

RHEA IYER

professional + undergraduate architecture portfolio

2018-2024

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RHEA IYER

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• www.linkedin.com/in/rhea-iyer •

EDUCATION

• PRATT INSTITUTE

August 2018 - May 2023

B.Arch - Bachelor of Architecture

Sustainability Minor

GPA: 3.6

Involvement: Peer Advisor / Tutor

September 2020 - May 2023

- Peer Advisor at the Learning/Access Center for students at Pratt Institute.
- Areas: architectural design, representation, software navigation and tutorials, structures (concrete and steel), math, science, and time management.

ACCOMPLISHMENTS

• Presidential Merit Scholarship

\$26000 merit based scholarship awarded each year from 2018-2023 at Pratt Institute

• Project Archival

One project chosen per section for publication in Pratt's yearly InProcess book for NAAB/RIBA.

- Spring '23
- Degree Project: Research and Design

- Spring '21

Construction Document Set

• Finalist

- Degree Project Award: Spring '23

1-2 projects per section selected to present at the distinguished degree projects review

- Student Worker of the Year: Spring '23

- History/Theory of Architecture Essay

Award: Spring '20

• President's List

SP '19, SP '20, FA '20, SP '21, SP '22, FA '22, SP '23

SKILLS

Rhino 3D, AutoCAD, Revit, Illustrator,

Photoshop, InDesign, V-Ray, Enscape,

Sketchup, Vectorworks, Laser Cutting,

Google Suite, Microsoft Office

EXPERIENCE

2023 Chango and Co.: New York, NY

Junior Architectural Designer

June 2023 - August 2024

- Drafting, 3D modeling, rendering high end single family homes.
- Product and material research, selection, specification, vendor communication.
- Ordering and maintaining sample databases; recording meeting minutes on client, site visits, and internal meetings.
- Working on all stages of design from SD to CA.

2022 Gensler: Denver, CO

Architectural Design Intern

June 2022 - August 2022

- Developed the complete Revit model showing existing conditions of an adaptive reuse conversion of a building from vacant office space to residential units, and came up with potential apartment layouts.
- Assisted on site visits, measuring and collecting data, verifying on field conditions with those in drawings and modifying them accordingly.
- Developed a physical model (topography, site context and buildings) for a large scale urban, mixed use development project.

2023 Pratt Institute School of Architecture: New York, NY

Architecture Research Assistant

January 2023 - May 2023

- Research and production of drawings and models for exhibits on modular housing for the firm Gans and Co.

2022 NYC Department of Citywide Administrative Services: New York, NY

Space Planning/Management College Aide - Portfolio Planning and Management

February 2022 - May 2022

- Assisted in site surveys of city owned/leased office spaces.
- Modified their plans and managing information from them using AutoCAD and Archibus, based on the site surveys.

2021 JBA Collective: New York, NY

Architectural Design Intern

July 2021 - December 2021

- Produced a set of city drawings of a restaurant for the NYC Department of Buildings.
- Worked on the complete design process of a poolhouse in CT.
- Drafted legalization drawings for a residential building on AutoCAD.
- 3D modeled existing and proposed residential designs.
- Drafted drawings for SD, DD, and CD

2020 IMK Architects: Mumbai, India

Architectural Design Intern

May 2020 - August 2020

- Developed presentation drawings from construction drawings and concept sheets using vectorworks and photoshop.

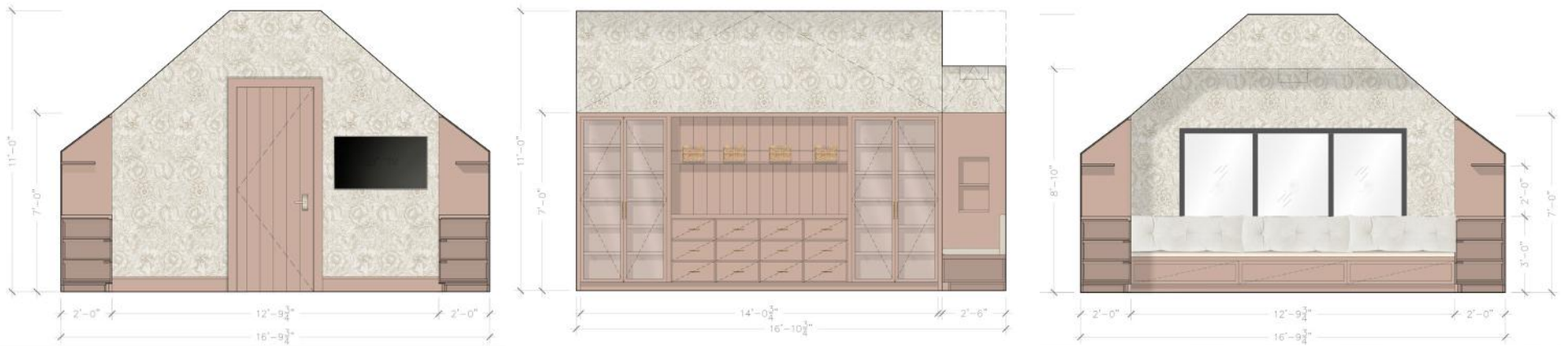


CHANGO

Upstate new york residence: Rendering of kitchen options in 3D on enscape and rendering of final client picked option through rendered elevations on photoshop.

2023-2024

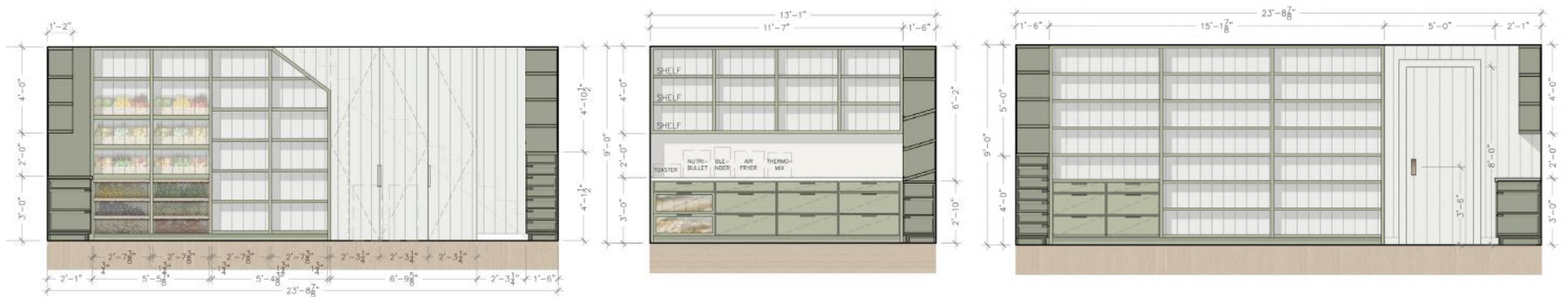
rhea iyer



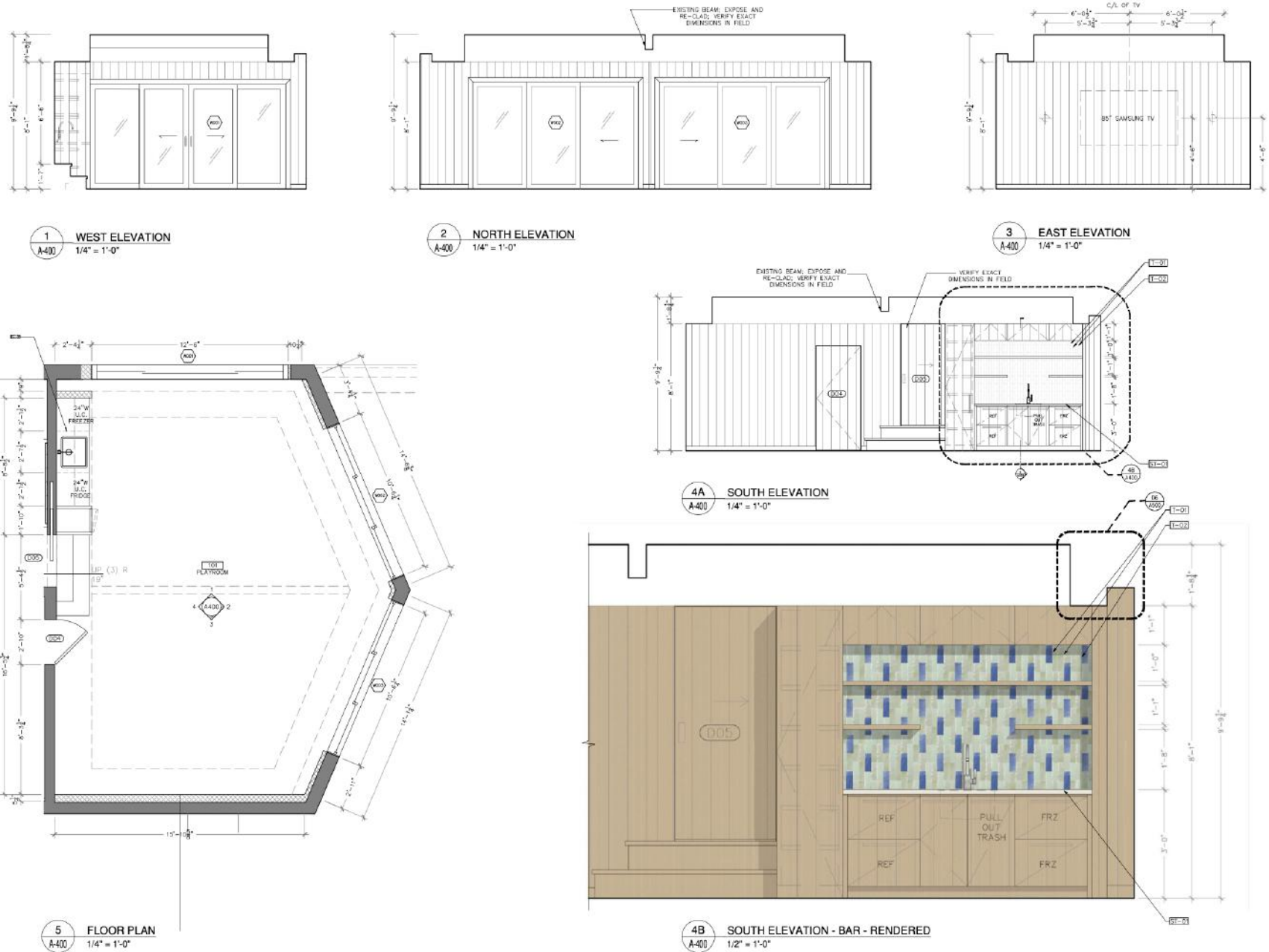
Upstate new york residence: Rendered elevations and studying millwork options.



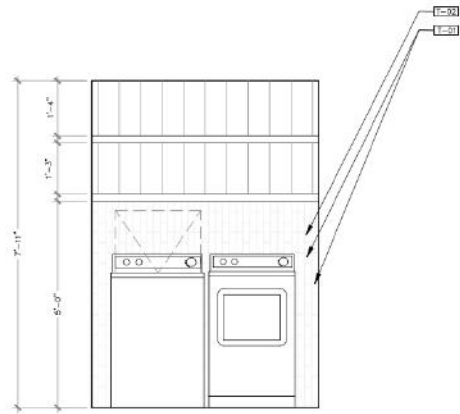
Bridgehampton residence: Rendered elevations of the primary bathroom and sourcing of plumbing fixtures.



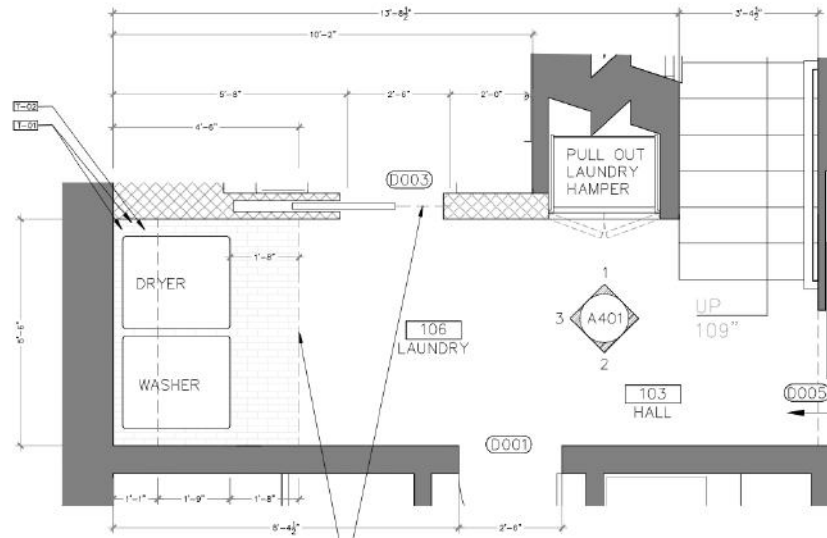
Upstate new york residence: Rendered elevations and studying millwork options.



Yosemite residence: Studying millwork, wall paneling, tile layout options, picking up redlines and rendered elevations.

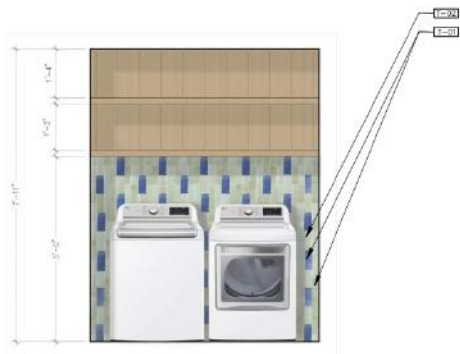


1A SOUTH ELEVATION
A-401 1/2" = 1'-0"

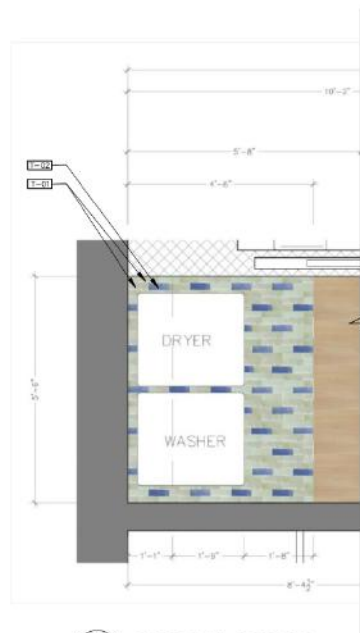


2B FLOOR PLAN
A-401 1/2" = 1'-0"

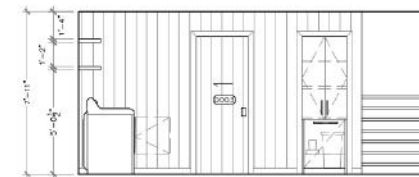
LINE OF FLOOR
TRANSITION. REFER TO
DETAIL X/A-401.



1B SOUTH ELEVATION - RENDERED
A-401 1/2" = 1'-0"



2B FLOOR PLAN - RENDERED
A-401 1/2" = 1'-0"



3 WEST ELEVATION
A-401 1/4" = 1'-0"



4 EAST ELEVATION
A-401 1/4" = 1'-0"

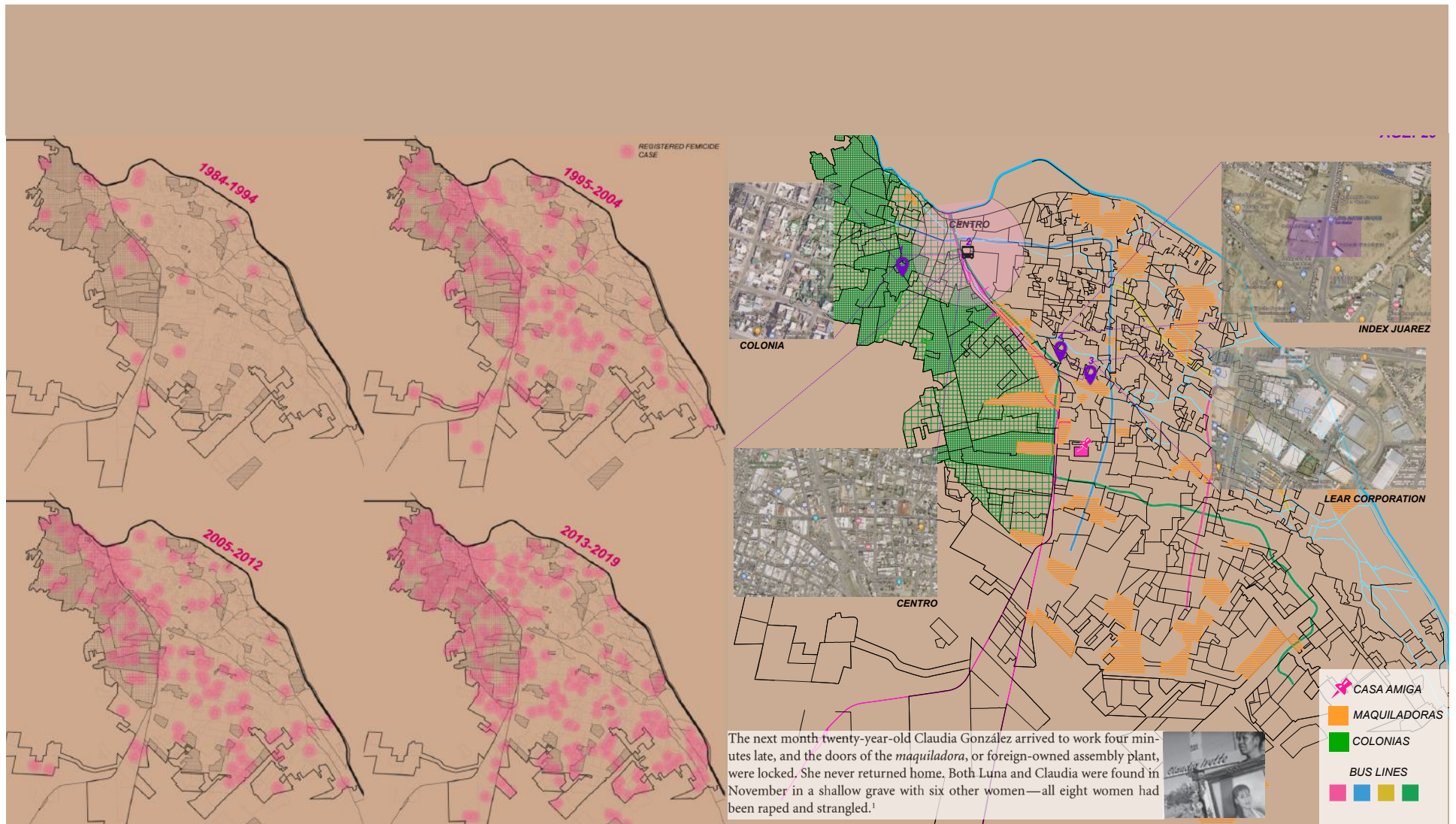
Yosemite residence: studying millwork, wall paneling, tile layout options, picking up redlines and rendered elevations.



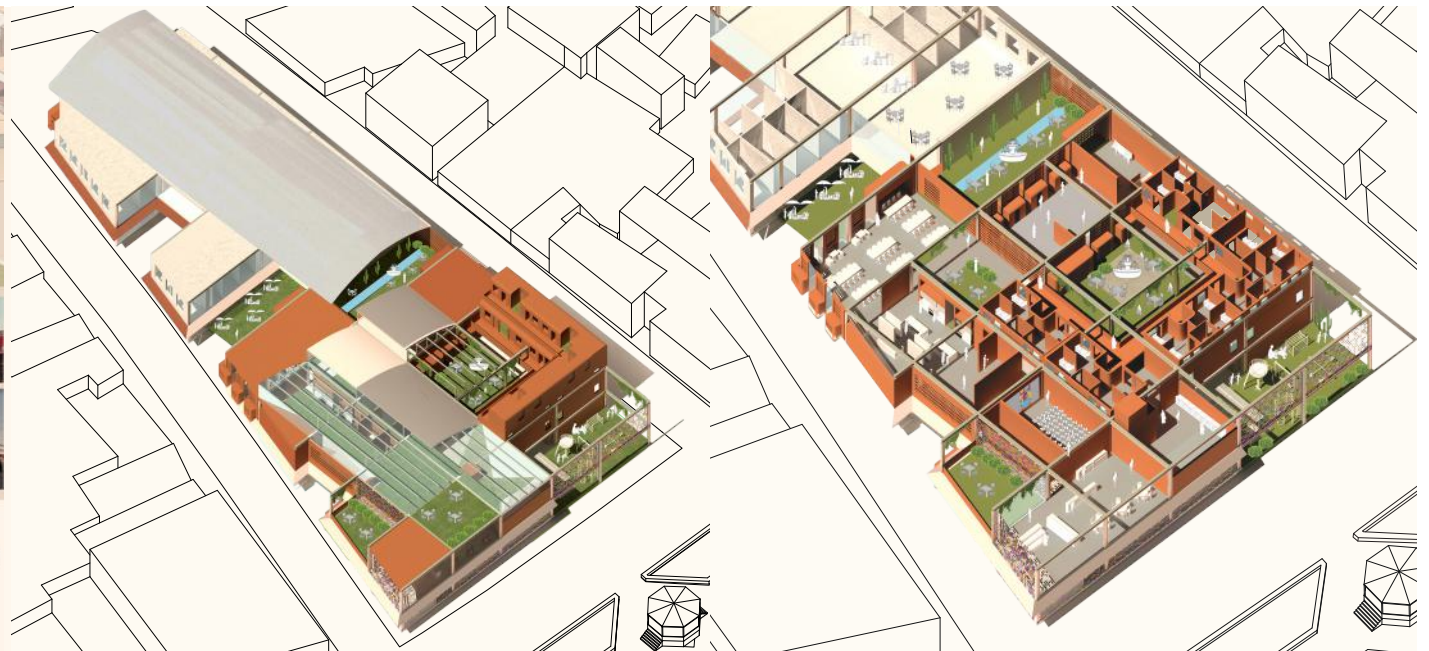
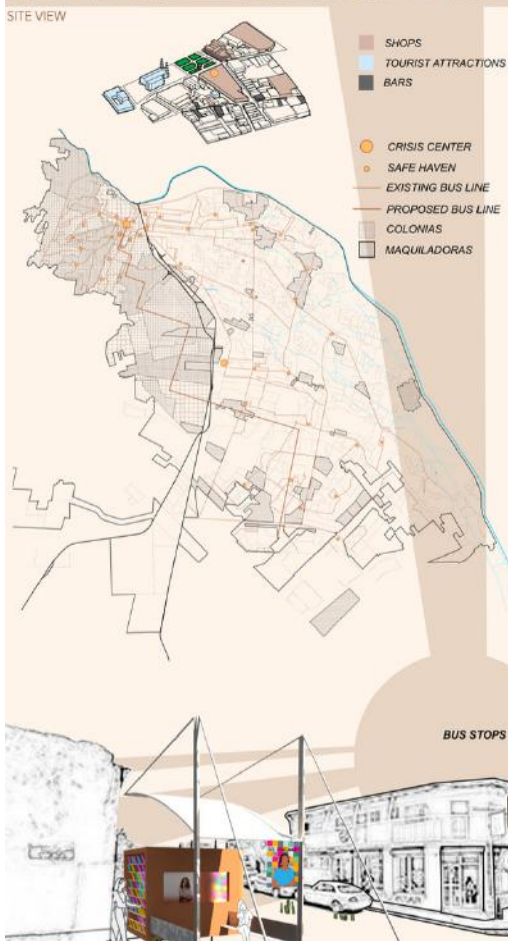
Ciudad Juarez is a Mexican **border city** that is **heavily industrialized** due to cross-border trade between the U.S. and Mexico. The factories here are called **maquiladoras** and they favor female workers over men for their intensive labor. The **globalization** of the area combined with the **machismo culture** has created a **dangerous** environment for the maquiladora **women**. They are sexually assaulted, kidnapped and murdered typically in the **downtown area** during their **commute** to work. The existing cultural structure and government institutions are not protecting their wellbeing. A potential way to address the issue could be through a **crisis center for women** in the downtown area, along with expansions into the **bus transportation infrastructure**, thereby creating a system of **centralized and distributed safe havens**. This project was done in **teams of two** with Defne Celtikci.

ARCH 501
NIÑA DE MAQUILADORA:
EXPLOITATION OF THE FEMININE

fall 2022 - spring 2023



Mapping femicide cases in Ciudad Juárez shows that **femicide only increased over time in the city**, and the cases were clearly **concentrated in the downtown area** of Ciudad Juárez. The info-graphic on the right illustrates the story of Claudia Ivette Gonzalez, a 20 year old maquiladora employee, who was killed on her way to work. Ciudad Juárez is a **divided city** - a majority of maquiladoras, where people work, are on the east, and colonias, impoverished neighborhoods where people live, are on the west. The **downtown area is a connection between the east and west sides**. It is a location where workers may be found waiting to change buses, or where women are kidnapped, and their bodies found later discarded in secluded areas. **Women are heavily exploited inside the maquiladora as well**. While we cannot completely resolve these vast issues, our scope can be defined in the creation of our own separate safe havens to help women affected by these issues. Recognizing the correlation of all these issues, our proposal is a **centralized crisis center for women** and a **network of distributed safe havens adding onto the bus transportation infrastructure** in the city.



Aerial View: Insertions and removals of the proposed crisis center in the existing marketplace - Mercado Reforma



- shoppers
- women + community
- residents

CIRCULATION BY USER



first floor



second floor

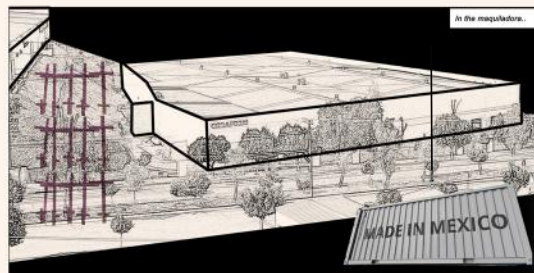
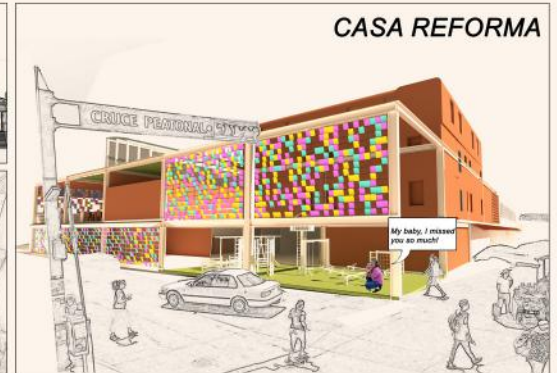
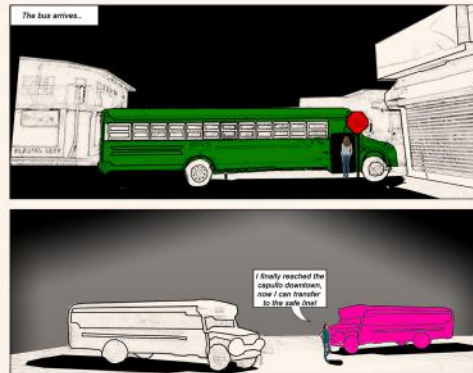


third floor

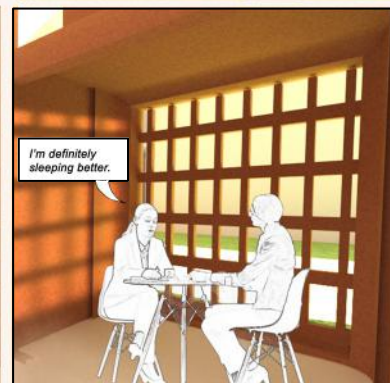
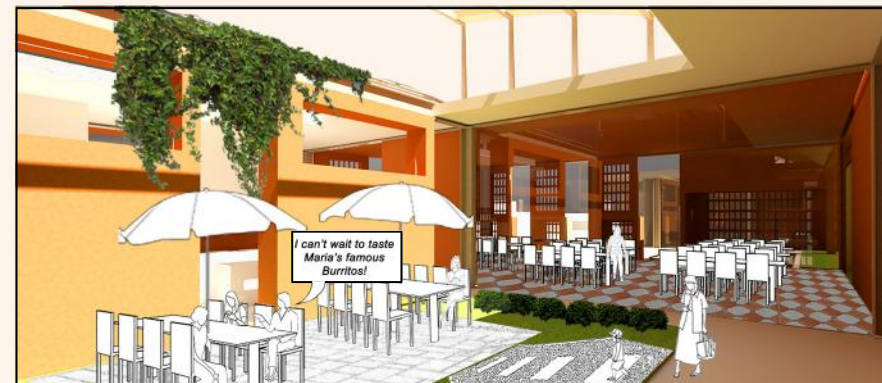
Circulation maps showing how public shoppers, women of the crisis center and residents of the crisis center can use the space.



Section showing the residences, courtyard, kitchen on the second floor, and emergency pods on the first floor extending out onto the street for greater visibility by women walking.



Graphics showing how the lives of women in maquiladoras and in Ciudad Juarez will be improved with the new crisis center in Mercado Reforma.





ARCH 301: MULTIGENERATIONAL HOUSING FOR FOOD LOVERS

Fall 2020

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This project is **multigenerational housing** and **co-living** for **food lovers** who are **families and empty nesters** in the neighborhood of **Gowanus, Brooklyn**. Beginning from the **smallest scale of the unit** (family or empty nester), importance is given to the **kitchen as the most social space** being the entrance to each unit. the idea continues to the next scale of sharing at the **mini cluster** (**family+empty nester or empty nester+empty nester**) with **shared kitchens and living**, and further at the next larger scale of sharing at the cluster (**two mini clusters combined**) with a **larger shared kitchen and living** between two mini clusters. This scale of sharing acts as the common space for the entire building. The focal point of sharing occurs at the double height **market place**, where the public may begin to interact with the private. This project was done in **teams of two** with Vickly Luo.



An empty nester unit: concepts of stepping to indicate a higher level of privacy and importance to the kitchenette as the social space being at the entrance to the unit



A family unit: same concepts of stepping to indicate a higher level of privacy and importance on the kitchenette as the social space being at the entrance to the unit



A mini cluster: empty nester - empty nester unit with a shared kitchen, living/eating area, bathroom, and exterior balcony space.



A mini cluster: empty nester - family unit with a shared kitchen, living/eating area, bathroom, and exterior balcony space





Level 4 cluster plan

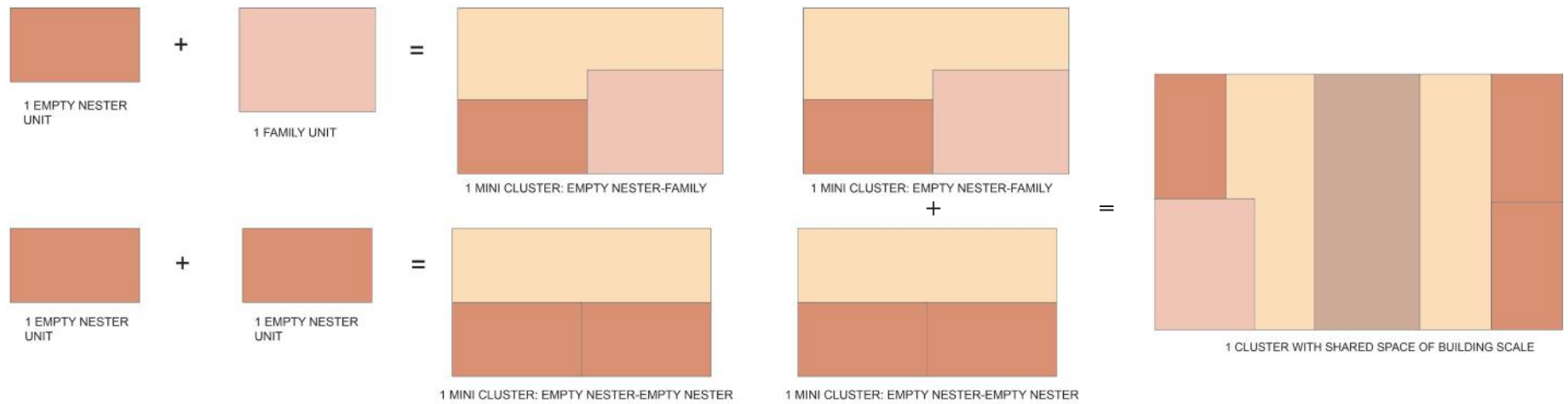


Level 1 cluster plan

Floor plans of the cluster of the building showing two mini clusters with shared space at the scale of the entire building in between them

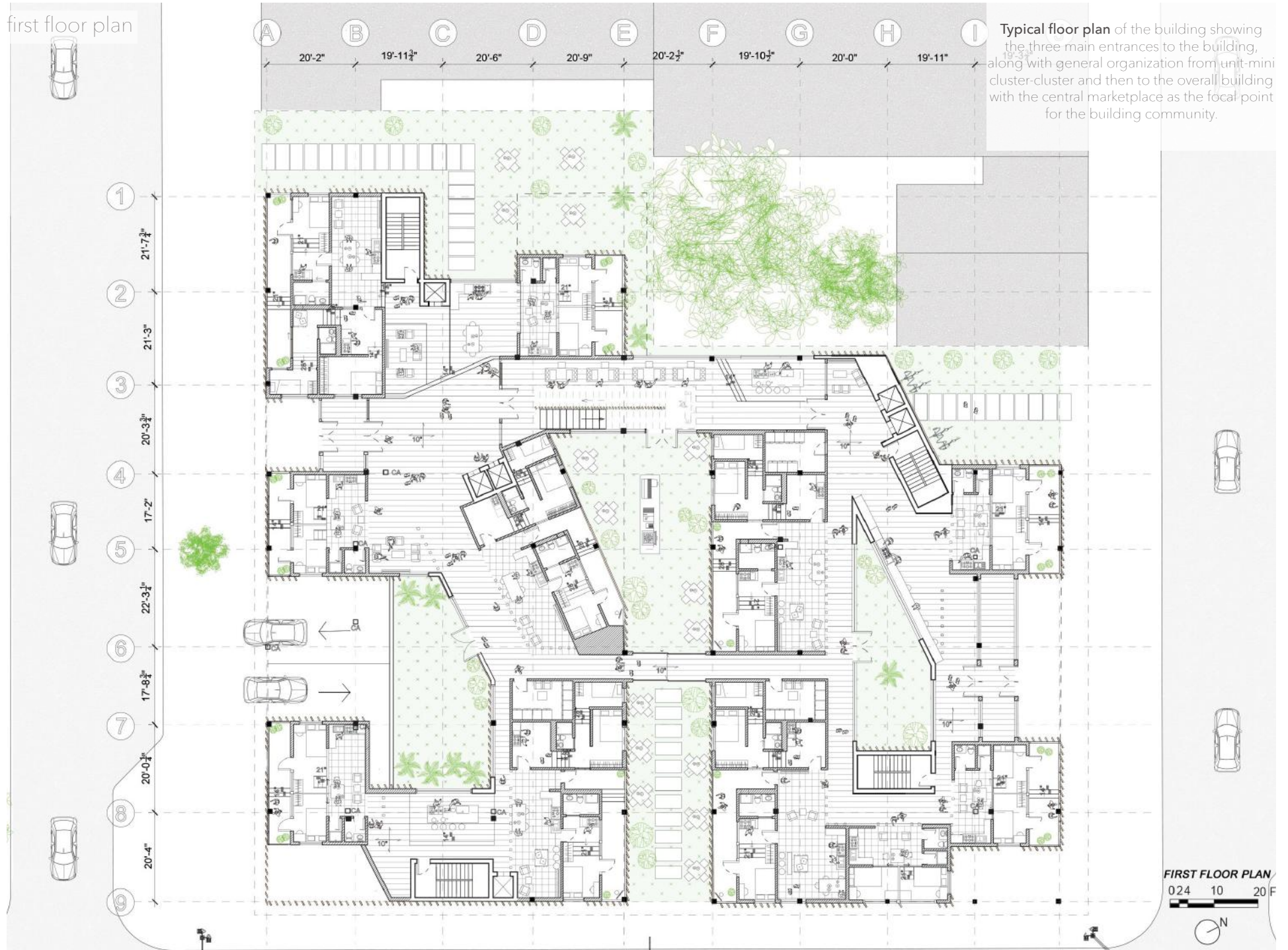


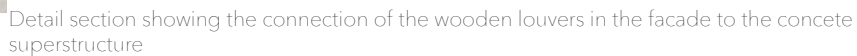
Section of the cluster - shared space in between the two mini clusters and units and semi public shared space for each mini cluster to the sides



Diagrams to explain the scales of sharing: unit-mini cluster-cluster-building

first floor plan



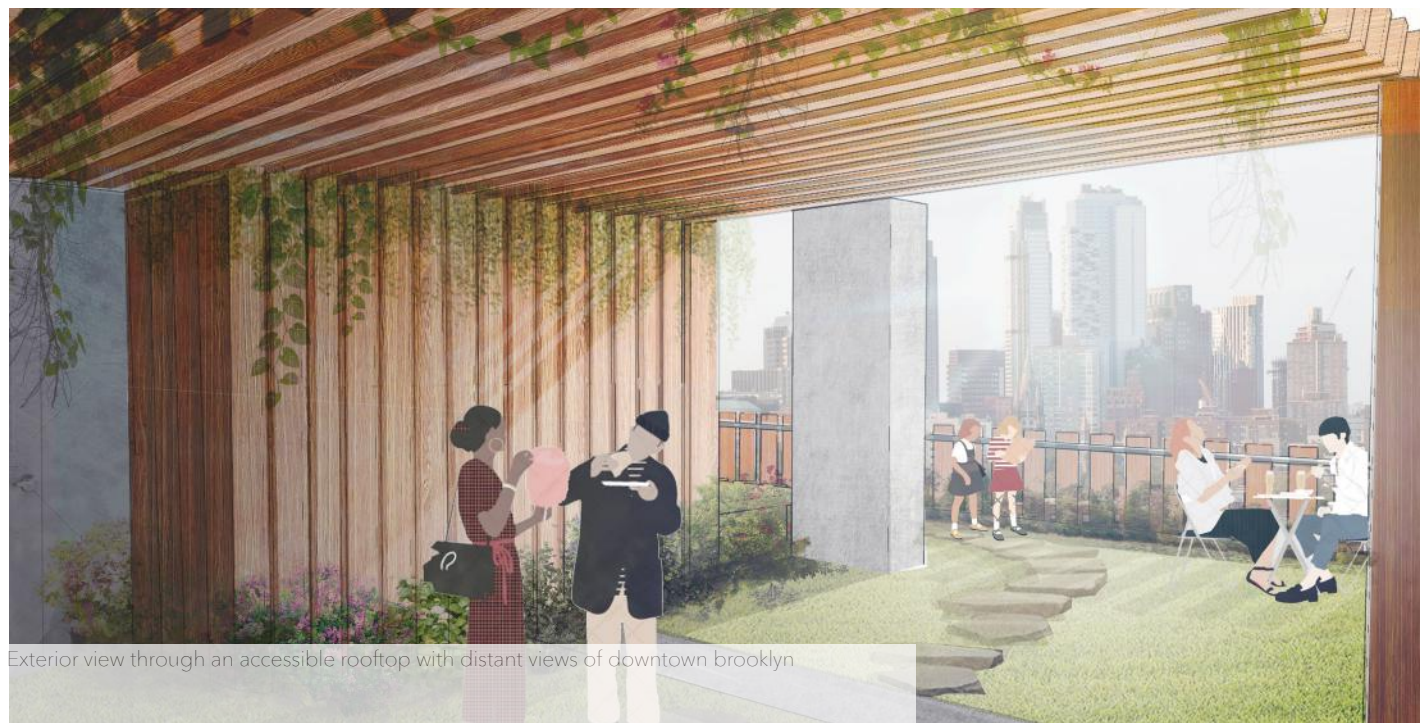




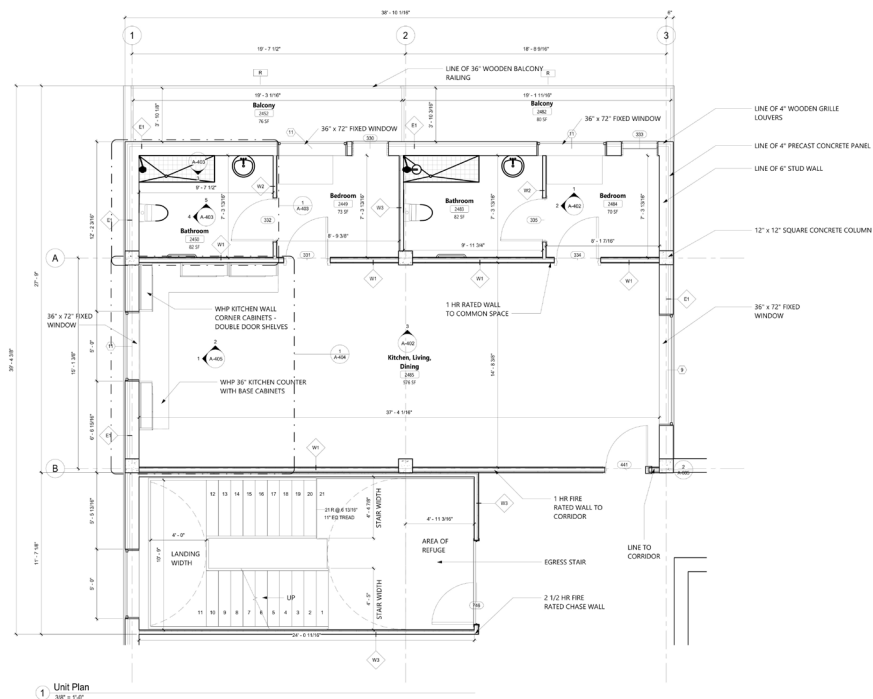
Sections through the building.



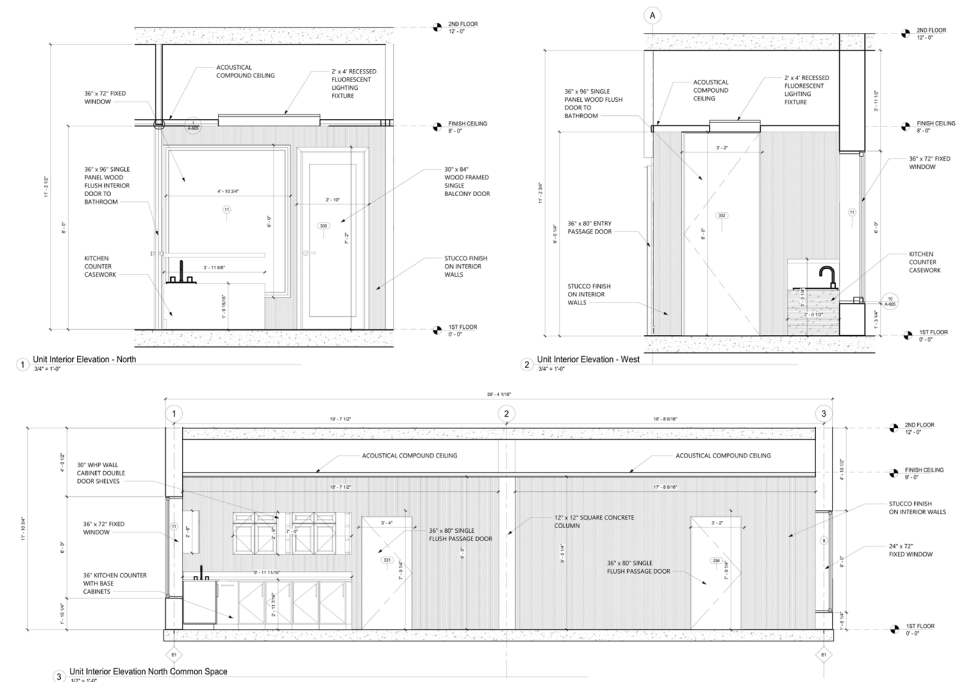
Interior view of the double height market place on the first and second floor



Exterior view through an accessible rooftop with distant views of downtown brooklyn



Empty nester cluster plan



Empty nester unit interior elevations



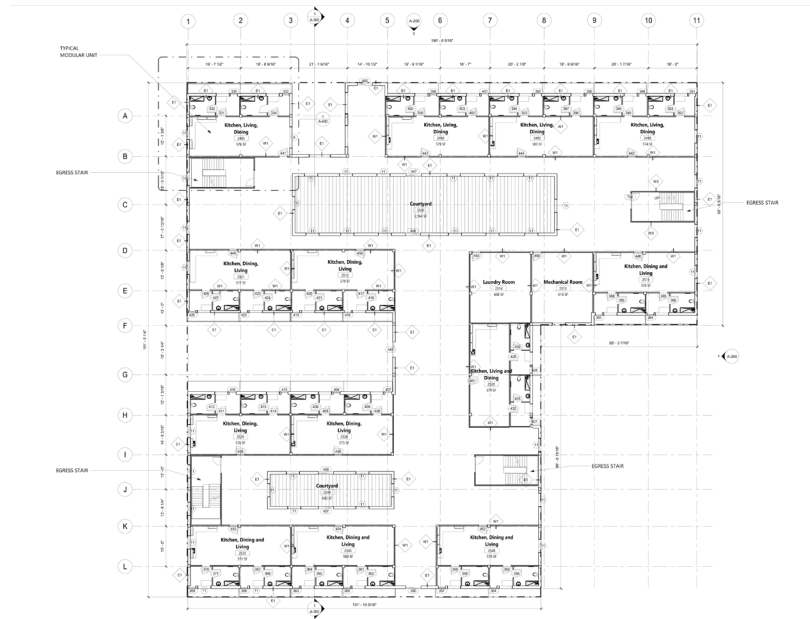
Full building section

CONSTRUCTION DOCUMENTS

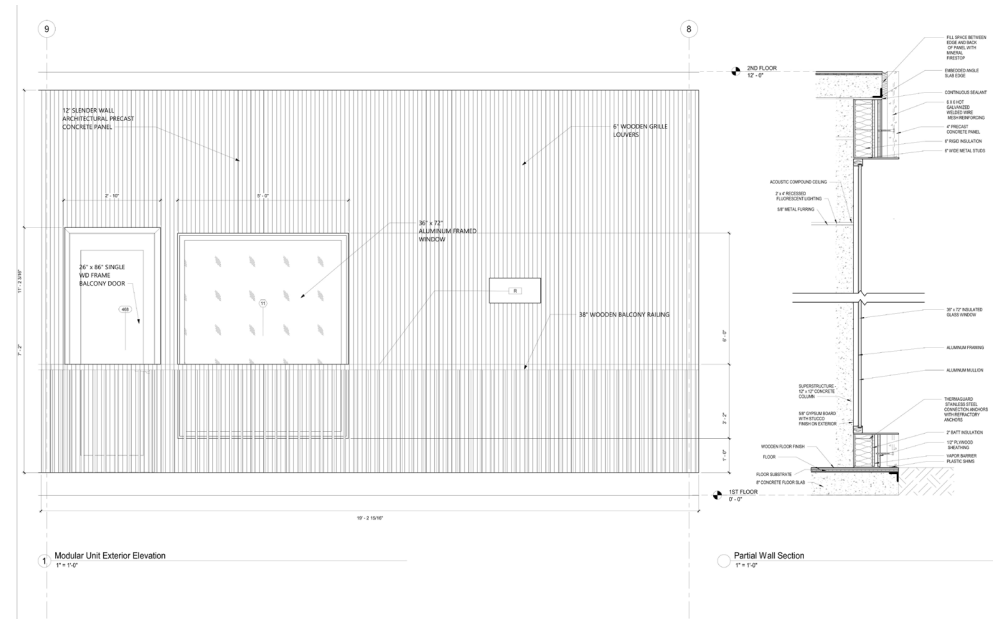
Spring 2021

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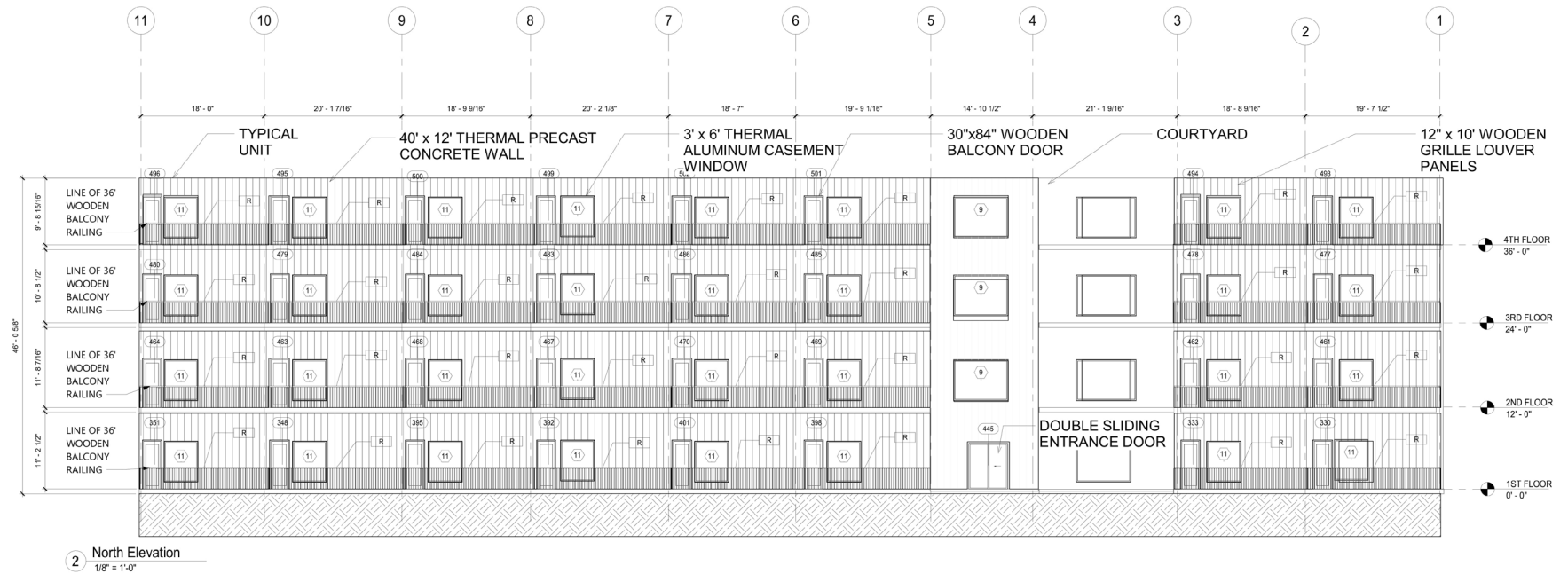
Production of construction documents set for a simplification of the ARCH 301 project using Revit.



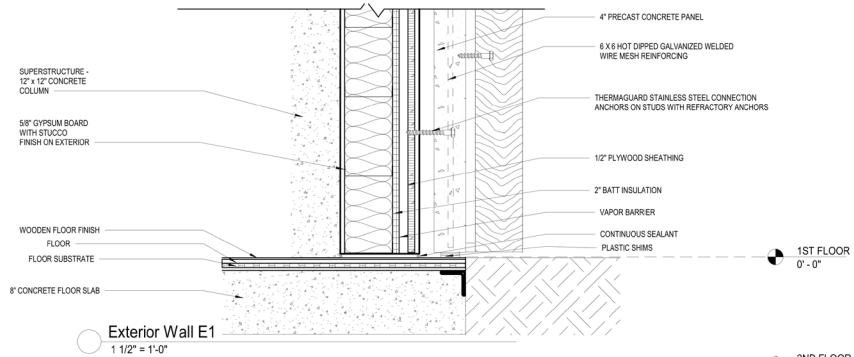
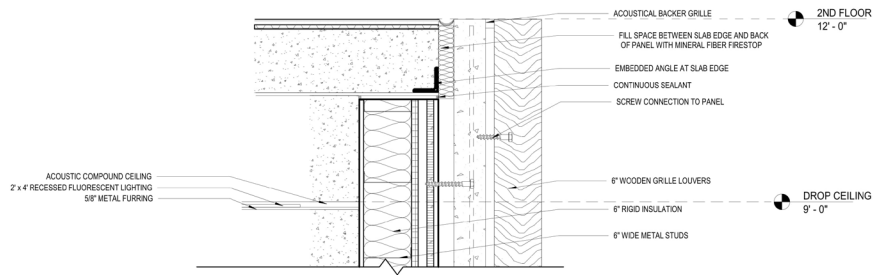
First floor plan



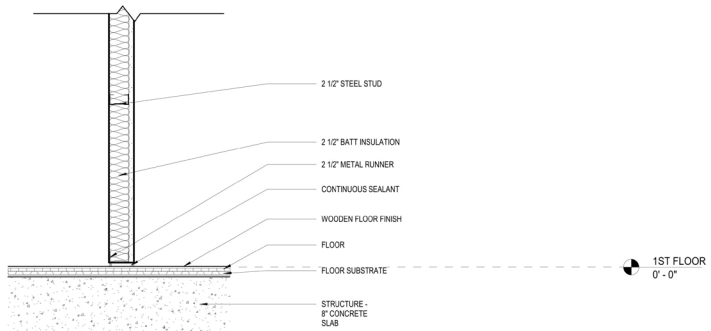
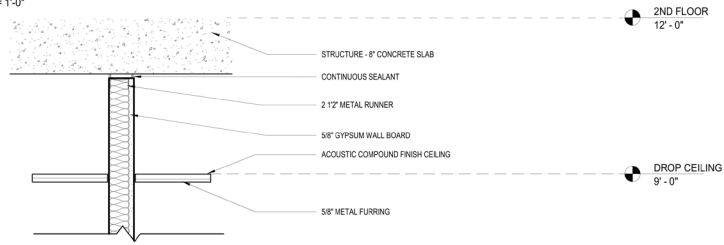
Unit exterior elevation with wall section



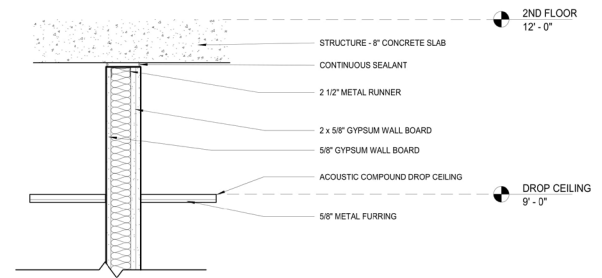
Building elevation



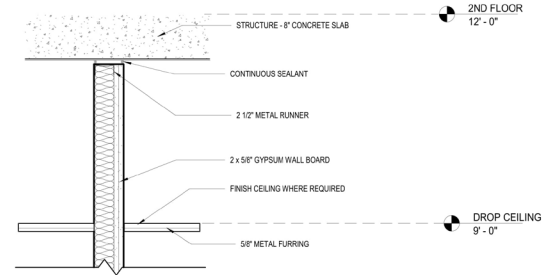
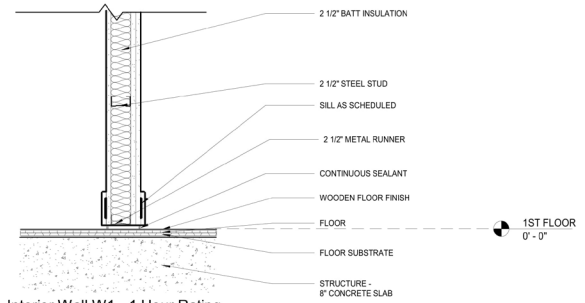
Exterior Wall E1
1 1/2" = 1'-0"



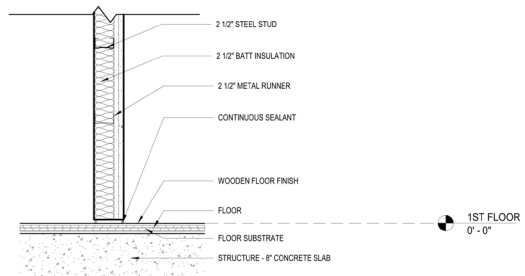
Interior Wall W2 - No Rating
1 1/2" = 1'-0"



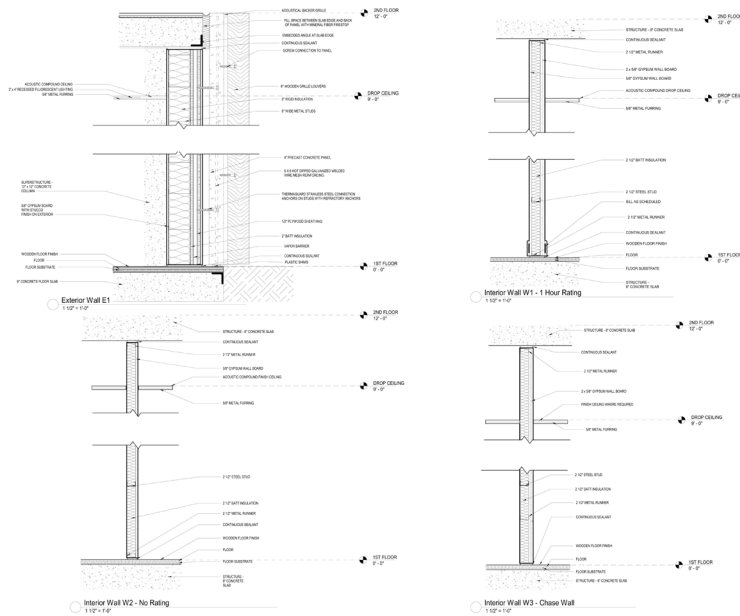
Interior Wall W1 - 1 Hour Rating
1 1/2" = 1'-0"



Interior Wall W3 - Chase Wall
1 1/2" = 1'-0"

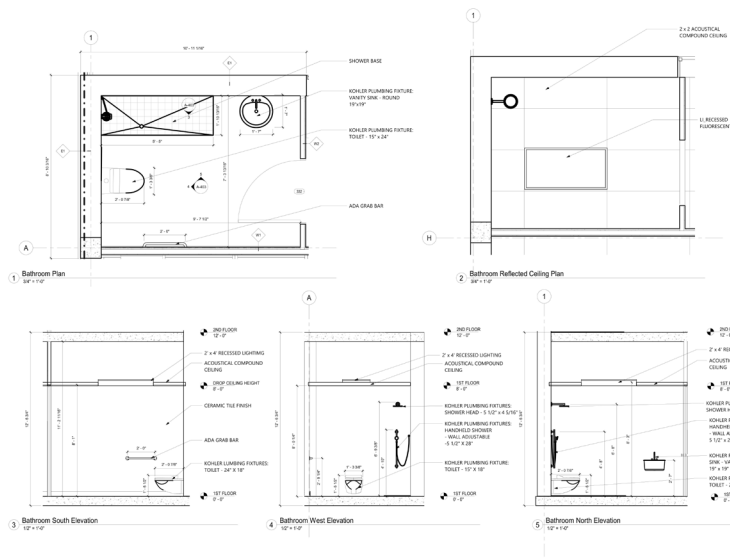


Exterior wall details

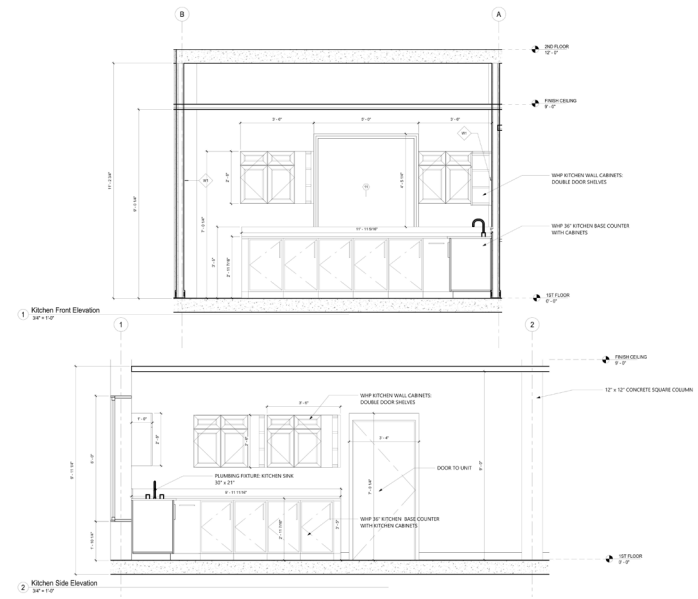


Typical wall details

Egress stair drawings



Bathroom drawings



Kitchen elevations



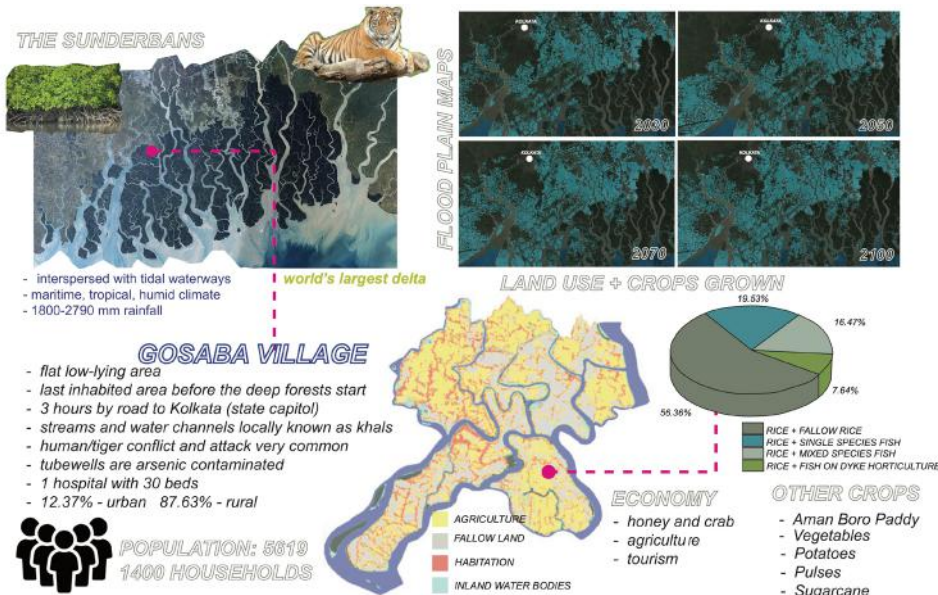
The project investigates the **resettlement of the people in Gosaba village** of the Sundarban forest in northeast India. As a village, they value **agriculture and water**, seen from images and their ways of living. As a result of the **sunderbans projected to being underwater by 2070**, they will be **relocating to Domjur**, an **urban agglomeration** of Kolkata, a major city in India, which also happens to be in the same state as the Sundarban forest, but **safe from rising sea levels**.

The **agricultural urbanism** of the new settlement takes into consideration both, Gosaba as a heavily **agricultural based village** and Domjur, as a **growing industrial, residential, and commercial town**, especially famous for its gold jewelers. The **new marketplace** on the settlement will **connect the old and new together** through allowing not only products produced in the new urban farms, but also those made in the existing commercial district of Domjur, to be exchanged and sold. It will also **connect the two parts of the new settlement**: the residential and commercial districts together by being sited in the center of the settlement.

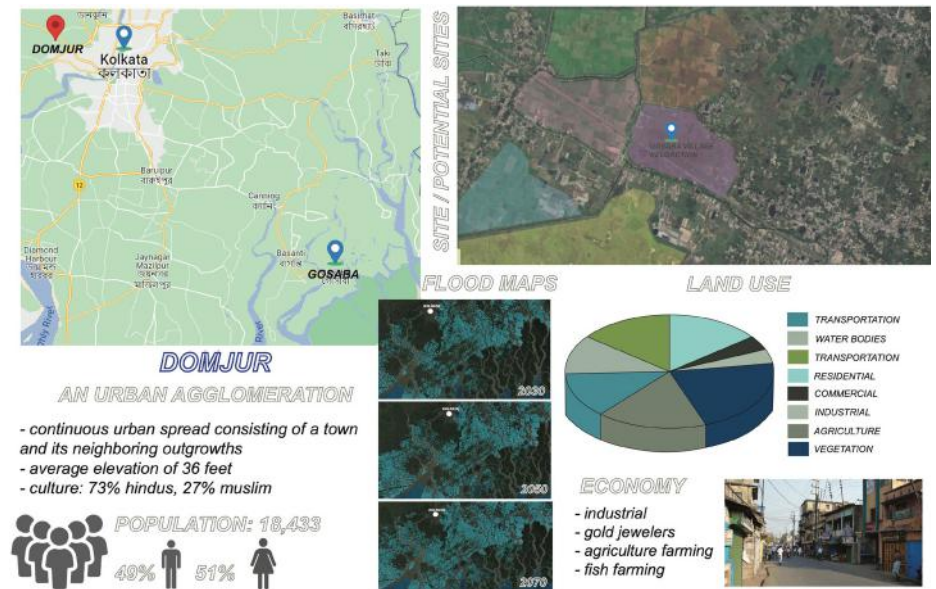
ARCH 403: CLIMIGRATION

Fall 2022

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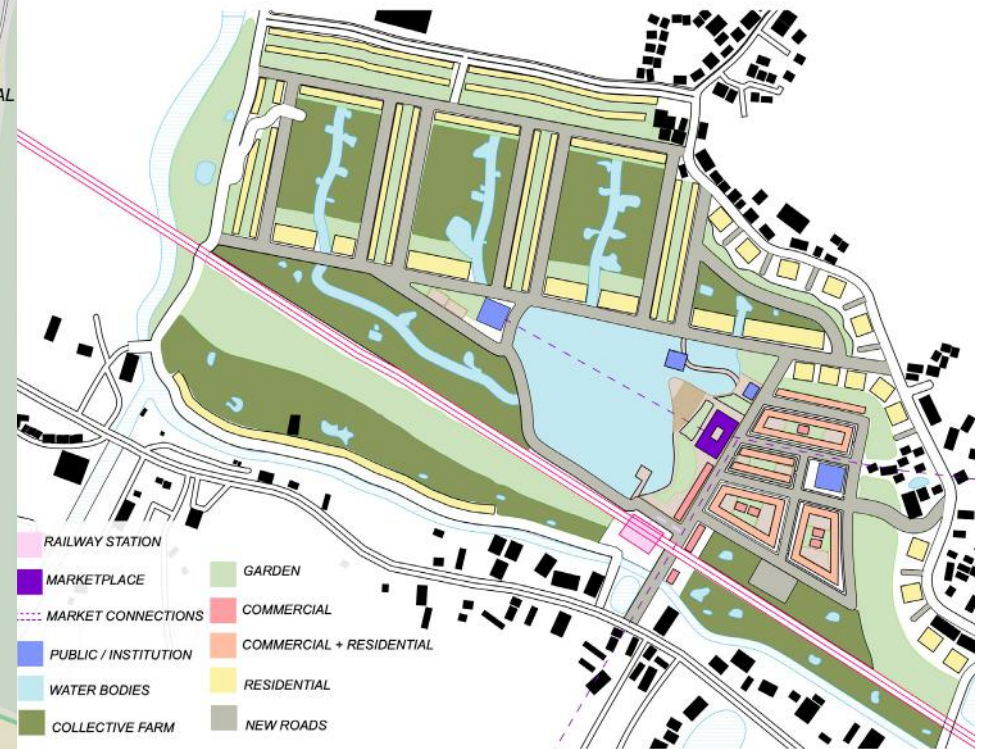
Infographic for Gosaba village, the existing village that will be under sea level in the future.



Infographic for Domjur, the urban agglomeration where Gosaba residents will move to.



Existing zoning diagram around the proposed site of the new settlement in Domjur.

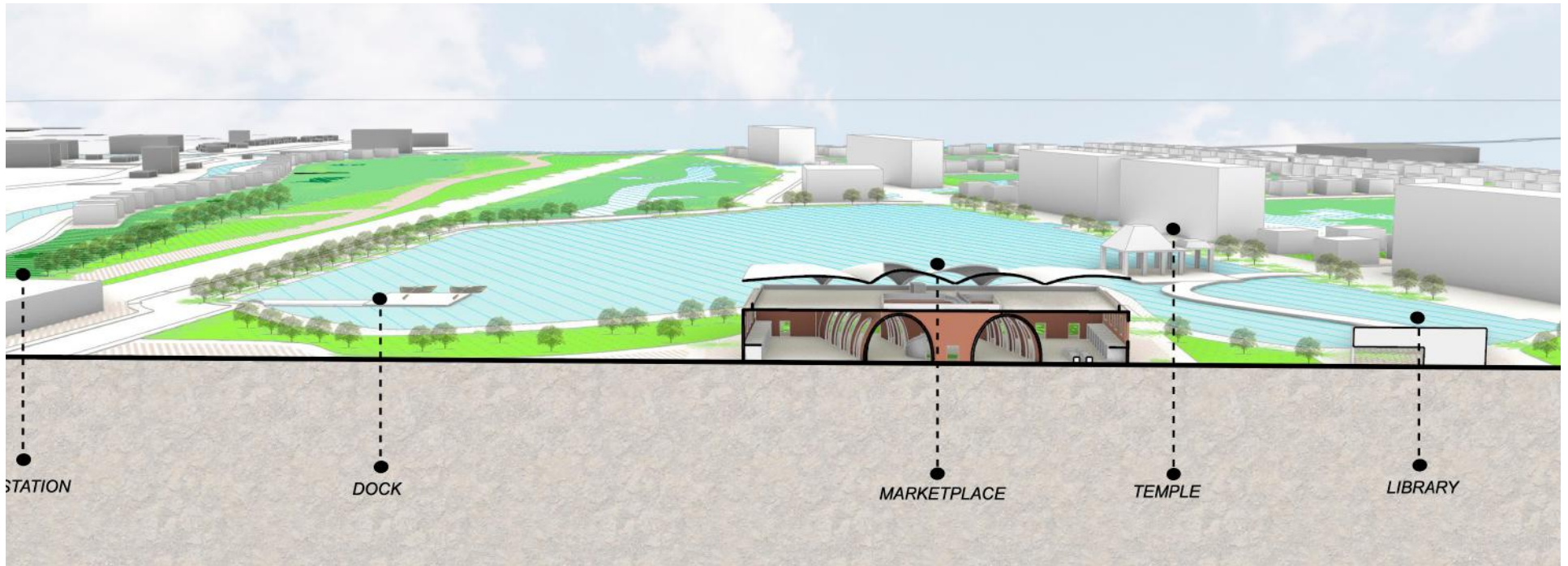


Zoom in view of the settlement - proposed zoning on the vacant agricultural land site in Domjur.

SETTLEMENT PLAN
1/128" : 1'



Plan view of the new proposed settlement: agricultural urbanism characterizes the settlement.



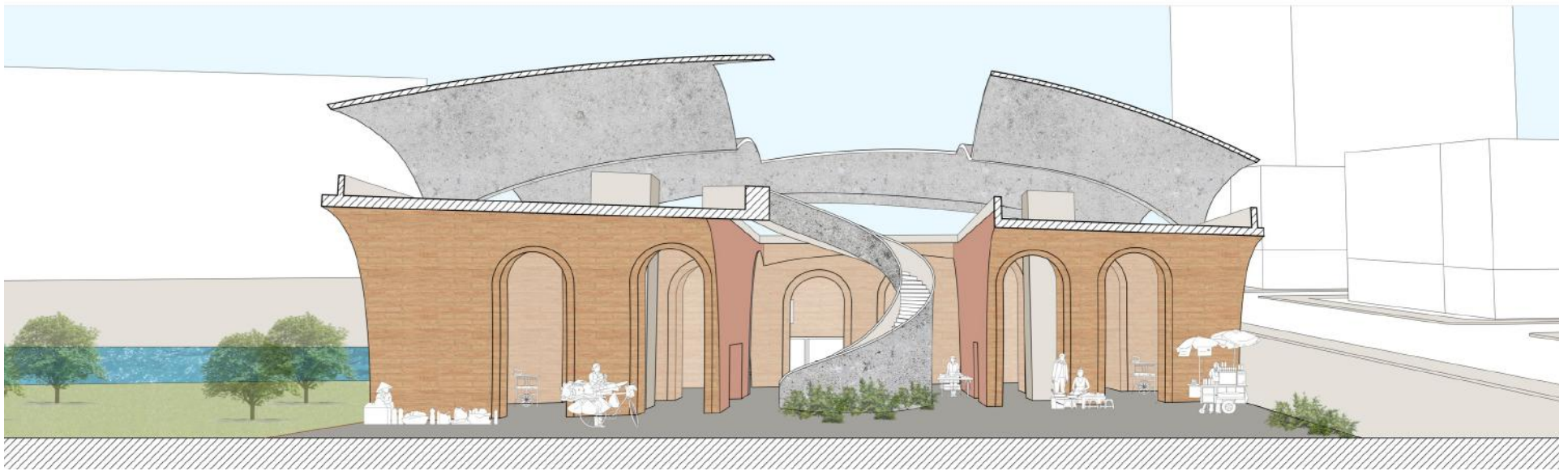
Site section showing the marketplace in relation to other proposed public buildings and the existing railway station



Floor plan of the marketplace.



Perspective view of the marketplace.



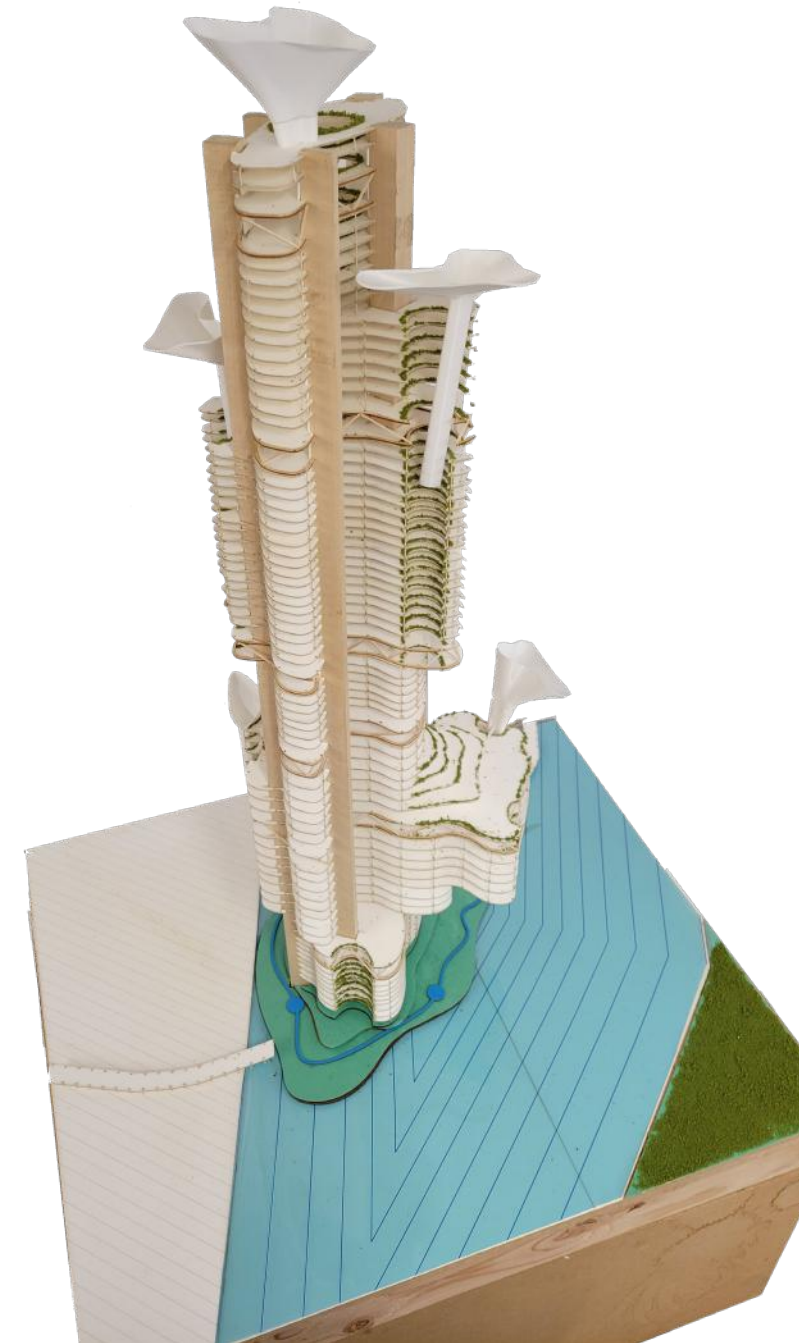
Sections of the marketplace.

This project is a **100 floor mixed use high rise tower** in **Mumbai, India**. It is sited on waters of the Mithi river, which runs in the middle of Bandra Kurla Complex, one of Asia's richest business districts, and Dharavi, one of the world's largest slums. The **inequality and polarity** in the area is what the project aims to bridge, both literally and symbolically.

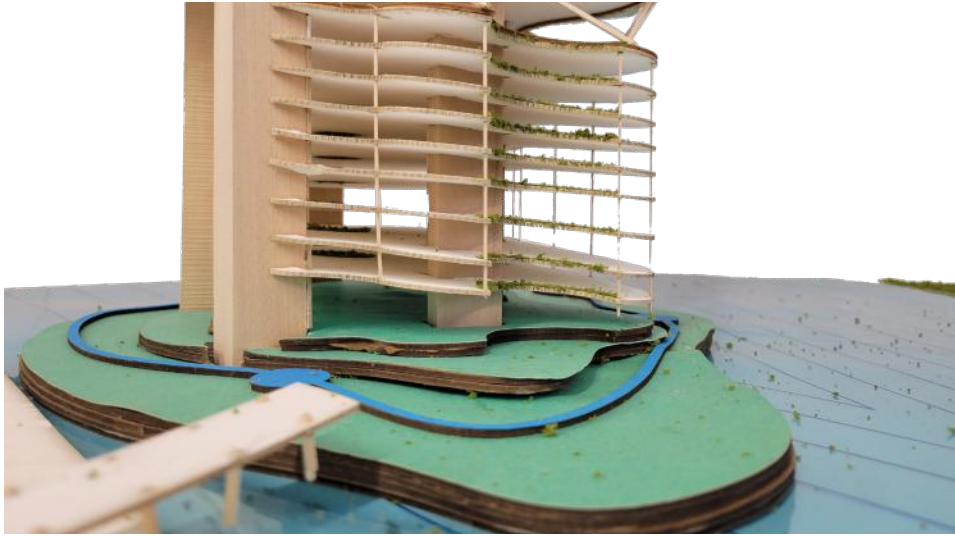
The distinctive feature of the building is the **rainwater harvesting and management system** that runs throughout the building, operating in full swing during the Indian monsoons from June to September, and also during other parts of the year, using the ambient heat, and **providing water for the building**.

ARCH 402: **मरम्मत** /marammat/
translation: restoration

Spring 2022



Physical model: 1/16": 1'-0"

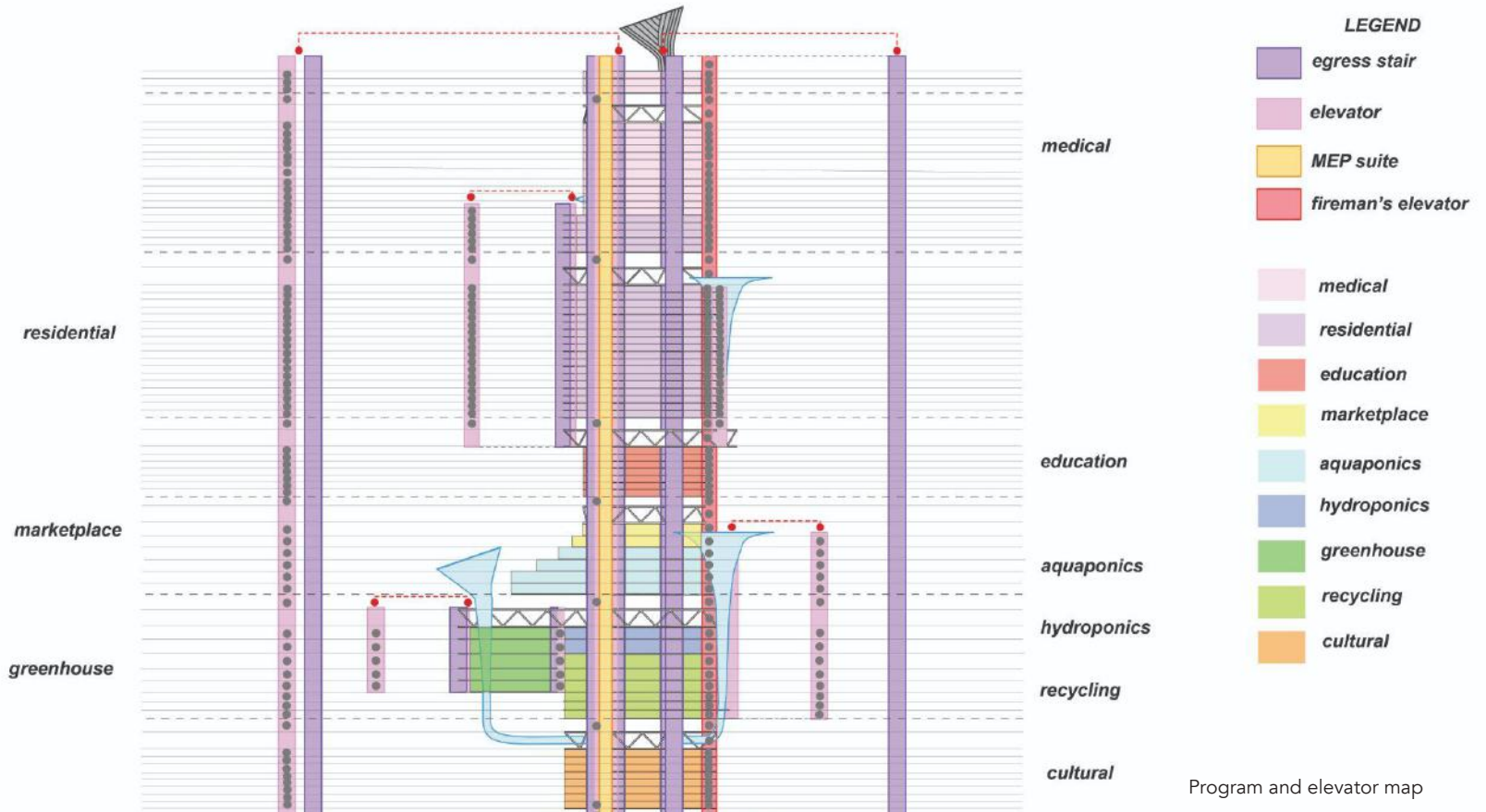


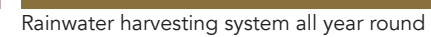
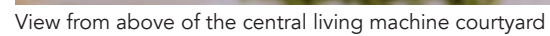
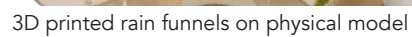
Physical model: Exterior view

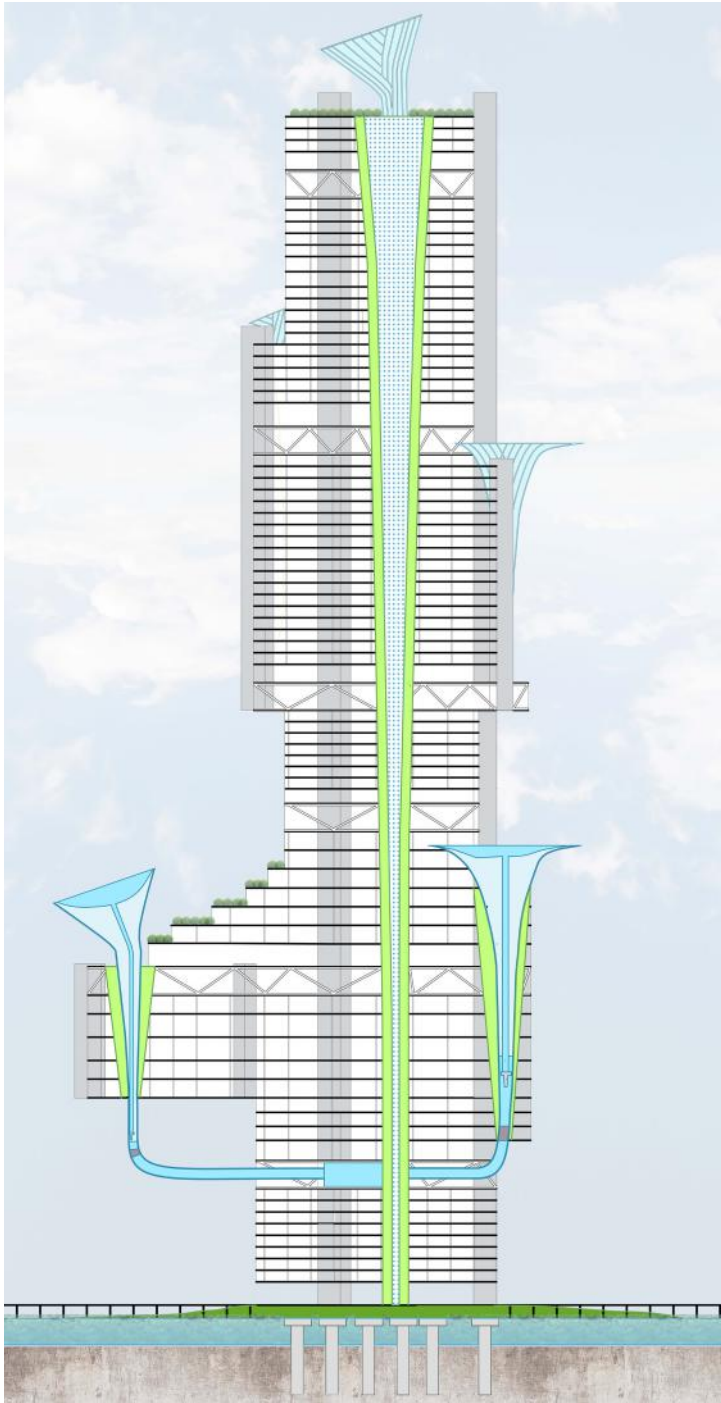


Physical model: View of floor slabs and courtyard

The site has been through a lot over the years, suffering drastically from **flooding, epidemic, pollution and poor waste management**, and simply a lack of essential urban features like **drainage, sanitation, drinking water**, and even roads, resulting in haphazard growth.



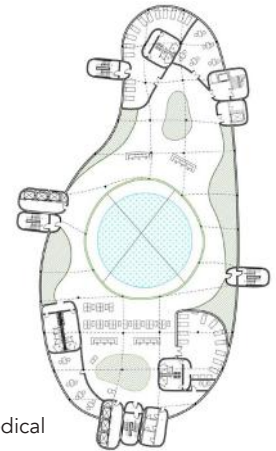




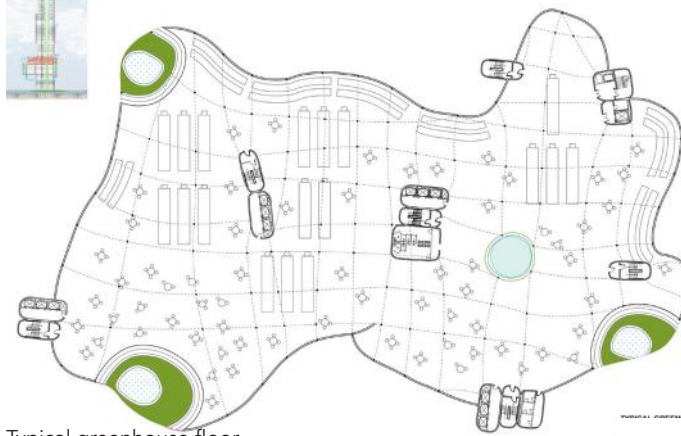
Building section



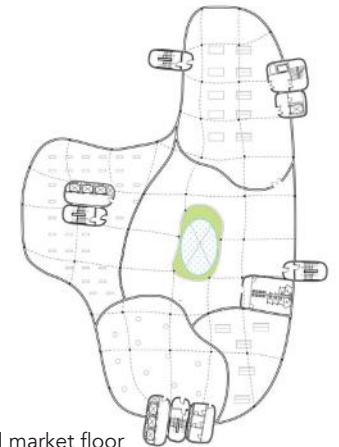
Typical residential floor



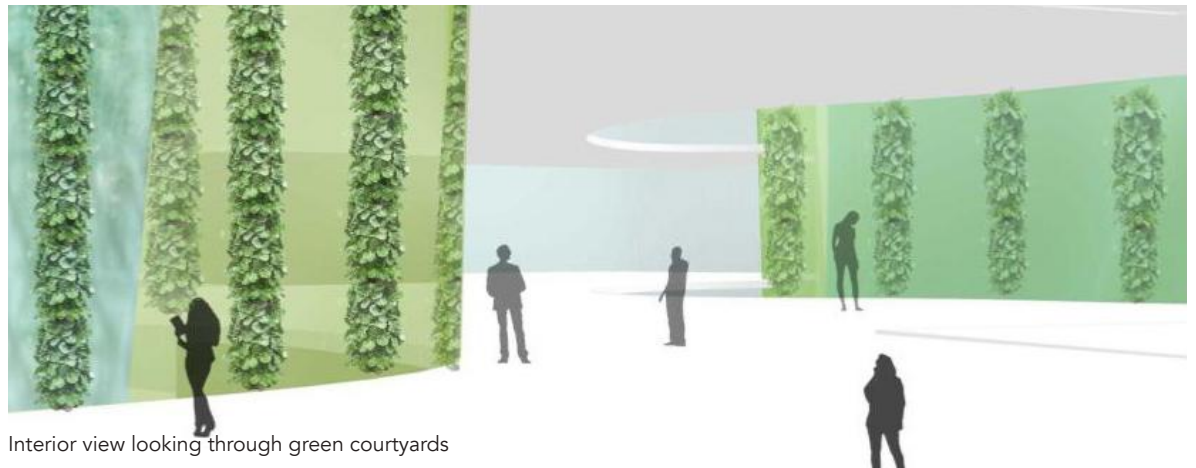
Typical medical floor



Typical greenhouse floor



Typical market floor



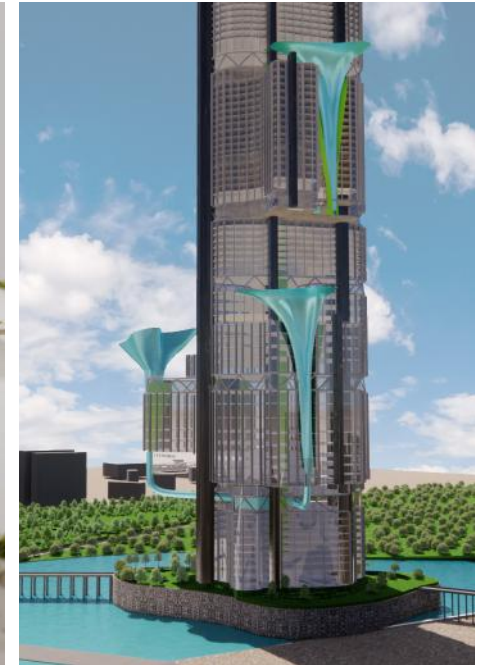
Interior view looking through green courtyards



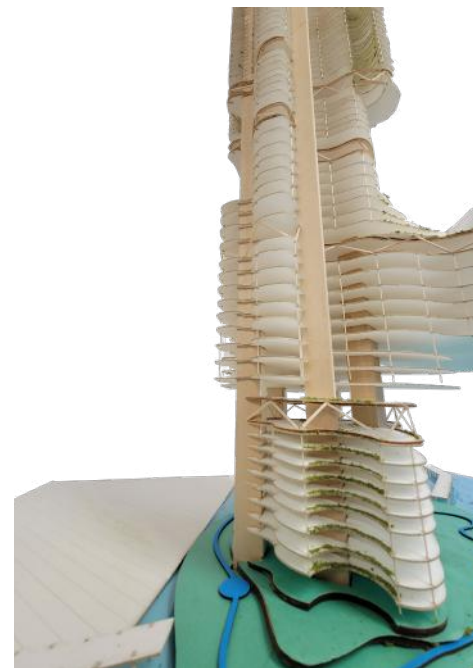
1/16":1'0" scale physical model: wood, museum board



Physical model: stepping on greenhouse floors



Exterior render



Physical model view and scale reference



fin.