



Brian Pekar

Master of Architecture '21



Brian is an architectural designer currently completing a Master of Architecture Degree at the University of Michigan where he has focused his work on topics of equity, access, digital implications, and material honesty. He has had work exhibited at the 2020 and 2021 Student Shows and holds a 3.9 gpa. In 2019 he earned an undergraduate degree from Kent State University's College of Architecture and Environmental Design and is originally from Cleveland, Oh.

He has started his professional career via internships spanning the past 5 years, most recently working at a K-12 and Higher education focused firm out of Cleveland. He also has aspirations to quickly become licensed and earn LEED BD+C credentials.

Brian is currently exploring career options and is always open for conversation.

Thank you.

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Brian Pekar

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Education

University of Michigan
Ann Arbor, Michigan
2019-2021
(expected)

- Pursuing a Master of Architecture degree
- 2 year program
- 3.97 GPA through 3 semesters
- Graduate Student Instructor, Understanding Architecture, Winter 2020
- Work exhibited in 2020 and 2021 Student Shows
- Arts Engine Grant Recipient 2021

Kent State University
Kent, Ohio
2015-2019

- Earned a Bachelor of Science in Architecture
- 3.66 Cumulative GPA
- Dean's Advisory Board 2018-2019
- President of Alpha Rho Chi 2018-219
- Student Success Leader 2016-2017
- First Year Experience Instructor 2016
- Provost's Leadership Academy 2015
- Study Abroad Semester Florence, Italy 2018
- Most Inspiring Student Project Award 2018

Scholarships

- Trustee Scholarship 2015-2019
- Professor Schidlowski Scholarship 2017-2018
- John Holland Scholarship 2018-2019
- Architecture Merit Scholarship 2019-2021

Experience

ThenDesign Architecture
Willoughby, Ohio
May 2019 - January 2021

- Completed work on several scales of projects in the scope of K-12, Higher Education design, and Municipal. Gained experience in all project phases.

U of M Fabrications Lab
Ann Arbor, MI
September 2019 - Current

- Student Lab Coordinator in the Taubman College fabrications lab. Managed and operated equipment for digital fabrication and oversaw a team of 5.

MCG Architecture
Cleveland, Ohio
May - August 2018

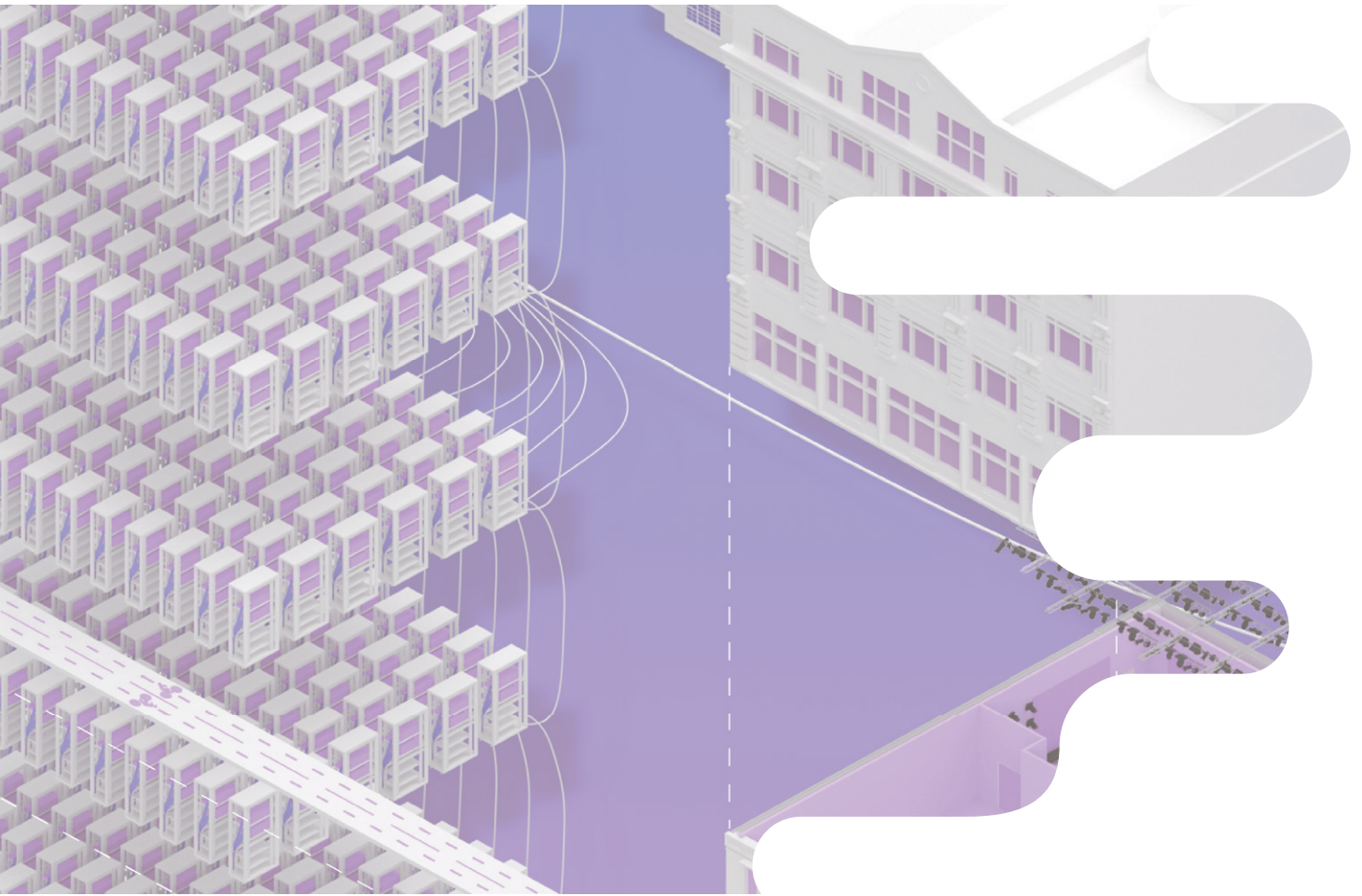
- Project Specialist working largely in AutoCad, Adobe Illustrator, Adobe Photoshop, and hand sketching. Completed work primarily on a large scale entertainment districts and corporate retail.

RFC Contracting
Strongsville, Ohio
May 2016 -
December 2017

- Beginning my career in AEC, at this position I completed organization tasks related to bid production and communication between parties. In my second year I took more responsibility in my rolls acting as an assistant superintendent on site.

Skills

- Rhino/VRay
 - Sketchup
 - AutoCad
 - Revit
 - Bluebeam
 - Illustrator
 - Photoshop
 - InDesign
 - 3D Printing
 - Presentations
 - Grasshopper
 - Photography
 - Video Editing
 - Sketching
 - Prototyping
-





Academic

Inside Looking In
2

Catwalks and Hats
10

Public Wifi Collective
22

Sliced or Cubed
26

Climate Simulation Center
32

Professional
38



Inside Looking In Theater + Housing

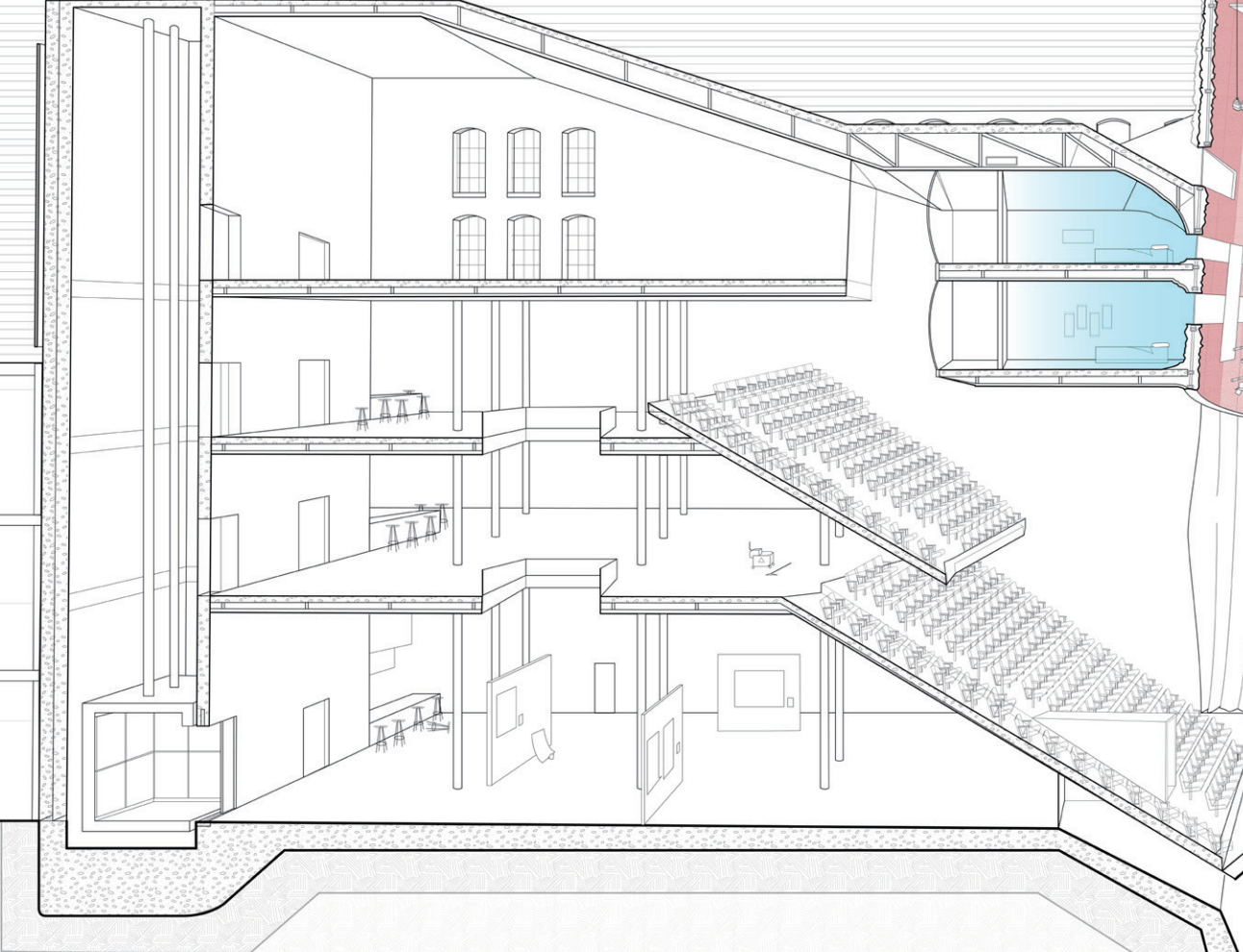
The project functions as a study of social housing conditions and their pairing with a semi rigid programmatic element of a community centric theater. Sharing typological frameworks and influences, these elements interact through viewports creating a courtyard condition familiar in apartment living but shifted to share space with the theater's fly tower. This new relationship allows residents and occupants to view the on goings of the theater stage and behind (above) the scenes, creating a new form and platform of performance. Treating each unit's viewport as a proscenium frames different props and pieces of equipment as actors playing a role. This experience changes from floor to floor in the three story courtyard.

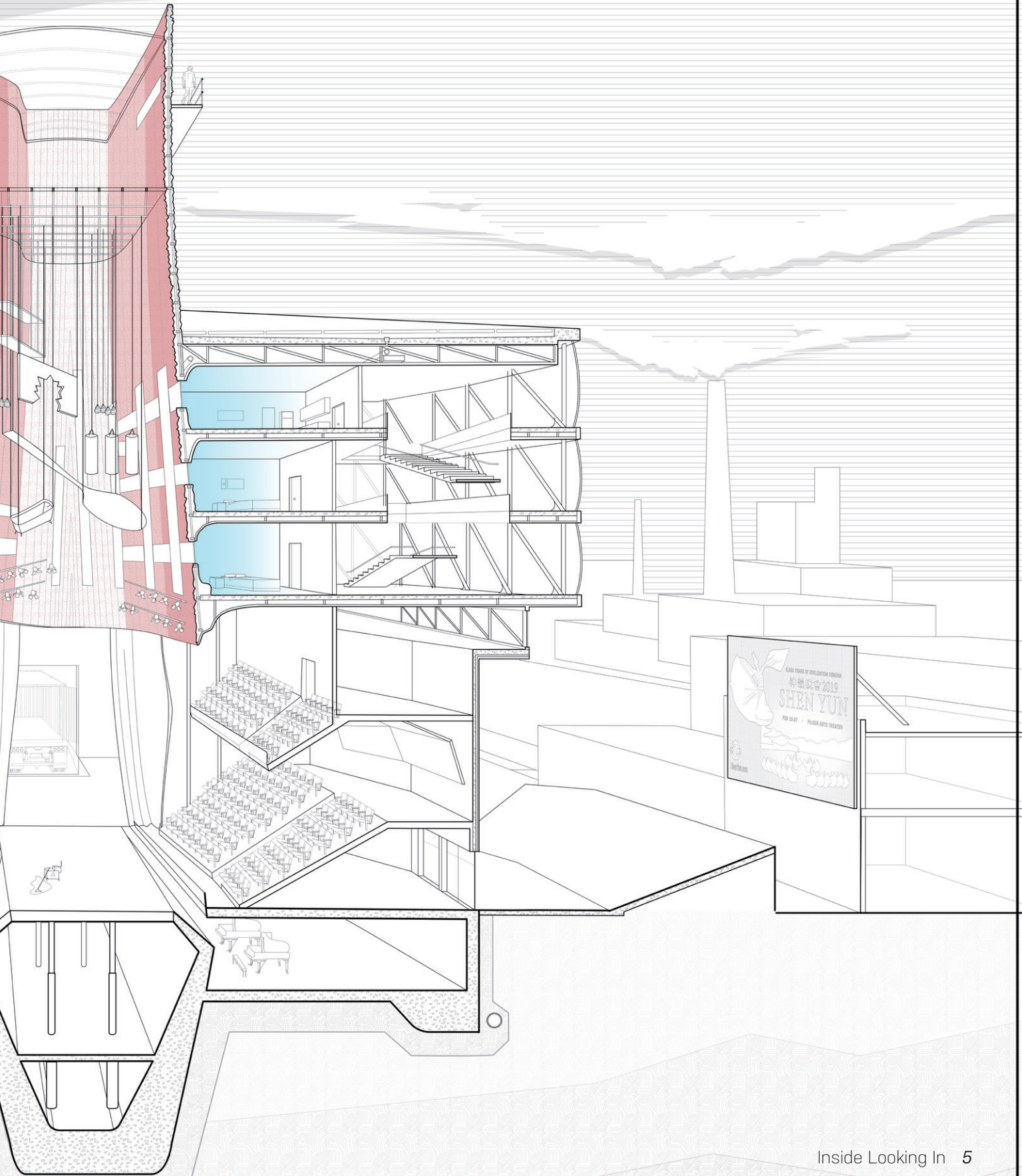
Preserving existing assets and uniqueness in a climate of gentrification and ballooning rent prices was a primary motive. These pursuits are addressed through operational and managerial structures designed to welcome subsidized housing as well as units for temporary visitors via weekend rentals. The theater seating allows performances to be shown nearly in-the-round with views from two sides of the stage, from the street, and from all four sides above. This not only forms options and opportunities for viewership but also faces everyone toward a common point of focus, gathering around in a communal celebration of the arts.

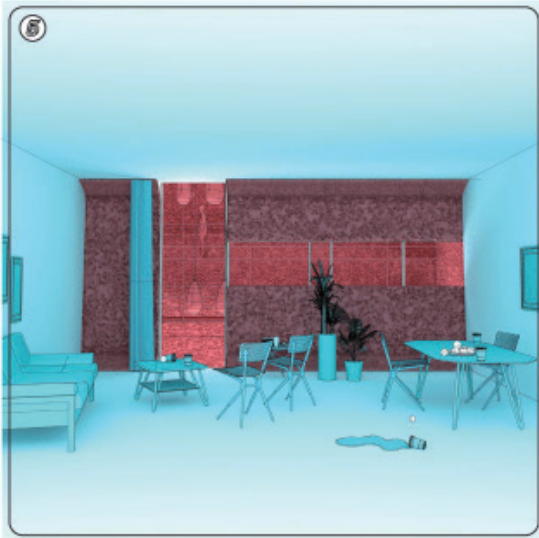
**Fall 2019 Institutions Studio
Exhibition at the 2020 Student Show**

Section Perspective-

*Longitudinal section
dissects the theater
space exposing the
nested apartments
and views below.*

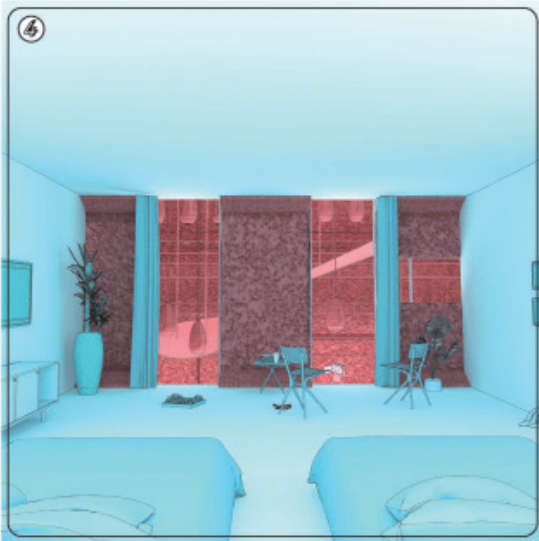






Floor #5 -

Top floor of residential space houses the largest units. These are intended for long term or indefinite housing.



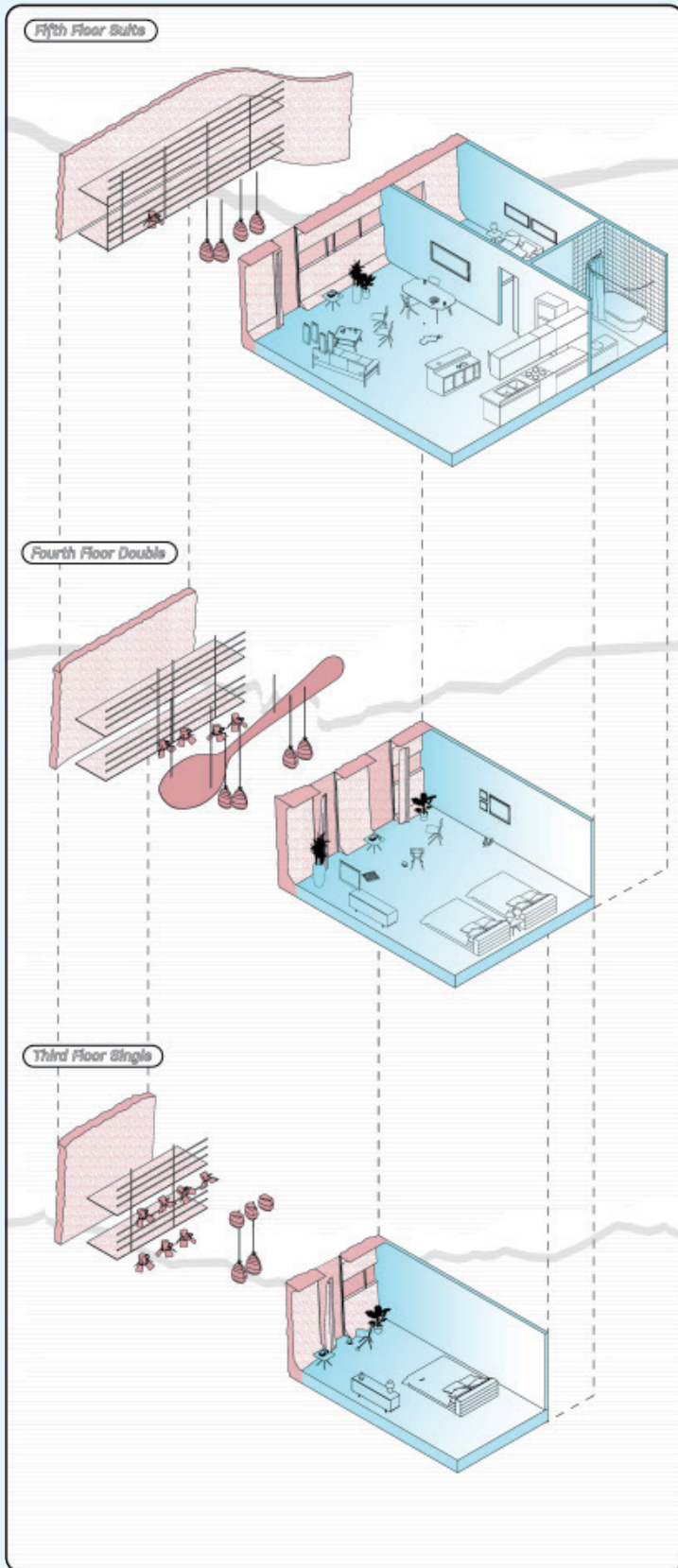
Floor #4 -

This floor provides studio apartments furnished with two beds, these units can be rented or provided upon short term subsidized basis.



Floor #3 -

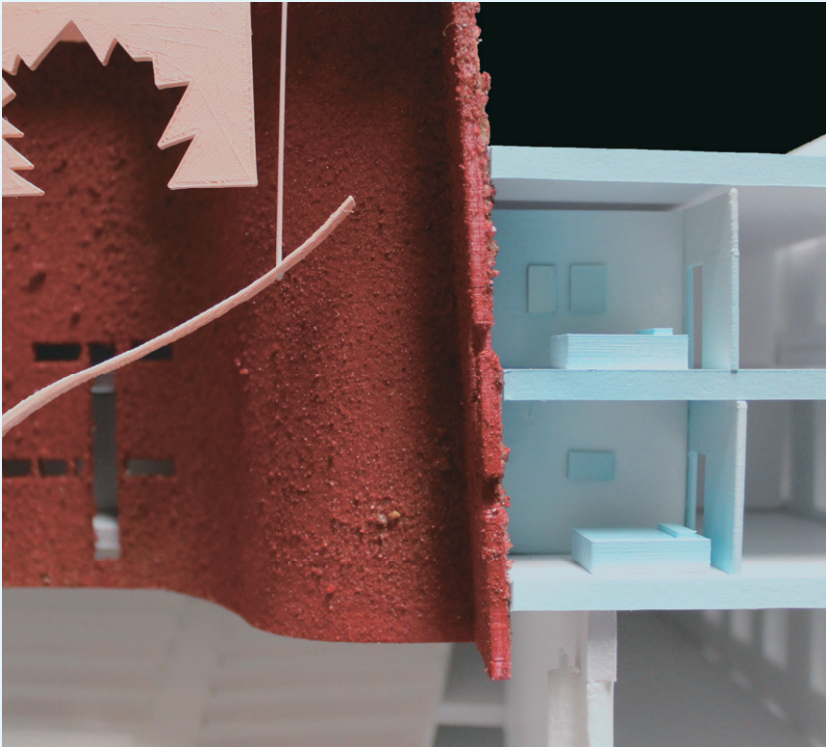
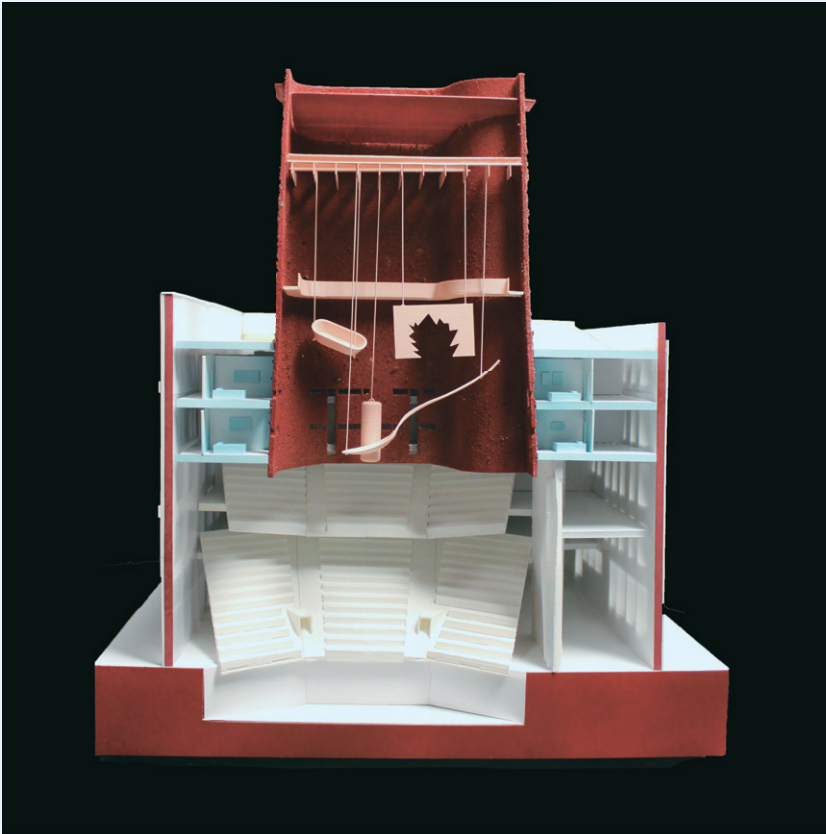
This lowest floor of housing creates views down onto the stage and views into catwalks. These units can be rented or reserved for traveling acts within the theater.



Sectional Axonometric -

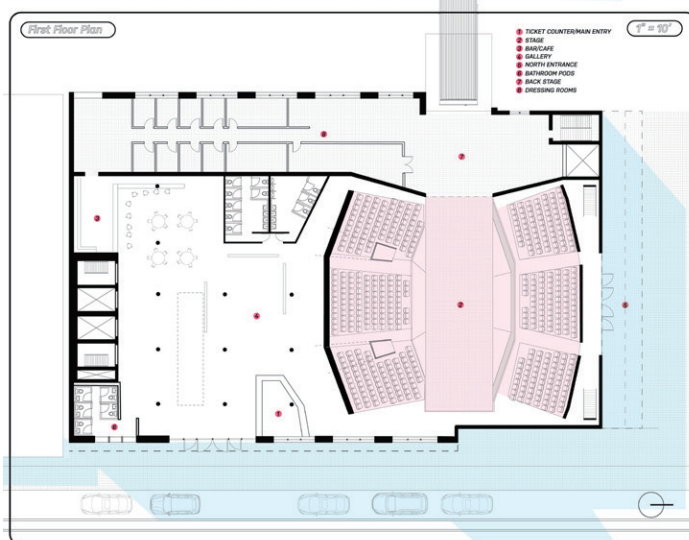
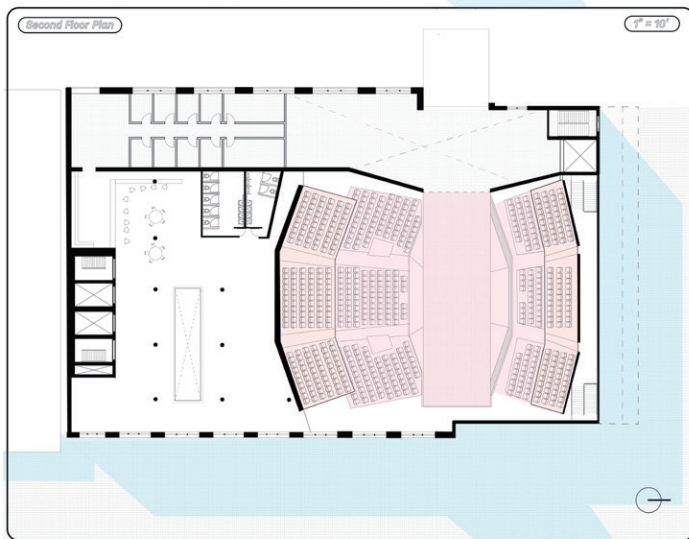
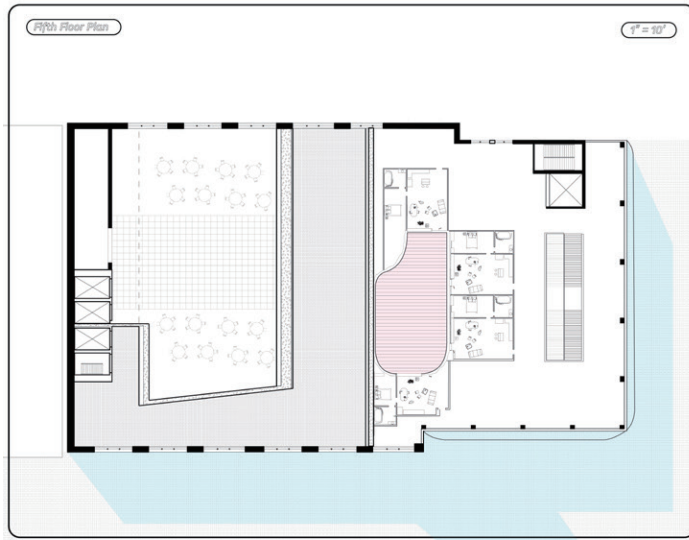
Exploding floor plates shows the vertical relationships between the fly-tower and apartment types.

(Top) Section model photograph
(Bottom) Model Fly tower detail



Floor Plans -

Three plans cut through several points, showing tiers of seating and domestic floor shift.





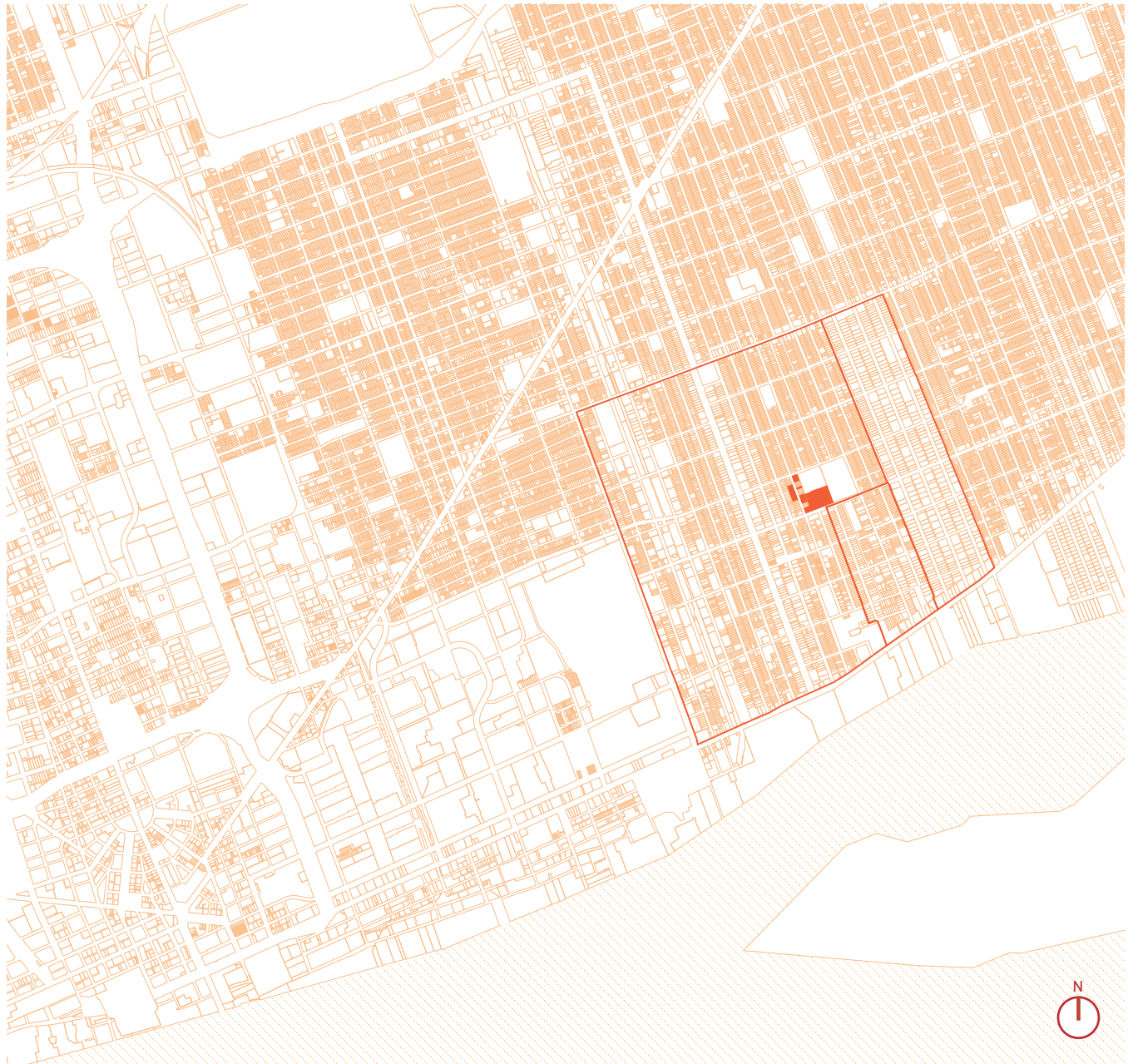
The Catwalks and the Hats Housing, Retail & Community Building

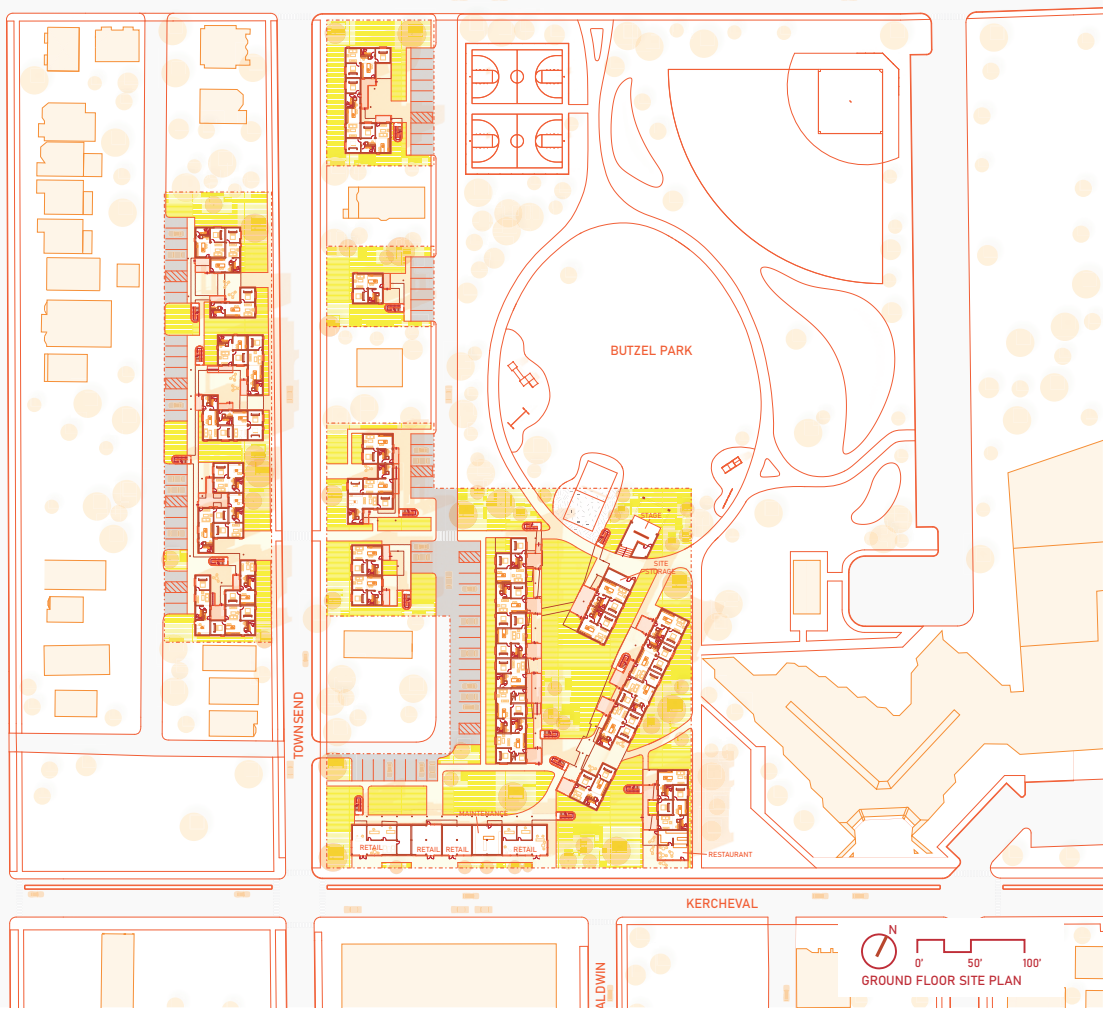
The project's ambitions included the formation of attainable housing that fosters community connections in familiar and novel ways. Addressing a dialogue and sensibility with the site's shifting conditions and future aspirations. Using stock materials to form a much different exterior conditions than expected. And creation of unique and intimate domestic conditions that counter them.

To navigate the issues of the site conditions we identified, we have created a kit of parts that aggregate into different residential program modules which eventually arrange themselves into buildings. This strategy allows for easy repetition structurally and programmatically across the site, and also accounts for some degree of affordability in construction

It also gives the different buildings on the site an aesthetic continuity in their materials and arrangement but also doesn't sacrifice on variety
And as each building gets to be its own form and have its own character.

Fall 2020 Systems Studio
Exhibition at the 2021 Student Show
Prof. Ellie Abrons and Meredith Miller, T+E+A+M





(Left) Detroit Map - Immediate site in orange, neighborhoods outlined include: Island View, West Village, and East Village

(Above) Site Plan - Including Butzel Park and Butzel Recreation Center. Medium density housing along Townsend (North West). Higher density along Kercheval (South East).

Townsend Blvd. Building Type and aggregation -

Units for buildings that conform to infill lots code restrictions, the result is less restricted to typology.



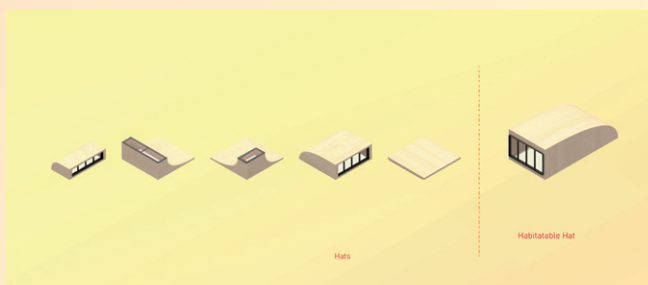
Kercheval St. Building Type and aggregation. -

Units arrange to form two bay wide "bar" shaped buildings that provide high density.



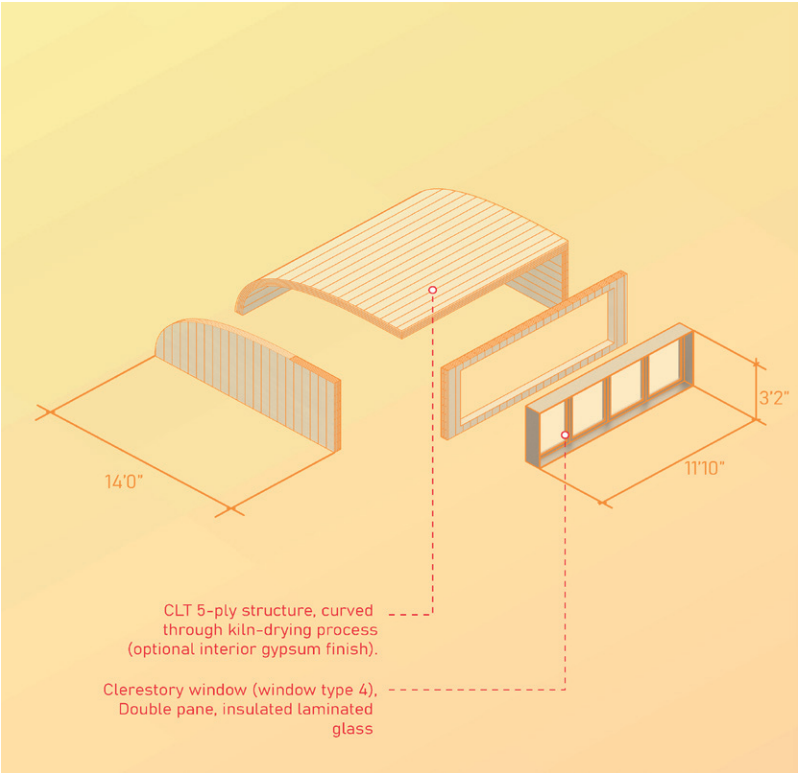
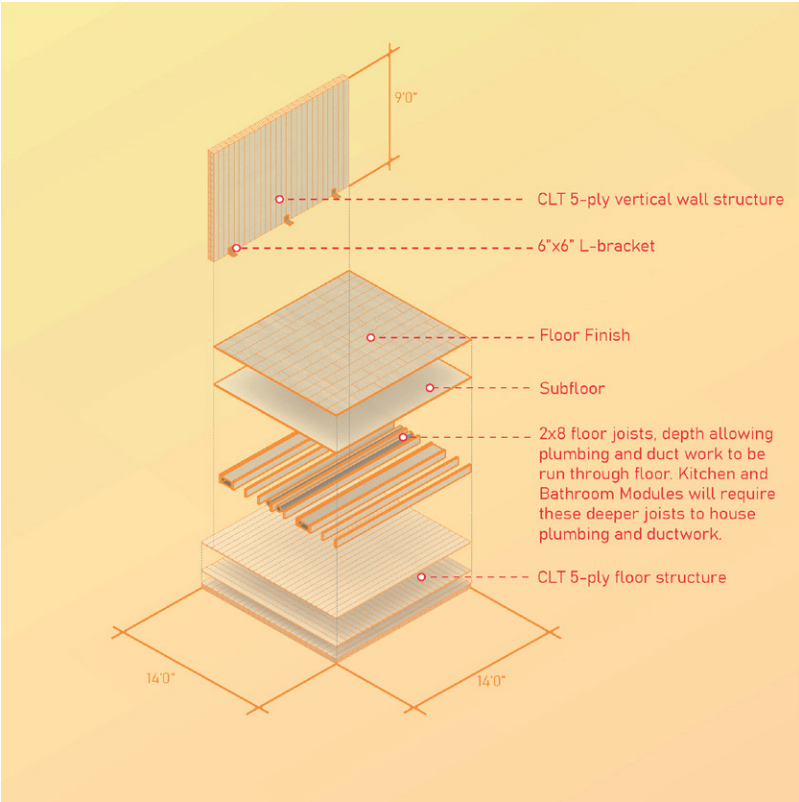
Prefabricated Roof "Hats" -

Creates unique interior lighting conditions and iconic exterior roofline.

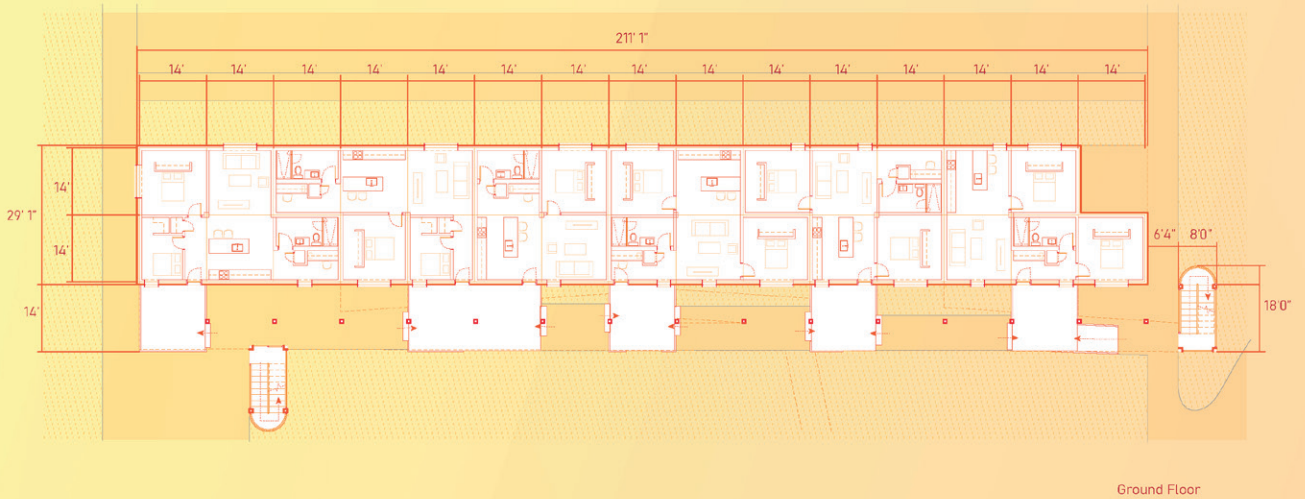
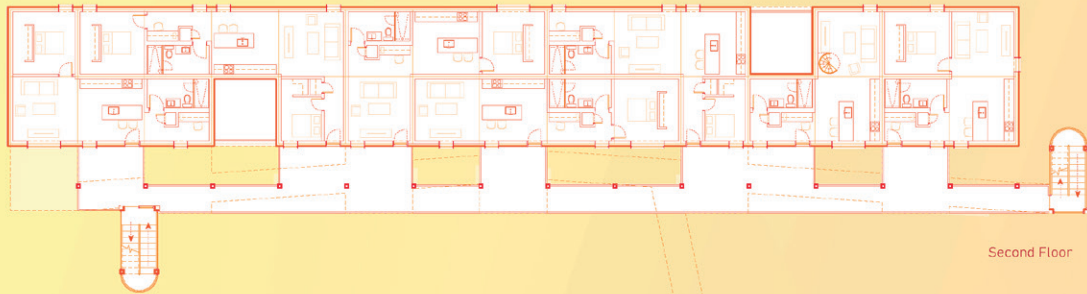
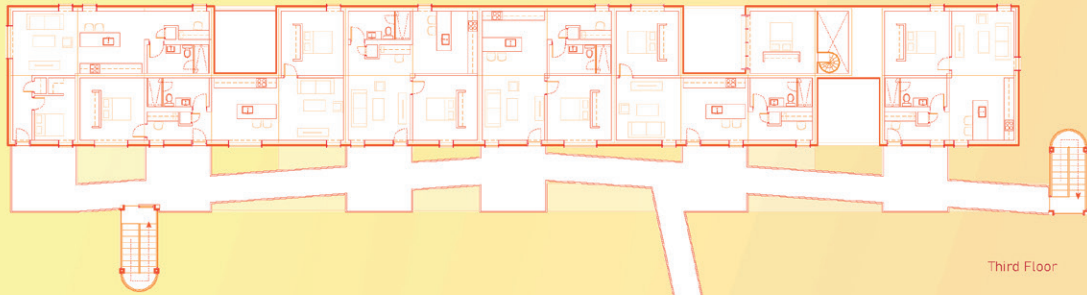


Module Assembly Diagrams -

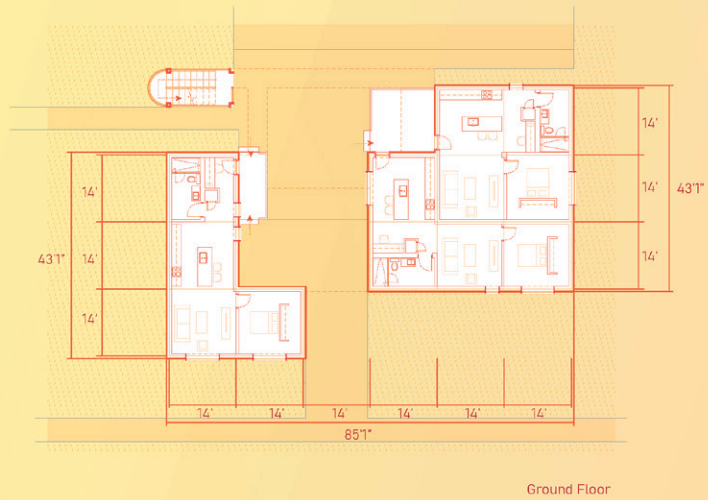
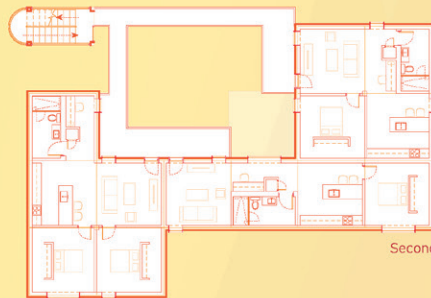
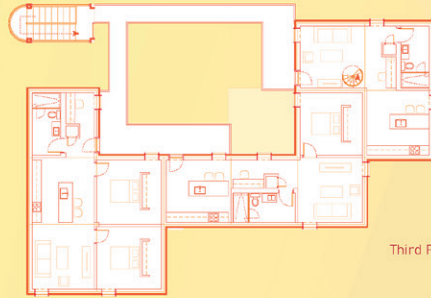
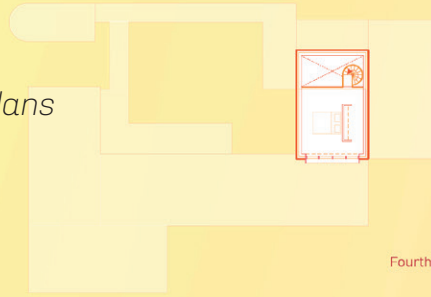
Modules are prefabricated off site and ship ready to install. Cross-Laminated Timber is used for structural walls and post and lintel instances.



Kercheval Building Type - Plans

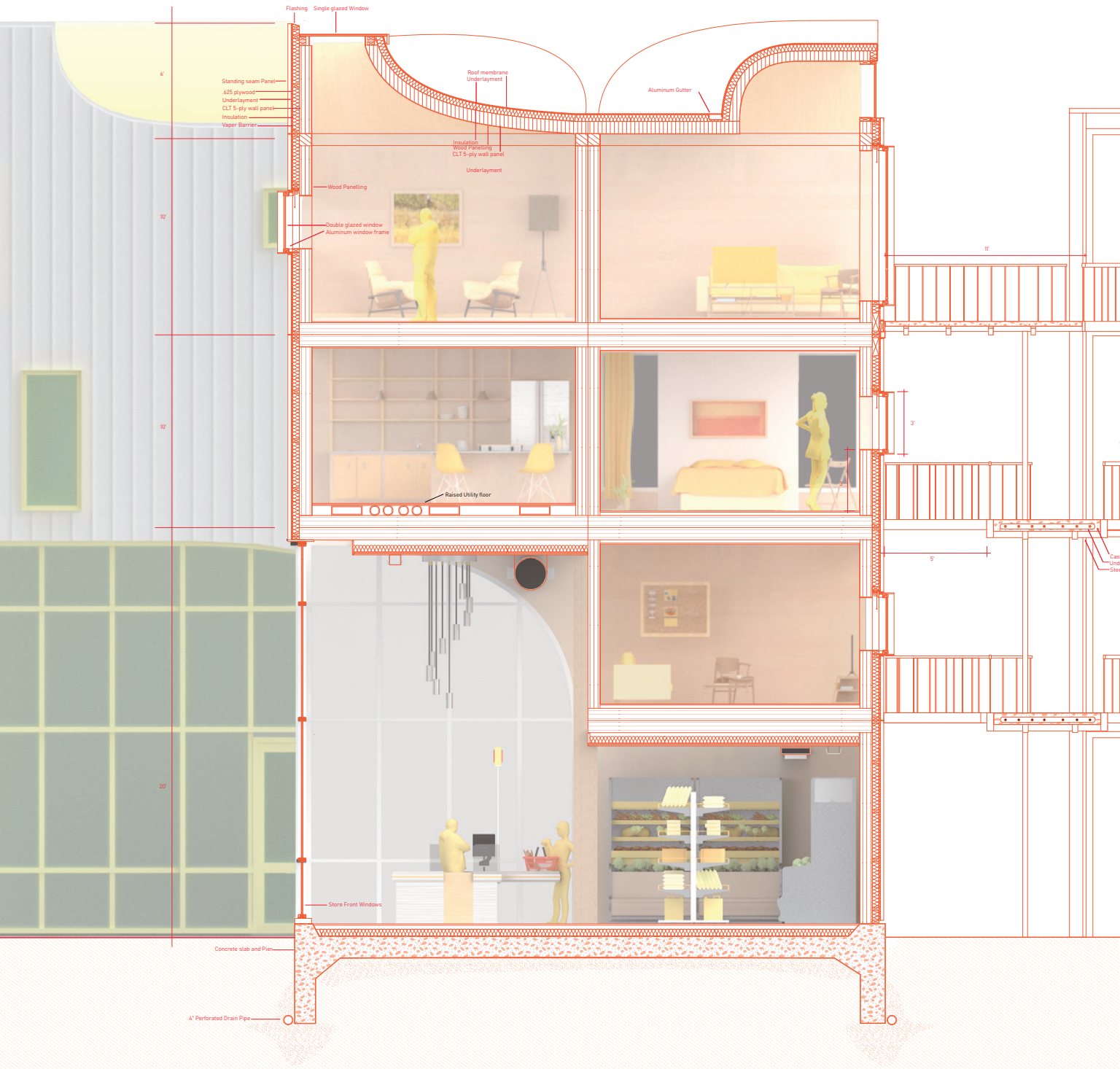


Townsend Building Type - Plans



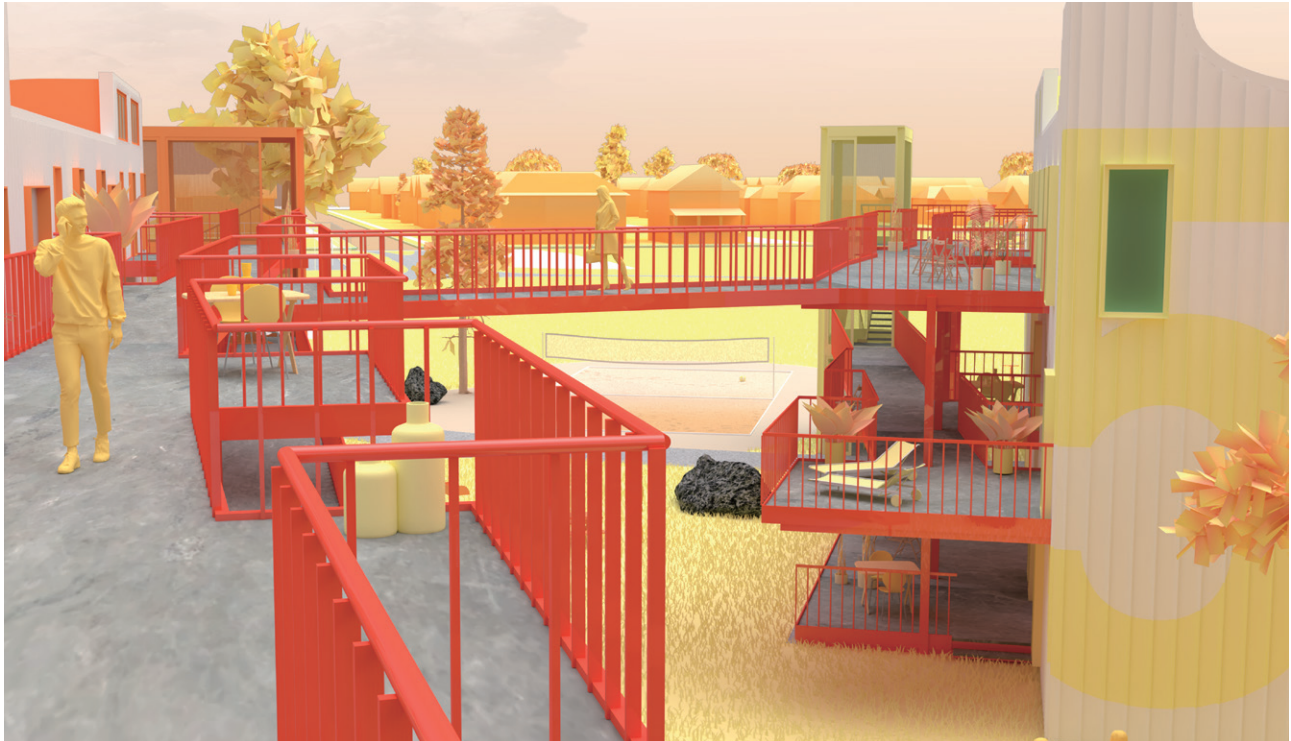


Construction Process Model - Simplicity and material honest combining to form a whimsical exterior and striking roofline.



(Above) Detailed Section - Highlights stacked structural grid, material composition, and vertical relationship between retail and residential programming.

Exterior Courtyard View

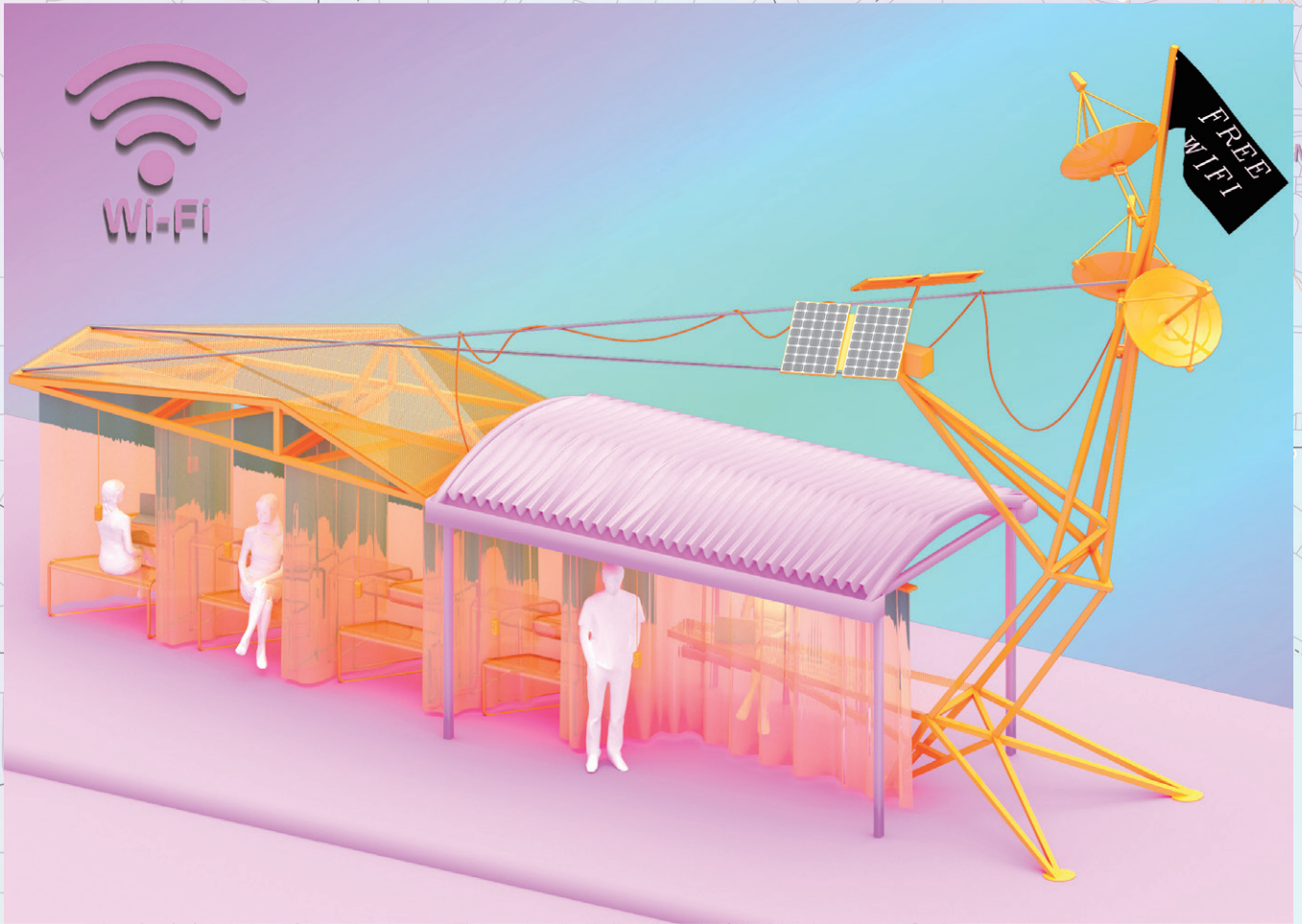


Kercheval Street View



Interior Views





FREE
WIFI

MPUS

MICHIGAN
STADIUM

BURNS PARK

Ann Arbor Public Wifi Collective Urban Design

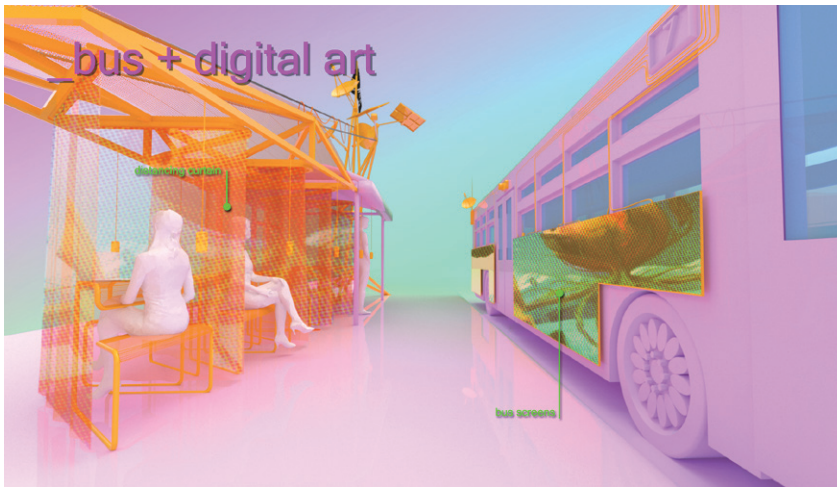
The Ann Arbor Public Wifi Collective is a proposal designed to address the growing disparity and urgency in internet access that has been exacerbated by the pandemic. Targeting lower income and disadvantaged areas the project builds off of the existing local transit infrastructure to optimize and give new agency to a public service preparing for new use conditions. Bus shelters will be altered to house speculative Wifi network SuperNode antennas that can provide internet access to entire neighborhoods while providing safe coworking and waiting space for bus riders. While smaller bus stops serve as router distribution points on a new route through the city carried by a previously under utilized bus.

Summer 2020

Longo Competition 3rd Place, Arts Engine Grant Winner

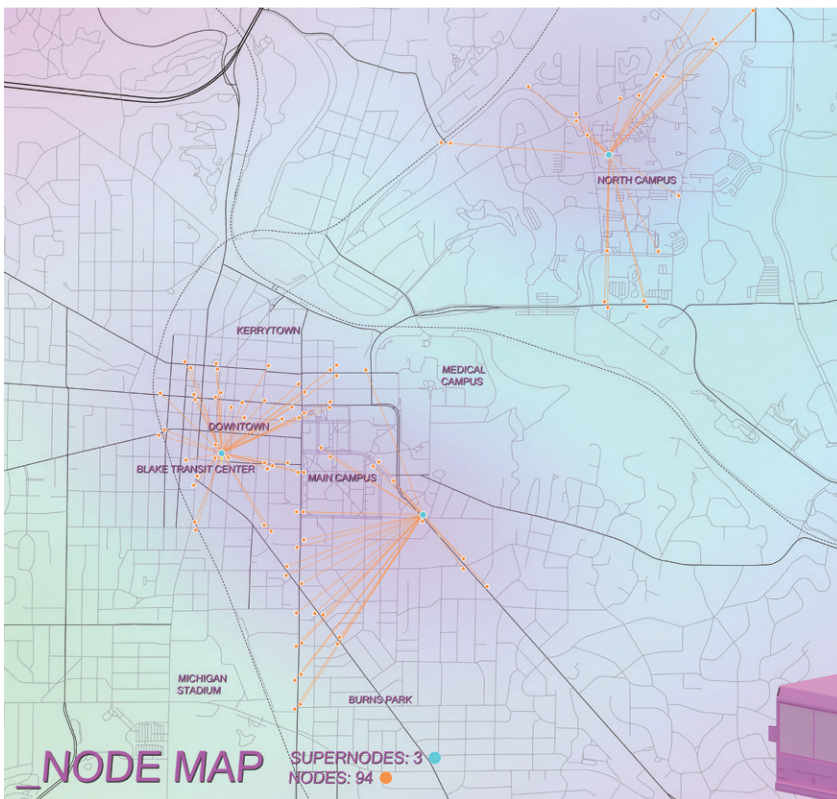
**Mentors: Paul Danna, SOM LA Principal and Director of Design
and McLain Clutter, UMich Department Architecture Chair**

In collaboration with Josh Myers and Nicholas Button



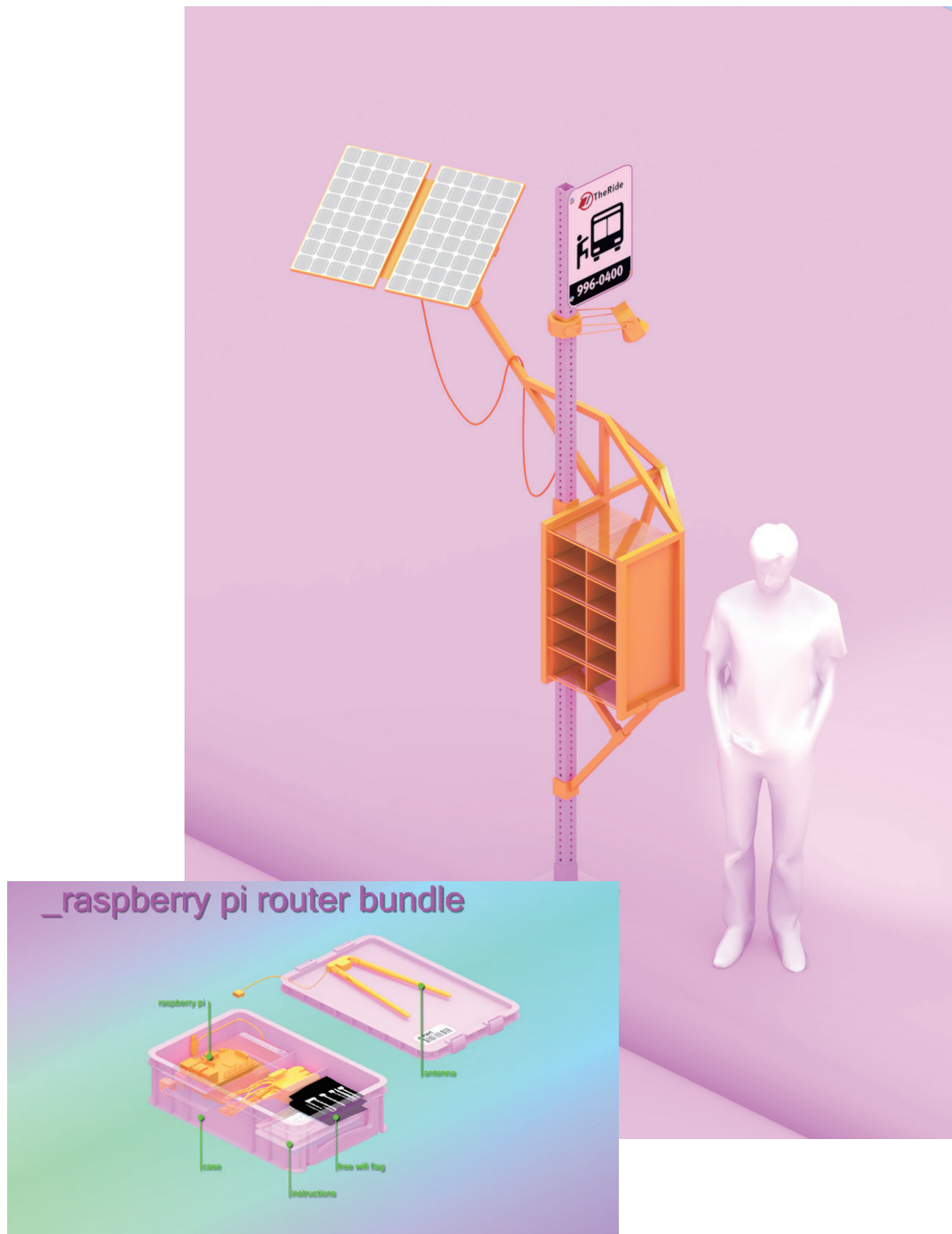
Bus Shelter Screens -

When buses make stops at these nodes, they momentarily project hyper local news and arts creating an ephemeral gallery

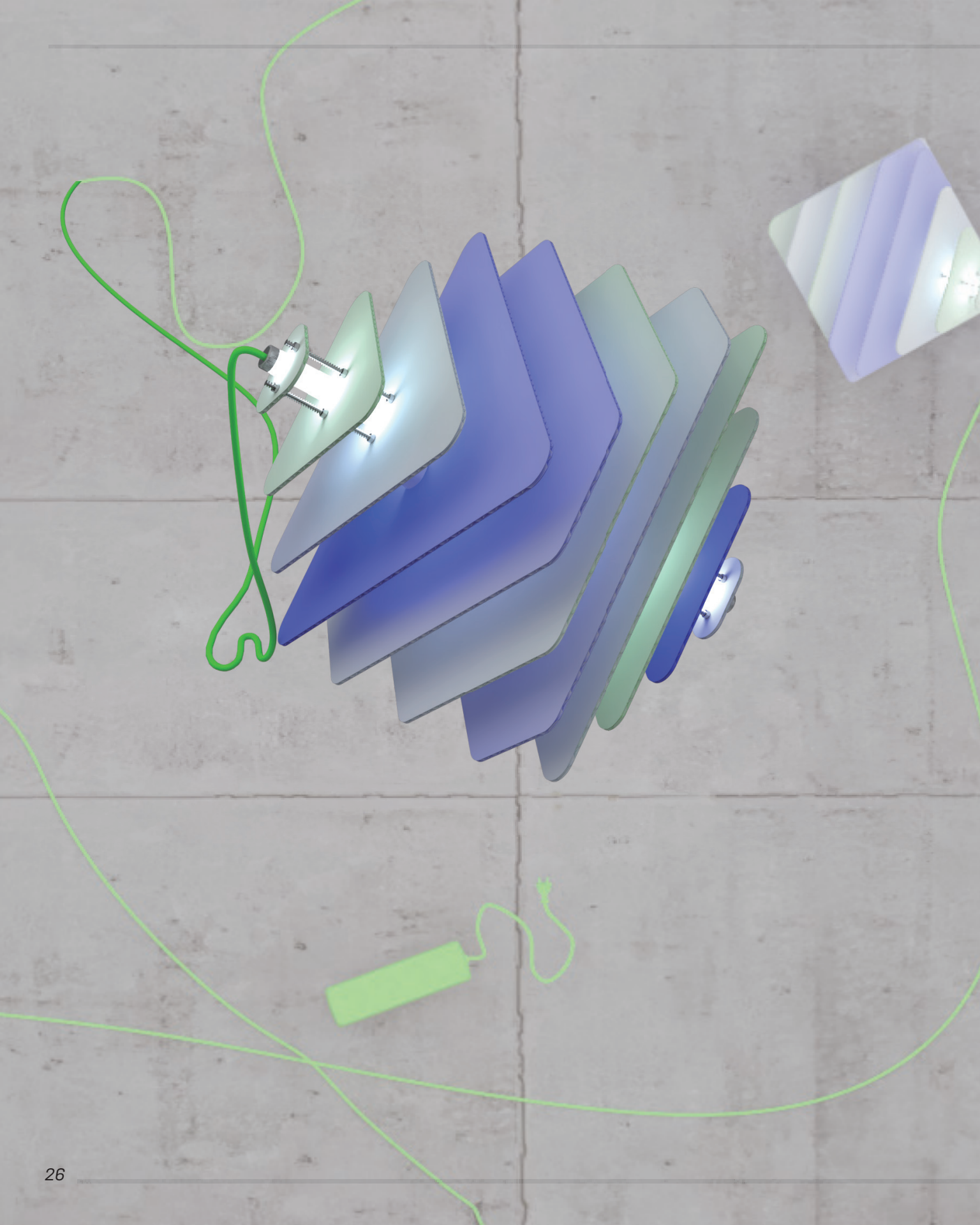


Node Map -

Uses data from communities to determine the most at risk areas and cross references with existing bus infrastructure to discover points of leverage.



(Above) Bus stop intervention to distribute low cost DIY router boxes, each provides community members with a unit ready for you to connect to the mesh network.



Sliced or Cubed: Flat Pack, Modular Light Fixture

Digital Fabrication Exercise

The project was completed in a group of four as a final project in an Introduction to Fabrication course with several pieces of technology and processes. Machinery used to complete the project includes: large format Zund robotic knife cutter, Kuka Bot robotic arms, 3D printing attachments, and various power tools for cutting/finishing.

Materials used Include:

- 8' x 4' PETG Corrugated sheet plastic
- Operable LED lights
- Threaded steel rod
- Steel hex nuts
- PLA 3D Print filament
- General adhesives

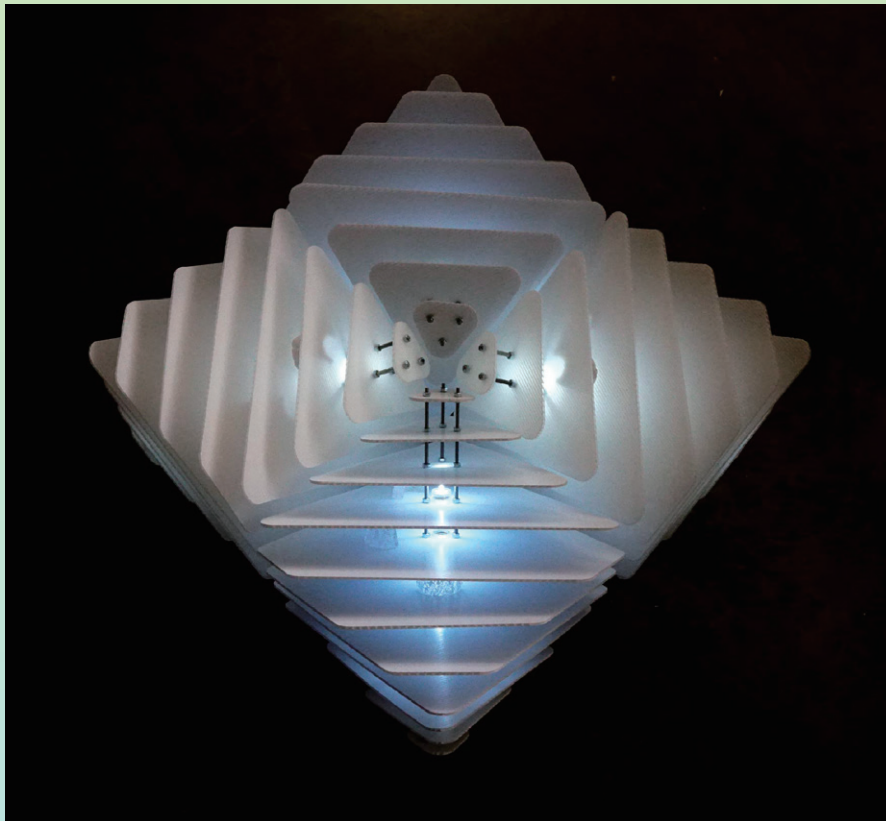
Fall 2019 Fabrication Lab 1/2 Semester
Professor Rachael Henry

In collaboration with Jay Schairbaum and Sarah Nail



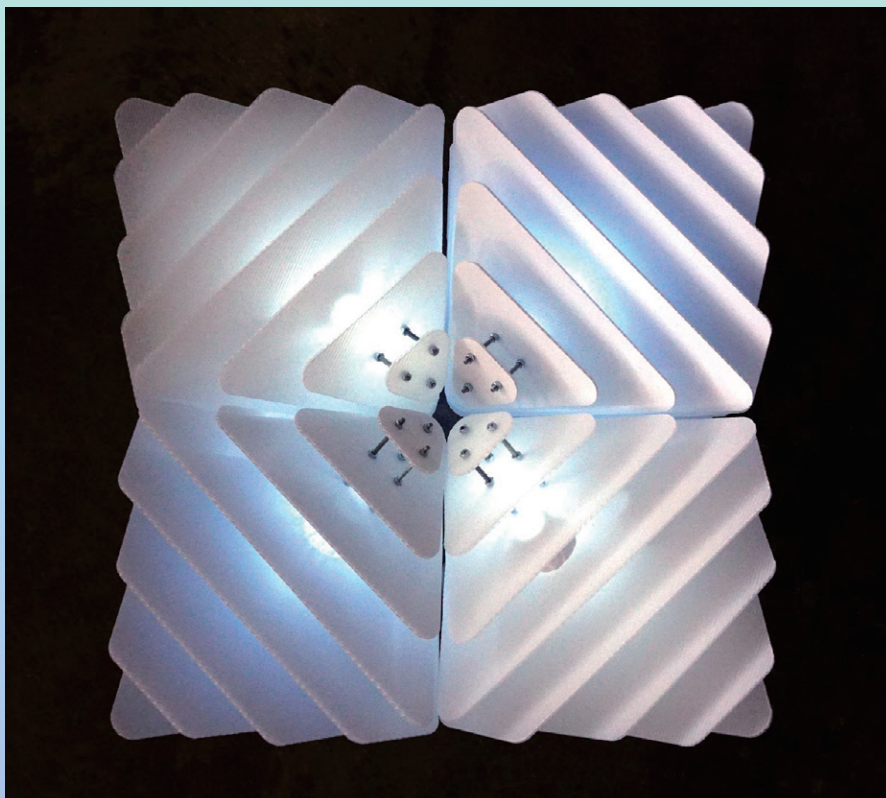


(Above) Light Fixtures staged as pedestals, checkout counter, and organization in a "pop-up" store. This shows the utility of the objects and their rigidity as shelving or organizational tools.



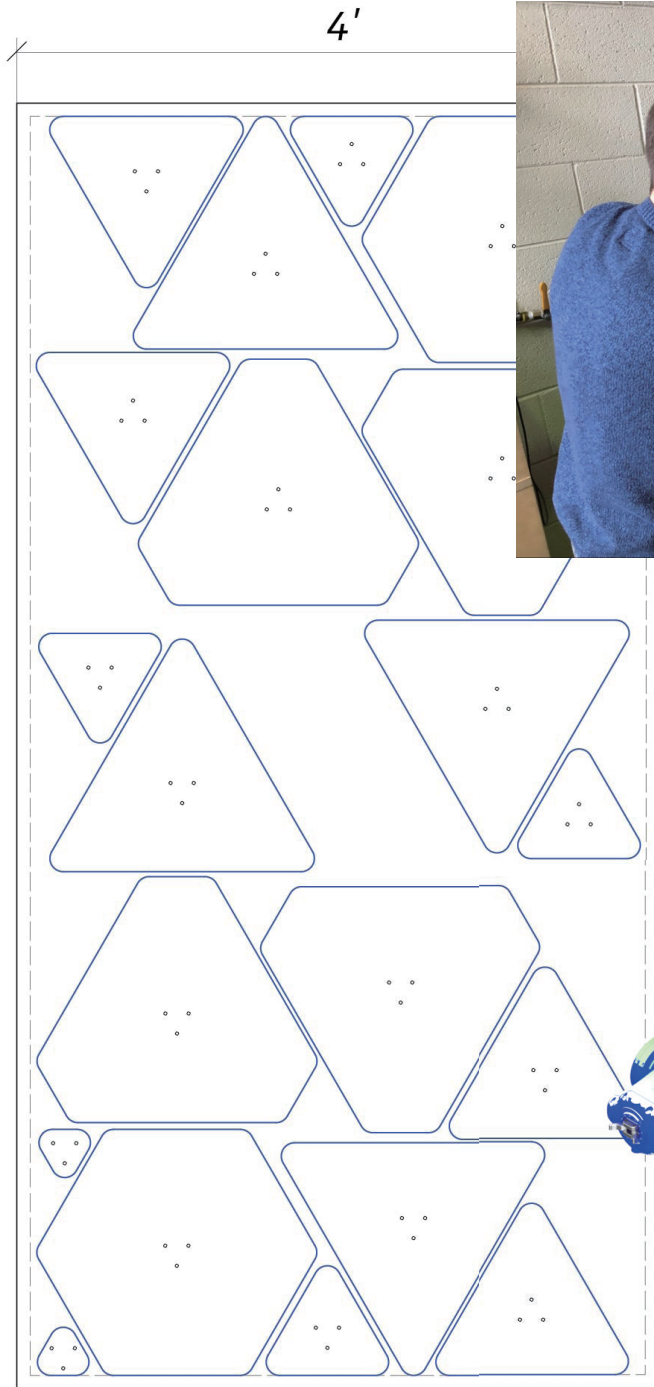
Built Objects -

Arranged in a set of four pieces the light fixtures create lighting conditions and aesthetic variations based on vantage points



Built Objects -

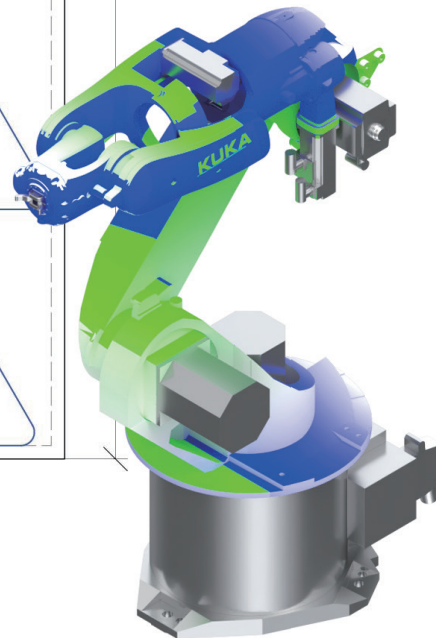
From above the arranged components radiate light outward, these can be arranged in any number of configurations with any number of additional pieces.

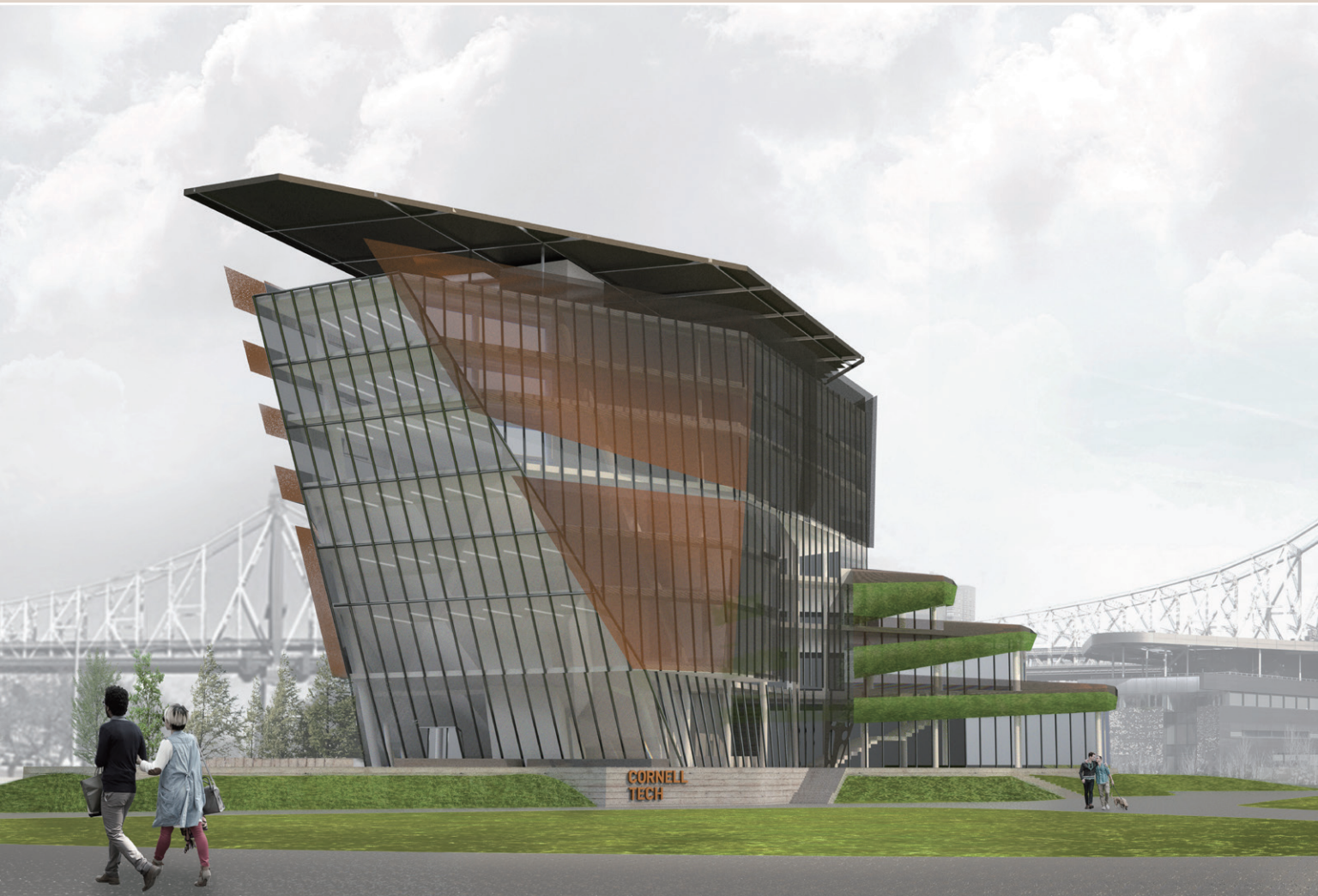


Fabrication -

Components were fabricated in stages using Kuka Robotic arms to fabricate small plastic light shrouds and using the Zund robotic knife cutter to size our corrugated light panels.

8'





*Exterior Rendered View from the South end of the site
Queensboro Bridge is seen in the background*

Climate Simulation Center: Cornell Tech Campus

Institutional Research Campus Expansion

The project is situated on the newly developed land of Roosevelt Island for the future expansion of the Cornell Tech Campus. Site considerations include future water level rises, strict site sizing, building security, and visual language with Morphosis' Bloomberg Center adjacent. The chosen program reflects the institutions pursuit for progress and forward thinking networking. The prompt also included necessary tenant spaces for public private partnership research endeavors. Solar panel arrays on the roof as well as exterior terraces provide instances of environmental sensitivity in a strange urban landscape of interiors with excess.

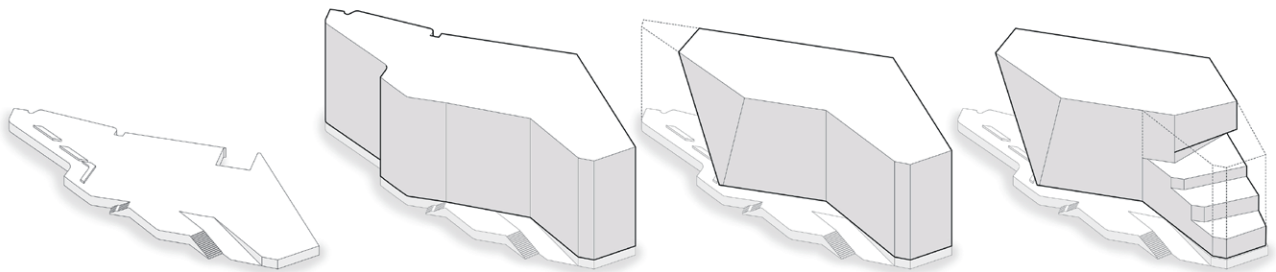
The project was completed in a studio in my fourth and final year in Kent State's Bachelor of Science in Architecture program to fulfill NCARB and NAAB accreditations.

Spring 2019 Integrated Design Studio
Professor Charles Harker, Kent State College of Architecture

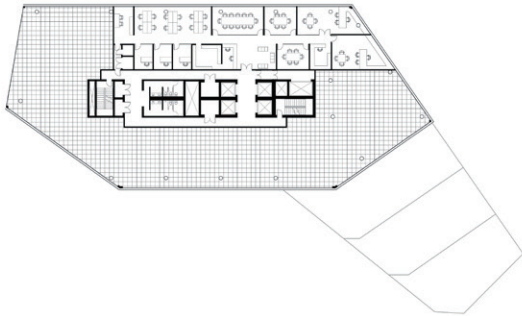




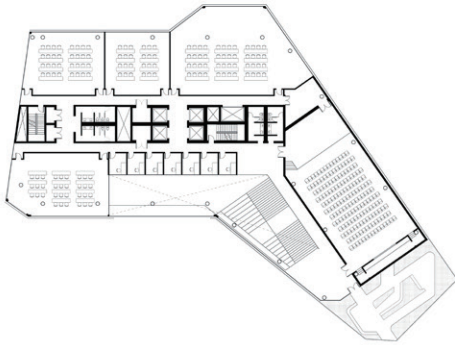
Roosevelt Island is a unique location in the scheme that is New York City. Functioning as a midpoint between Manhattan and Queens the island is frequently traveled over but seldom visited by the average New Yorker or tourist. The narrow island is home to approximately 10,000, however large swaths of the land is currently unoccupied by built environment after a large apartment development was destroyed several years ago. In it's past the island has functioned to effectively isolate certain populations. Furthermore the island has hosted a penitentiary, asylum, and numerous hospitals for quarantine.



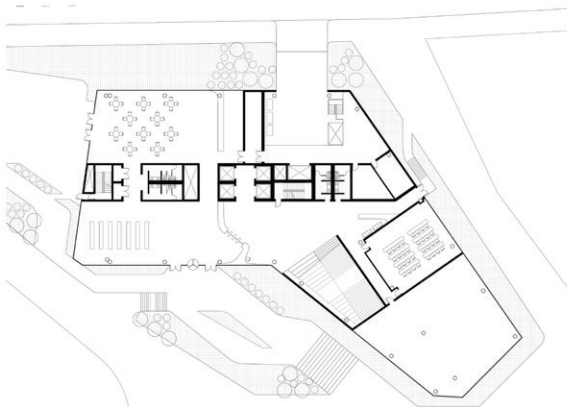
FORM DIAGRAM



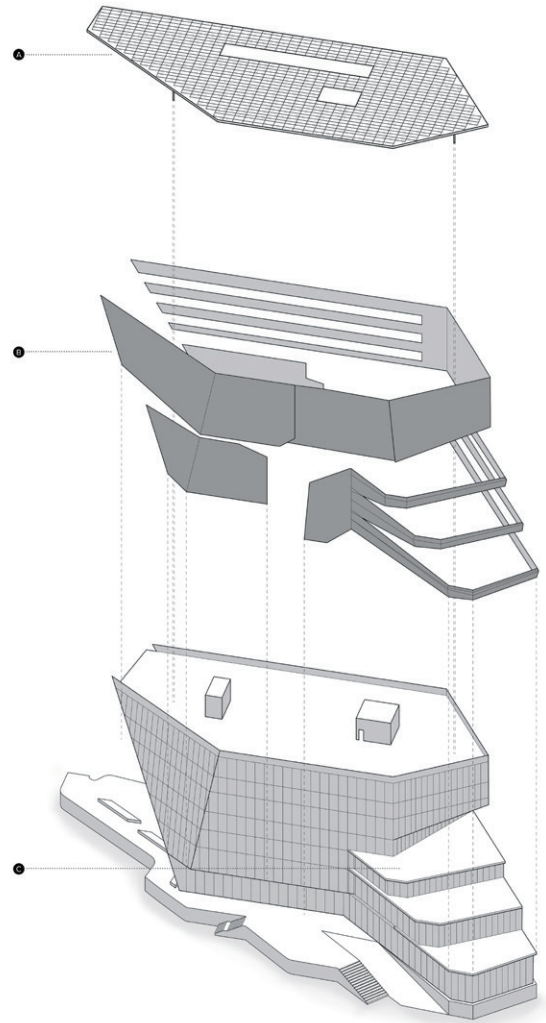
LEVEL 7 FLOOR PLAN



LEVEL 8 FLOOR PLAN



LEVEL 1 FLOOR PLAN



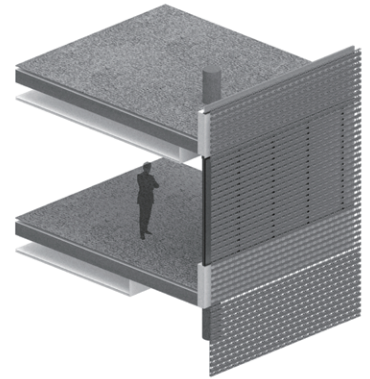
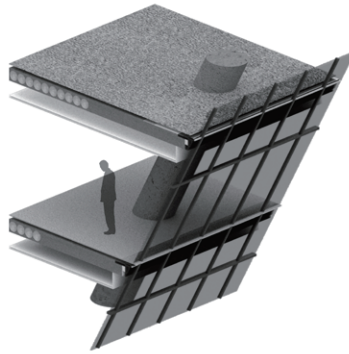
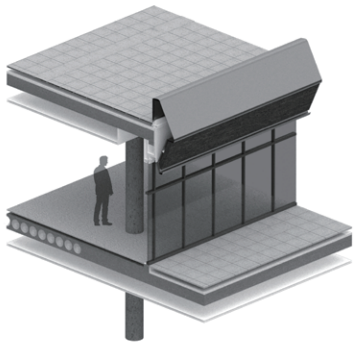
SECTION

- 1 Photovoltaic Roof
- 2 Aluminum Facade
- 3 Outdoor Terraces

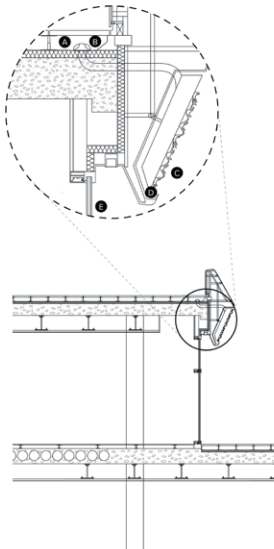


*Lobby Rendered View Showing Student, Faculty, and Staff Checkpoint
Entry faces central walkways of the island.*

WALL DETAILS

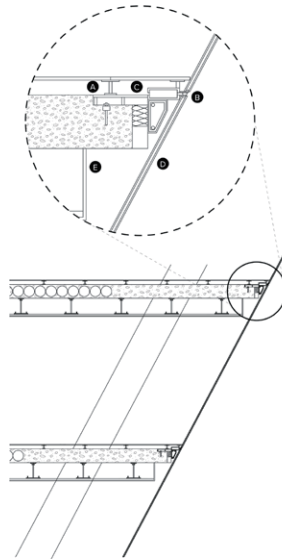


TERRACE SECTION



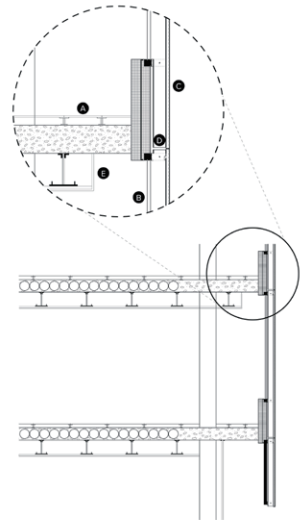
TERRACE SECTION DETAIL

SLANTED SECTION



SLANTED SECTION DETAIL

TYPICAL SECTION

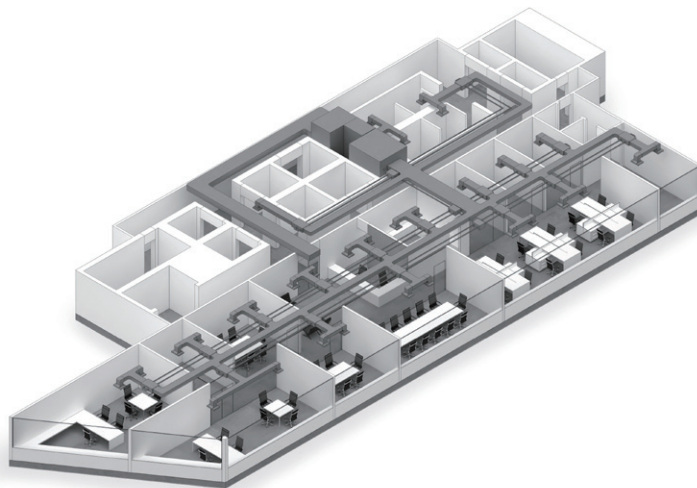


TYPICAL SECTION DETAIL

Technical Systems -

(Above) Wall Assembly Diagrams detail connections and material assemblies at three points in the building

(Left) Systems axonometric of a standard office/research space to be leased by partner companies.



MECHANICAL AXON

Richmond Heights High School

Richmond Heights Ohio

ThenDesign Architecture_ Project includes a branch of the Cuyahoga Public Library



*Tasks accomplished include:
Construction Document Phase Drawings and Deliverables
As Built Drawing Set
Construction Administration
Closeout Documents*

North Royalton Elementary School

North Royalton Ohio

New Construction Elementary School_ Incorporates cutting edge learning philosophies



*Tasks accomplished include:
Design Development Phase work & drawings
Document and file management tasks
Interior Design Drawings and Shop Drawings*

Geauga County Municipal Building Claridon Township, Ohio

ThenDesign Architecture_ Community Central Administration Hub



Tasks accomplished include:
Early Schematic Design Work
Production of press and schematic images
Working with engineer and landscape architect on Site Design

Dania Pointe Development Dania Beach Florida

MCG Architecture_ Mixed Use Entertainment Development



*Tasks accomplished include:
Early Schematic Design Work
Production of press and schematic images
Facade Design work
Client Fit out Drawings and Design
Landscape Design*