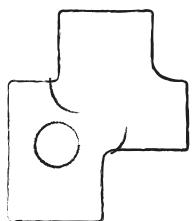


Ali Kazmaz

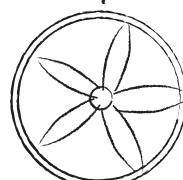
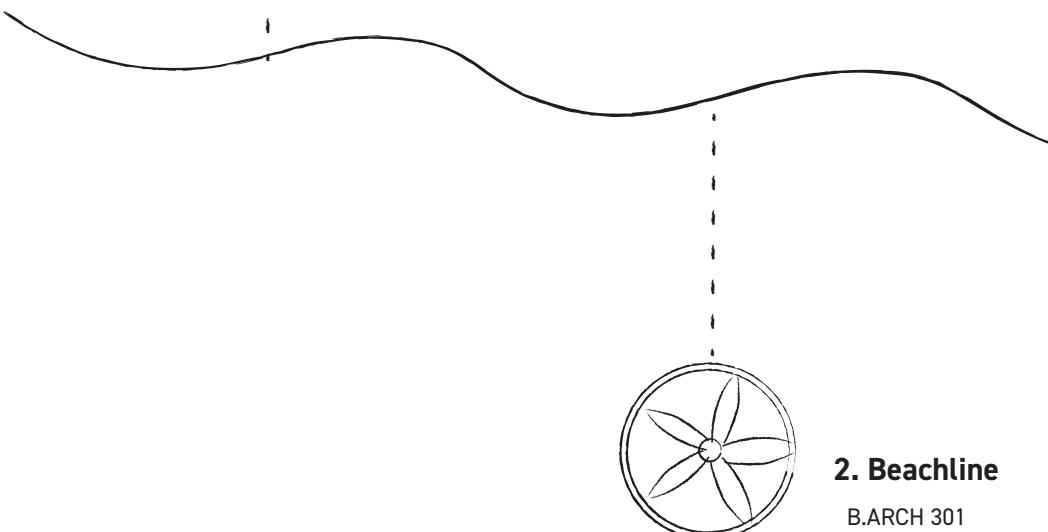


Selected Works



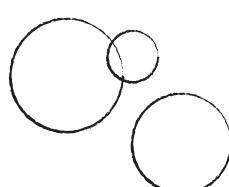
1. Project Pathways

Initiative 99 Competition
Honorable Mention



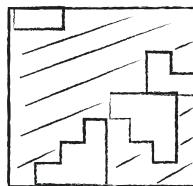
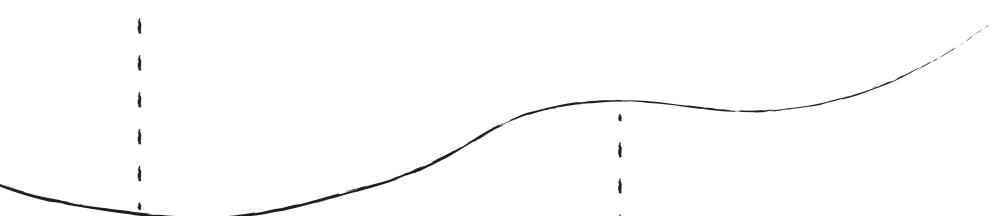
2. Beachline

B.ARCH 301



3. Ripple

B.ARCH 302



4. Galena Park

B.ARCH 401

Project Pathways

Initiative 99 Competition- Honorable Mention

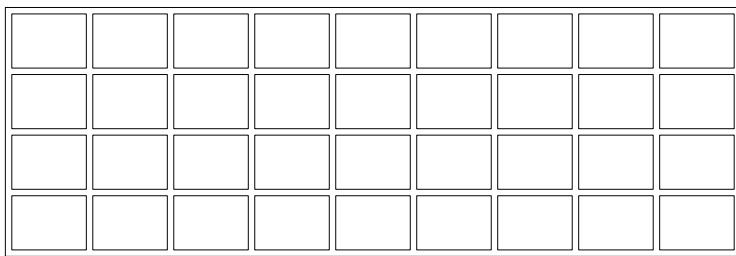
Isabela Canavati, Vitoria Carneiro Zhu, Ali Kazmaz

In the U.S., around 653,000 people are homeless. Globally, that number nears 150 million. As the population rises and construction costs soar, these figures will only climb. The housing crisis demands urgent solutions—and 3D printing in construction offers a tangible, unprecedented way forward.

ICON's Initiative 99 competition challenged architects and designers worldwide to imagine affordable, dignified housing made with 3D printing technology. The goal? Make high-quality homes accessible for under \$99,000.

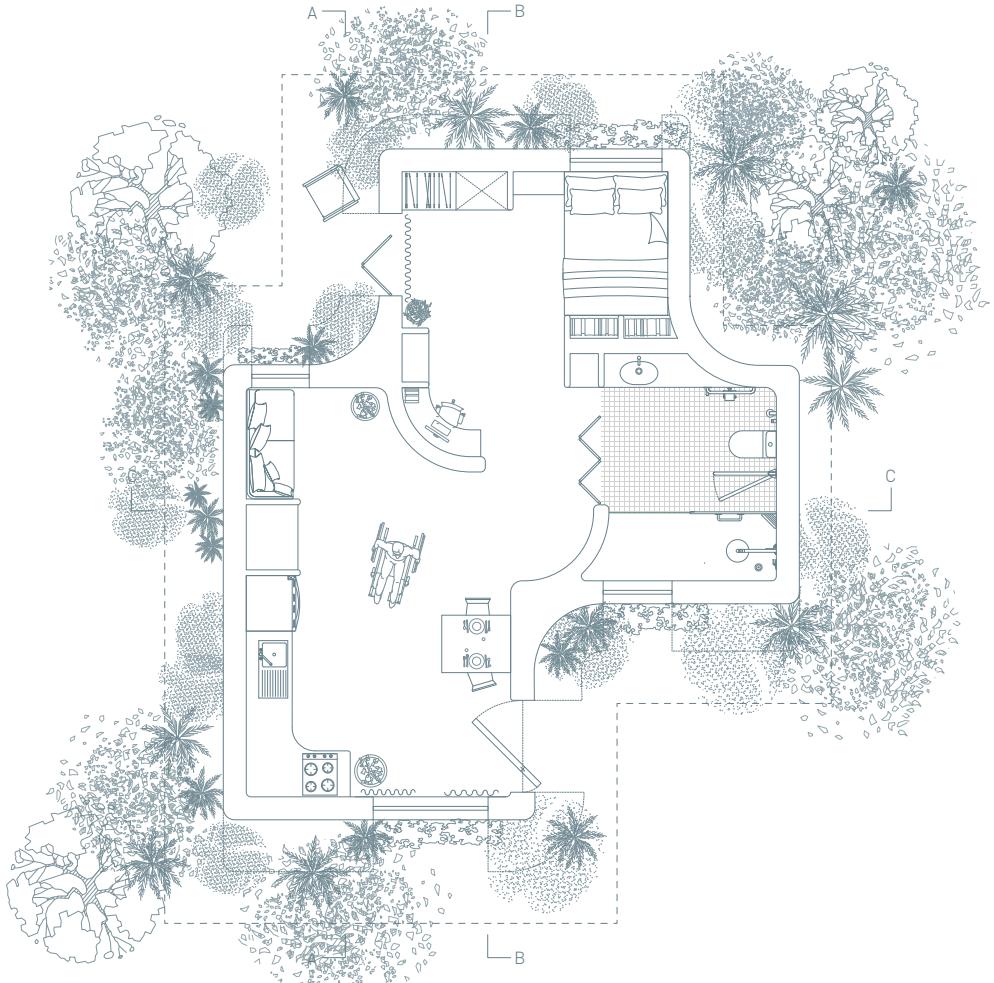


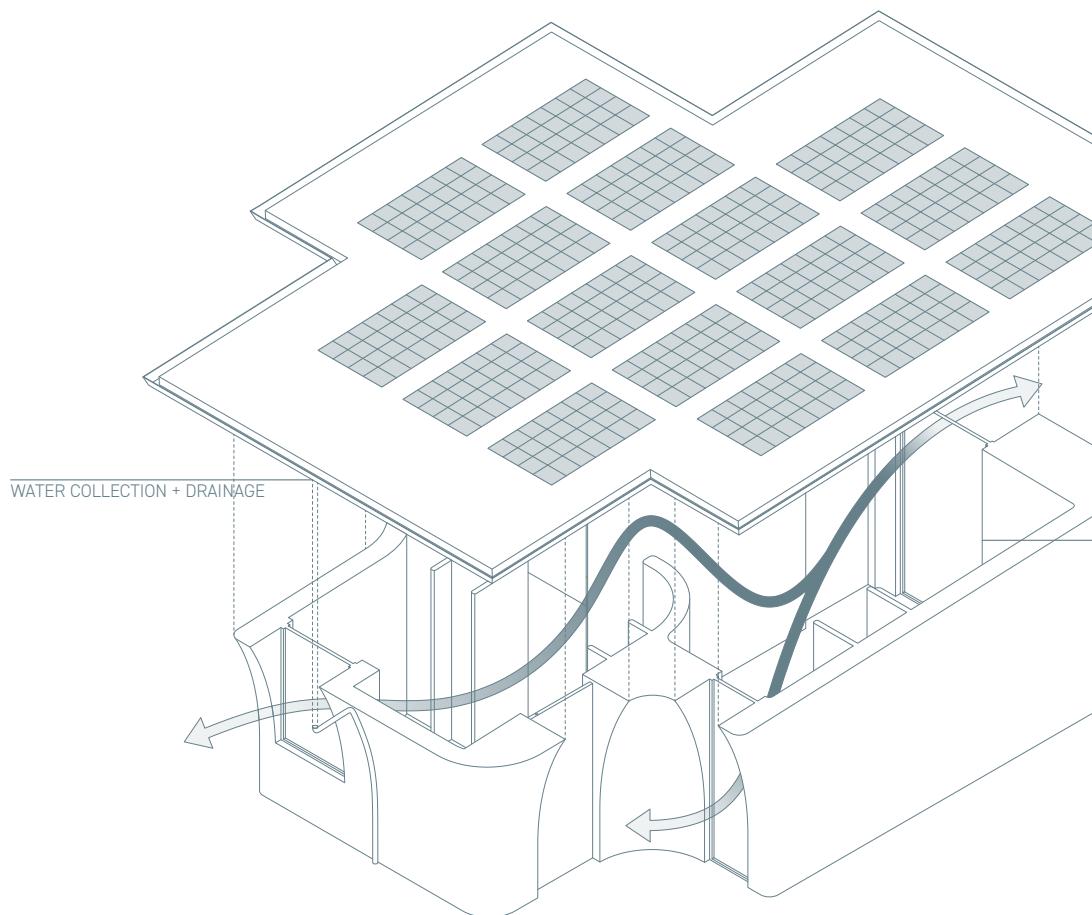


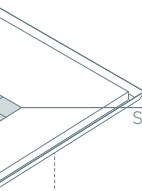


In designing a house under 99,000 USD, we elected to assume a 250 USD per sqft price point, which resulted in a 400 sqft house. When designing a singular unit, we foresaw a way in which these units would aggregate to create public and semi-public zones. We divided the 100L x 38W ft print bed into segments of 100 square feet, then combined accordingly into 4-segment units to create these zones that envelope the private homes.

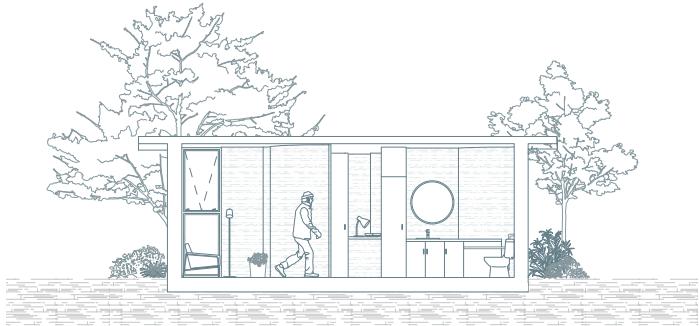






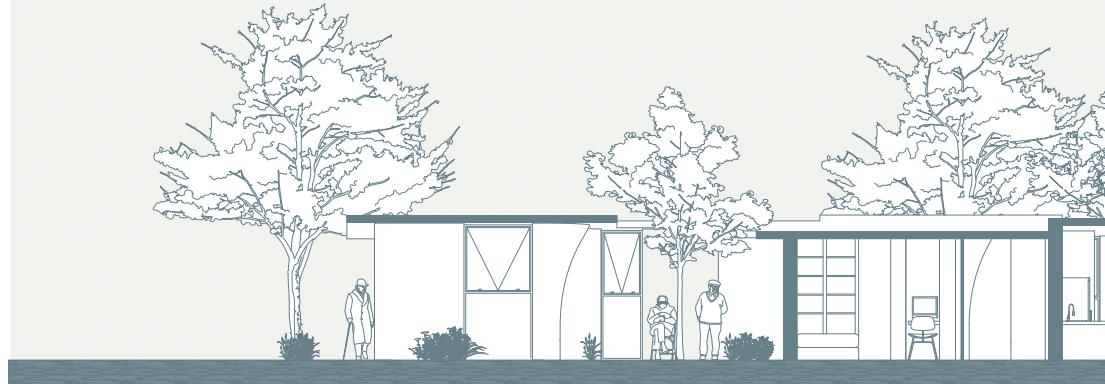


SOLAR PANEL READINESS



CROSS-VENTILATION SYSTEM







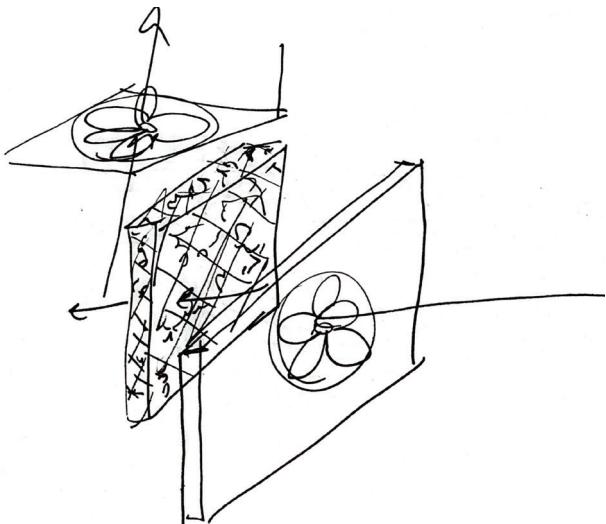
Beachline

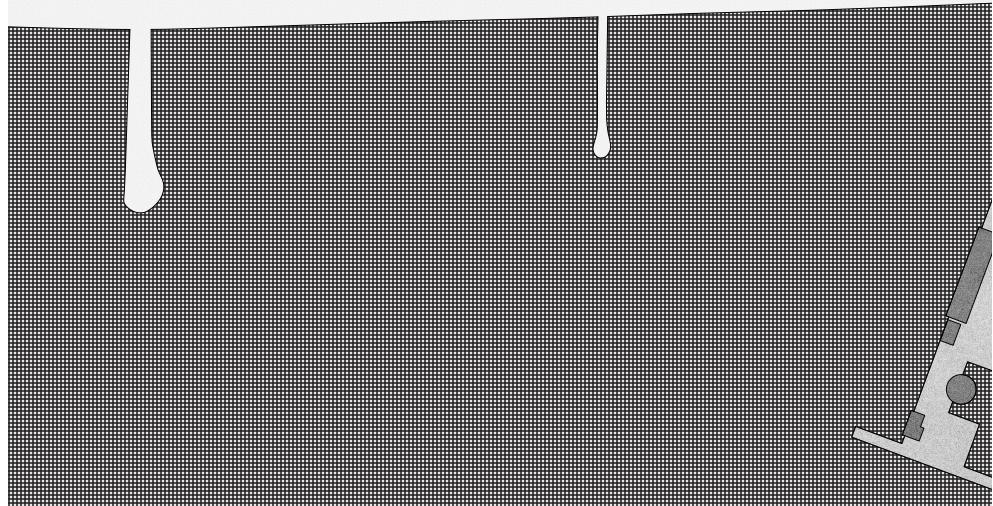
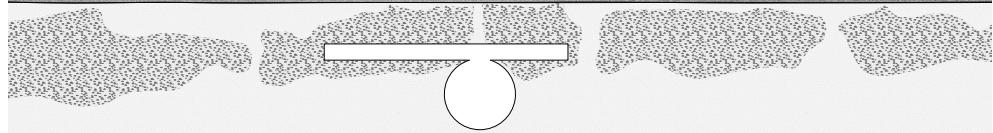
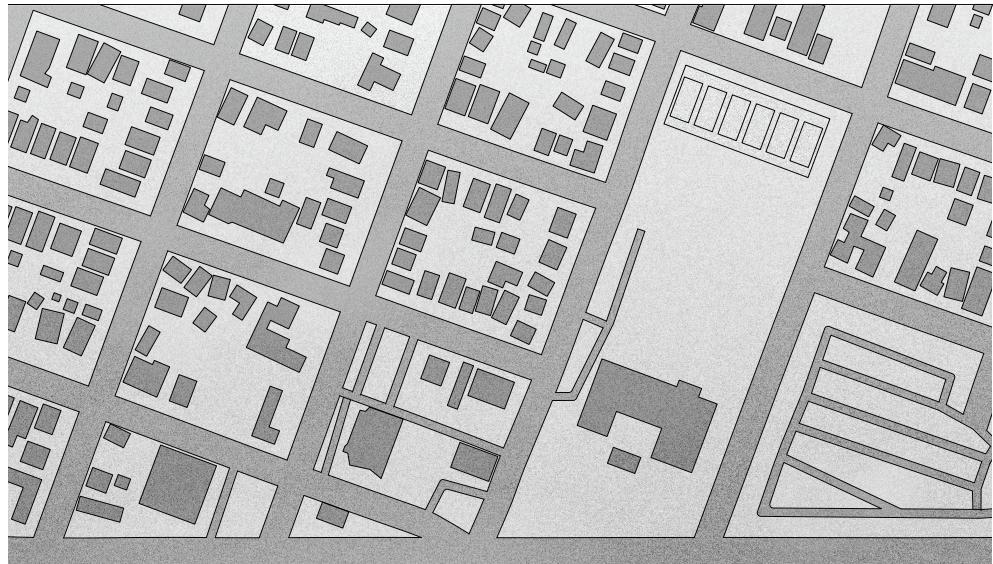
B.ARCH 301

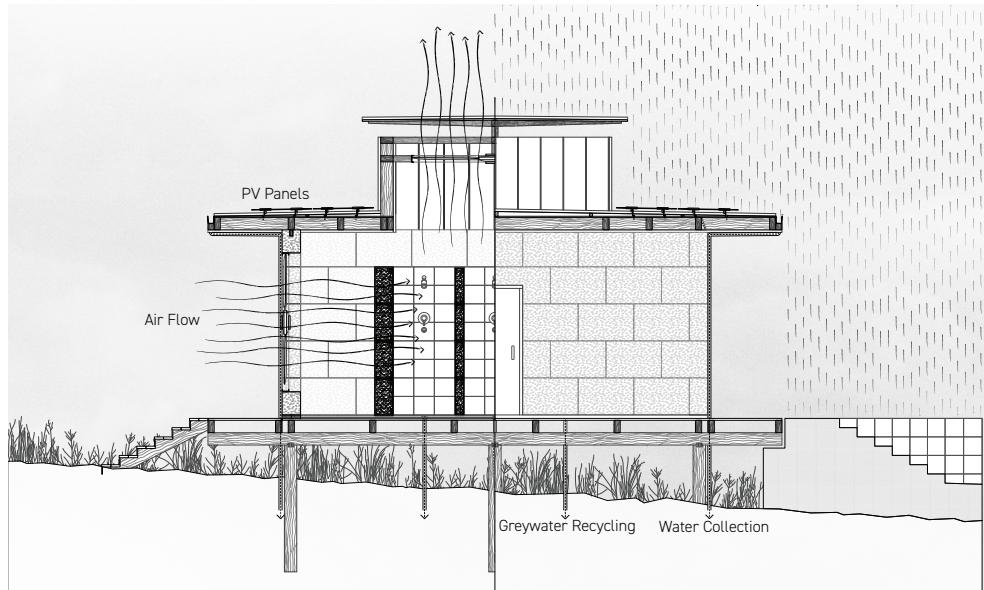
Taught by:
Georgina Baronian

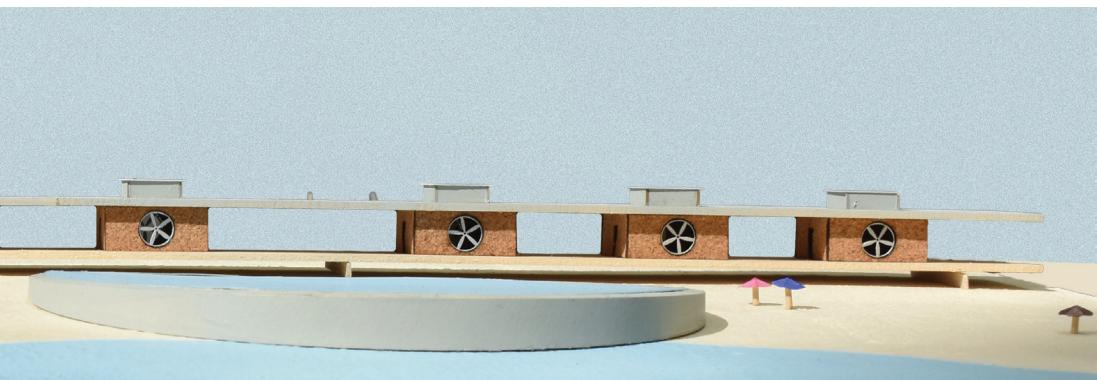
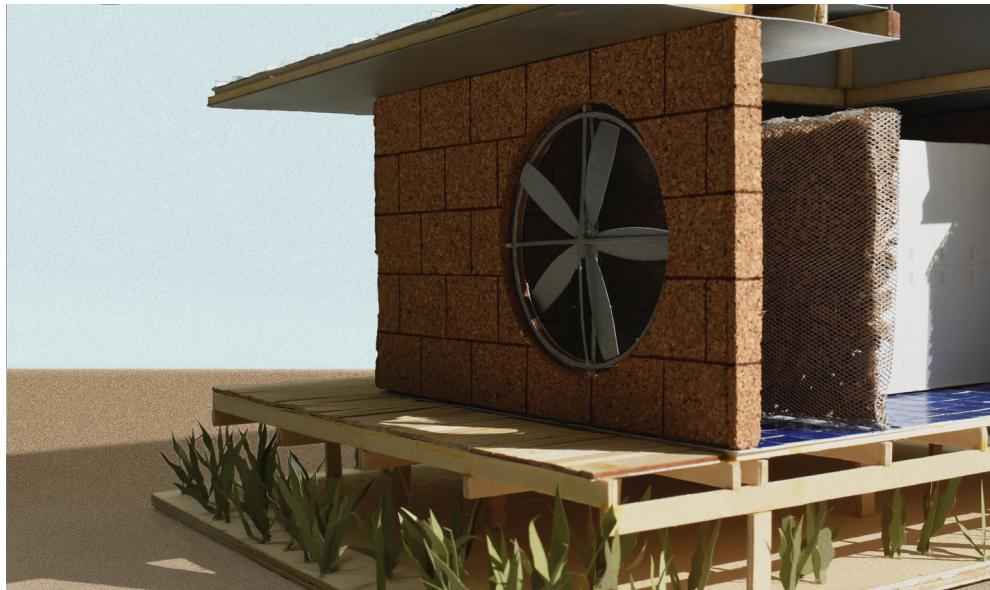
Stuti Mehta, Ali Kazmaz

Galveston oceanfront is primarily commercial. The beach is open for public use, and people often grab their umbrellas and spend their day there. However, **there are no public facilities that service the beachgoers.** We are proposing a comfort station, with public bathrooms, changing





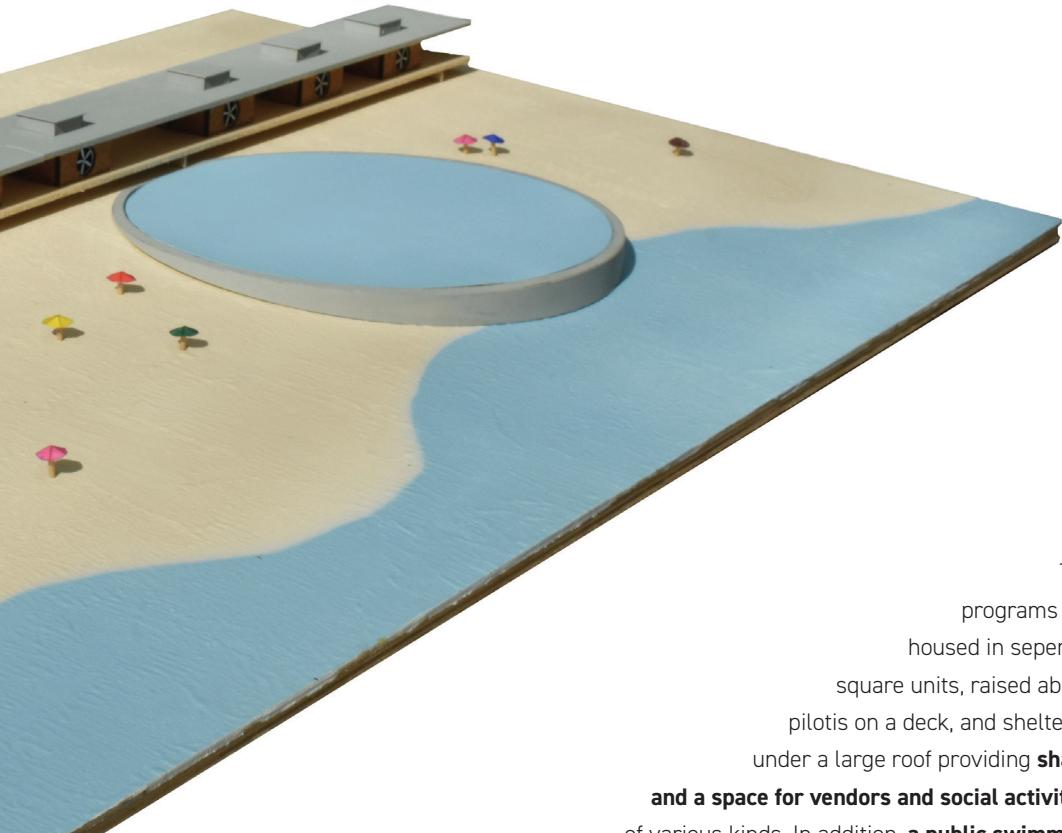




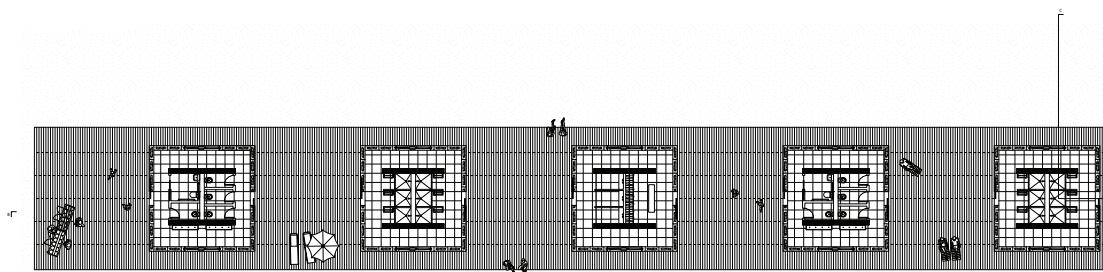
We were drawn to **cork** for its versatility—**fire-resistant, water-resistant, and buoyant**. With the studio's emphasis on cork stood out for its ability to **absorb humidity**. As air moves through humid cork walls, **evaporative cooling** occurs for HVAC. To support this, our design includes **large low-speed fans** on the exterior to enhance airflow through the **granulated cork**.



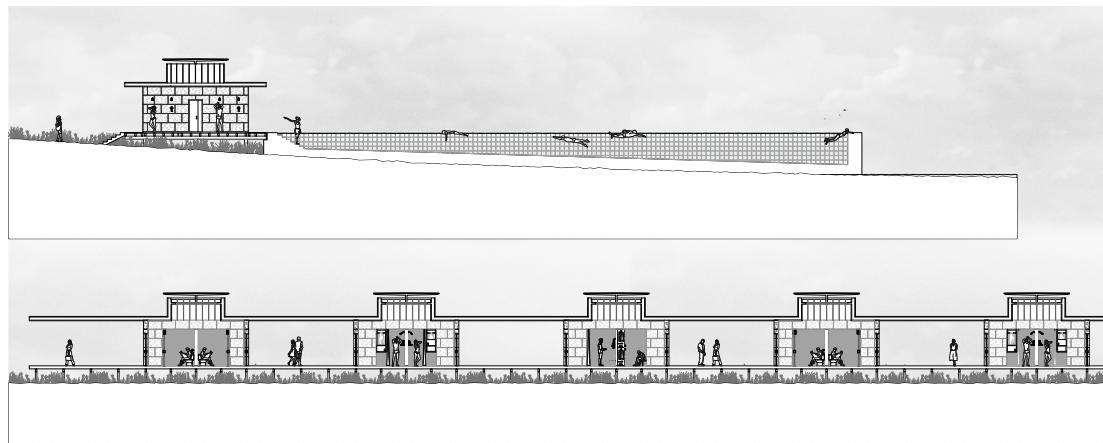
asis on **natural ventilation**,
occurs, reducing the need



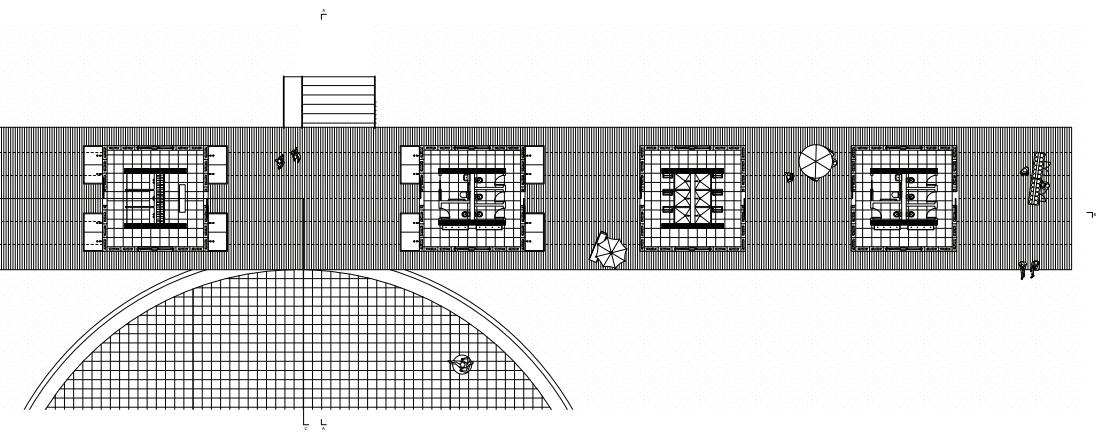
The programs are housed in separate square units, raised above pilotis on a deck, and sheltered under a large roof providing **shade and a space for vendors and social activities** of various kinds. In addition, a **public swimming pool** connects to the comfort station, providing a **safer and cleaner alternative** to Galveston ocean water.



Bar Plan View



Bar Section A-A and Section B-B



Ripple

B.ARCH 302

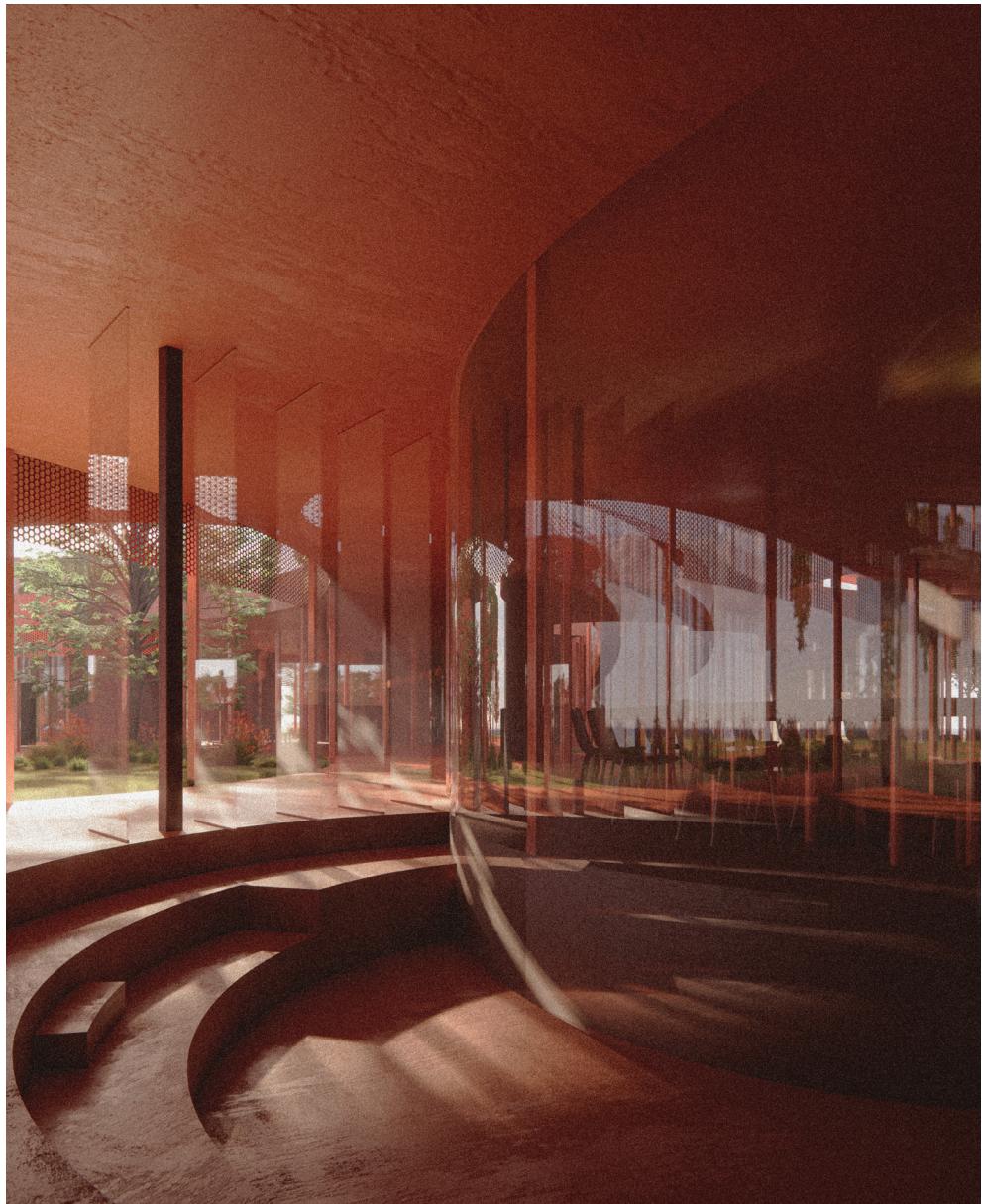
Taught by:
Andrew Cologny

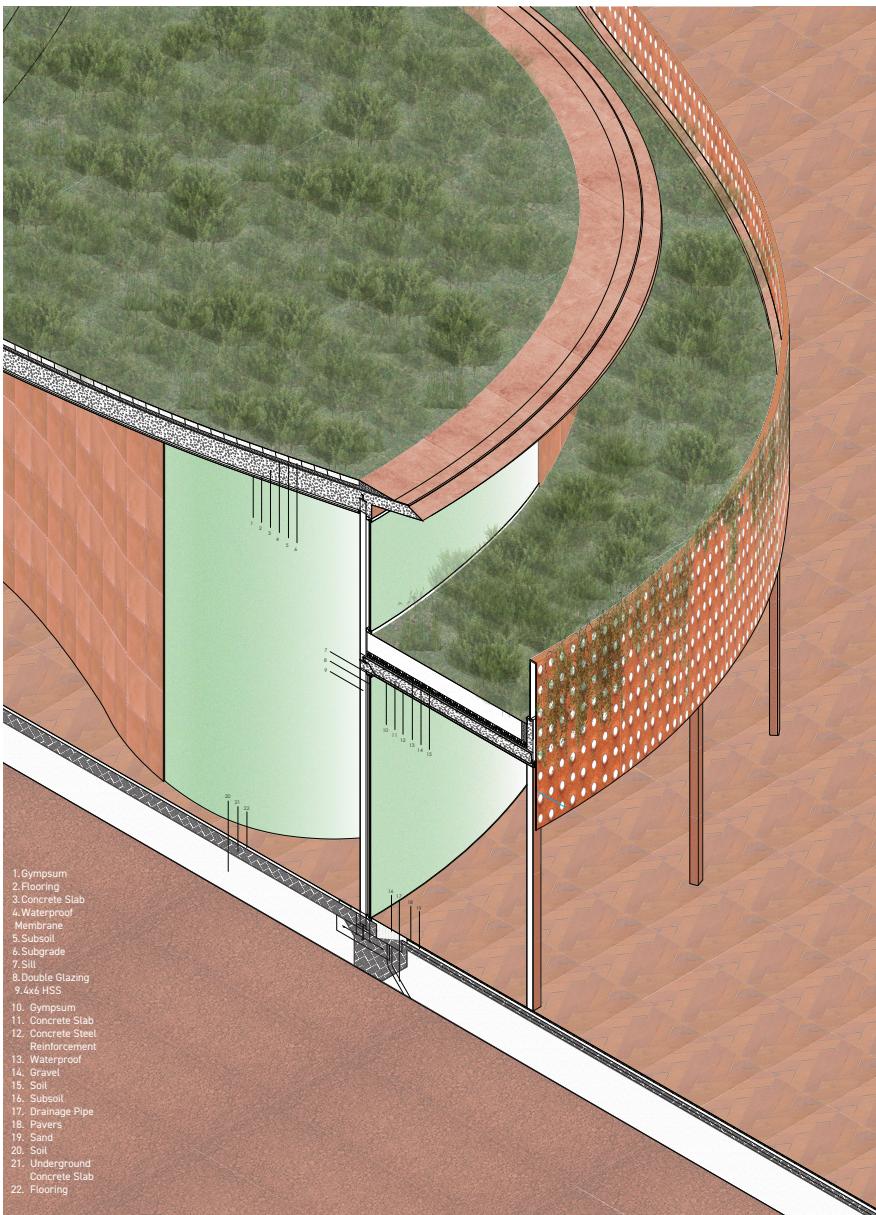
Khadija Derouiche, Ali
Kazmaz

RIPPLE is a school proposal
for Dillard, Georgia,

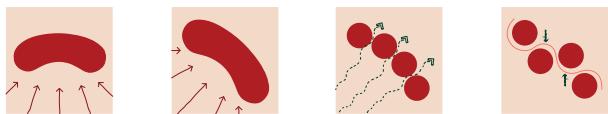
designed with sensitivity to
the social and environmen-
tal impact of large-scale
construction.

With a moderate climate and
a school year from August to
May, the building addresses
a balanced need for heating
and cooling. It uses passive
strategies—welcoming solar
gain in winter and maximiz-
ing shade and ventilation in

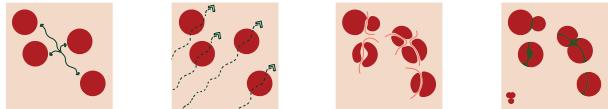




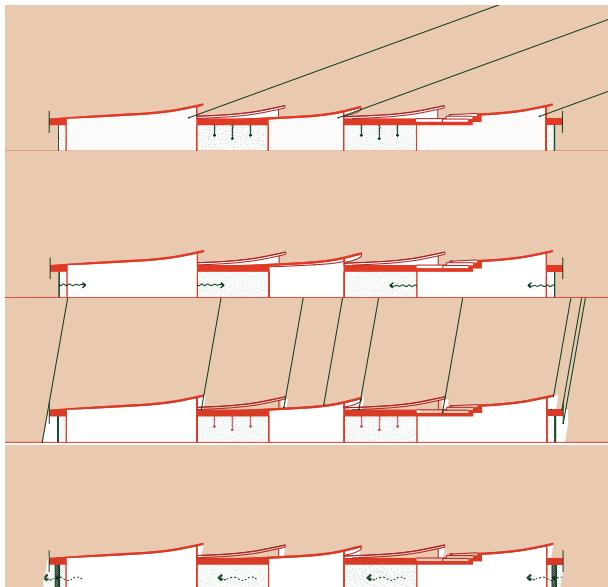
The plan consists of seven conditioned circles housing the main programs, connected by semi-conditioned spaces with operable louvers. These allow southwest breezes in for passive summer cooling and let heat escape through the roof.

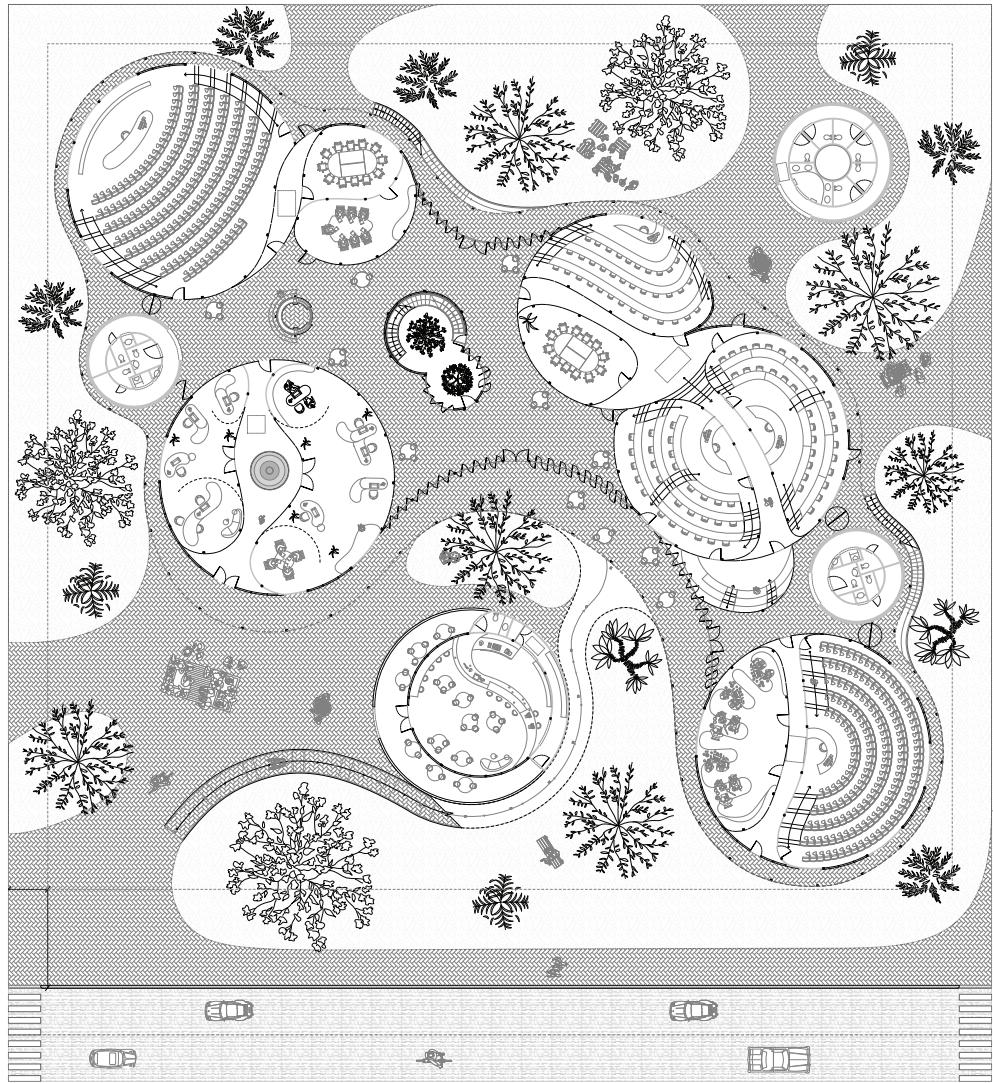


A large green roof with overhangs absorbs solar radiation in summer, while the conditioned volumes puncture through to capture low-angle winter sun—shielded in summer by 3-foot overhangs. RIPPLE reduces AC loads by **blurring indoor-outdoor boundaries** and embracing environmental transitions over sealed, airtight spaces.



In this studio, we approached design unconventionally—**starting with datums**, or spatial barriers, rather than walls and openings. This shaped how the building emerged.

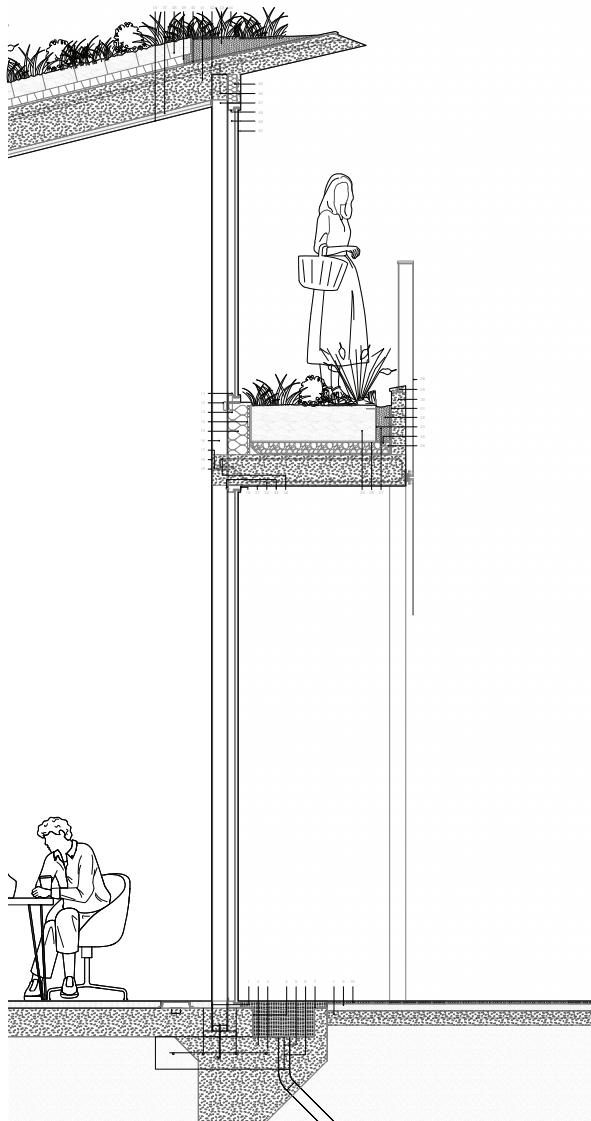




Plan Ground Floor

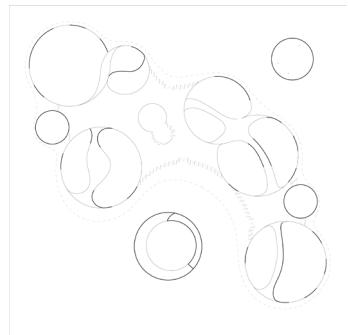


Plan Roof

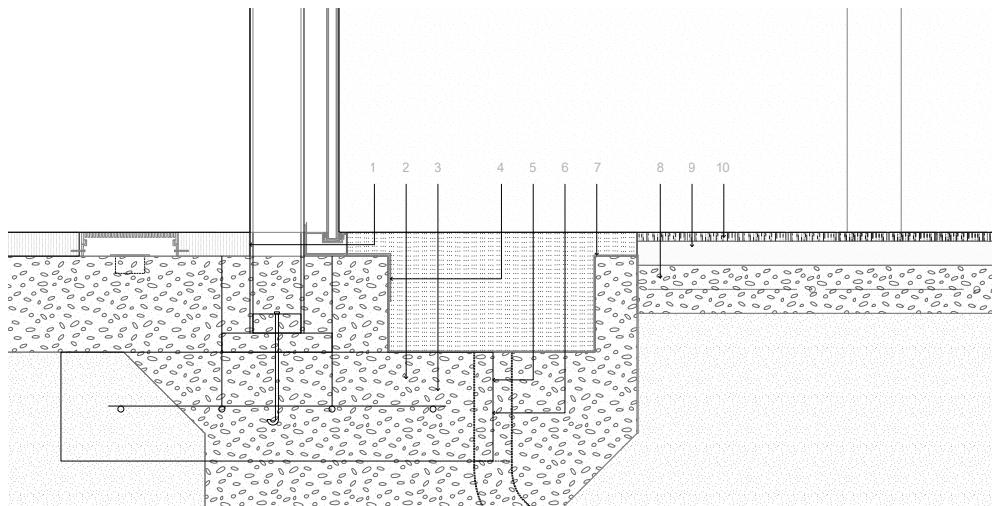
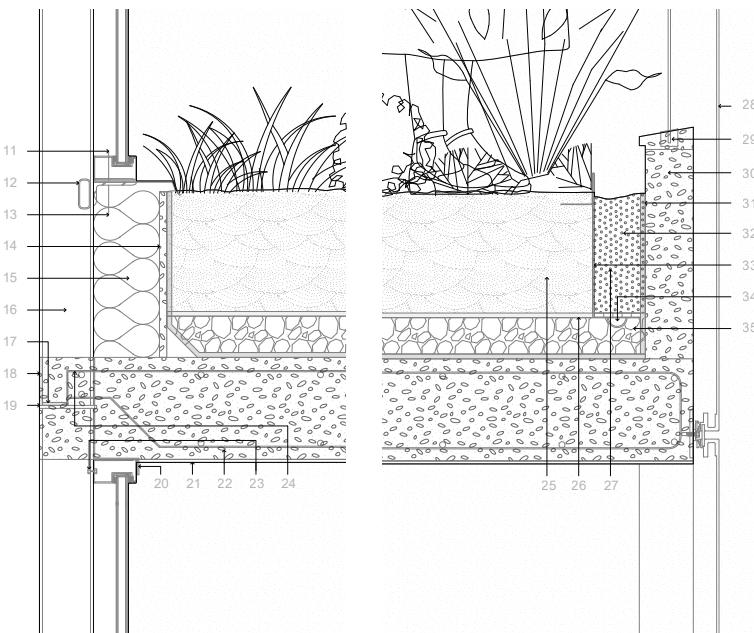


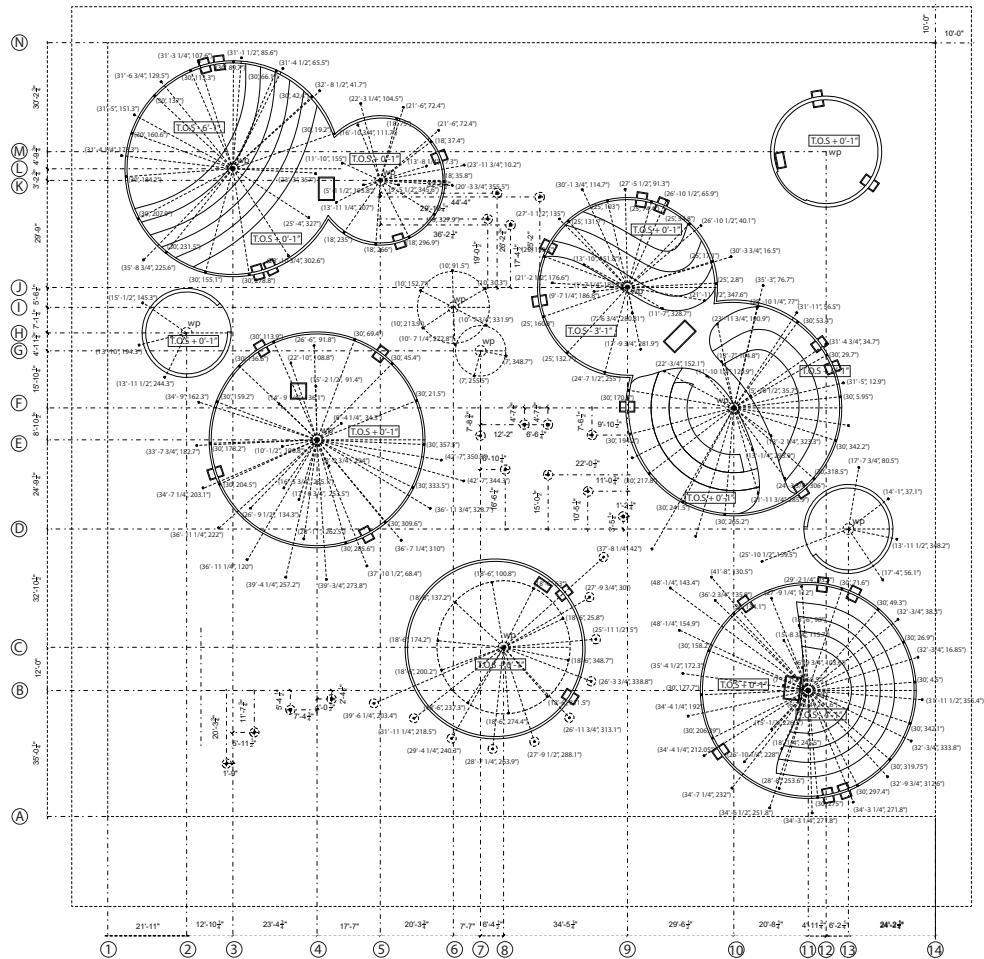
1. terracotta flooring
2. concrete slab
3. column foundation
4. flashing
5. drain pipe-storm reservoir
6. metal rebars
7. weather membrane
8. concrete bed 4"
9. packed sand 2"
10. terracotta pavers
11. flashing
12. metal tube 2.5" x 1"
13. galvanized steel angle
14. sheathing
15. insulation R-28
16. HSS beam 4"x6"
17. pour stop
18. paint-finish
19. welded beam
20. flashing
21. exterior ceiling
22. steel rebars

Glass Walls



- 23. bolt
- 24. short rebar
- 25. subgrade
- semi-intensive
- 26. root resistant waterproofing
- 27. concrete
- 28. perforated steel 3/16"
- 29. concrete parapet cap
- 30. concrete
- 31. weathering membrane
- 32. green roof perimeter gravel
- 33. metal curb
- 34. drain pipe
- 35. green roof drain





Construction Foundation Plan



Galena Park

B.ARCH 401

Taught by:

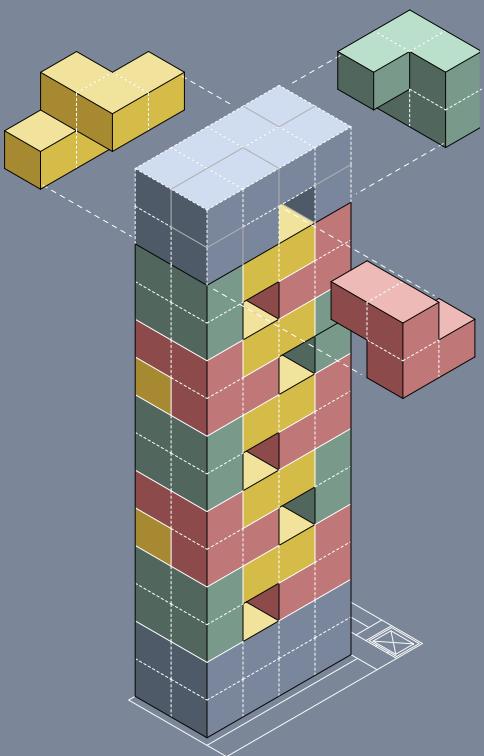
Albert Pope

Eliz Ipek Alp, Sebastian

Merlo, Ali Kazmaz

Intervention on an urban
scale.

Community, environmental,
social solutions
with design on a city
scale.



GALENA PARK: HOLLAND CORRIDOR

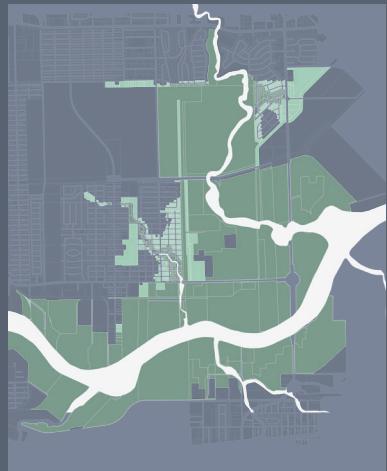
OVERVIEW

Galena Park, TX, located near the Houston Ship Channel, has a long history of industrial activity, including oil refineries and chemical plants that have driven the local economy. However, this industrial presence has also led to serious environmental issues, particularly water contamination from toxic pollutants like heavy metals, petroleum products, and organic chemicals.

These pollutants have harmed local ecosystems and posed significant public health risks. The predominantly low-income, Hispanic community in Galena Park is especially vulnerable, facing limited resources, political underrepresentation, rising healthcare costs, and declining property values. Although remediation efforts are underway, pollution continues to hinder economic growth and investment in the area.



GALENA PARK FLOOD RISK MAP -

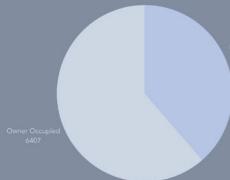


ANCHORED STABILITY: HOUSING TENURE

Housing tenure in Galena Park reflects both stability and vulnerability. With 68% of homes owner-occupied and a median home value of \$100,000 in 2022, the community shows affordability and resilience. Homeownership anchors families, offering identity, security, and long-term investment opportunities, fostering a strong sense of place.

However, 32% of residents rent, often in lower-quality housing in flood-prone areas. These neighborhoods lack the stability and security of homeownership, exposing renters to disparities in infrastructure and housing standards. This divide highlights the need to preserve the strengths of homeownership while addressing renters' vulnerabilities.

RENT VS OWN



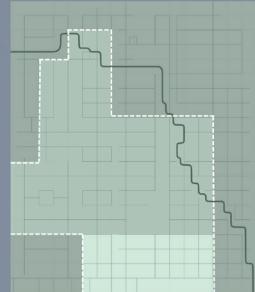
100K

Median Home Value
2022

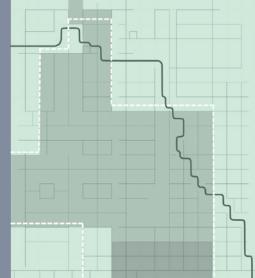
68%

Homeownership
2022

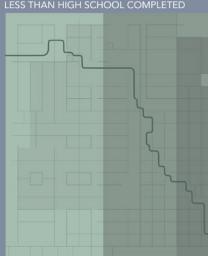
DENSITY OF OWNER OCCUPIED



DENSITY OF RENT OCCUPIED



FOREIGN BORN + LESS THAN HIGH SCHOOL COMPLETED

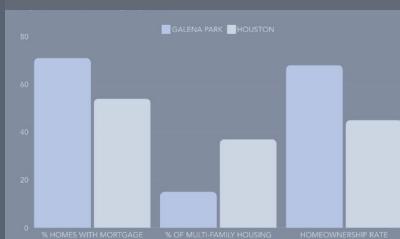


6%

Earned a Bachelor Degree
2023

35%

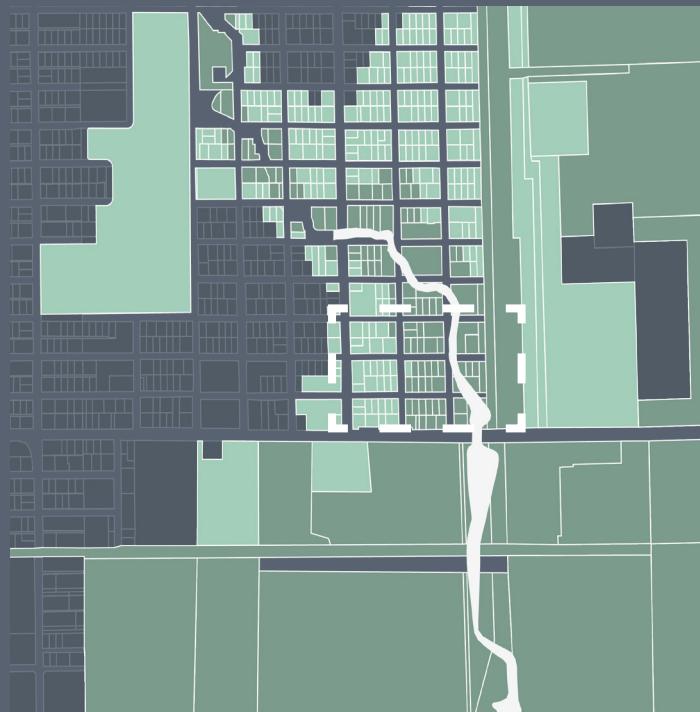
Are not US Citizens
2022



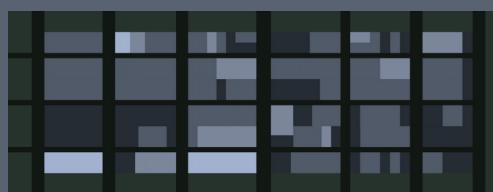
FRAGILE GROUNDS: FLOODING + HOUSING DEMOGRAPHIC SURVEY

The flooding map of Galena Park reveals a stark vulnerability along the east side of Holland Avenue, where areas near Panther Creek face significant flood risk. This aligns with housing data showing that much of the stock in these blocks is of poor or average quality, lacking the structural resilience to withstand environmental hazards.

This intersection of environmental and structural vulnerabilities underscores the need for a comprehensive approach—combining flood mitigation strategies like natural stormwater retention, permeable pavements, and resilient landscaping with housing upgrades and community support. Importantly, interventions must preserve the neighborhood's social fabric, ensuring improvements enhance rather than displace the community. This analysis informed a strategy that weaves together resilience, housing, and respect for Galena Park's character and heritage.



HOUSING DEMOGRAPHICS MAPS



LANDSCAPE STRATEGIES

GROUND LEGEND



LAWN/GARDEN URBAN PLAZA

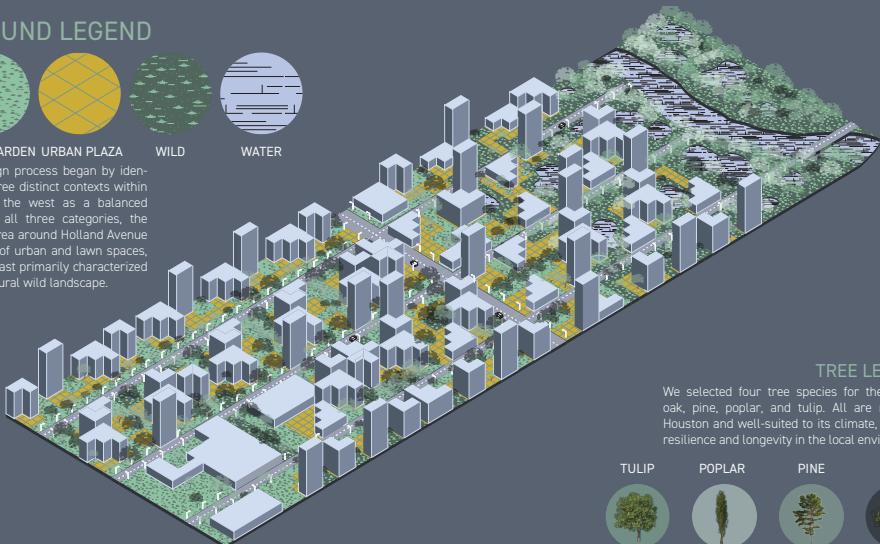


WILD



WATER

Our design process began by identifying three distinct contexts within the site: the west as a balanced blend of all three categories, the central area around Holland Avenue as a mix of urban and lawn spaces, and the east primarily characterized by its natural wild landscape.



TREE LEGEND

We selected four tree species for the project: oak, pine, poplar, and tulip. All are native to Houston and well-suited to its climate, ensuring resilience and longevity in the local environment.



TULIP



POPLAR



PINE



OAK

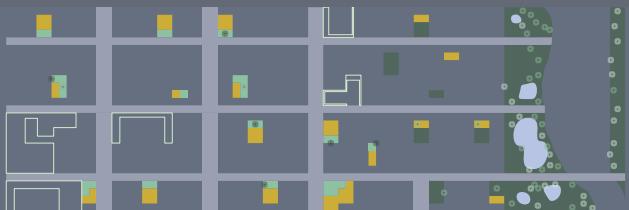
PHASE 01

The initial stage involves removing existing trees where new buildings are planned while preserving as many of the remaining trees as possible. A site visit will assess whether the preserved trees are suitable for integration into the design.



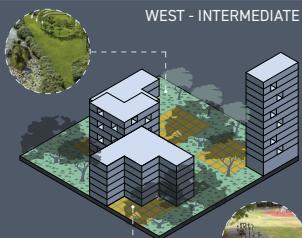
PHASE 02

In this phase, the landscape will begin to align with the datum established by the planned towers. Portions of Crown Street and Galena Street will be removed to accommodate these changes. The eastern area will see the initiation of a forestry effort, with the development of wetlands and a wild, contextually adaptive landscape.

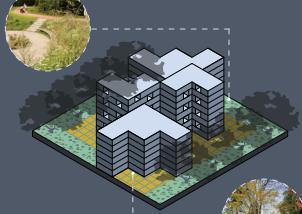


STRATEGY

WEST - INTERMEDIATE

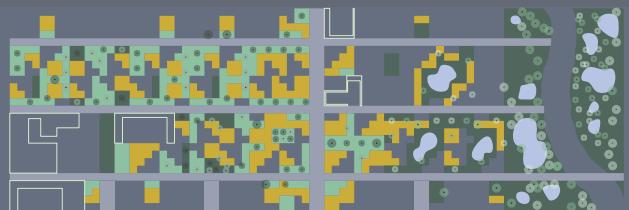


CENTER - HIGH COVERAGE



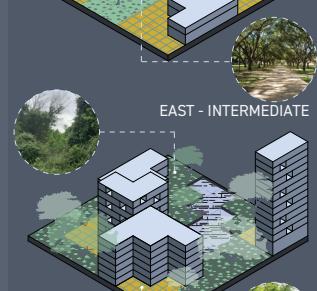
PHASE 03

As residential buildings are introduced, attention will shift to the western landscape, blending gardens, urban areas, and wild spaces. Holland Street will be developed to create collective spaces in high-traffic zones. Urbanization will concentrate in the central area, while forestry efforts in the west are finalized.



PHASE 04

The central spaces will be completed to enhance connectivity across the four main blocks. Additional wetlands will link residential areas to adjacent forestry zones. Vertical streets will be removed entirely to streamline the layout. The third stage of tree planting will shift focus toward oak and pine species.

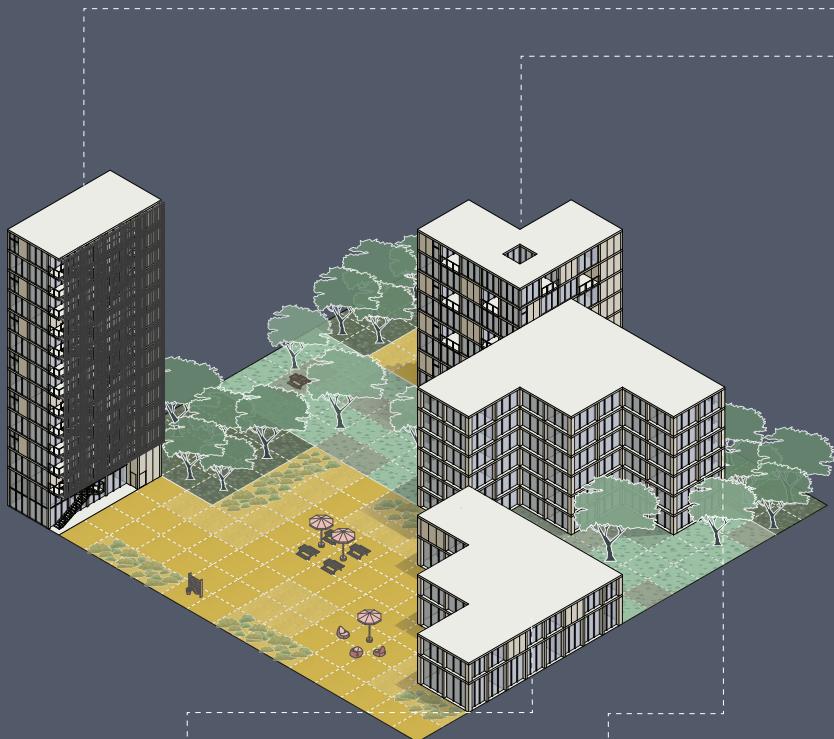


PHASE 05

The final phase involves completing the overall scheme. Paths will be added to connect buildings and urban spaces seamlessly, with garden spaces introduced to balance the urbanized western area. The master plan will be refined to harmonize with the specific context, shaping wetlands and enhancing garden pathways.



BUILDING TYPOLOGIES



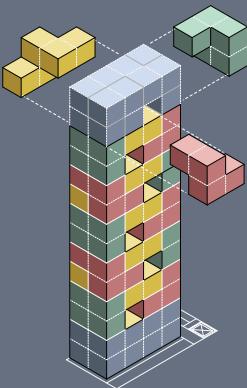
COMMERCIAL/OFFICE TYPOLOGY 1

A mixed-use typology with commercial on the ground floor and offices above fosters economic activity, boosts walkability, maximizes land use, and integrates work and retail.

COMMERCIAL/OFFICE TYPOLOGY 2

A mixed-use typology with commercial spaces on the ground floor and offices above fosters economic activity, boosts walkability, maximizes land use, and unites work and retail.

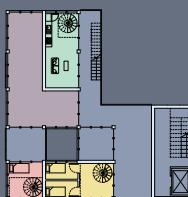
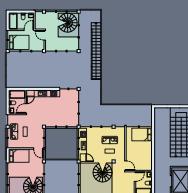
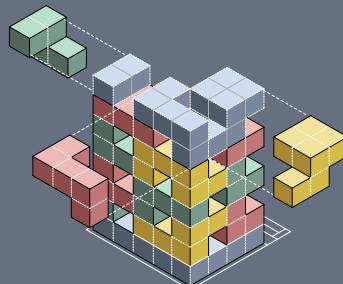
RESIDENTIAL TYPOLOGY 1



A generous high rise residential typology that makes three promises to each resident: that they will have two stories, that they will have a porch, and that they will have a backyard. Circulation exists within the core and the single loaded corridors. The apertures, which act as backyards, and which are connected to the three apartment types that repeat themselves, are the heart of these towers, fostering connection and a social setting. There are three apartment types. In total, the tower houses:

- 12 two bedroom apartments
- 6 one bedroom apartments.

RESIDENTIAL TYPOLOGY 2



A generous L-shaped residential typology makes three promises to each resident: two stories, a porch, and a backyard. Circulation exists within the core and single-loaded corridors. The apertures, which act as backyards and connect to multiple apartment types, are the heart of this typology. They foster social life and human connection. Unlike the first residential typology, the apartments here do not repeat. In total, the block houses:

- 1 four bedroom apartment
- 6 three bedroom apartments
- 3 two bedroom apartments
- 3 one bedroom apartments

PHASE 04

DATUM OF TOWERS

The introduction of south-facing towers marks a pivotal transformation in Galena Park's urban fabric. These towers introduce a new typology to a neighborhood historically defined by single-story, single-family homes, increasing density and creating a vertical presence that unifies the area. Brise soleil screens on the south facades reduce solar heat gain, while those on the north soften aesthetics and harmonize with the context. This typology fosters greater density, sustainability, and a collective identity, knitting together the urban language.



PHASE 02

HOLLAND AV. STRATEGY

Holland Avenue evolves into a central North-South spine with minimal reliance on vehicles, integrating a light rail system to connect key urban areas. The avenue balances dense residential blocks on the west with commercial zones on the east, fostering a vibrant mixed-use environment. Green plazas and vegetated public spaces blend ecological and urban systems, creating pedestrian-friendly zones that enhance community interaction. This strategy prioritizes connectivity, sustainability, and active public life, redefining Holland Avenue as a central, adaptable urban corridor.



PHASE 03

NEGOTIATING THE EXISTING

The scheme balances preservation with transformation, targeting low-quality buildings and flood-prone areas for buyouts. These spaces are replaced with sustainable, high-density housing that enhances resilience, connectivity, and livability. The urban fabric is treated as an ever-evolving system, where layers of history interact with new interventions. This approach creates a dynamic interplay between old and new, addressing current challenges while ensuring adaptability for future growth. By prioritizing flexibility and ecological integration, the scheme establishes a thriving, forward-looking urban framework.



PHASE 03, 04, & 05

LANDSCAPING STRATEGY

The landscaping strategy creates a gradient of environments that integrate ecology and social programming. Lawns with light tree coverage provide open, flexible spaces for recreation, while semi-wild landscapes featuring Poplar, Pine, and Oak trees combine native prairie plants with wetlands to foster biodiversity and stormwater retention. Urban landscapes favor gravel over concrete, hosting outdoor gyms, playgrounds, sports courts, and picnic areas. Together, these layers form a sustainable, interconnected green network that enhances resilience while supporting active and social lifestyles.





Education

Rice University, Houston, TX
Bachelor of Architecture

August 2021-Present

Skills

Languages: Native: Turkish. Fluent: English. Professional Working Proficiency-B2 CEFR: French
Technical: 3D Modeling: Rhino, Blender, SketchUp, Grasshopper. Rendering: Vray, Substance Painter. Graphics & Visualization: Photoshop, Illustrator, InDesign. CAD & Documentation: AutoCAD, Revit
Artistic: Drum Set (Advanced): Experience in jazz, funk, rock, and Latin styles. London School of Music Grade 1-8 certification with distinction. Acoustic Guitar (Experienced): Comfortable in multiple styles.

Work Experience

Miskavi Architecture Studio

Intern

Istanbul, Turkey

June 2023-August 2023

- Assisted in the schematic design phase of various residential and commercial projects.

Kerem Piker Architecture

Intern

Istanbul, Turkey

June 2018-August 2018

- Produced detailed 2D and 3D design studies for urban projects. Informed final design decisions

Moody Center for the Arts

Gallery Guide, Part-Time

Houston, TX

September 2023-December 2024

- Engaged visitors in conversation about the art on view, contributed to creating a warm welcoming environment.

Rice University Pep Band

Drummer

Houston, TX

January 2024-March 2024

- Collaborate with Shepherd School musicians to deliver synchronized, high-energy performances during live basketball games.

Competitions and Awards

Initiative 99 Global Architecture Competition, ICON

Honorable Mention, Phase 2 Participant

Austin, TX

December 2023-August 2024

- Led a three-person team in designing a 3D-printed housing prototype as part of a global competition exploring new methods of fabrication.
- Selected as one of 16 teams from hundreds of applicants to advance to Phase 2, focused on refining the design into a detailed architectural proposal, including DD and BIM documentation for feasibility testing.

Elinor Evans Centennial Fund, Rice Architecture

Merit Award

Houston, TX

May 2022

- Recognized for exceptional early design work and strong conceptual thinking in first-year studio projects.

Ali Kazmaz



Selected Works