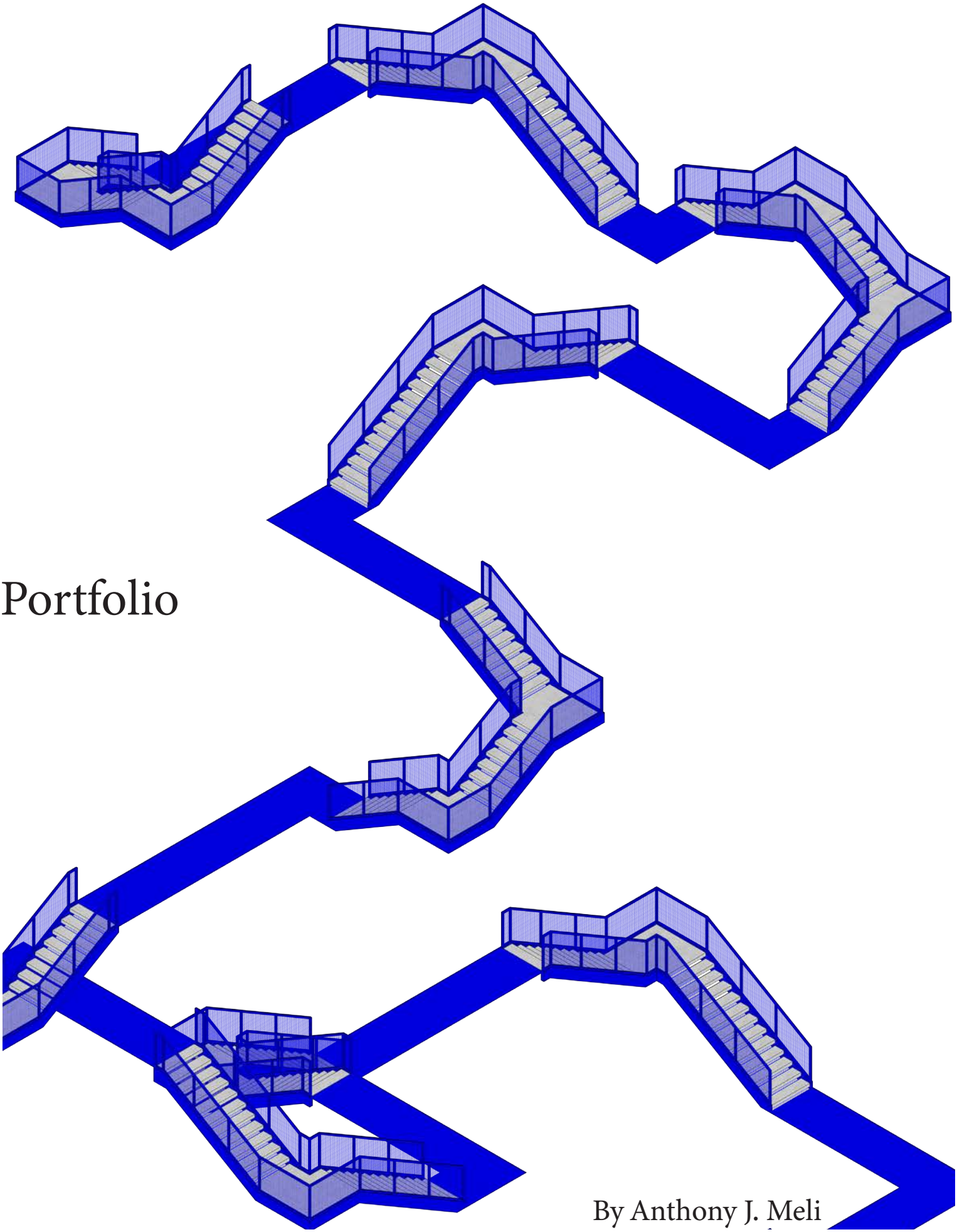


Portfolio

By Anthony J. Meli

Anthony J. Meli

St. James, NY 11780
Phone: 631-766-1344
E-Mail: ajmeli634@gmail.com

Motivated Architectural Designer with experience in project support and coordination. Skilled in design software, multitasking, and maintaining a constructive, team-oriented mindset. Eager to apply academic training to real-world challenges and contribute to innovative architectural solutions.

Education

University at Buffalo — January 2024 - July 2025
Master of Architecture

University at Buffalo — August 2020 - December 2023
Bachelor of Science in Architecture
Dean's List Spring 2021

Smithtown East High School — September 2016 - June 2020
High School Diploma

Academic Experience

The Vertical Paradox (ARC602 Graduate Studio, Prof. Song) — January 2024 - May 2024
- Researched and designed educational spaces within dense urban developments.
- Collaborated with international teams from Chung-Ang University (Seoul), Pusan National University (Busan), and Japan Women's University (Tokyo).

Housing In Place (ARC403 Undergraduate Studio, Prof. Wales) — August 2023 - December 2023
- Designed multi-family housing for refugees on Buffalo's West Side.
- Reimagined an industrial edge site as a vibrant neighborhood center in a two-person team.

Riochante Community Center (Study Aboard, Prof. Cramer & Fernado) — May 2023 - July 2023
- Partnered with the Monteverde, Costa Rica community to enhance a local community center.
- Developed phased improvement programs aligned with funding availability.

Job Experience

Elegant Affairs Caterers (Waiter) — July 2018 - Present
- Delivered high-end catering services for large events as part of a professional team.
- Responsible for full event setup, guest service, and post-event breakdown.

Town of Smithtown Parks Department (Recreation Aide II) — August 2017 - September 2019
- Maintained cleanliness and safety of local parks and recreational facilities.
- Prepared sports areas and ensured readiness for public use.

Published Work

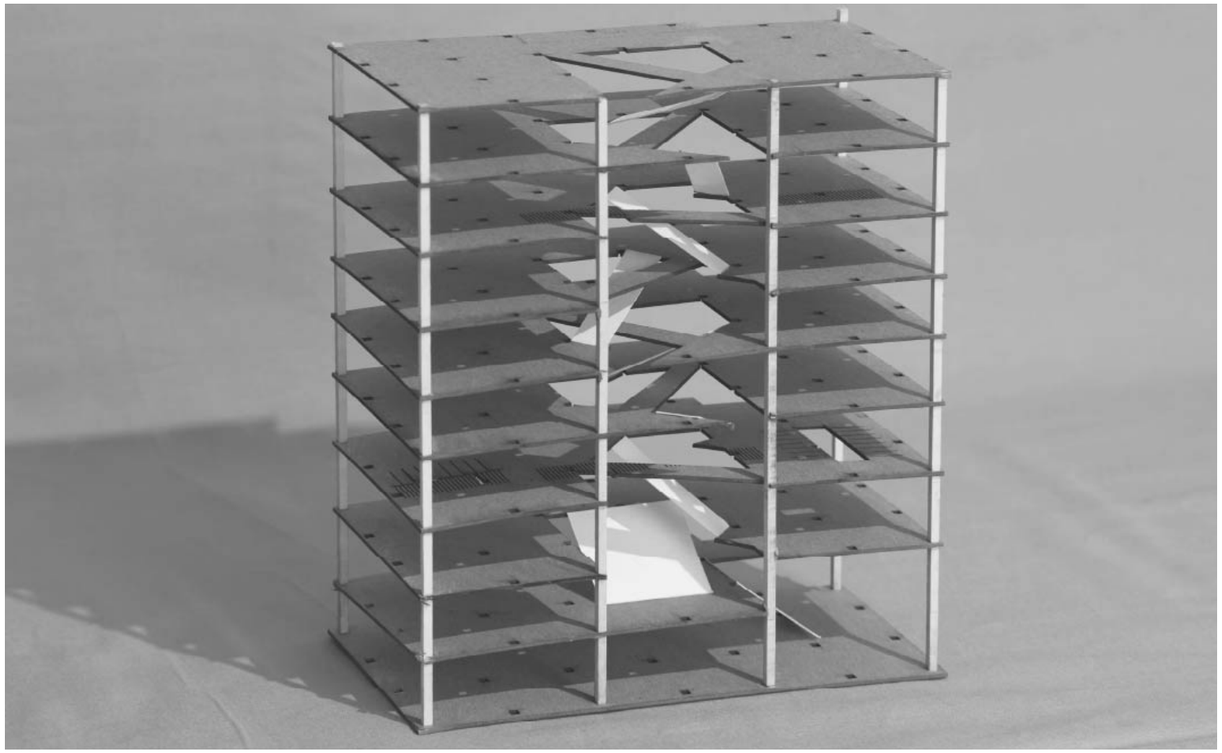
- The Vertical Paradox Amusement Park (ARC602 Graduate Studio, Prof. Song) is invited to the international symposium and exhibition Cram Urbanism and Vertical Learning Space at Chung-Ang University, Korea, July 14–18, 2025.
- Featured in Intersight 26 and 27, an annual publication by the University at Buffalo School of Architecture and Planning

Skills

Design Software: AutoCad, Rhino 7, Grasshopper, Lumion
Graphic Tools: Illustrator, Photoshop
Soft Skills: Collaboration, Time Management, Communication, Adaptability

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Amusement Park 4-11
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New Tribeca Public Library 20-23
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Buffalo Community Center 36-41
Allegheny West Public Library 42-45
Construction Technology 46-47
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Grasshopper 50-55

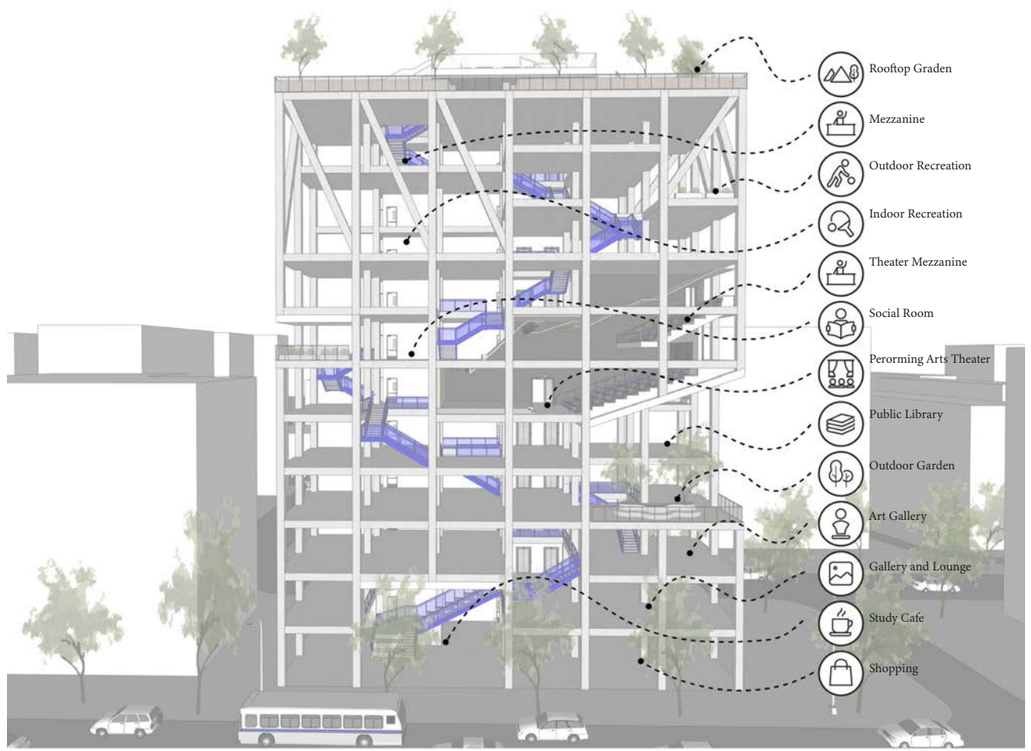


Study Model

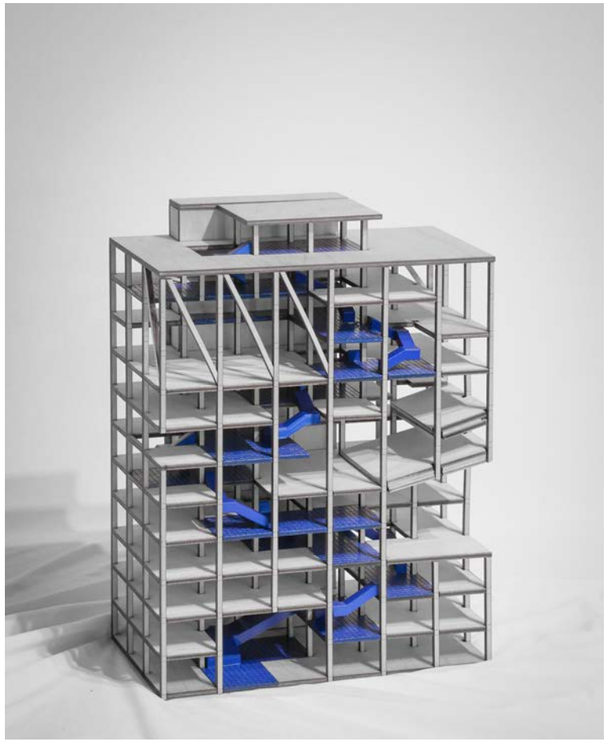
Amusement Park

Date: Spring 2024
Professor: Jin Young Song
Studio Sponser: Desimone Engineering
Collaborator: James Herlihy and Jack McGowan
Location: Seoul, South Korea

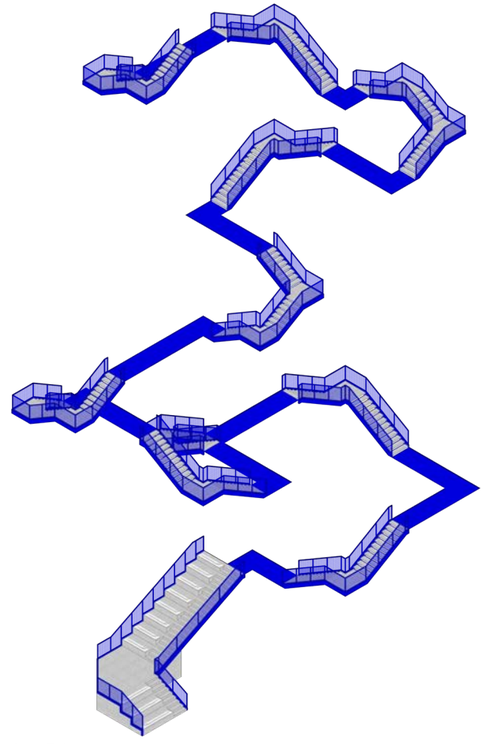
This project explores the concept of a vertical school, specifically a “Hagwon,” which is a Korean cram school dedicated to after-school education. Hagwons are often characterized by cramped, cluttered spaces where students lack access to healthy learning environments, natural light, and, in many cases, endure grueling study sessions late into the night, sometimes until 2 a.m. This design aims to transform these efficiency-driven spaces into an environment that prioritizes student well-being, encouraging peer interaction and addressing mental health concerns. The harsh reality is that such intense learning environments have, tragically, led some children—as young as five years old—to harbor resentment towards their families. In extreme cases, these pressures have even led to thoughts of self-harm. This design seeks not only to foster sociability but to make it a core aspect of the school’s structure. The circulation paths throughout the building are designed to intertwine with abundant social spaces, promoting connection and collaboration at every turn.



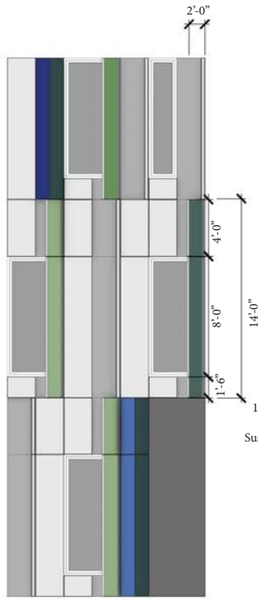
Program Diagram



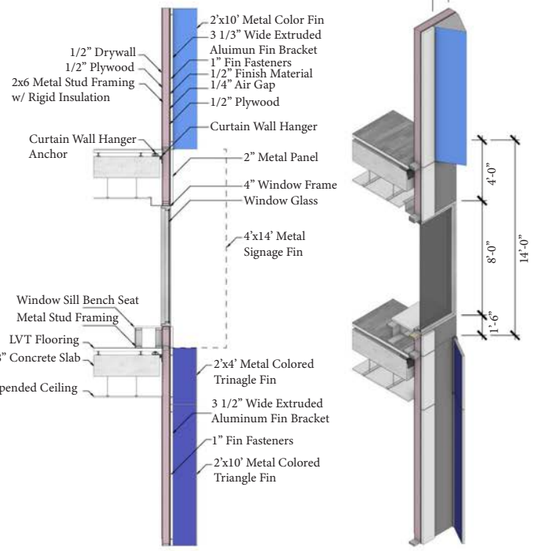
Circulation Concept Model



Circulation Diagram

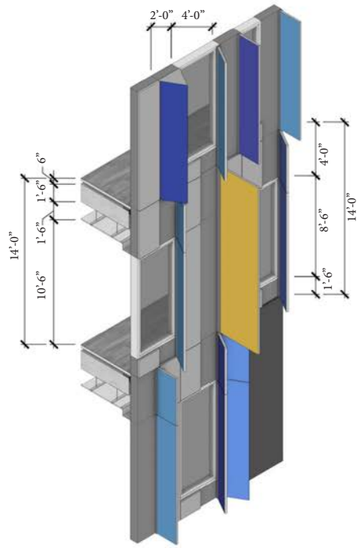


Facade Panel Elevation

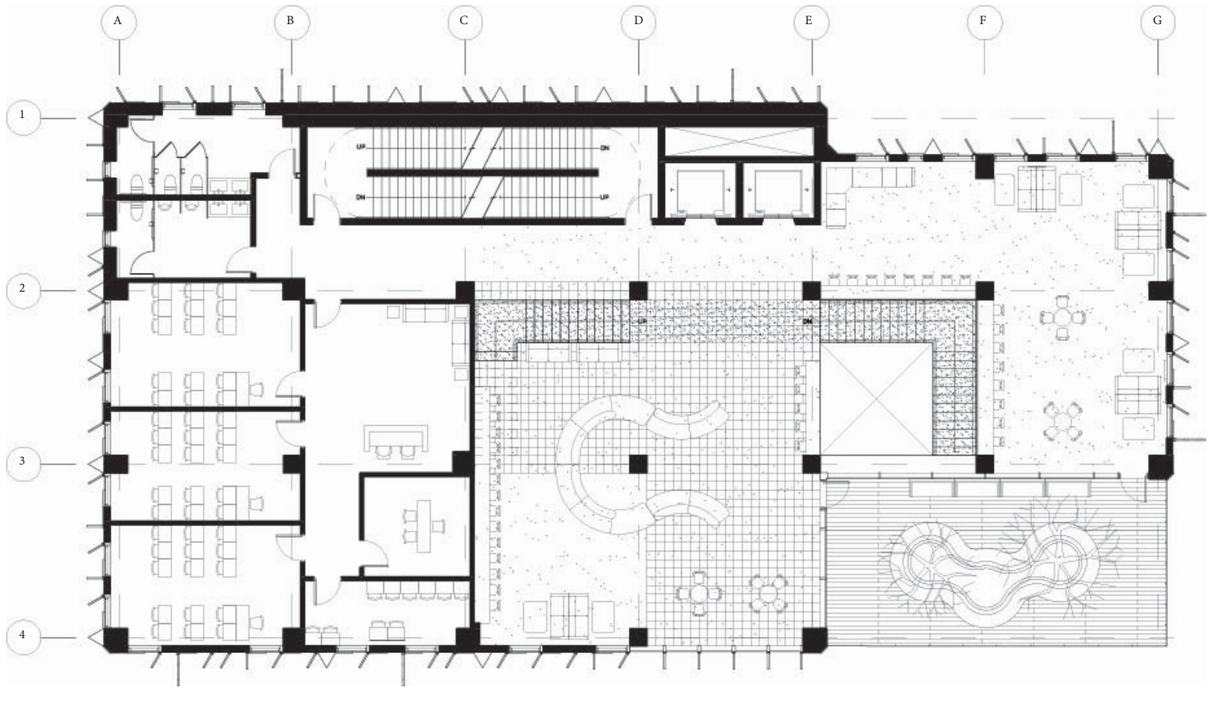


Wall Section

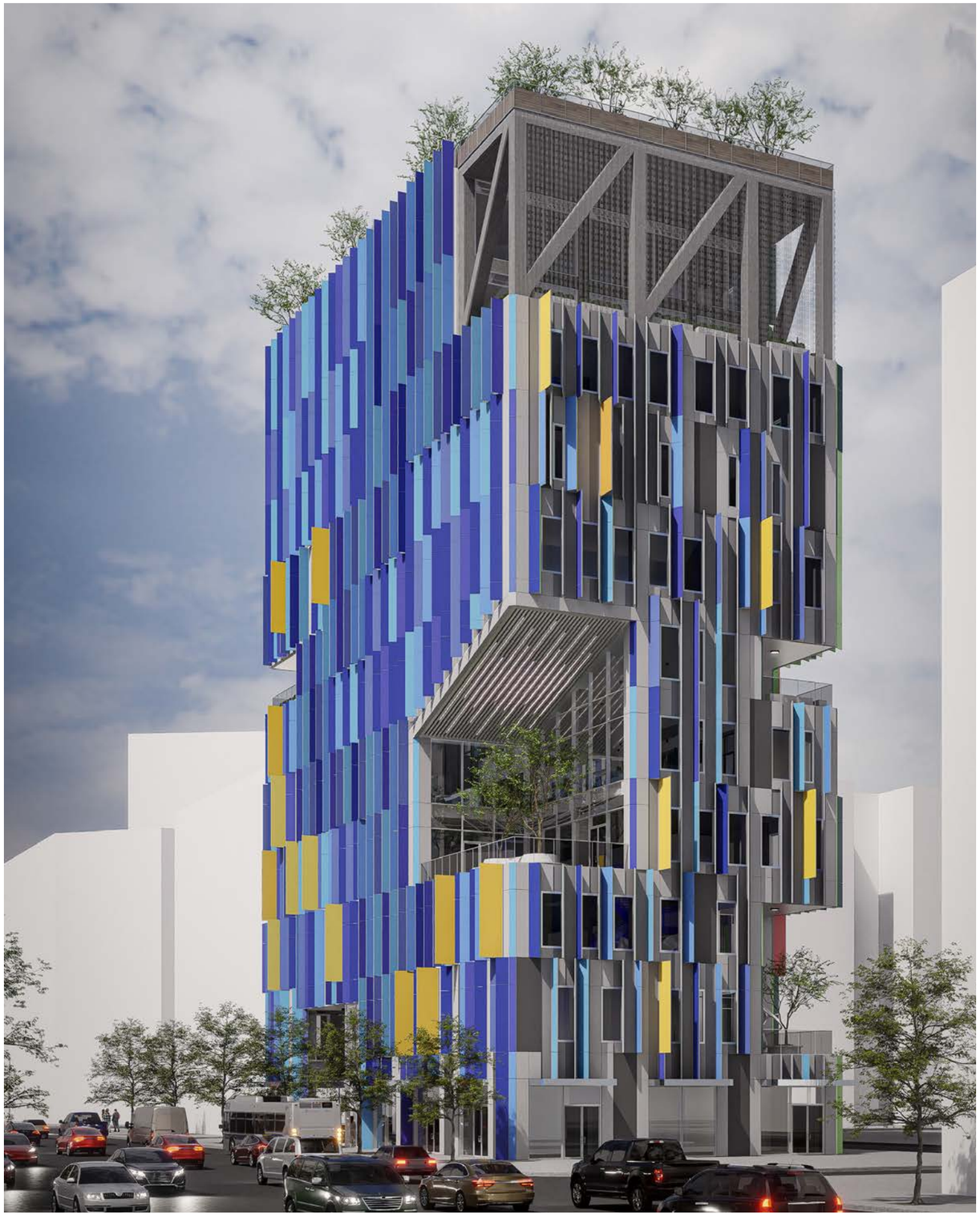
Wall Section Iso



Facade Panel Iso



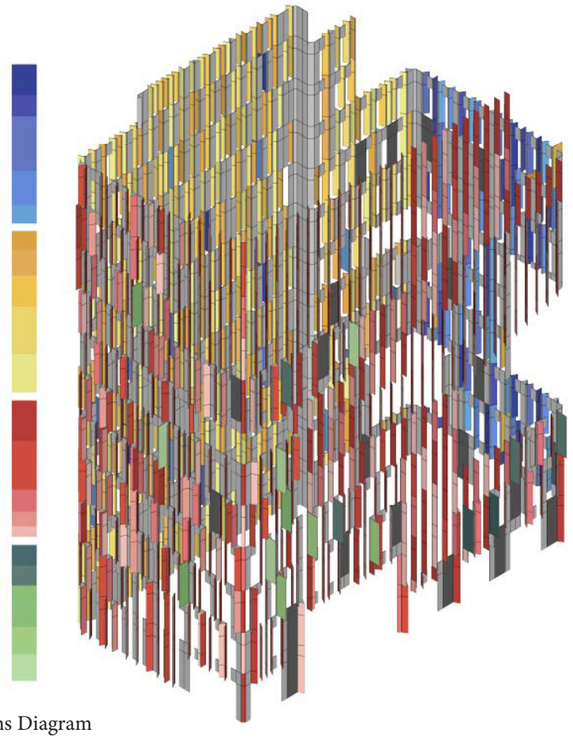
4th Floor Plan

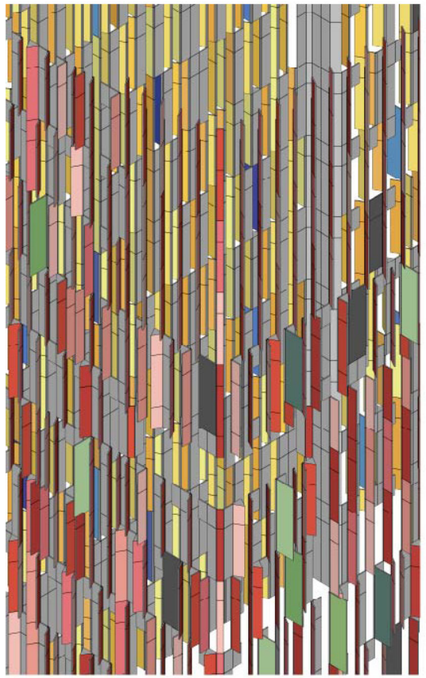


Day Rendering

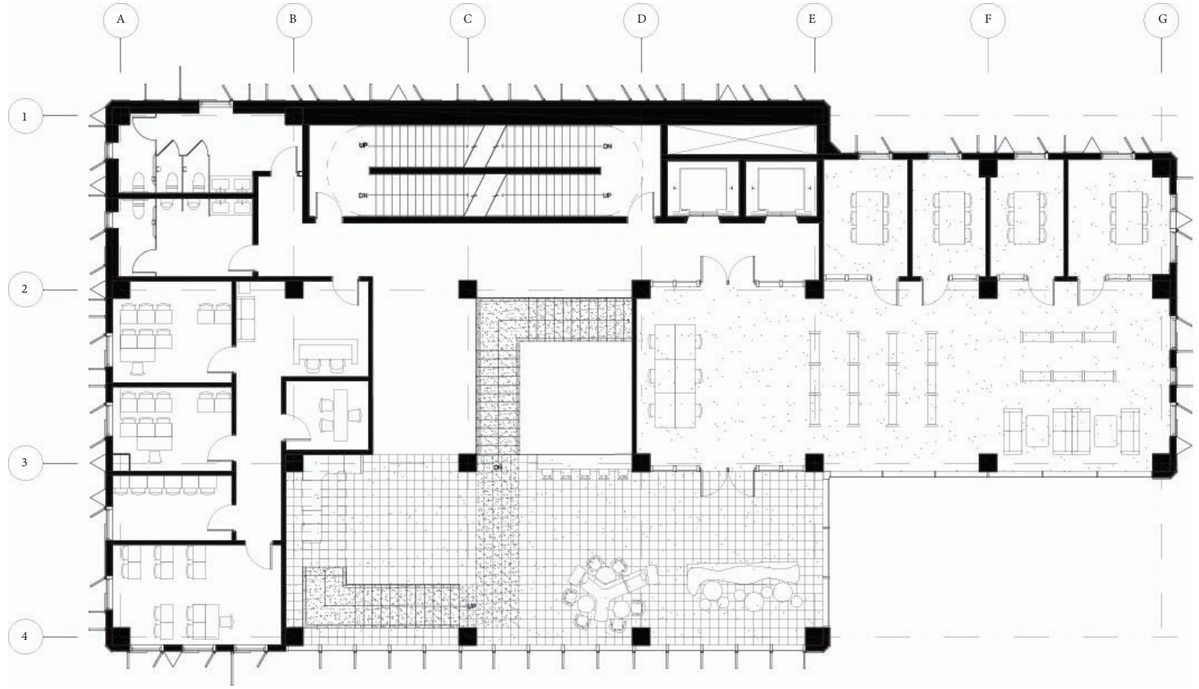
Elevation



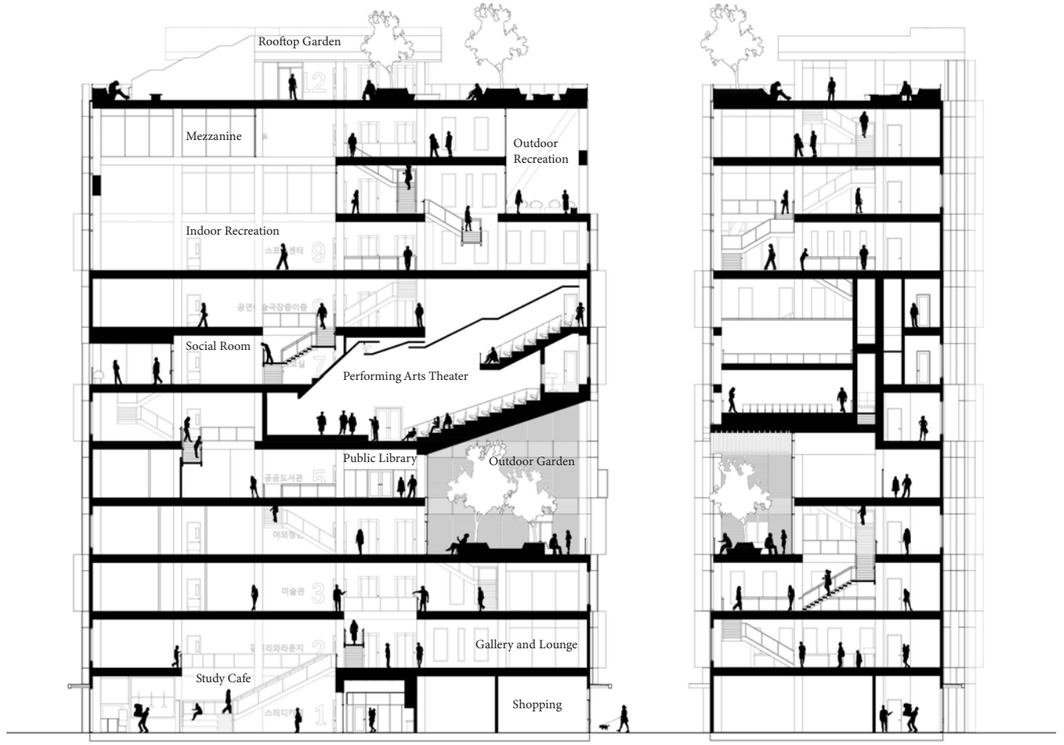




Colered Fins Diagram



5th Floor Plan



Longitudinal Section

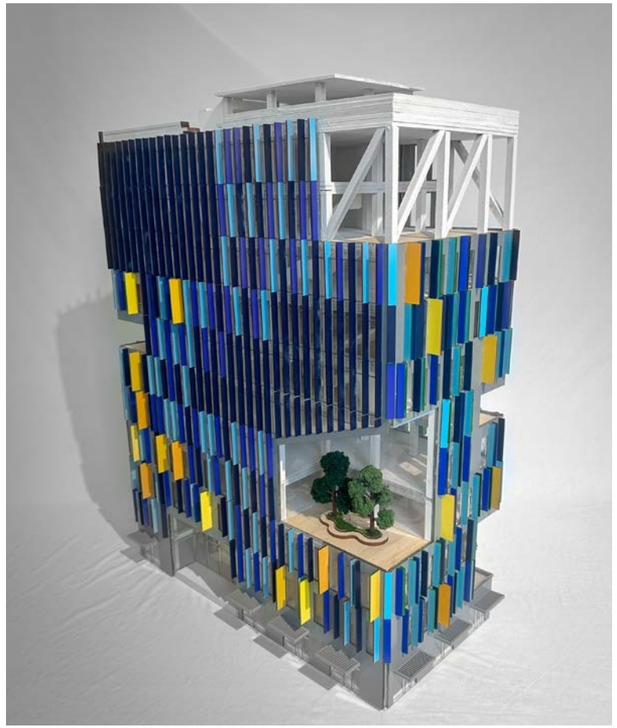
Transverse Section



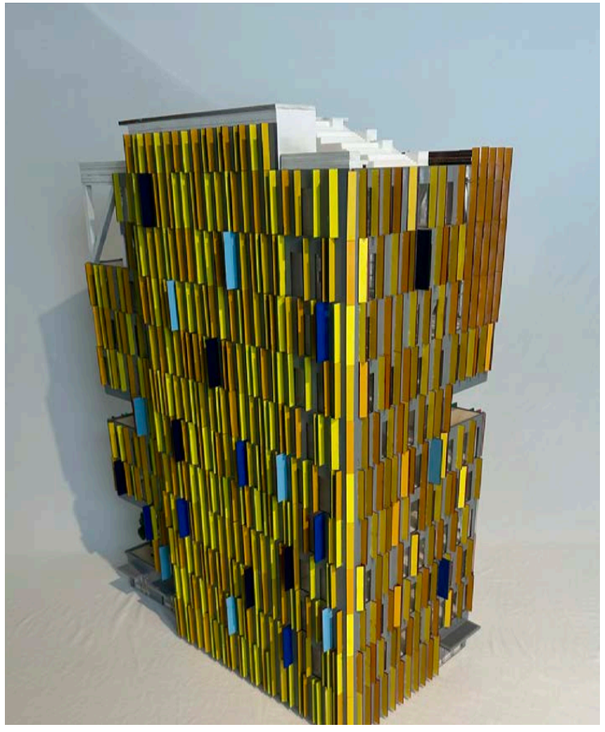
Night Rendering



Northwest Elevation



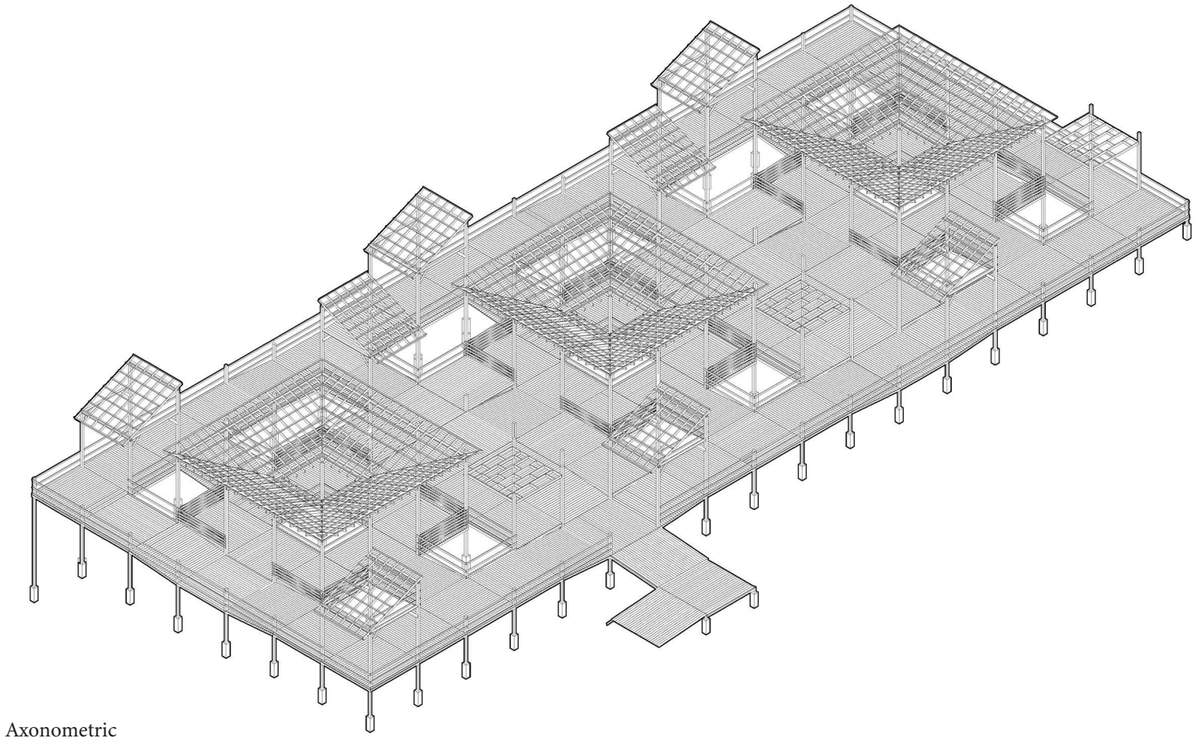
Southwest Elevation



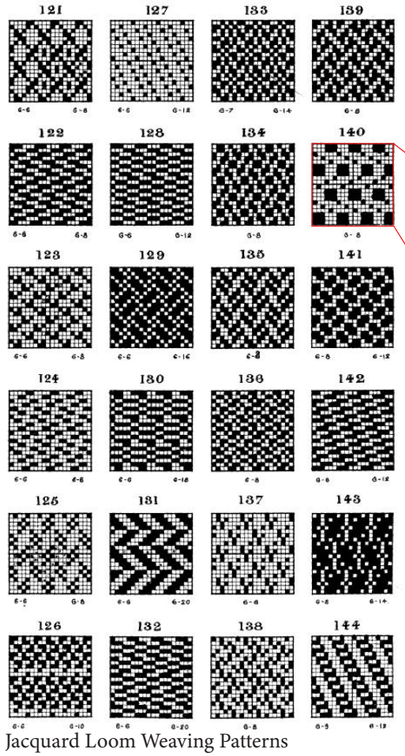
Northeast Elevation



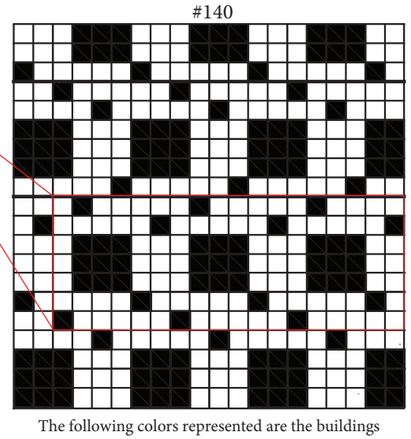
Southeast Elevation



Axonometric



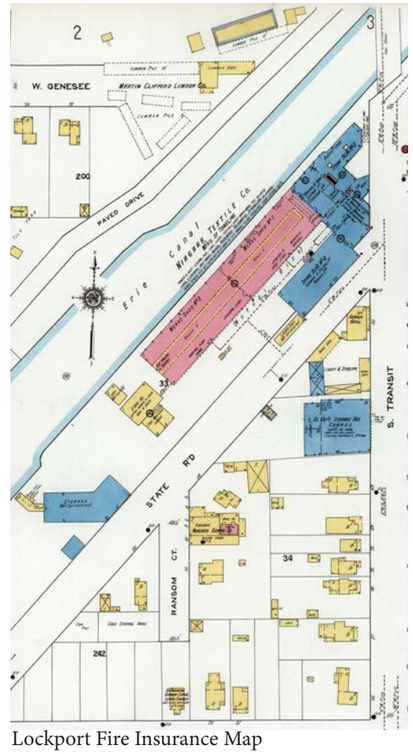
Jacquard Loom Weaving Patterns



The following colors represented are the buildings fabrication materials

Yellow - Wood Framed
Blue - Stone
Red - Brick

Publisher: Sanborn Map Co.
Basemap Date: May 1919
Sheet No.: 0021

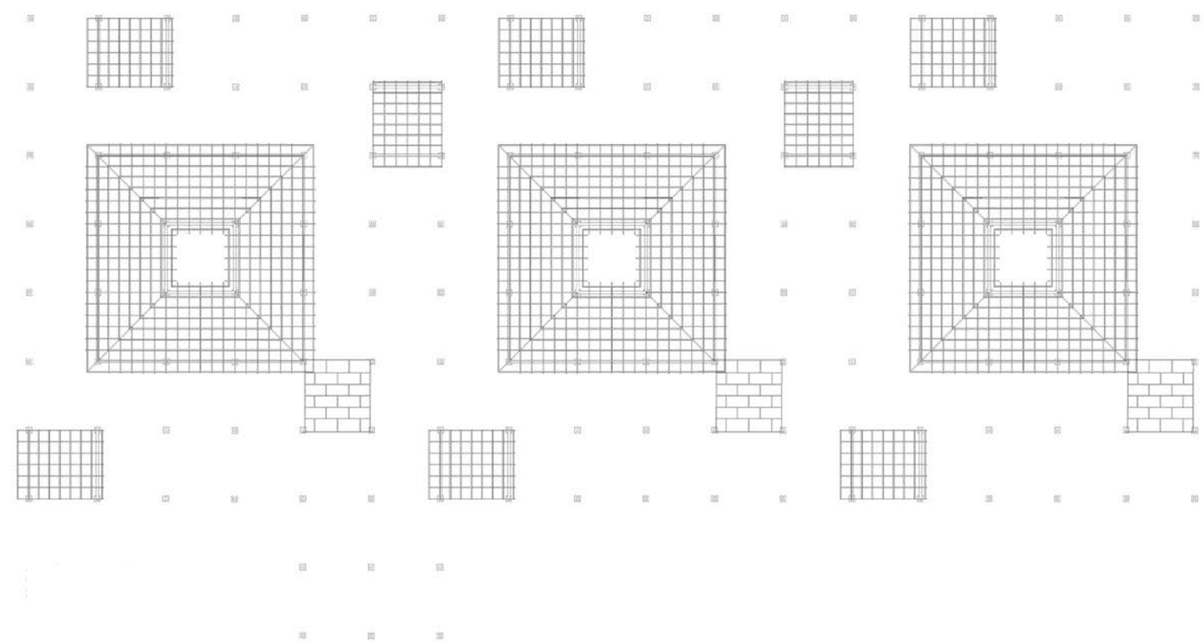


Lockport Fire Insurance Map

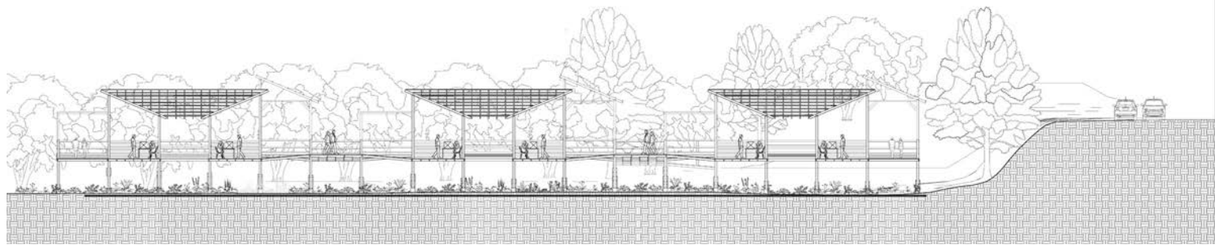
The Woven Canal Market

Date: Spring 2025
Professor: Tiffany Xu
Collaborator: Mason Murtha
Location: Lockport, New York

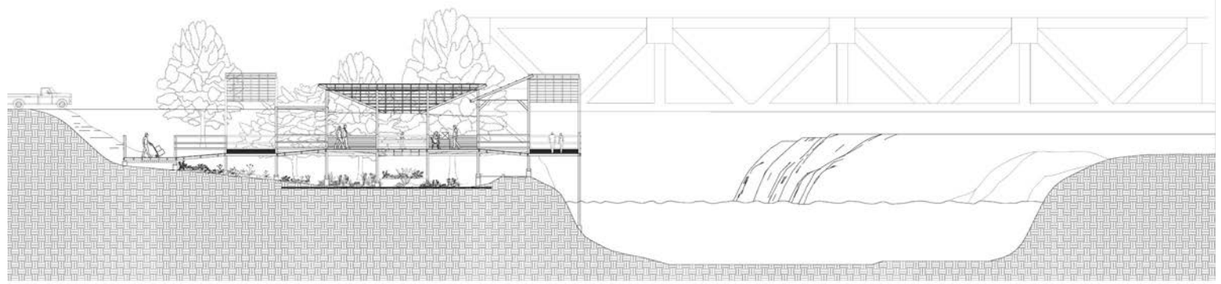
Lockport's history, deeply rooted in the Erie Canal's industrial legacy, inspires a modern homage to its heritage. The canal, crucial for its low-cost power and transportation, fostered a boom in lumber trade, leading to the construction of numerous framed houses between 1850 and the early 1900s. A prominent site in Lockport was the Niagara Textile factory, once a vital economic hub producing towels and fine linens for NYS Rail sleeper trains. Though destroyed by fire and demolished in 1965, remnants like an old loading ramp near the canal remain. The design for a new farmers market honors this history by integrating concepts from the factory and its weaving machinery, such as Jacquard and Dobby Looms. Inspired by textile patterns and aerial site photos, the grid-based layout uses black squares for transactional spaces and white for circulation. The factory's original dimensions serve as a framework, with standard lumber sizes shaping the grid. Employing balloon framing tectonics, the market's floors are staggered, mimicking a woven effect, symbolizing the fabric of Lockport's past. This farmers market aims to revive economic activity, bridging the site's historic industrial roots with its present community needs.



Roof Framing Plan



Section A-A’



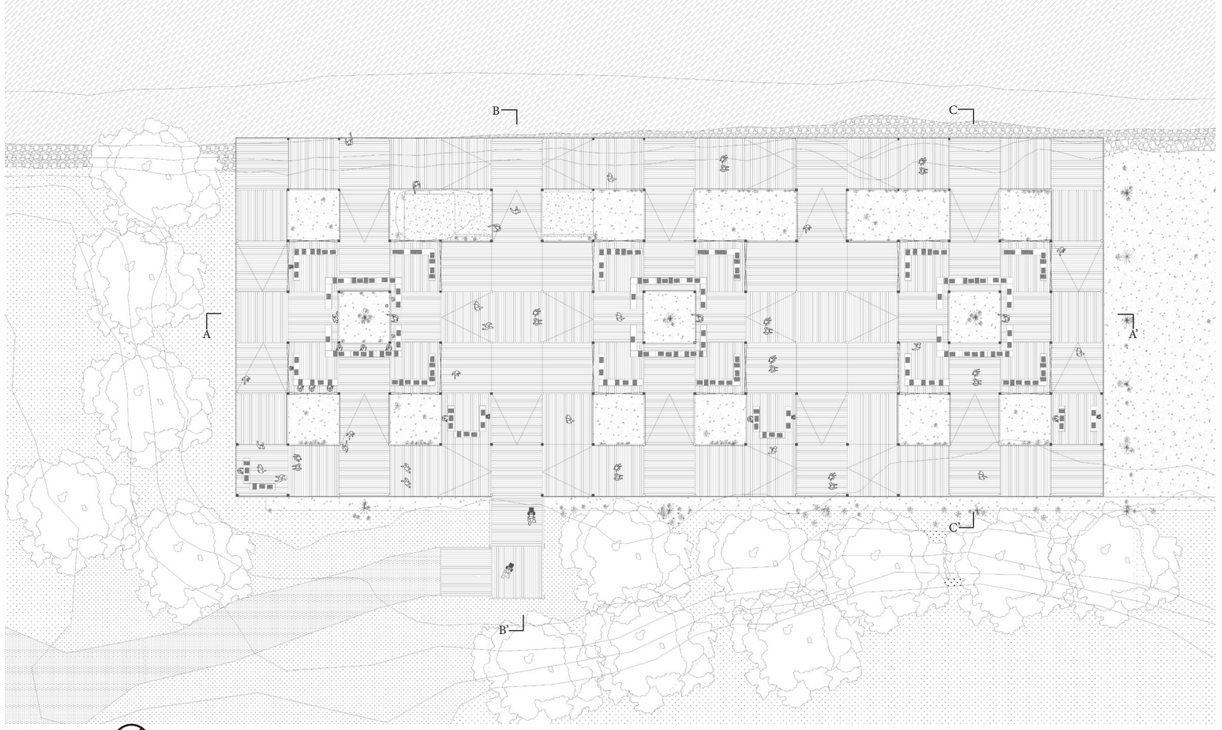
Section B-B’



Model Photo



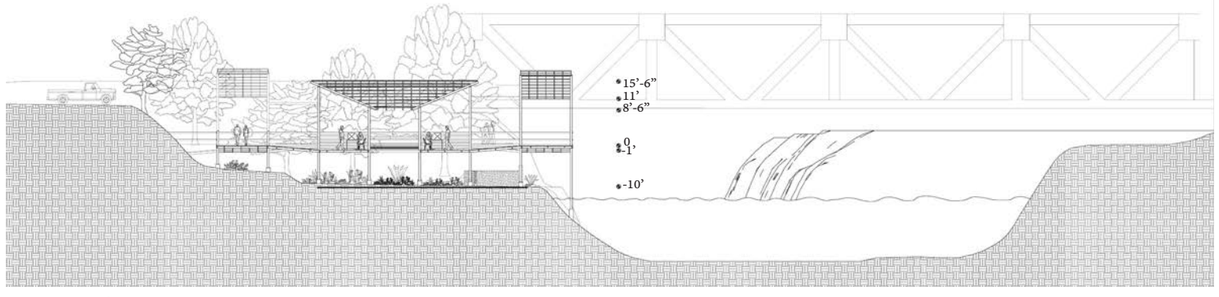
Render



Floor Plan



Site Map



Section C-C'



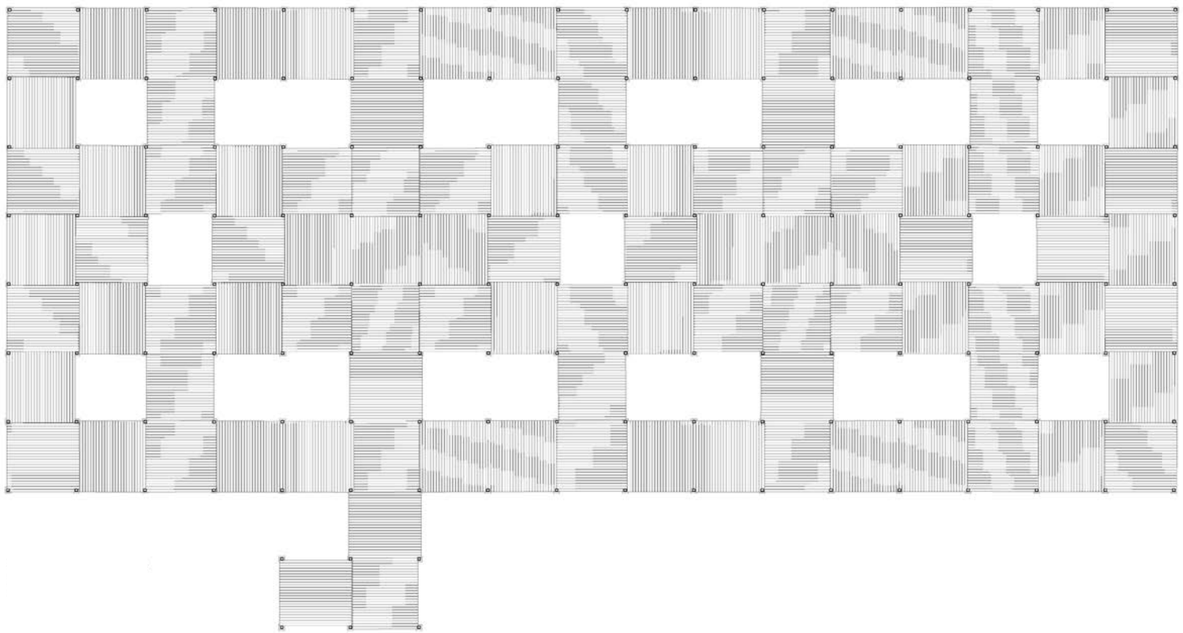
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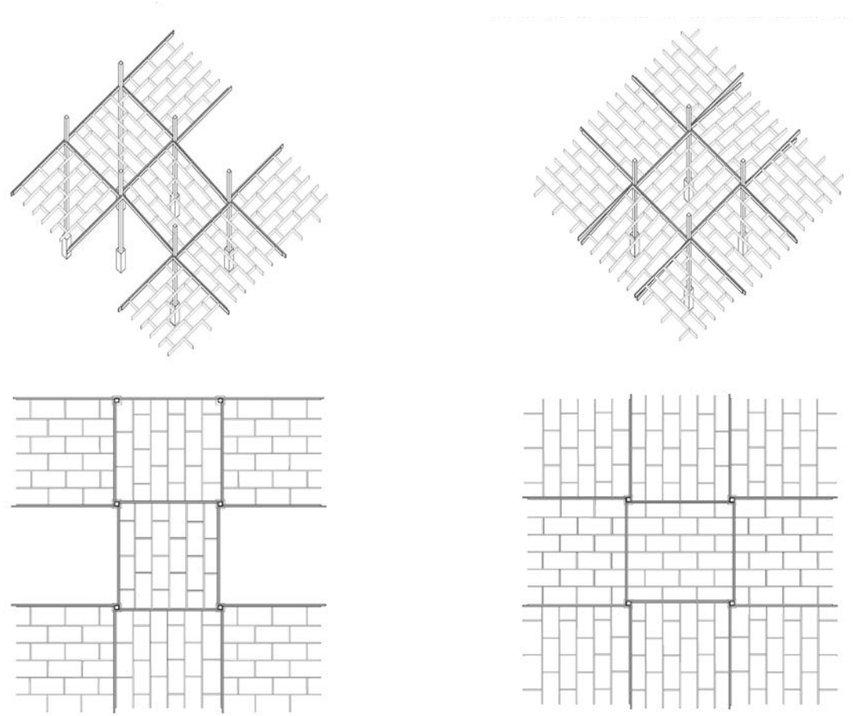
Model Photo



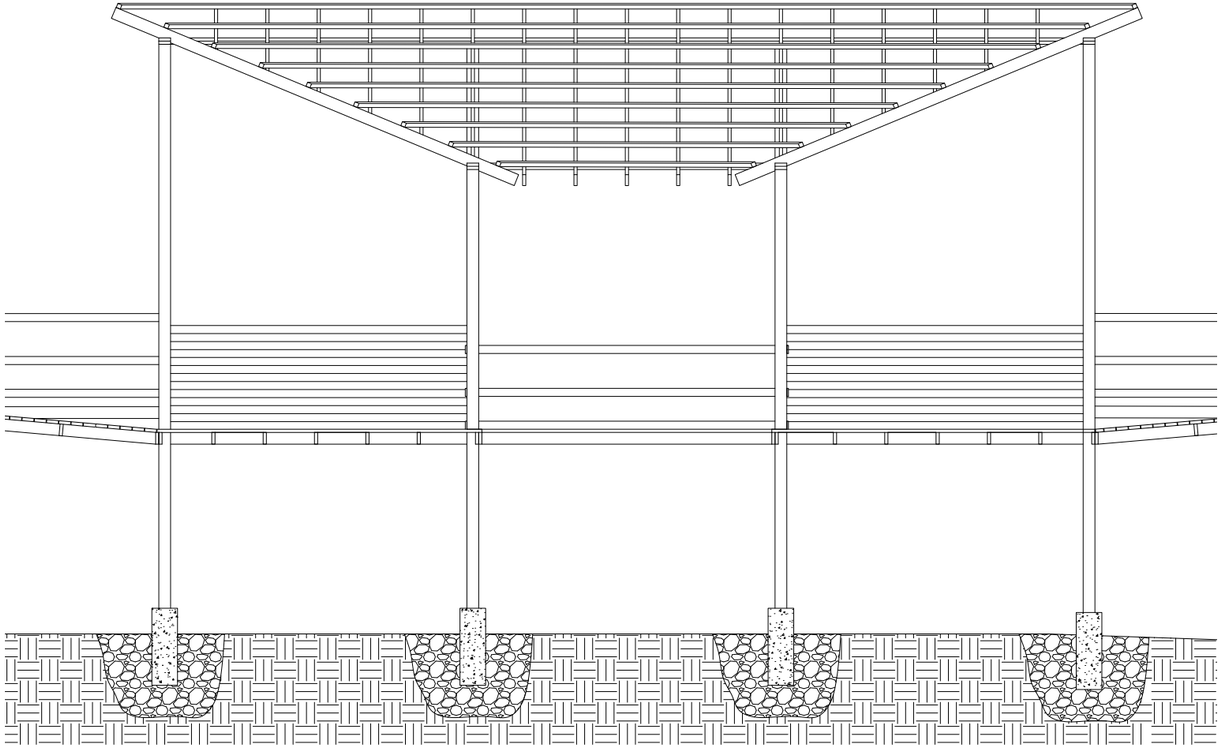
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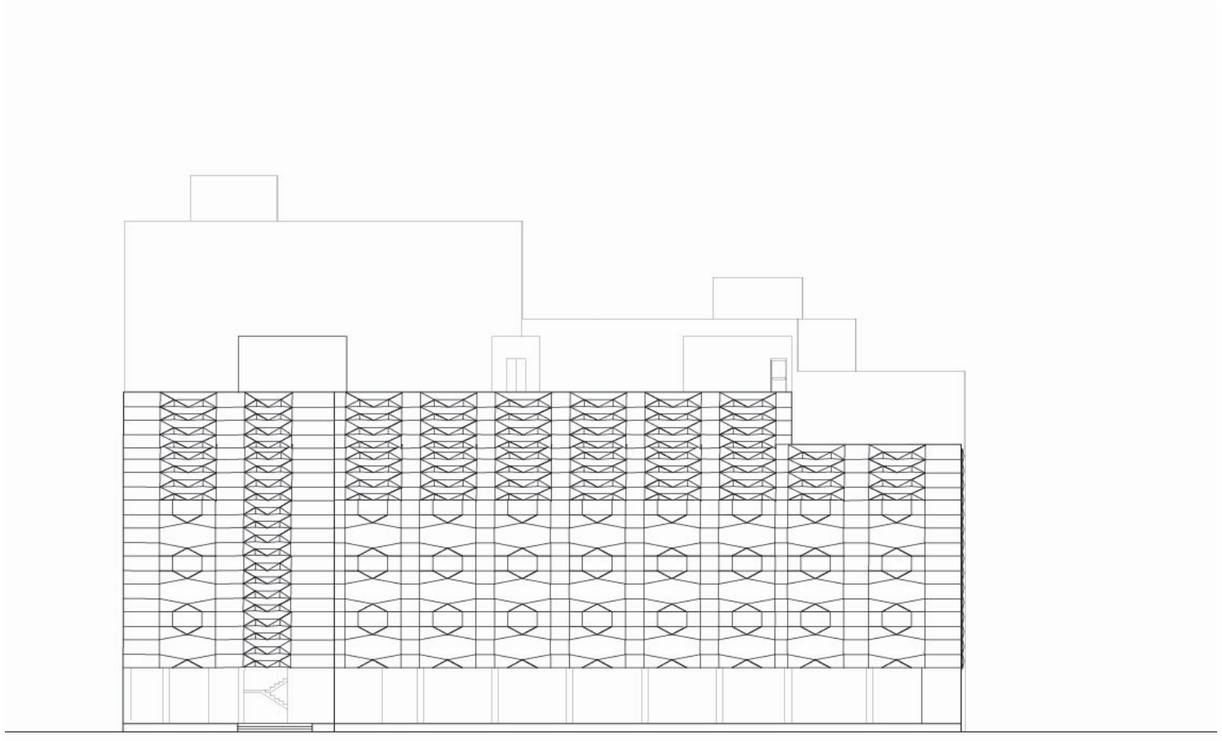
Floor Framing Plan



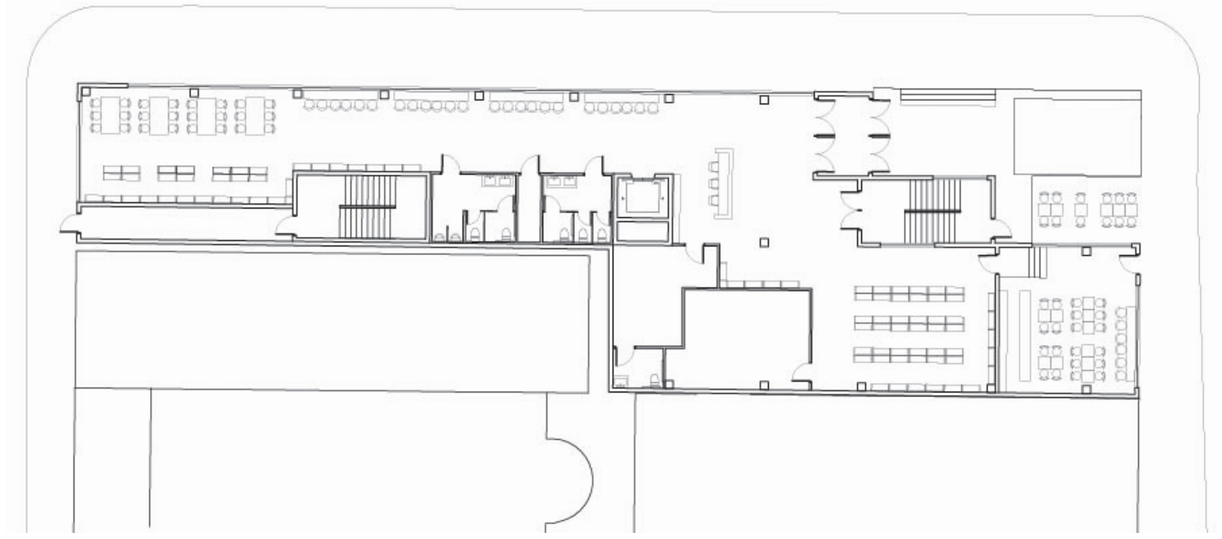
Pinwheel Floor Framing Diagram



Section Detail of Large Market



West Elevation

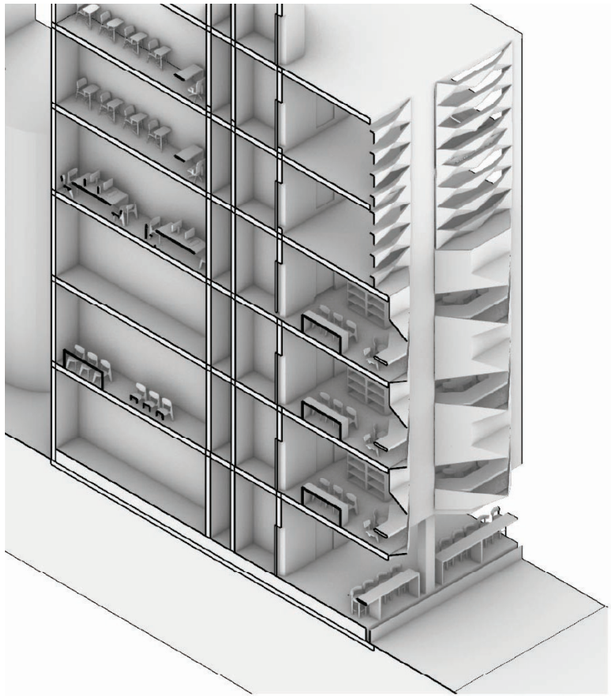


Ground Floor Plan

New Tribeca Public Library

Date: Fall 2024
Professor: Brain Carter
Studio Sponser: Andrew Burman
Location: Tribeca, New York

This community library is more than just a collection of books—it's a vibrant, six-floor hub for learning, creativity, and connection. Its modern architecture blends functionality with aesthetic appeal, offering thoughtfully designed spaces for all ages and interests. The welcoming entrance leads to an inviting indoor/outdoor café, perfect for social gatherings or quiet reading sessions. Each floor caters to different age groups, with interactive children's sections, a tech-equipped teen space, and comfortable reading nooks adorned with copper detailing for a warm, shaded retreat. Private study rooms and classrooms provide quiet areas for focused work, tutoring, and workshops, while community rooms host meetings and events to foster engagement. With its diverse offerings, this library isn't just a place to read—it's a dynamic environment that inspires education, collaboration, and cultural enrichment, making it an essential pillar of the community.



Section Axon



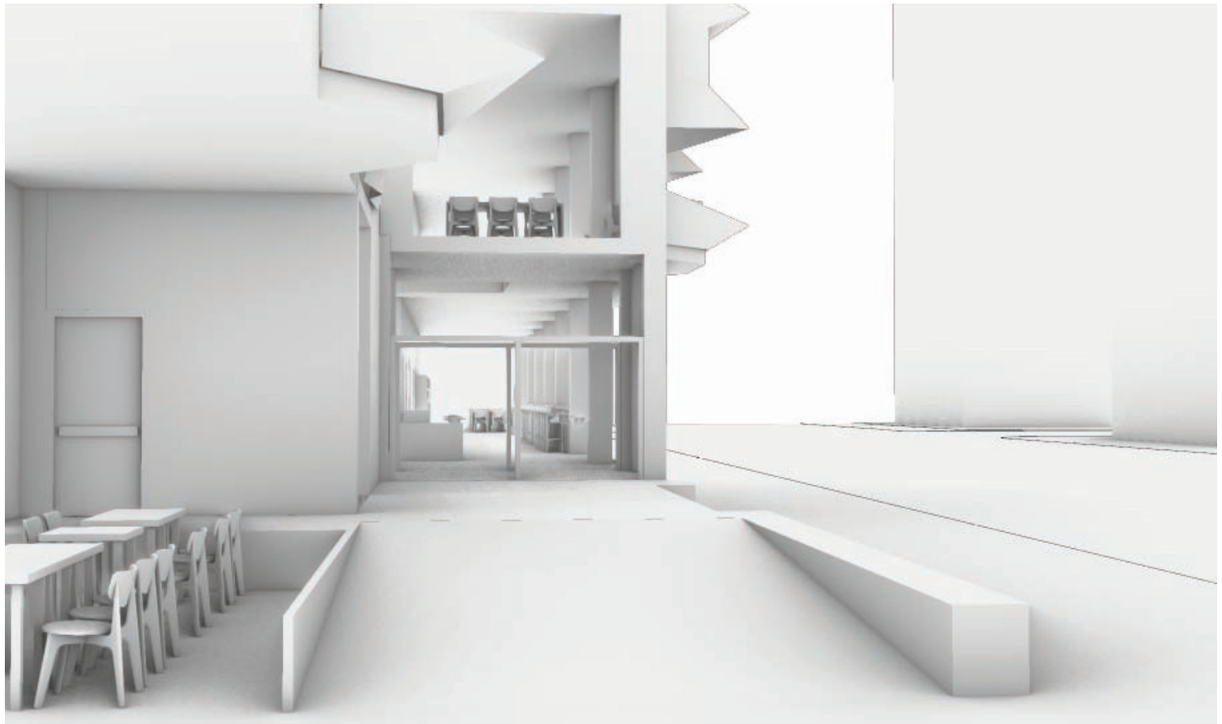
Facade Study



Fourth Floor Plan



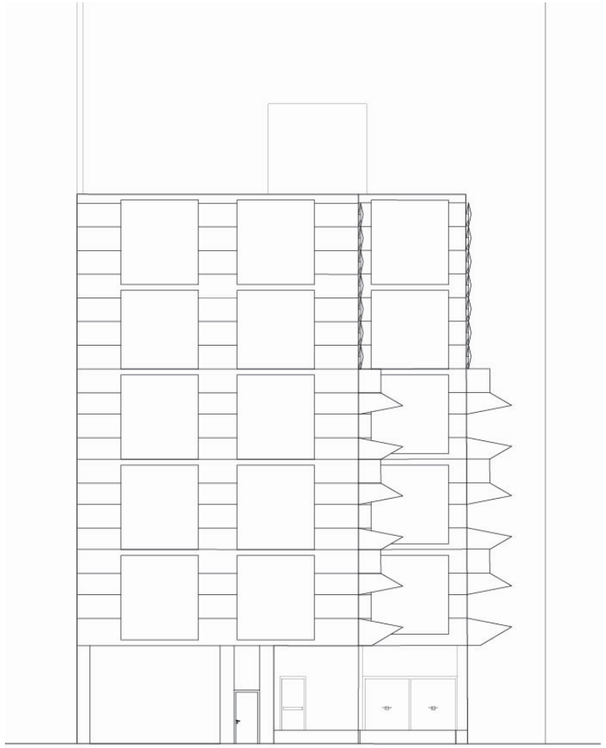
Third Floor Plan



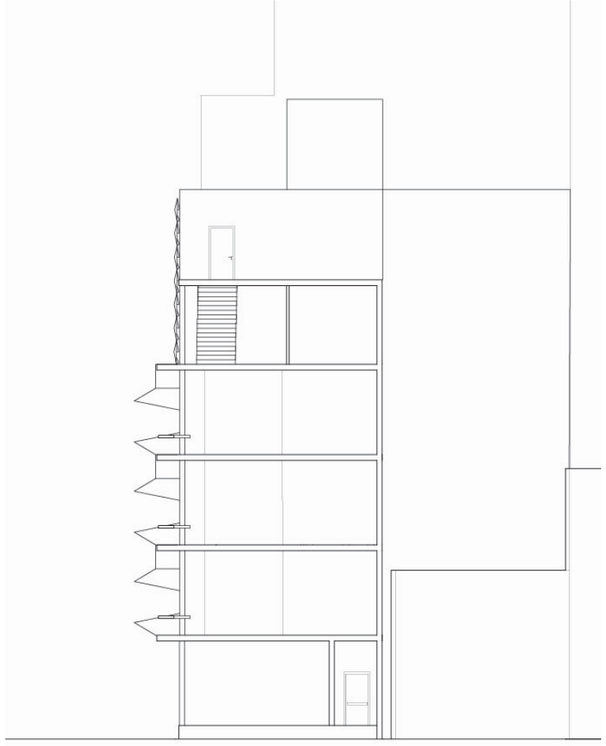
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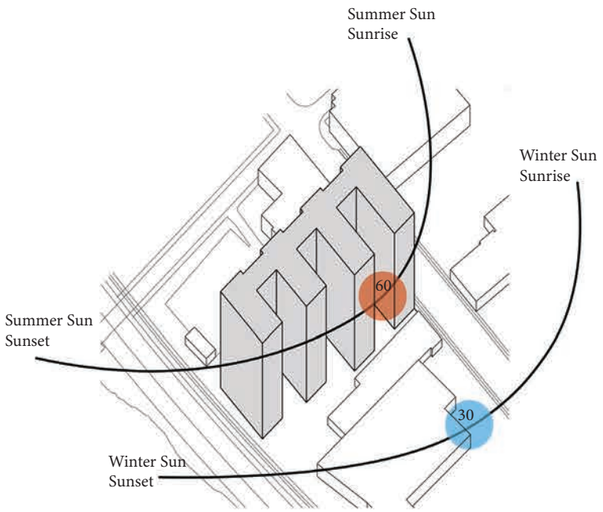
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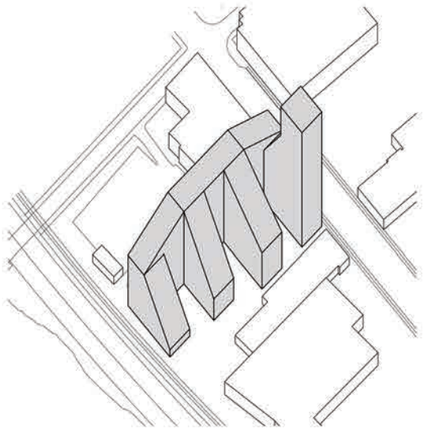
North Elevation



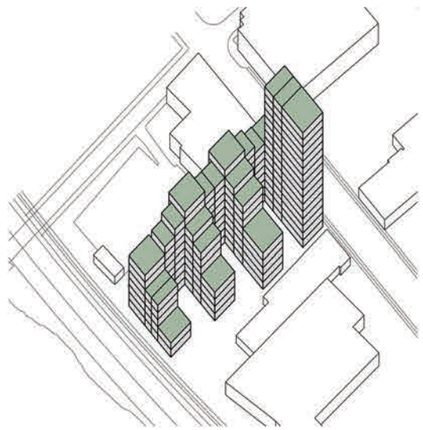
Section Looking North



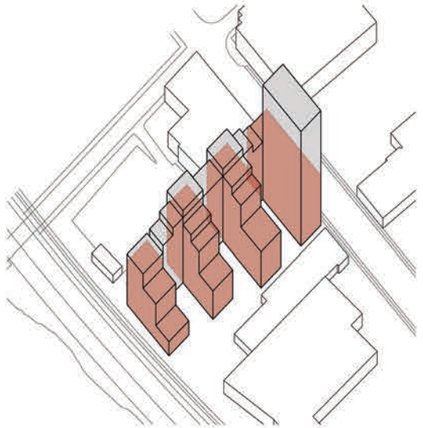
1. Finger massing for courtyards and more aspect walls



2. Taper finger masses to allow more sun penetration



3. Tier the building to create green roofs



4. Compositionally, the N-S Fingers are inspired by Niagrara Street buildings

The Welcoming Hand

Date: Fall 2023
Professor: Brad Wales
Collaborator: Zach Izzo
Location: Buffalo, NY

Welcoming Hand is a refugee apartment building designed to make adjusting to the United States easier for refugees. The building contains a variety of needed amenities to make them more accessible, as well as provides rooftop gardens to allow for residents to grow their own individual crops. The design of the building allows for efficient use of the Sun. The finger massing creates more aspect walls as well as three courtyards that are each uniquely programmed.

The building is laid out in a skip-stop unit arrangement to allow nearly all units to have through ventilation. Finally, the building is broken up into two main materials, brick and terracotta. The brick elements relate to the surrounding buildings of Niagara Street while the terracotta cladding provides a more modern aesthetic, while at the same time using traditional clay-fired material.



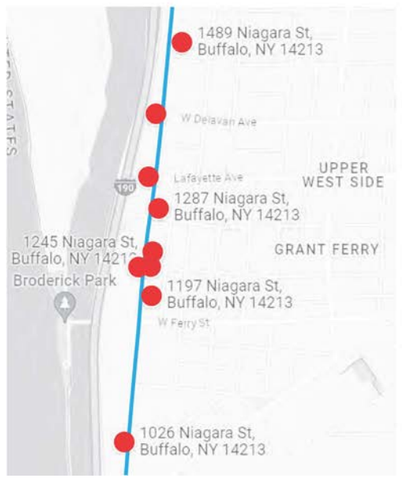
Gull Street Ground Plan



North Elevation

Brick Fronts of Niagara Street

Lining Niagara Street are various brick buildings built to the property line of long skinny lots. These brick buildings then expand backwards taking up a majority of the narrow site. The buildings heights vary from two to four stories and usually have tall and/or punched windows in the facade. Programs wise a majority of the buildings are commerical, built to the property line to increase the likelihood of passerbys entering the business while the others are industrial or abandoned.





1489 Niagara Street



1287 Niagara Street



1225 Niagara Street



1400 Niagara Street



1245 Niagara Street



1226 Niagara Street



1330 Niagara Street



1197 Niagara Street

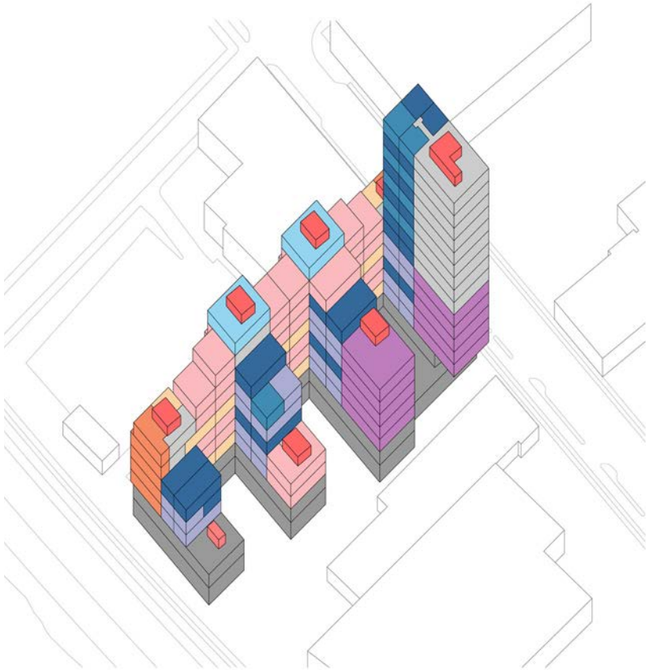


1226 Niagara Street

Gull Street Ground Plan



Section Looking North



Unit Arrangement Diagram

Studio
-9 Units
-702 sq. feet

1 Bedroom (west corner)
-5 Units
-Type A Unit
-890 sq. feet

3 Bedroom
-5 Units
-Type A Units
-1,842 sq. feet

3 Bedroom
-2 Units
-1,635 sq. feet

5 Bedroom
-5 Units
-Type A units
-2,918 sq. feet

1 Bedroom (east corner)
-5 Units
-Type A Units
-988 sq. feet

2 Bedroom Skip Stop
-36 Units
-2,063 sq. feet

3 Bedroom
-2 Units
-Type A Units
-1,552 sq. feet

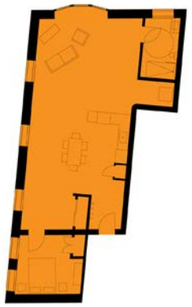
3 Bedroom (red)
-12 Units
-2,641 sq. feet
4 Bedroom (orange)
-12 Units -3,157 sq. feet
-Type B Units

3 Bedroom (red)
-5 Units
-Type A Units
-2,255 sq. feet

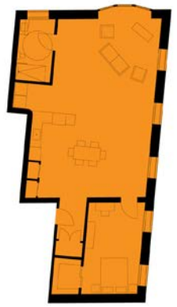
Total Units: 98



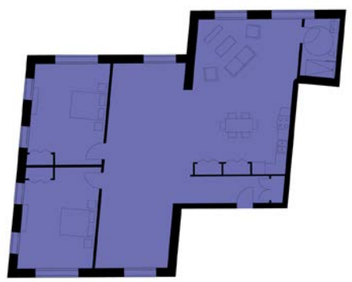
Studio



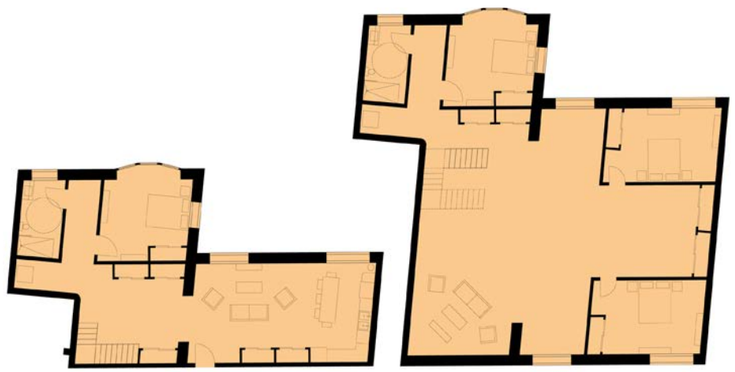
1 Bedroom



1 Bedroom



2 Bedroom



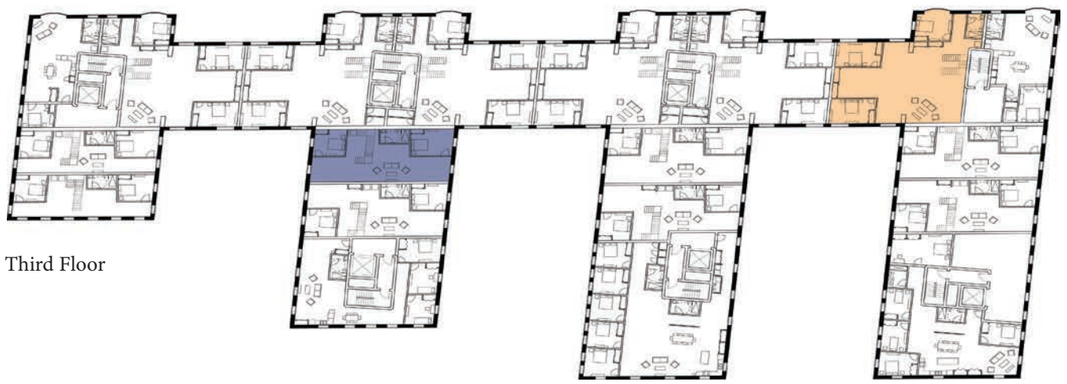
4 Bedroom



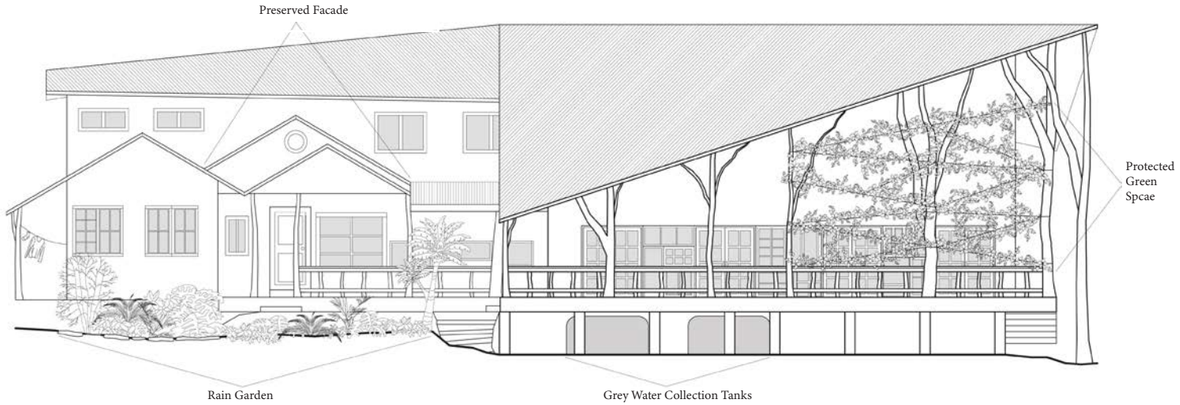
Fifth Floor



Fourth Floor



Third Floor

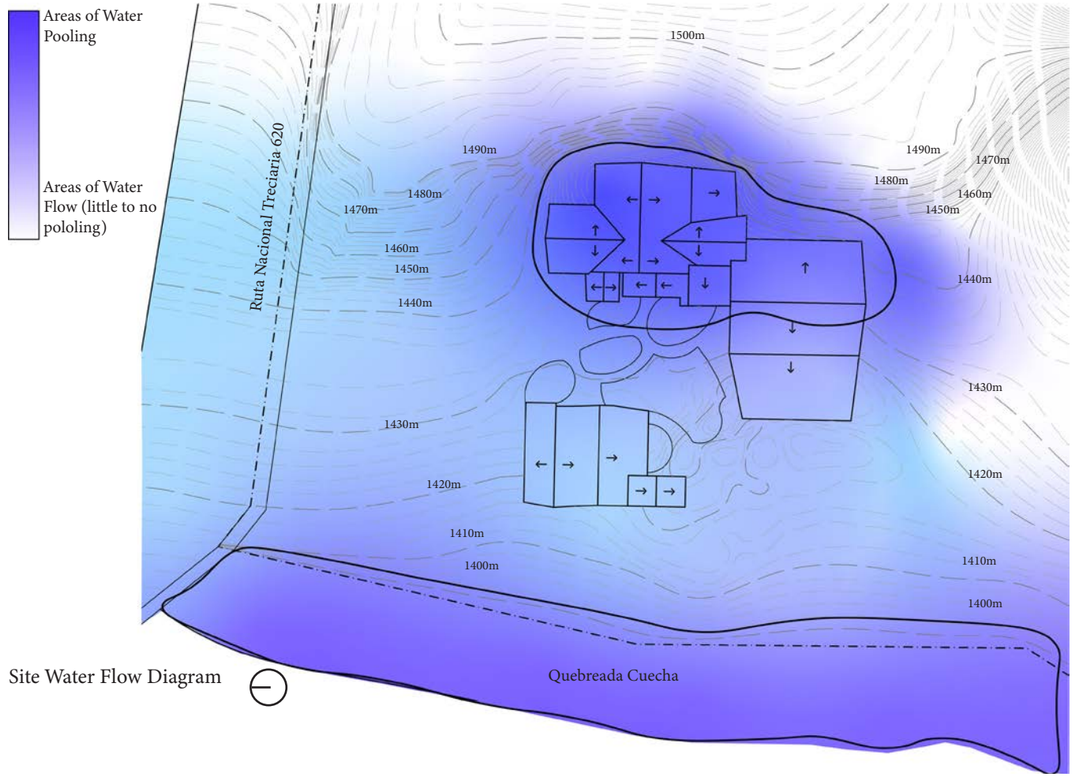


East Elevation

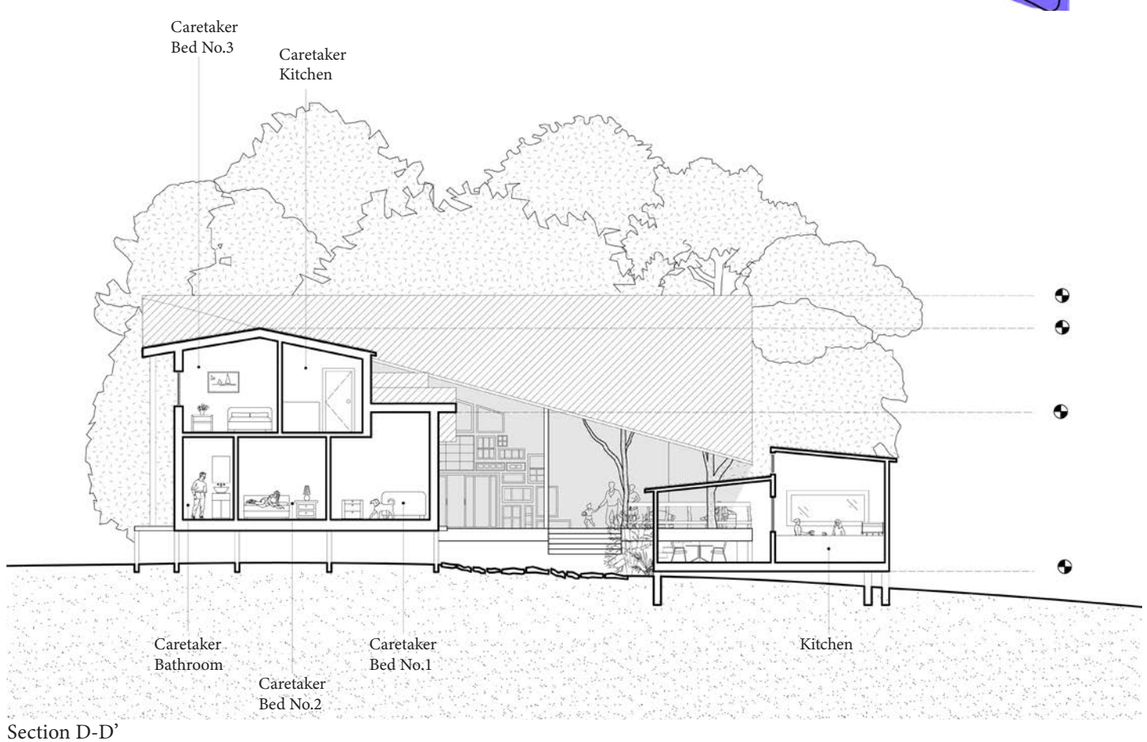
Riochante Community Center

Date: Summer 2023
Professor: Stephanie Cramer and Randy Fernado
Collaborator: Julia Ferone, Hannah Ruth, Nicholas Frantzekos, and Juan Romero Vazquez
Location: Monteverde, Costa Rica

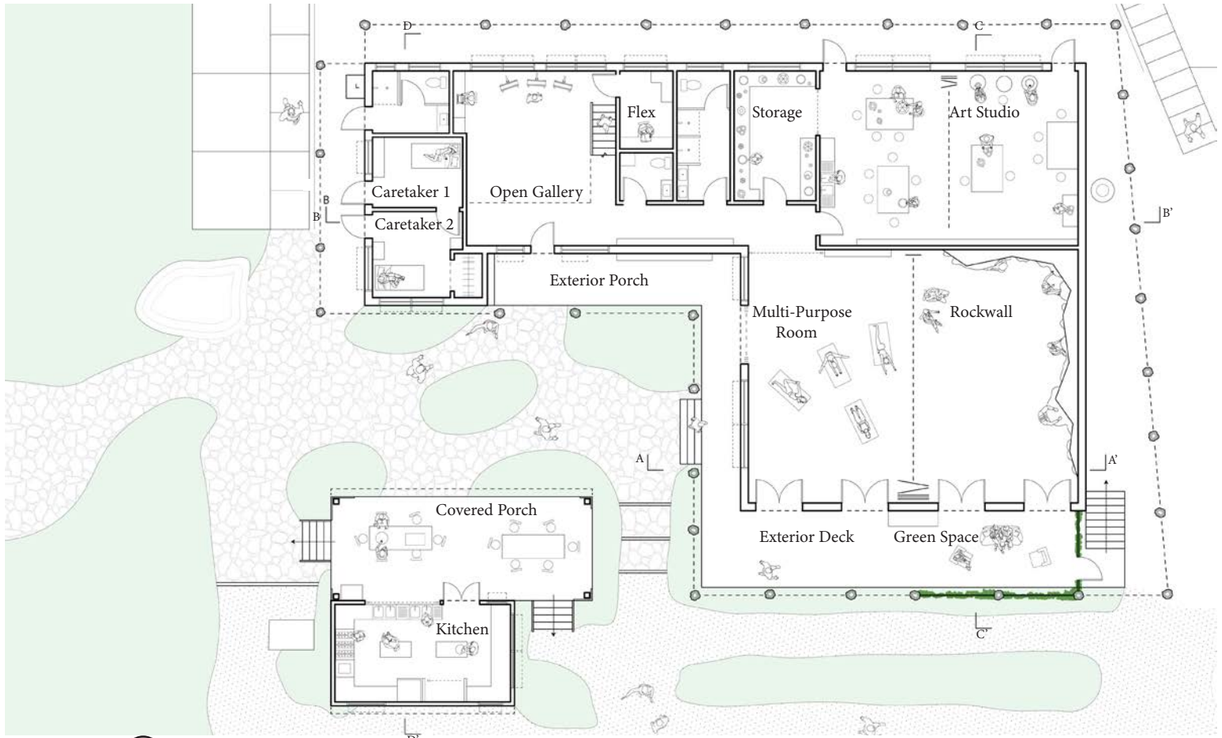
The Costa Rica study abroad project consisted of taking an abandoned structure and redesigning it into a community center. The existing structure featured a main house with a multipurpose space, two bedrooms for caretakers, a kitchen, and an attached porch. Our design implemented a second floor with a private apartment, kitchen, an extra room for guests, and a computer lab.The first floor had the opportunity to be used for community activities such as samba drumming, yoga, and rock climbing. There would also be an added classroom and a double-heighted art space. Maintaining the separate kitchen property lines, we reconfigured the interior based on the Monteverde Institute's model, incorporating a clerestory/sawtooth roof for optimal ambient lighting. The sloping topography was addressed with terrace benched landscaping featuring a native plant to enhance water absorption during heavy rain.



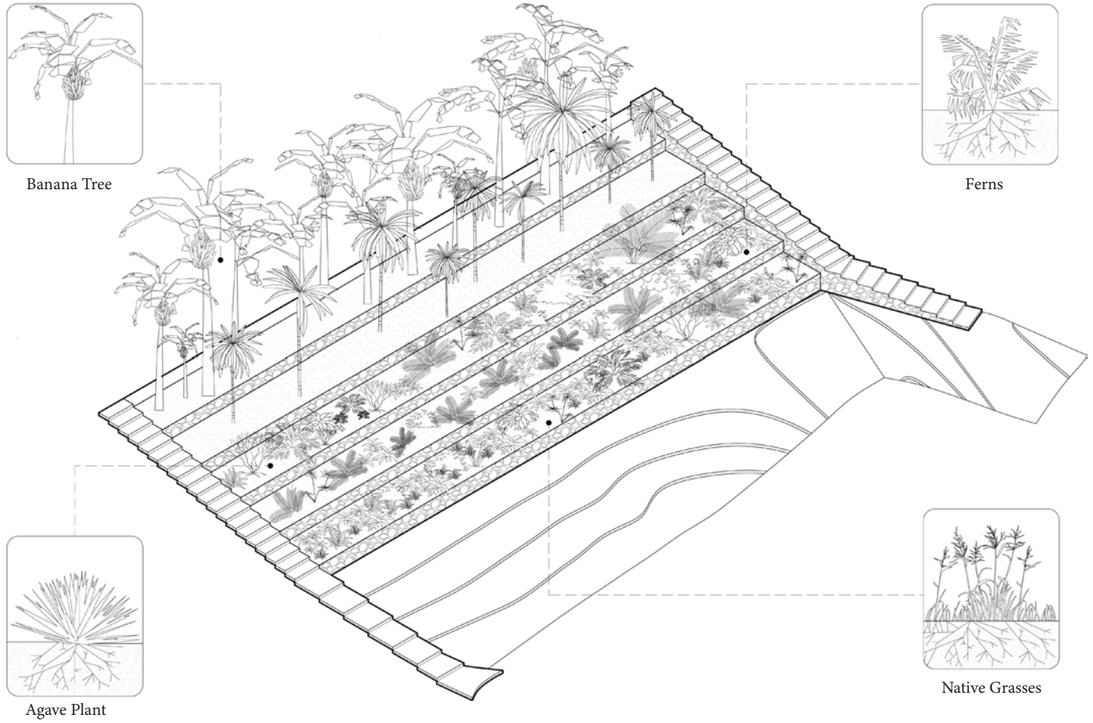
Site Water Flow Diagram



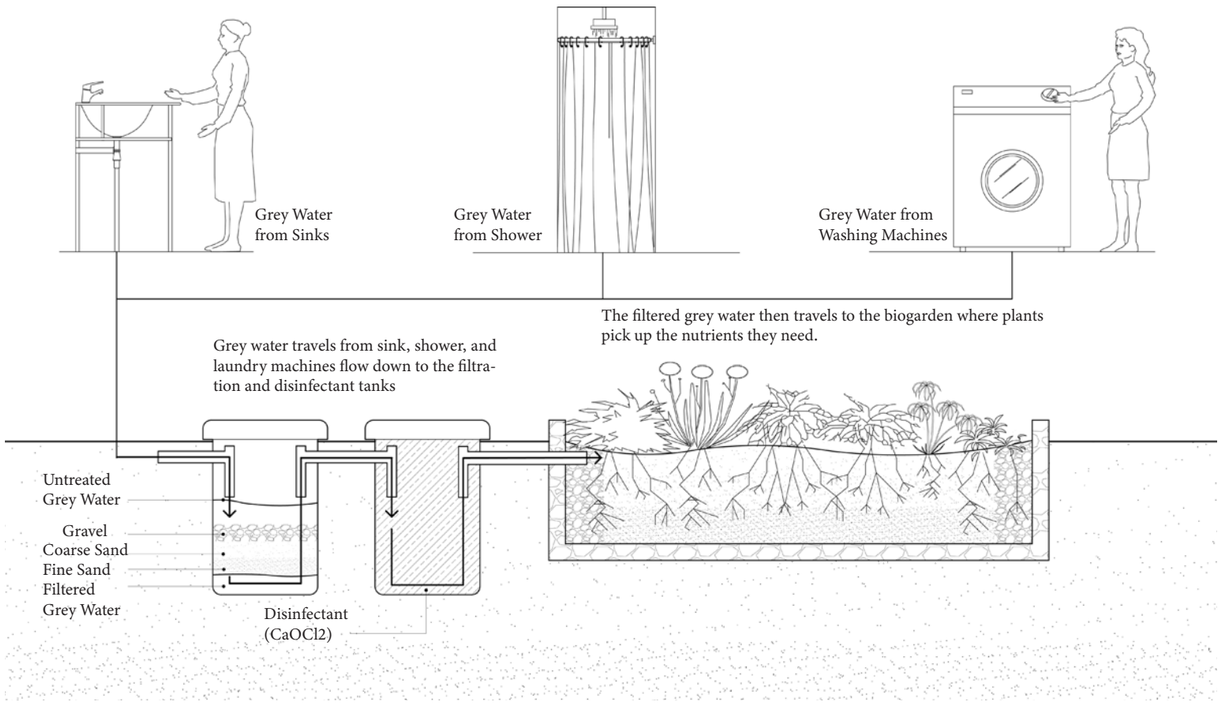
Section D-D'



First Floor



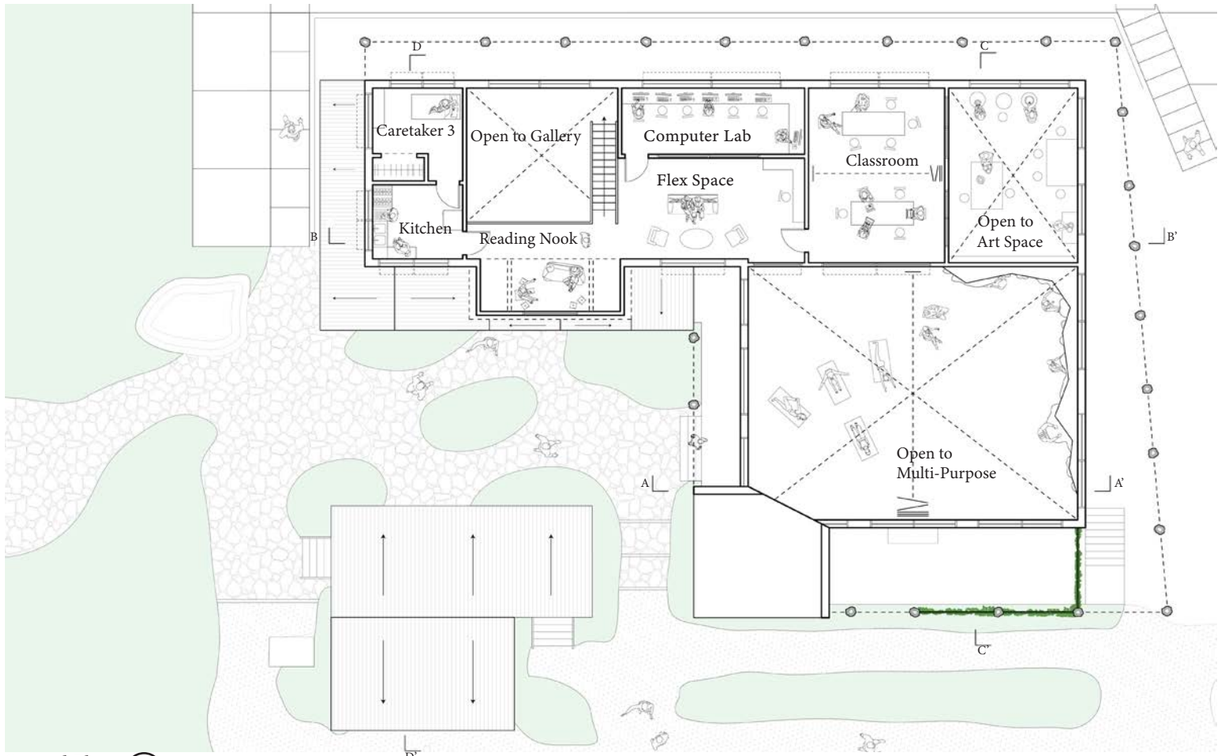
Garden Terrace Vignette



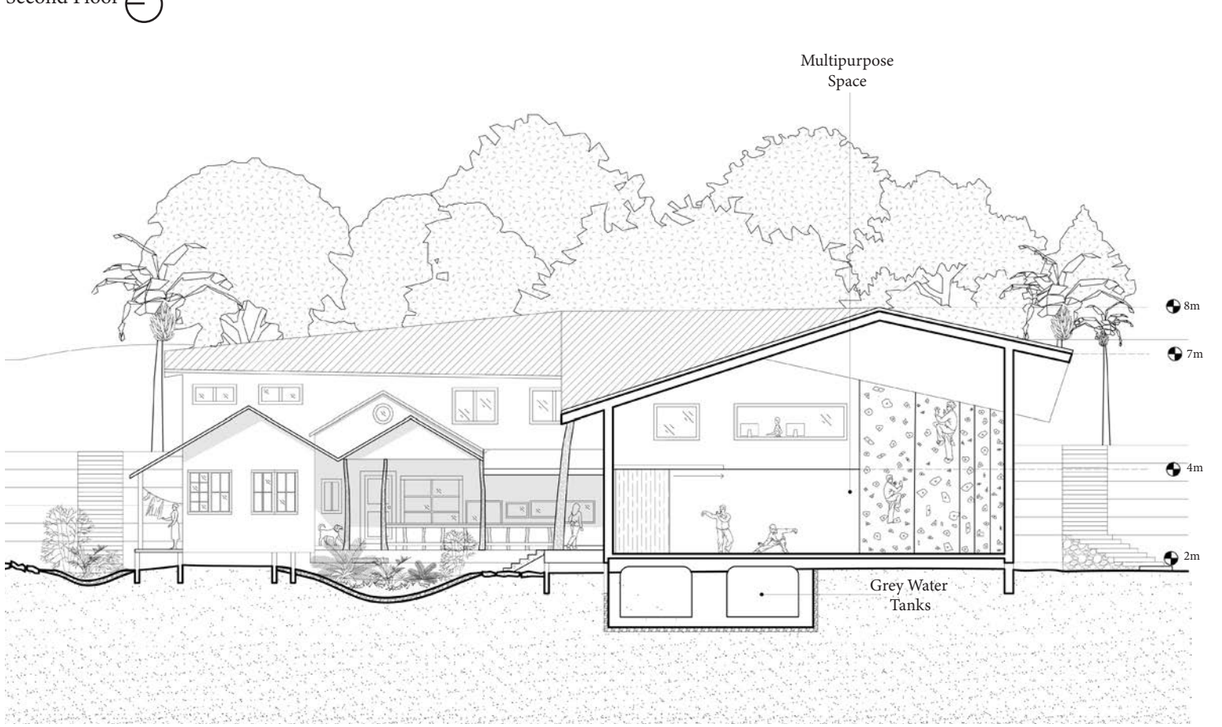
Biogarden Vignette



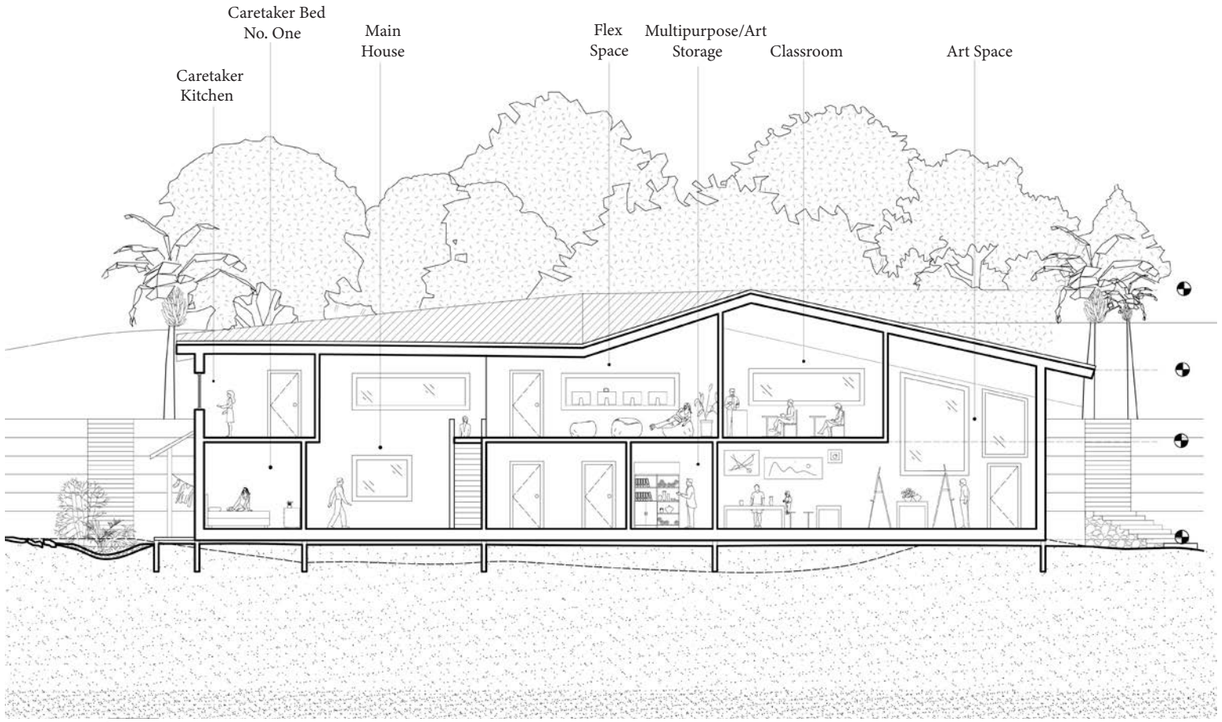
Propose Site Plan



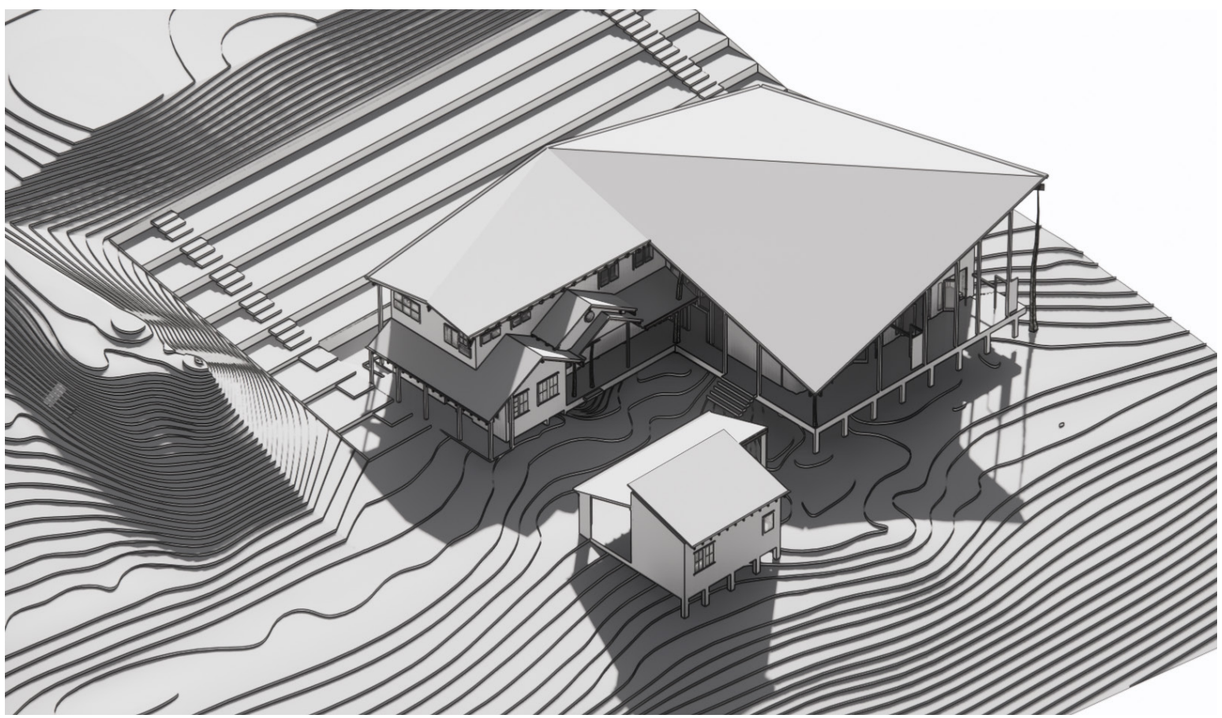
Second Floor



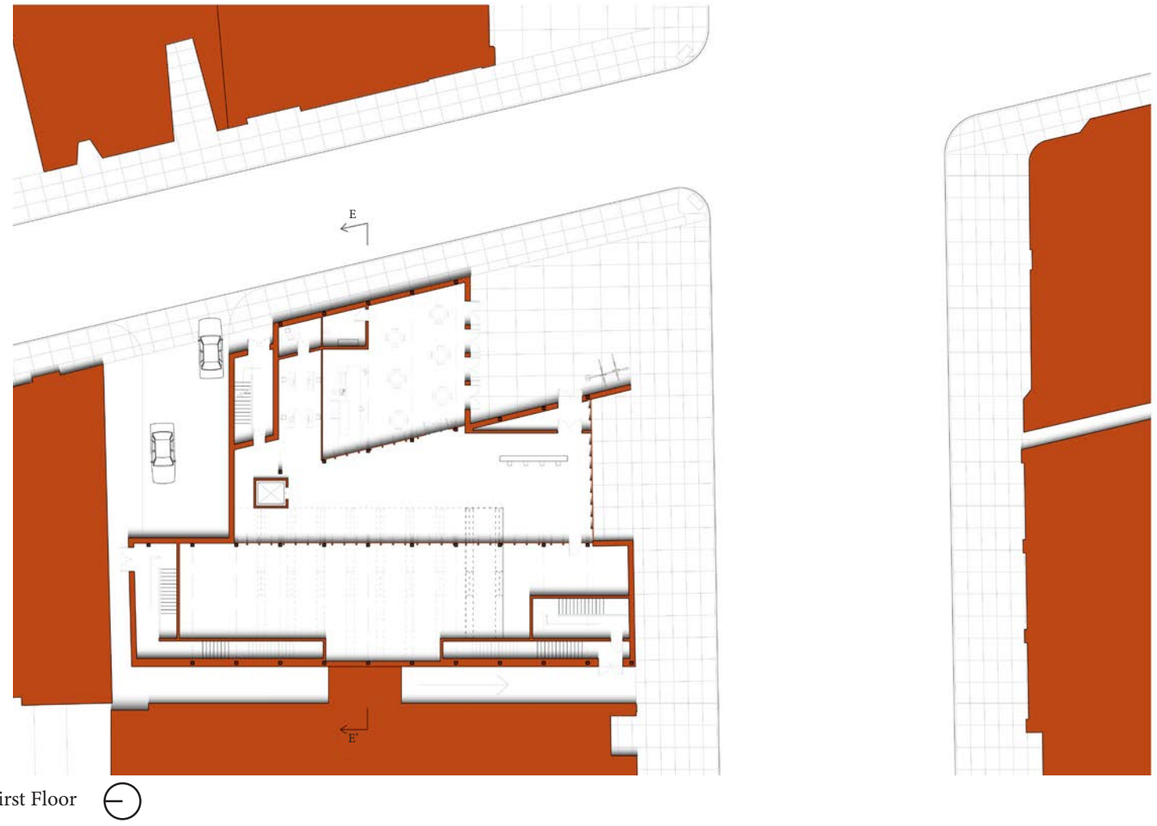
Section A-A'



Section B-B'



3D-Model of Propose Design

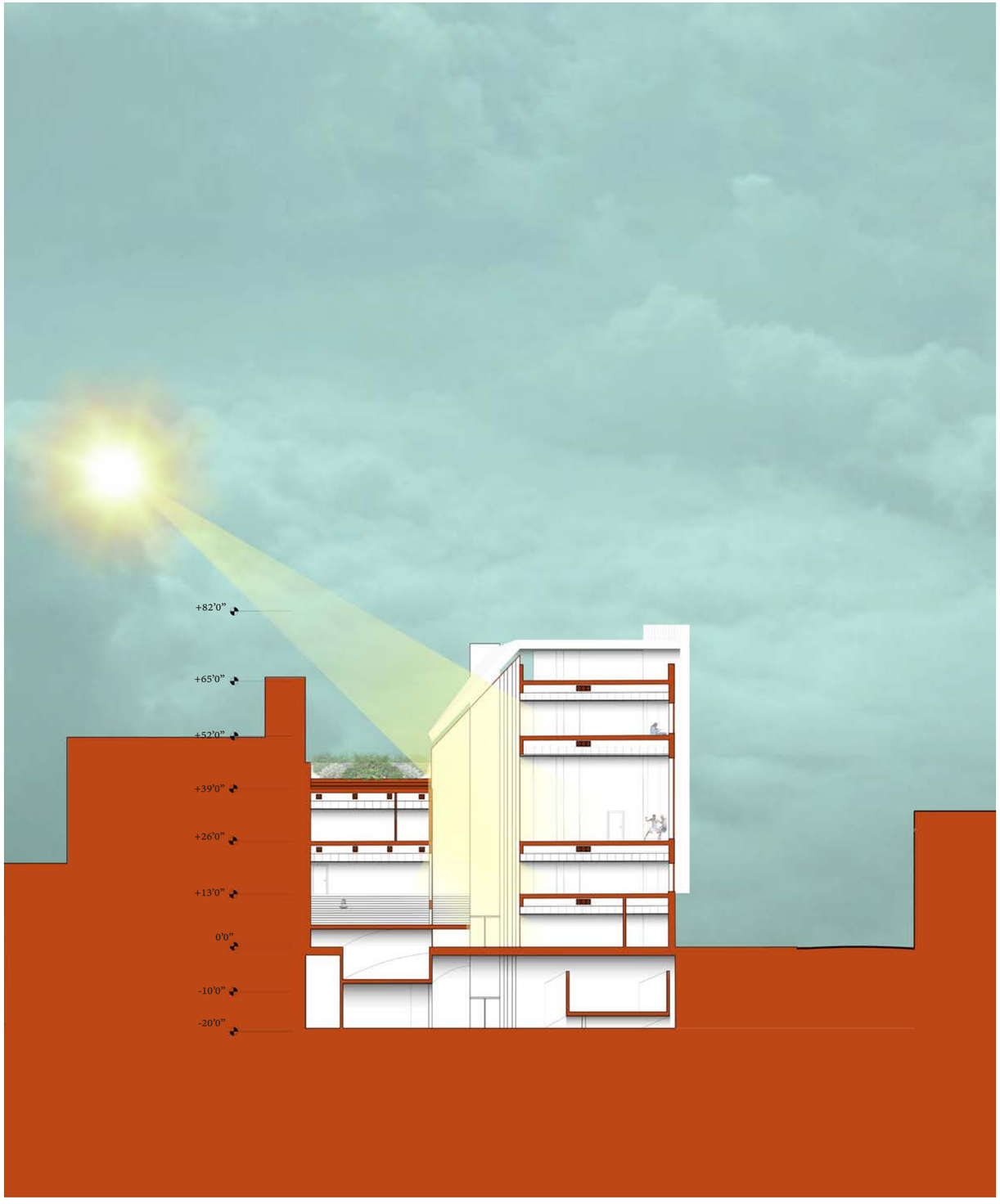


First Floor

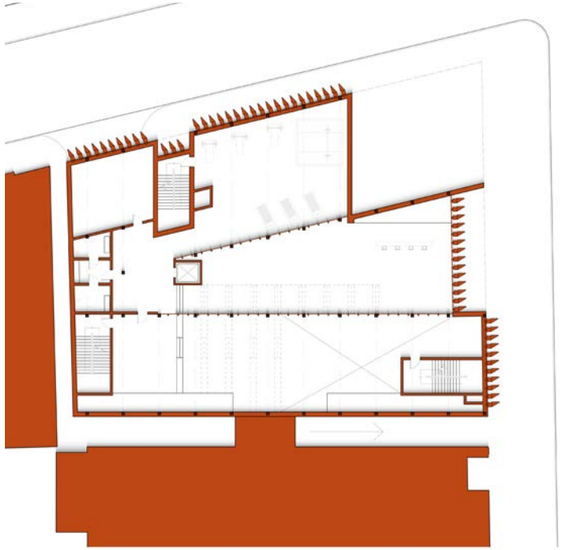
Buffalo Community Center

Date: Spring 2023
Professor: Ken MacKay
Collaborator: Faith Vale
Location: Buffalo, NY

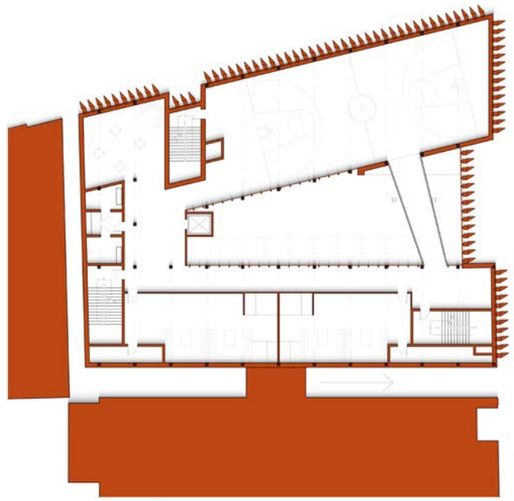
The project focuses on using space to promote more natural sunlight in a community center. The building uses an ample atrium space that follows up, a lower louver system that encases the street facades, a public stair that follows the tiered classroom, and a green roof on the left side of the building he plans show a two story high cantilever, three primary egresses and a separate staircase for the basement. The angled roof allows sunlight into the atrium, while the louvers on the atrium glass controls the amount of sunlight. Wind, windows, wall insulation, the green roof, louvers, and a water catcher in the basement all enhance environmental performance. The idea is that there could be a roof garden for fresh produce and the water catchment could be used to replenish drinking water. A resilience hub with multi purposes is also incorporated in this design.



Section E-E'



Second Floor



Third Floor

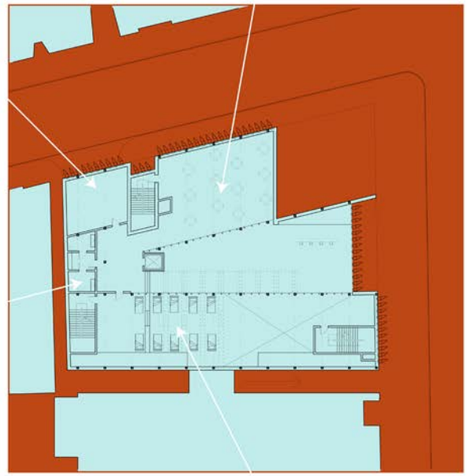
Roof garden acts as mini food supply for fresh produce

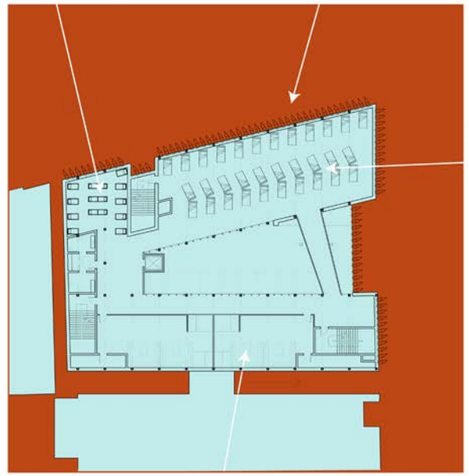
In addition to the cafe, the fitness room is altered to hold seating for eating

Childrens room changes into a kids sleeping room that is monitored by cartaker

Louvers are manually operable to affect the amount of light in

Meeting room turns into a storage room or an extra adaptable space





Multi-purpose space changes into adult sleeping area

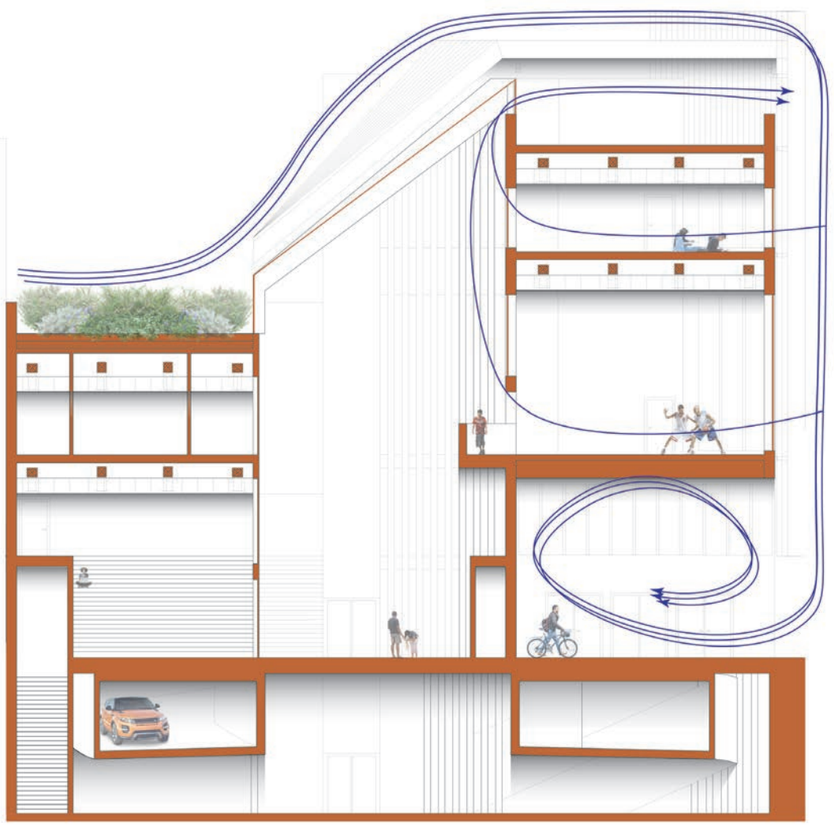
Bathrooms on each floor

Resiliency Hub

Tiered class room altered to another sleeping area or gathering/meeting space

Locker rooms gie acces to secure lockers, showers, and priavate dressing room

Water tower acts as water reserve for drinking waters and showers



Section Negative Pressure Wind Diagram



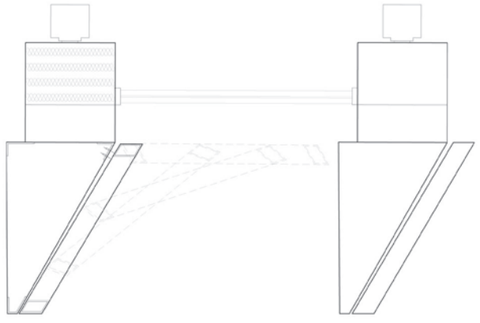
Render Elevation



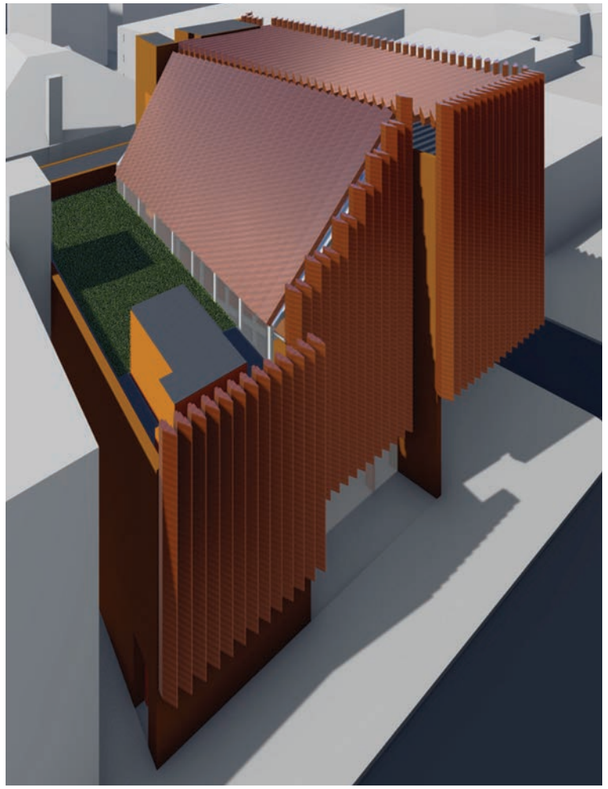
Model Photo

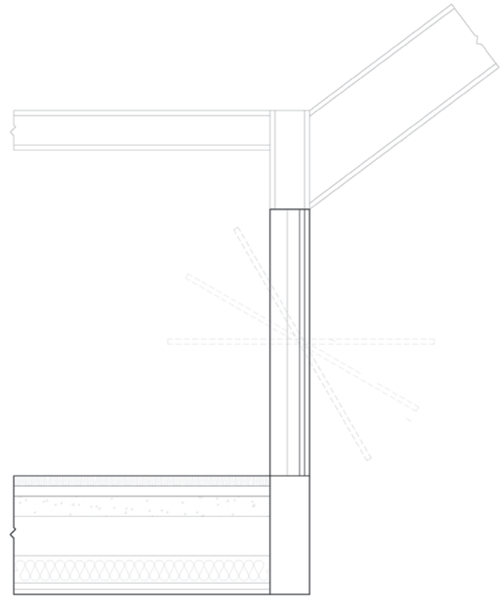


Wall Section of Louver

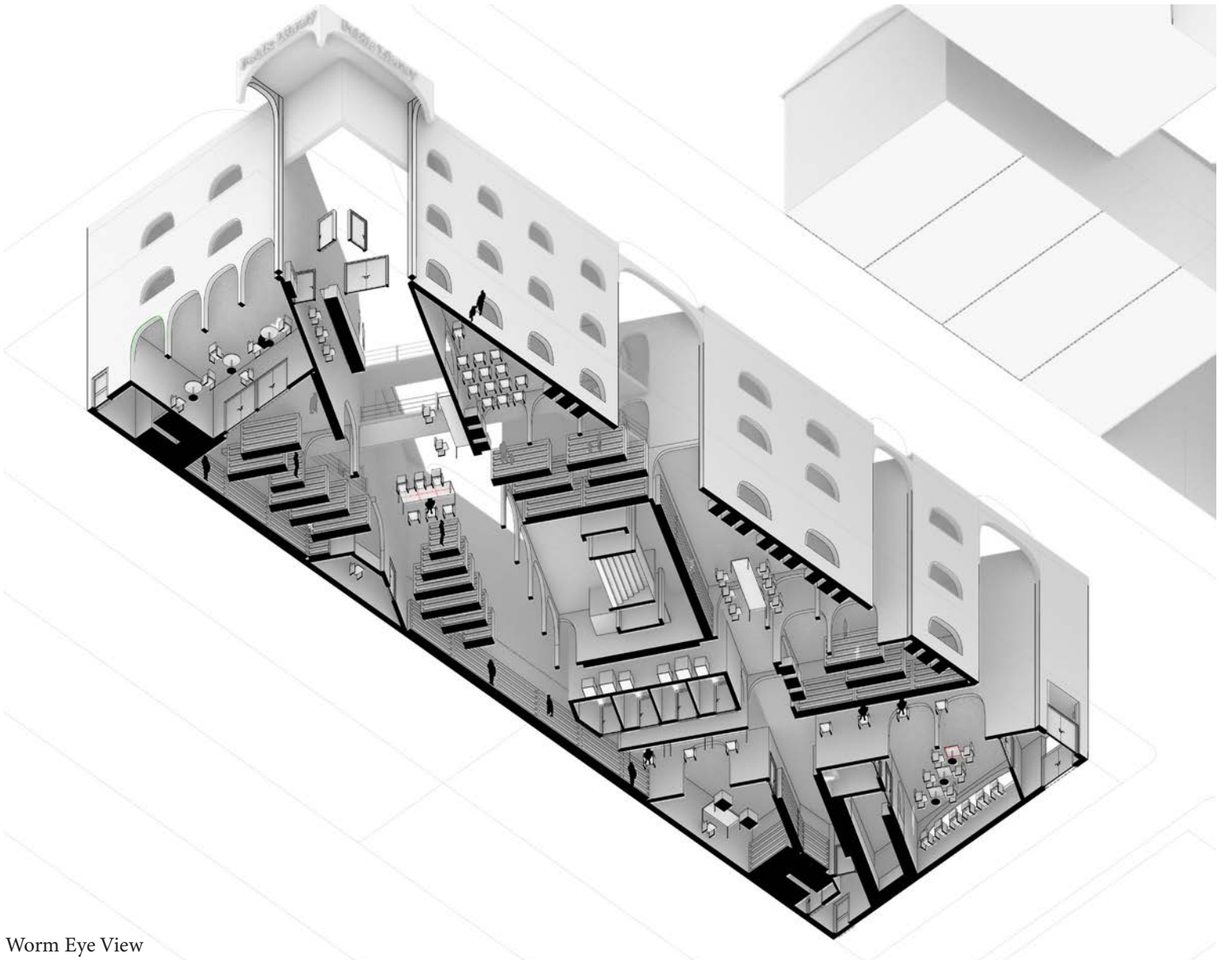


Plan of Louver System





Roof Section of Louvers



Worm Eye View



Circulation Diagram

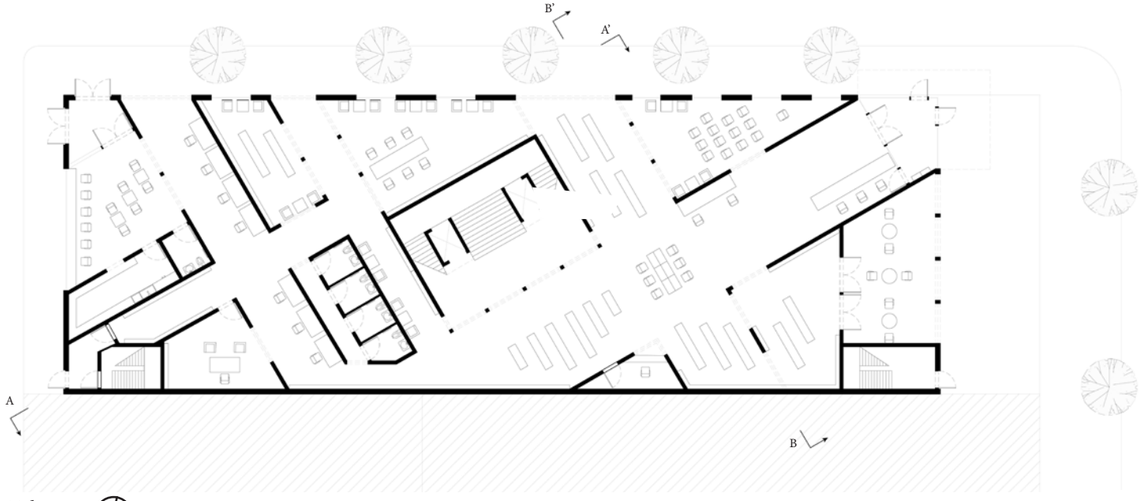
Allegheny West Public Library

Date: Spring 2022
Professor: Lukus Fetzko
Location: Pittsburgh, PA

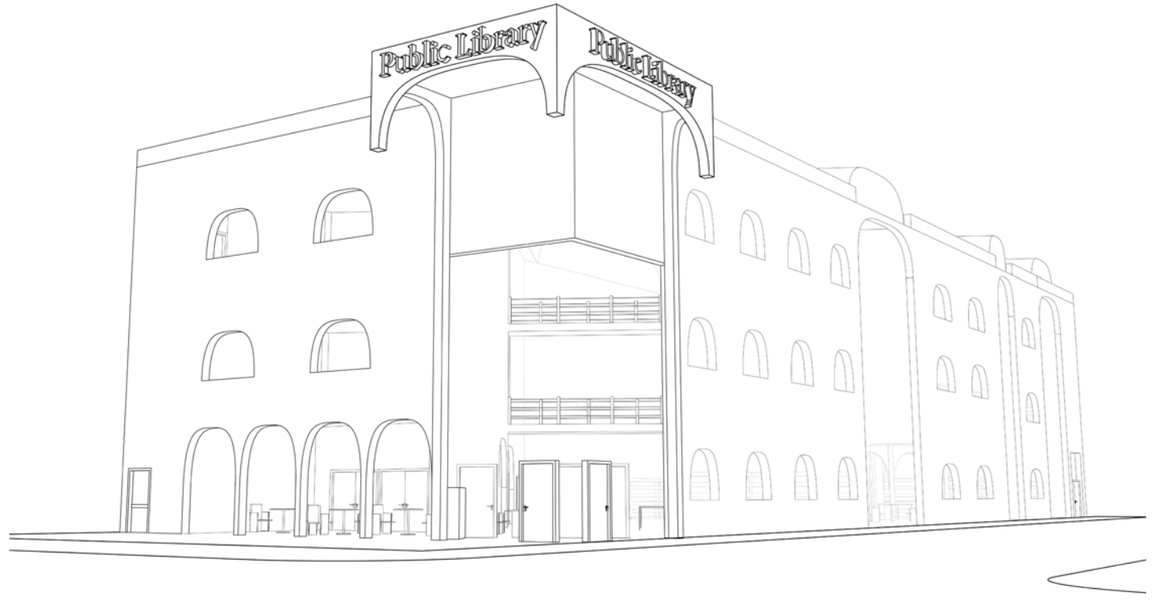
The project revolves around the concept of using arches to design space. Using a grid I am able to show where the main arches occur. These arches get brought through the building at 30, 45 and 60 degree angles. This enhances circulation/movement throughout the library design. The major arches are triple height spaces to create a public space. There are catwalks incorporated on the 2nd and 3rd floor. This increases circulation possibilities throughout the building.



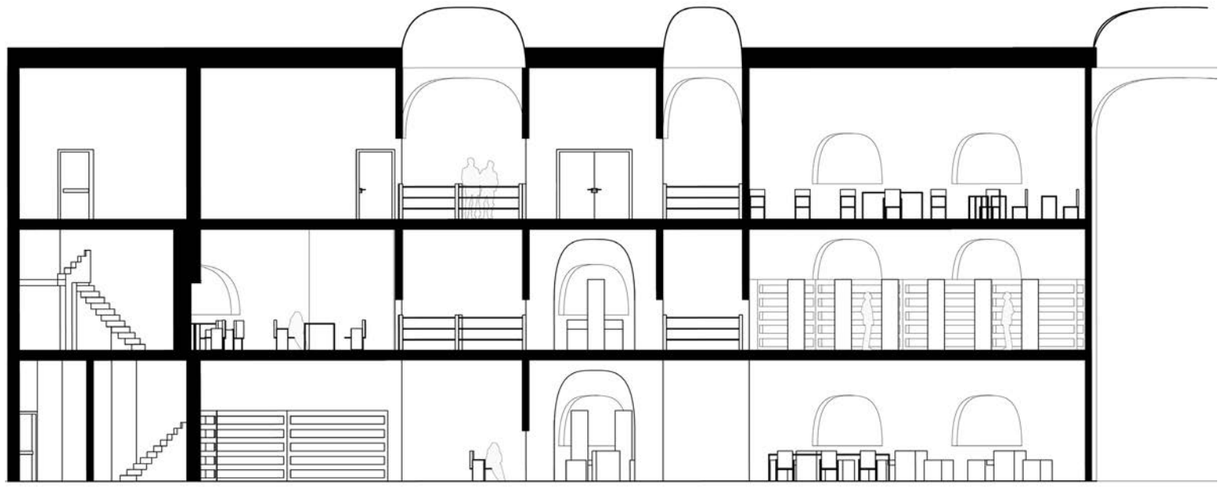
Model Photo



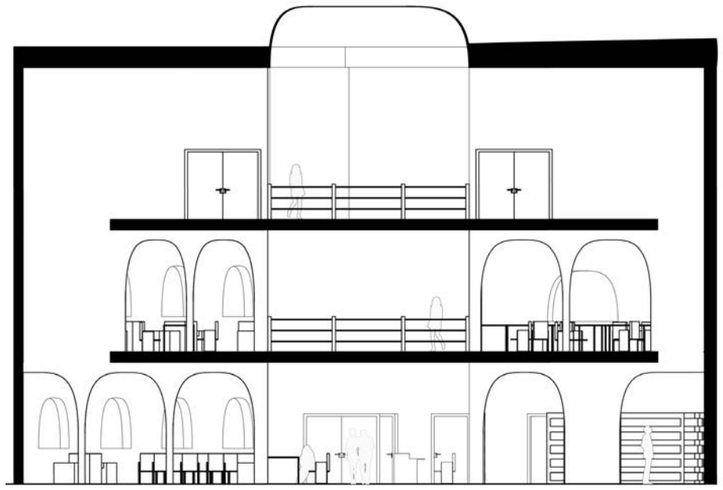
First Floor



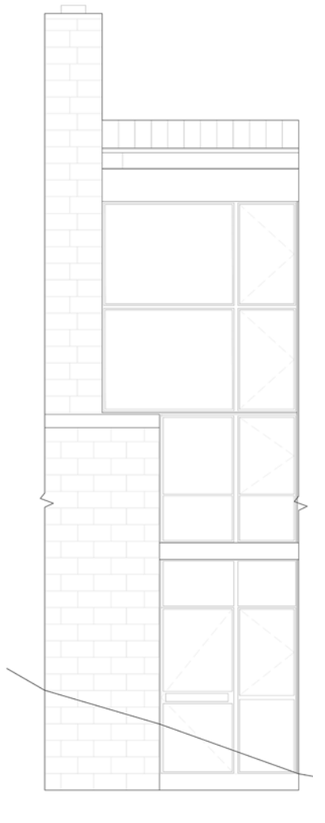
Exterior Perspective



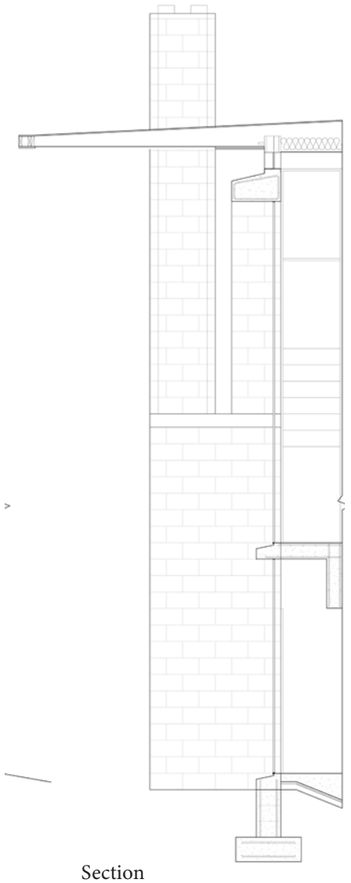
Section A-A'



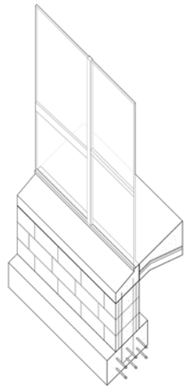
Section B-B'



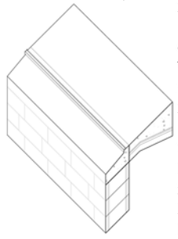
Elevation

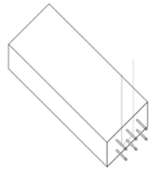


Section









Additive Axon

Menefee Cabin Spec. Notes:

1 Foundation For Perimeter Wall
2 feet 6 inch wide x 12 inch thick site cast concrete strip footing with 3-#5 reinforcement bars long

2 External Wall Below Grade
8x16x16 single wythe CMU with #6 vertical rebar grouted solid at 24 inches OC outer face and 48 inches OC inner face; horizontal joint reinforcement at 8 inches OC
Exterior face
Waterproof membrane
1 inch rigid insulation

3 External Wall at Ground Level and Upper Levels
8x16x8 CMU inner wythe with 3-#5 vertical rebar grouted solid at corners, each side of large openings, and 48 inches OC; horizontal joint reinforcement at 16 inches OC
Vapor barrier
2 inches rigid insulation
2 inch air space
8x8x4 CMU outer wythe

4 Floor at Lower Level
Crushed stone, vapor barrier, rigid board insulation at 1", cast-in-place concrete

5 Living Room Floor
2x10 truss joists/TJI's at 16 inches OC
2x6 tongue and groove wood deck

6 Loft Floor
W section steel beam
3x10 wood joists at 16 inches OC
2x6 tongue and groove wood deck

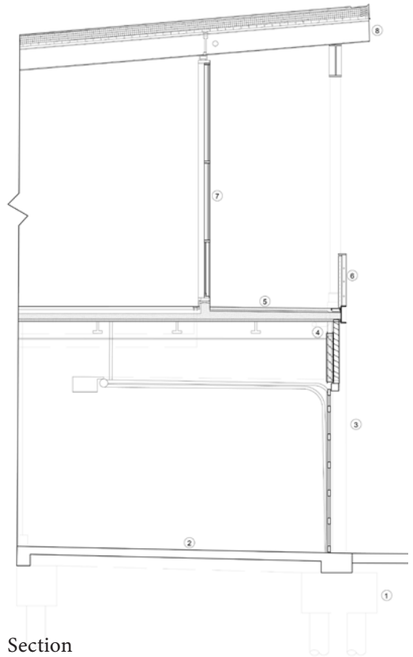
7 Roof
Flitch beam: 4- 2x10 wood joists and ⅜ inch steel plate, stagger bolted
LVL joists at 16 inches OC
Batt insulation
Plywood sheathing
Building paper/ underlayment
Slip sheet
Standing seam metal roof

8 Window
Site-cast concrete sill
16 inch high site cast concrete lintel
Steel-framed double glazed window
Clerestory: frameless glass

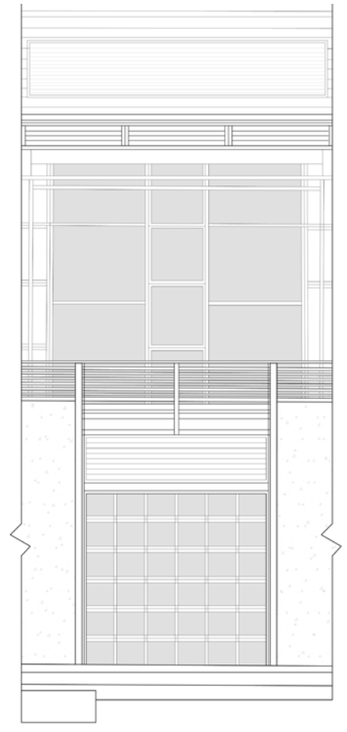
Construction Technology

Date: Spring 2023
Professor: Annette LeCuyer

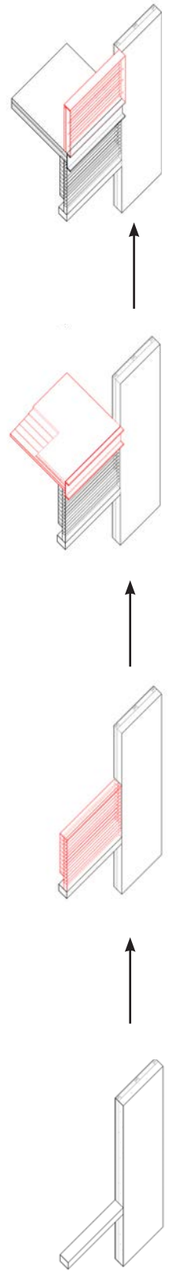
Construction technology is a course focusing on materials used in architecture. This course explains the basic need for materials, construction techniques, and how to incorporate needed materials for the intentions, strategies and technical means of construction. Three-dimensional technical drawings were completed to show the understanding of the material and its use.



Section



Elevation



Additive Axon

Conibear Shellhouse Spec. Notes

Floor Assembly:
2" Topping slab with broom finish
1" rigid insulation
drainage compost
protection sheet
hot rubberized asphalt membrane
2-½" conc. topping slab
2" composite metal decking
Exist stl. Structure
W/R-14 min. Insulation finish board attached to decking between structure bays

Roof Assembly-1:
PVC Single-Ply membrane on ¼" overlayment board on R-21 high-performance rigid insulation on vapor barrier on plywood sheathing on T&G wood decking on 2x6 P.T nailer on PTD. steel Purlins

Roof Assembly-2:
Single ply PVC Membrane on ¼" overlayment board on R-21 rigid insulation (tapered to slope unless structure is sloped) on vapor barrier on ¼" underlayment board on 1 ½" perforated MTL. deck on steel structure exposed

Wall Assembly:
C.I.P Concrete Panels(Arch. Conc. finish at exterior)
R-11 Batt insulation in 3 ⅜"
Metal Studs 24" O.C. with ⅝" Hi-impact GWB at interior

Head Assembly:
Backer rod & sealant, typ.
Overhead door & tracks
Neoprene Gasket @ head
HSS 6x6x1/2" stl.

Jamb Assembly:
4x4 STL angle embedded in Conc. @ corner
Alum. louver
Line of 6x6 TS

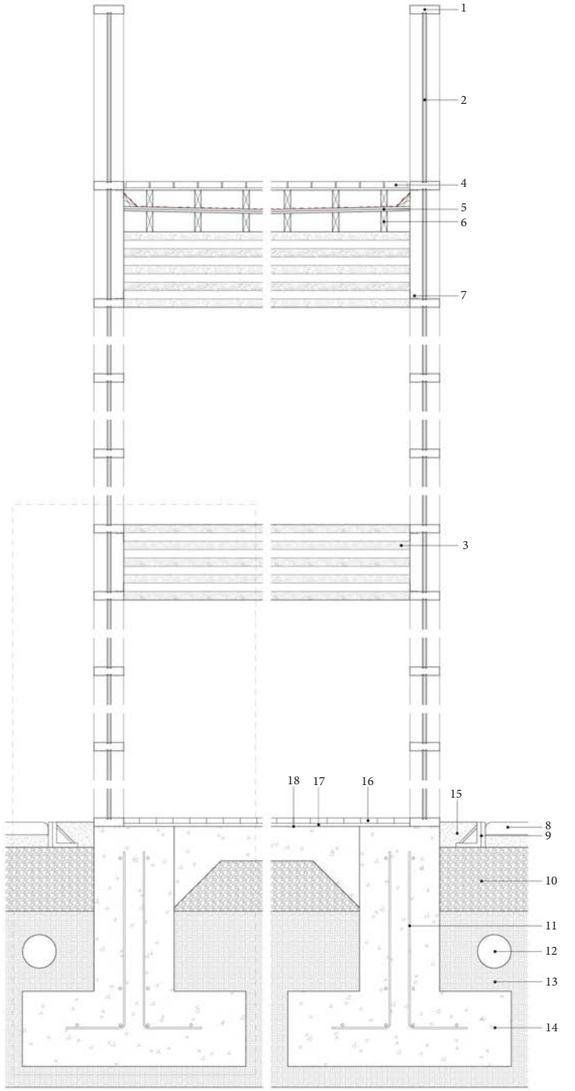
Sill @ Dining Assembly:
Curtain wall with alum. Single-hung window
Becker rod & sealant, typ.
Blocking
Prefinished metal flashing
Wrap membrane into rough opening
Aluminum breakshape by manufacturer to match window finish
Continuous flush diffuser, typ @ dining room

Head @ Dining Assembly:
Alum. window with comp. Channel
6x3x25 T.S.
Weld beam & sealant, typ
9" Curtain wall with alum. single - hung

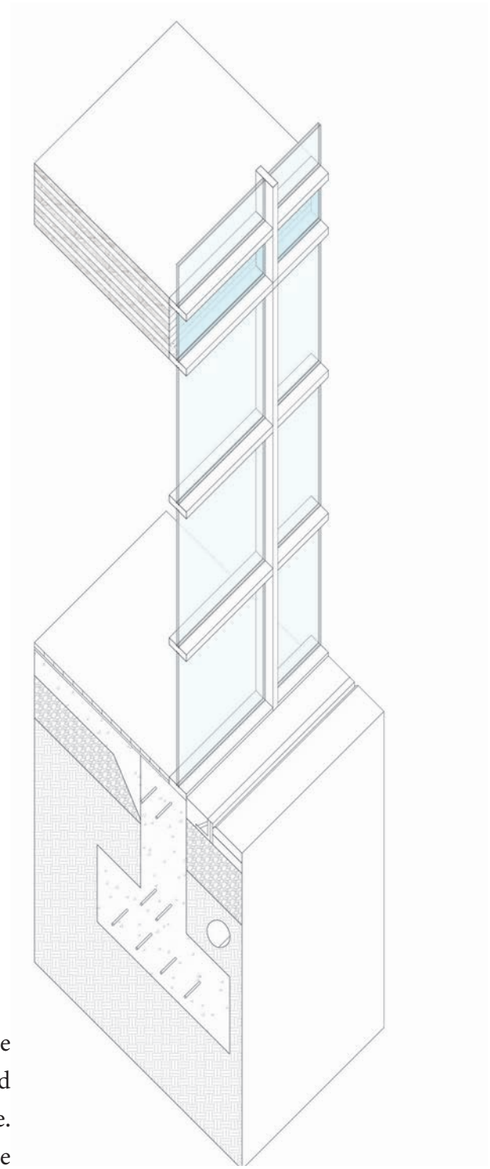
Foundation Assembly:
Extend Augercast reinf into to drop cap
(4) #6 t&B & EA side Mid-Depth of cap
#3 ties @ 4" into pile cap
Conc Slab & BM

Envelope Assembly:
Exterior motorized shades type 4-(6) Locations at east elevation with (1) motor & (2) coupled bands each with common HEM bar with vertical cable guides at steel columns

Ceiling Assembly:
3-½" b. tube and shade assembly inside #16 GA pained steel bent pocket
3/18" guide cable
Shadecloth
Painted steel column
1-½" Aluminum hemtube with ¼" rebar sealed inside fabric with guide cable finials



1 - Mullion
2 - Gas Filled Double Pane Glass
3 - Cross Laminated Timber
4 - Pavers
5 - Plywood Deck
6 - Wood Joist
7 - L-Bracket
8 - Paver
10 - Gravel
11 - #5 Rebar
12 - Drain Tile
13 - Earth
14 - Concrete
15 - Sand
16 - Wood Paneled Flooring
17 - Plywood Subfloor
18 - Building Paper

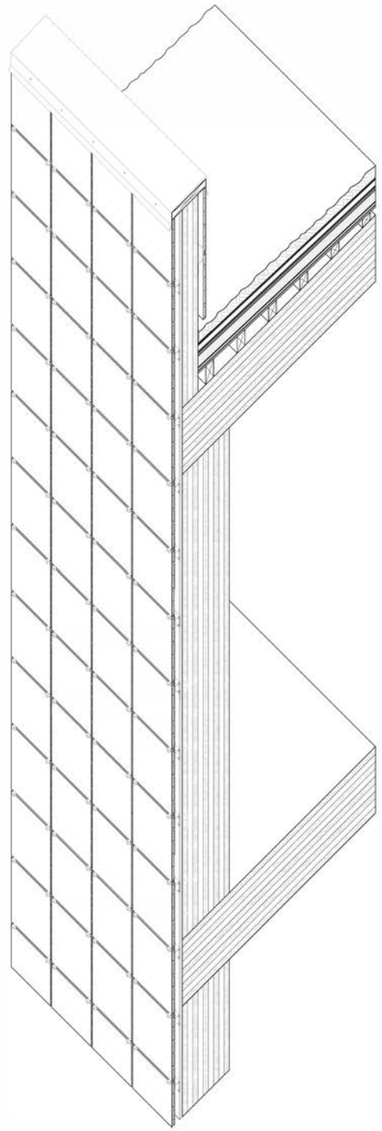


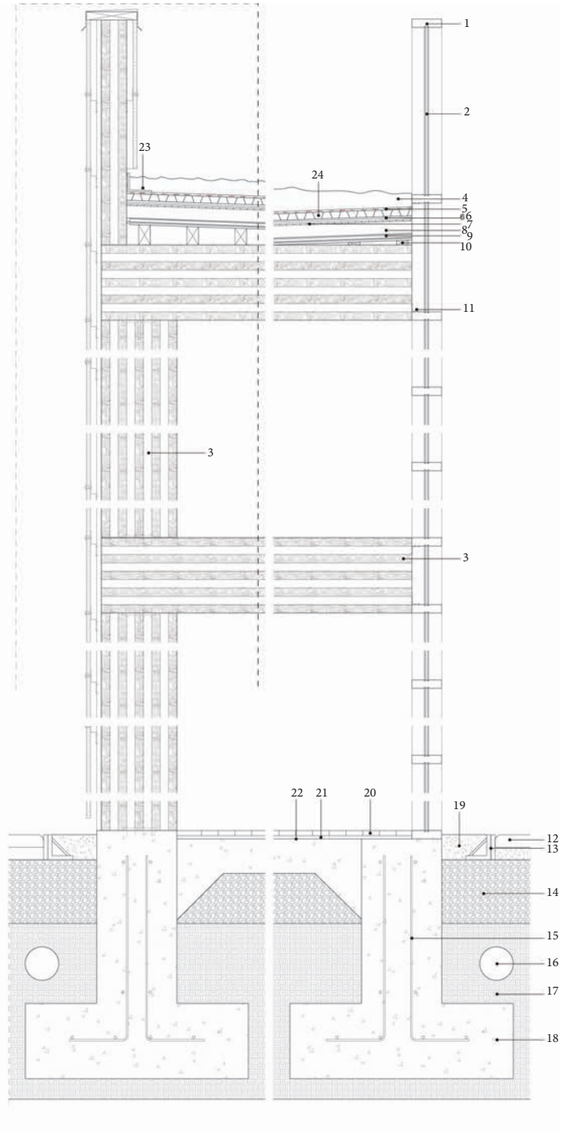
Wall Sections

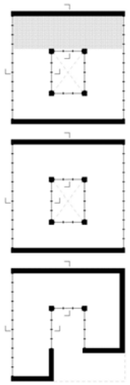
Date: Spring 2025
Professor: Tiffany Xu
Collaborator: Cassidy Frisch, Troy Behar, Zach Izzo

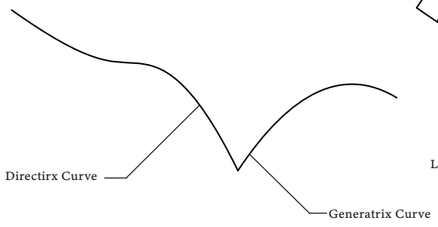
This project explores structural, thermal, and hydrological performance through the integration of mass timber framing, cast concrete pad footings, and an aluminum storefront system for the curtain wall facade. The foundation responds to the site's slope with embedded supports, while one square is cantilevered, introducing a dynamic structural element. Operable louvers and a natural ventilation system enhance environmental responsiveness, allowing for passive cooling and airflow regulation.

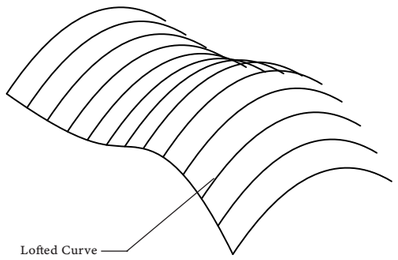
1 - Mullion
2 - Gas Filled Double Pane Glass
3 - Cross Laminated Timber
4 - Soil
5 - Filtration Layer
6 - Plywood
7 - Underlayment
8 - Rigid Insulation
9 - Playwood Decking
10 - Wood Joist
11 - L-Bracket
12 - Paver
13 - Plastic Edge Restraint
14 - Gravel
15 - #5 Rebar
16 - Drain Tile
17 - Earth
18 - Concrete
19 - Sand
20 - Wood Paneled Flooring
21 - Plywood Subflooring
22 - Building Paper
24 - Corregated Metal

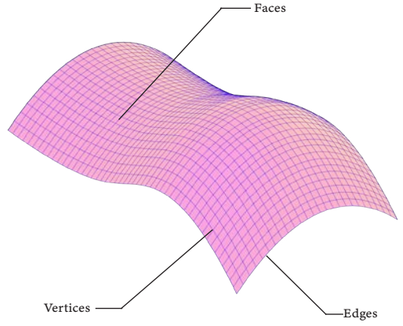


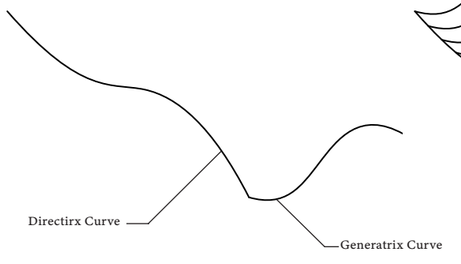


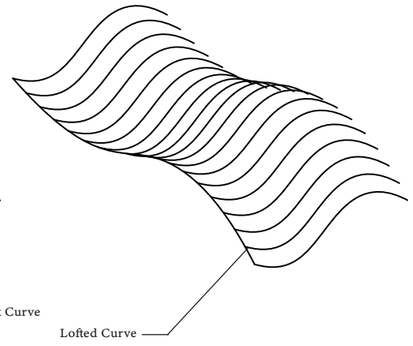


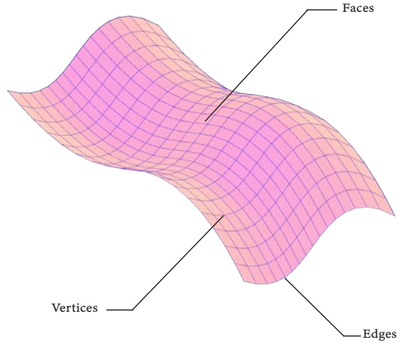


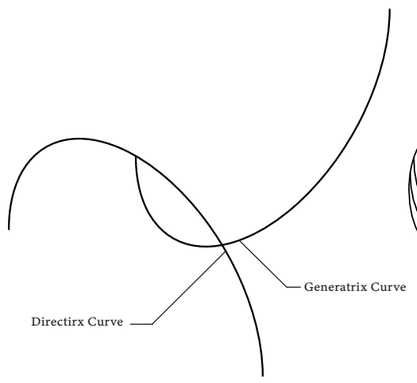


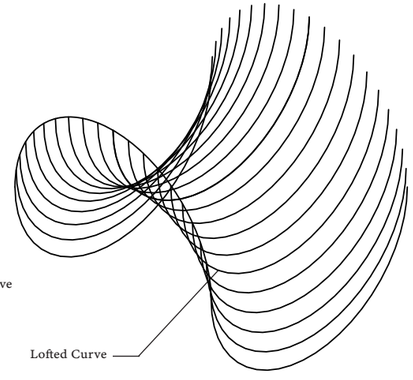


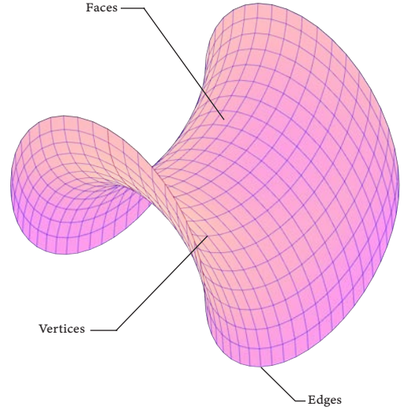








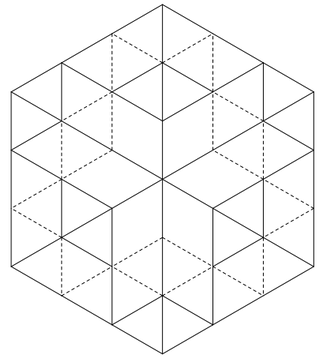




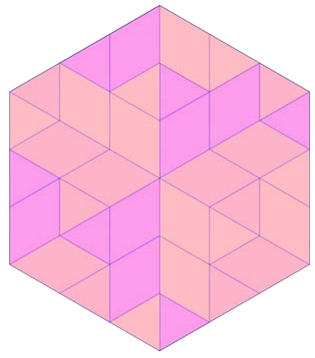
Grasshopper

Date: Spring 2025
Professor: Nicholas Bruscia

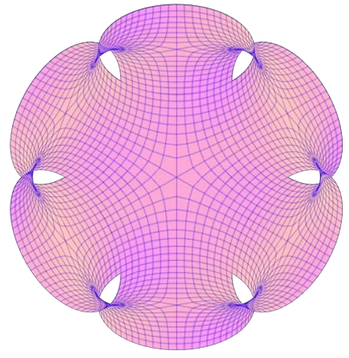
This course introduces robotic fabrication through computational form-finding and form-conversion, focusing on architectural geometry in digital workflows. Students engage with Grasshopper, Kangaroo2, and fabrication tools like the Kuka KR240 robot arm. Through hands-on workshops, they explore parametric modeling, simulation, and extended reality, developing skills in Situated Technologies. Small design-build projects emphasize the interplay between digital modeling, material constraints, and construction-aware computation, fostering innovation in architecture and its evolving relationship with technology.



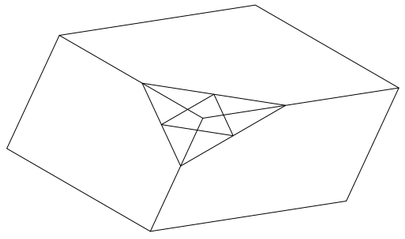
Linework For Geometry



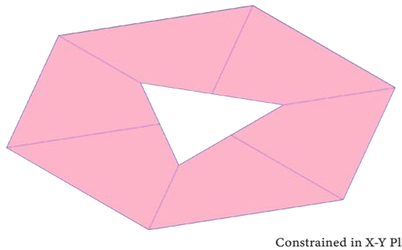
Planar Quadmesh



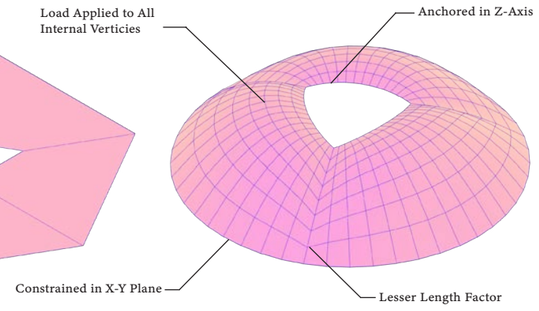
3-Step Subdivision



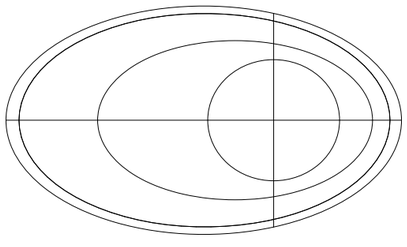
Linework For Geometry



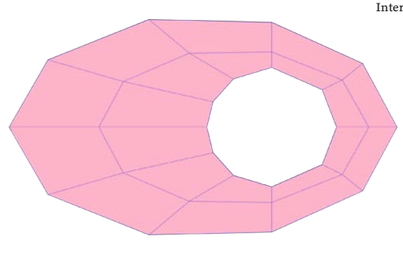
Planar Quadmesh



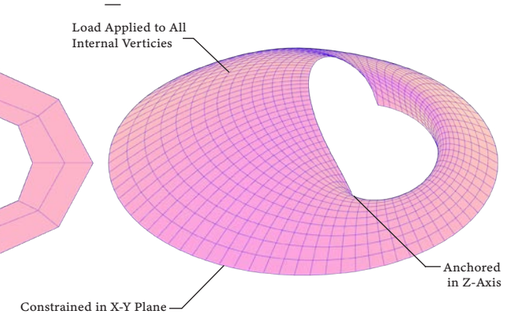
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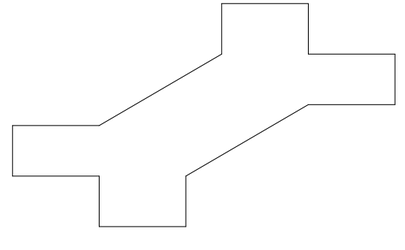
Linework For Geometry



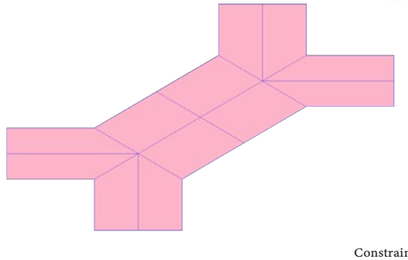
Planar Quadmesh



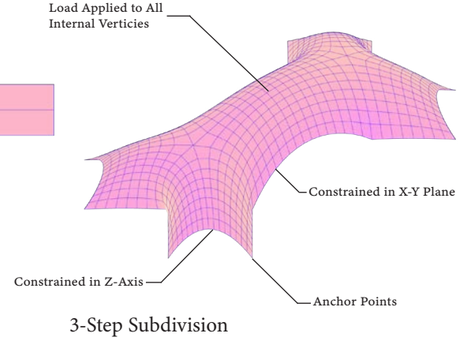
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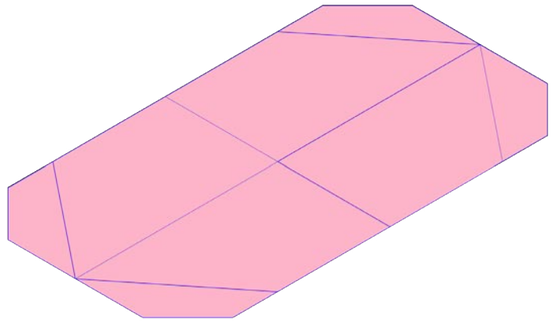
Linework For Geometry

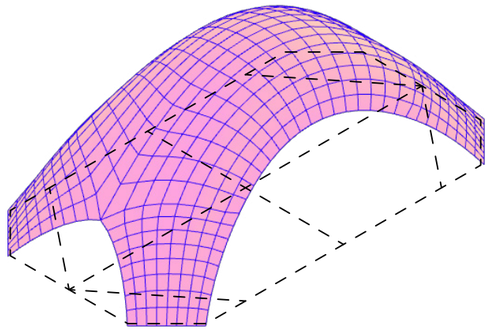


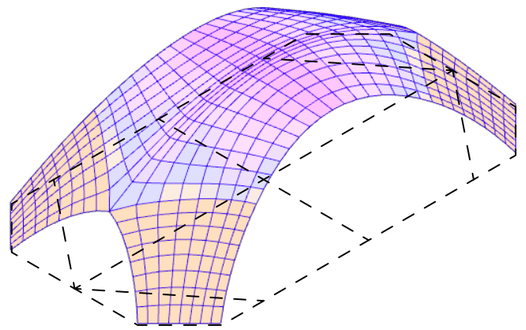
Planar Quadmesh

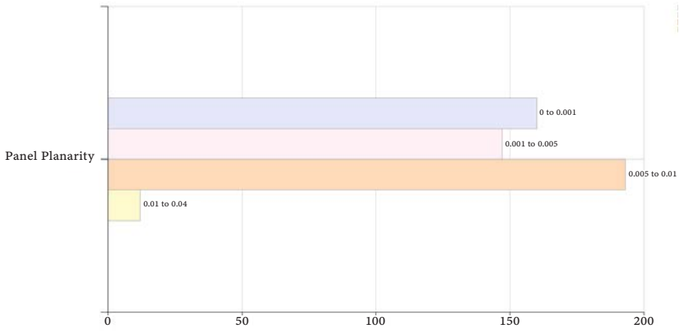


3-Step Subdivision



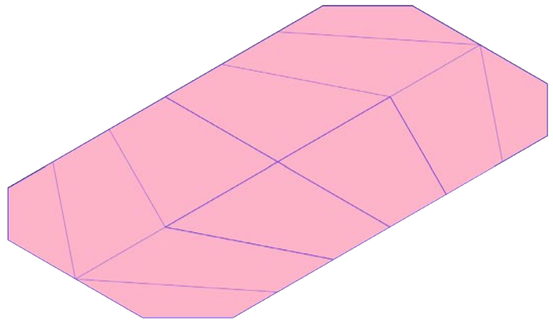


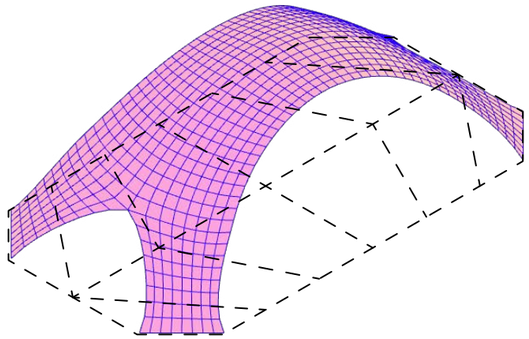


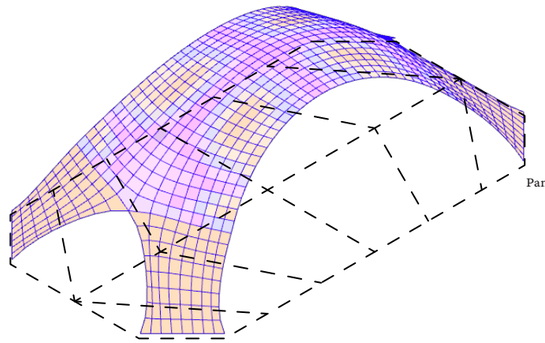


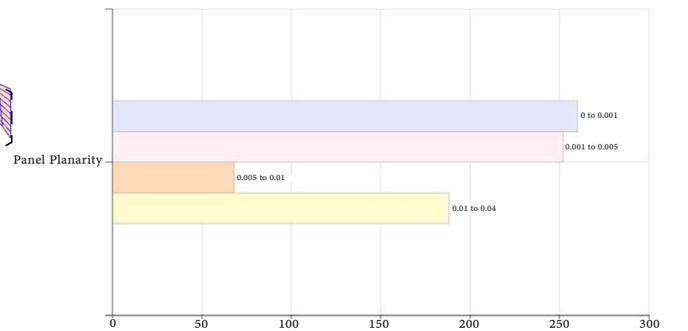
More Planar

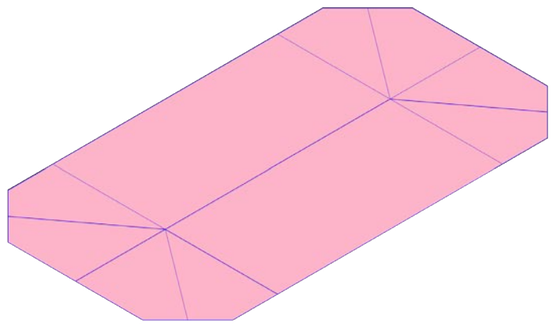
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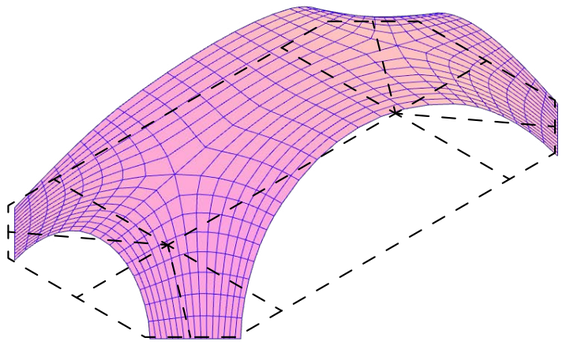


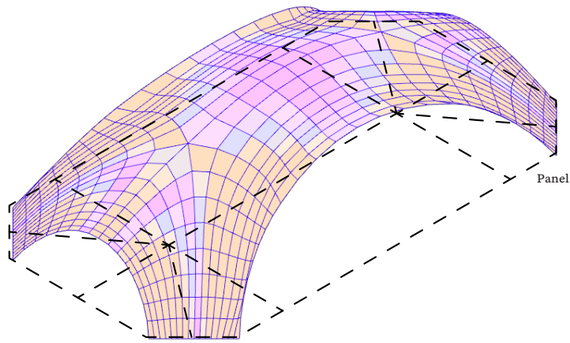


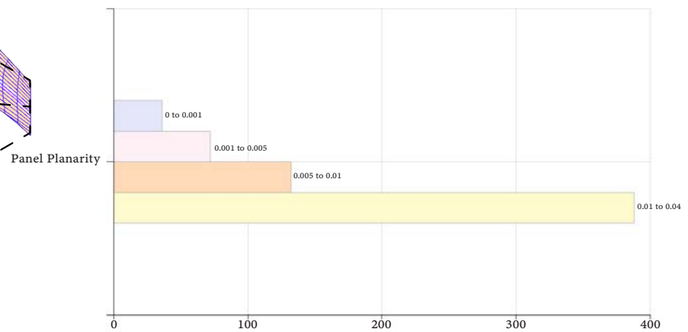


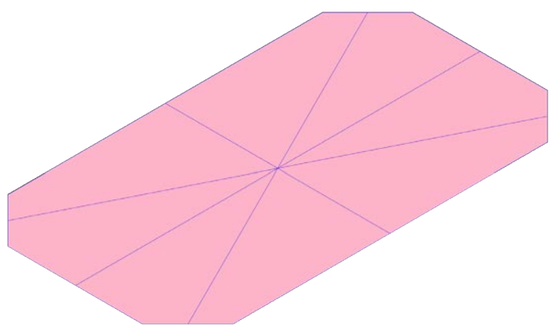


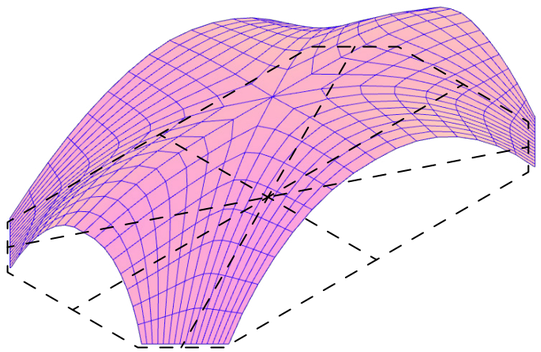


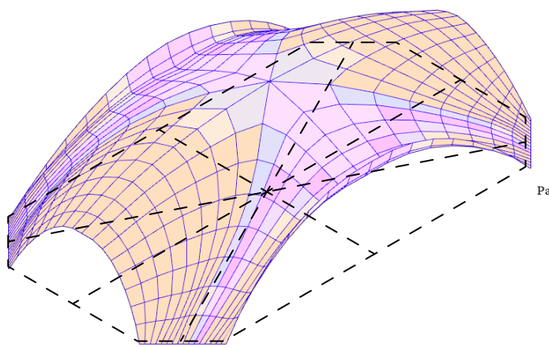


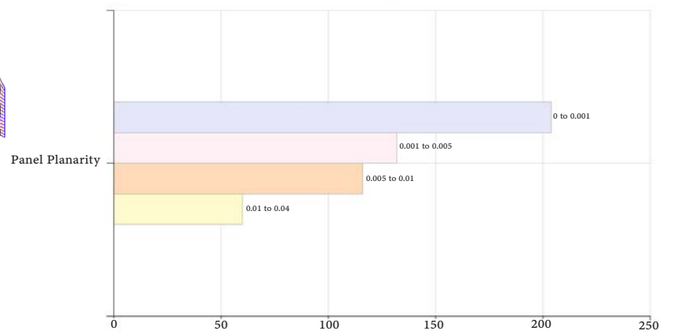












Planar Quadmesh

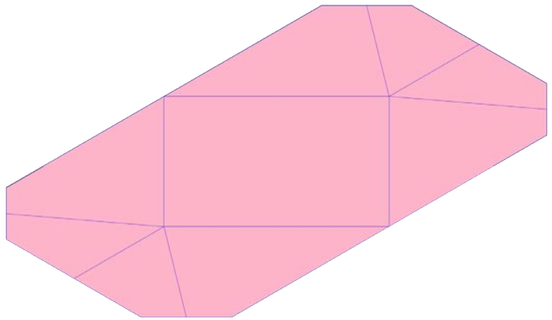
3-Step Subdivision

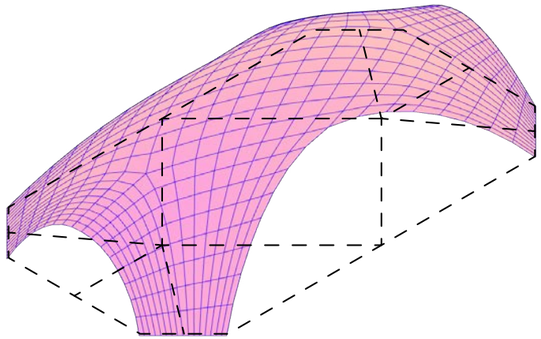
Quadmesh after Planarization

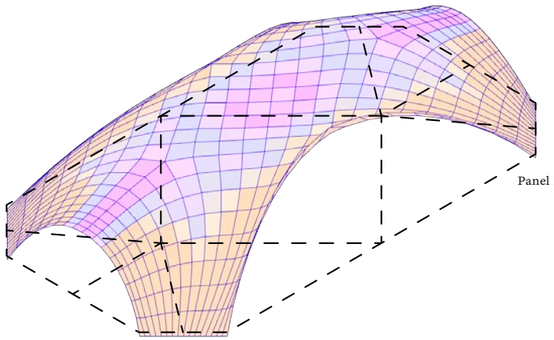
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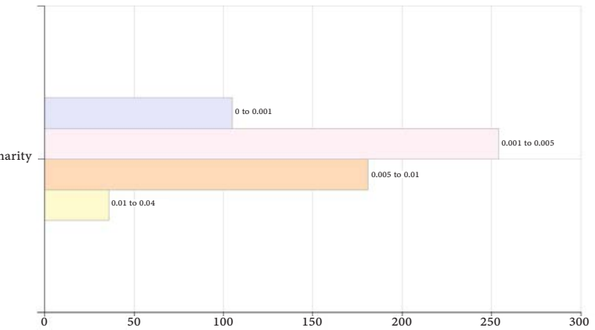


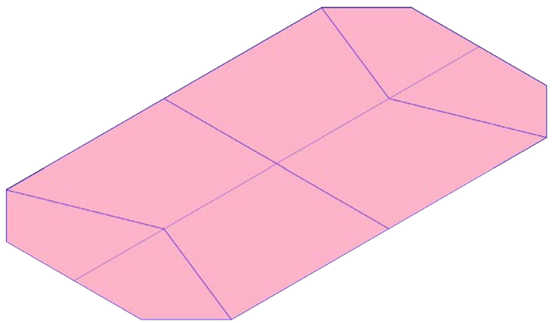
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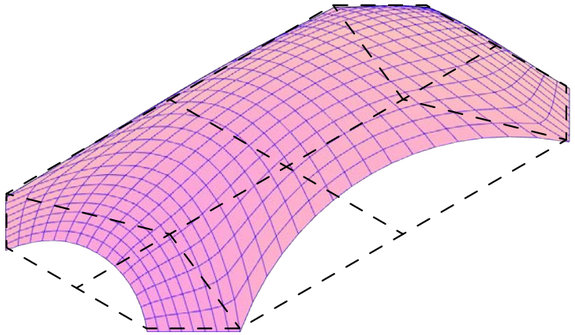


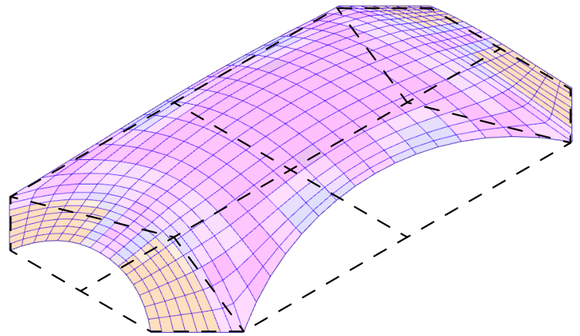




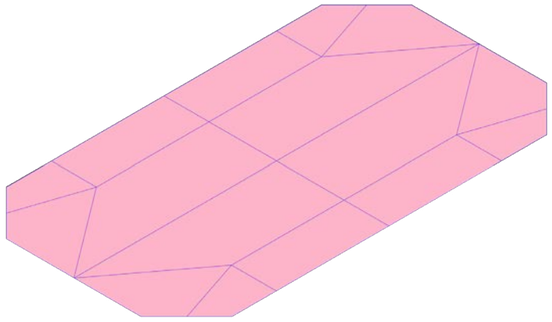


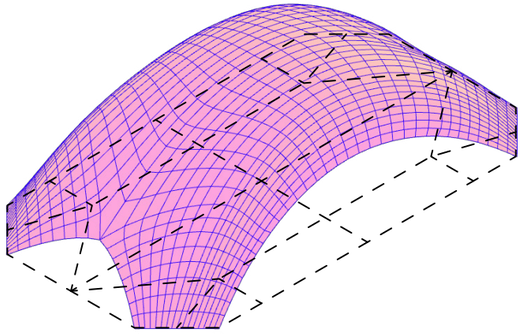


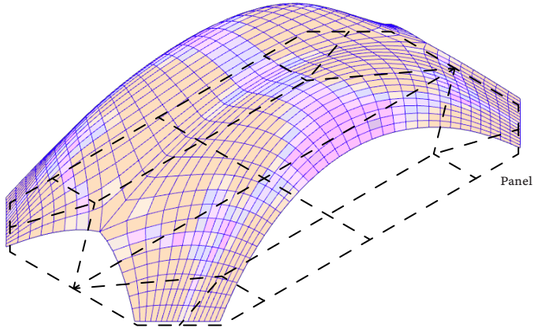


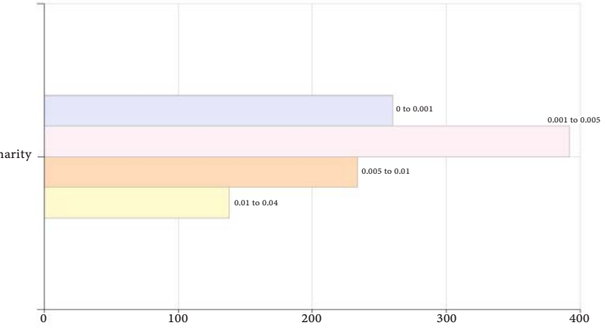


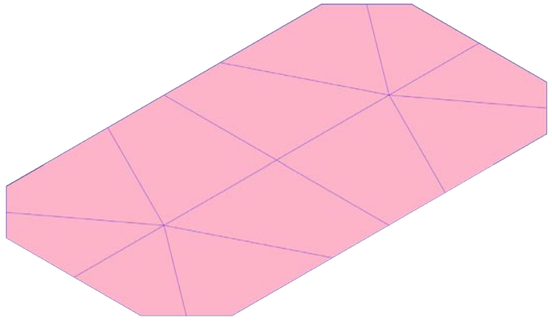


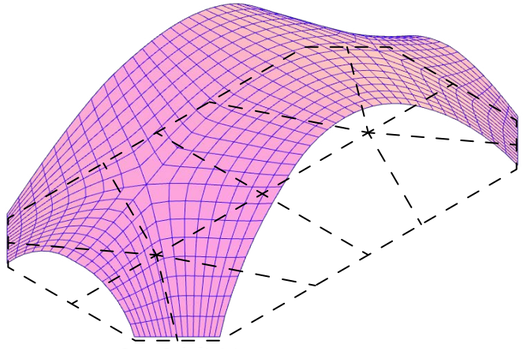


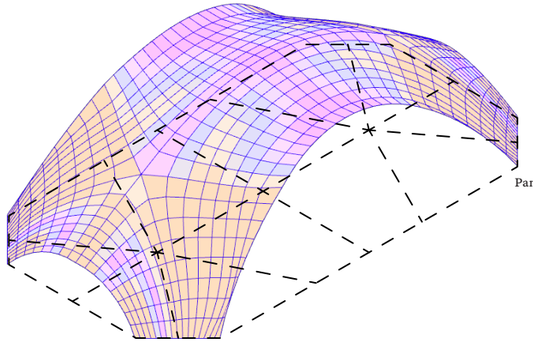


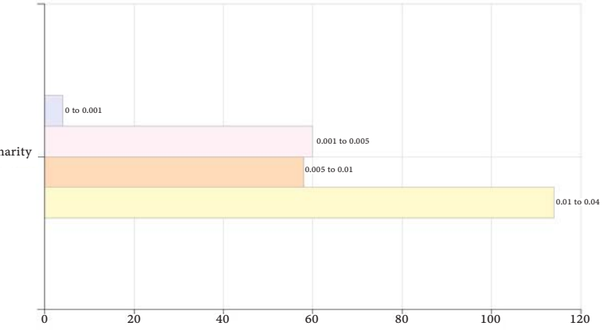












Planar Quadmesh

3-Step Subdivision

Quadmesh after Planarization