



MICHAEL THUT

# INTRO

My name is Michael Thut and I am working as an Architectural Designer in New York City, NY.

Prior to earning my M.Arch degree at the University of Michigan, I studied Math and Studio Art at Swarthmore College. These have become foundational to my architecture education and my creative practice. While this book is intended to be a presentation of my creative work to this date, it is also a manifestation of me and my interests. I believe the logic, systemization, craft, and attention to detail that are a part of my personality are on display in this body of work. I hope you enjoy my practice.



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# NORTHERN BLVD

Location: Queens, NY

Professional Work: FXCollaborative

Skills Used: Revit, Enscape, Excel, InDesign, Bluebeam

Architecture Team Members: Tim Sudweeks, Eric Laine, Christos Constantinou

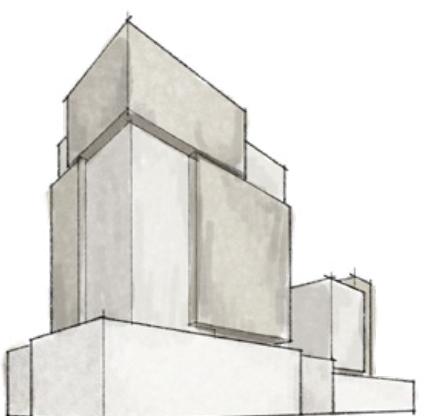
This project recently wrapped up the schematic design phase (shown here). My role was to produce unit layouts in coordination with an exterior designer and project architect. The unit mix was a spread of 1BRs, 2Brs, and 3BRs, with more luxurious apartments on the upper floors. This required various floor layouts across the tower, creating a challenging architectural, structural, and mechanical coordination effort. I also helped calculate the GSF and ZSF throughout the design process to ensure we were maxing out our buildable area as things shifted.

## SKETCHES

The sketches to the right show the original design intent of creating stacked boxes and how it progressed with additional detail.

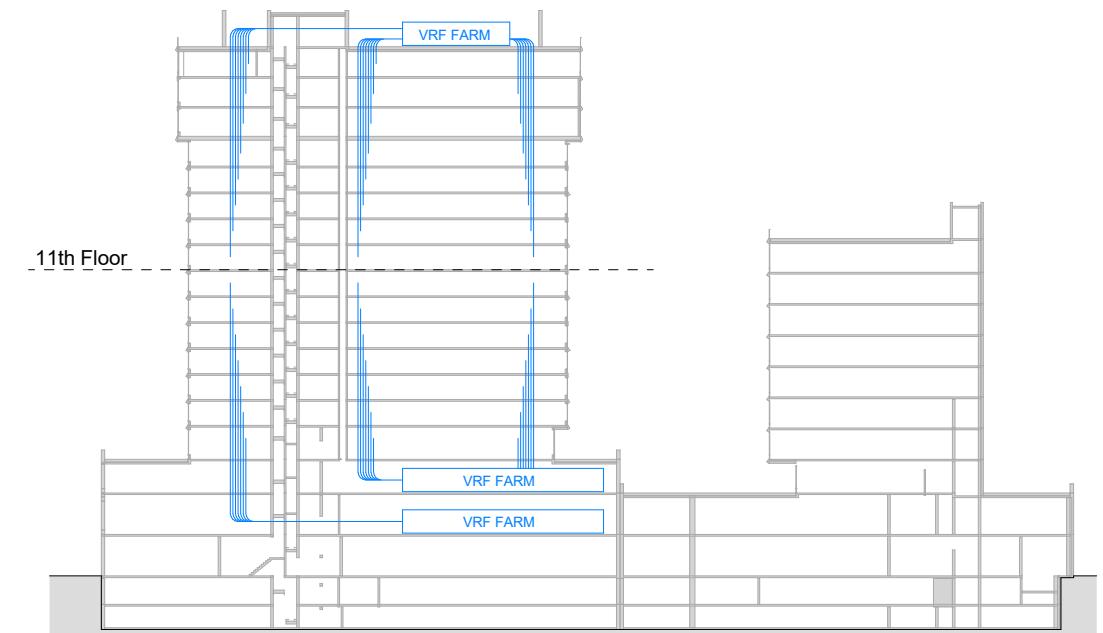
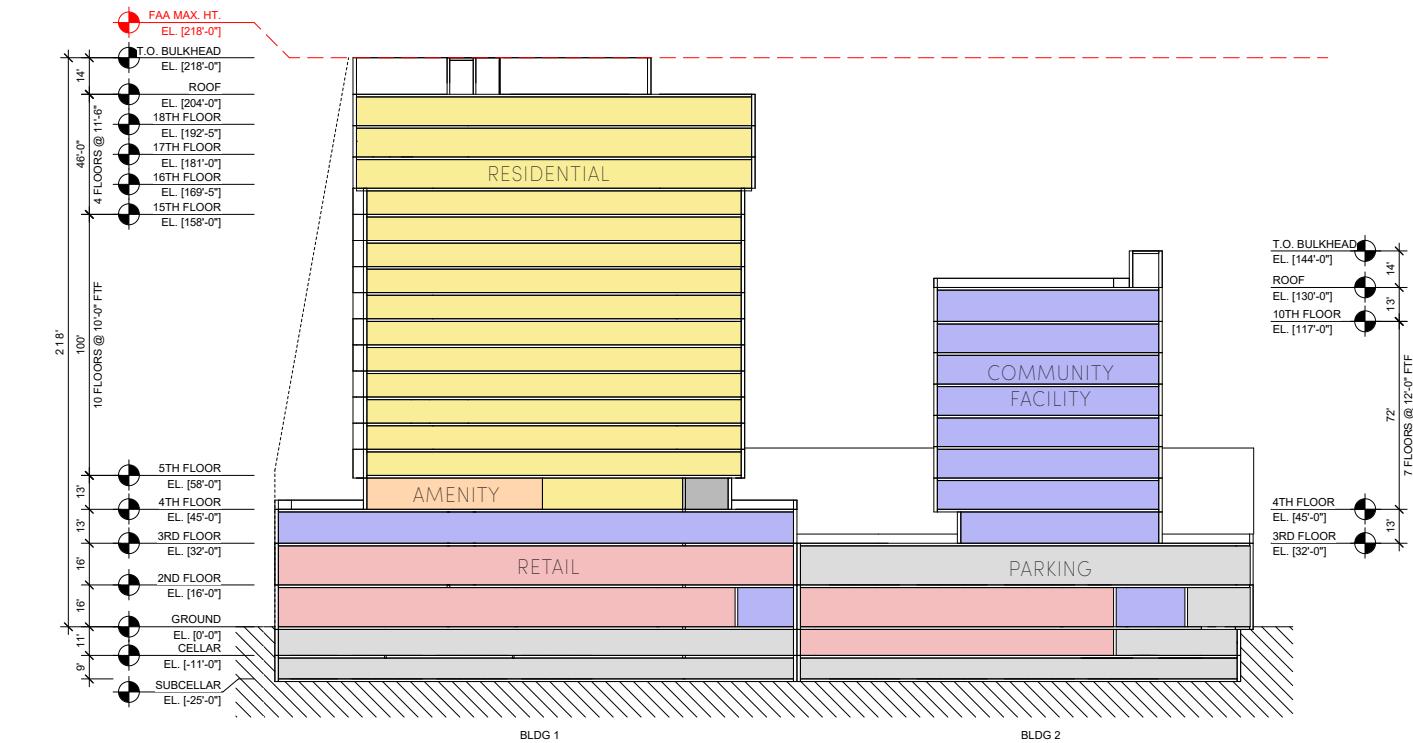
## IMAGE

The image on the far right shows how the team, along with the client, structural, and MEP engineers, turned that stacked box idea into a finalized schematic design.



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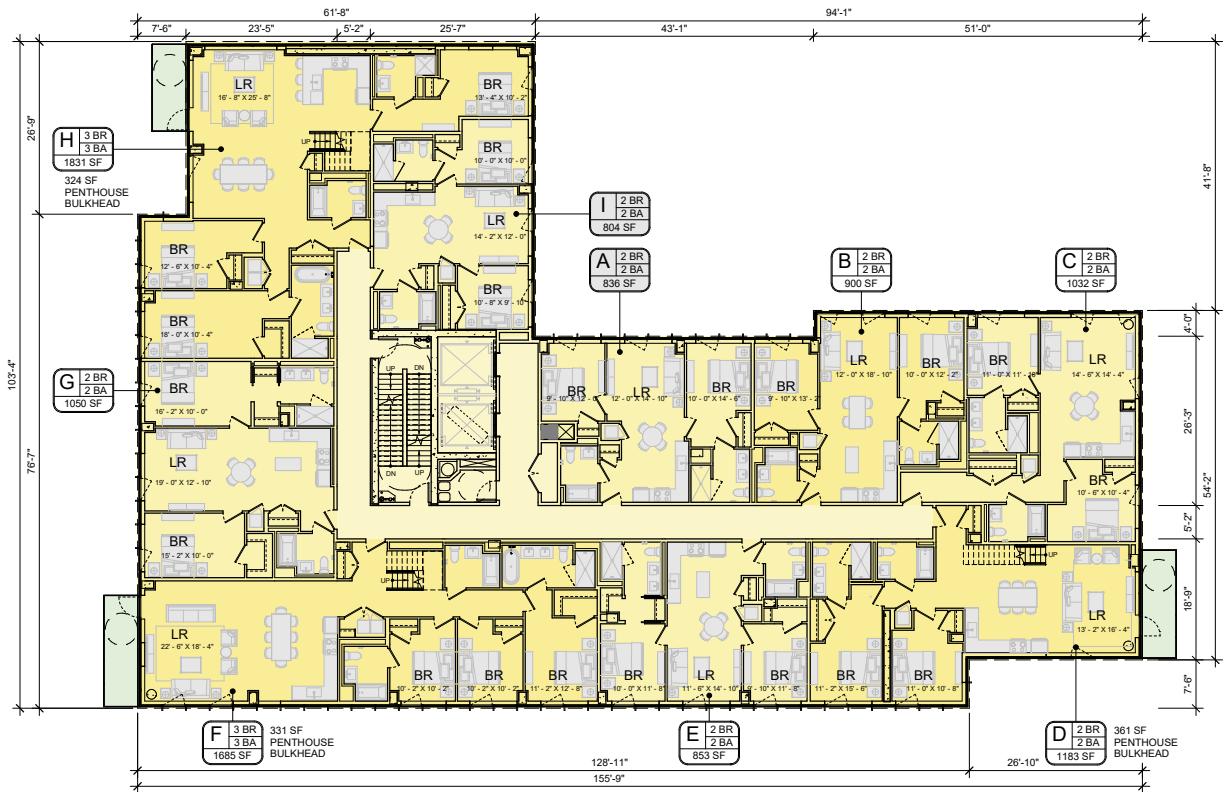
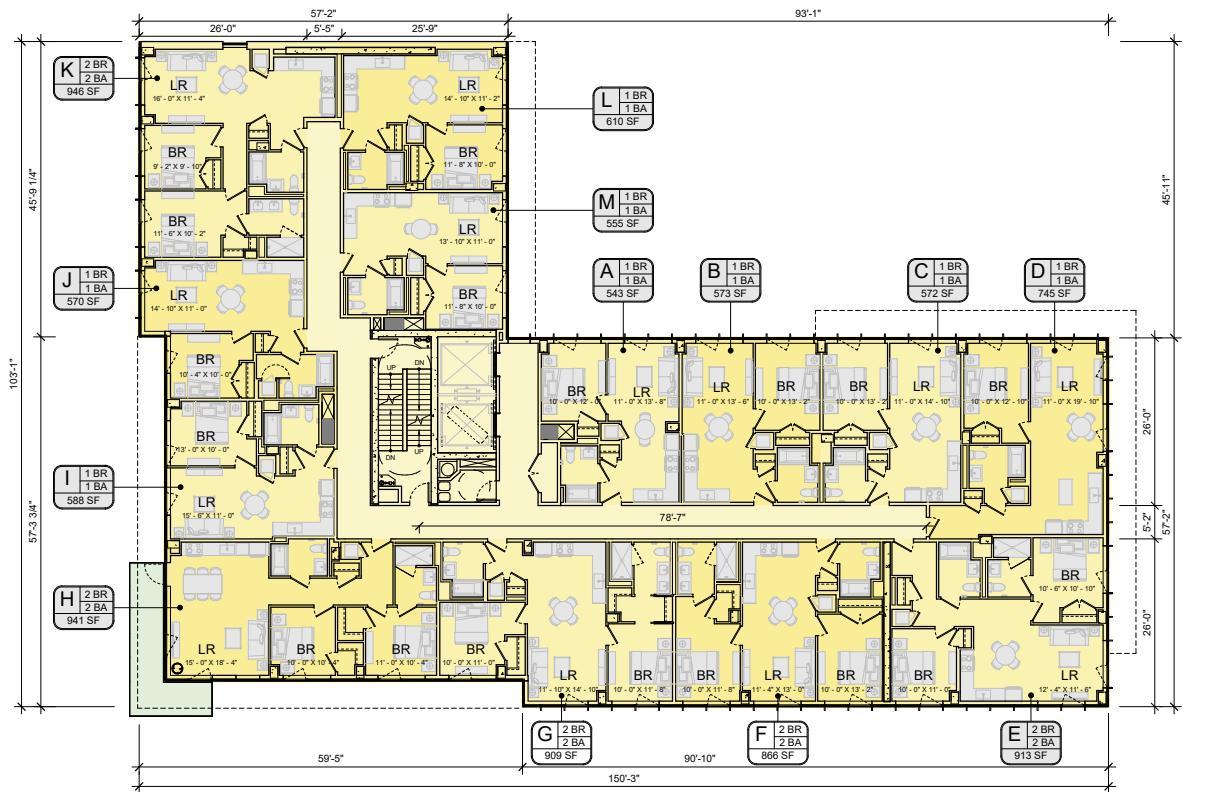
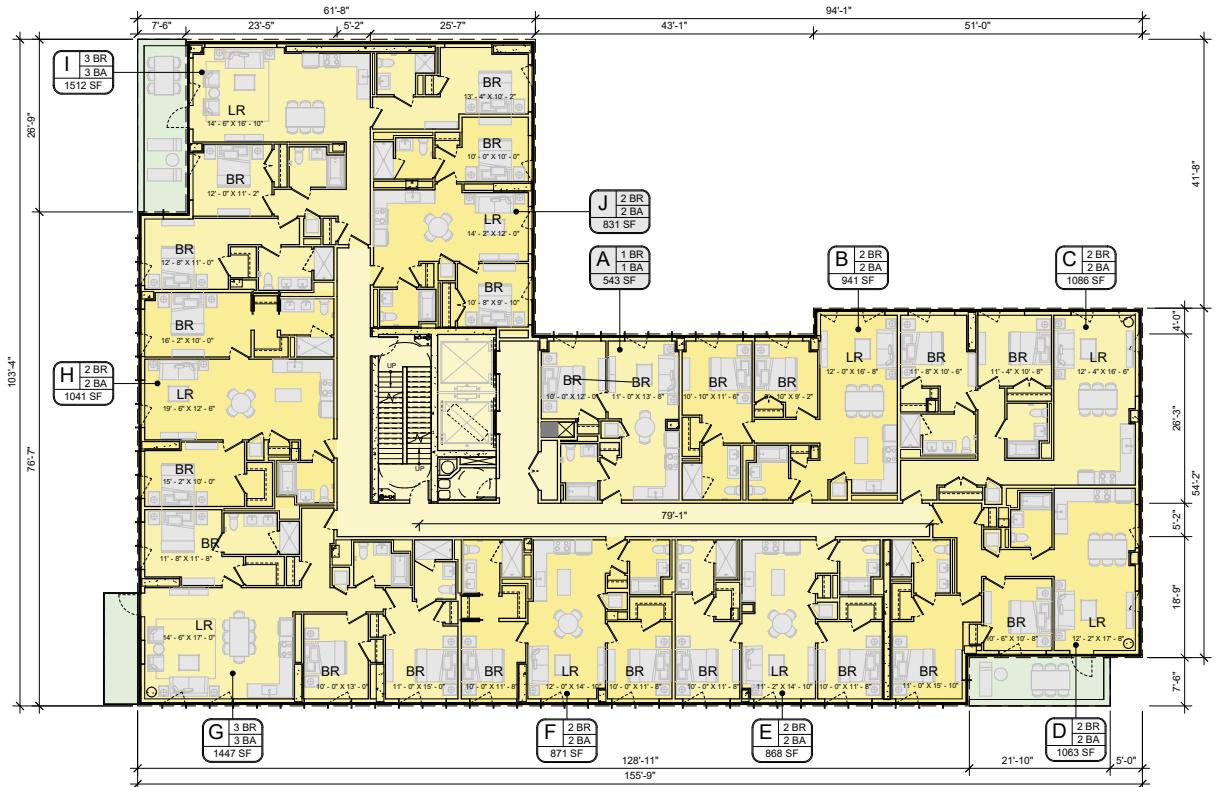
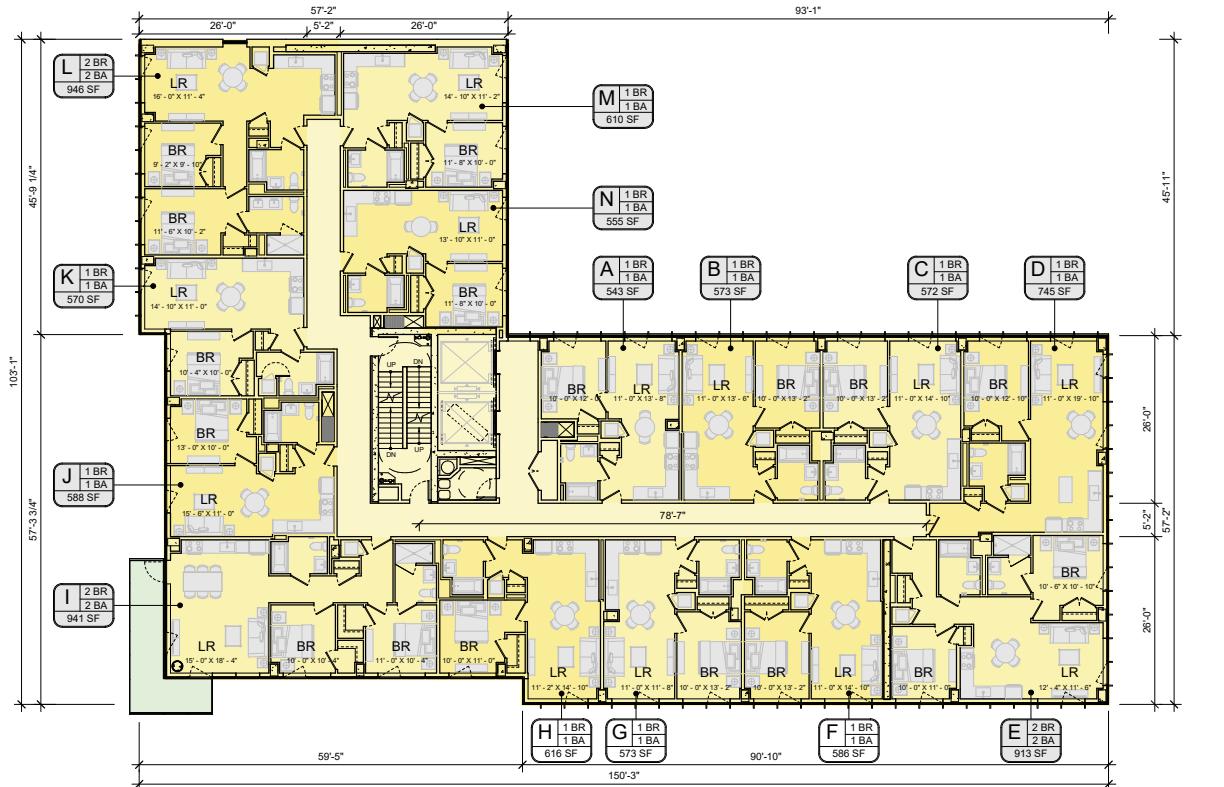


**SKETCH**

The sketch to the left highlights the open green space in the project. We had to fastidiously calculate this throughout the design process because our max height was dependent on providing a certain percentage of open space.

**DRAWINGS**

The sections above detail the various programs throughout the building and the coordination effort required to provide VRFs throughout the building. This is why stacking units became so important in the unit layout process.

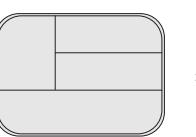


## PLANS (LEFT)

The plans to the left are the bulk of the residential tower. They comprise 100 1BRs and 47 2BRs. It was crucial to maintain stacked units as much as possible to help with coordination later.

## PLANS (RIGHT)

The plans to the right are of the three top floors. The client wanted luxurious units higher up because the sale price is greater, so coordinating the layouts with the floors below was a fun challenge.



= STACKED UNIT



IMAGE

The image to the left highlights a grand residential entrance off of the quieter road. The separation from the retail and community facility was a crucial component of the design.

IMAGES

The renderings above display the multi-use building in its entirety. The team put a lot of effort into trying to delineate the various programs while making the building feel cohesive.

# PACIFIC ST

Location: Brooklyn, NY  
 Professional Work: FXCollaborative  
 Skills Used: AutoCAD, Bluebeam  
 Architecture Team Members: Tim Sudweeks, Minghan (Tom) Lin, Alekhyia Goolla, Shreya Badnikai

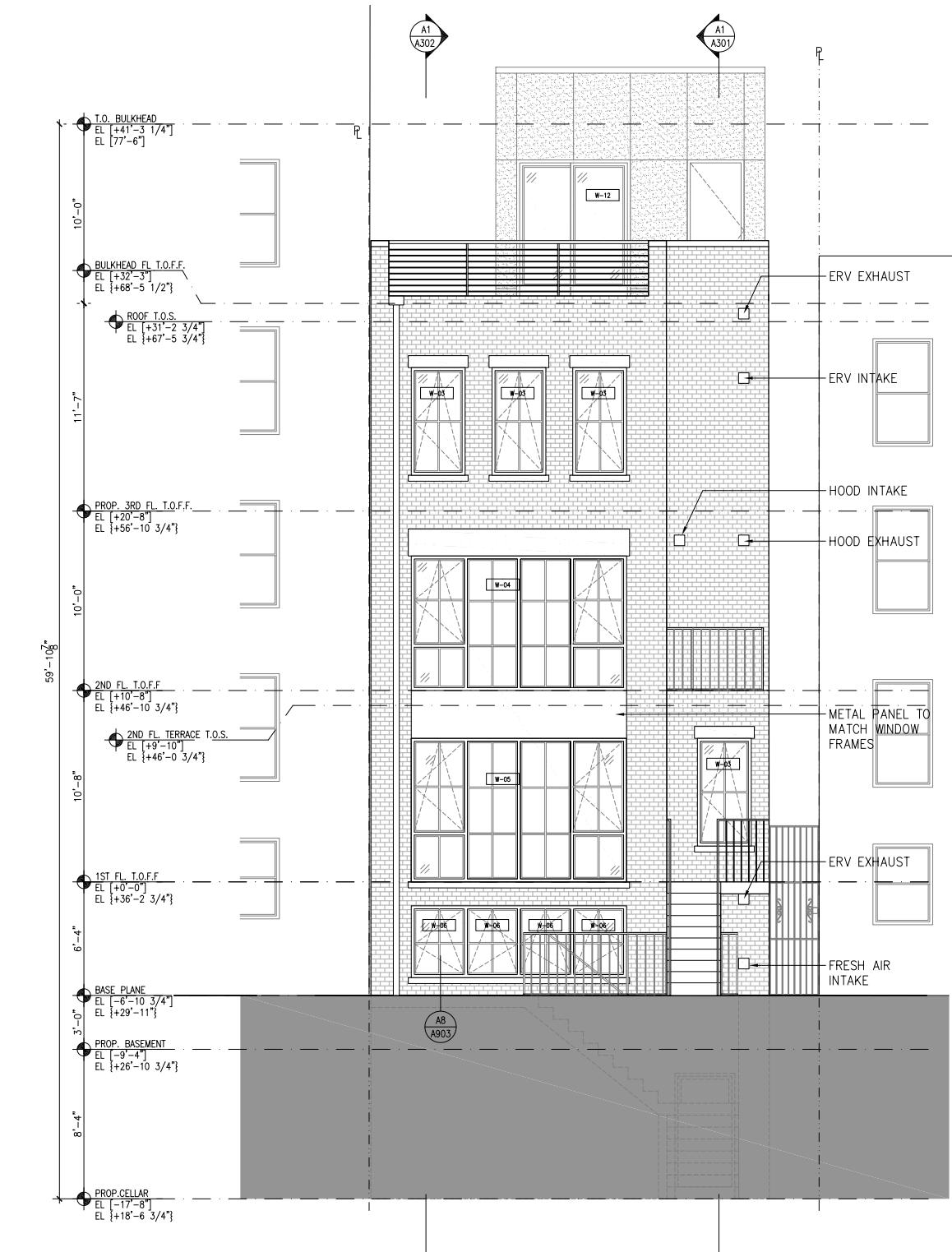
This is one in a series of historic townhouse renovations at FXCollaborative. Each project is a full gut of the existing interior (aside from the floors), often with an back end extension to max out increased ZSF. This particular renovation was designed as a two-family residence. I aided in the remodel design and took control of the project through the coordination and production of construction documents. This required close coordination with the client, MEP engineer, and structural consultant. Additionally, this project was set up with outsourced labor, so I was responsible for managing two architectural drafters from Studio Parametric Architects (located in Bangalore, India).

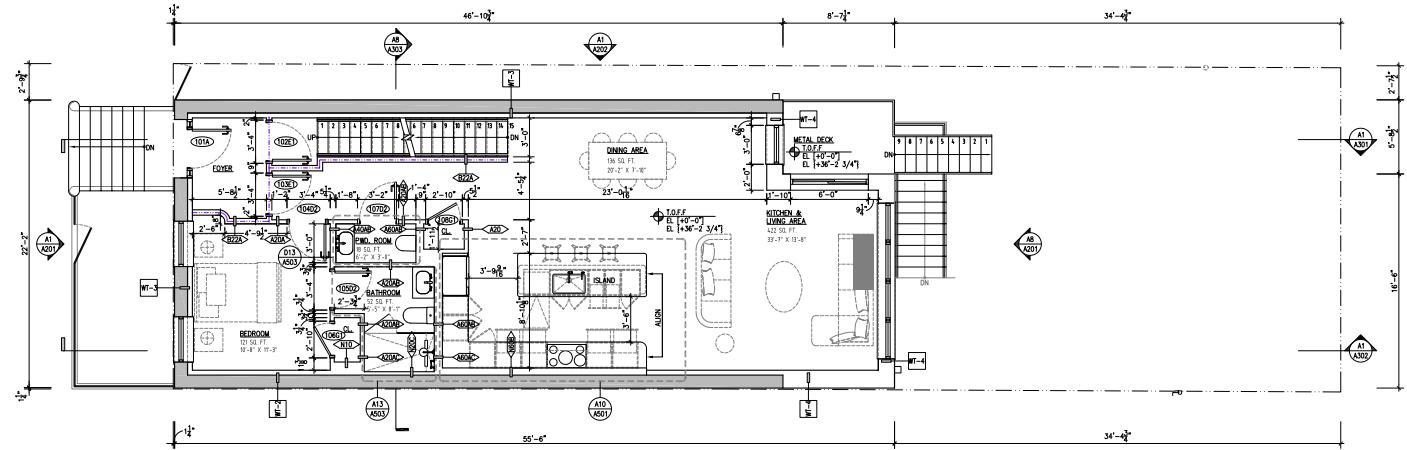
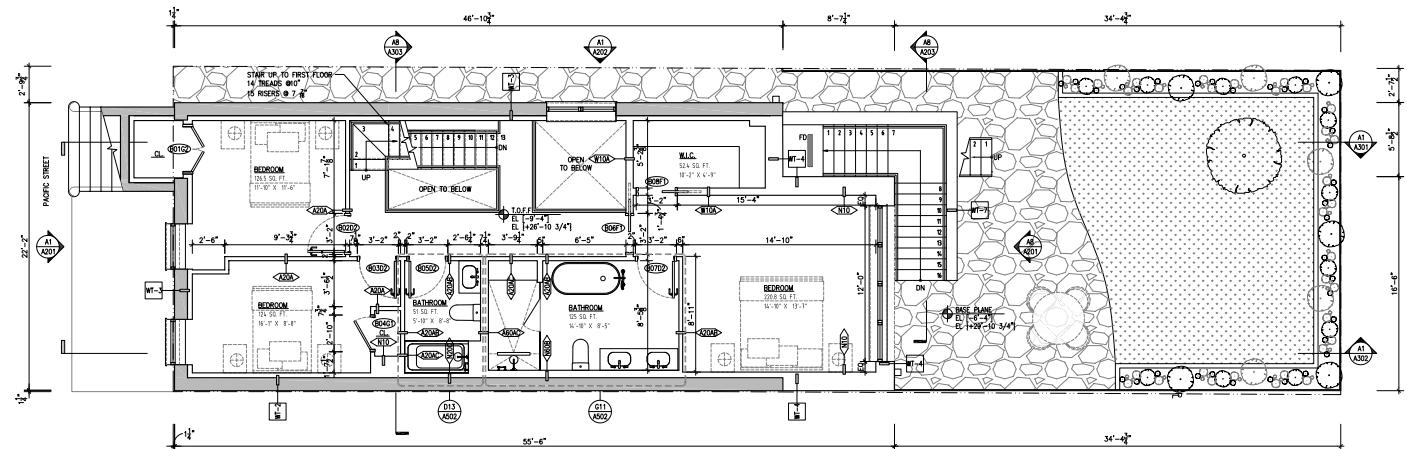
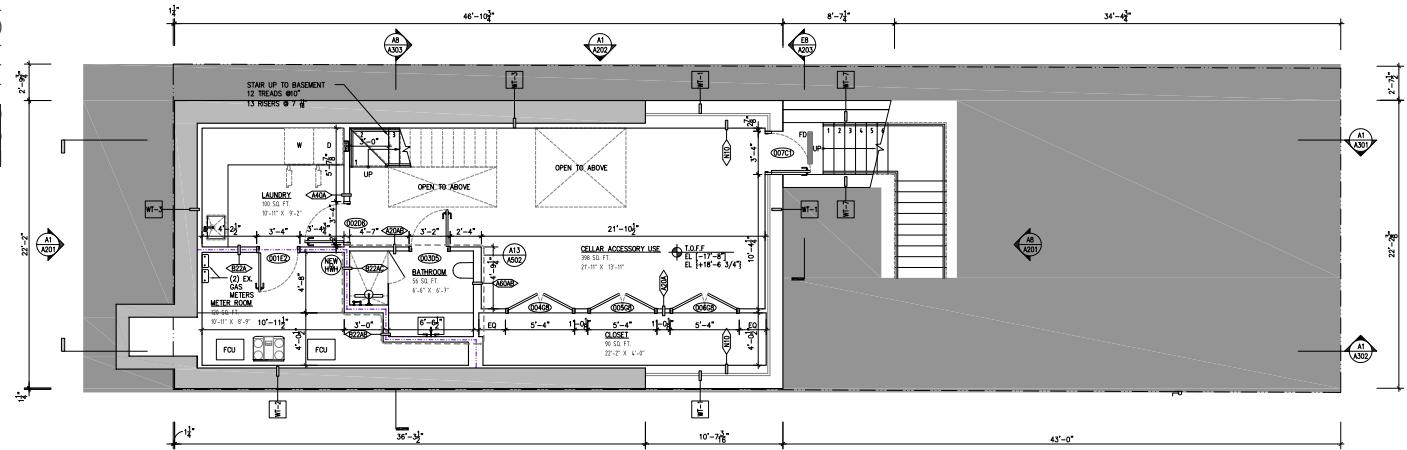
## DRAWING

The front elevation to the left was updated to its original status because the townhouse is within a historic district and needed to go through an LPC process for approval.

## DRAWING

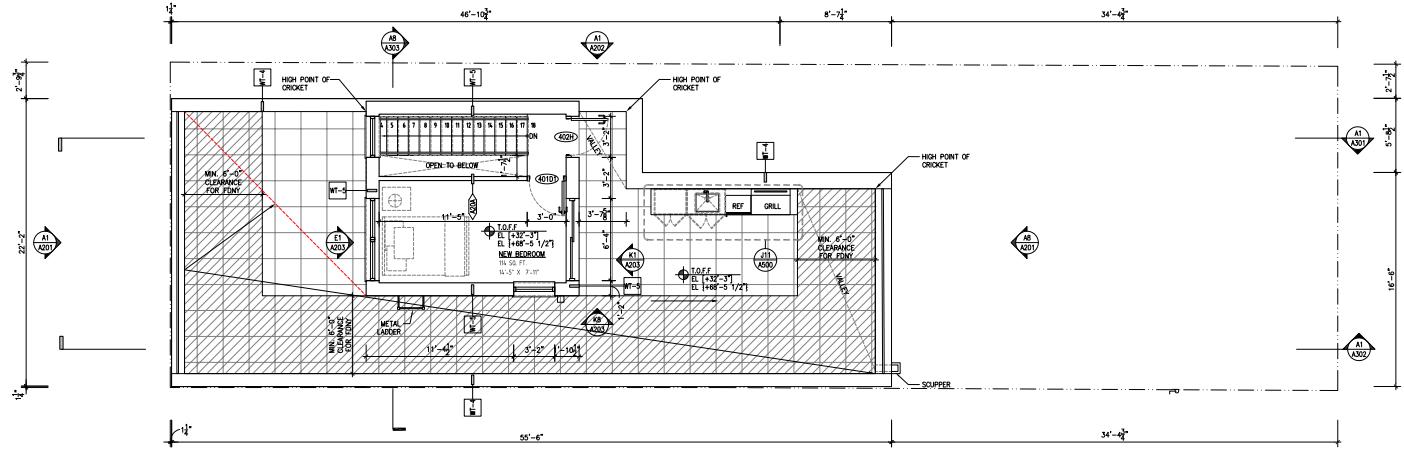
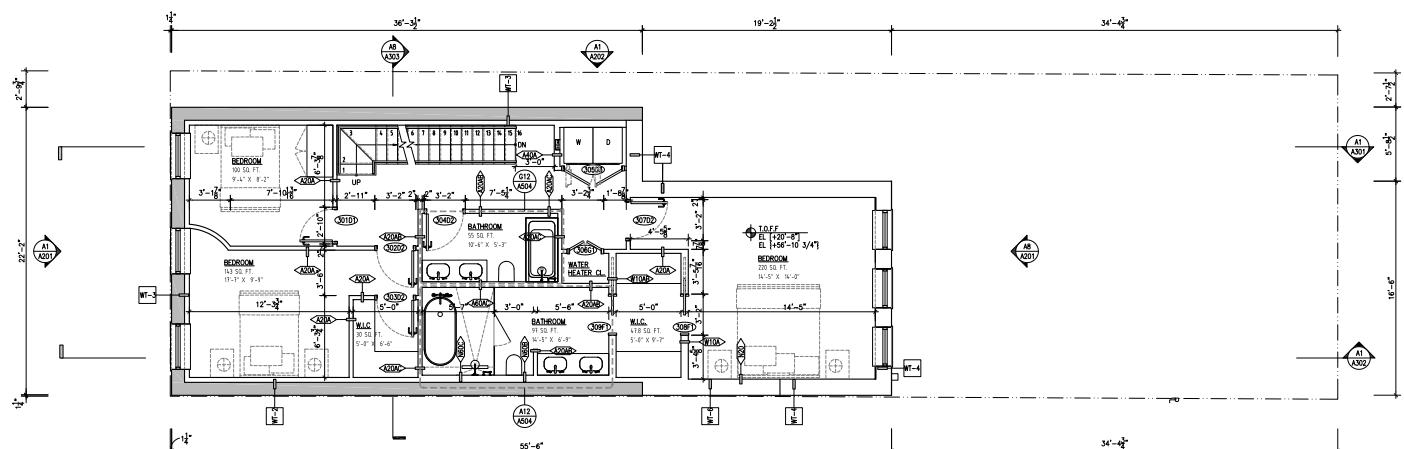
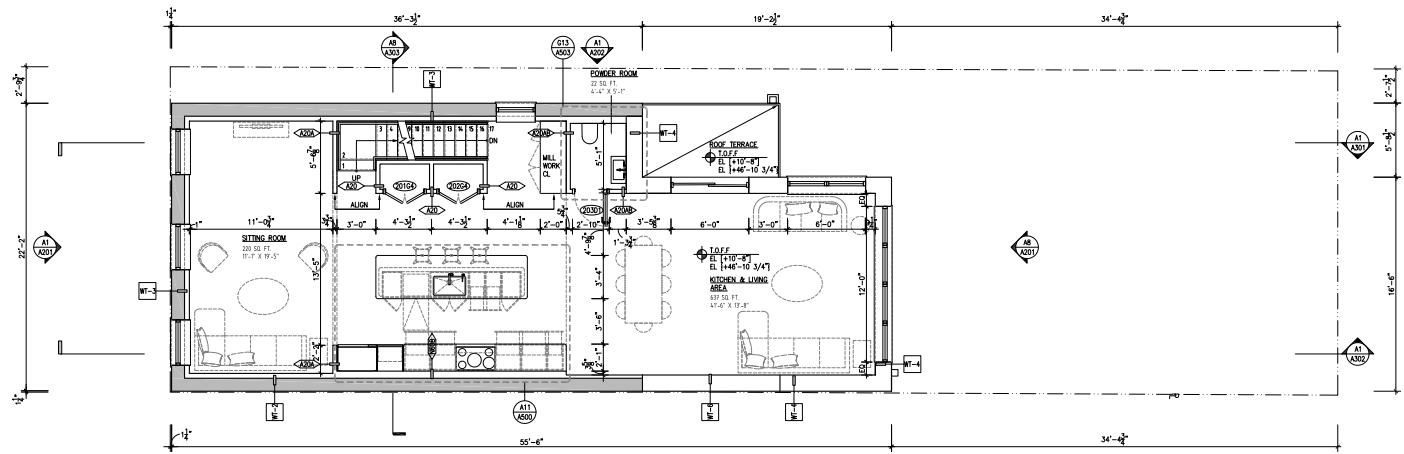
The rear elevation to the right did not require the same historic standards, so the back wall was blown out, extended, and rebuilt as new construction.

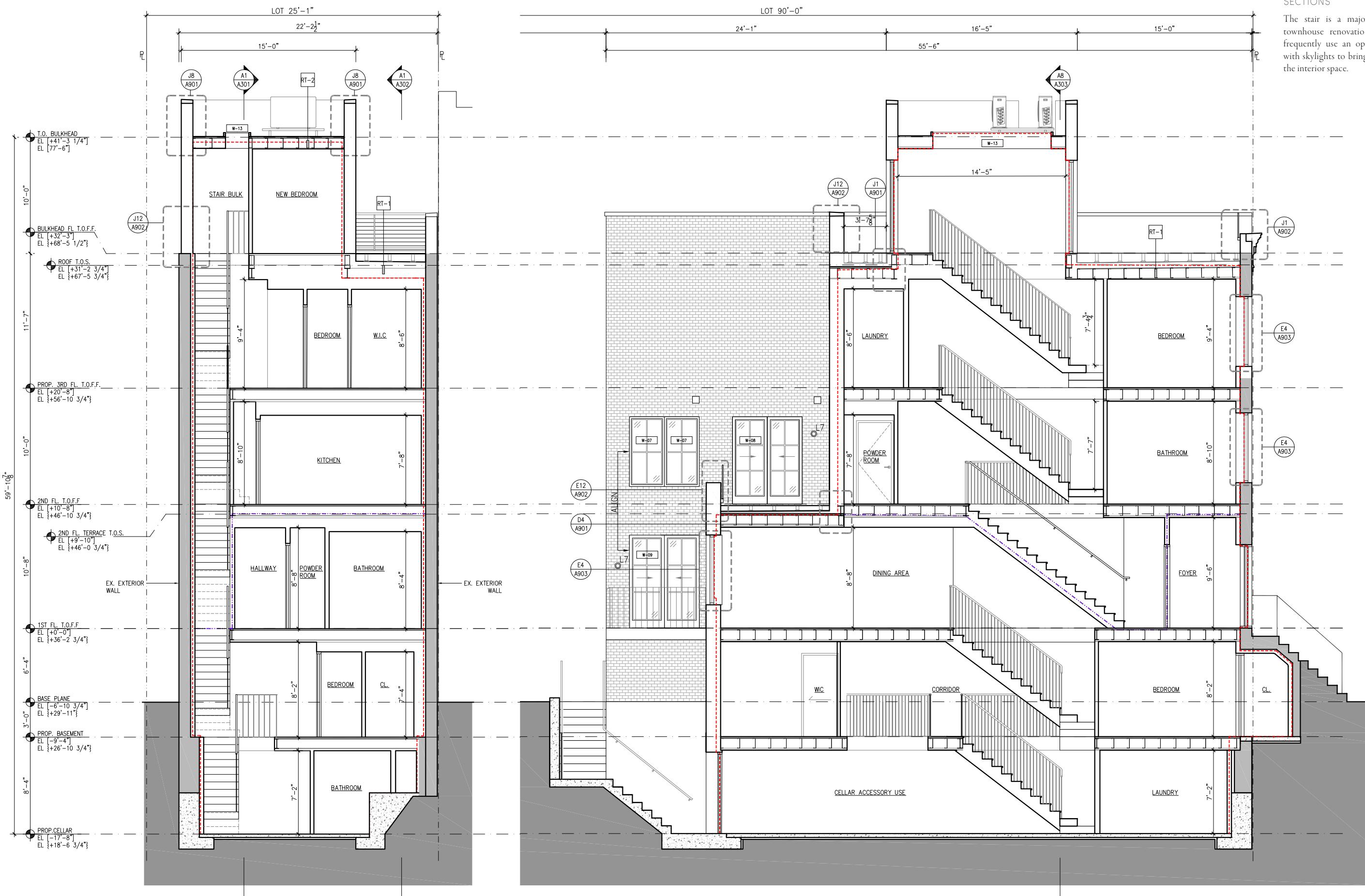




## PLANS

The plans ascend from the cellar (top left) to the bulkhead (bottom right).





# TRUNG NGUYEN KINDERGARTEN

Location: Buôn Ma Thuột, Vietnam

Professional Work: MASS Design Group

Skills Used: Revit, Google Slides, Lumion, Adobe Suite (Illustrator, Photoshop)

Architecture Team Members: David Saladić, Jean Paul Sebuhayi Uwase, Théophile Uwayezu, Divine Mutsinzi, Emery Karenzi, and Carolyne Chelimo Bor

My role in this project was to help progress a pre-existing concept design from 2018 through the schematic design phase. Due to the client's desire for a sustainable building (both materially and systematically), the structure team designed a cross-laminated bamboo and steel truss that necessitated a strict adherence to grids. This required revising the upper level form since it was designed to connect clusters of classroom blocks on the ground. My work involved the development of the second floor plan. This included the layout, organization, and refinement of the architectural program in-tandem with the in-house engineering teams. Additionally, I presented and ran most of our in-house meetings since I was the only native-english speaker on the Rwandan architecture team.

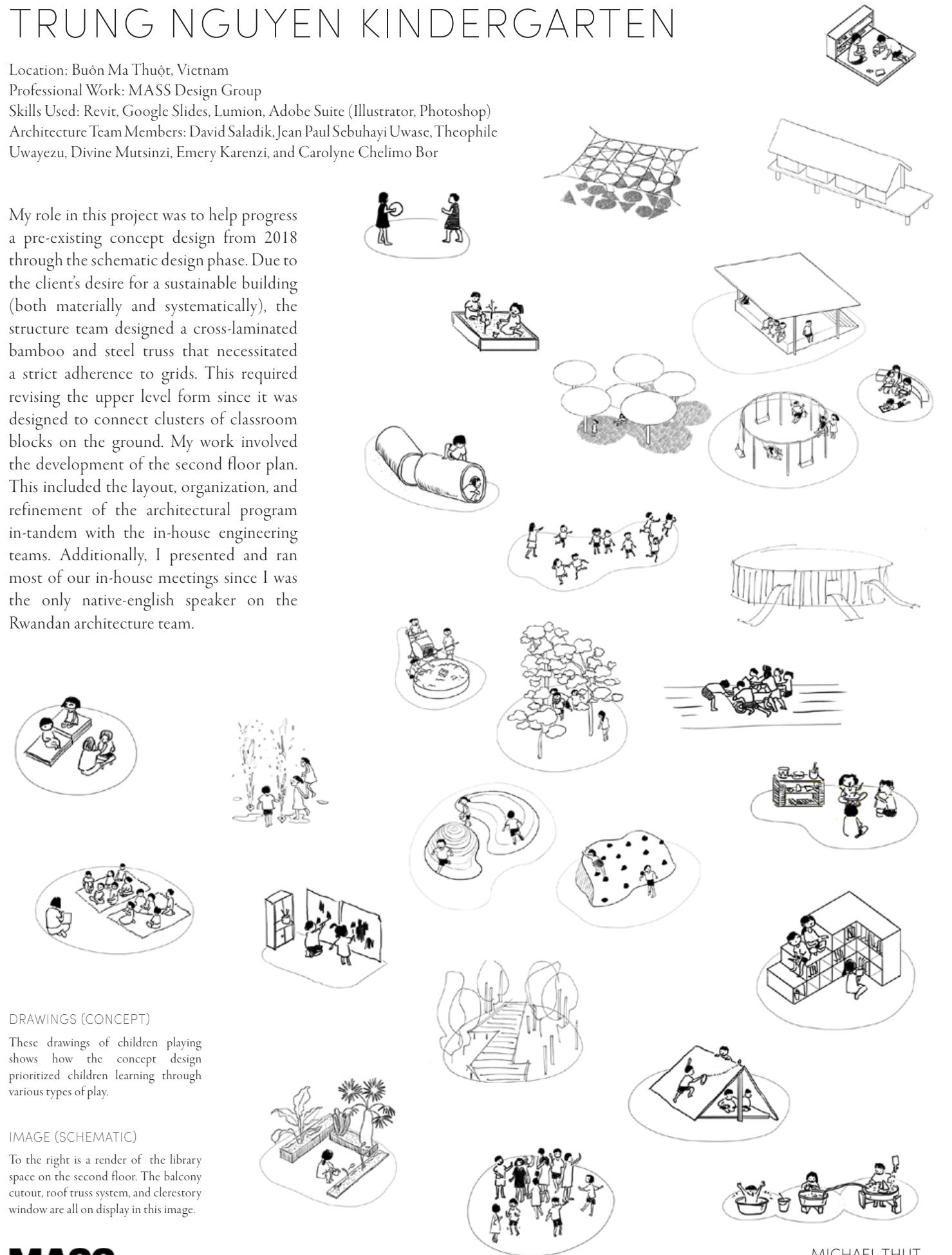


## DRAWINGS (CONCEPT)

These drawings of children playing shows how the concept design prioritized children learning through various types of play.

## IMAGE (SCHEMATIC)

To the right is a render of the library space on the second floor. The balcony cutout, roof truss system, and clerestory window are all on display in this image.



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**MASS.**





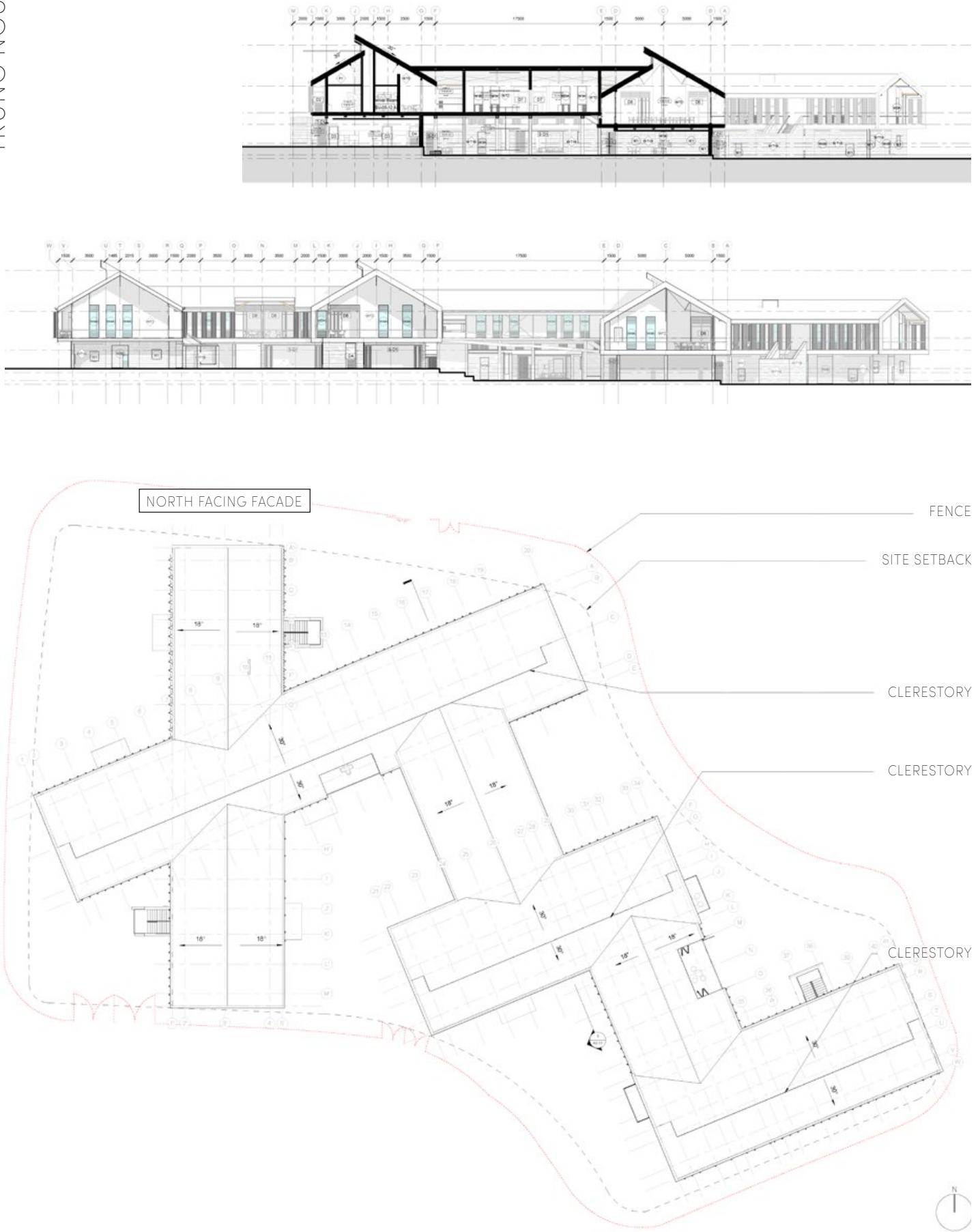
DRAWINGS (CONCEPT)  
ADMIN & STAFF  
PUBLIC  
EDUCATION  
BACK OF HOUSE  
TERRACES

To the left are the original concept design floor plans for the school. These were done by a team at MASS back in 2018.



DRAWINGS (SCHEMATIC)

On the right are the plans for the schematic design phase. As a new team, we had to develop the design while maintaining its architecture integrity. I was responsible for the 2nd floor plan.



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DRAWINGS (SCHEMATIC)

The drawings to the left show the passive roof design that we chose. Architecturally, we sharpened the intentionality of the gable with respect to structure and program.

IMAGES (SCHEMATIC)

The renderings above highlight the branching form of the building across the site. This clusters classrooms by age with the purpose of creating a shared, interconnected, playground.

# RURAL BRIDGE HOUSE

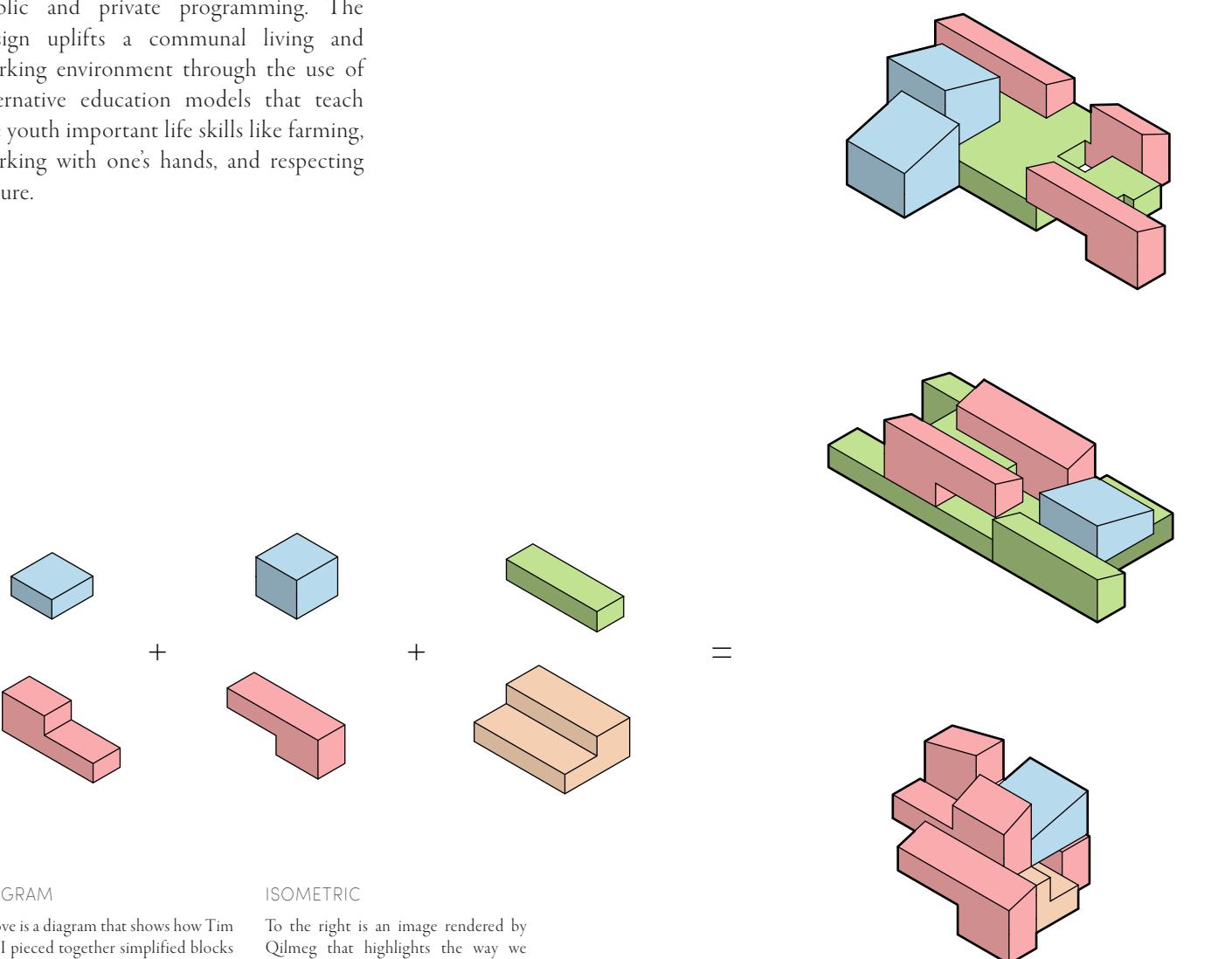
Location: Port Austin, MI

Class: ARCH 562: Countryside Collectives - Jonathan Rule & Kathy Velikov

Skills Used: Rhino 7, Revit, Adobe Suite (Illustrator, Photoshop)

Team Members: Michael Thut, Tim Jockers, Qilmeg Doudatz

This project was a three-person group project in Michigan's comprehensive graduate studio. Our team was prompted to design a publicly engaged, collective living complex in the rural town of Port Austin, Michigan. With a projected northern migration to Michigan in the near future due to the growing climate crisis, our professors tasked us with envisioning the potential growth for smaller towns in the state. Our proposal was a low-lying, linear construction punctured by striations of public and private programming. The design uplifts a communal living and working environment through the use of alternative education models that teach the youth important life skills like farming, working with one's hands, and respecting nature.

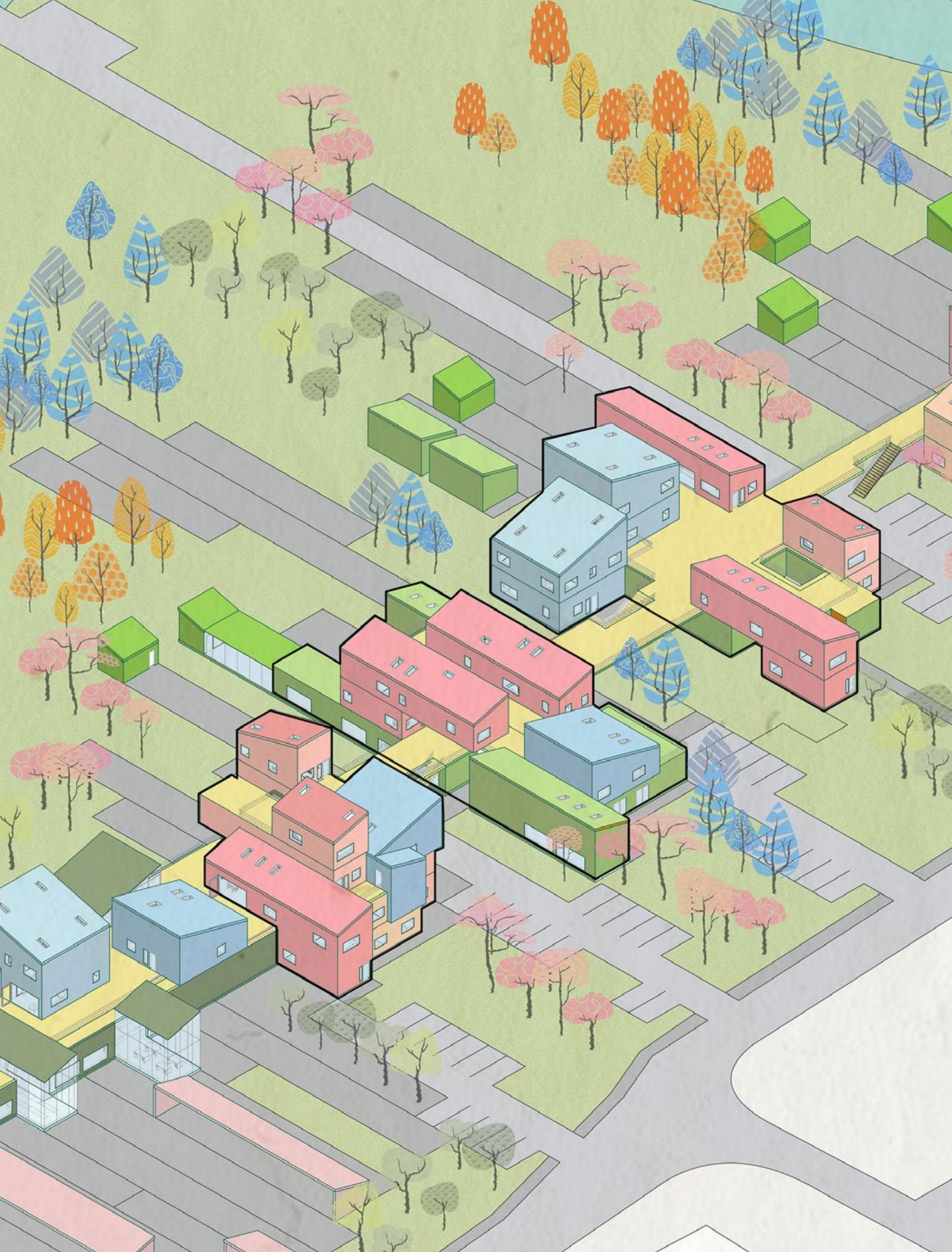


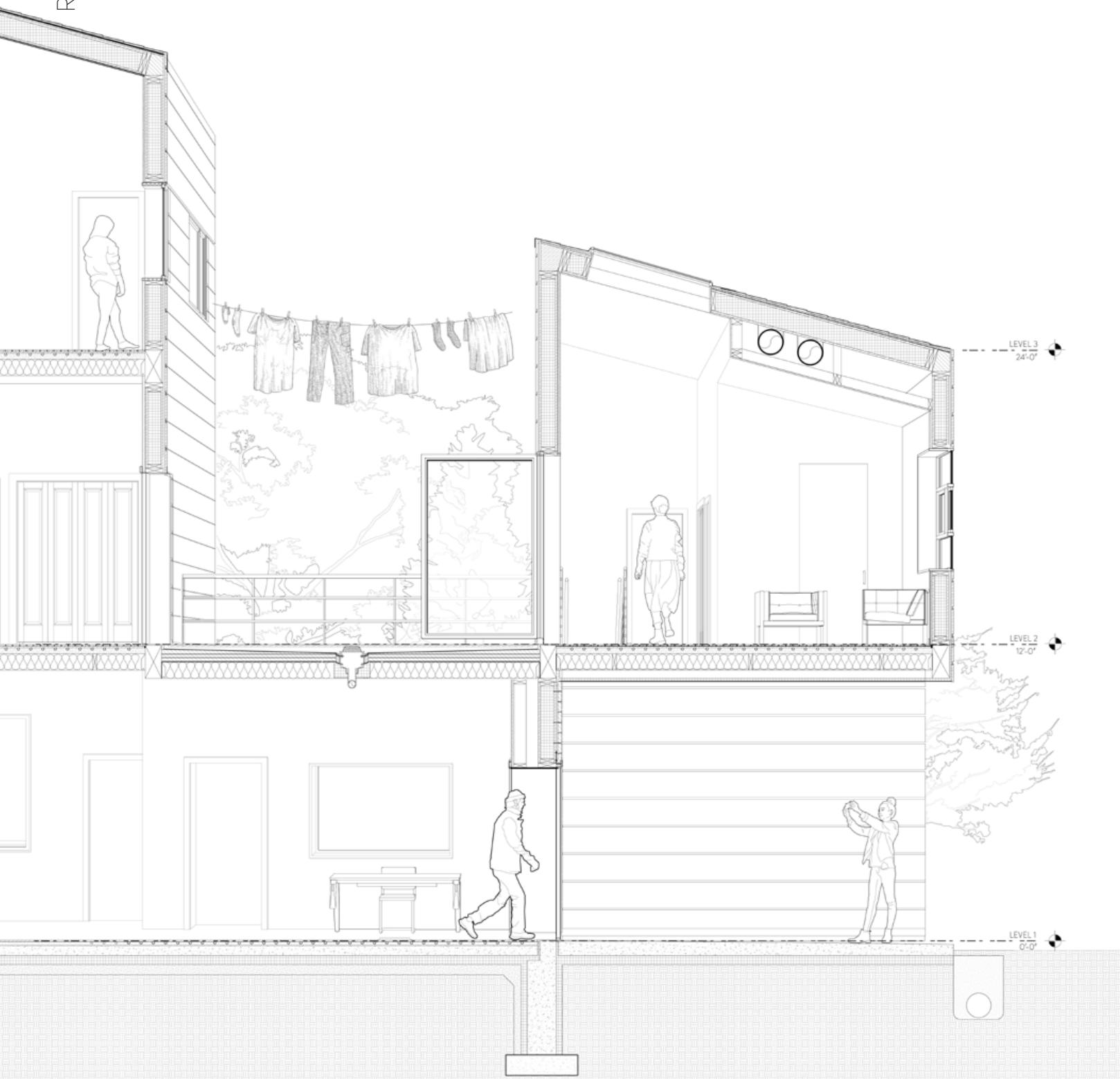
DIAGRAM

Above is a diagram that shows how Tim and I pieced together simplified blocks of typical developer apartment models to construct the formal logics of our project.

ISOMETRIC

To the right is an image rendered by Qilmeg that highlights the way we clustered differing unit types with and the various public programming across the site.



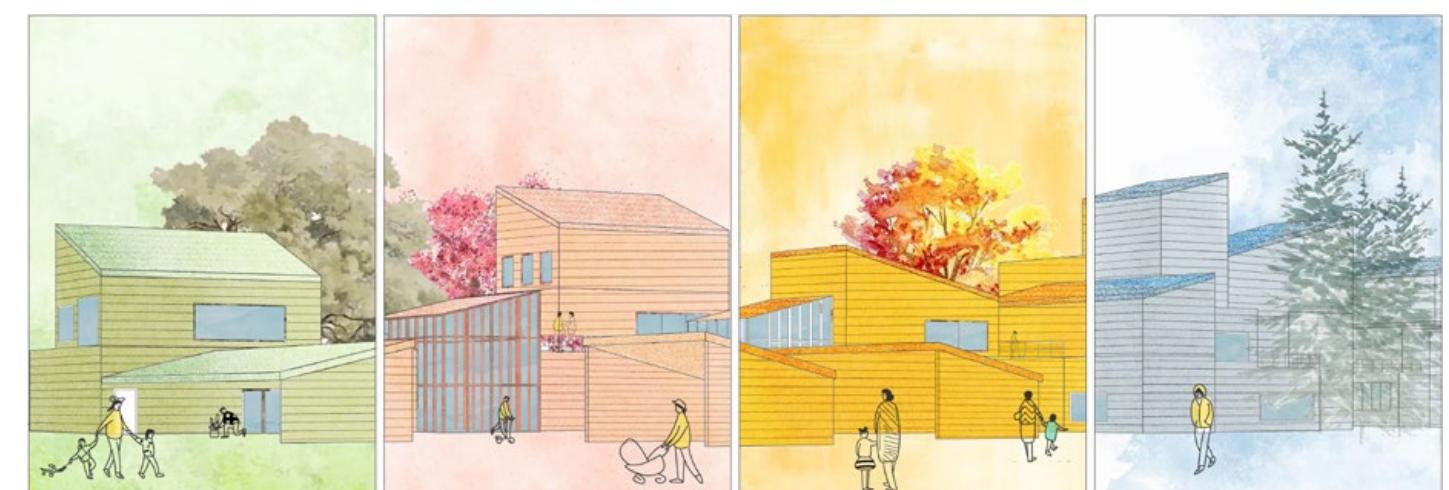


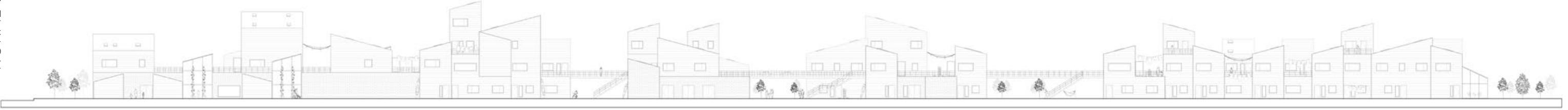
## WALL SECTION

To the left is a wall section drawn by Tim and I detailing our construction decisions. We were economic and sustainable through the choice of wood siding, Structurally Insulated Panels, and radiant heating.

## DRAWINGS

Below is a series of drawings by Qilmeg that give life to the elevated walkway and the building's public programming. We included alternative education components for each season to provide support to the town year round.





## ELEVATION

The top drawing is the west facing facade elevation. The height variation coupled with the low-lying separated clusters of program help to break down the large structure for the small town.

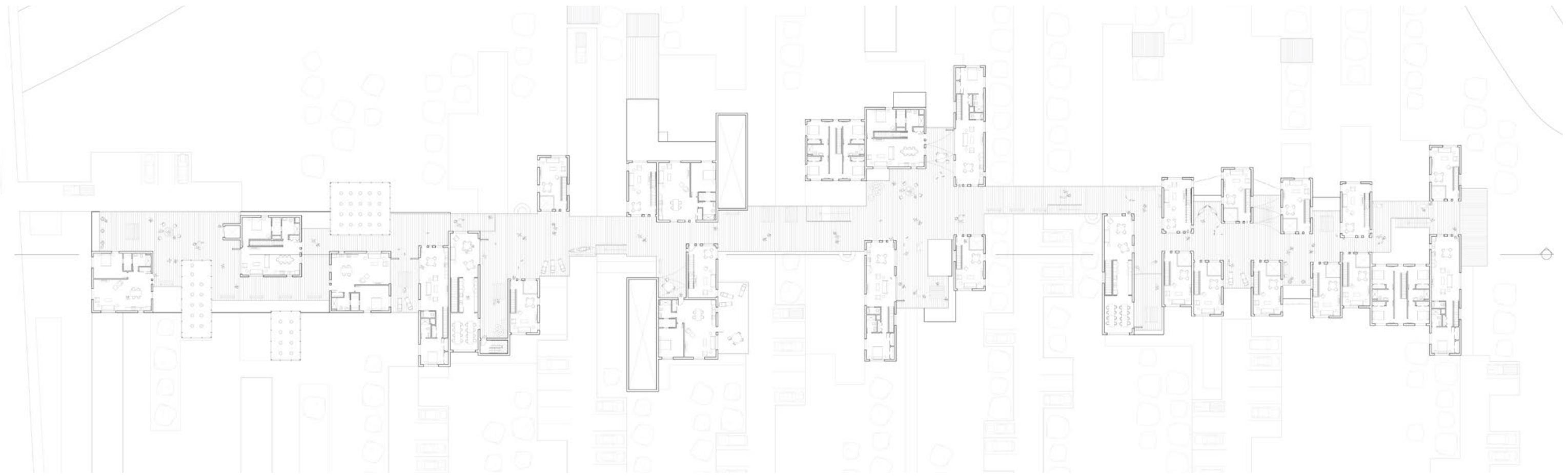
## SECTION

In the middle is a section cut through the length of the building. It shows how one and two-story apartments connected to the deck and the public programming.

## PLAN (2ND FLOOR)

At the bottom of the page is the 2nd floor plan. It highlights the deck as an elevated walkway that connects every part of our project together to form a large, public, exterior space.

All drawings produced by Tim and I.





Unit plans designed by Tim and I.

# CHAIR TRANSLATIONS

Location: Ann Arbor, MI

Research: Architecture Student Research Grant (ASRG)

Skills Used: LiDAR Scanning, Rhino 7, Woodworking, Adobe Suite (Illustrator, Photoshop)

Team Members: Evan Weinman

This project explores the role of cutting-edge design technologies through an iterative process combining digital tools and analog fabrication. The project utilized Gravity Sketch, a Virtual Reality CAD software, and 3D LiDAR scanning to uncover faults in the technology and capitalize on mistakes made in the translation process—digital mistranslations. Beginning with designs inspired by Finn Juhl's FJ48 and Marcel Breuer's Cesca Chair, the iterative process of design and fabrication resulted in the production of two series of chairs that are a direct product of the digital and physical tools used throughout the process. This allowed the makers to explore varying themes ranging from texture mapping and kitbashing to gestural motion and human proportion.



## PRECEDENTS

We started with the precedents on the right to focus on translation processes as opposed to the initial chair design. Evan chose FJ48 and I chose a personal reinterpretation of the Cesca chair.

## PROCESS DRAWING

The drawing on the far right explains the translation process we designed for the project. The iterative process followed a trajectory that flowed from physical to digital and back again.



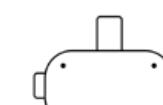
EVAN



GRAVITY  
SKETCH

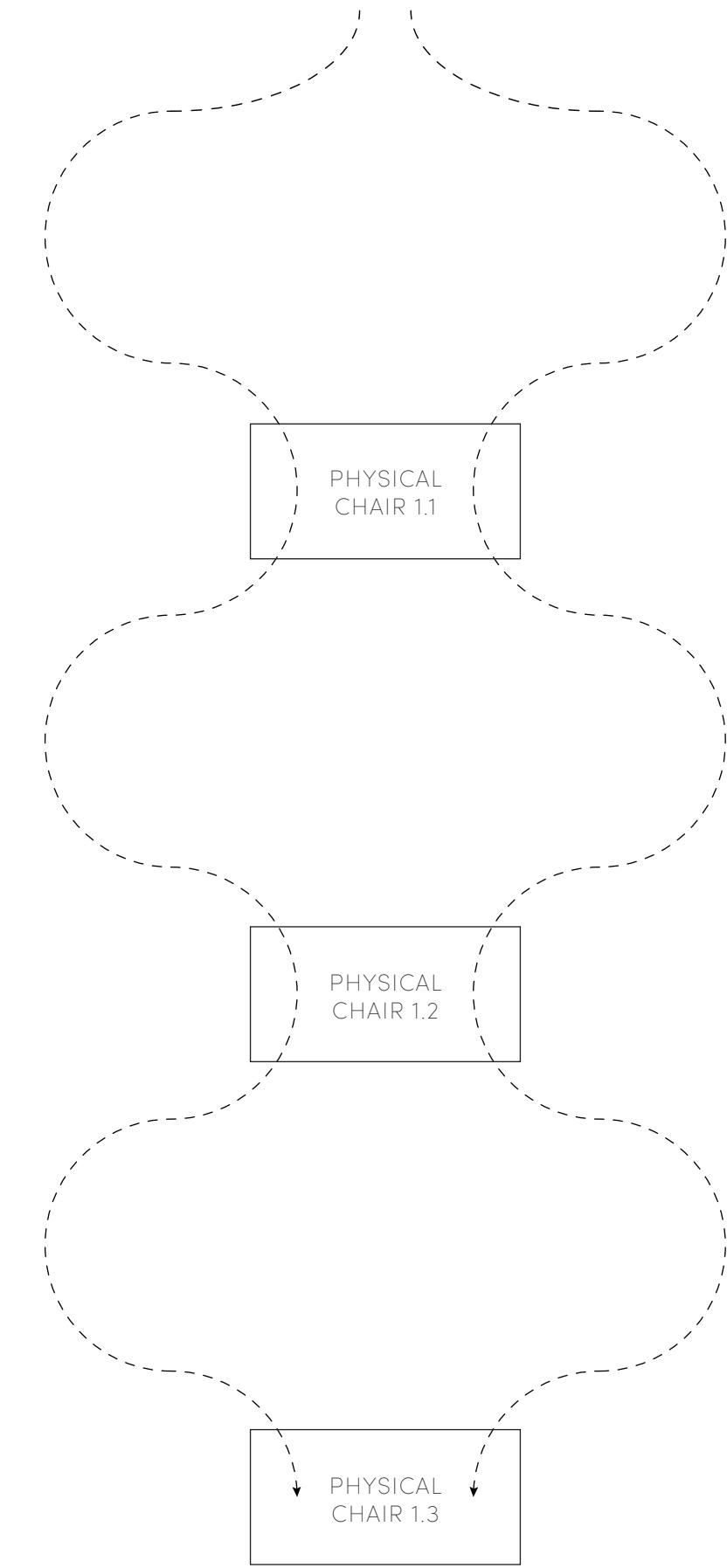


GRAVITY  
SKETCH



GRAVITY  
SKETCH

PRECEDENT  
CHAIRS



MICHAEL



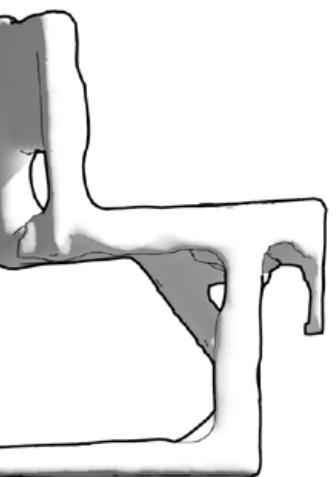
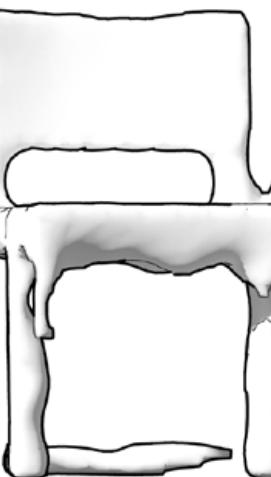
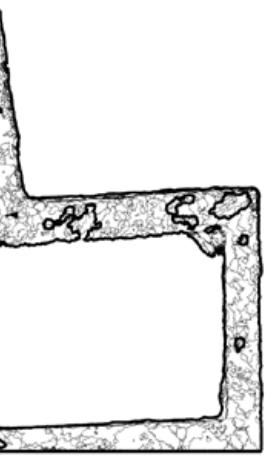
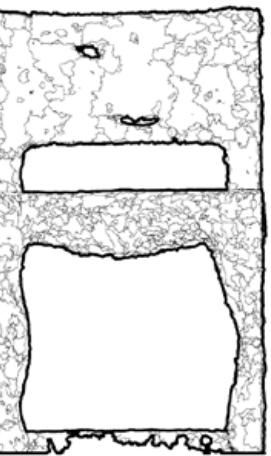
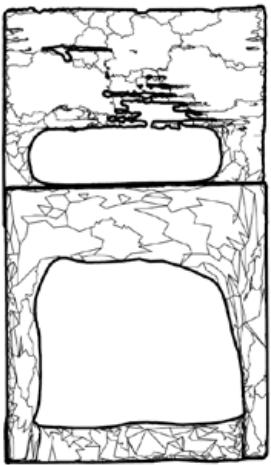
LIDAR



LIDAR



LIDAR



## DRAWINGS

The drawings on the left are of the LiDAR scans I captured for each chair. They turned into the construction drawings for the next chair in the iterative, design process.

## IMAGES

The images on the right are of the physical chairs Evan and I produced. LiDAR scanning and the process of physical making both had a significant impact on the design of the chair.



## PLAN

To the left is the detailed plan of the phase-three proposal. The site has resources for migrants and the surrounding neighbors interlaced across the parking lot.

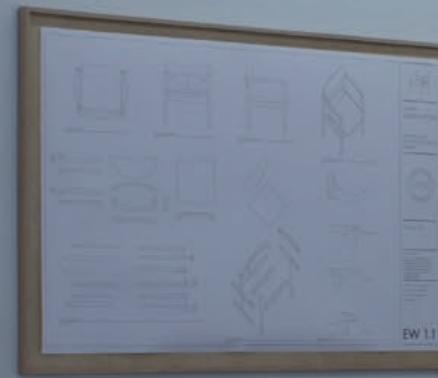
## DRAWINGS

Above is a set of two drawings detailing activities in the project. Gardening and construction education helped to provide resources and knowledge to migrants and families alike.



# CHAIR TRANSLATIONS

FROM DIGITAL TO PHYSICAL AND BACK AGAIN



# DRAWING (DOORS)

Location: 418 High St. Ann Arbor MI, 48104

Class: ARCH 509: Directed Drawing - Melissa Harris

Skills Used: Hand Drawing, Photography, Adobe Photoshop

This series is part of a collection of drawings that I produced in a free hand architecture drawing course. Some of these are one offs while others are drawings on top of my own previous printed drawings. This process can be repeated ad infinitum, creating abstraction on top of abstraction.

