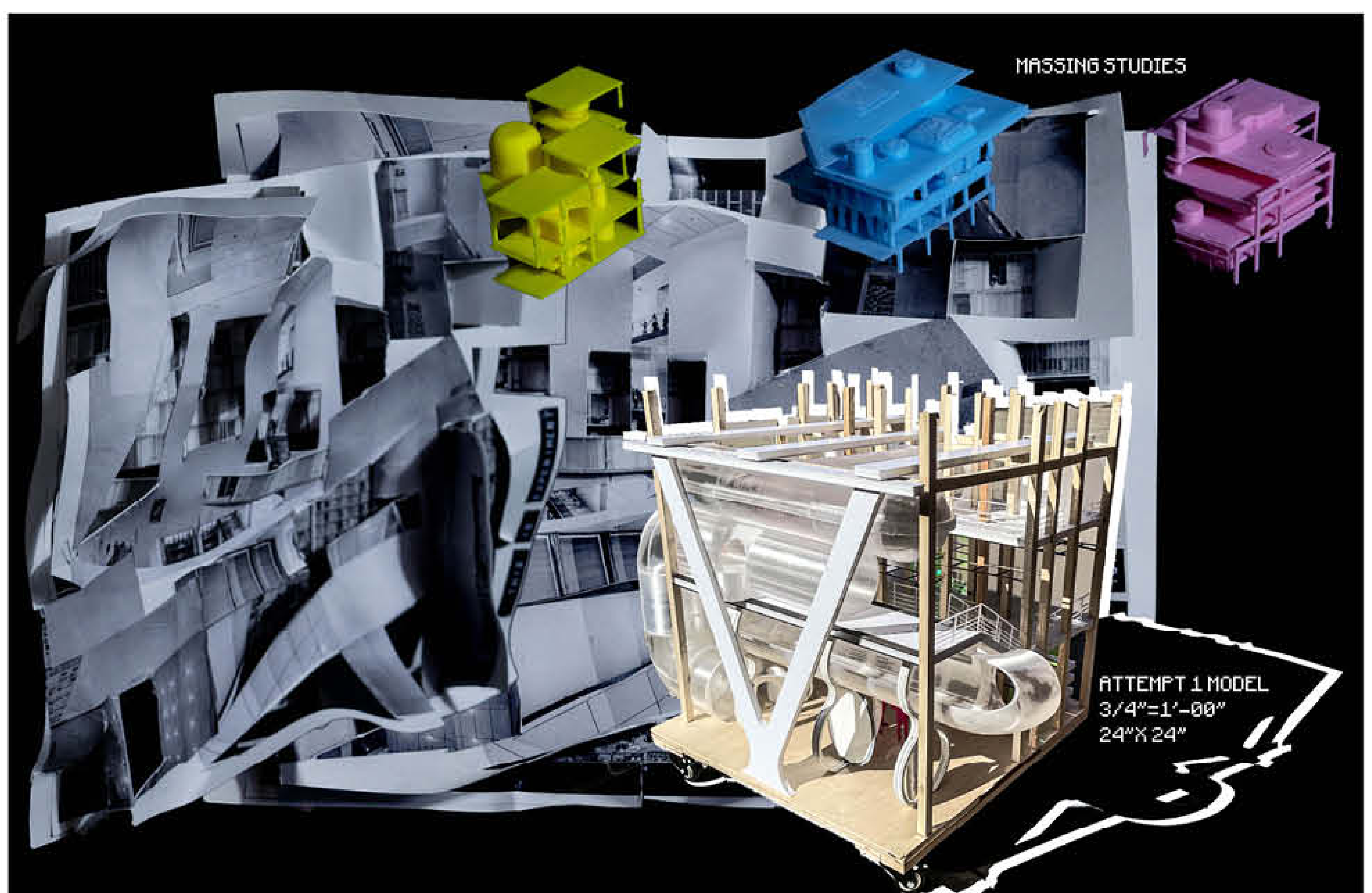
AXON & PLAN
24”X36”
1/8”= 1’-00”



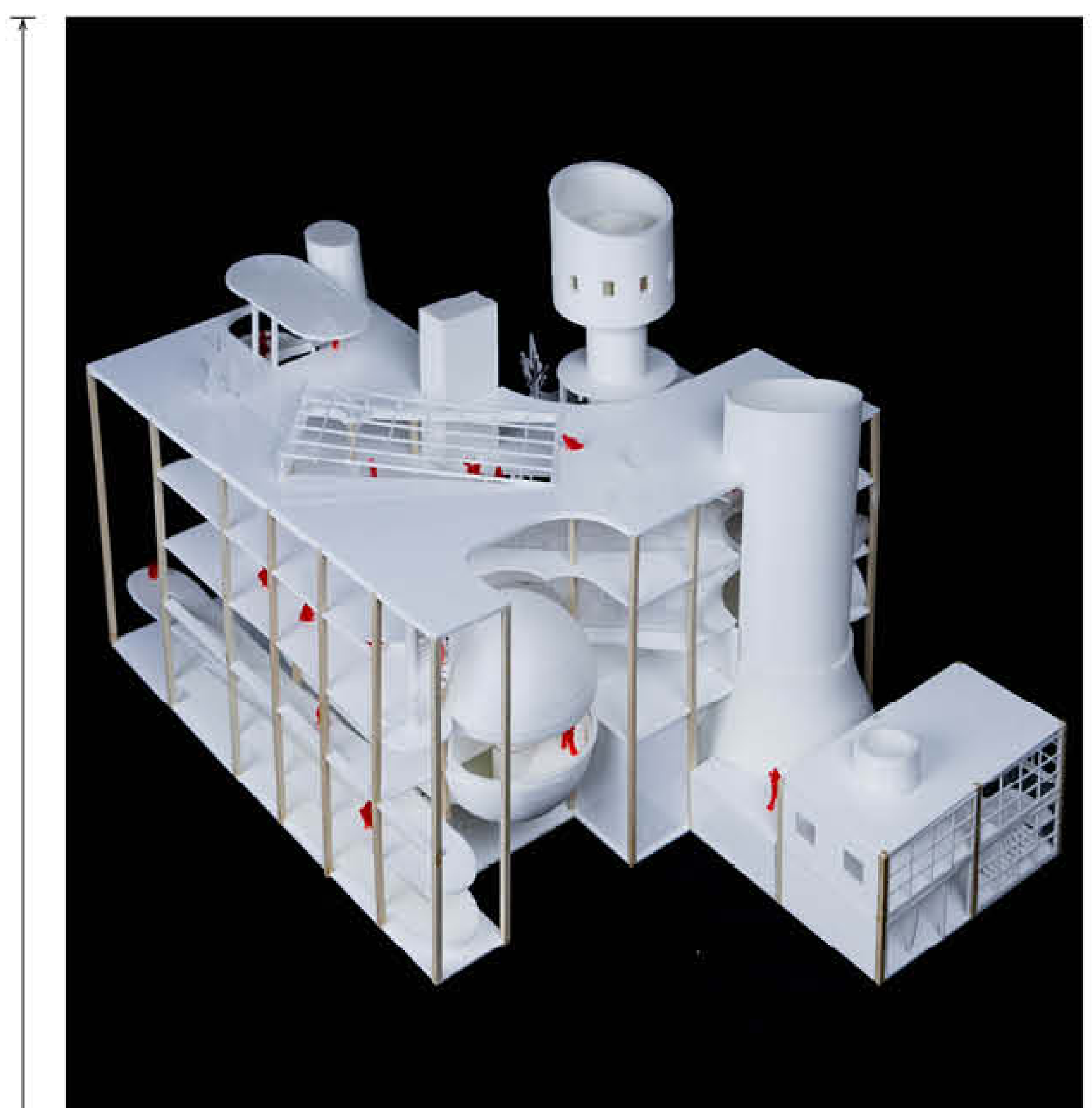
ZOOM-IN DETAILS



PHYSICAL MODEL 1/16”=1’-00” ACRYLIC + BASSWOOD + 3D PRINT



PHOTOGRAPHY COLLAGE EXPERIMENT



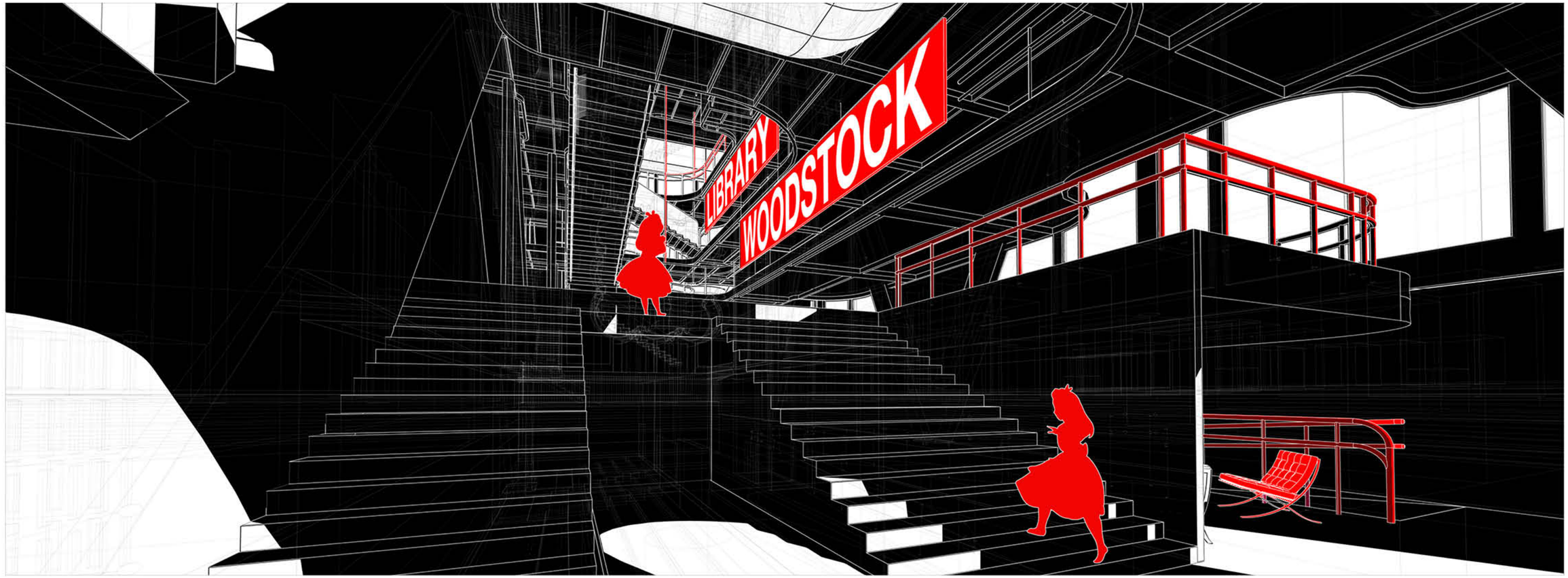
3/4 VIEWS OF PHYSICAL MODEL

RENDERS PHOTO FACTORY 402_FA2023

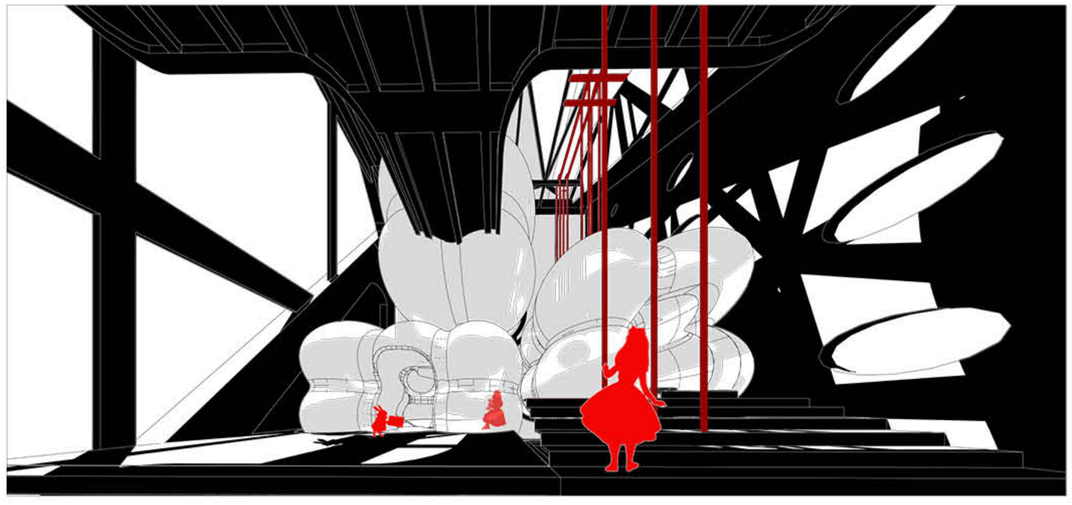
EPIC ENGINE + PS BETA

NIGHT TIME
EXTERIOR VIEW

INTRODUCTION WOODSTOCK LIBRARY 202_SP2022



RHINO + PS + AI



WOODSTOCK CLOUD LIBRARY

Woodstock, The Bronx, New York
NY Public Library / Community Classroom / Resource Center
Intermediate Design II - Spring 2022 - Prof. Karen Bausman

The Woodstock Library redesign project, situated in the South Bronx borough of New York City, aims to reimagine this community hub to better serve the diverse needs of the community, with a particular focus on new immigrants and students of all ages. The design concept is centered around creating an inclusive and engaging environment that fosters learning, connection, and empowerment.

At the heart of the design is a bold architectural vision characterized by innovative structural elements, including slab systems and suspended volumes. Conceptualized within a steel superstructure frame and interconnected by steel cabling, these elements form the foundation for a dynamic spatial experience. Within these spaces, a variety of programmatic elements are integrated, including classrooms, reading areas, theaters, event spaces, artwork display surfaces, and interactive zones, all designed to promote collaborative education and exploration. Furthermore, the inclusion of green spaces invites relaxation and inspiration.

As a borough with a rich cultural heritage in arts and music, the Woodstock Library seeks to tap into this dynamic community spirit by providing a welcoming space where residents can unite, exchange, and engage. By embracing the borough's cultural diversity and fostering inclusivity, the library aims to serve as a catalyst for bringing together individuals from all walks of life under one shared vision of knowledge, connection, and opportunity.

Through reflective spatial planning and strategic design interventions, the project aims to facilitate meaningful connections and address the challenges posed by serving a wide range of age groups. The design features "clouds," or suspended volumes, serving as enclosed spaces within the otherwise open library environment. The Woodstock Library is designed to serve as a platform for cultural exchange, dialogue, and collective growth, embodying the transformative potential of architecture in shaping social dynamics and fostering community resilience.

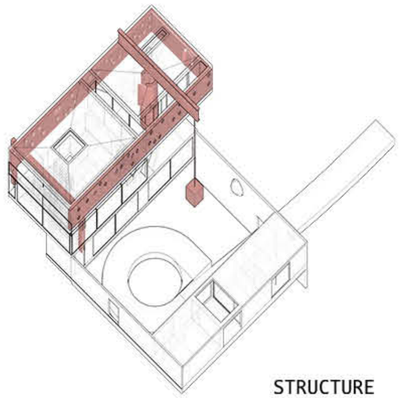
GRAPHIC RENDERS
ENTRANCE
READING CLOUDS

DESIGN APPROACHS WOODSTOCK LIBRARY 202_SP2022

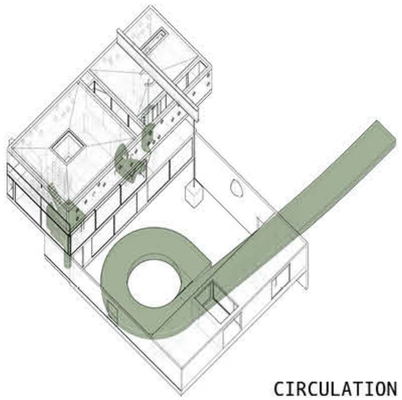
RHINO + PS + AI

DIAGRAMS
PRECEDENT STUDY
(///´□`)♡

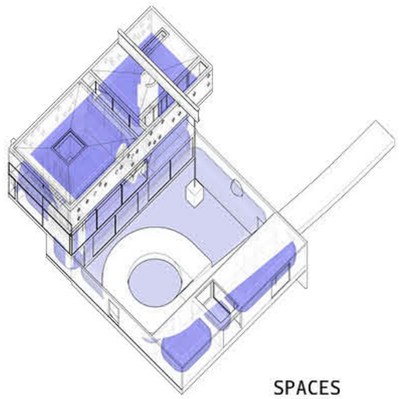
PRECEDENT STUDY



STRUCTURE

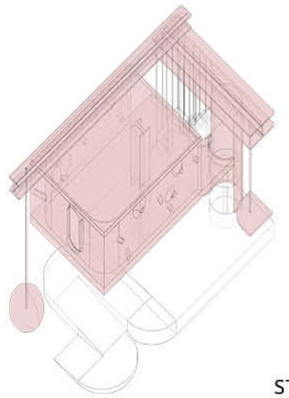


CIRCULATION

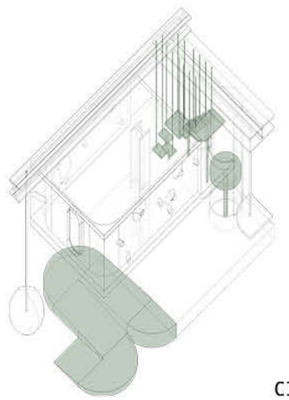


SPACES

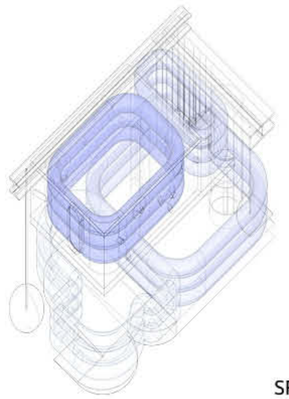
SHRINK



STRUCTURE

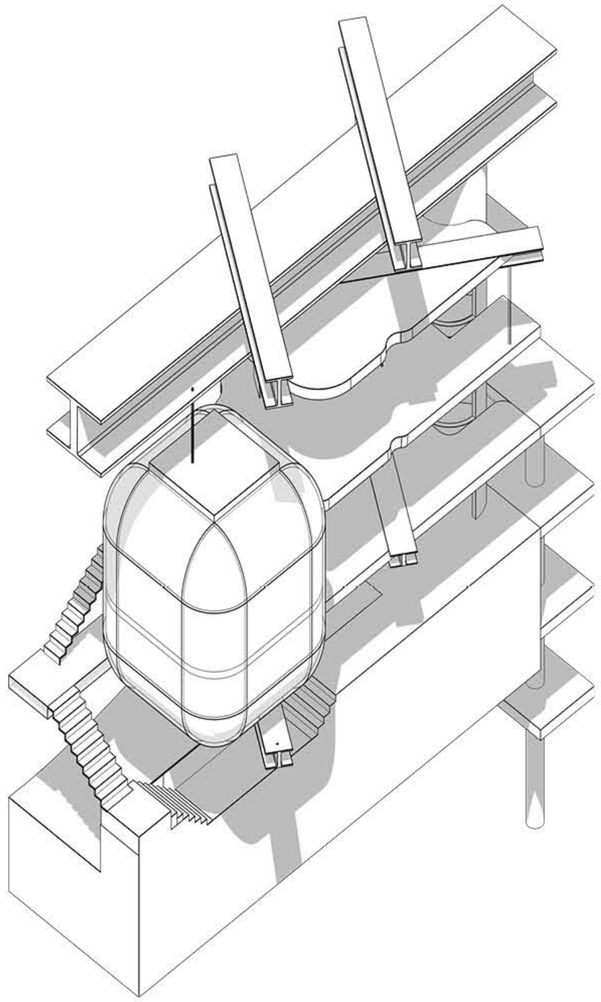


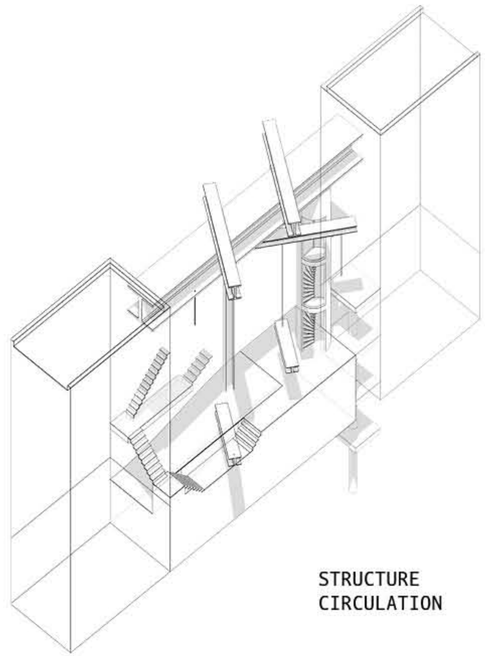
CIRCULATION



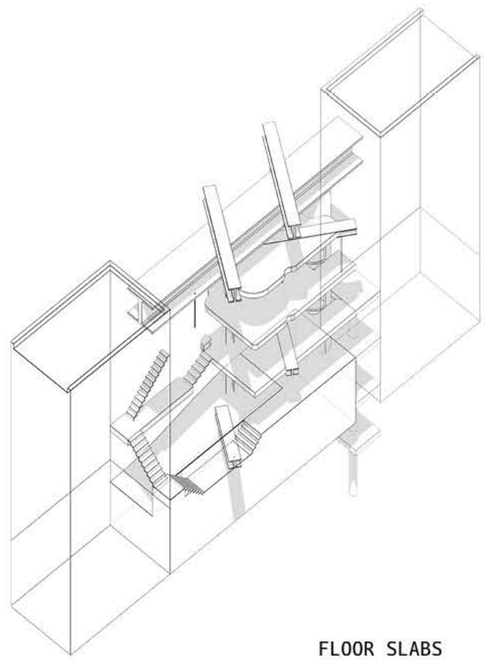
SPACES

DOMINO DIAGRAM





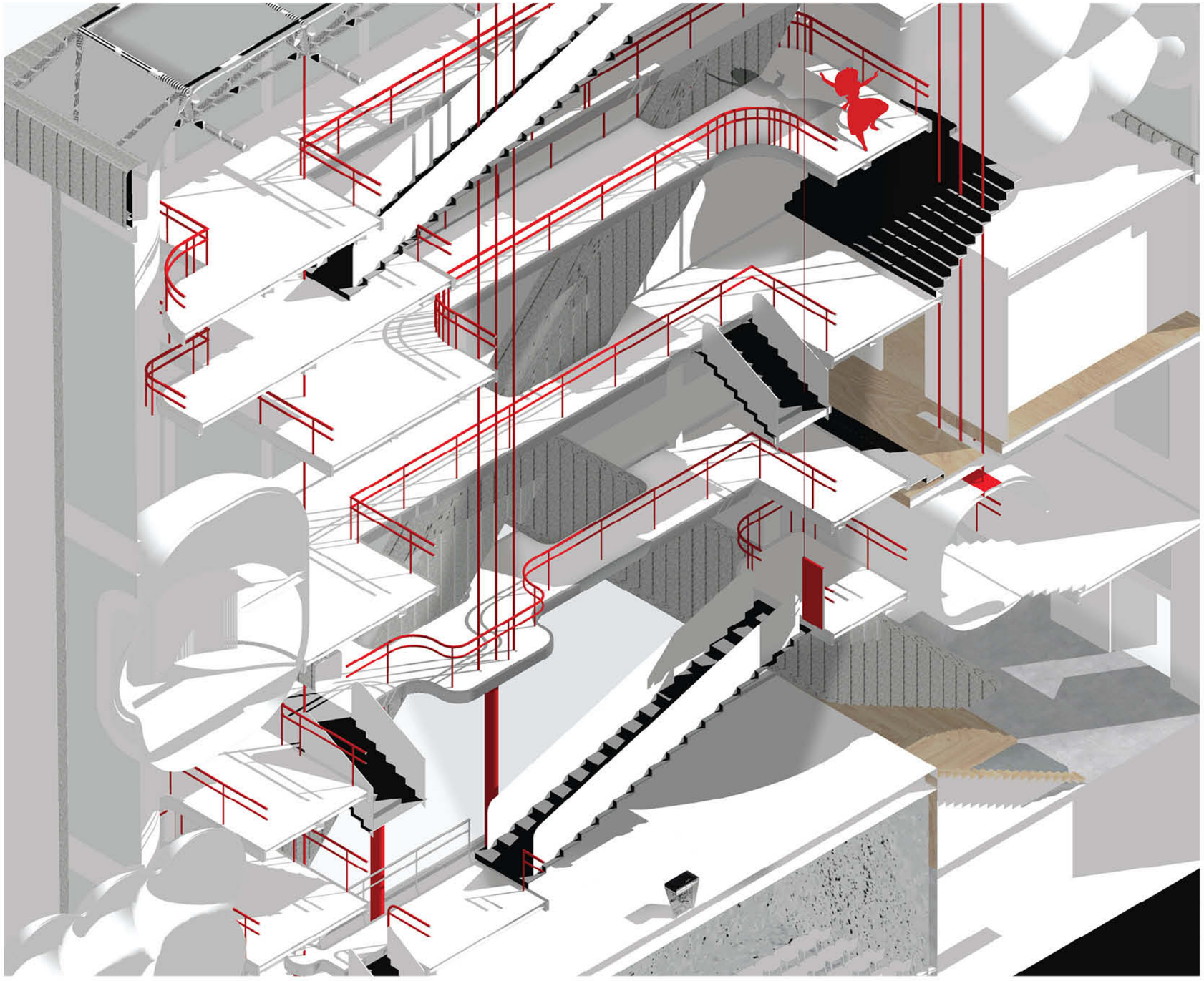
STRUCTURE
CIRCULATION

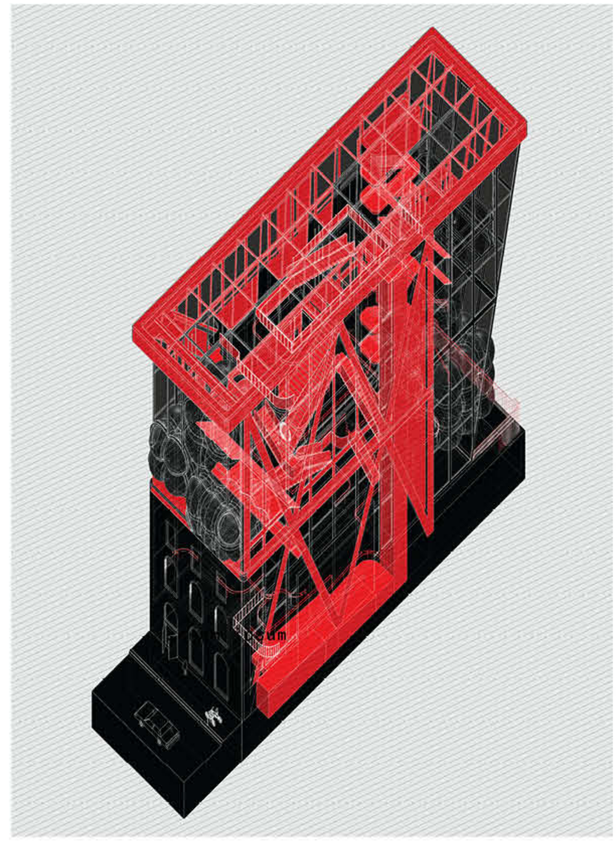


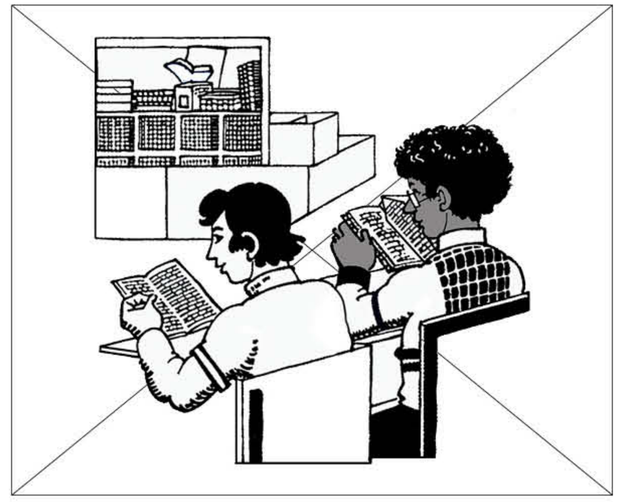
FLOOR SLABS

Initiated with an in-depth examination of Rem Koolhaas' Maison à Bordeaux, the project meticulously analyzed its architectural intricacies. Drawing inspiration from Le Corbusier's Domino Diagrams—emphasizing columns, slabs, and circulation—the design process delicately tailored these elements to suit the distinctive context.

RHINO + PS + AI FUN ARCHITECTURAL DRAWINGS WOODSTOCK LIBRARY 202_SP2022





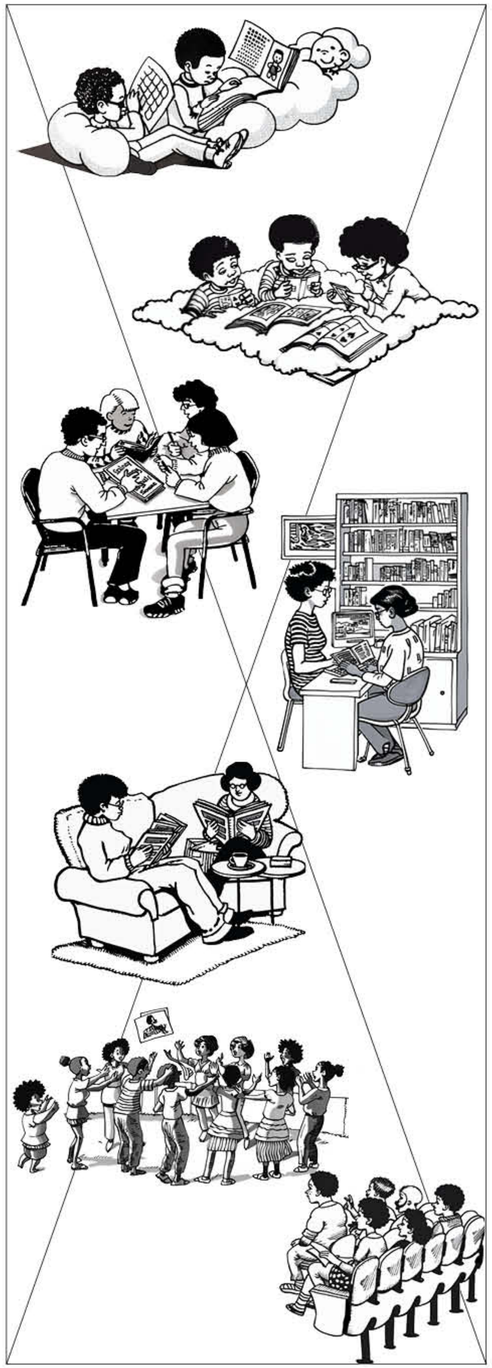


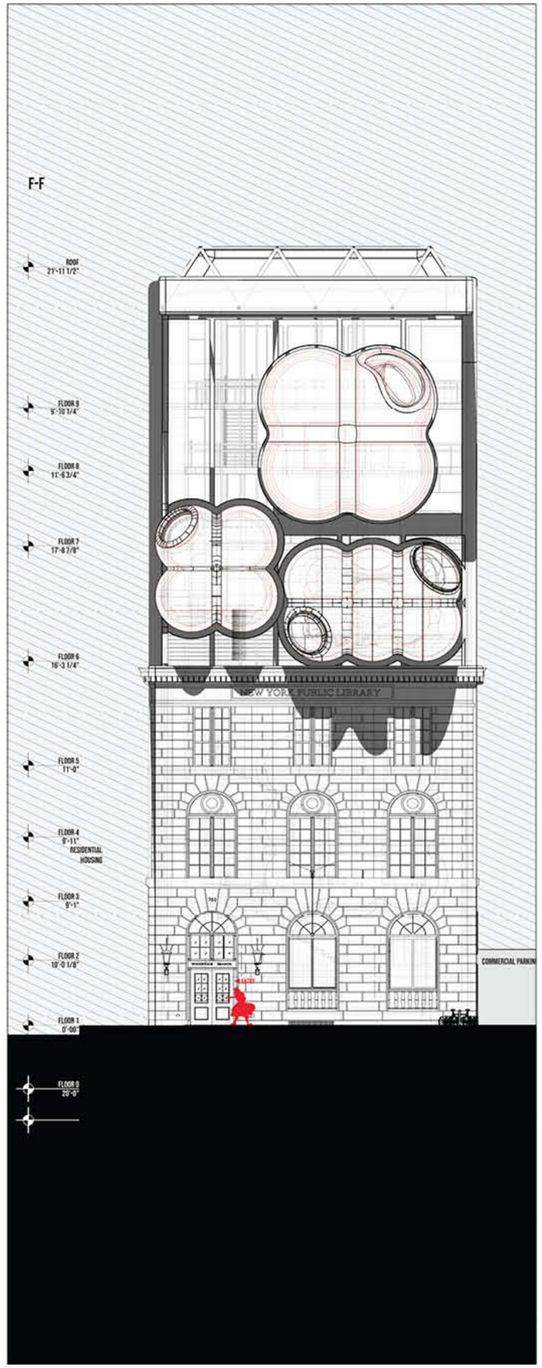
AXON
DRAWINGS

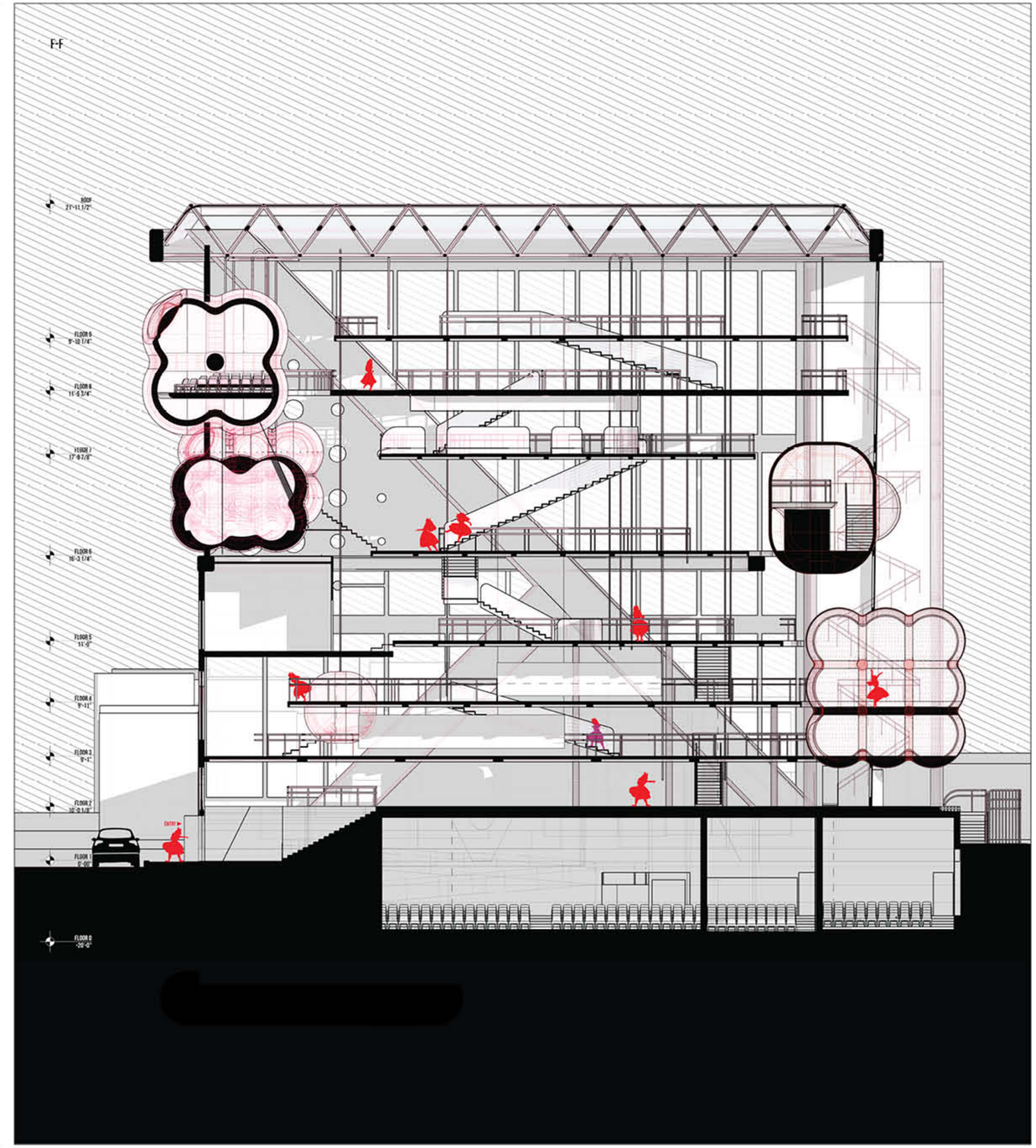
The diagrams illustrate the progression of program placement throughout the design process. The initial massing involved subtractive considerations to align with the context. Subsequently, internal massing volumes were strategically positioned to correspond with the interior programs, aiming to establish a cohesive relationship between the interior and exterior spaces. Ultimately, the design intentionally centers around the original exterior pool area, highlighting it as the focal point of the overall program.

DRAWINGS WOODSTOCK LIBRARY 202_SP2022

RHINO + PS + AI





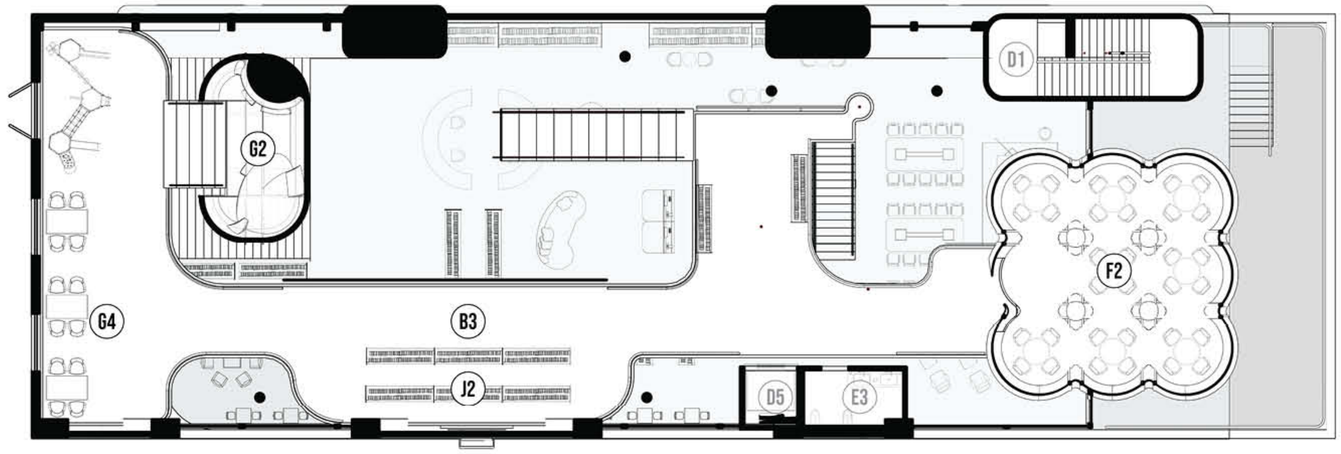


SECTION
ILLUSTRATIONS
1/8"= 1'-00"

The project employs a hierarchical design approach: the basement is dedicated to event spaces and theaters; the lower levels contain traditional reading areas and resources for adult learning; the middle section is reserved for educational facilities; and the upper floors feature brightly lit spaces designed for interactive learning and reading.

DRAWINGS WOODSTOCK LIBRARY 202_SP2022

RHINO + AI + PS



FLOOR 3

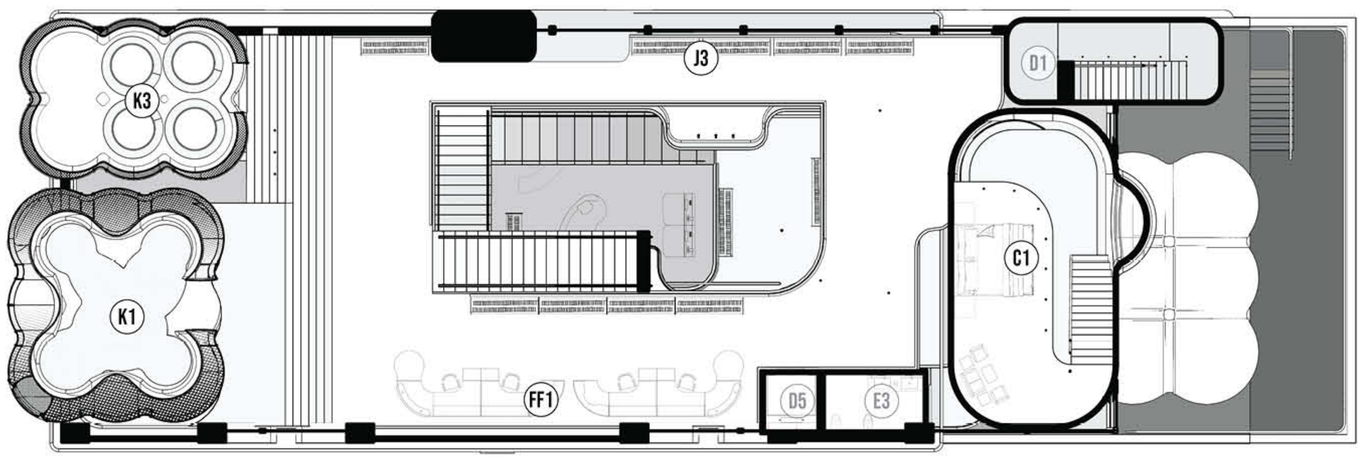
C1: Staff Room

J3: Educatopm Resources

F11:Individual Study Units

K1: Enclosure Meeting Room {1}

K3: Enclosure Meeting Room {3}



FLOOR 6

G2: Children Reading Pods

G4: Parent + Children's Place

B3: Suspension Artwork Display

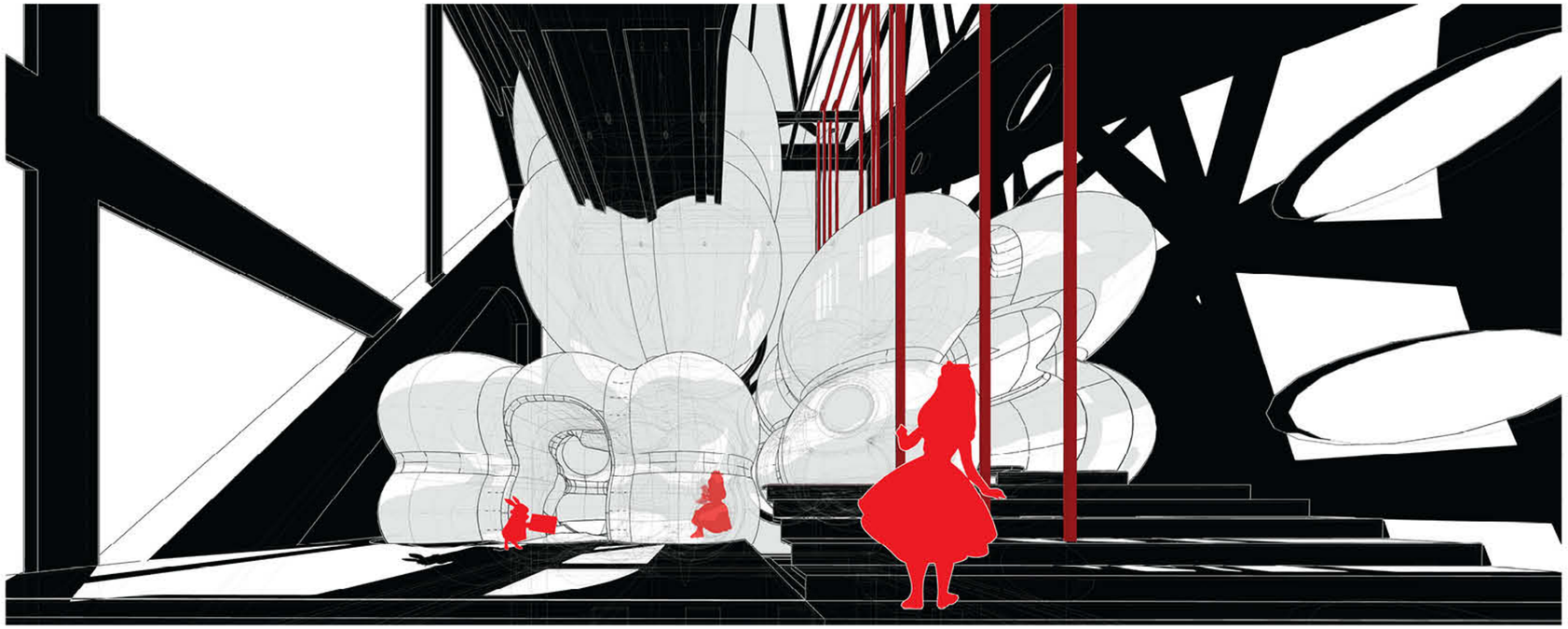
J2: Children Books

F2: Slient Reading Room

PLANS
12"X 24"
1/8"= 1'-00"

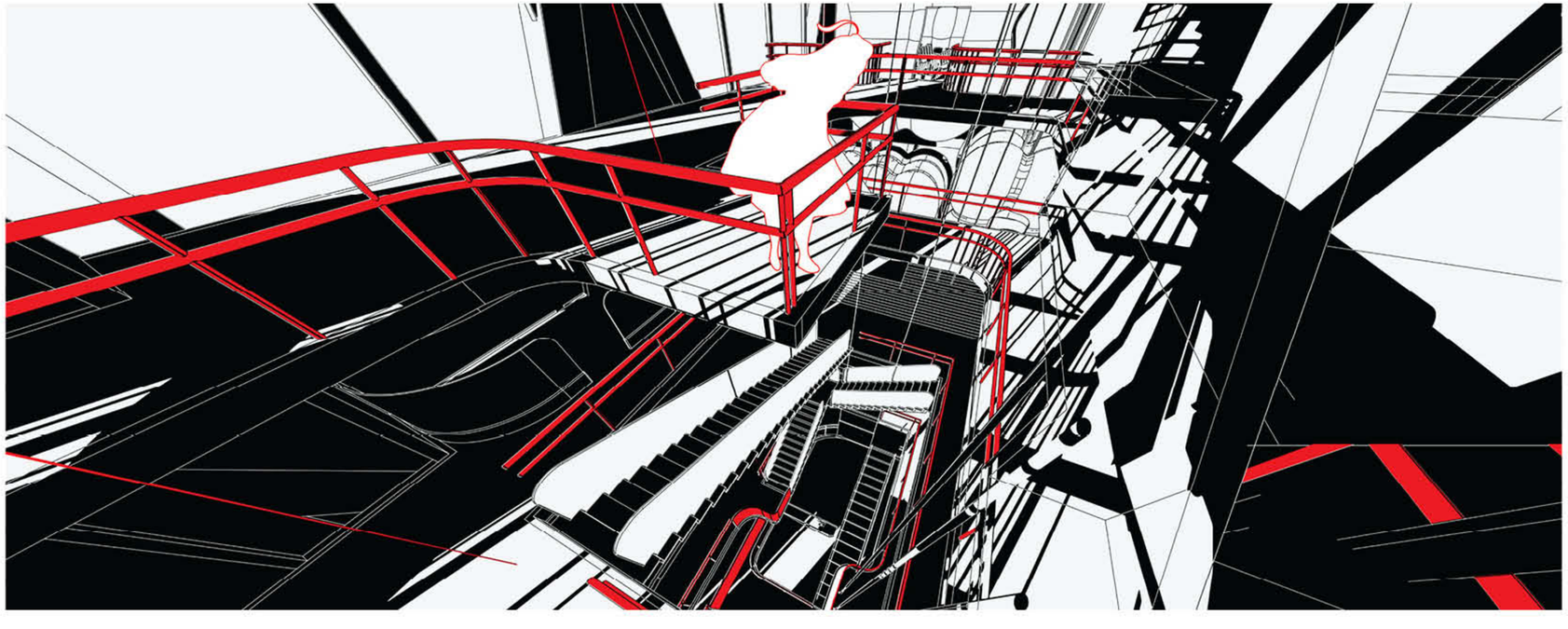
WOODSTOCK LIBRARY 202_SP2022

RHINO +SKETCHUP + PS + AI GRAPHIC RENDERING



READING CLOUDS

View of Library’s Enclosed Reading Rooms: Cloud Volumes

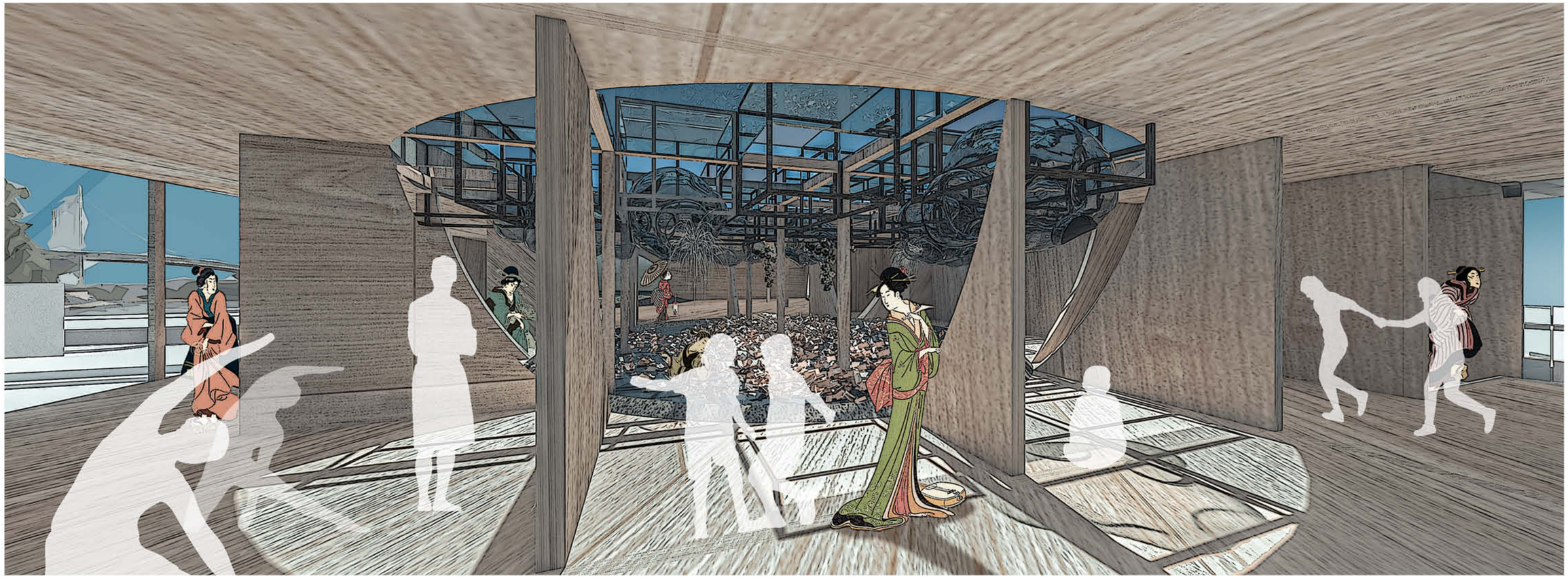


UPPER LEVEL OVERLOOK

Interior View of Library’s Central Void:
A Space for Circulation and Visual Connection

GRAPHIC
RENDERS

Project reposted by PrattSOA



ASTORIA SAUNA BATHHOUSE

Astoria, Queens, New York
Bathhouse / Sauna / Community Classroom
Intermediate Design I - Fall 2021 - Prof. Maria Vrdoljak

The Astoria Park Bathhouse, conceived amidst the COVID-19 pandemic, aims to transform the original poolside area into a welcoming communal space. Located adjacent to the Astoria Outdoor Swimming Pool in Queens, New York, it fosters connections and a sense of belonging among residents. Designed with sustainability in mind, the bathhouse includes strategically placed wet zones, rooftop cooling, and eco-friendly rainwater harvesting systems to minimize environmental impact. Its adaptable programming caters to a broad range of community needs and interests, thereby strengthening social bonds. This initiative reflects a concerted effort to reimagine urban spaces in a way that promotes both environmental health and community well-being.

Enriching the vibrant Astoria Park community, the project serves as a hub for shared experiences and collective engagement. With the addition of recreational and social amenities, such as wet zones and overhang spaces, the bathhouse becomes a dynamic center for community life. It hosts events and activities that bring people together, embodying the community's commitment to environmental stewardship and serving as a model for sustainable urban development.

Furthermore, the Astoria Park Bathhouse symbolizes resilience and hope. It provides opportunities for creativity, self-expression, and personal growth, uplifting and empowering residents. This engenders pride and ownership in their shared community space. Through collaborative efforts and volunteer initiatives, the bathhouse will continue to enhance the park's appeal and strengthen the bonds among residents, ensuring this cherished gathering space thrives for generations to come.

RENDERINGS
2.2:1
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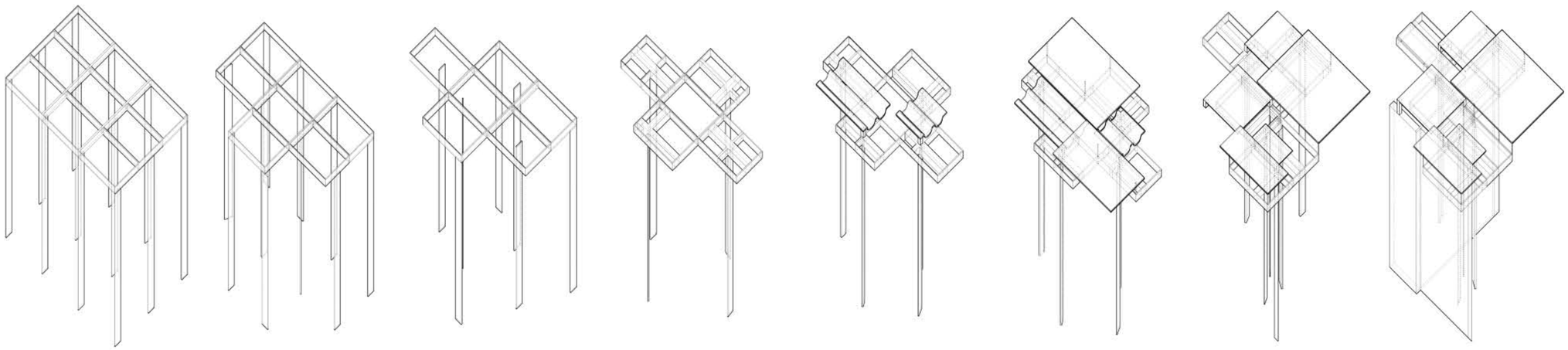
ASTORIA BATHOUSE 201_FA2021

DESIGNS RESEARCH

RHINO + AI

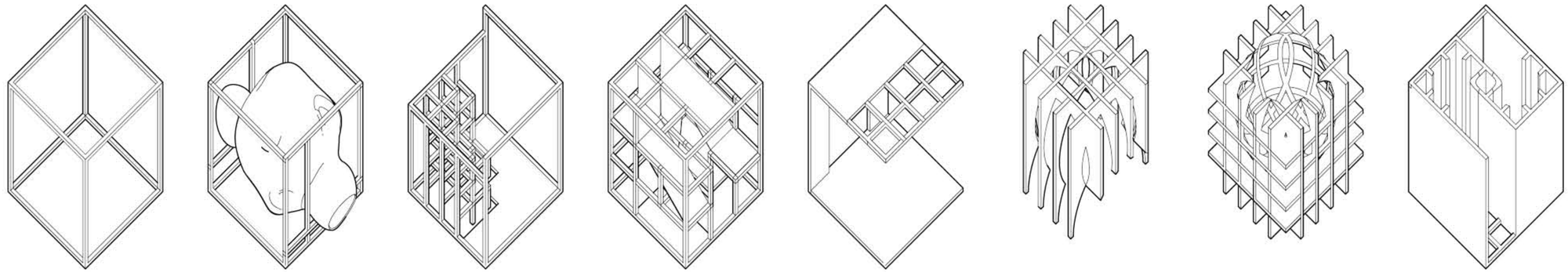
SYSTEM DIAGRAMS
2 X 8
ITERATIONS

ROOF SYSTEMS



2-WAY GRID SYSTEM | SUBTRACTION OF GRIDS | SHIFTING OF PILLARS | ADDITION OF BEAMS | 1ST LAYER OF ROOF | 2ND LAYER OF ROOF | 3RD LAYER OF ROOF | EXTENSION OF COLUMN TO WALLS

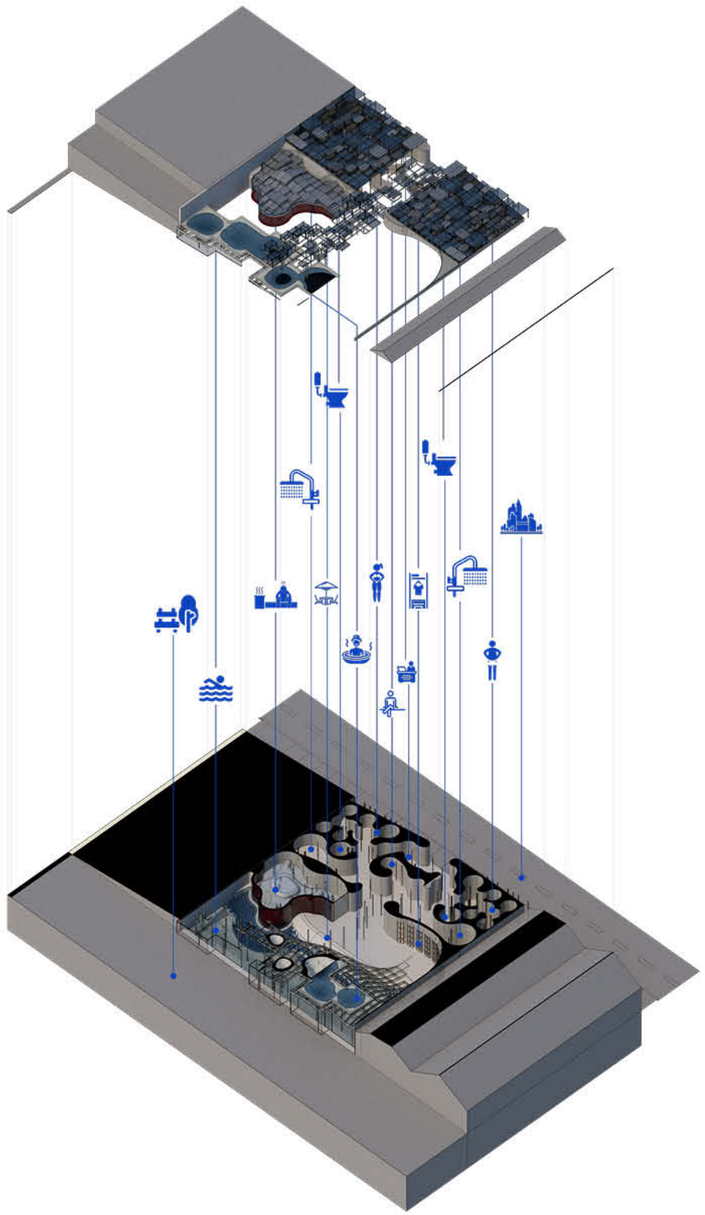
UNIT SYSTEMS

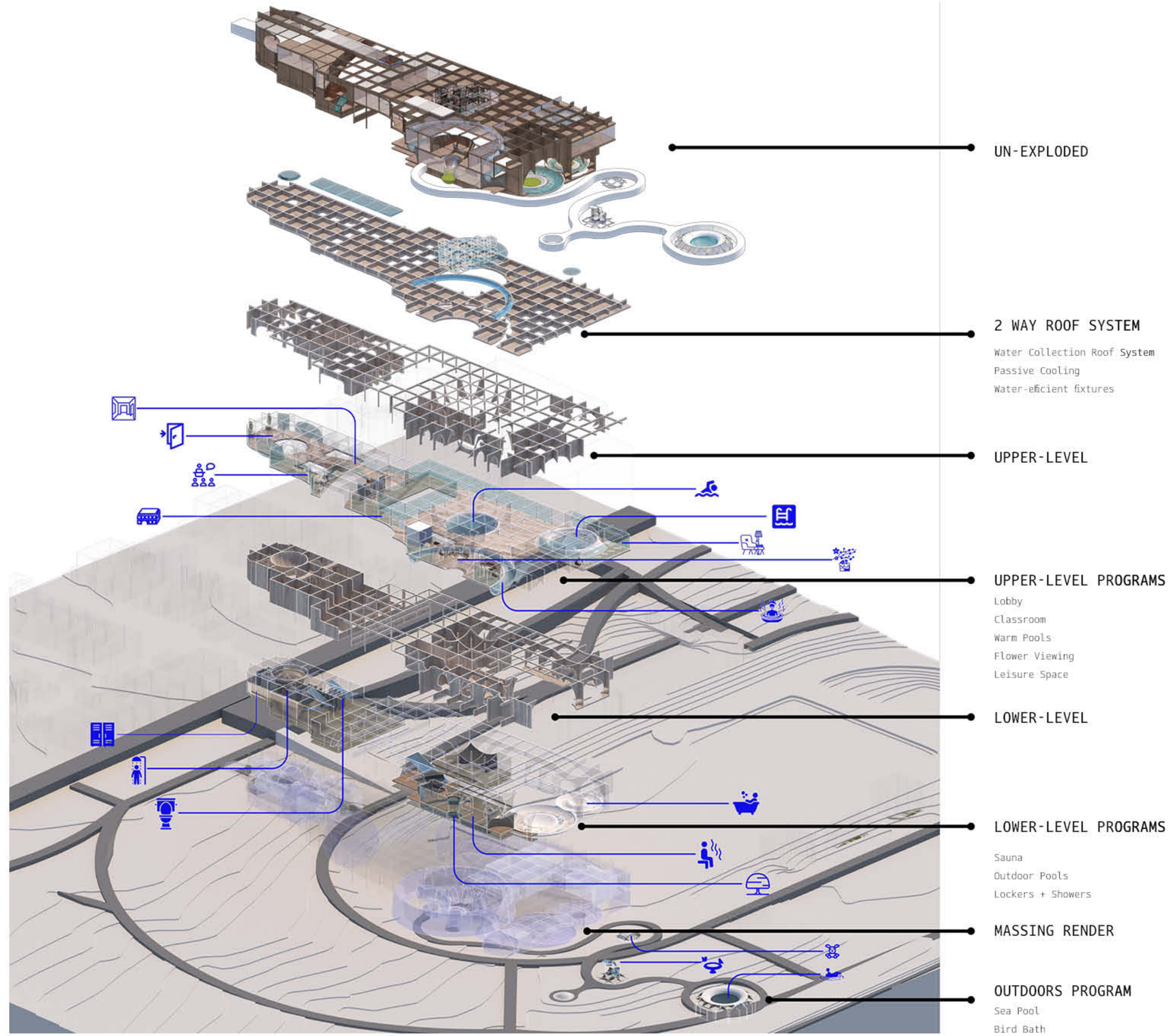


BASE UNIT | BASE UNIT WITH FORM | UNITS WITH IN UNIT | UNIT WITH SURFACES | UNIT WITH ROOF | 2-WAY WAFFLE UNIT | 3-WAY WAFFLE UNIT | SURFACE & VOLUMN UNIT

Initiated with a comprehensive precedent study of the KAIT Workshop by Junya Ishigami, the project delved into the intricate design methodology of the roof system, from which inspiration emerged, sparking innovative ideas for the development of new roof systems. As the project progressed, these ideas evolved into distinct units, each contributing to the overarching vision with intricacy and purpose.

RHINO + VRAY + AI + PS EXPLODED DIAGRAMS ASTORIA BATHHOUSE 201_FA2021





A CHUNK APPROACH PART A

The design process primarily focused on seamlessly integrating the roof system with various programs and ensuring harmonious alignment between the horizontal and vertical planes.

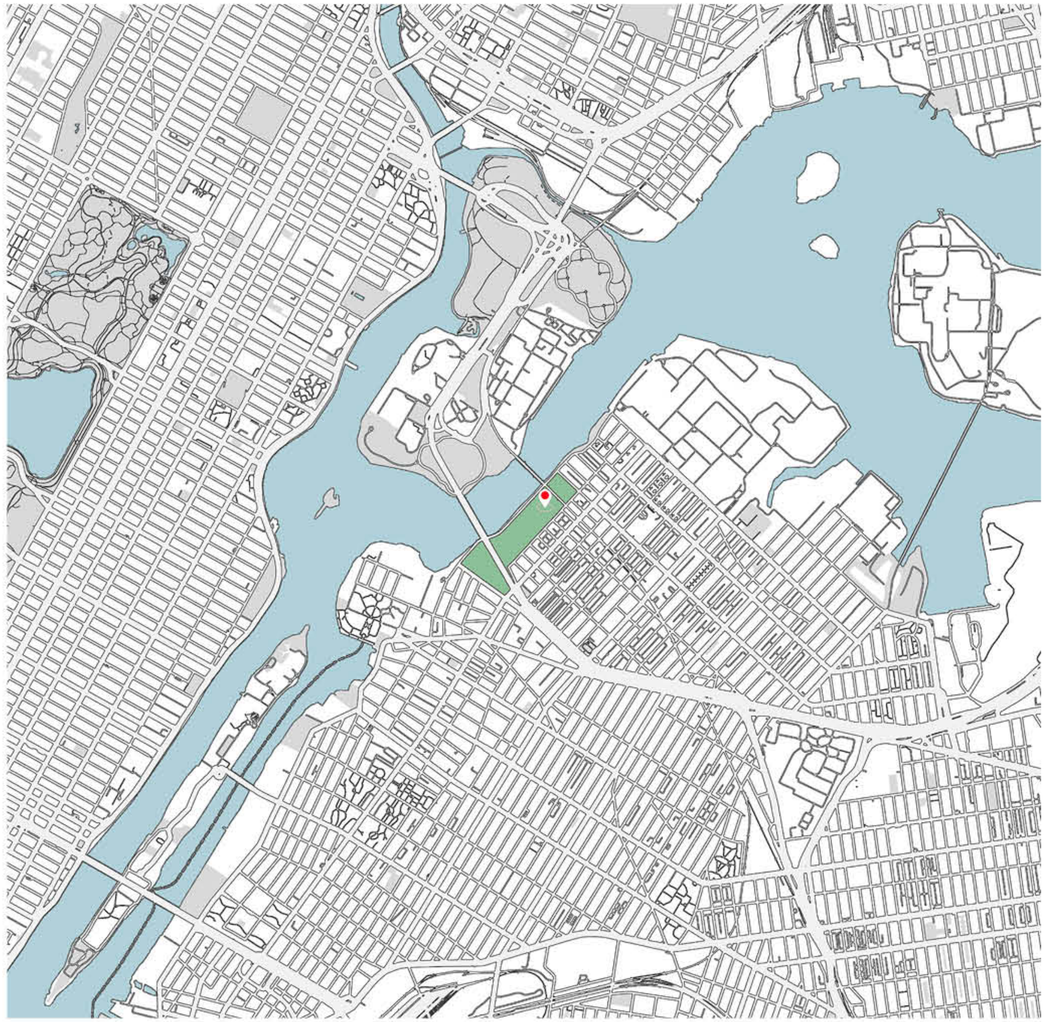
DESIGN SAUNA BATHHOUSE PART B

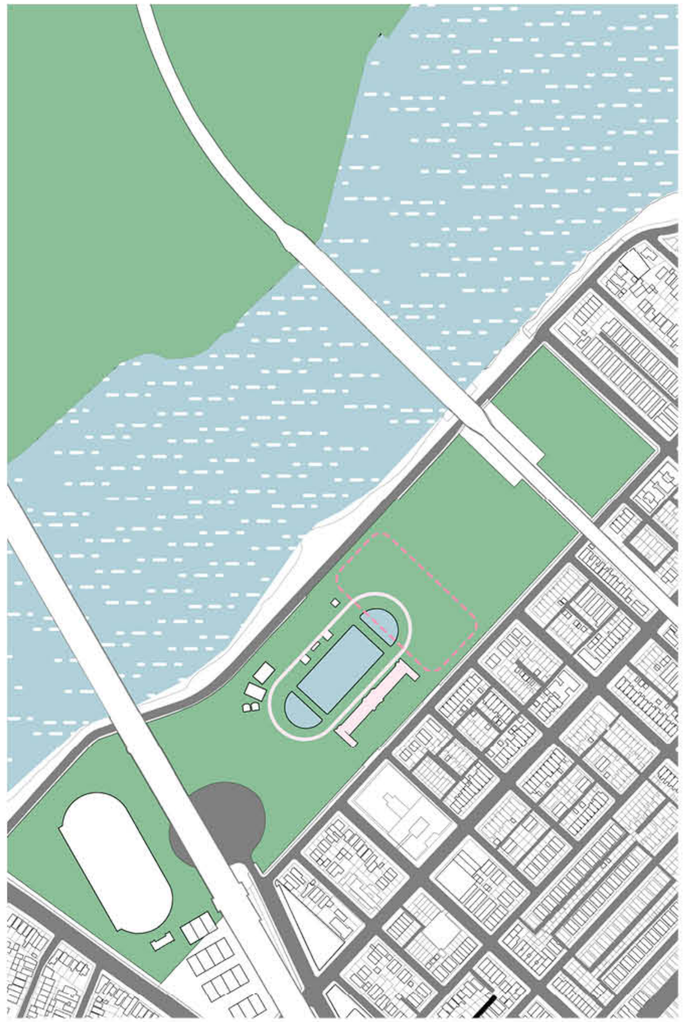
The bathhouse / sauna is designed in a mat building style, gracefully integrating with Astoria Park's topography. The program is organized into two major quadrants across two levels: dry facilities are positioned furthest from the pools, and leisure-based amenities are located closer to the poolside. For further details, please refer to the site map on the following page.

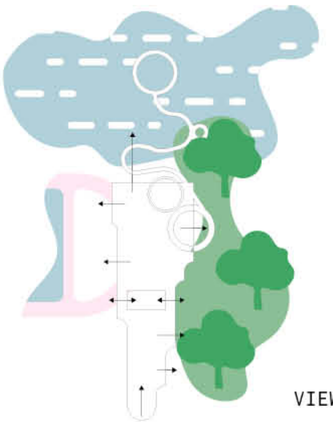
SITE & APPROACH

ASTORIA BATHHOUSE 201_FA2021

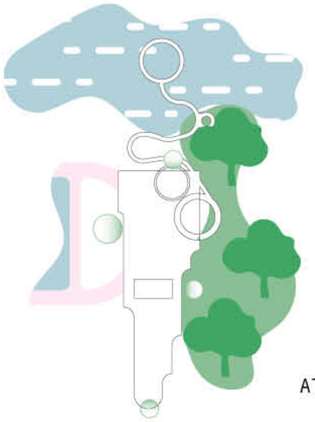
RHINO + AI



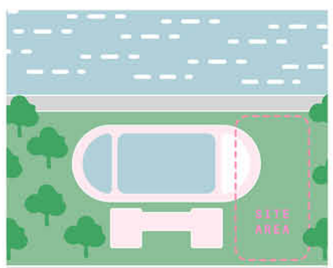




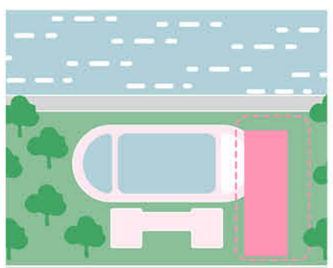
VIEWS



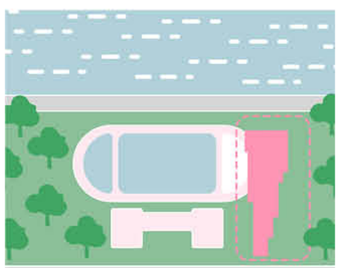
ATTRACTORS



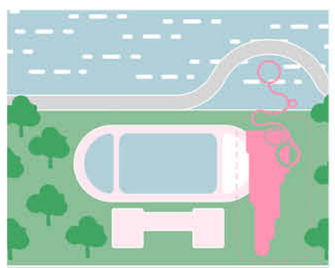
SITE CONTEXT



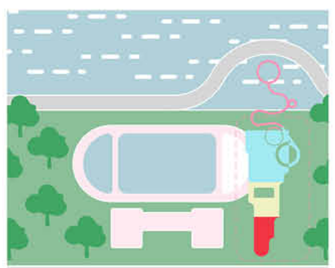
BUILDING AREA



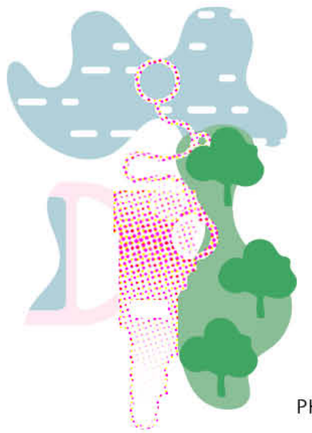
MASSING



EXPANSION



PROGRAM



PHASING

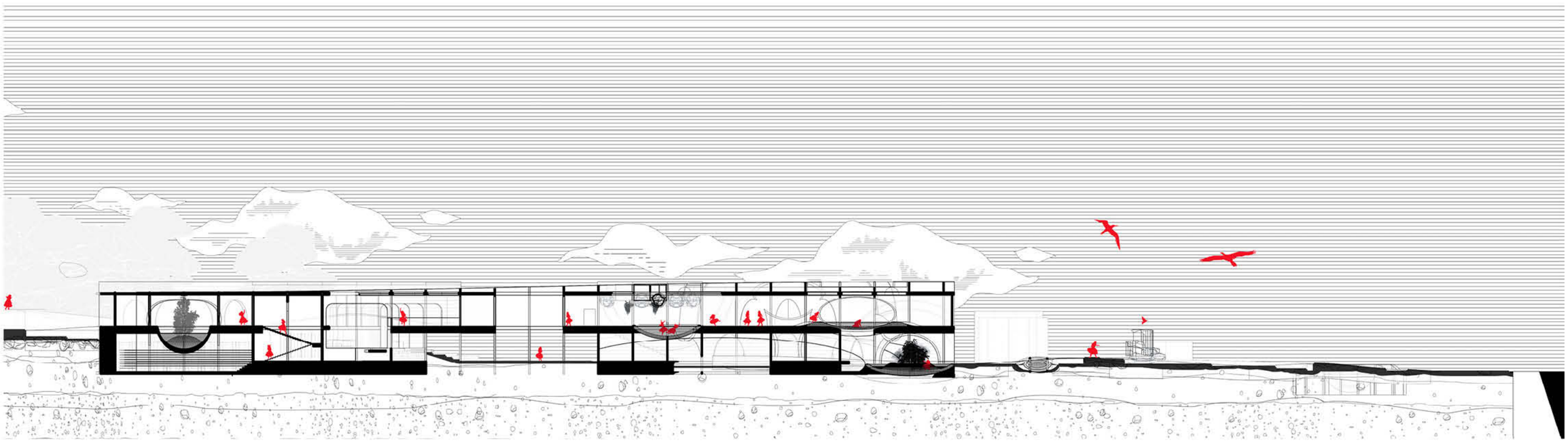
SITE & DIAGRAMS
SITE MAP
1-4000 & 1-2000

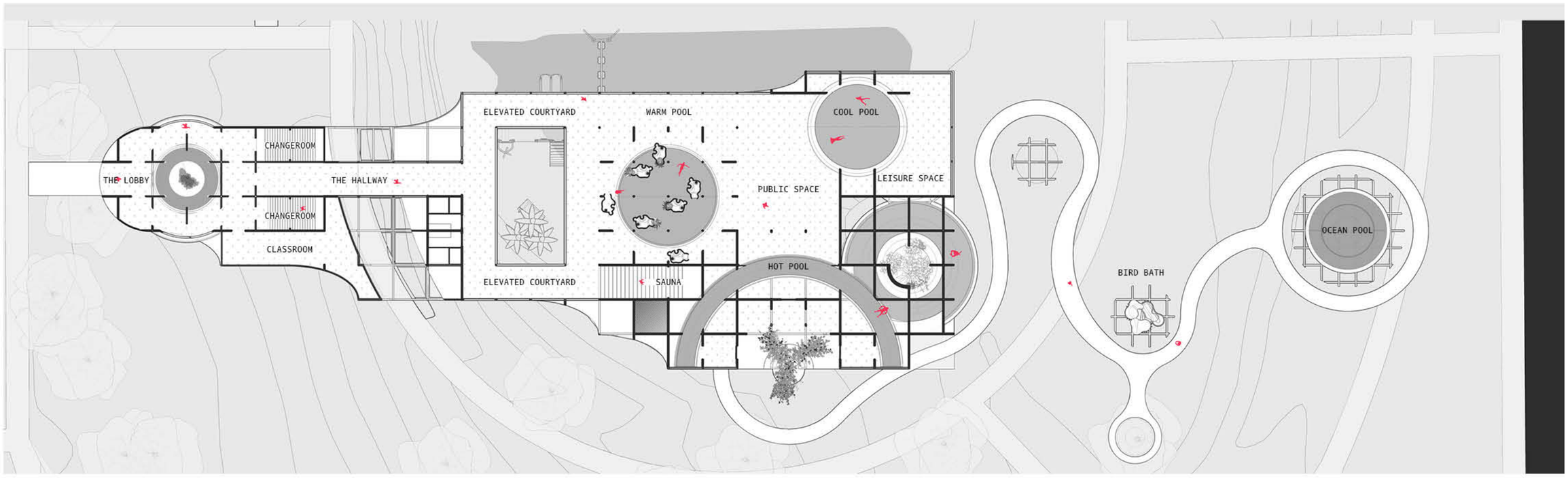
The diagrams illustrate the progression of program placement throughout the design process. Initially, massing involved subtractive considerations to align with the surrounding context. Subsequently, internal massing volumes were strategically positioned in accordance with the interior programs, aiming to establish a cohesive relationship between the interior and exterior spaces. Ultimately, the design culminates around the original exterior pool area, emphasizing it as the focal point of the overall program.

ASTORIA BATHHOUSE 201_FA2021

DRAWINGS

RHINO + AI + PS





PLAN & SECTION
36” X 24”
1/16”=1’-8”

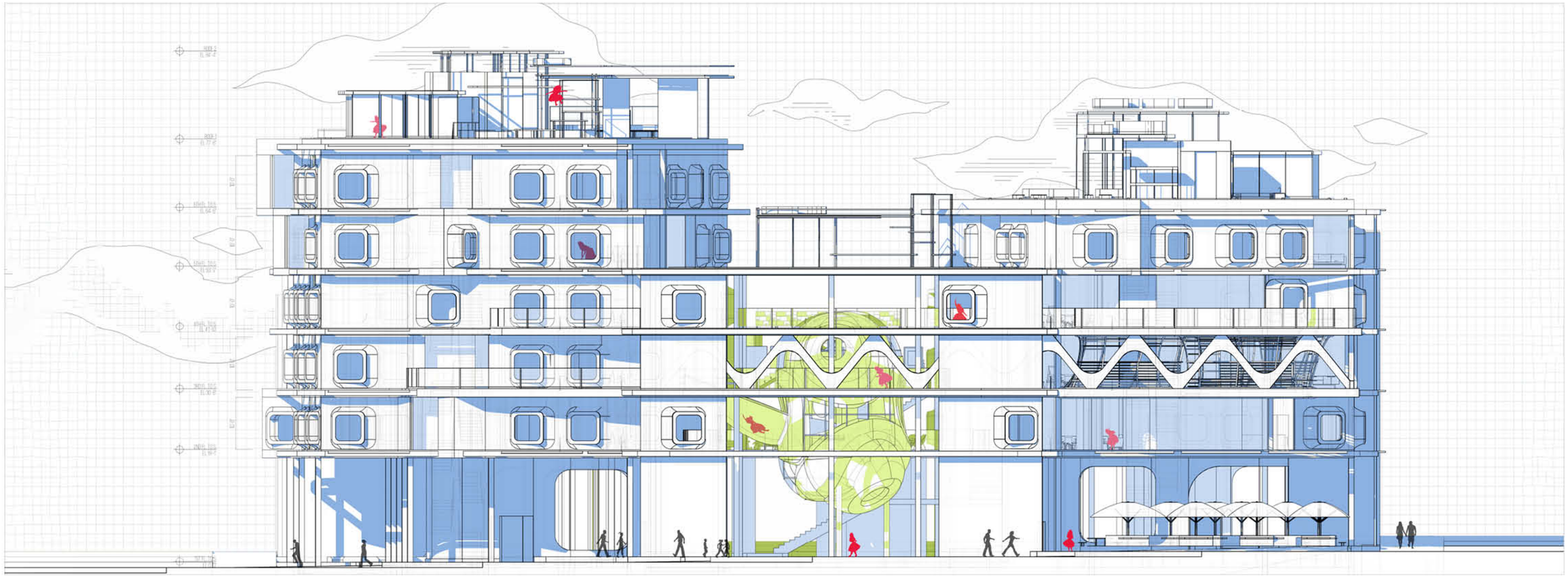
ASTORIA BATHHOUSE 201_FA2021

STYLE RENDERS

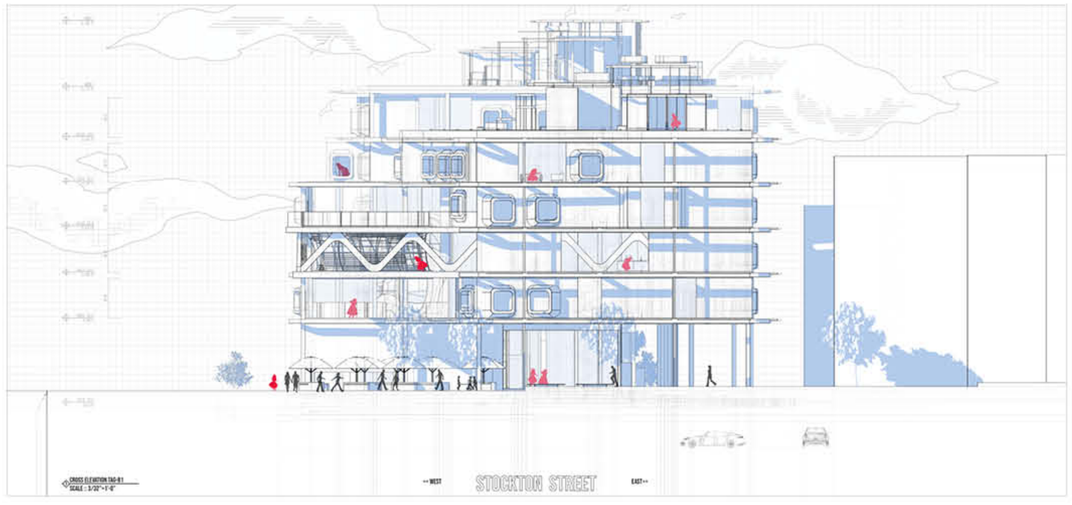
RHINO + VRAY + PS

RENDERINGS
2.2:1
(˘▽˘)っ >>

INTRODUCTION MARCY'S PLAYTIME 301_FA2022



RHINO + PS + AI



MARCY'S PLAYTIME

Bedford-Stuyvesant, Brooklyn, New York
Single Parent Housing / Social Housing
Integrated Design 301 - Fall 2022 - Prof. Eva Perez De Vega

Marcy's Playtime redefines architectural innovation with its core mission to support single parents and provide entertainment that bridges generations. This visionary project is not just a building; it's a community-centric ecosystem that melds expansive program areas to encourage interactions among different species and age groups, spanning multiple floors. The architectural centerpiece, "The Symbiosis Void," situated in the building's southern corner, is a testament to the project's commitment to fostering a deep connection between humans, animals, and plants. This space is designed as a living, breathing entity where exchanges of energy and life occur, highlighting the importance of coexistence in urban environments.

"The Hubby" takes the concept of a play area to new heights—literally. This vertical space is ingeniously designed to engage children in physical activity while enabling parents to interact or work in close proximity, thanks to the surrounding floors that create a unique work-play dynamic. Below this bustling area, a publicly accessible lobby becomes the stage for wildlife education and hands-on workshops in dye gardening, providing invaluable learning opportunities for the community. On the flip side, beneath The Nest, a partnership with the Brooklyn Flea Market transforms the space every Sunday into a hub of local commerce and social gathering. This initiative not only stimulates the local economy but also fosters a strong sense of community and belonging among residents.

Marcy's Playtime introduces a living typology catering to the needs of single parents and economically disadvantaged families, emphasizing adaptable living spaces through "dynamic walls." These walls allow for the easy reconfiguration of spaces from rooms to entire buildings, supporting evolving family dynamics. The project also incorporates green spaces and sustainable practices, such as rooftop gardens and water recycling systems, highlighting its commitment to environmental stewardship. Marcy's Playtime is not just a building but a community space that prioritizes flexibility, inclusivity, and well-being, aiming to create a more sustainable and family-friendly urban environment.

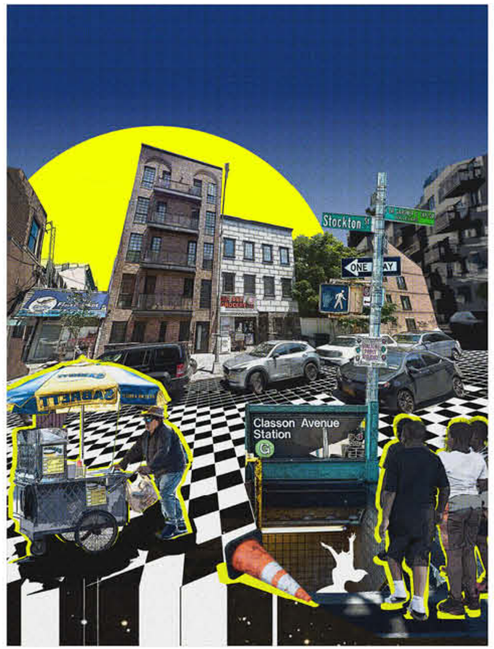
SOUTH ELEVATION
EAST ELEVATION

MARCY'S PLAYTIME 301_FA2022

INTRODUCTION

RHINO + PS + AI

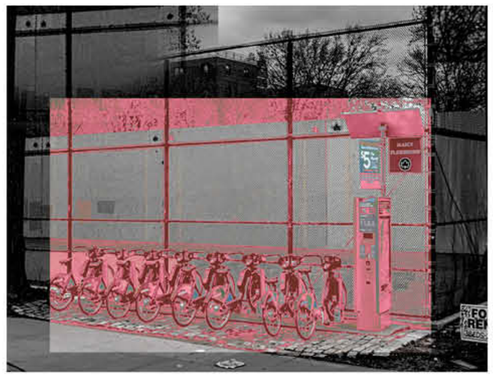
SOUTH ELEVATION
EAST ELEVATION

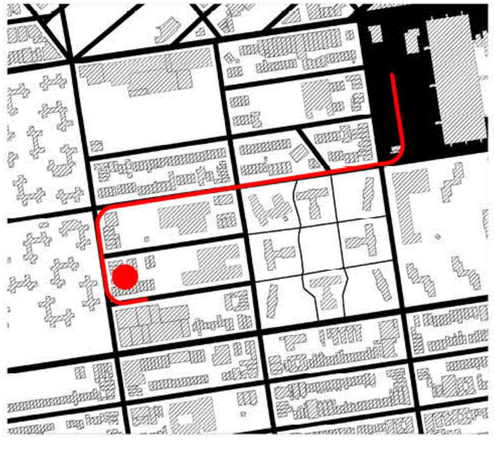


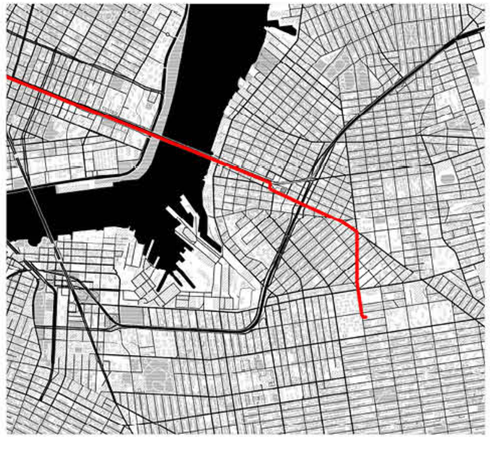
1

2

3







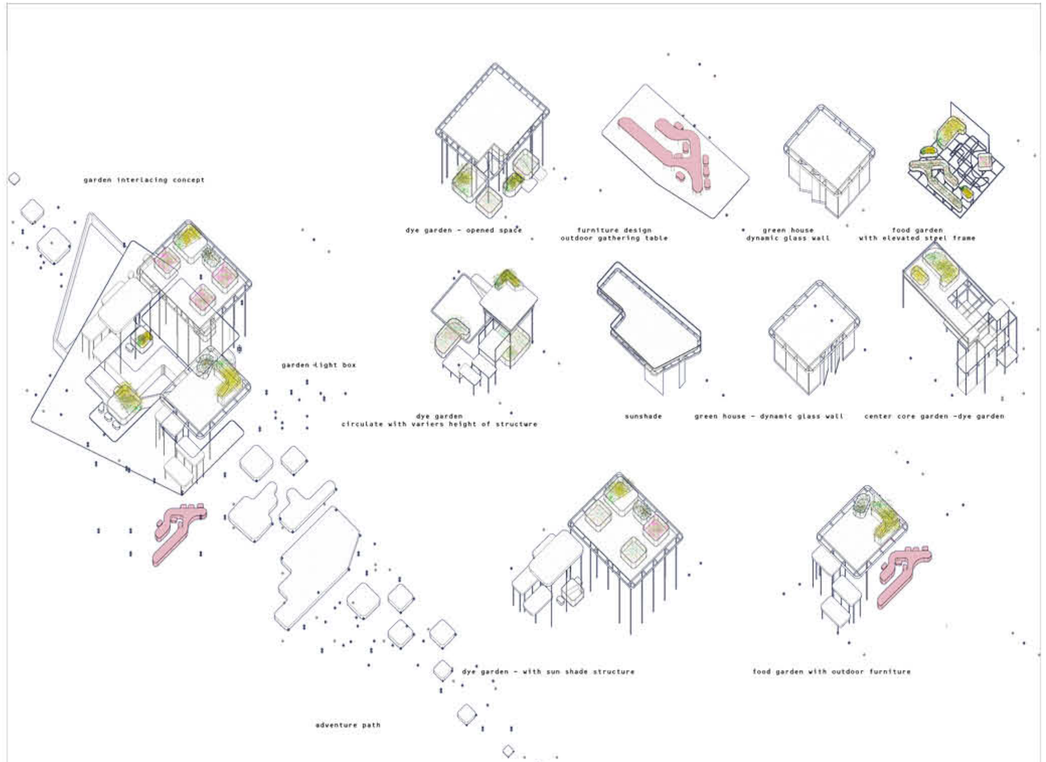
1.Close Proximity: Near Designated Location
2.Transport Corridor: Medium-distance Transit Connection
3.Metropolitan Outlook: Beyond Brooklyn's Immediate Metro Reach

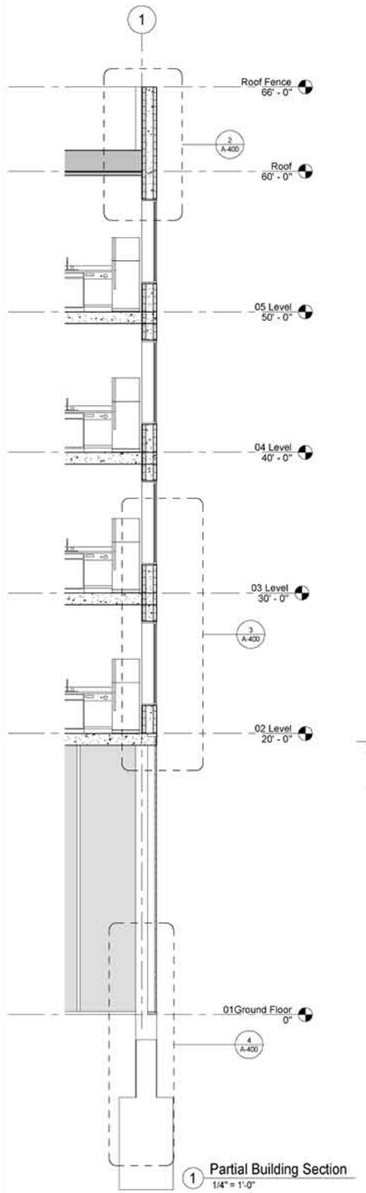
Single parents often have limited time available due to work commitments and childcare responsibilities. Lengthy commutes to work can eat into precious time that could otherwise be spent with children or on personal activities. Long commutes can lead to increased stress and fatigue for single parents, particularly if they are rushing to drop off children at school or daycare before heading to work. This can impact their ability to focus on work tasks and engage with their children effectively.Establishing a strong sense of community within residents can enhance safety for single-parent households. Neighbors looking out for each other and collaborating on initiatives such as neighborhood watch programs can provide additional layers of security.

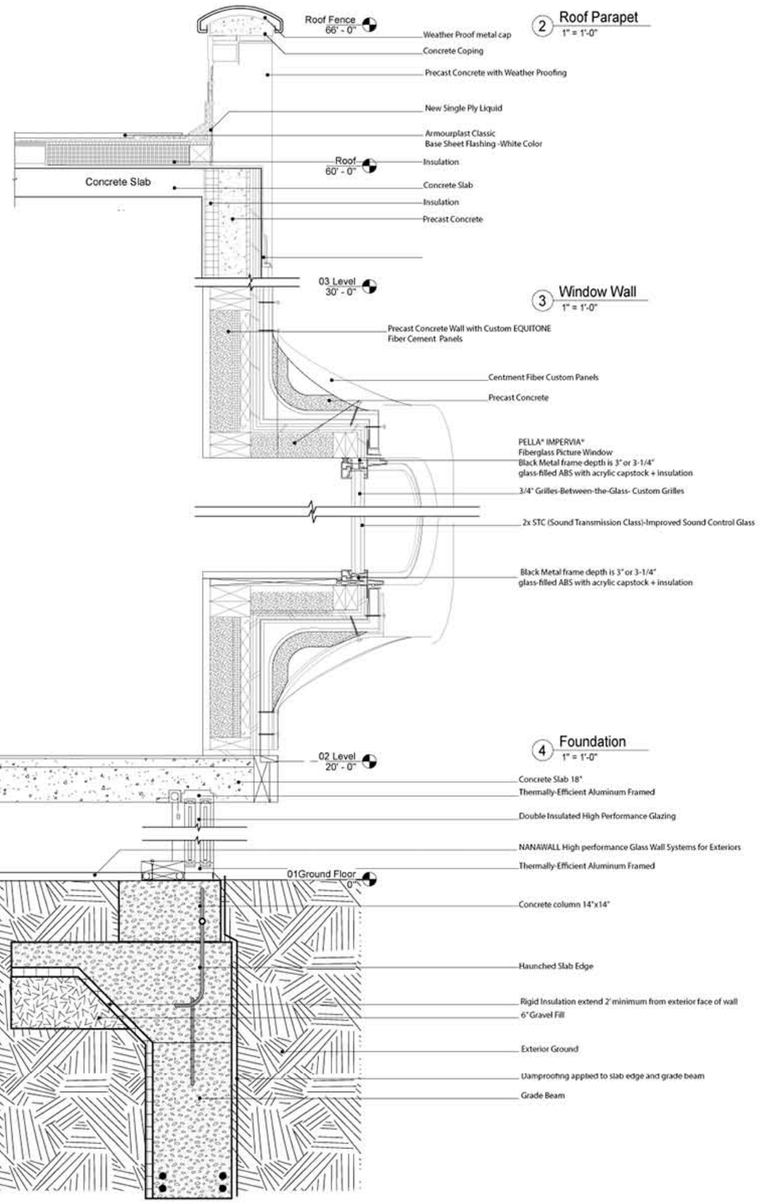
DRAWINGS

MARCY'S PLAYTIME 301_FA2022

RHINO + REVIT + AI

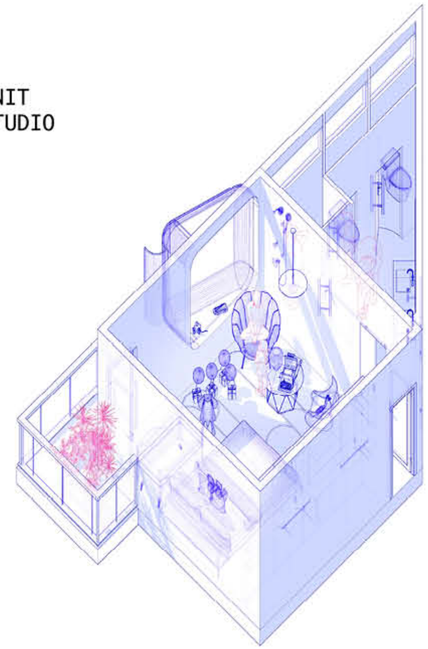




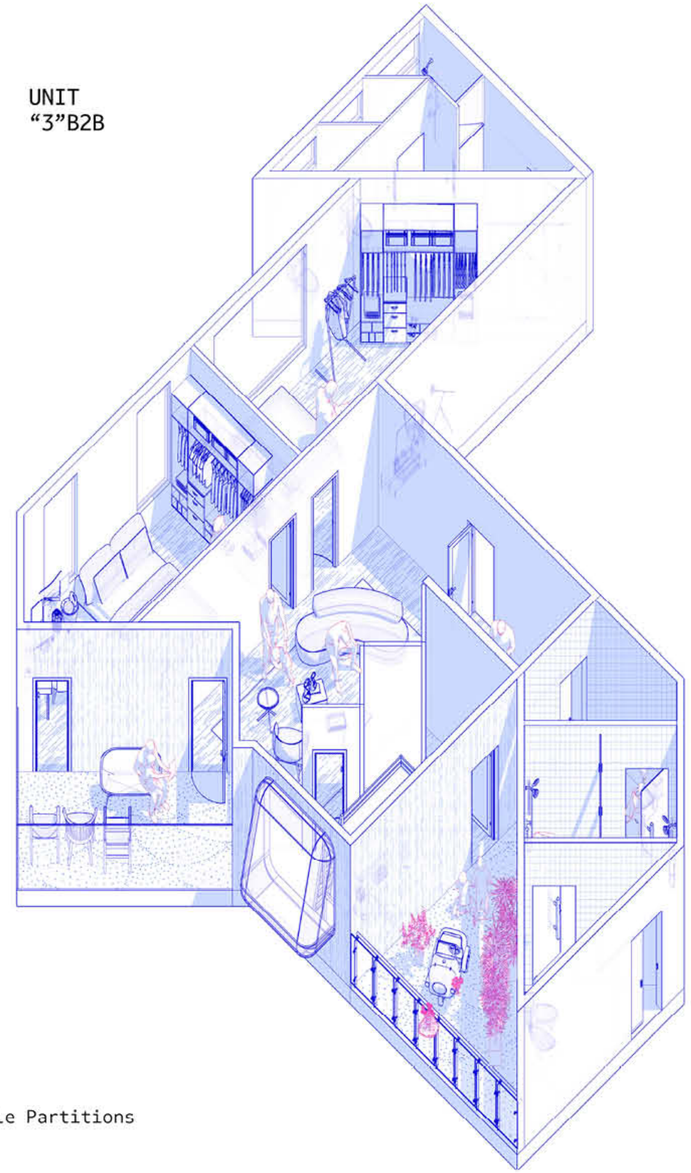


GARDEN MODULES
SOUTH SECTION
SECTION DETAILS

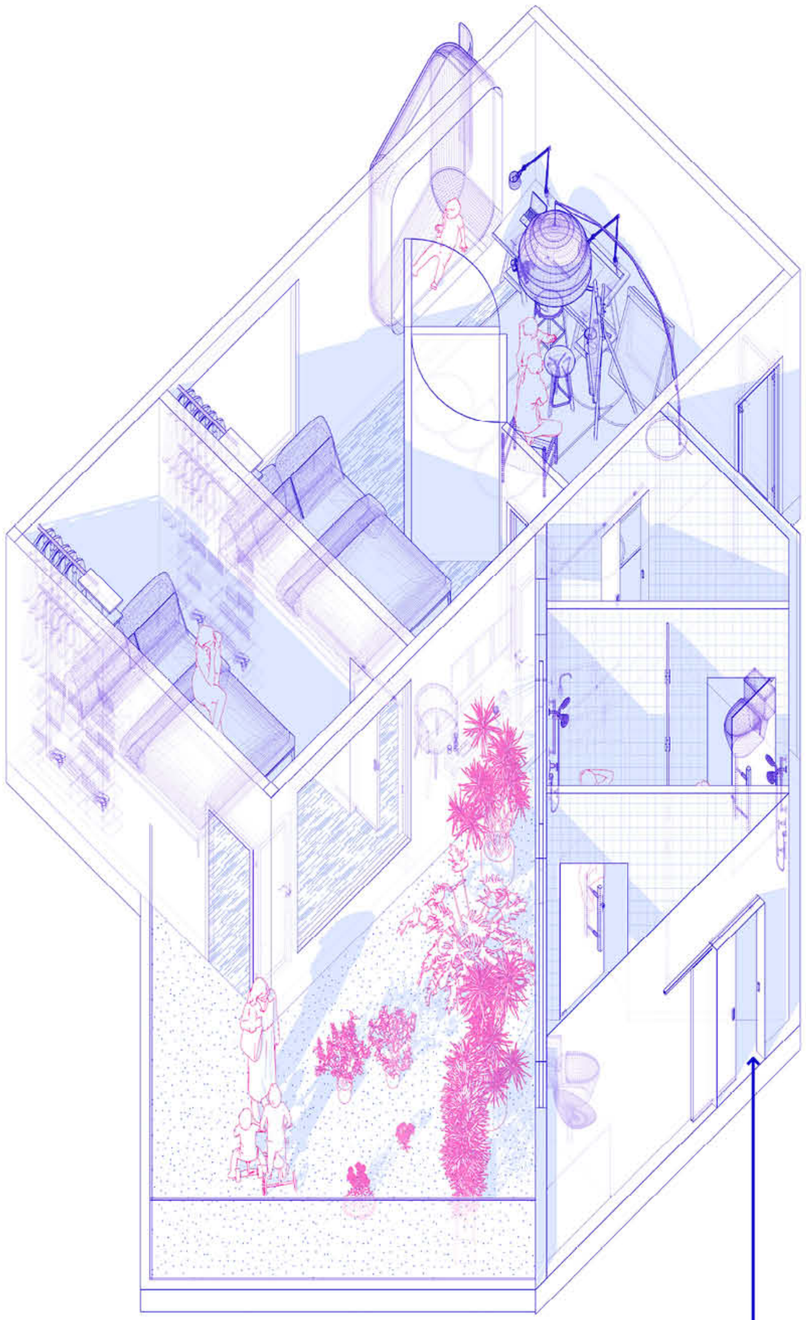
UNIT
STUDIO



UNIT
"3"B2B



UNIT
"2"B1B



Operable Partitions

UNIT "2"B 1B

Neighborhood Unit

For Future Flexibility & Shared Spaces

Shared kitchens and washrooms spaces foster single family community bonds and reduce isolation. Residents can share appliances and amenities, reducing costs. The shared facilities optimize floor space and lower construction expenses.Resource sharing promotes eco-friendly practices. Operable partitions allow residents to easily adjust room configurations for different activities.They maximize the use of limited apartment space by enabling flexible layouts. Operable walls create private areas within the apartment as needed. Operable walls accommodate changing needs over time without major renovations.

DRAWINGS MARCY'S PLAYTIME 301_FA2022

RHINO + PS + AI

TYPICAL
FLOOR PLAN

PROGRAM:
1. HUBBY
2. MUSIC LOUNGE
3. DYNAMIC WALL
4. SHARED KITCHEN
5. ARCADE
6. EGRESS & ELEVATOR
7. LOUNGE
8. PARENTS WORKING SPACE
9. PV PANEL

INTRODUCTION RETI CENTER 401_SU2023

RHINO + VRAY

PLANTER DESIGN
FLOATING GARDEN

WATER'S EDGE : RETI CENTER

Redhook, Gowanus Canal, Brooklyn, New York
Upcycle Design-Build for Non-Profit Organization
Advance Design Studio 401 - Summer 2023 - Stephen Slaughter

In partnership with the Brooklyn-based non-profit RETI in the Red Hook Community, our two-month summer studio was dedicated to developing resilient design strategies to address climate challenges. We aimed to produce speculative and practical proposals for the local community, emphasizing sustainable development through collaborative research and design.

This studio project not only highlights my architectural contributions but also underscores my roles as the studio's graphic designer and photographer. As the graphic designer, I was responsible for creating the graphic standards and compiling the final PDF booklet that encompasses all project documentation. My role was pivotal in ensuring cohesive visual communication and branding throughout the project materials. As the photographer, I meticulously documented the studio's journey, capturing everything from classroom activities and shop time to on-site work, providing a comprehensive visual record of our process. As an architecture student, my contributions spanned various scales of design and implementation, from extra-small to extra-large. Working alongside RETI's graphic designer, I developed inking stencils with unique patterns, enhancing brand visibility on RETI-produced objects. A significant portion of my effort was devoted to designing and constructing stools from wooden pallets provided by RETI, a medium-scale project that underwent several iterations to reach its final form. Additionally, I played a pivotal role in the conceptual design of a green wall, research on floating concrete, and the creation of a water-floating art garden.

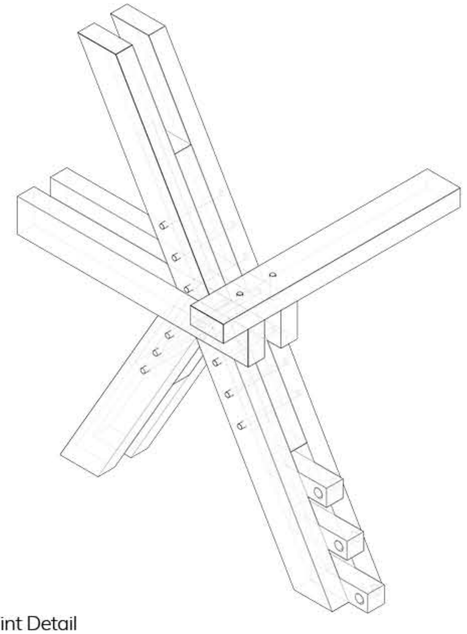
The collaborative studio with RETI in Red Hook has been a multifaceted journey that blended innovative design with practical environmental solutions. My multi-roles as an architect, graphic designer and photographer allowed me to capture and shape the narrative of our project, contributing to both its functionality and visual identity. Through our collective efforts, we addressed critical challenges with creative resilience, leaving an impact on the community and enriching our understanding of sustainable architectural practices.

401_SU2023

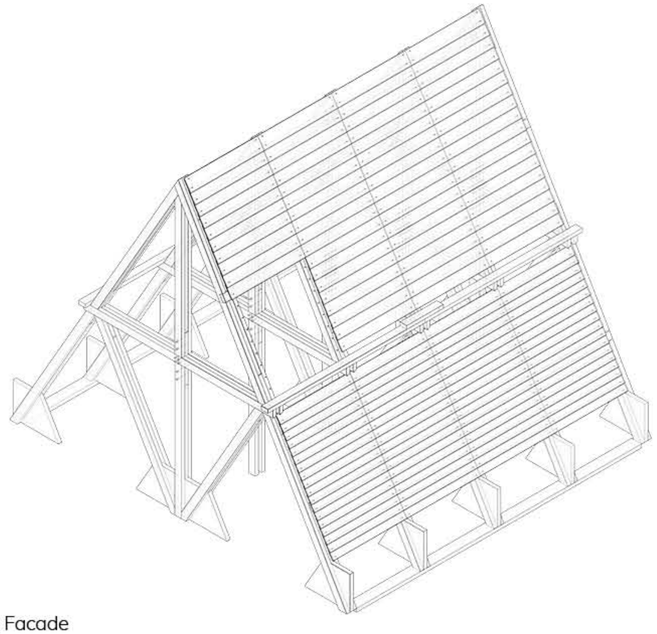
RETI CENTER

WOOD-JOINT

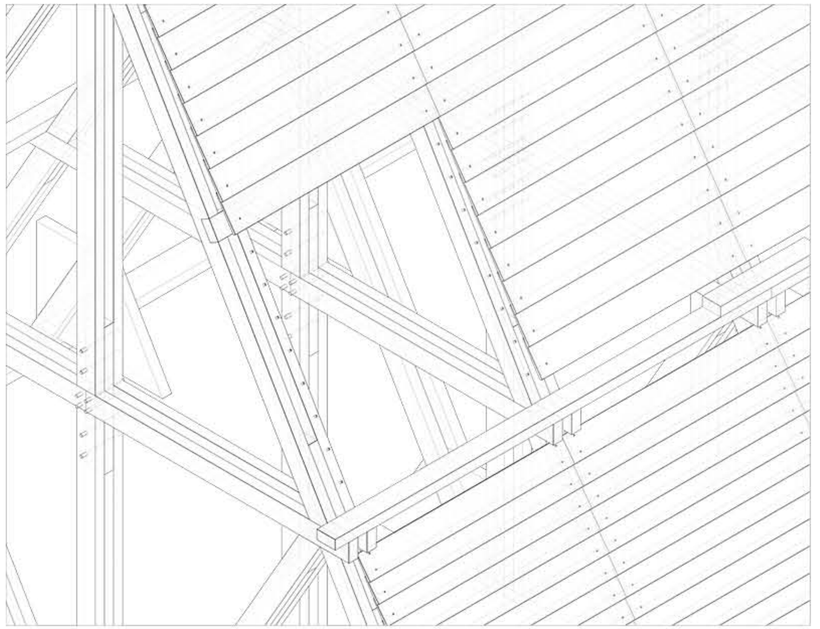
RHINO + AI + WOODSHOP



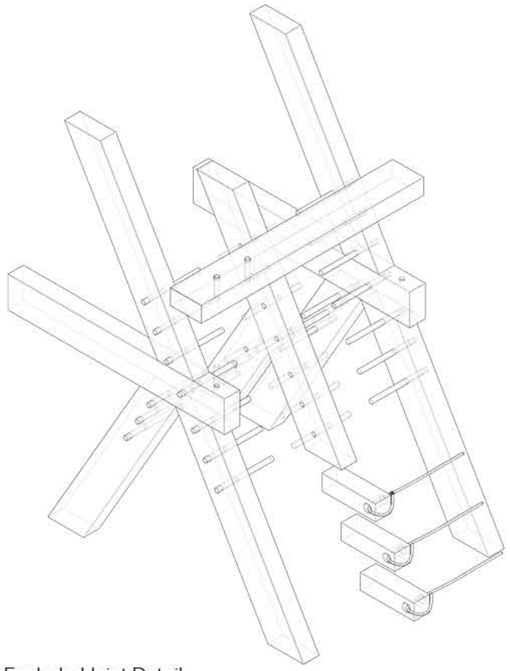
Joint Detail



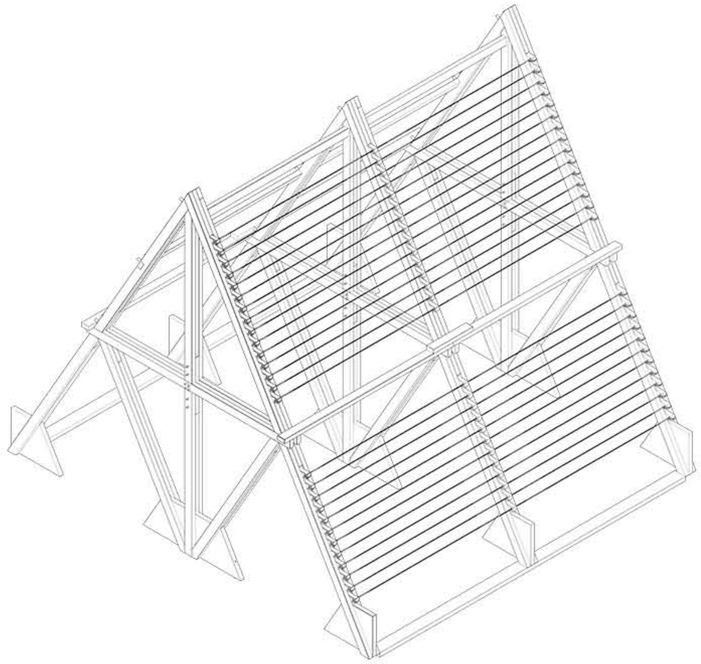
Bevel Sliding Facade



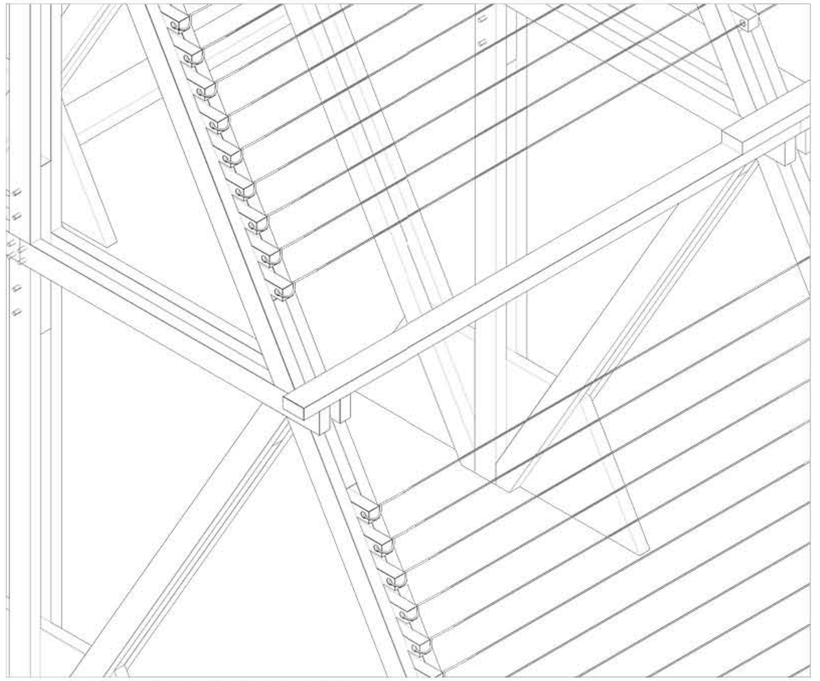
Bevel Sliding Facade Zoom-in



Exploded Joint Detail



Rope Facade [For Kelp Drying]



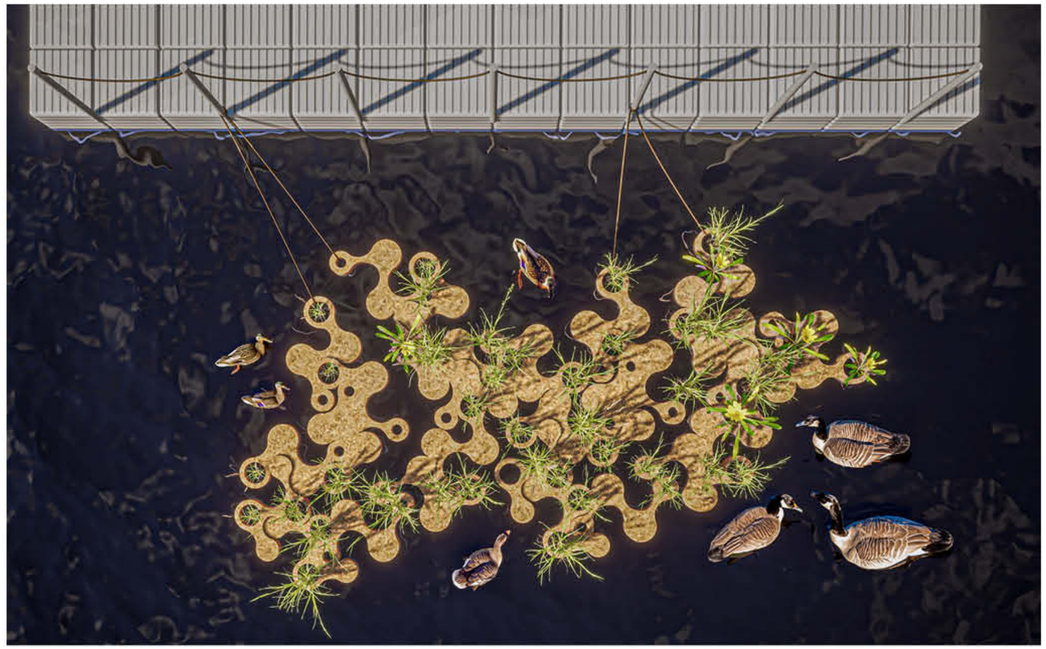
Rope Facade [For Kelp Drying] Zoom-in

INITIAL COASTAL CONSTRUCTION IDEAS

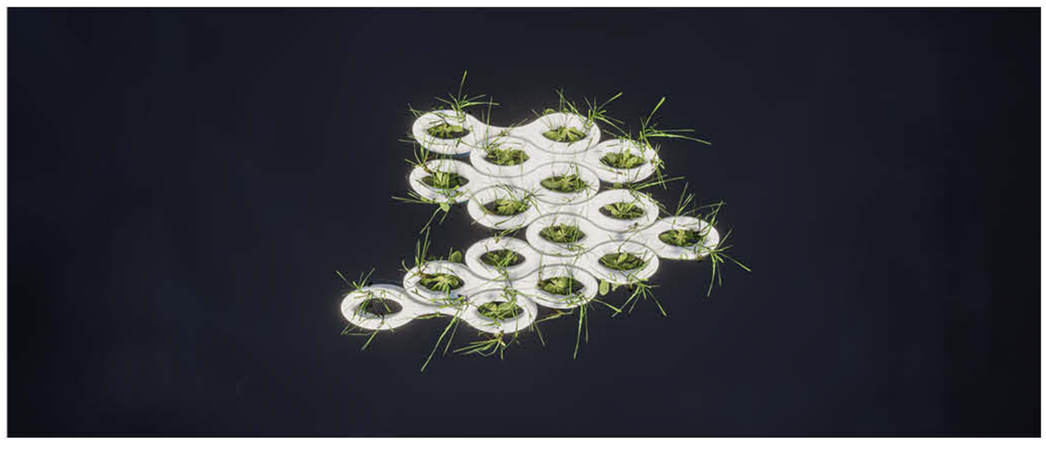
302_SP2023

PROJECT TITLE

RENDERING



TOOLS USED



FLOATING PLANTERS
GROUND PLANTERS

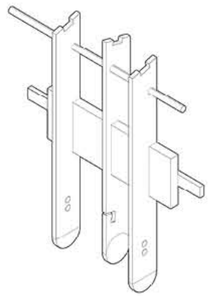
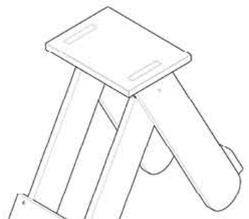
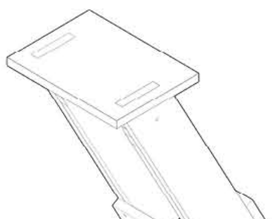
401_SU2023

RETI CENTER

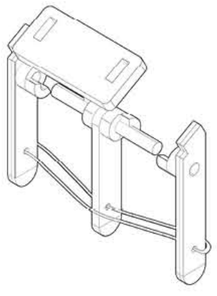
CHAIR

RHINO + AI + WOODSHOP







DIGITAL PROTOTYPES

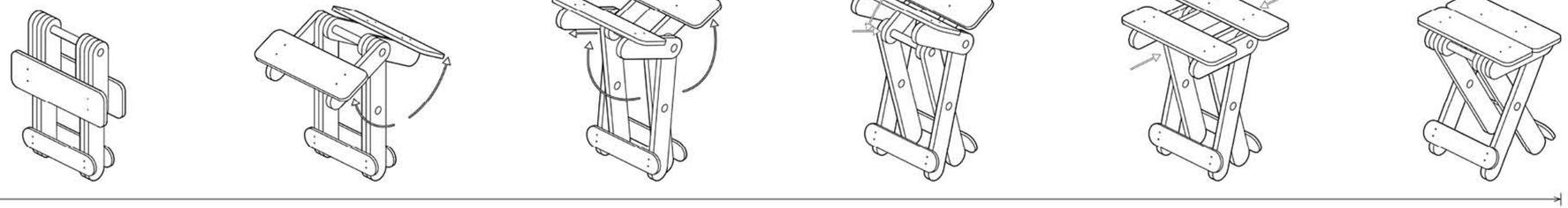
ITERATIONS
OF THE
CHAIR DESIGN

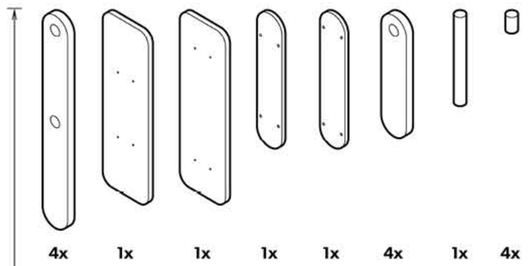



PHYSICAL PROTOTYPES
Sustainably Crafted Seating: Handmade at Pratt Institute’s Woodshop using Repurposed Wood and Pallets

401_SU2023 RETI CENTER CHAIR RHINO + AI + WOODSHOP

CHAIR UN-FOLDING AND FOLDING





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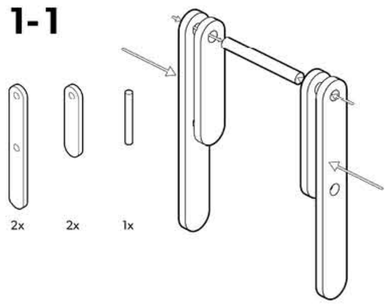

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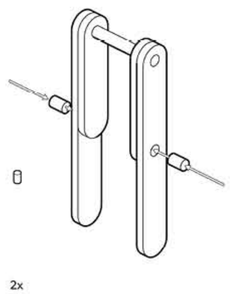

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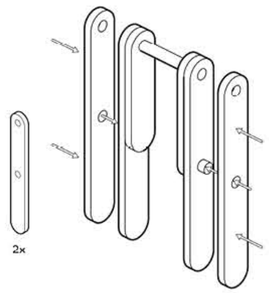

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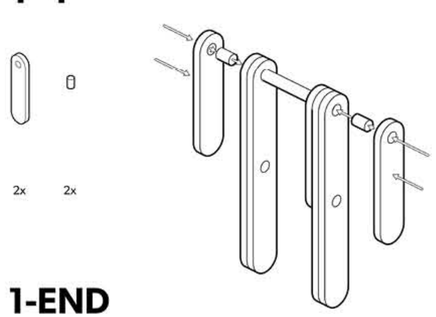

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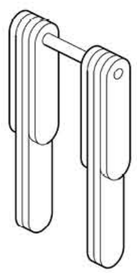

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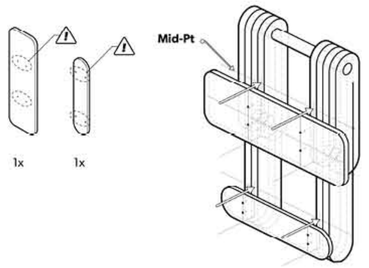

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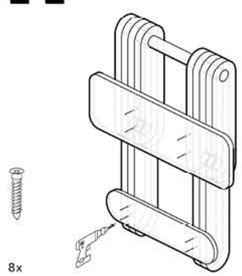

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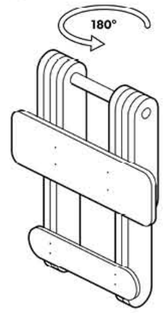

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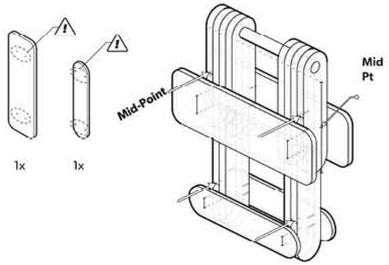

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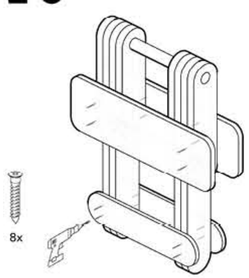

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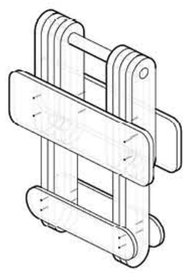
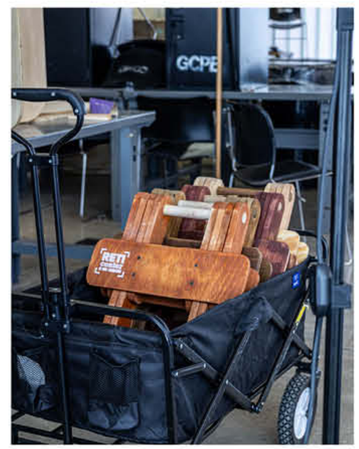
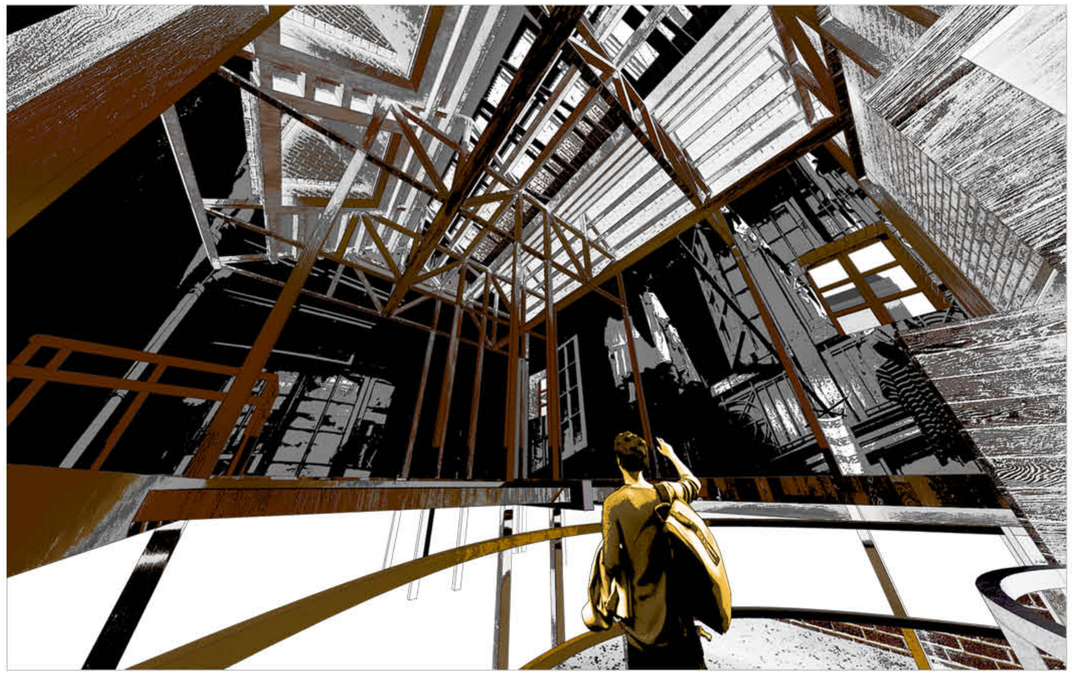




CONSTRUCTION MANUAL INSPIRED BY IKEA
The construction manual is made for RETI, so they can fabricate their own folding chairs from their waste pallets!

"IKEA VER."CHAIR
BUILDING MANUAL



RED BRICK WALLS

Shanghai, China
Installation / Museum / Community Revitalizations
Summer 2022 - Partner with Guanda Li

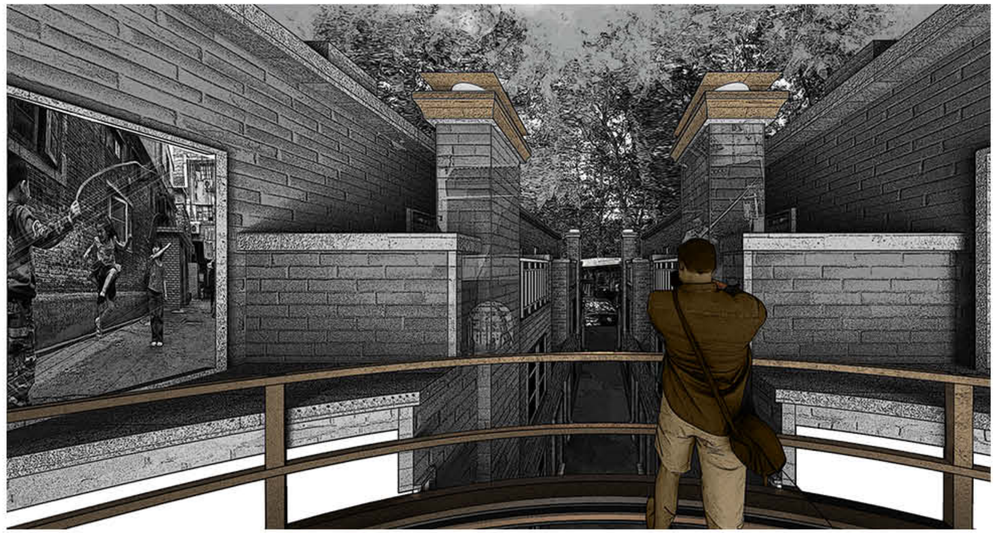
The Longtang, historic alleyways nestled within Shanghai and developed from the mid-19th to the 20th centuries, are akin to living museums that encapsulate the essence of the city's cultural and architectural history. This design proposal introduces an elevated linear journey that cleverly juxtaposes the dualities of ease and unease, serving to unveil the hidden vibrancy of the Longtang. As visitors embark on this path, they are immersed in the rich textures of Longtang life, finding comfort in the human presence and the material richness that defines these spaces. The journey starts at ground level, allowing travelers to experience the intimacy of the Longtang, before ascending onto a displaced walkway. This elevated path gifts visitors with expansive views and a flood of natural light, offering new perspectives that intertwine the linear experiences of the Longtang with a wider urban narrative.

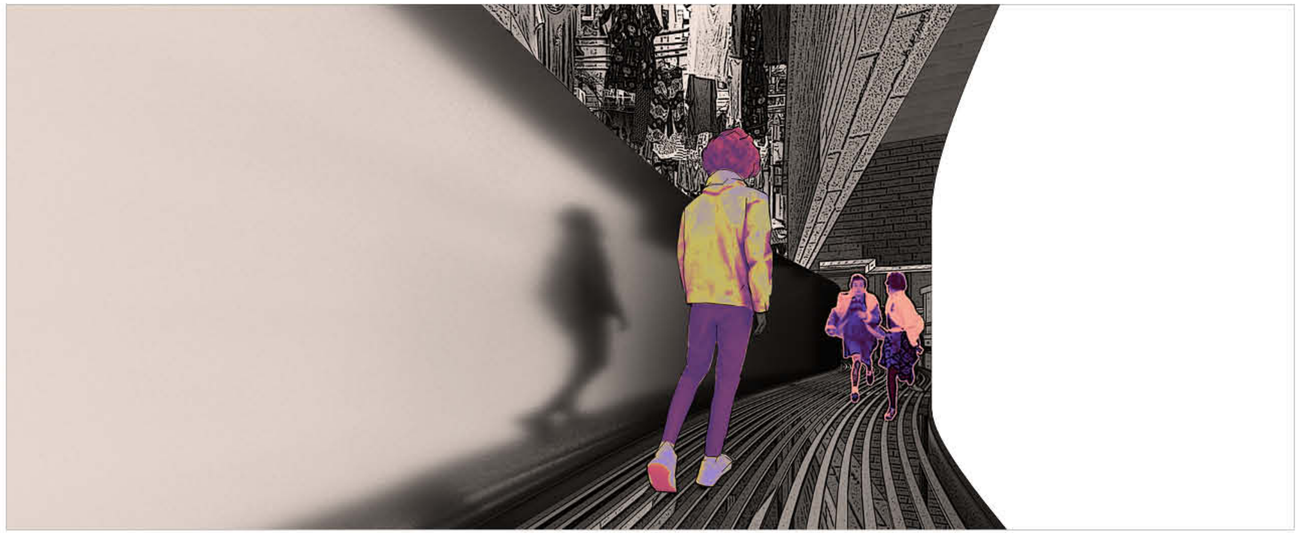
The journey's continuity is artfully disrupted by two distinct cuts, which curve the path away from its linear progression, inducing a sense of unease. These deviations reveal hidden spaces that have been abandoned and left to deteriorate, standing in stark contrast to the bustling life within the inhabited Longtangs. The presence of these voids along the path highlights the delicate dependency of these historical sites on human engagement and care.

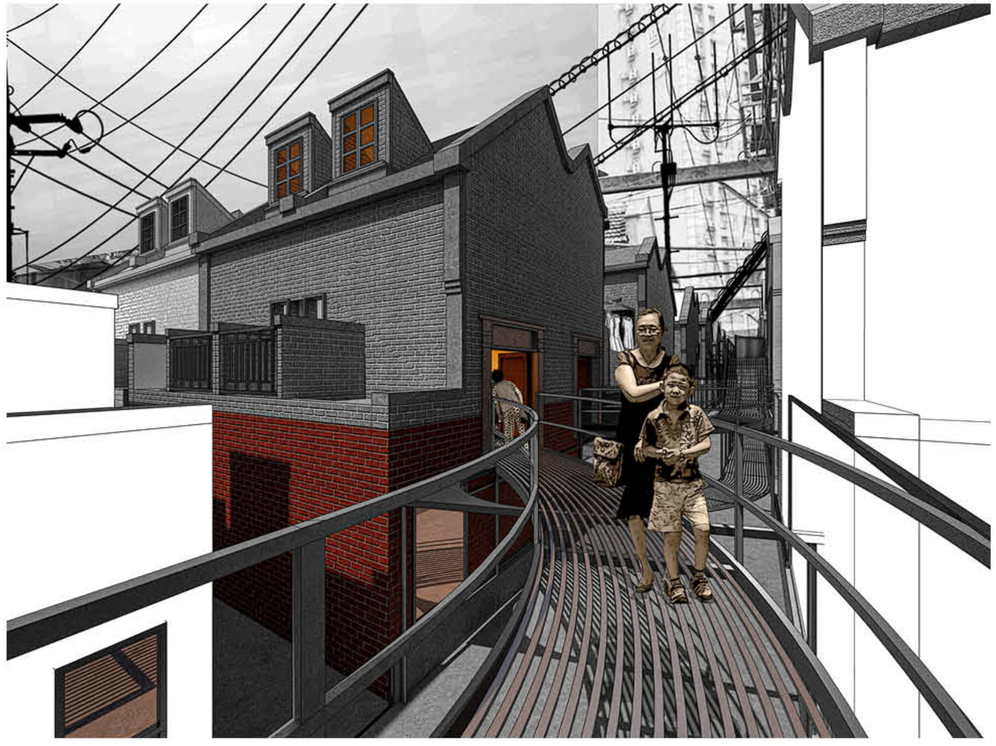
To deepen this engagement, mirrors are strategically placed along both the original and the elevated paths, reflecting the figures of visitors as they move. This element not only amplifies the personal connection to the space but also poses profound questions regarding the ownership of memory, intertwining past and present experiences. By showcasing the Longtang in both its lived-in and abandoned states, while paying homage to its unique textures, density, and linear form, the design invites a contemplative exploration of how vitality itself can serve as the most effective means of revitalizing the Longtang's history. This proposal aims to foster a deeper appreciation for the complex layers of history and life that coexist within Shanghai's Longtang, encouraging a thoughtful reflection on the importance of preserving such spaces as dynamic repositories of culture and memory.

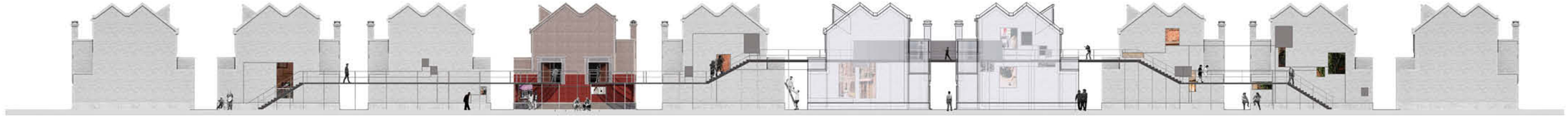
SELF-DIRECTED PROJECT RED BRICK WALLS ###_SU2022

RHINO + VRAY









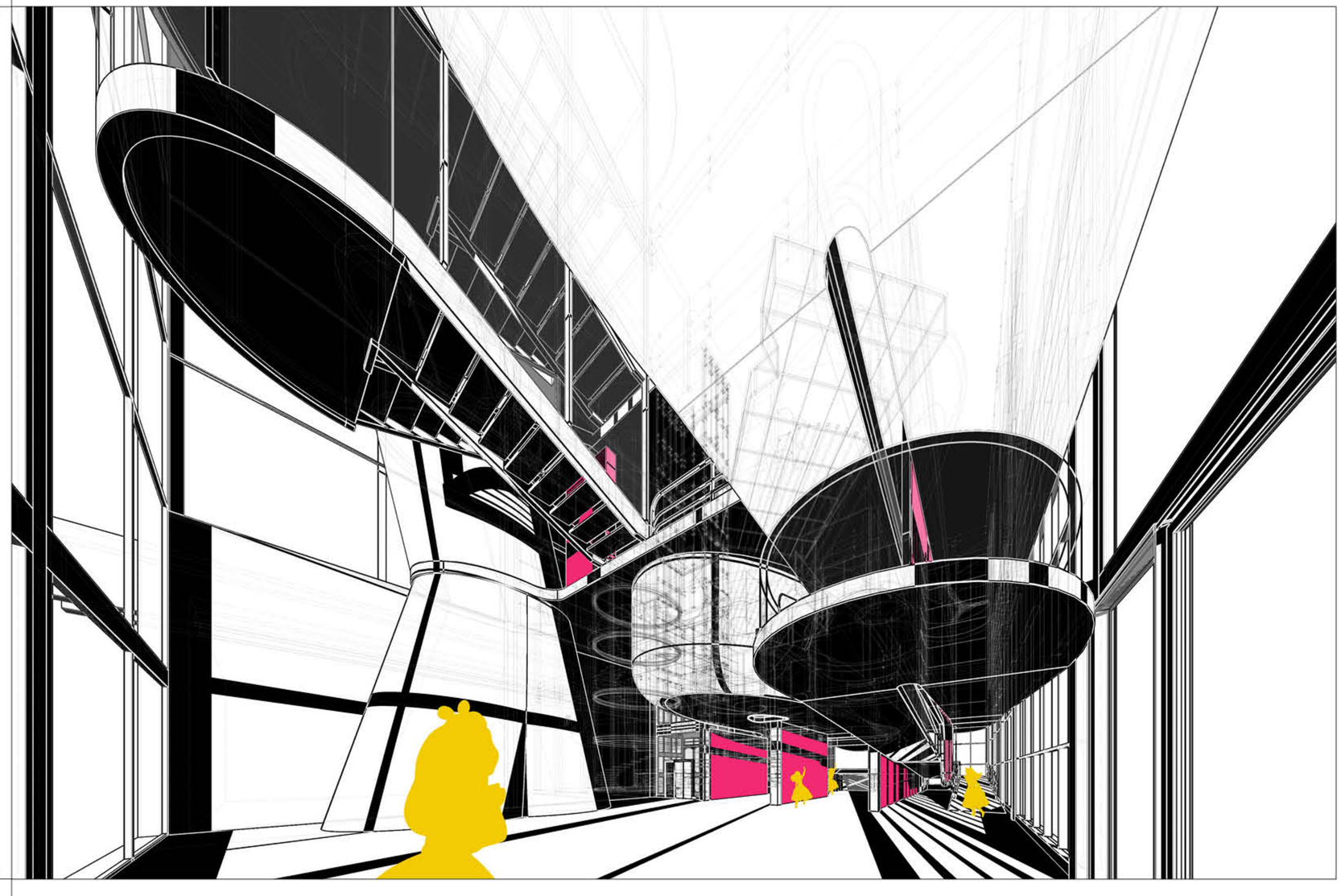
RENDER COLLAGE

(～^∇^)～EXTRAS EXTRAS READ ALL ABOUT IT

Techniques and Tools in Architectural Visualization

OTHER TOPICS

Renderings / Models
Construction Documents / Photography / Sketching



L [QIRUI] FANG

2020-2023

GRAPHIC RENDERS ARCHI-MANGA

RHINO + SKP + PS + AI

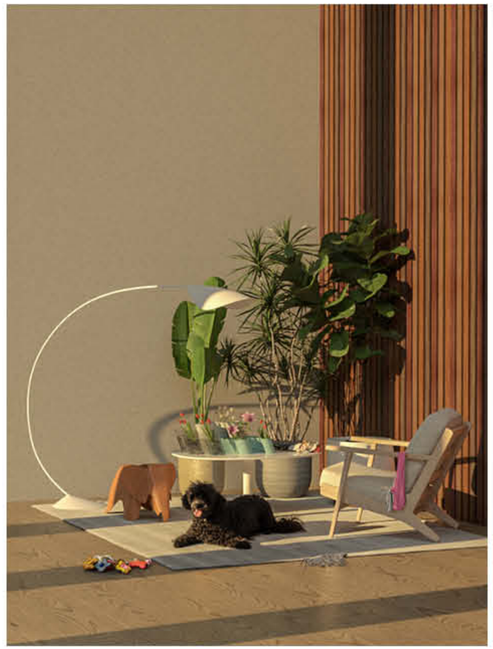
ARCHITECTURE
SPACE OF A PLOT

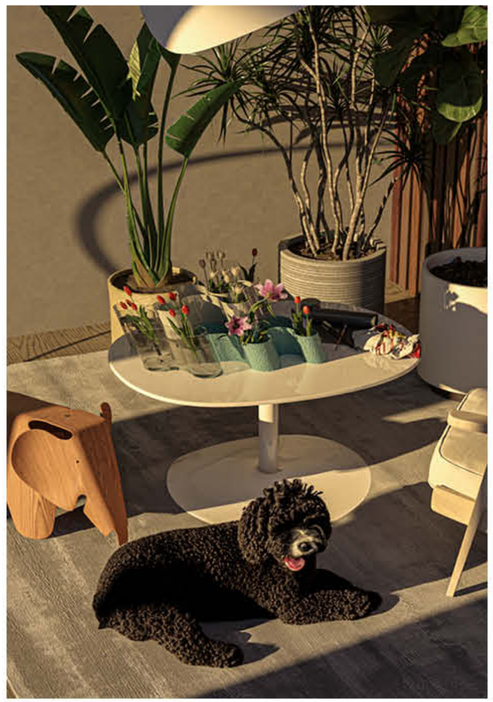
TEXTURED RENDERS

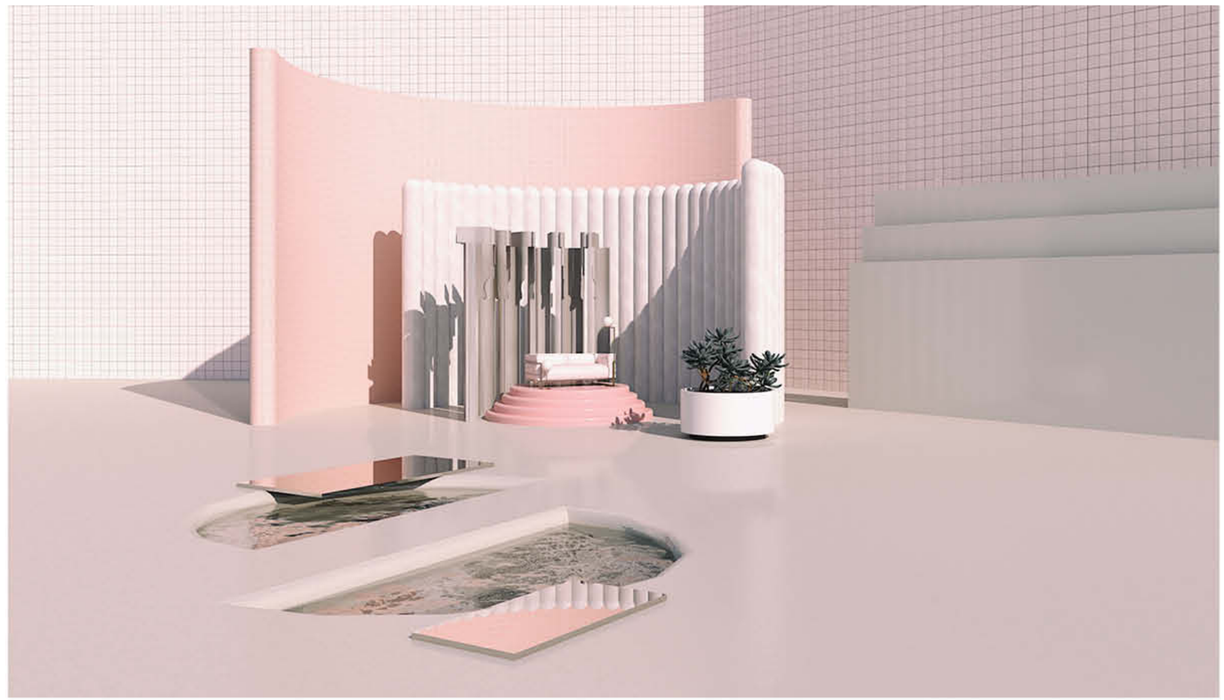
RHINO + VRAY

IMAGINED SPACES

2021-2023

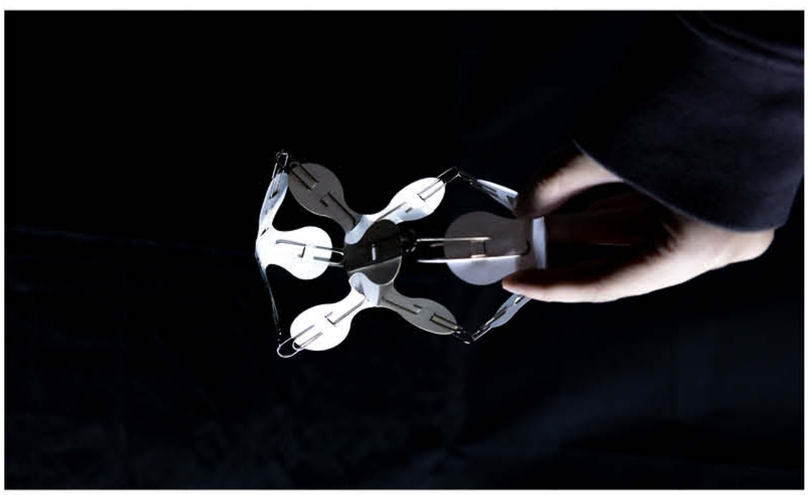


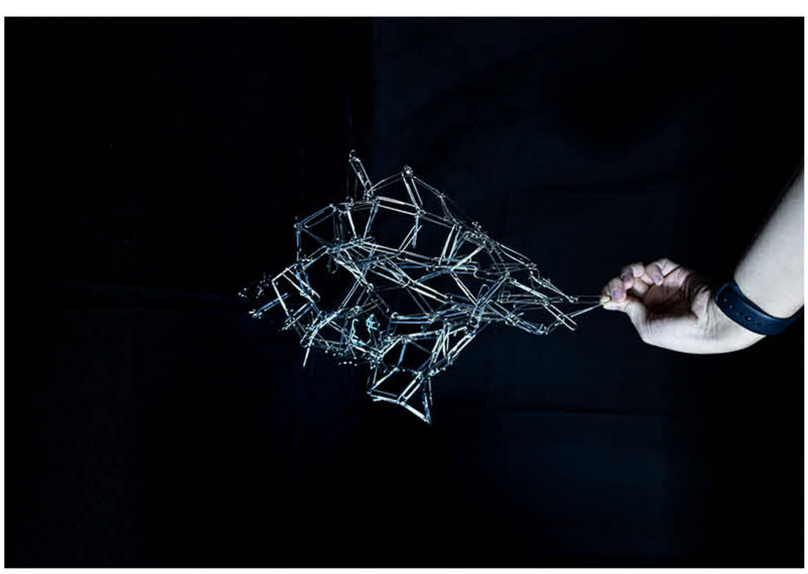


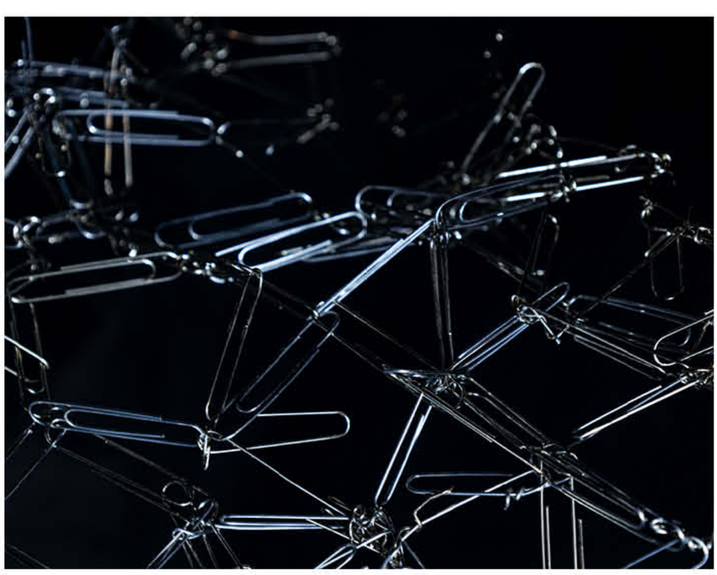


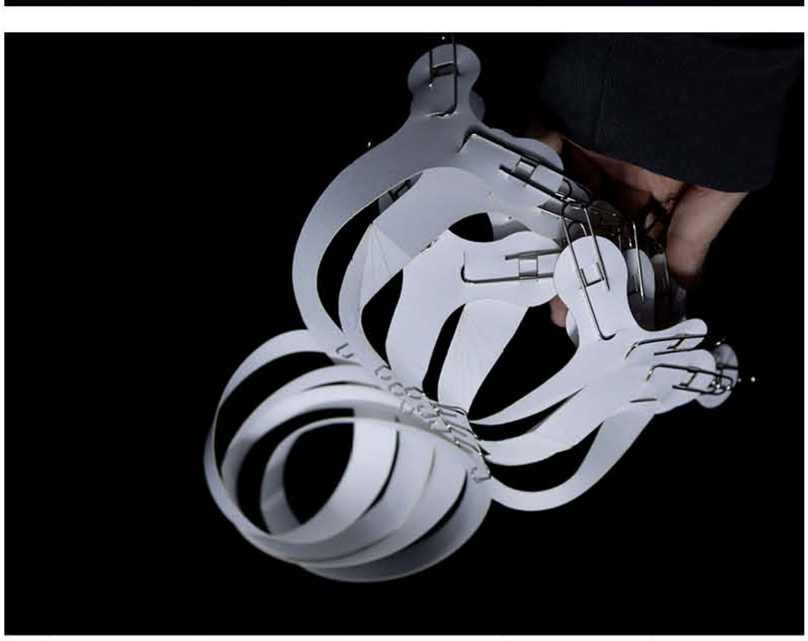
ARCHITECTURE
SPACE OF A PLOT

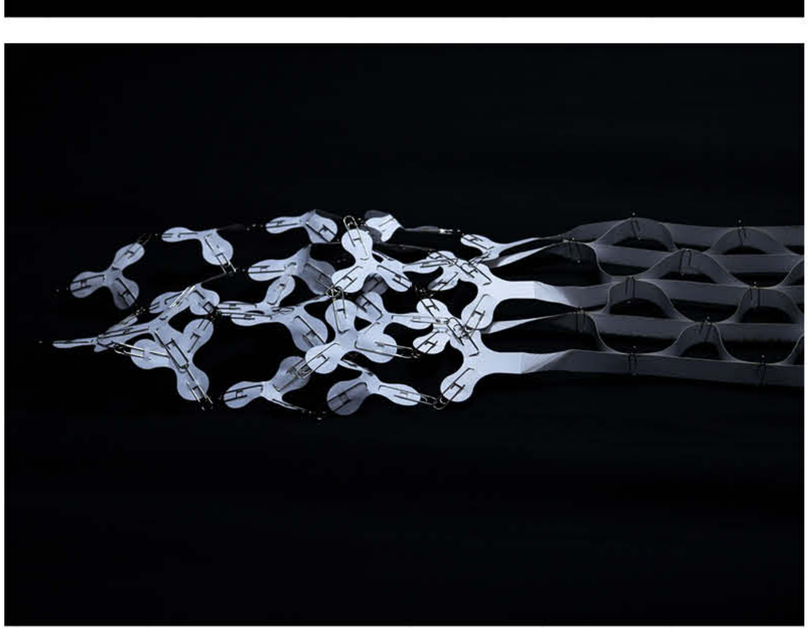
A UNIT OF CONNECTION

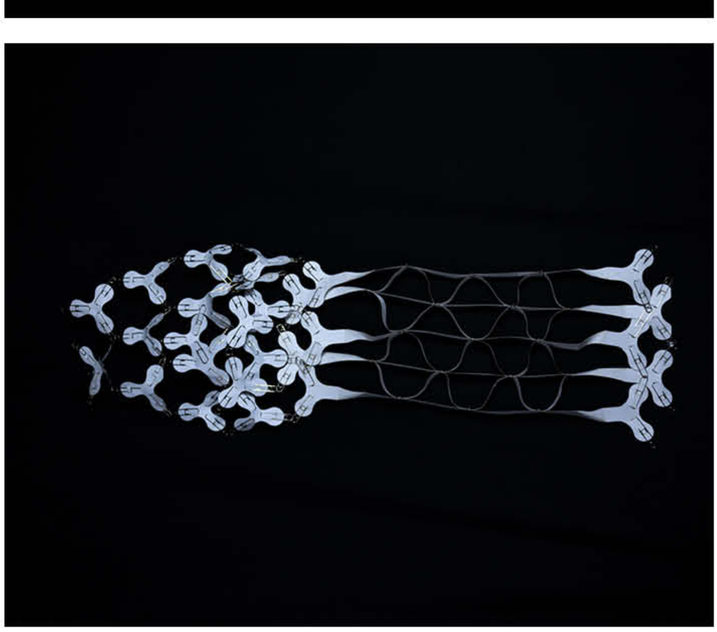




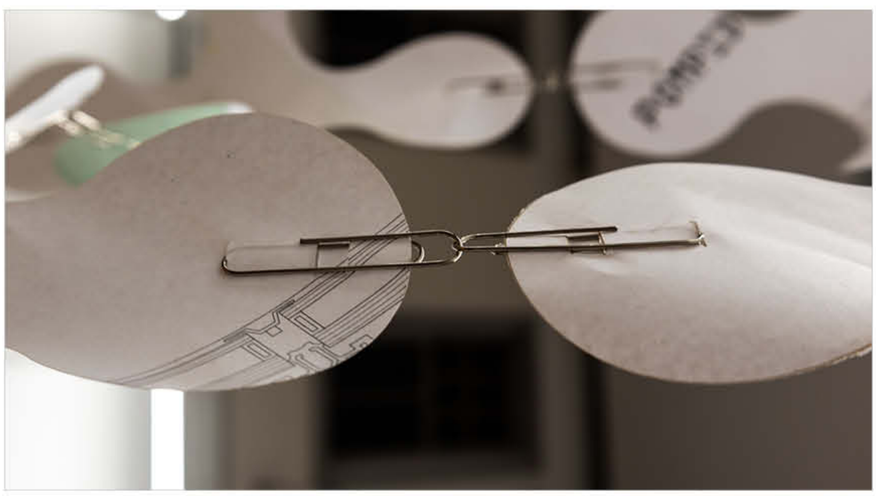


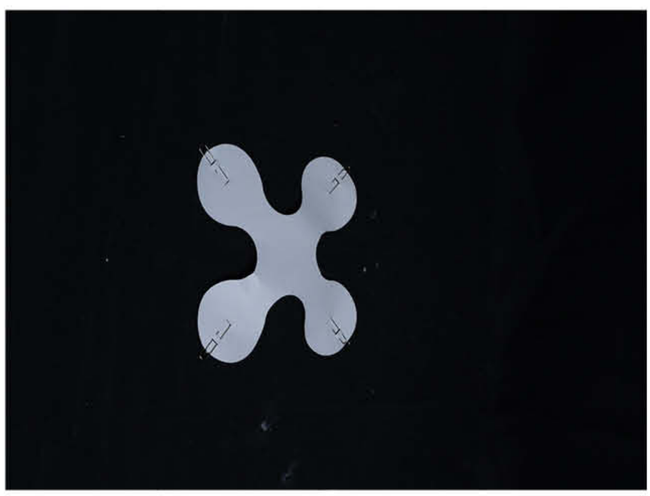


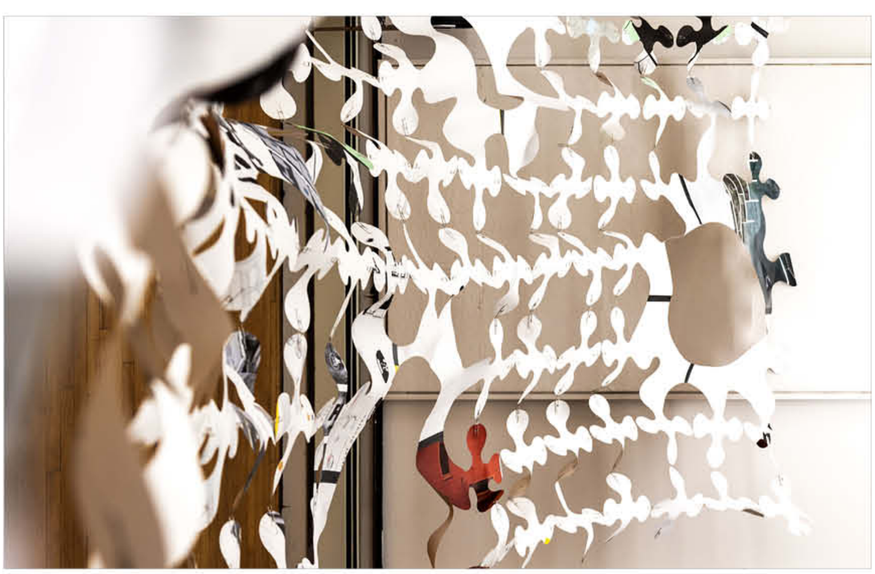


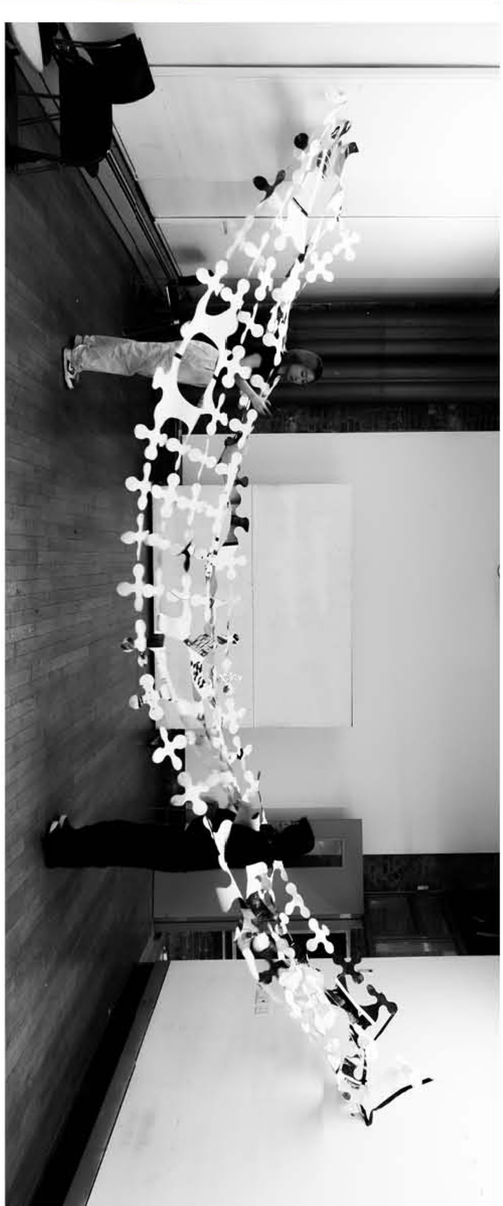


"+" DRAPE







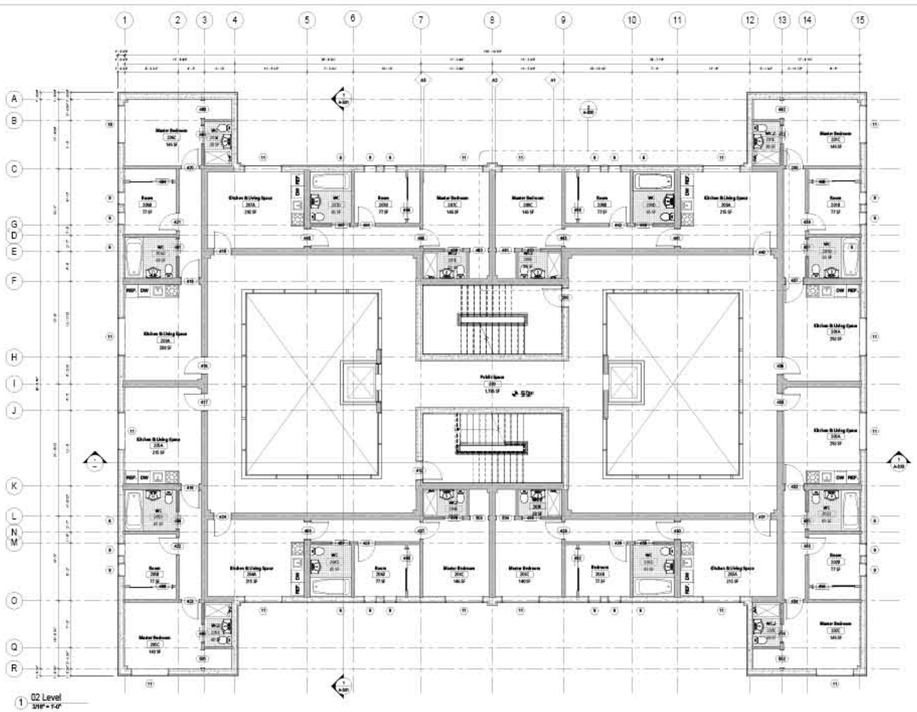


SP2023

CONSTRUCTION DOCUMENTS

REVIT

RESIDENTIAL TOWER



QR.3LF STUDIO

Address under Manage: 539 Marcy Ave, Brooklyn, NY 11206
Project information: Residential [R6 ZONE]
Project Address : 545 Marcy Ave, Brooklyn, NY 11206

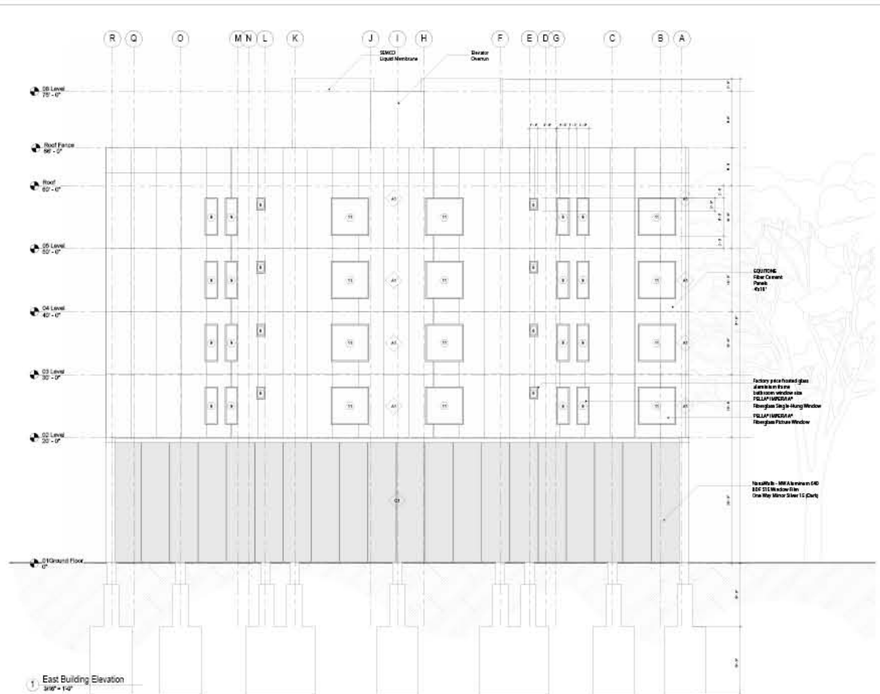
Revision #: Phase.04 Date: 04/19/2023

CD SET

Scale: 3/16" = 1'-0"
Date: 05/03/2023
Project No: 2003.CD.SF
Drawn by: Qirui Fang
Checked by: Gonzalo Carbajo

Drawing Title:
Typical Floor Plan

Drawing Number:
A-102



QR.3LF STUDIO

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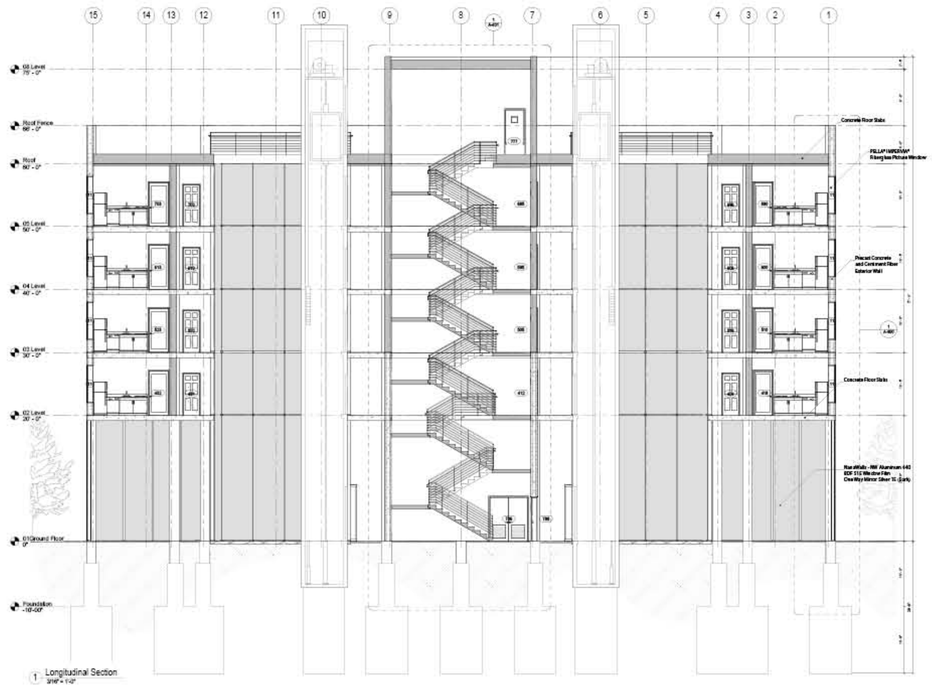
Revision #: Phase.04 Date: 04/19/2023

CD SET

Scale: 3/16" = 1'-0"
Date: 05/03/2023
Project No: 2003.CD.SF
Drawn by: Qirui Fang
Checked by: Gonzalo Carbajo

Drawing Title:
Building Transverse Elevations

Drawing Number:
A-201



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Project information: Residential [R6 ZONE]
Project Address : 545 Marcy Ave, Brooklyn, NY 11206

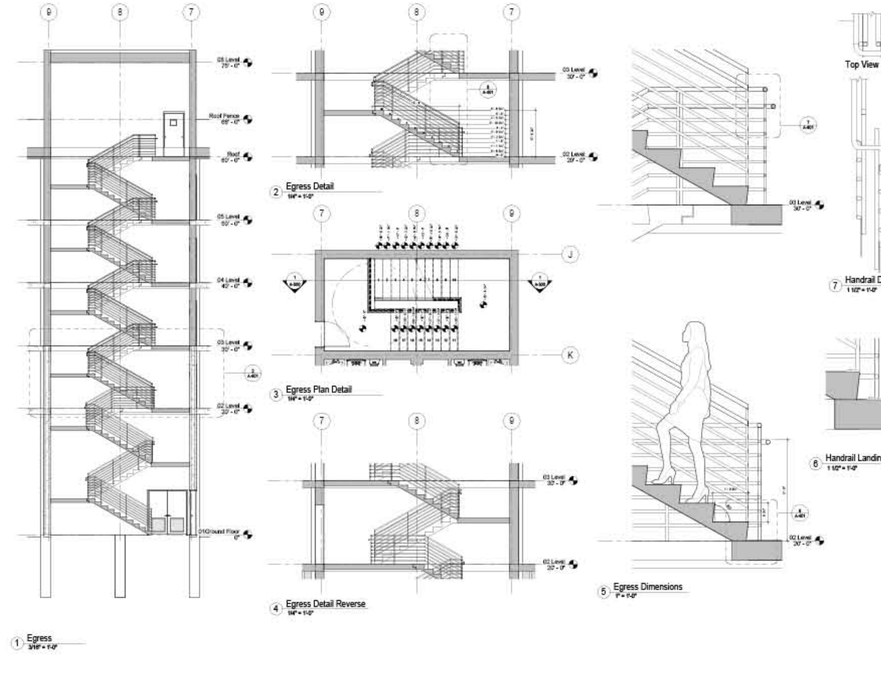
Revision #: Phase.04 Date: 04/19/2023

CD SET

Scale: 3/16" = 1'-0"
Date: 05/03/2023
Project No: 2003.CD.SF
Drawn by: Qirui Fang
Checked by: Gonzalo Carbajo

Drawing Title:
Building Longitudinal Sections

Drawing Number:
A-300



QR.3LF STUDIO

Address under Manage: 539 Marcy Ave, Brooklyn, NY 11206
Project information: Residential [R6 ZONE]
Project Address : 545 Marcy Ave, Brooklyn, NY 11206

Revision #: Phase.04 Date: 04/19/2023

CD SET

Scale: As indicated
Date: 05/03/2023
Project No: 2003.CD.SF
Drawn by: Qirui Fang
Checked by: Gonzalo Carbajo

Drawing Title:
Egress Stair Plans, Section and Details

Drawing Number:
A-401

PHOTOGRAPHY QR.3LF STUDIO 2018-2024

CANON + LRCC + PS

MORE PHOTOGRAPHY
WORK @QR.3LF