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Education

Completed May 2021 Syracuse University | School of Architecture | Syracuse, NY
Bachelor of Architecture Degree with Honors, Magna Cum Laude

Experience

Summer 2017 AIAS Imagine: Top 60-at-60 | Orlando, FL
Winner (10 winners from each year and graduate programs)
Participated in Walt Disney Imagineers program

Summer 2018 Workspace Architecture Studio | Bangkok, Thailand
Architecture Intern

Summer 2019 Palmer & Turner (Thailand) Ltd. | Bangkok, Thailand
Architecture Intern

Fall 2019 Atema Architecture | New York, NY
Architecture Intern

Leadership

Spring 2018 American Institute of Architecture Students (AIAS) | Syracuse University
Graphic Design Team Captain

Honors

Fall 2016 Distinguish Architecture Portfolio Award

Spring 2017 - Spring 2021 Dean's List for high academic achievement at Syracuse University School of Architecture

May 2021 Bachelor of Architecture Degree with Honors, Magna Cum Laude

Skills

Digital Revit, AutoCAD, SketchUp, Rhinoceros 3D, V-Ray for Rhino, Grasshopper for Rhino,
ArcGIS, Autodesk Maya, Photoshop, Illustrator, InDesign, After Effects, Blender

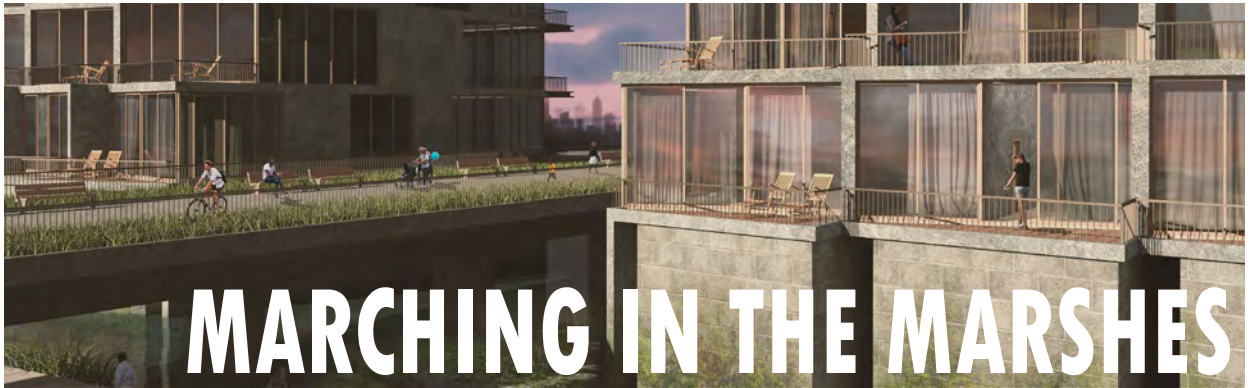
Manual Drafting, Sketching, Model Making, 3D Printing (FDM), Laser Cutting

Languages

Proficient Thai, English
Beginner Japanese

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MARCHING IN THE MARSHES

Canarsie, Brooklyn, NY

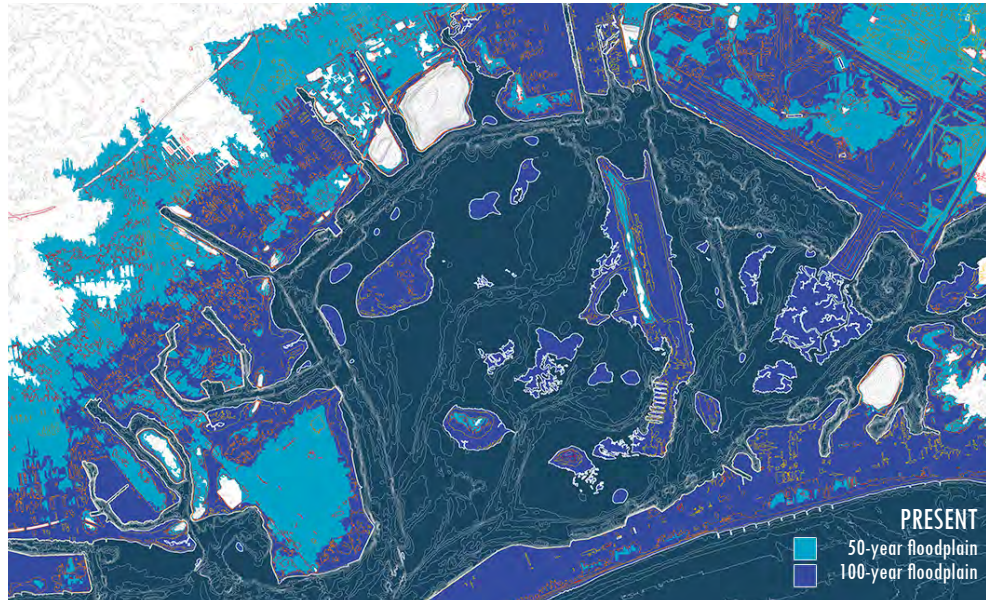
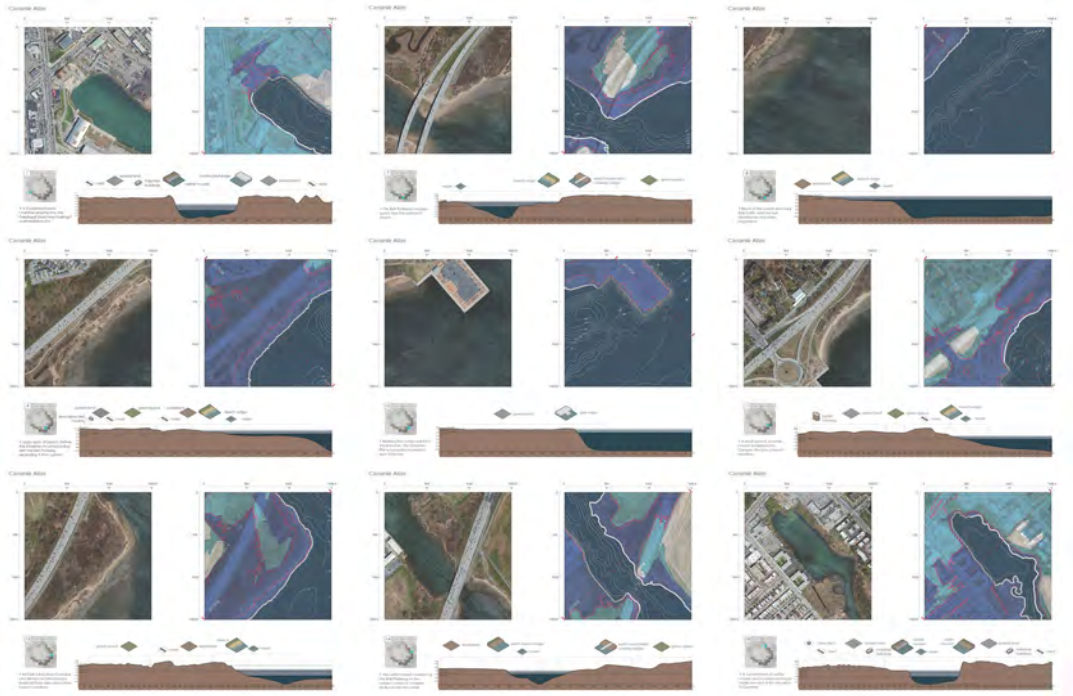
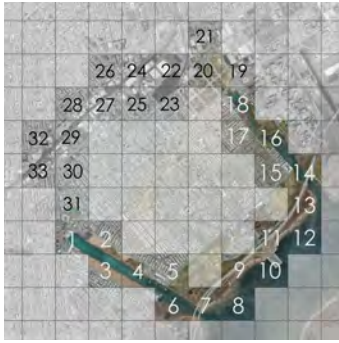
Canarsie, Brooklyn is a neighborhood at the north western edge of Jamaica Bay. It consists mostly of working- and middle-class black population after many waves of white flight since late 2000s. Canarsie's connection to Jamaica Bay has been cut off by the construction of Belt Parkway in 1940, limiting the community's access to the bay to a single passage underneath the limited-access highway. The NYC Subway's L Train terminates at Canarsie-Rockaway Parkway station at the northern end of the neighborhood, limiting public transit to only buses. The neighborhood has many occurrences of street flooding during heavy rains due to its combined sewer system which collects rainwater runoff, domestic sewage, and industrial wastewater into one pipe. In 2012, Canarsie suffered greatly from Hurricane Sandy. The damages from the storm continue to today, as many households have yet to be compensated nor rebuilt, while flood insurance has become unaffordable to many households after their lots were rezoned into a new FEMA 50-year and 100-year flood zone. The area is also becoming more susceptible to high tides due to a constant sea level rise.

Jamaica Bay is large urban oasis nested within the boroughs of Brooklyn and Queens of New York City. While a habitat for many local floras and faunas, it also serves as a crucial nesting and breeding area for migratory species in warmer seasons. As large influxes of European started settling down around the bay's vicinity, the marshlands underwent a huge decline in area due to landfills and pollution from the city. With the construction of John F. Kennedy International Airport (opened 1948), Jamaica Bay suffered a major loss of marshlands and natural shorelines. Meanwhile, the airport continues to threaten they bay with many proposals for its runway expansion further into it. While there have been pushes for the bay's restoration, the city's continuous wastewater discharge into the bay and ongoing sea level rise contribute to a net loss of marshland over time. This affects not only local species whose habitats continue to dwindle out, but also people in nearby neighborhoods, as the marshlands are the city's natural barrier against storms and provide sponginess of ground surface for rainwater absorption.

This project aims to reconnect the neighborhood of Canarsie to Jamaica Bay and reclaim the community's access to the waterfront public space; to increase the neighborhood's quality of life with reliable means of transportation and increased availability of job opportunities; to envision the restoration of marshlands not as just bringing back what was there before but also providing rooms for further growth; and to adapt our urban living typology to our surroundings instead of fleeing or fighting against it and embrace natural flows of land and water.



SITE ANALYSIS





GONDOLA

Urban gondola will provide the community of Canarsie a new public transit system which only needs minimal footprint on the recovering marshland



LOCAL AVIFAUNA

Jamaica Bay provides food and nesting habitat for many shorebird species such as the federally-listed endangered Roseate Tern



MIGRATORY AVIFAUNA

Jamaica Bay acts as an important stopover for neotropical migratory birds such as barn swallow, which stays in North America to breed during spring and summer before flying south to spend their winter in regions with warmer climate



ELEVATED PATH

Elevated path decreases total constructed planar surface of the neighborhood; solving the current needs for intensive rainwater management while also allowing local faunas to traverse on the ground below



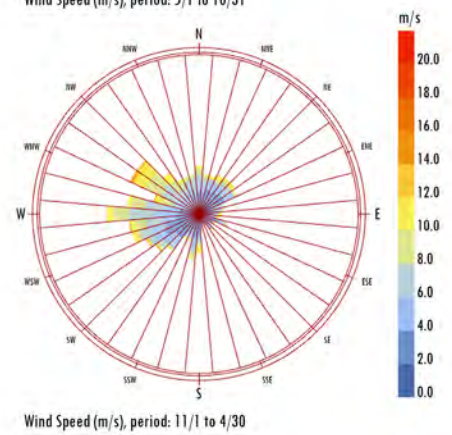
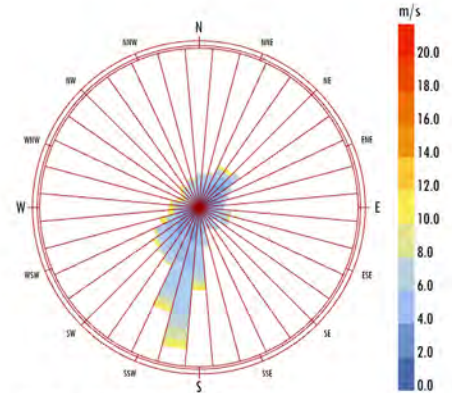
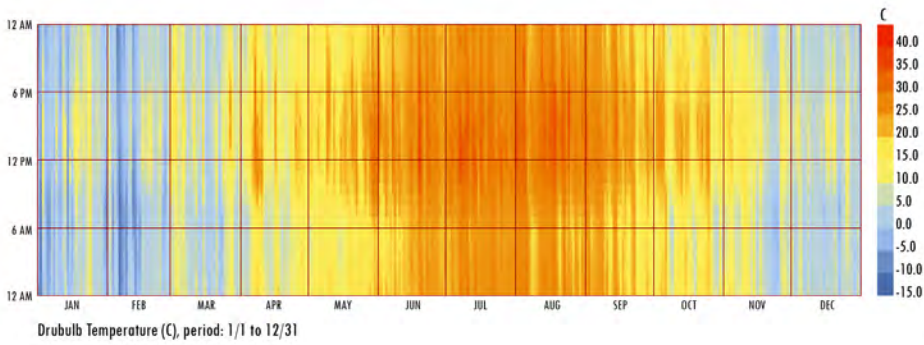
SEA TURTLES

Reclaiming the marshland will recover sufficient amount of nesting habitat of sea turtles such as the federally-listed endangered leatherback turtle



TEMPORARY BARRIER

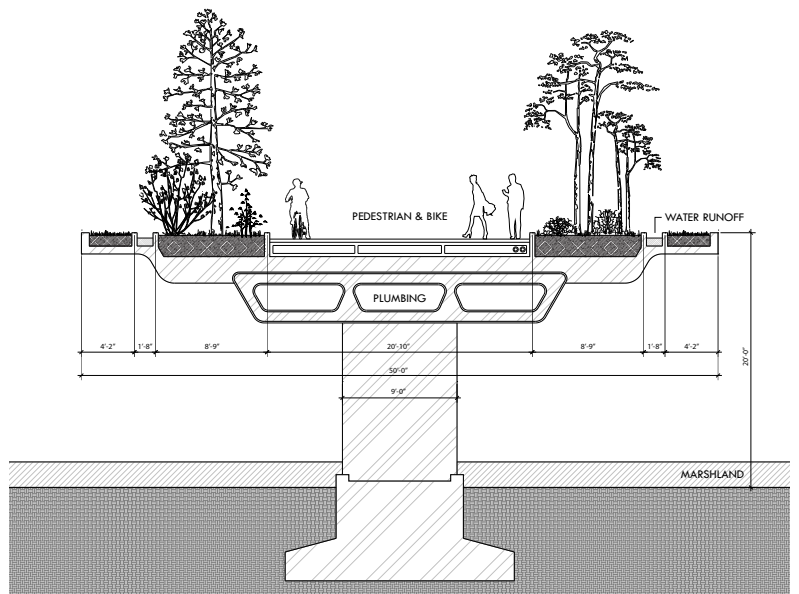
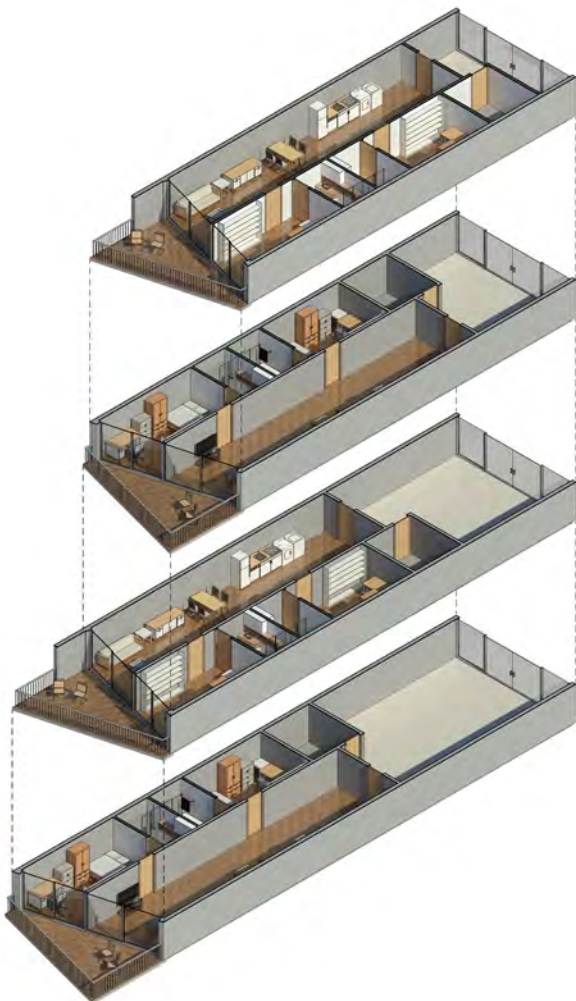
The base of the residential buildings will also act as storm surge barrier during the transition process of moving Canarsie from the current ground level to a new elevated level, after which the barrier shall be decommissioned to allow water to flow and marsh to expand more freely



The building has stepping terraces on its south side to allow winds to climb up the terraces, while the north side of the building is sealed off by walls and floors to force the winds to go over the building.

The elevated paths provide Carnasie with a new cityscape removed from its previous ground level, allowing the marshland to encroach further into the land with little interruption and increase sponginess of ground surfaces to minimize heavy flooding. The paths themselves also help manage the rainwater with their runoffs. The outdated infrastructure of Canarsie shall be replaced with new ones running within the hollow parts in the structure under the paths.

The buildings provide both residential and commercial uses. Retails lining up the arcade corridor are owned by residents of their respective living unit. The commercial rooms vary in size from floor to floor, corresponding to what type of retail store each resident plans to operate.



disPLACING the DISHWASHER

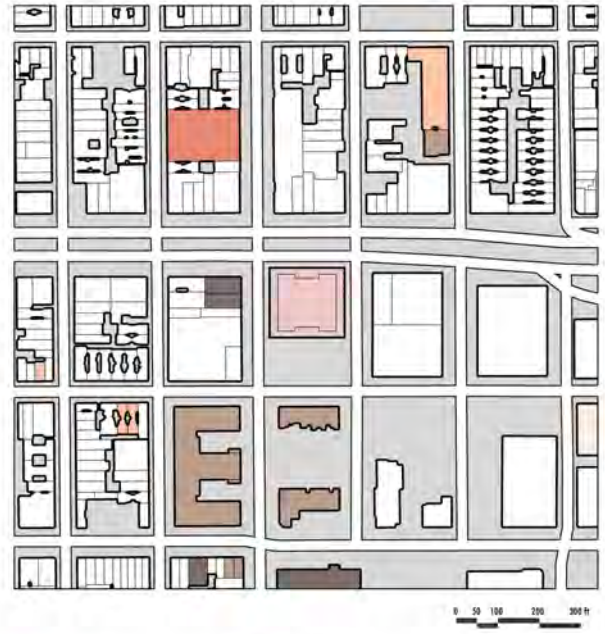
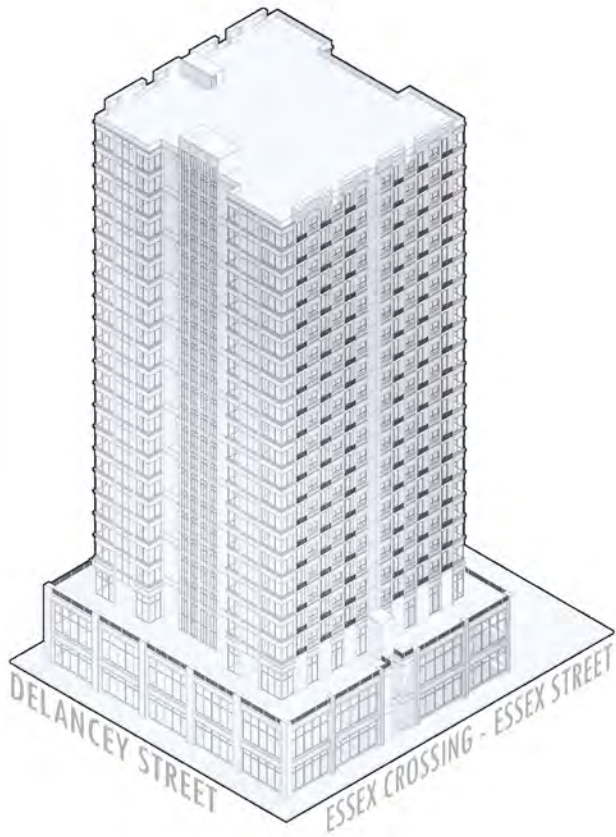
Essex St, Manhattan, NY

The Lower East Side owes its rich history and mixture of different cultures to many waves of immigrants settling in, whether to escape from famine or political regime, or to make a fresh start and reach for the ever so sought after 'American Dream.' With rapid increase in a number of occupants over the years, the Lower East Side quickly became one of the densest urban setting in the world at the time. Opportunistic landowners quickly subdivide every room in their buildings to cram in as many people in as possible. Thus came a huge wave of tenement building construction throughout New York and specifically the Lower East Side. What had been originally single units would then house as many as and sometimes more than three families together. Different cultures and beliefs constantly engage with one another in the Lower East Side, starting from these living units.

While the building codes and regulations have since improved minimum requirements for residential buildings, the lack of affordable housing for families with low income has never left the Lower East Side nor the city of New York. From the area of town from which people wanted to move out of, the constant gentrification has transformed the Lower East Side and most of New York City into an area that is difficult to settle in. With increasing rent and cost of living and severe lack of long-term job opportunities for those who cannot afford higher education, many family cannot reliably accumulate savings as they keep needing to expend more of their earnings just to cover few days of living.

This project aims to look back at the history of tenement housing in the Lower East Side and inspect elements from the past of this neighborhood, both good and bad, and use them to rethink the current living condition of people in metropolitan cities like New York; to lay a proper groundwork in solving multi-generational poverty which continues to plague many families in the city of New York; and to help people break free from this lifestyle of self isolation in a pretense of privacy and reconnect them with their community





- project
- health services
- youth services
- community amenities
- library & cultural
- emergency services





FOCUS ON FAMILY

Many family units are available within this apartment to focus on solving the multi-generational nature of poverty. The apartment has its own daycare service to provide both parents with availability to continue their full-time job.

With many jobs still not providing sufficient time for nor payment during maternity and paternity leaves, it is important for us to provide as much assistance to every household to allow parents to support their families.



JOB OPPORTUNITIES

To make up for the displacement of the Essex Market, which has a long history in the Lower East Side, the commercial floors of this building will house local retails and vendors. Both the owners and employee of these stores shall consist primarily of the residents living here to make provide considerable amount of job opportunities to the building's residents.

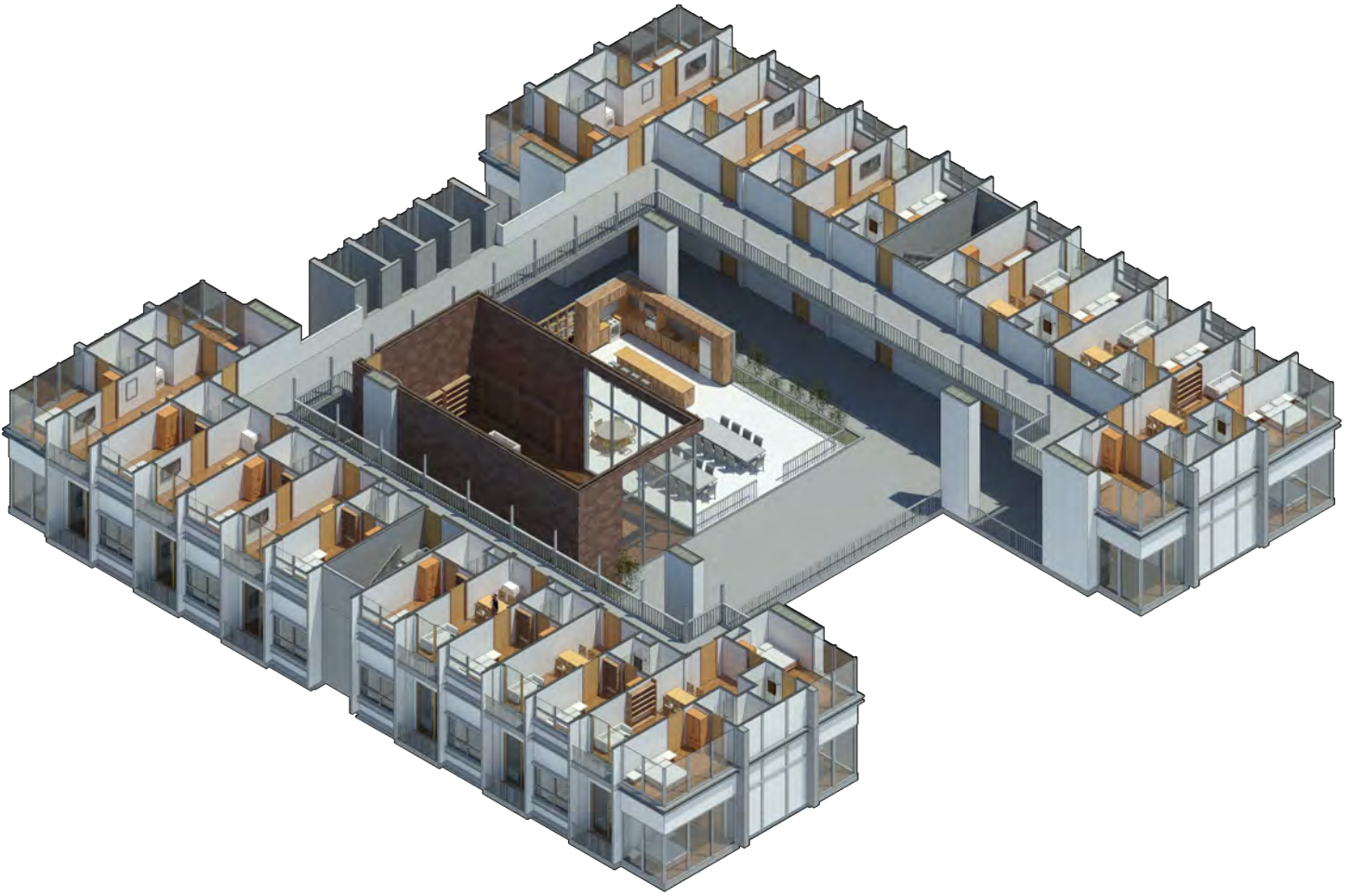
The residents living in the apartment are also encouraged to support these local stores run and operated by their neighbors within their means.



COMMUNAL KITCHEN

Kitchens are displaced from living units to a communal space in the middle of every two floors. Ingredients are to be mostly locally sourced. From either retails below or other locally run stores and markets.

This shared dining area will broaden the residents' understanding of different viewpoints and cultures. Making acquaintance with more people starting at the scale of this community will also help with networking for jobs.

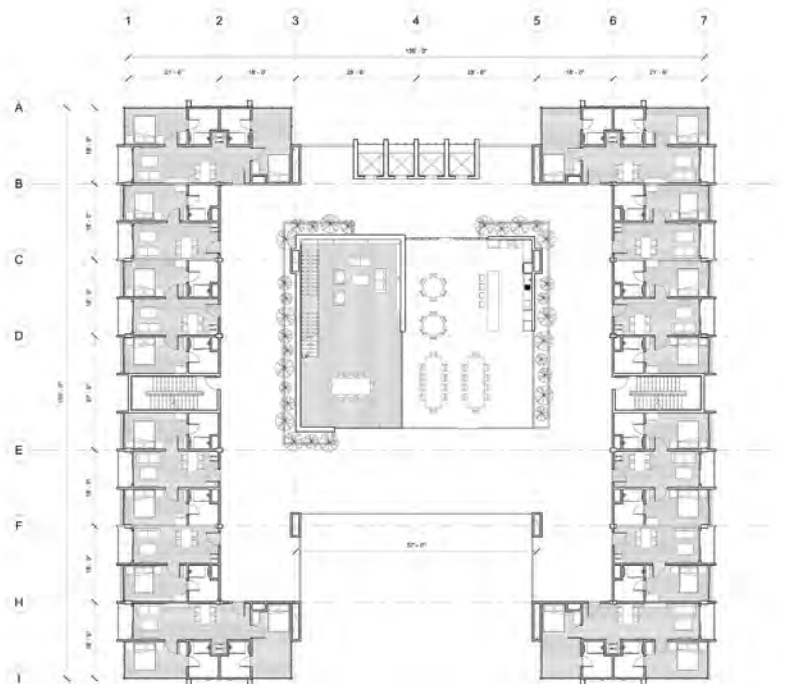


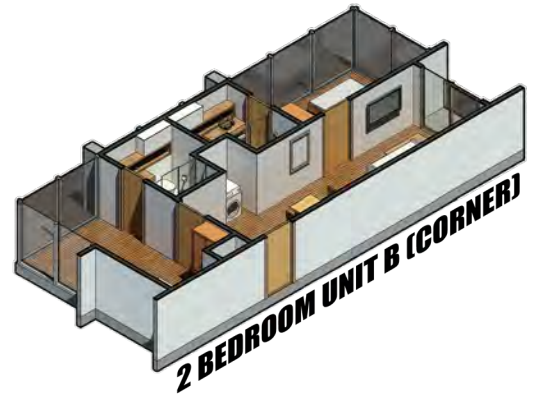
TWO-FLOOR COMMUNITY

Despite their poor living conditions, the tenement housings provided the Lower East Side with an environment conducive for day-to-day interactions between different cultures during works or around a dining table, thus shaping the district's rich history. We aim to bring back spaces which allow residents to interact with variety of people within their community.

Every two floors have a shared communal space in the middle in which residents can leisure. Looking after this shared space is a responsibility of each resident to their community.

Placing large openings in the south and smaller openings in the north allow southern wind to ventilate the central area throughout the year.





PERSONAL PURSUITS

Gathering around a dining table has been a prevalent means of exchanging one's story, culture, and discussing the ongoings of each society. It strengthens the bonds of people in a community and is a good starting point for job networking, which is crucial to running a successful business.

Aside from forging connections within the community, displacing kitchens to the center of the floor frees up spaces in each room for more personal belongings and career- or school-related items.

Each unit gives its residents an ample amount of space to pursue their interest in a more personal environment, while still providing easy access to the communal space right outside their rooms.

OUTSKIRTS UNDER-OVER

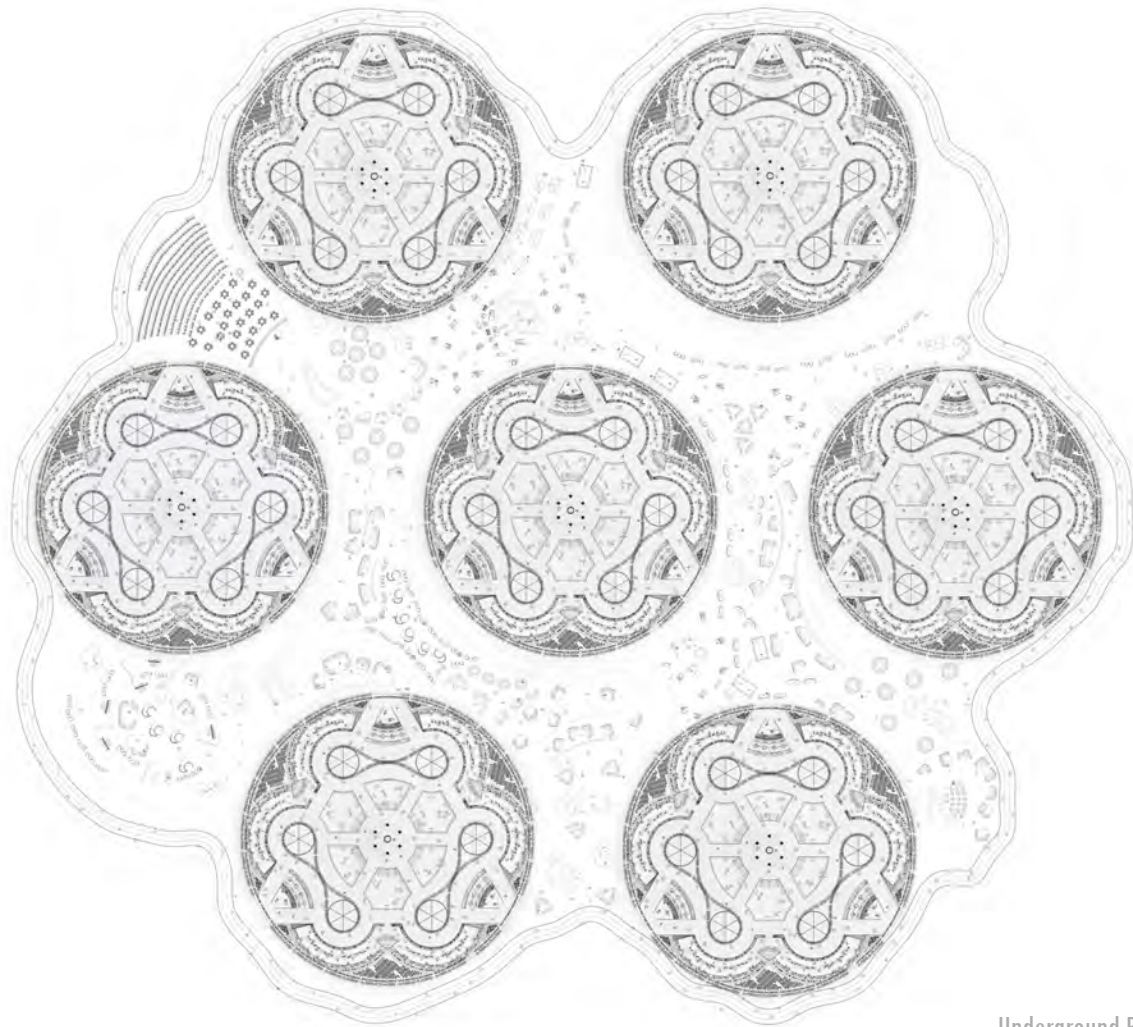
London Outskirts, UK

Major cities have become crowded, yet many people still feel more isolated than ever due to the lifestyle of working in an urban setting, which lessens our time to breath and limits our interactions. We may encounter many people each day, but how many of those meetings count as meaningful interactions to keep us away from perpetual loneliness of a city life? Accessibility to green spaces within a city to relax from work is also limited in space and highly dependent to your workplace location.

This project aims to create a community in the outskirts to promote a new living condition which promotes constant social interactions and collaborative efforts, while also providing close proximity to nature, where residents can take breaks between their works.

Rethinking Ebenezer Howard's Garden Cities of To-morrow, the same amount of lot used for a single family house can now be used for a single high rise apartment housing hundreds of residents. What originally imagined as miniature cities connected together with high-speed roads and railways can now be group of residential towers within a walking distance from each other. Instead of having occasional green spaces within the gaps between building walls and streets, we move our activities underground and access nature above us to relax during free time and breaks.





Underground Plan



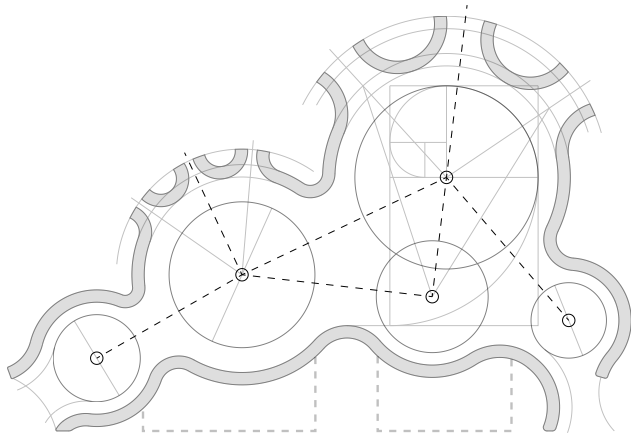
Floor Axonometric

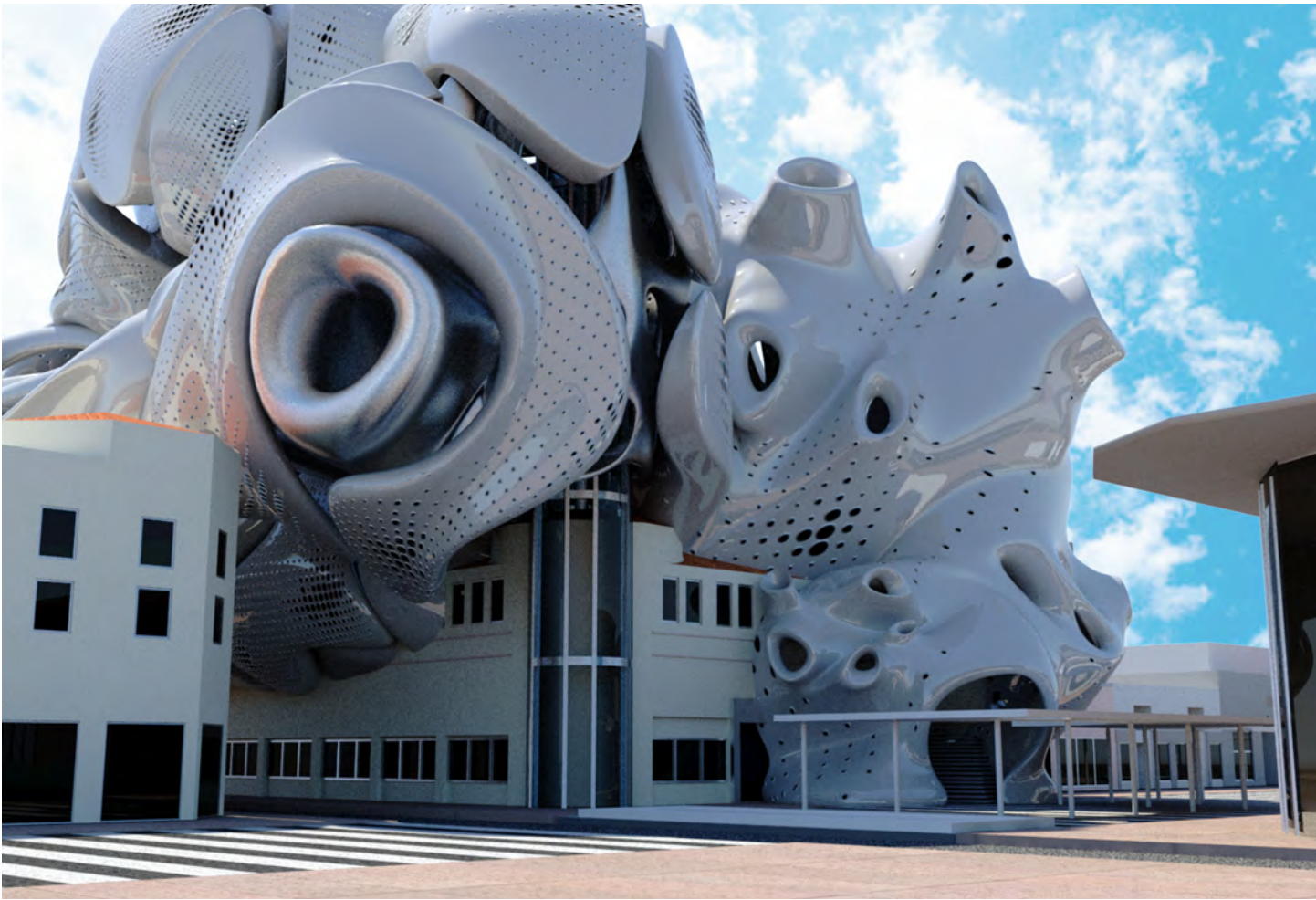
MIMICKING MIAMI MARINE

Lincoln St, Miami, FL

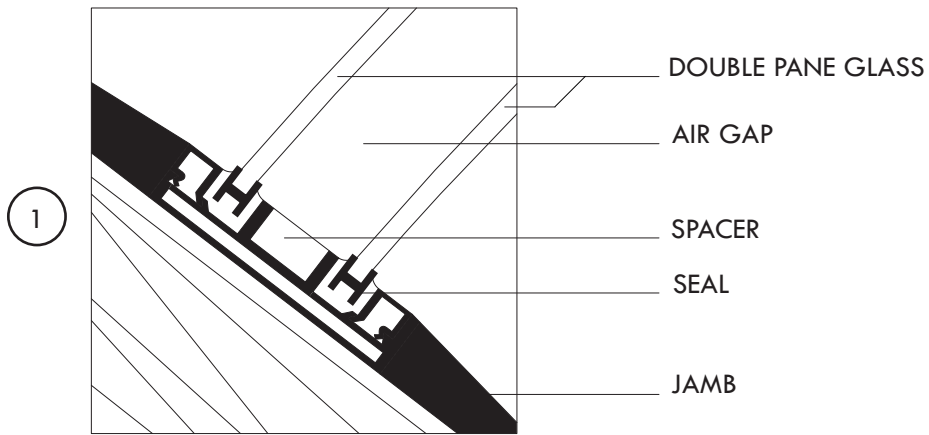
This project is from a design studio which tasked students to conceptualize an art center using traits from biological organism as an inspiration, using Autodesk Maya which we were tasked to learn for the second half of the semester, before reigning in the design back with structural explanations through detail drawings.

This art center is inspired marine species which correlate with the coastal city of Miami, Florida. The building's envelope are segmented akin to exoskeletons of crustaceans, while other parts mimic shells of mollusks like nautilus and conchs. The shells then contain sponge-like interior of the building, which appears as if sprouting out of the shells and preexisting buildings in a grafting manner.





DETAIL DRAWINGS



DOUBLE PANE GLASS _____

AIR GAP _____

SPACER _____

SEAL _____

JAMB _____

VAPOR BARRIER _____

BENT I-BEAM _____

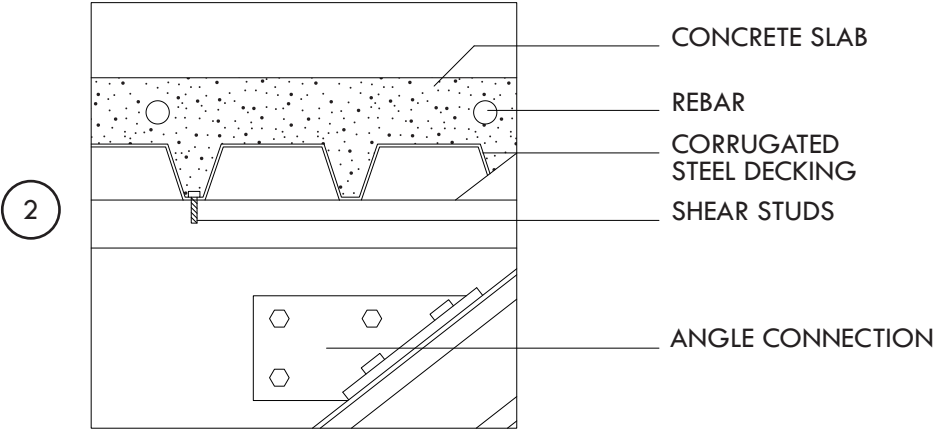
WEB MEMBER _____

BOLTED MOMENT CONNECTION _____

PLATE CONNECTION _____

BRACING MEMBER _____

1



CONCRETE SLAB _____

REBAR _____

CORRUGATED
STEEL DECKING

SHEAR STUDS _____

ANGLE CONNECTION _____

SPRAY FOAM INSULATION _____

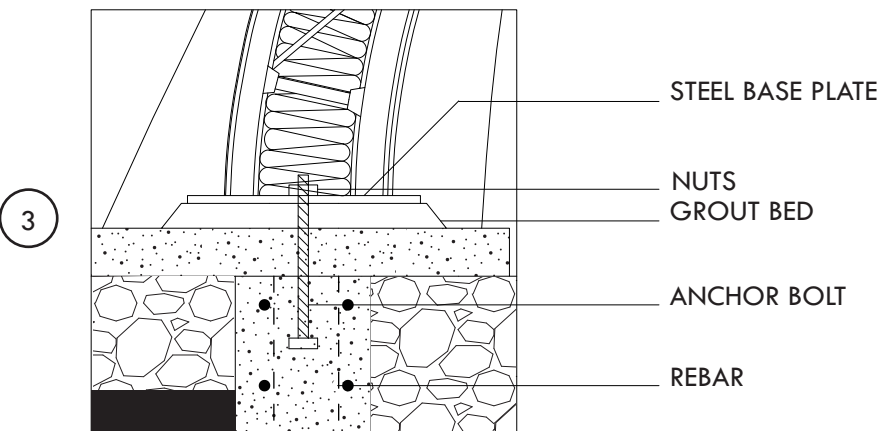
WATER & AIR BARRIER _____

WELDED STEEL PLATED SHELL _____

ANGLE CONNECTION _____

FLOOR I-BEAM _____

2



STEEL BASE PLATE _____

NUTS
GROUT BED

ANCHOR BOLT _____

REBAR _____

BASE PLATE _____

CONCRETE SLAB _____

CRUSHED STONE _____

PERFORATED PIPE _____

REINFORCED CONCRETE FOOTING _____

3

