

ARCHITECTURAL

Christopher Griffith 2024

# PORT FOLIO

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# CHRISTOPHER GRIFFITH

arch.cgriffith@gmail.com

## Education

The University of Texas at Austin | Bachelor of Architecture

## Experience

**Architectural Intern** | VLK Architects, Summer + Fall 2022

- Laid out sheets for a sports and music addition to a public high school.
- Attended client meetings.
- Discussed building code, client/contractor etiquette, and the handling of niche building elements during weekly meetings for emerging architects or interns.

**Destination Imagination** | Technical Challenge, 2016

- DI is an education-focused tournament emphasizing STEM elements.
- Worked with a small team to create a functional machine that solved an assigned task.
- Employed and improved my teamwork, organization, fabrication, and woodworking skills.
- My team reached 7th place at the Global Finals, out of 51 teams that made it to that level of competition.

## Involvement

**UTSOA Student Council** | Member, 2018-2023

**Friends For Life Animal Shelter** | Volunteer, 2015-2018

- Provided care and companionship to more than 60 cats.
- Assisted with landscaping and maintenance of the shelter's front yard.

## Technical Skills

### Digital:

Revit, AutoCAD, Rhino (Grasshopper, Enscape, V-Ray), SketchUp, Fusion 360  
Photoshop, Illustrator, InDesign, Premiere, AfterEffects  
BlueBeam Revu, Microsoft Office Suite, Python

### Fabrication:

CNC Milling, Laser Cutting, FDM 3D Printing (slicing, printing, maintenance)  
Woodworking

### Analog:

Sketching, Model-making, Printmaking, Painting (watercolor, gouache, acrylic)

## Honors & Awards

**UTSOA Design Excellence Nomination** Spring 2022

**UT Distinguished College Scholar/College Scholar** 2020-2023

**Scholastic Gold Keys** (regional) 2017

**Scholastic Silver Medals** (national) 2017

**US Department of Education Art Exhibition** 2017

## References

**Michael McCall** | Architect  
mjmccll@utmail.utexas.edu

**Kory Bieg** | Architect  
bieg@utexas.edu

**Clay Odom** | Interior Designer  
clayodom@utexas.edu

# GREENWEAVE MARKETS

Comprehensive Design Studio  
Instructor\_Michael Garrison  
Collaborator\_Gregory Muggli

110 W 5th Street  
Austin, TX

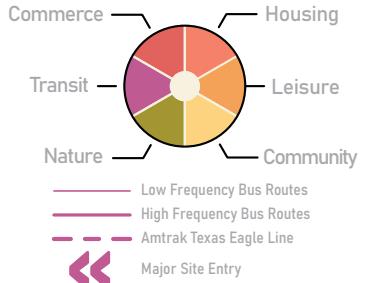
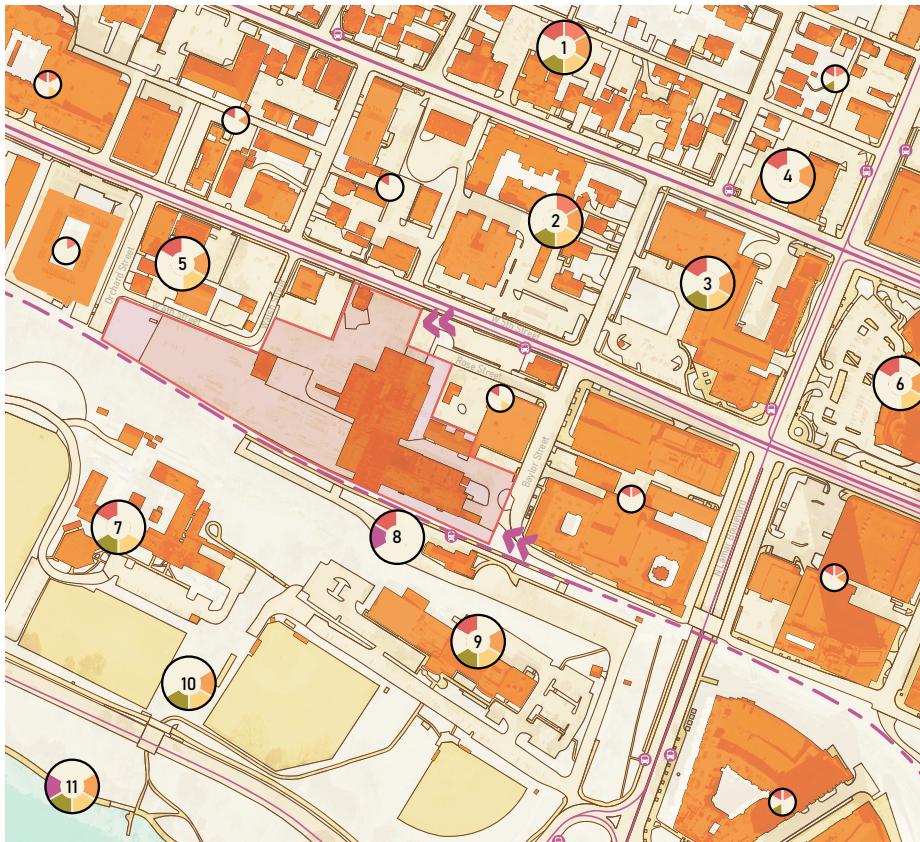
By digging and pushing earth to create a cascade of public areas and market spaces centered on a major pedestrian avenue, this project rejuvenates an abandoned brownfield lot along W 5th St in Austin. On the ground level, local and commercial vendors are provided with market spaces that customers can freely flow through. Meanwhile, industrial greenhouses float above like glassy clouds, shading the marketplaces while also providing enough grow-space to feed half of Austin.

With the creation of this public market and pedestrian avenue, the project hopes to bring Clarksville, downtown Austin, and the Colorado closer together, reducing the gap that has been formed by an underdeveloped and partially abandoned strip of the city.

03/GREENWEAVE MARKETS



## ANALYSING EXISTING SITE RESOURCES



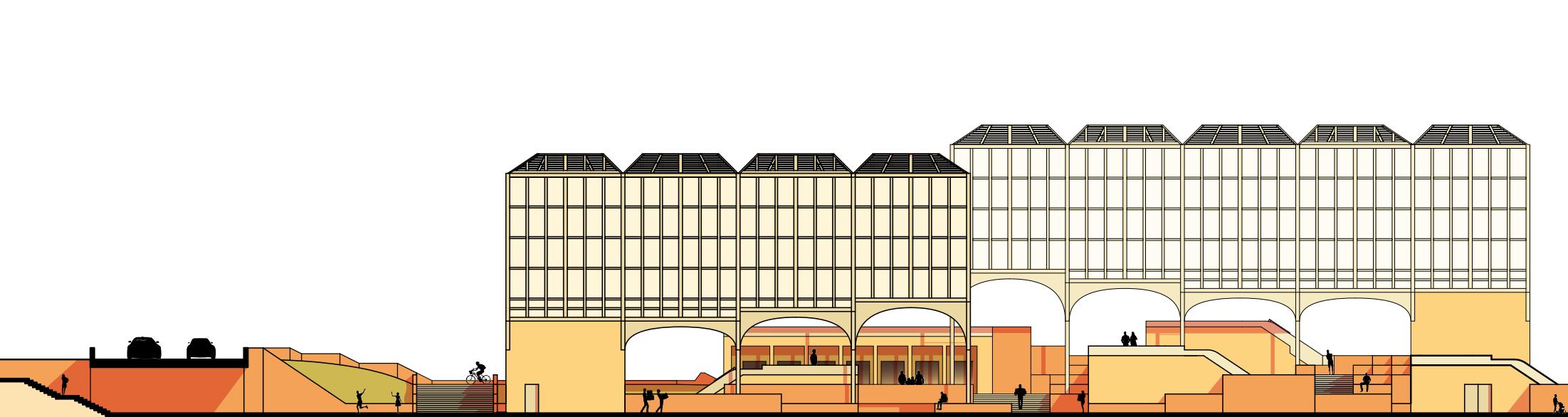
### Points of Interest

- 1 Clarksville Historic Neighborhood
- 2 Stephen L. Clark Gallery + others
- 3 West Chelsea Contemporary + Treaty Oak Oak Square + others
- 4 Amy's Ice Cream + others
- 5 Nate's Baked Goods + Hold Out Brewing Whole Foods HQ & Store
- 6 Austin Station on Texas Eagle Line
- 7 Pets Alive! No-kill Animal Shelter
- 8 Townlake YMCA
- 9 Metro Park Public Sports Fields
- 10 Ladybird Lake-Lamar Beach Metro Park

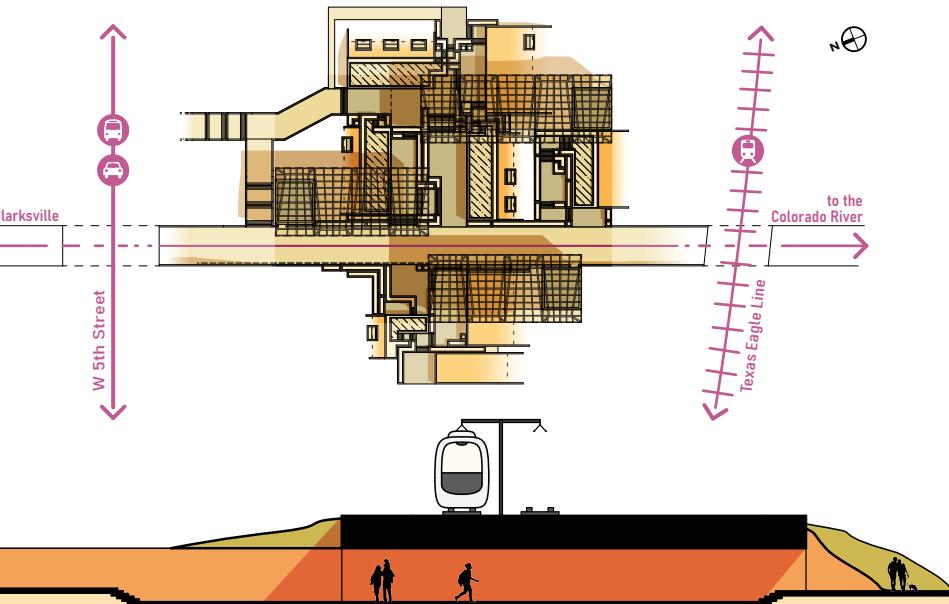


GREENWEAVE MARKETS/04

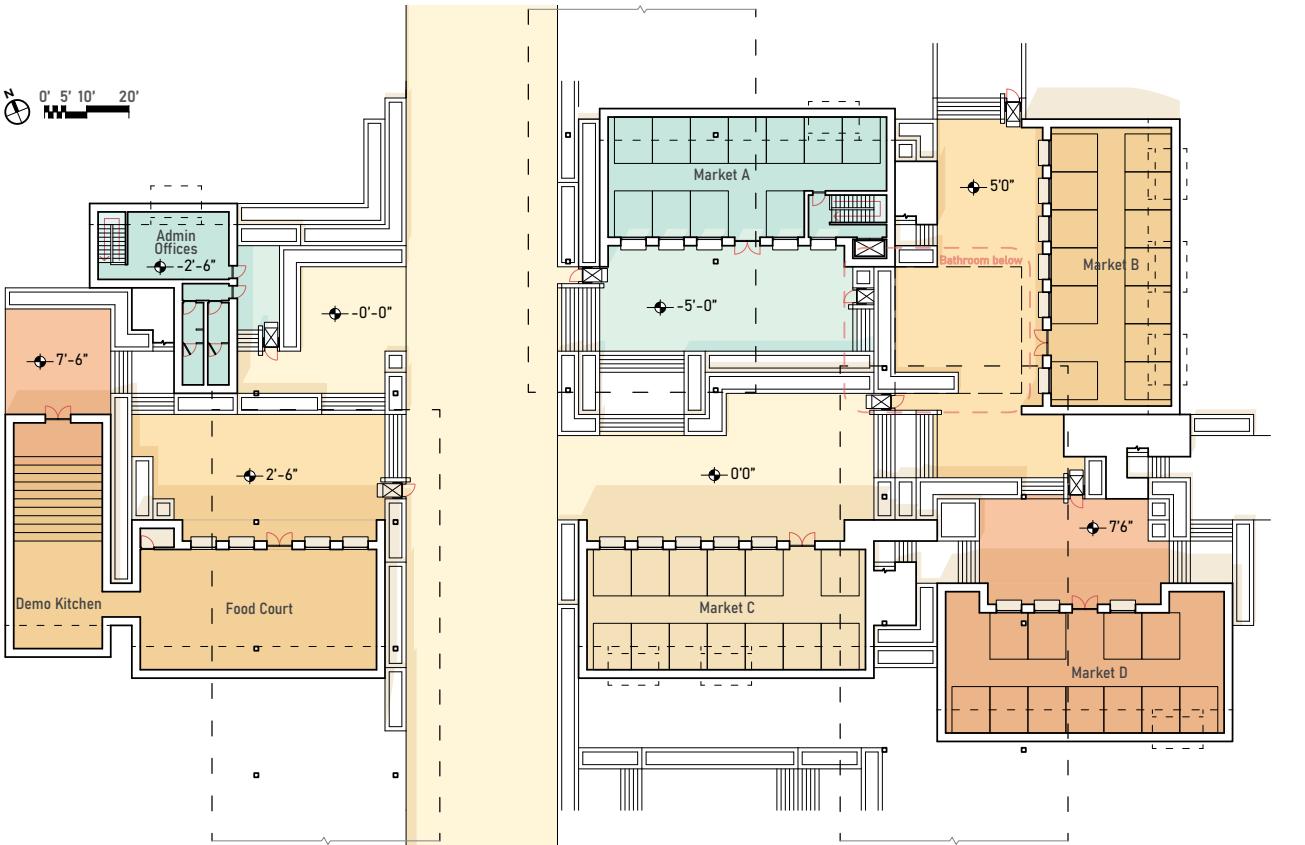
SITE SECTION - EAST FACING



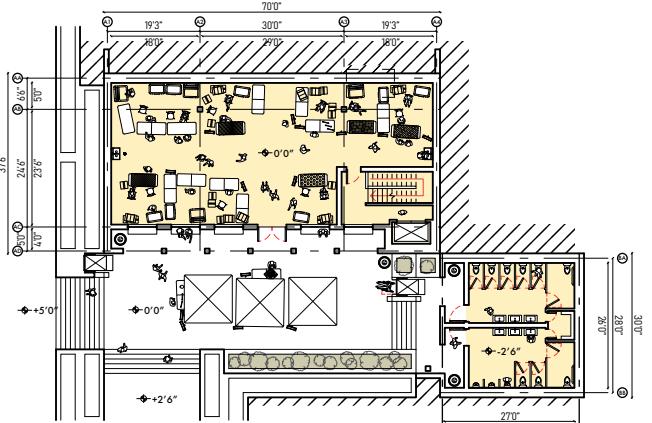
SITE PLAN



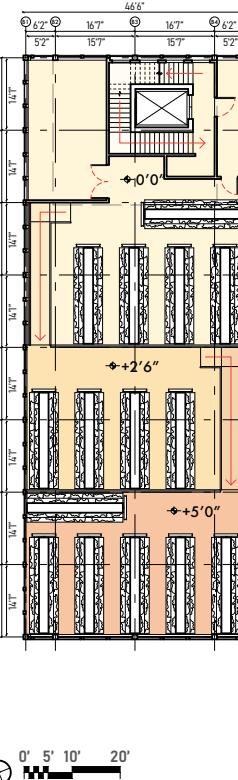
## MARKETS GROUND PLAN



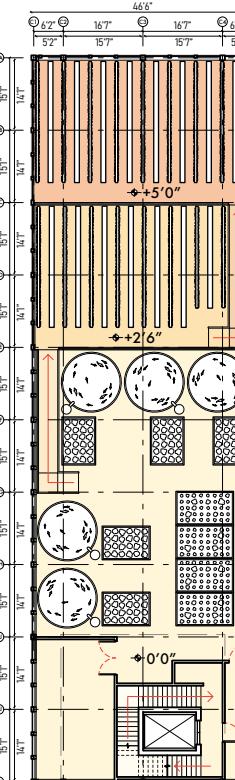
## MARKET A PLAN



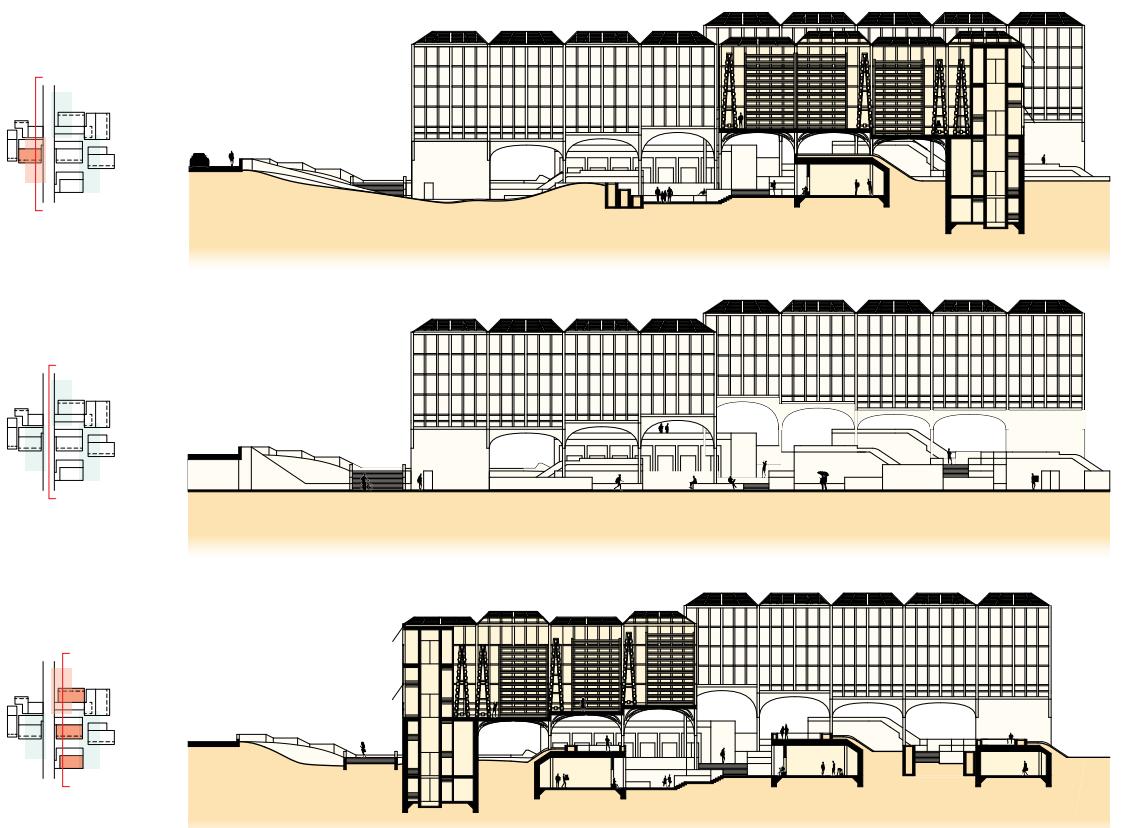
## GREENHOUSE B PLAN



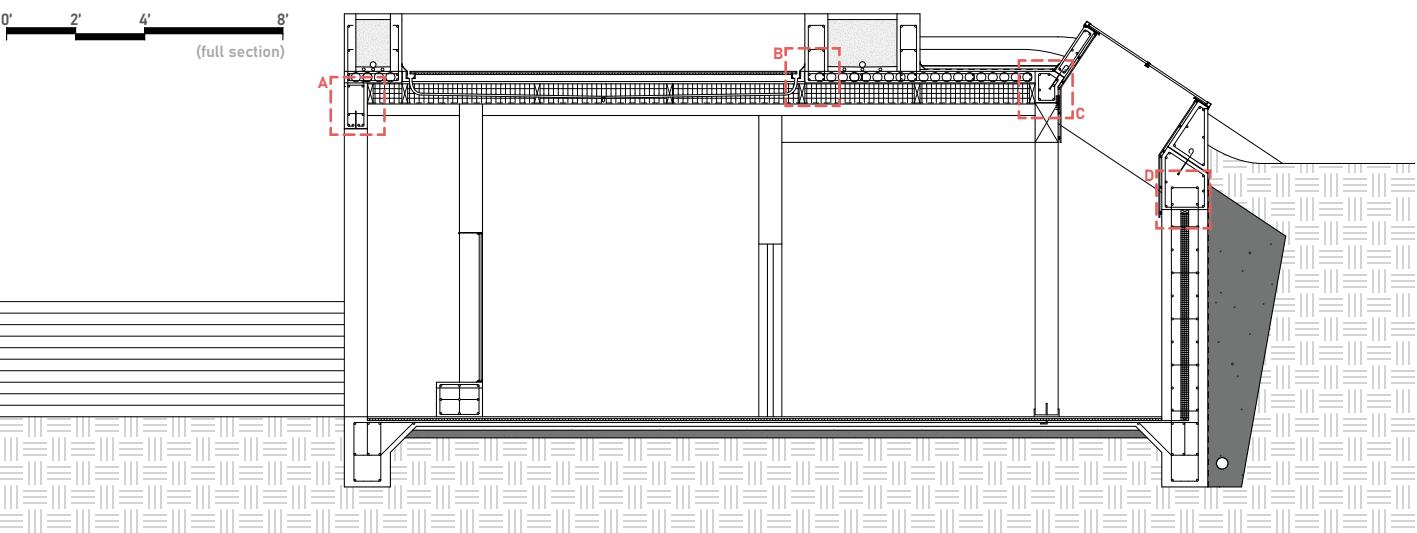
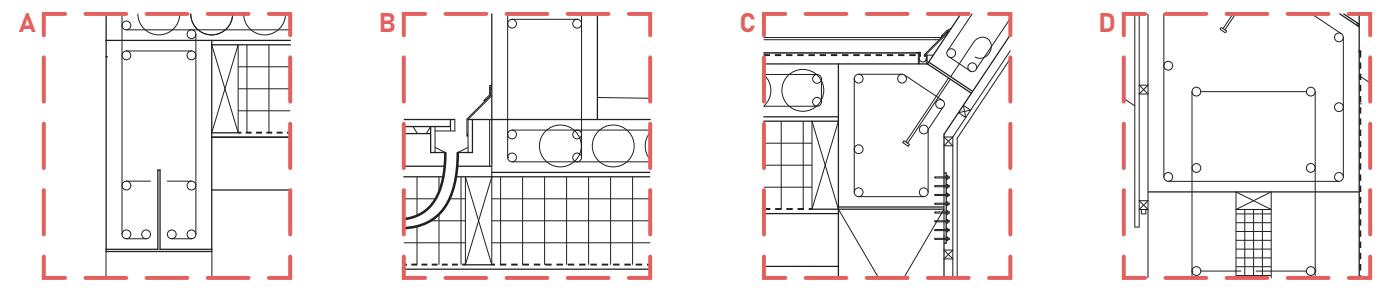
## GREENHOUSE C PLAN



MARKET SECTIONS



MARKET CONSTRUCTION SECTION + CONSTRUCTION DETAILS



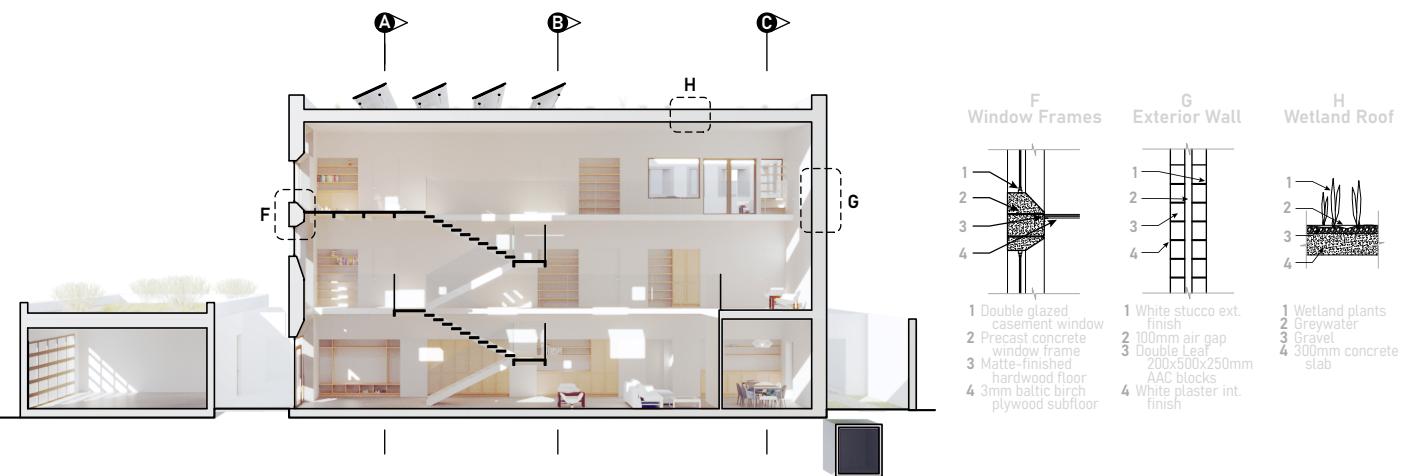
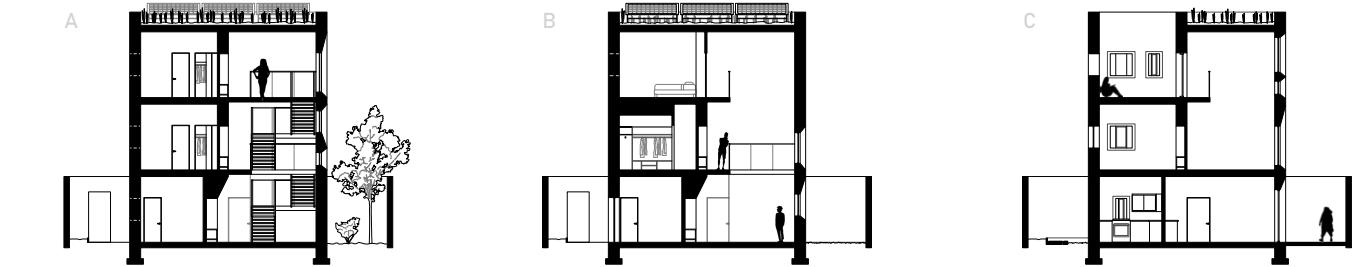
# CASCADE HOUSE

This project was designed for the House of the Future competition hosted by Buildner and the Dubai Government. The goal of the contest was to design a sustainable, affordable, and expandable template house for the needs of a modern Emirati within the constraints of a 15m by 30m lot.

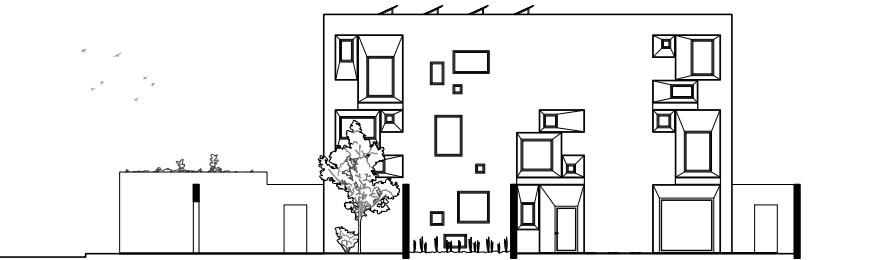
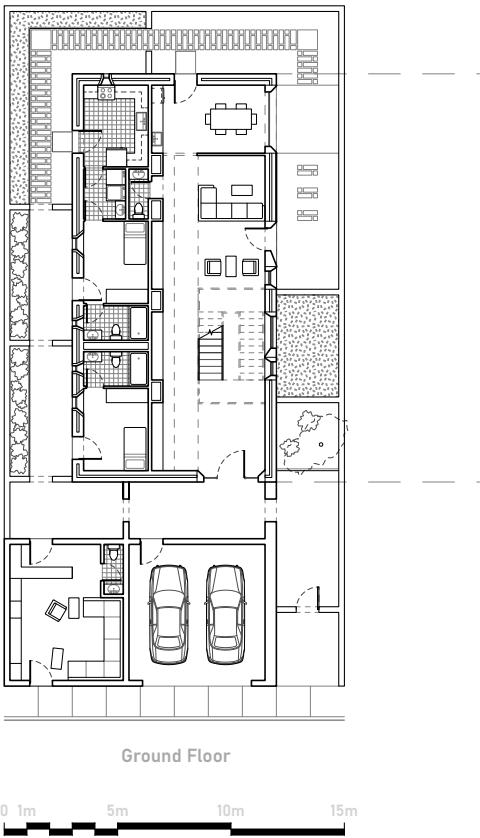
With this in mind, the Cascade House recontextualizes the traditional Arabic courtyard house by inverting the central space of a courtyard into the centerpiece of the home's interior, framing several social living areas and providing an airy, open space. Stacks of precast concrete windows perforate these more public areas, creating a lively dance of light that cascades through the villa. This interior court is then separated from bedrooms with a central wall interlaced with shelving, separating the private and public programs of the house with a malleable and easily personalized divider.



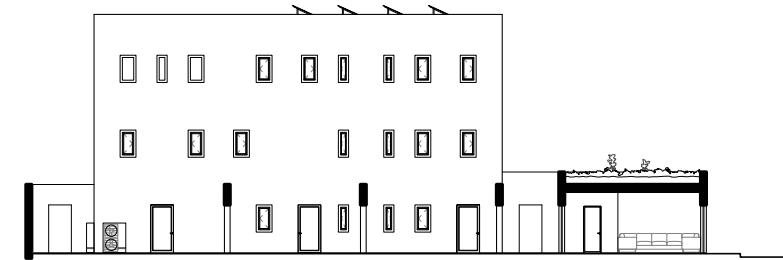
## SECTIONS



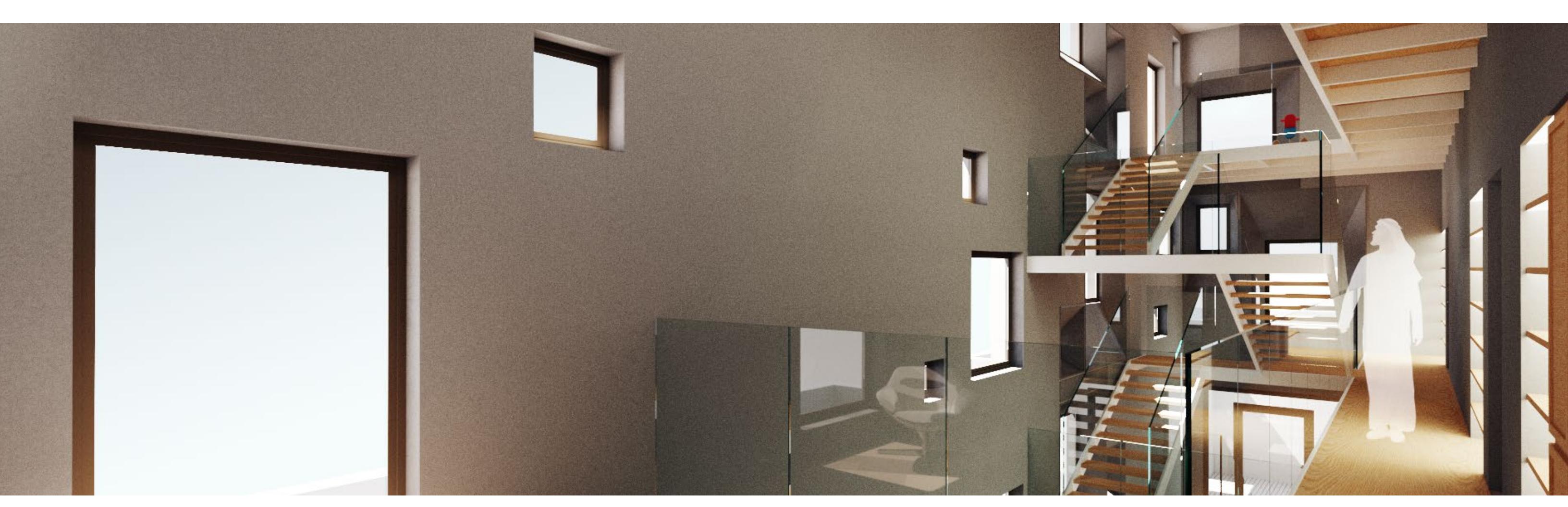
PLANS + ELEVATIONS



13/CASCADE HOUSE



CASCADE HOUSE/14



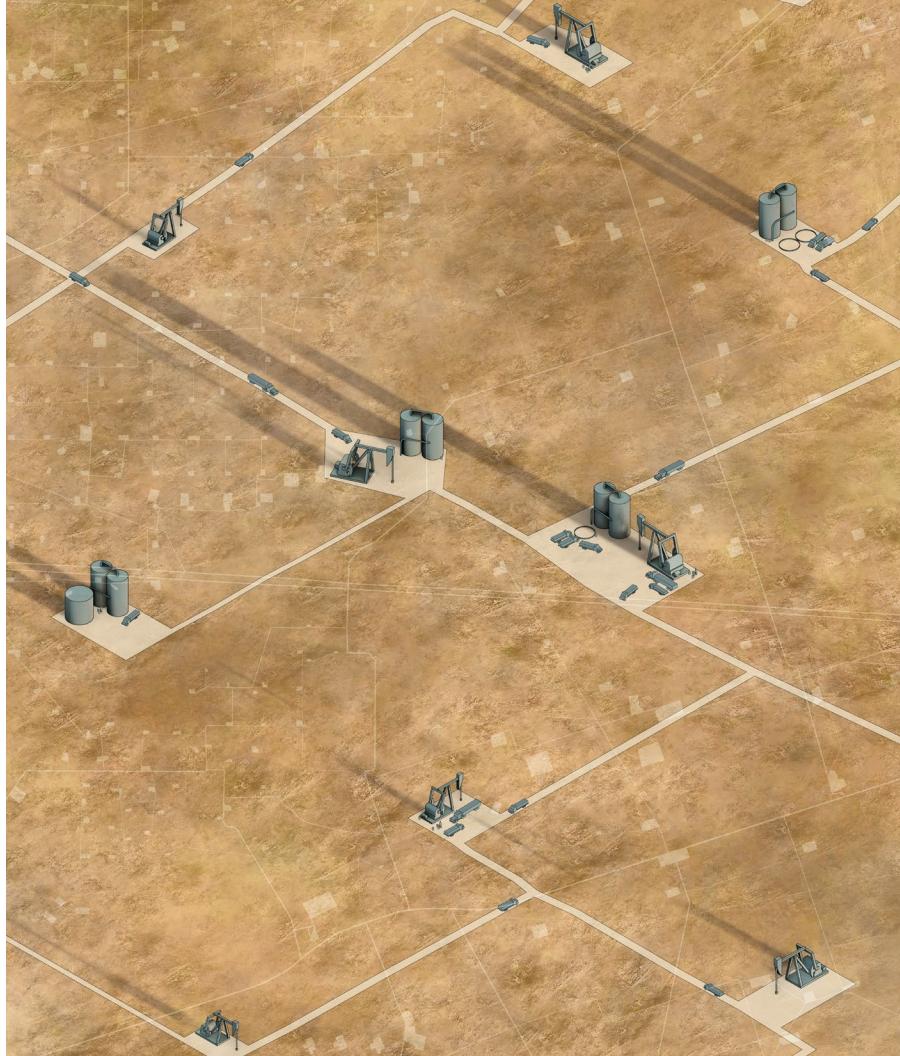
# FIELD CONDITION

Intermediate Design Studio  
Instructor\_Kevin Sullivan  
Instructor\_Suhash Patel

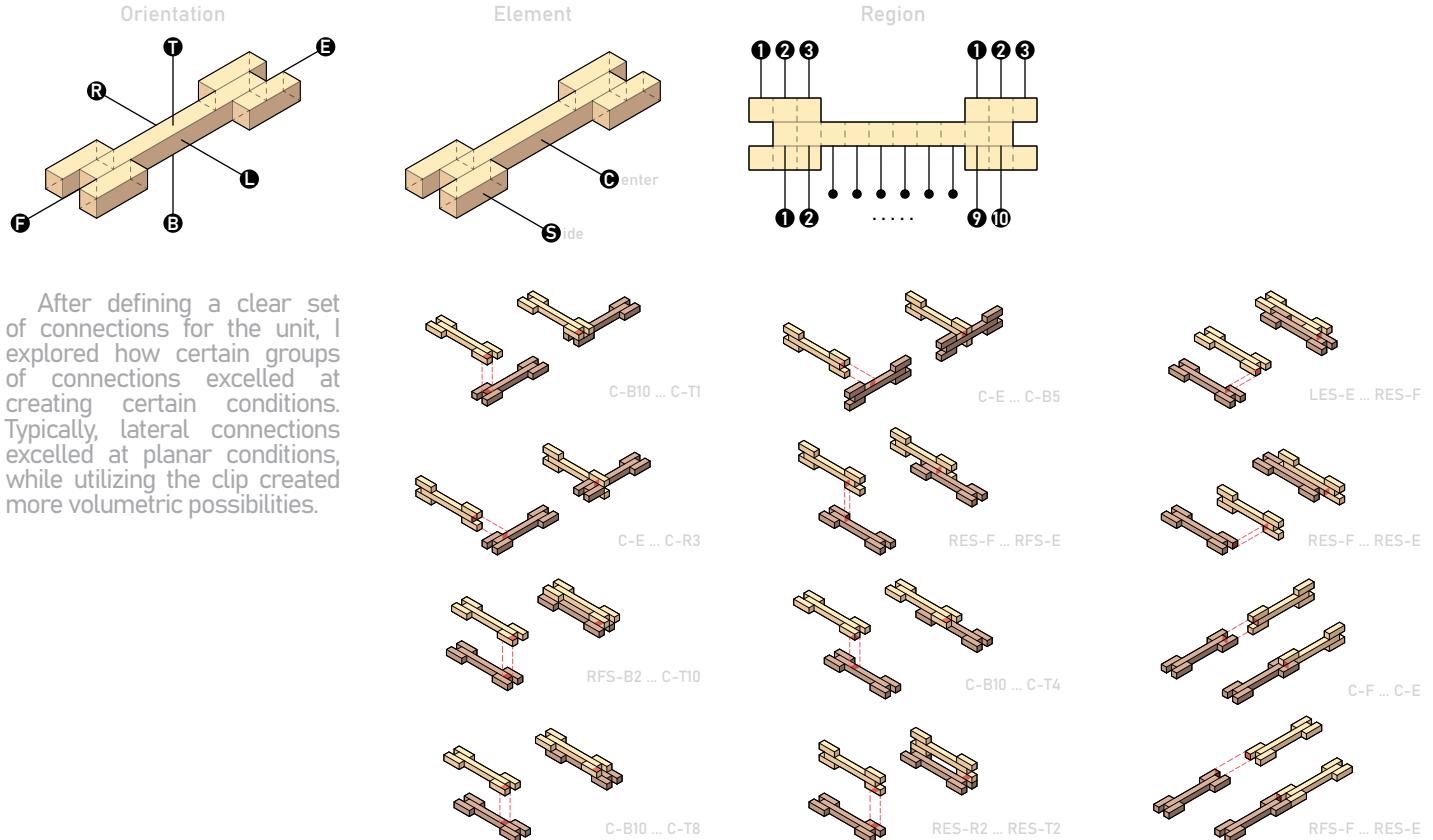
West Texas

In a hypothetical future, the worldwide oil supply has become dangerously low, causing companies to scour old wells for the last remnants of oil reserves. In order to race competitors to the last wells, the companies have turned to the use of temporary buildings constructed from a single wooden unit, allowing for the assembly and disassembly of structures in any form and layout. The unit is composed of a timber core with clips at either end, allowing it to be easily and cheaply produced both on and off the field.

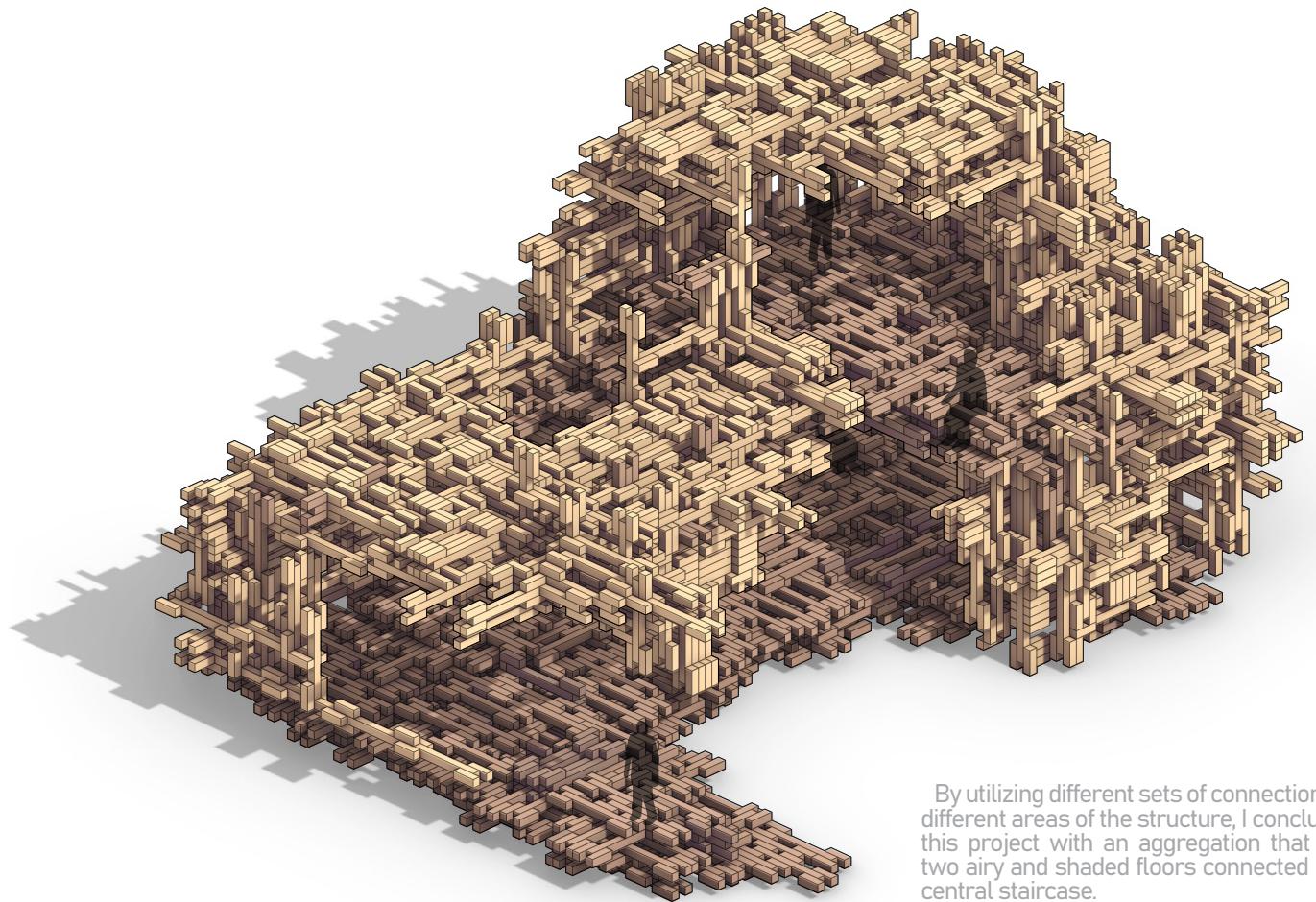
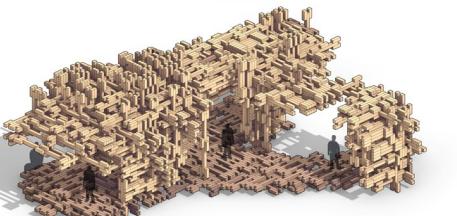
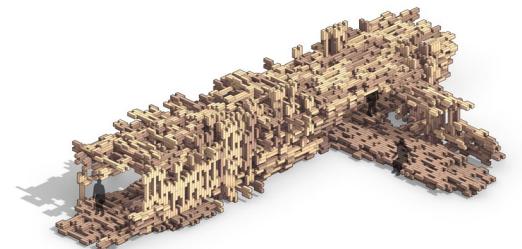
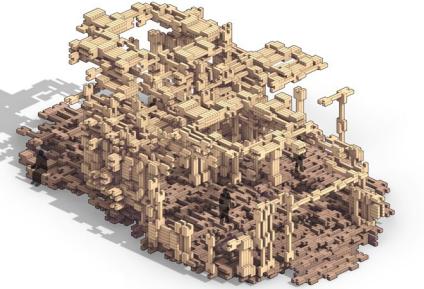
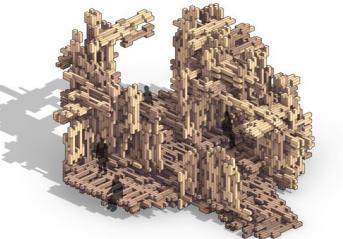
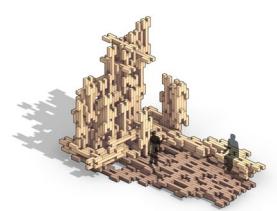
After establishing the form of the unit, I used parametric aggregation to rapidly iterate different structures and connection methods, exploring the unit's strengths and weaknesses. By targeting certain conditions that the unit excelled at creating, I landed on a final rest structure that heavily shades workers without sacrificing a view of the plains.



## UNIT CONNECTIONS: LANGUAGE + EXAMPLES



## UNIT AGGREGATIONS



By utilizing different sets of connections in different areas of the structure, I concluded this project with an aggregation that has two airy and shaded floors connected by a central staircase.



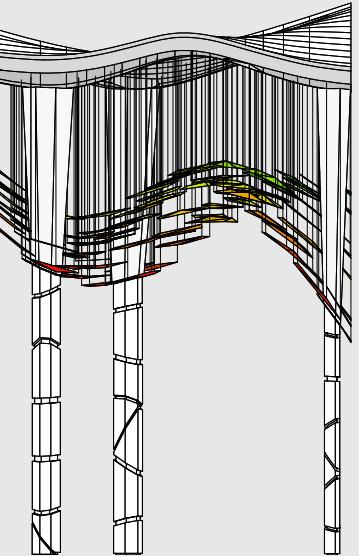
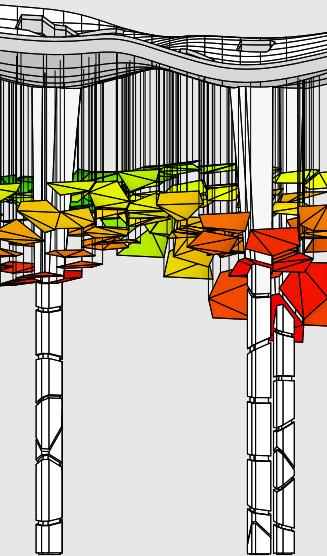
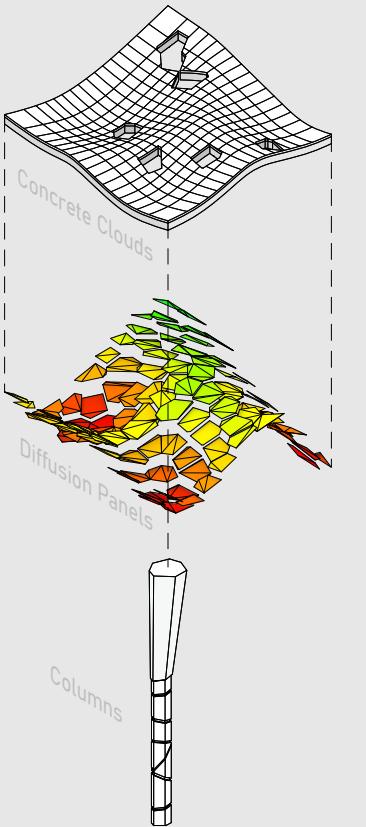
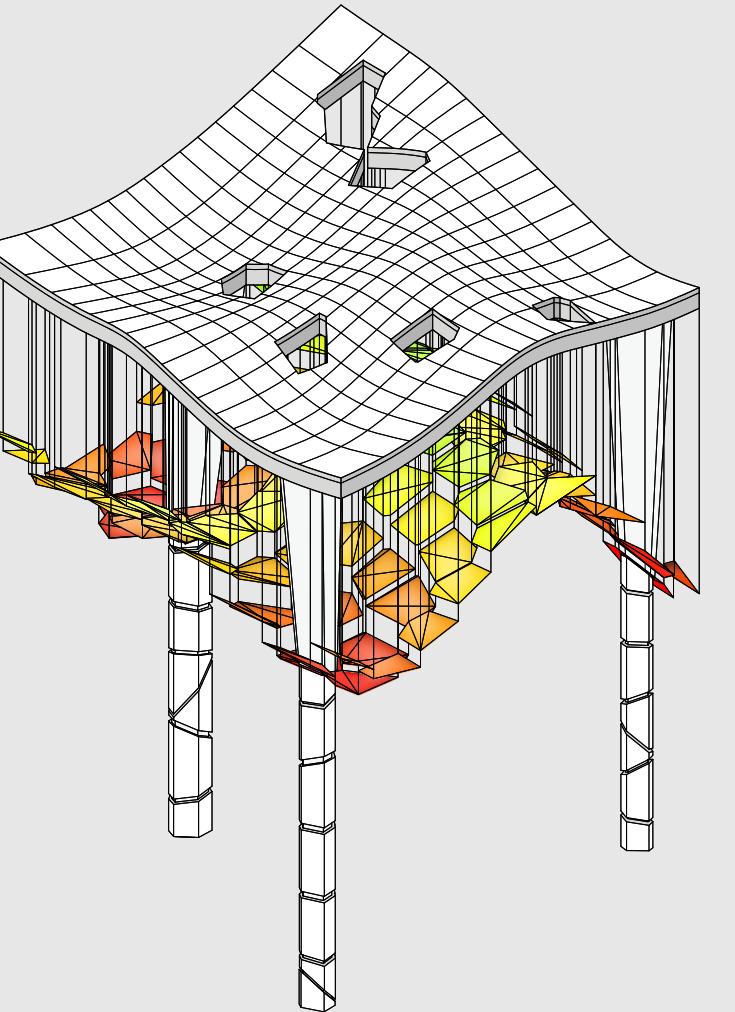
# FORECAST PAVILION

Visual Communications  
Instructor\_Kory Bieg

Conceptual

This project was an early exploration into the possibilities of parametric design and the heavy utilization of Grasshopper for Rhino. All the elements of the pavilion are derived from and controlled by a single set of flat voronoi cells, and the bounds of the project can be infinitely expanded to allow the project to fit into any space.

Though the project is highly conceptual, one possible construction of this pavilion involves translucent panels hung from a flowing concrete slab, suggesting the image of light streaming through clouds and leaves on a sunny day. Light pierces through holes in the cloud layer, where it is then diffused and guided by the hanging panels to create a soft, glowing effect.



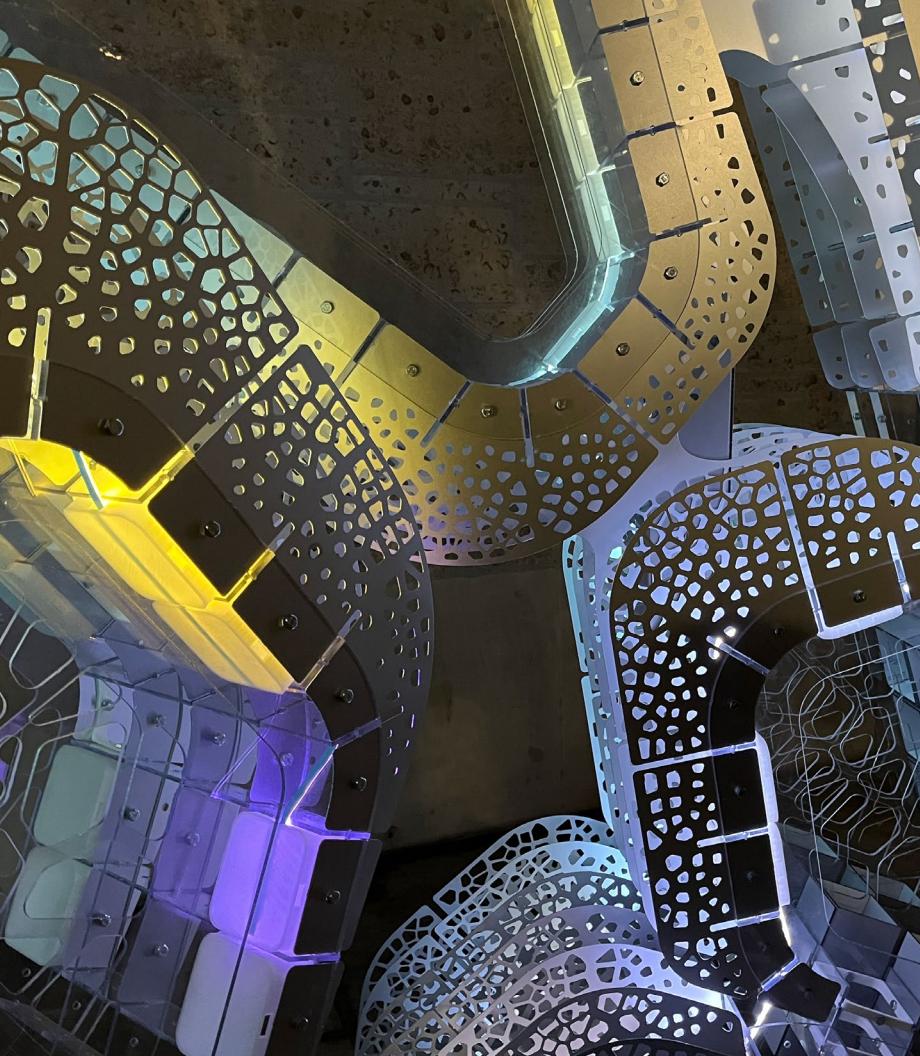
# WAFFLE HAUS

Advanced Design Studio  
Instructor\_Kory Bieg

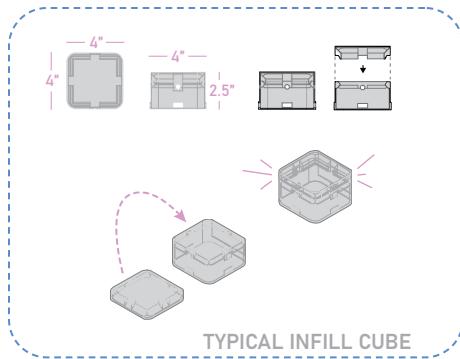
310 Inner Campus Drive  
University of Texas at Austin  
Austin, TX

Serving as the entry and backdrop for a VR exhibit, this project was a studio-wide exploration into the role of AI and advanced fabrication in architecture. Using AI-generated images for inspiration and brief sketches, we individually developed ideas based on precedents before joining together to finalize and fabricate a singular design.

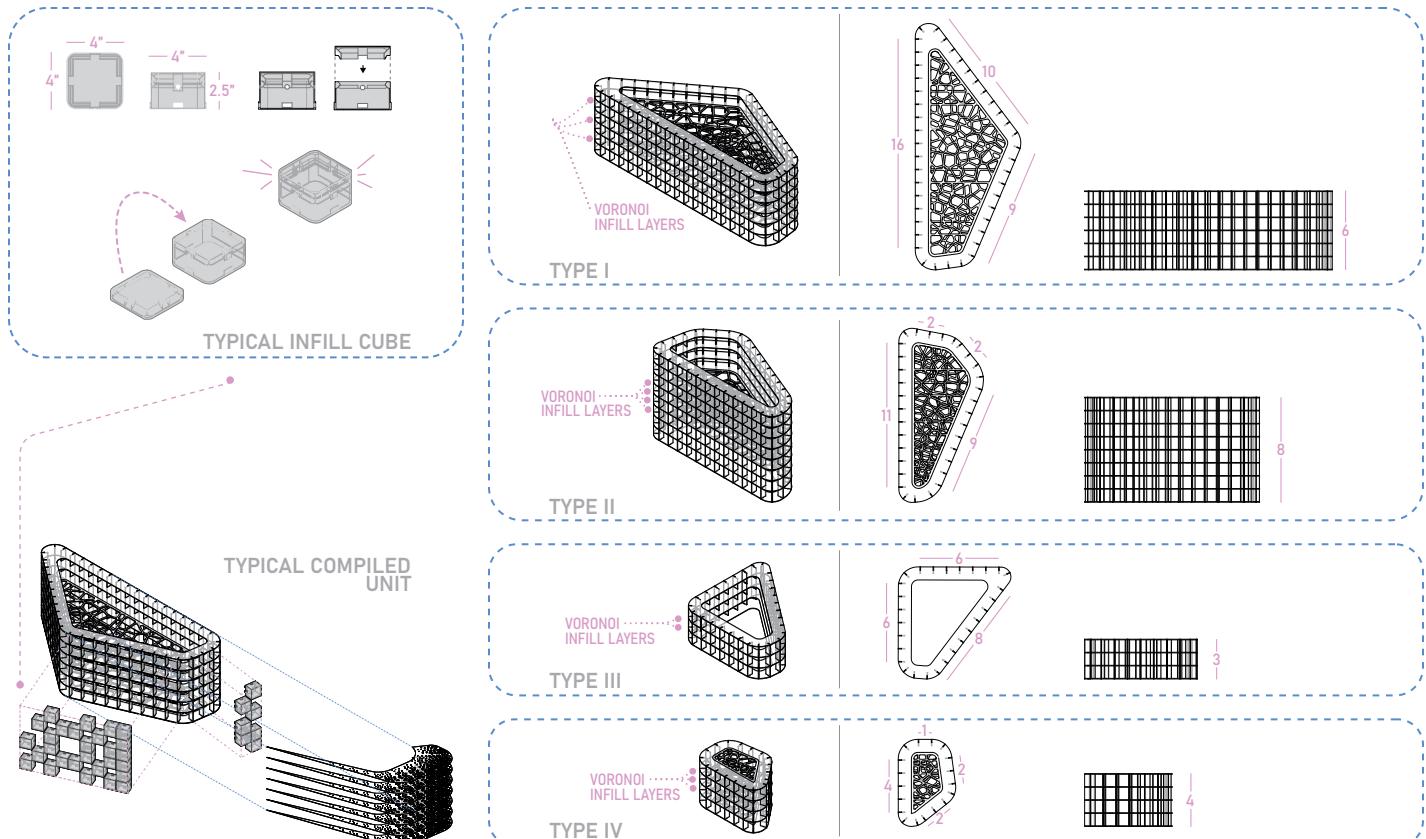
In the unified phase of this project, I took on a major role in the fabrication of the project, where I researched material possibilities, created fabrication files, and assisted in and oversaw most of the CNC milling and 3D printing. The final project consists of modular, waffled "boulders" cut from PETG sheets, adorned with aluminum fins and fastened with 3D-printed brackets and plugs.

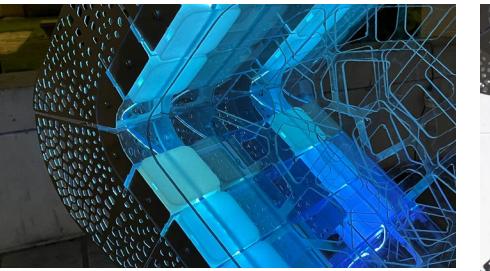


## BOULDER ASSEMBLY

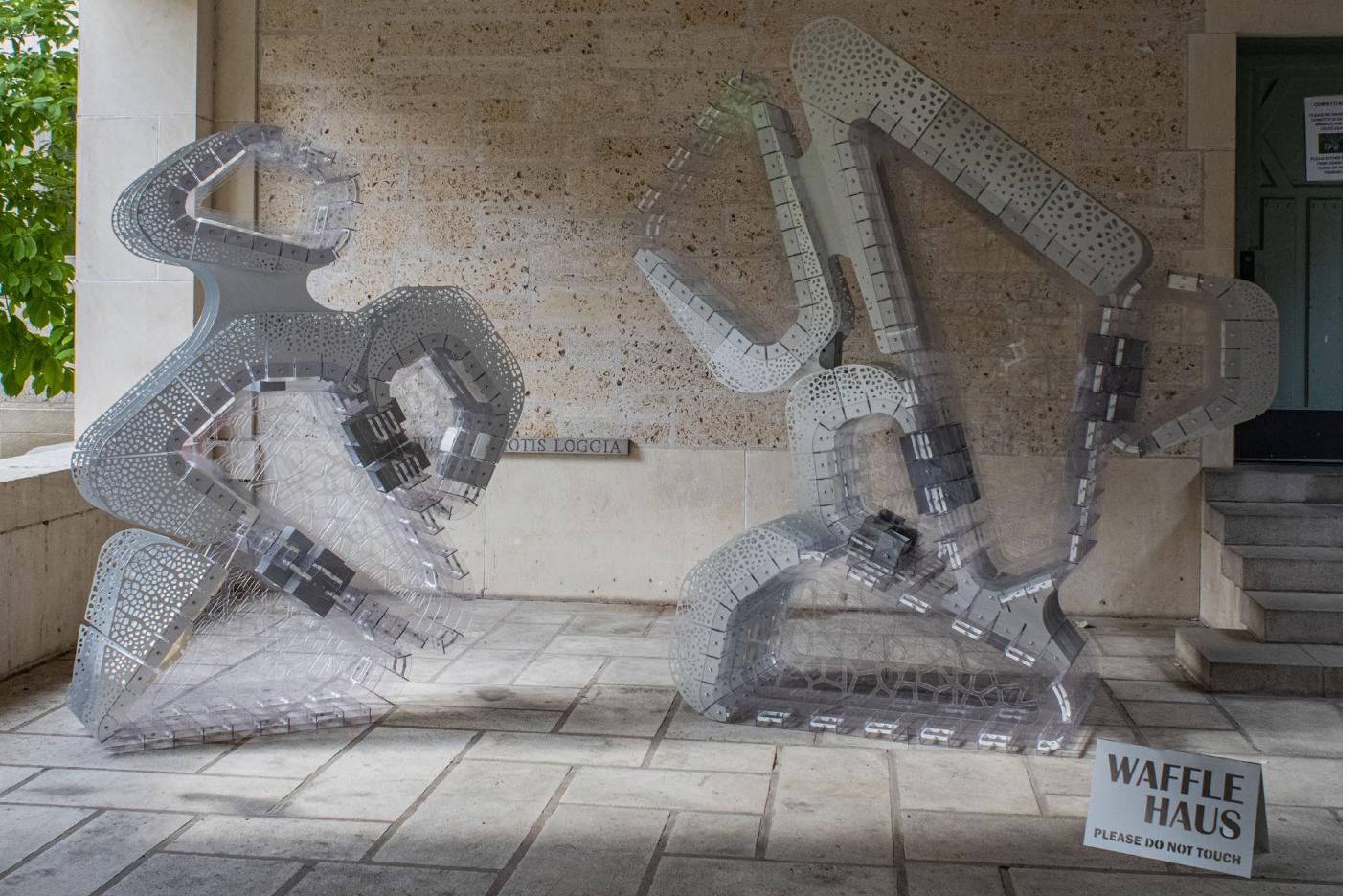


## BOULDER TYPOLOGIES





27/WAFFLE HAUS



WAFFLE HAUS/28

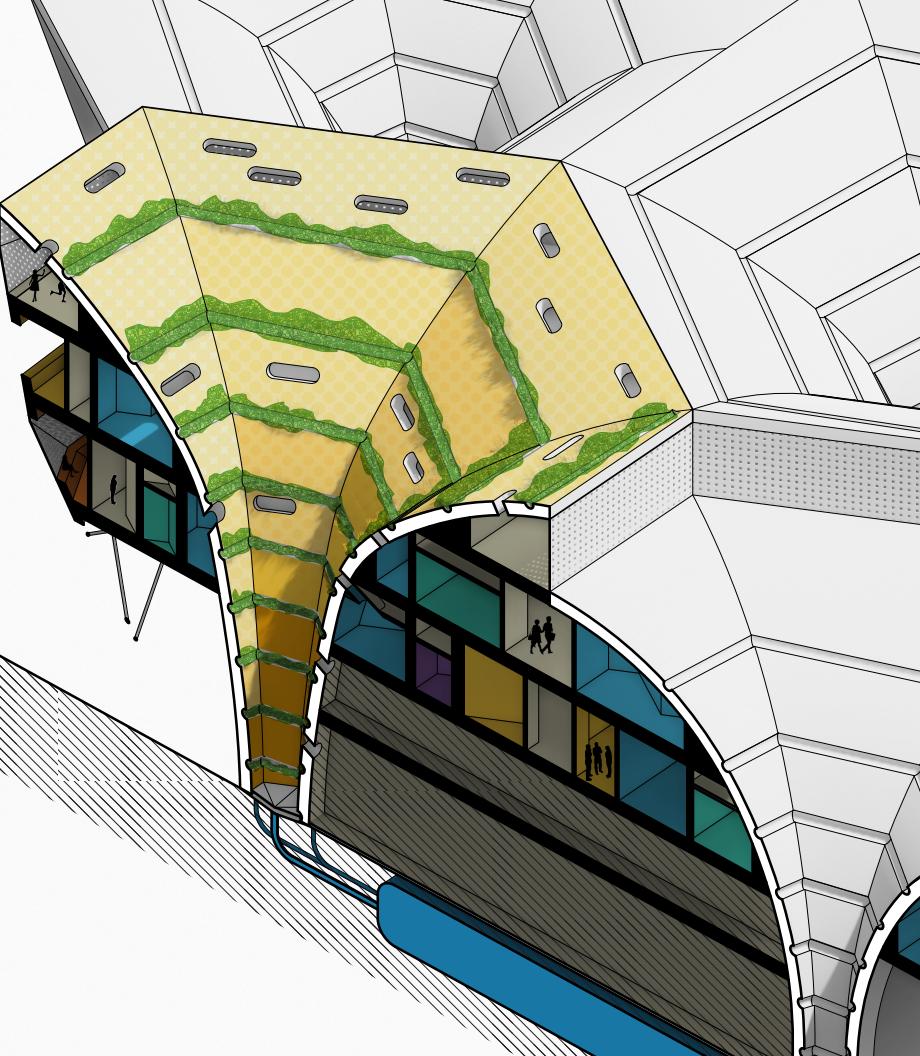
# Rain Catchers

Advanced Design Studio  
Instructor\_Clay Odom

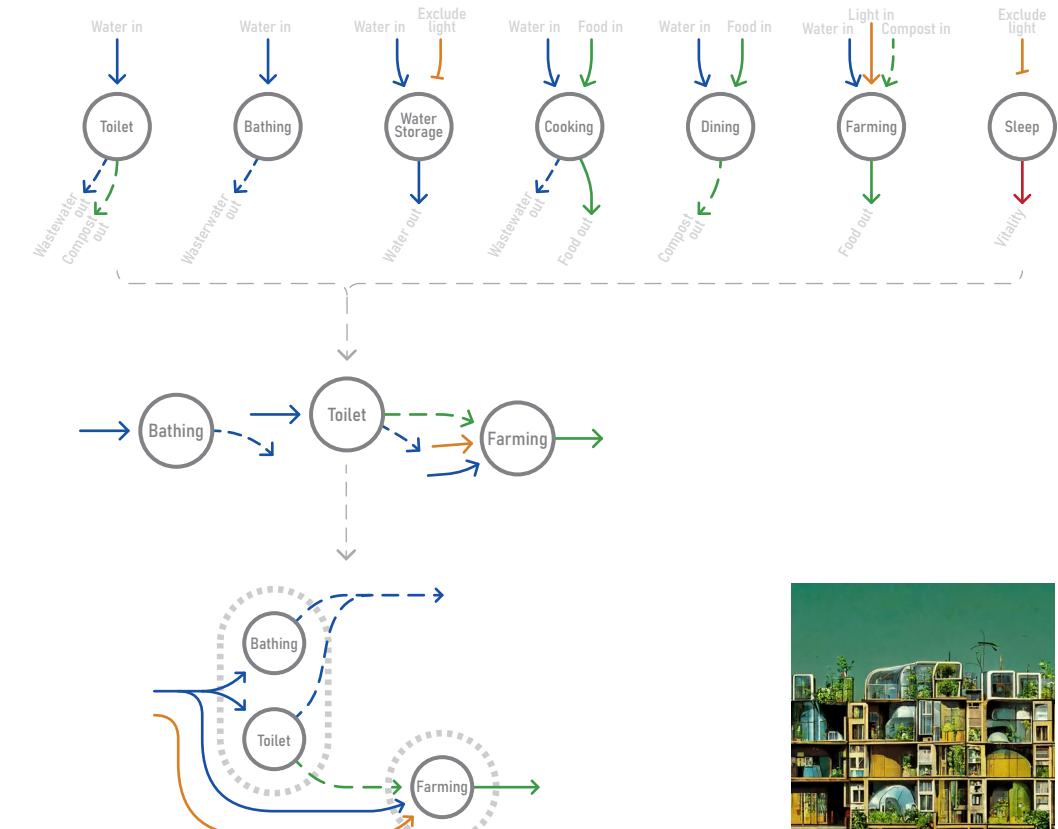
230 E 6th St  
Los Angeles, CA

With flower-like canopies spread across a city like a blooming clover, this project serves as a solution to the lack of both housing and water that Los Angeles faces. After exploring cyclical living systems with a diagrammatic method for analyzing resource flows, this project also utilized AI and parametric aggregation to explore how an adaptable building system could be implemented across an entire urban landscape.

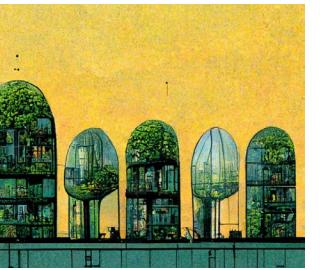
The main focus of this project lies within the canopies, which were built up layer-by-layer with several forms of sustainability and utility. Along with the capture of both sun and water, they also create a natural filter using foliage and gravity. This project further creates shelter for both people and wildlife alike in the protection of these blossoming parasols.



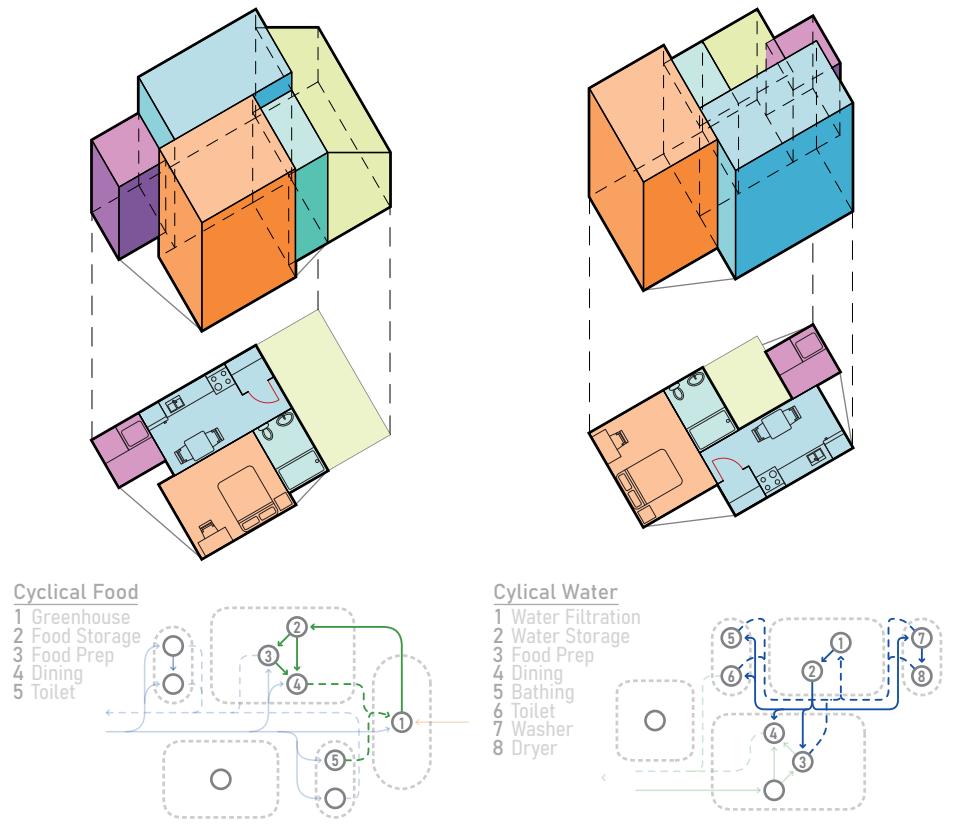
## LIVING SYSTEMS DIAGRAMS + AI SKETCHES



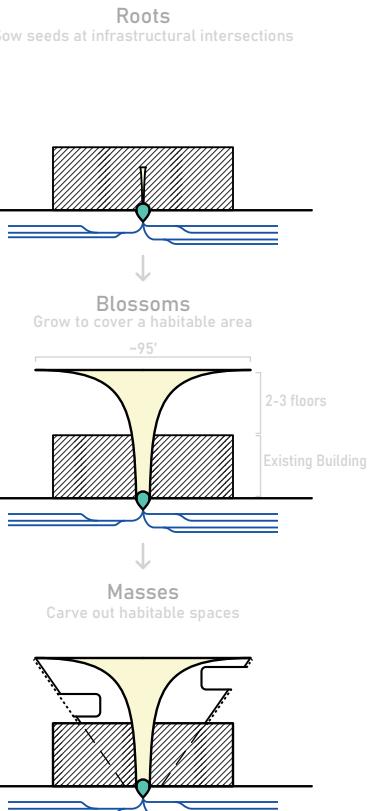
By first exploring the flow of resources during small-scale programs and then connecting them to build larger systems, I was able to eventually map the flows of resources throughout entire residencies or even communities. With the resulting diagrams, I found where cycles could arise.



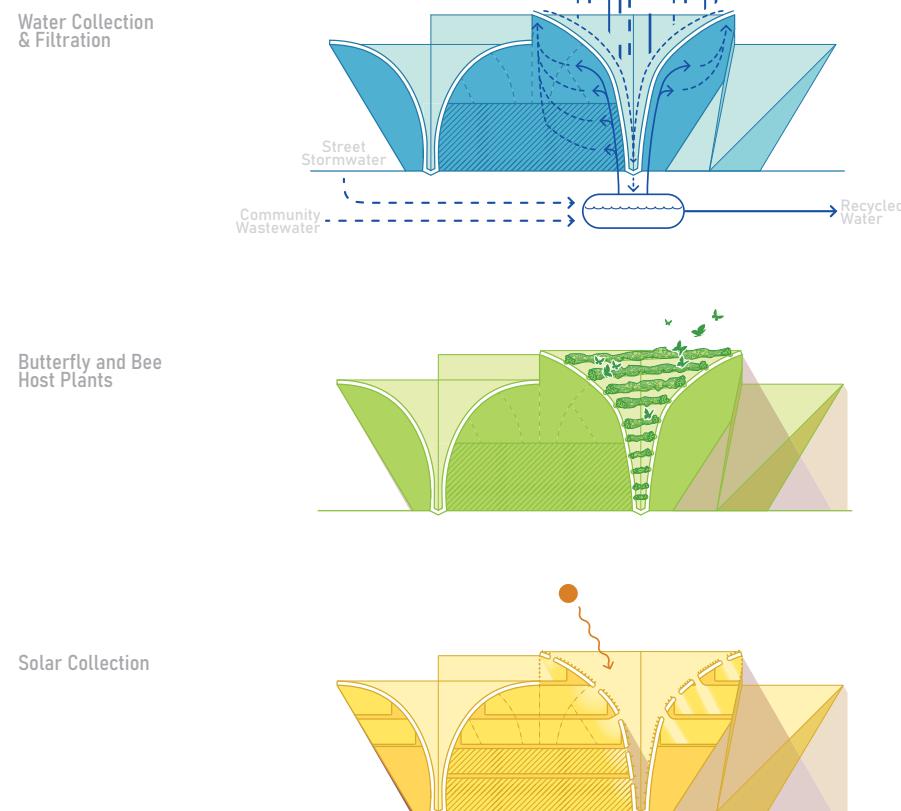
## HOUSE-SCALE LIVING SYSTEMS



## CANOPY FORMATION

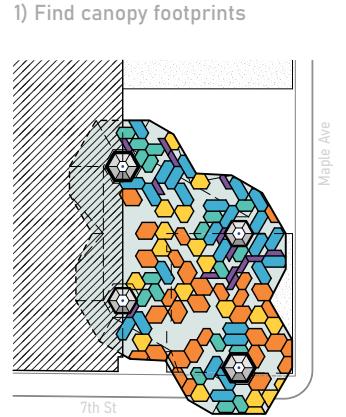
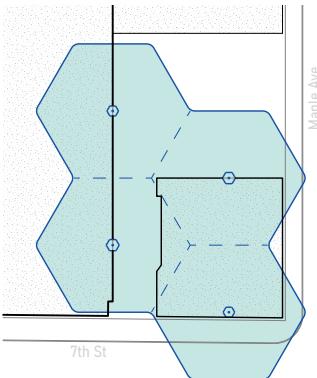


## CANOPY LAYERS

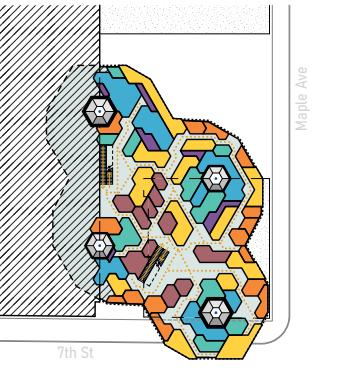
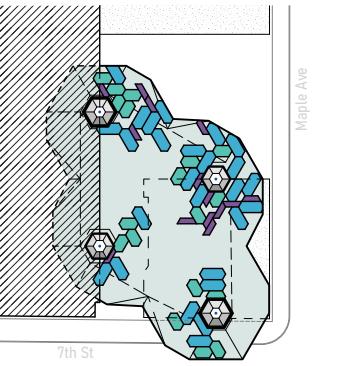


Focusing on a cyclical water system, the canopies are built with several layers of sustainability. During sparse days of rain, the canopies capture downfall with their slopes. In dry seasons, the systems can instead be used to recycle wastewater. A spiraling trough of native plants functions as a form of mechanical filter for this, while also attracting native insects with butterfly and bee host plants. Between the planted troughs, solar panels are utilized to capture energy on Los Angeles' many sunny days. A few perforations are scattered around the inside of each canopy, bringing light into the interior of the buildings.

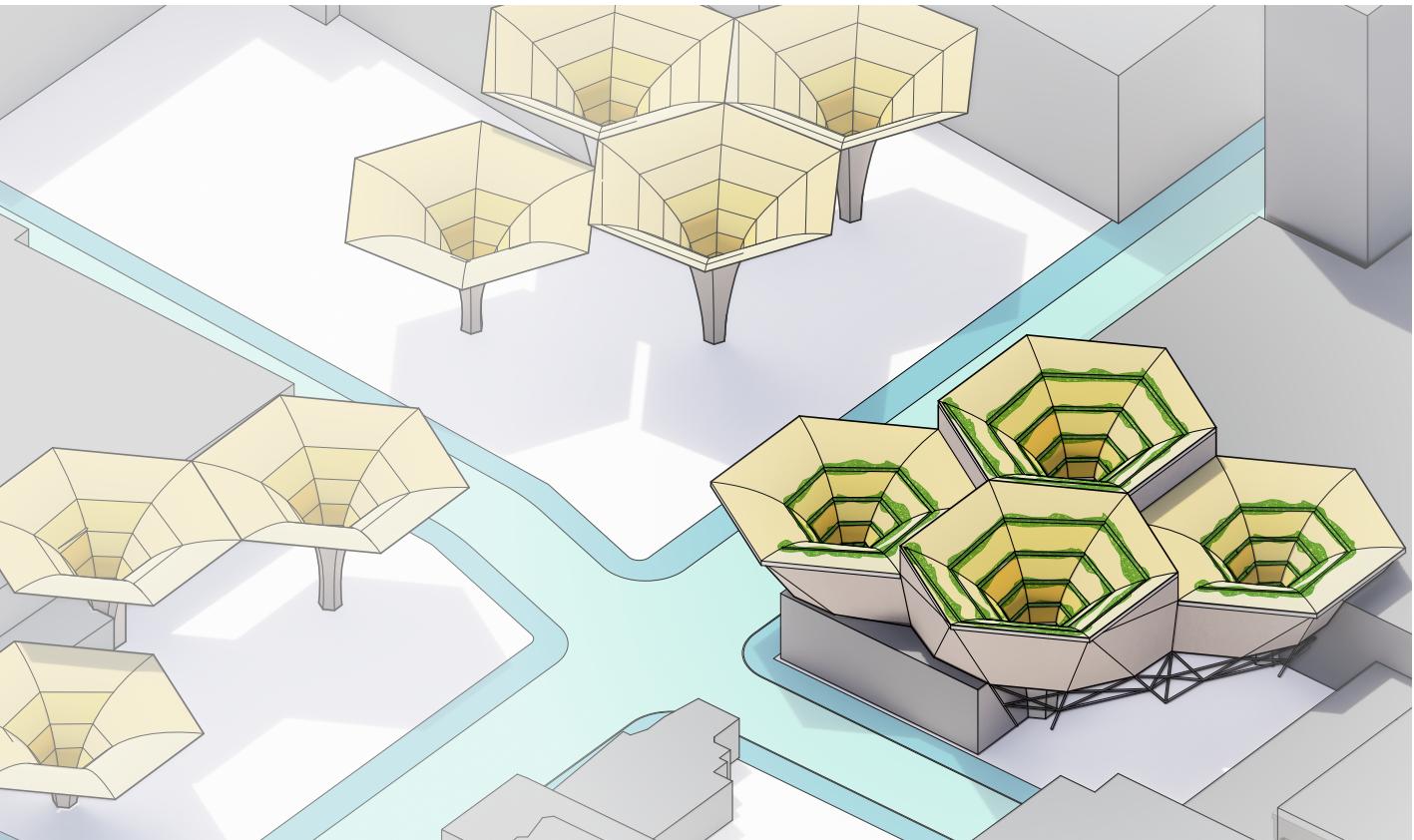
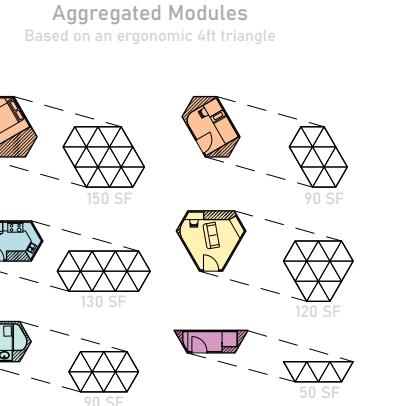
## RESIDENTIAL UNITS + AGGREGATION PROCESS



33/RAINCATCHERS

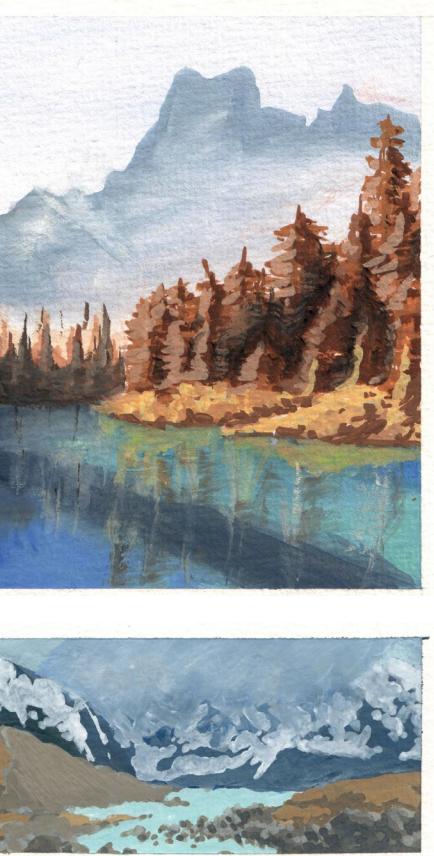


4) Consolidate modules



RAINCATCHERS/34

# ARTWORK



I've been exploring art in all sorts of different mediums since I was a kid. Though I enjoy using most mediums, my favorites are ink, watercolor, gouache, and linocut printing. This page shows a few small pieces I did as practice, printed at roughly their full size.



Thanks for taking a look!