



# **MINDFUL HARVEST URBAN FARM**

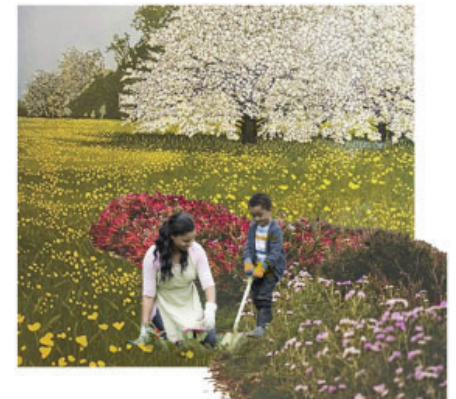
Lydia Gandy and Haley Rogers



Mindful Harvest Urban Farm is a unique residential outreach facility that serves homeless teens with underlying mental health conditions, while also creating urban farming space for the larger community.

Through this program, disconnected youth are provided with the tools and resources to reconnect with their community through agriculture-based education. At the same time, Harvest Urban Farms welcomes local residents to participate in the agricultural activities, promoting strong relationships between the community and its residents.

By carving out urban farming space, this program fosters a sense of belonging and purpose for homeless youth while promoting community engagement and sustainability.





## SITE CONTEXT

1050 Murphie Avenue is located 3 miles away from downtown Atlanta and directly off the Southside segment of the Beltline.

Although the site sits in the center of a food desert, the closest budget grocery a 20 minute walk away, it is surrounded by a strong network of green space.

Aluma Farm is located directly adjacent to the south east corner of our site. Patchwork City Farm is located 1.4 miles west and over 9 community gardens are within a 2.5 mile radius.





# USER

**1 in 10** young adults ages 18 - 25 experienced homelessness over a 12 month period.

Leading Contributors to Youth Homelessness

Family Conflict + Rejection

Child Welfare System

Residential Instability

**Disconnect Youth**

9 Factors of Endangered Runaways:

- abuse at home
- drug use
- age
- environment
- company
- criminal activity
- mental health**
- assault
- physical health



**68.4%**

of Georgians age 12-17 who have depression did not receive any care within the last year.

**2x**

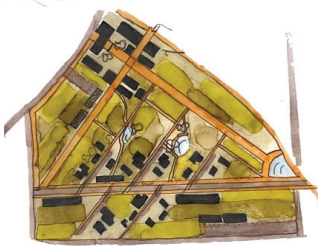
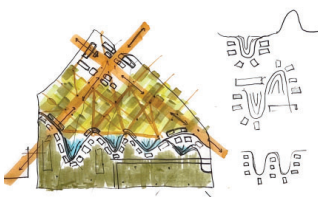
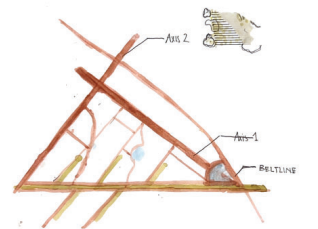
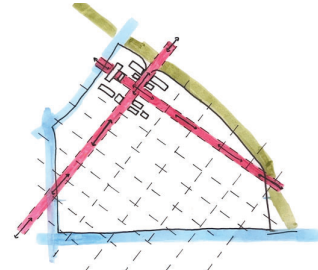
high school students with depression are 2x more likely to drop out than their peers.

**1 in 6**

of the 10,234 homeless persons in Georgia live with a serious mental illness

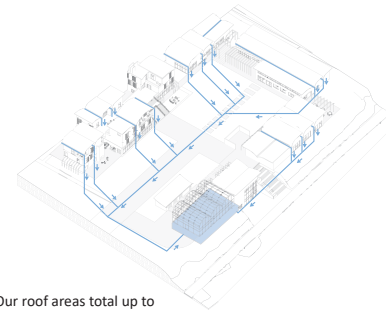
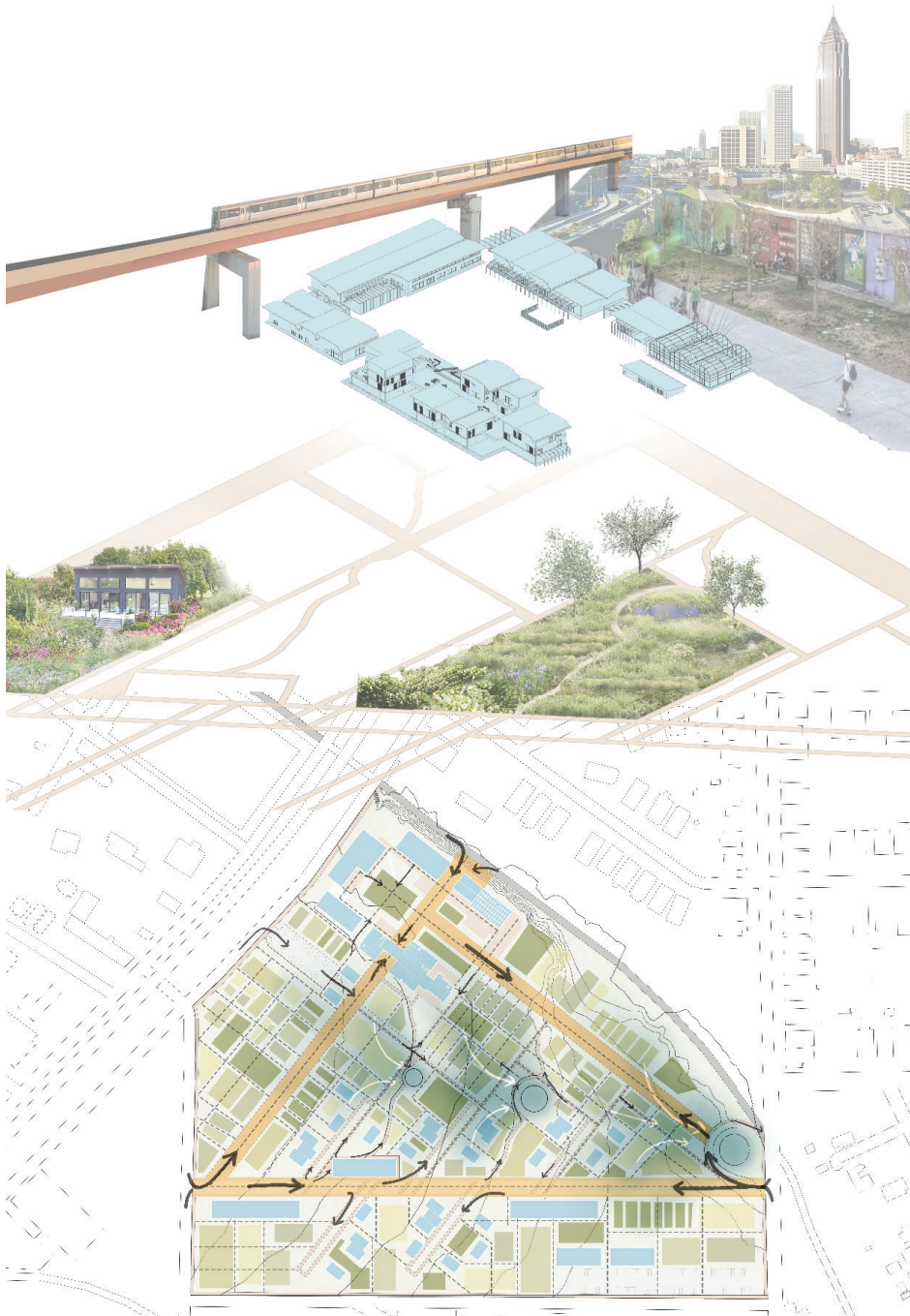


# MASTER PLAN

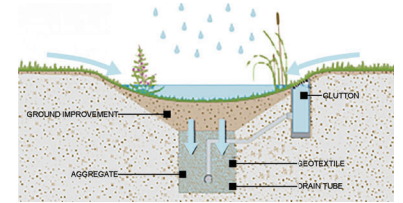




# SYSTEMS



Our roof areas total up to **29,772** SqFt and can yield roughly **872,522** Gallons Annually.



The thought process behind the development plan involved the decision to remove existing buildings and rejuvenate the soil for farming purposes. To ensure optimal placement of the various elements, the site was carefully studied and analyzed. The site's location, which was at the highest point and accessible to the main road and Beltline, was chosen for the project.

Residential buildings were positioned opposite the site, with the existing urban context serving as a guide for their scale and organization. The inclusion of integrated green space throughout the residential area helped to ensure privacy for the inhabitants. Additionally, commercial structures were placed in close proximity to the residential buildings to encourage community interaction.

Farming and Farming Support buildings were located off major arteries to accommodate equipment and other needs. The decision was made to integrate farming throughout the entire site, and a grid system was used to ensure optimal organization and streamline the various processes.

Bioswales were created based on the existing topography of the site, with adjustments made to ensure proper flow of water and prevent flooding in the residential area.

A grid system was designed based off the major axis of the site, with major and minor arteries created for equipment access and site circulation. The grid system also served as anchors for housing and other site elements.

**MASTER PLAN**





At the outset of designing our immediate site, we aimed to create a variation of a typical courtyard scheme. The reason being that we thought the courtyard could provide defined edges to establish clear site boundaries. By developing a variation of this, we could create boundaries with porous moments that integrate the farm and the public.

Radiating from the center of the courtyard, major axis lines connect our site to the Beltline and through the master plan, while an orchard blurs the green space between the farm and our courtyard.

To optimize natural ventilation from north-western winds, the buildings are positioned on the site accordingly. Additionally, the placement of the buildings is used to mitigate solar exposure, with shading strategies implemented in areas where solar exposure cannot be mitigated.



## AGRICULTURE & GREENHOUSE

To increase public exposure and provide easier site access, the agriculture center and greenhouse are positioned along the beltline and at the edge of the farm. The Agriculture Center connects the Beltline level to the level of the site with an atrium space. Additionally, a public monumental stair and elevator makes it easy for any user of the Beltline to access the site.

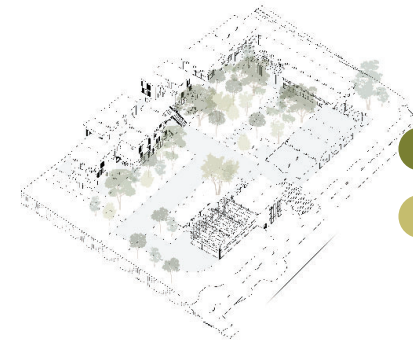




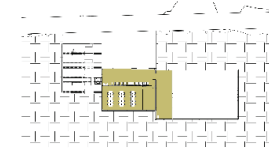
# SITE & FLOOR PLANS



LEVEL 1 | SITE



- HOUSING  
23,919 SQFT
- GREENHOUSE  
4,288 SQFT
- AGRICULTURE CENTER  
2,231 SQFT
- CLINIC  
4,086 SQFT
- DINING HALL  
6,179 SQFT
- 48,272 SQFT



LEVEL 0 | BELTLINE



LEVEL 2 | HOUSING



LEVEL 3 | HOUSING

## DINING

The Dining hall was positioned adjacent to the agriculture center to improve the farm-to-table food process. As product is harvested and processed from the green house and farm, the kitchen cooks fresh meals for the residence and their friends and family to enjoy. Industrial compost collection is located just outside not only for ease of access but also for food waste education.

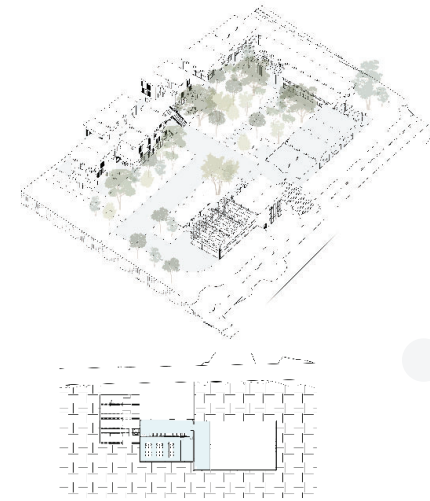




# SITE & FLOOR PLANS



LEVEL 1 | SITE



- EDUCATION  
7,479 SQFT
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LEVEL 0 | BELTLINE



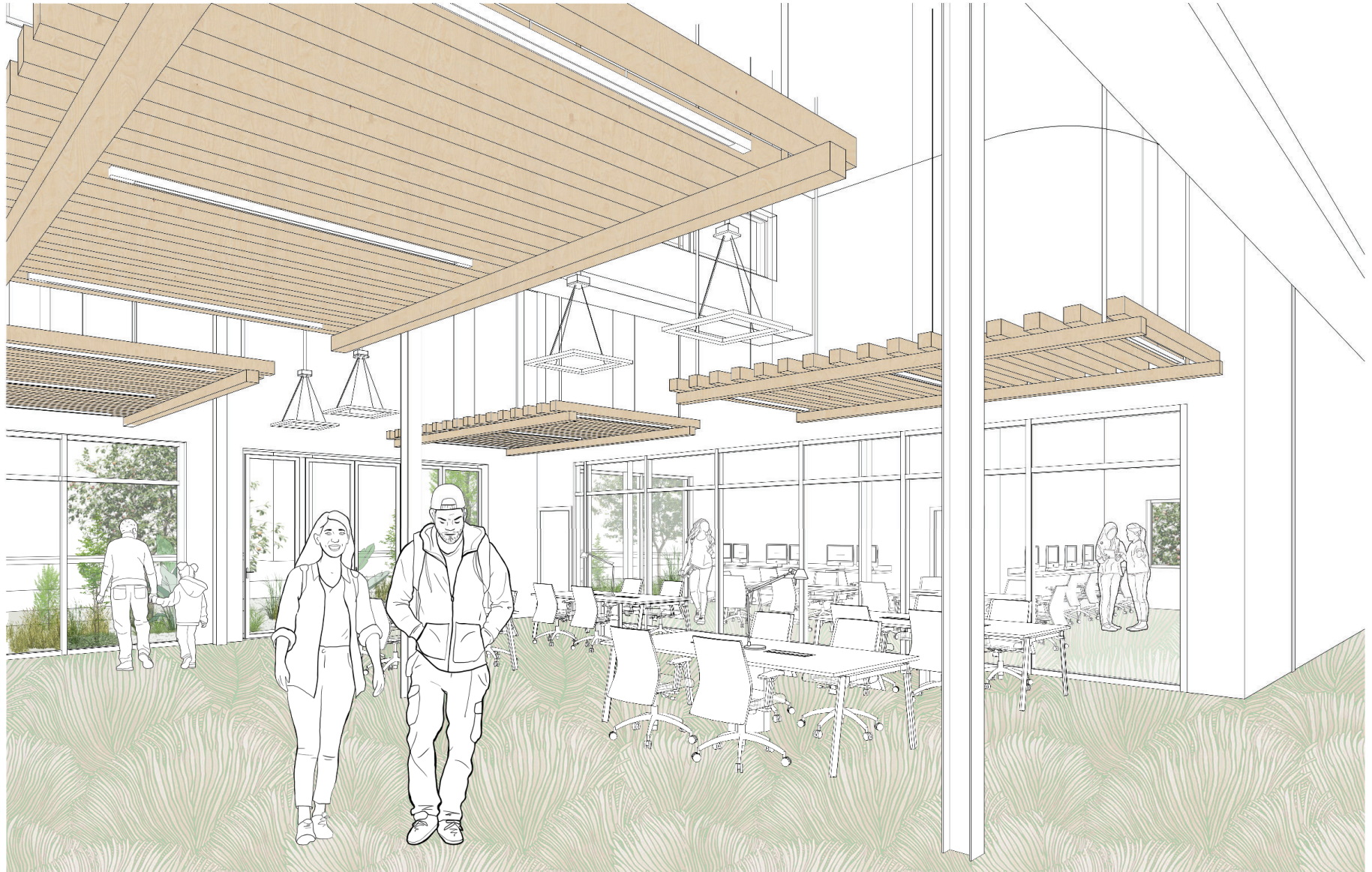
LEVEL 2 | HOUSING



LEVEL 3 | HOUSING

## EDUCATION

The education center was designed to serve both our residents and the broader community. In addition to providing a career prep center and maker space, the center also features therapy-based education programs focused on art and music.

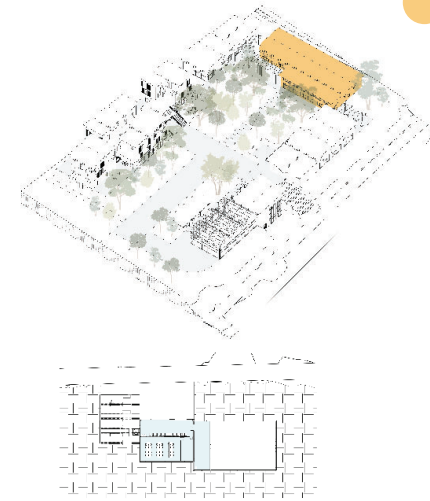




# SITE & FLOOR PLANS



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LEVEL 0 | BELTLINE



LEVEL 2 | HOUSING



LEVEL 3 | HOUSING

## CLINIC

The clinic provides both general health services as well as mental health services to for the residence. Next door is a donation center residence can use upon arrival or as need arises.

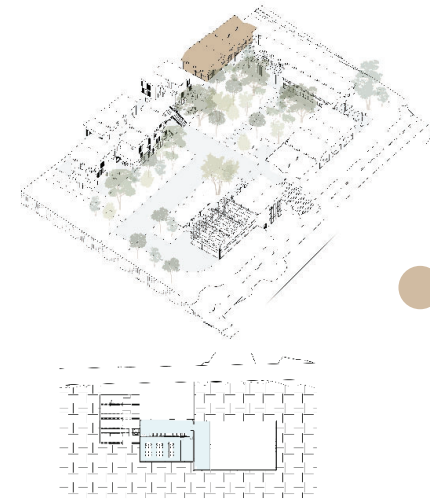




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LEVEL 0 | BELTLINE



LEVEL 2 | HOUSING



LEVEL 3 | HOUSING

## HOUSING & OFFICE

To provide our residents with the best views and connection to the farm, the housing is situated on the edge of the site. The first floor of the housing structure includes programs that serve our residents, such as an administrative office, communal kitchen, study space, laundry facilities, fitness center, and bike storage. Levels 2 and 3 feature a range of dwelling units designed to accommodate various living arrangements, including siblings, friends, and ADA-accessible dwellings.

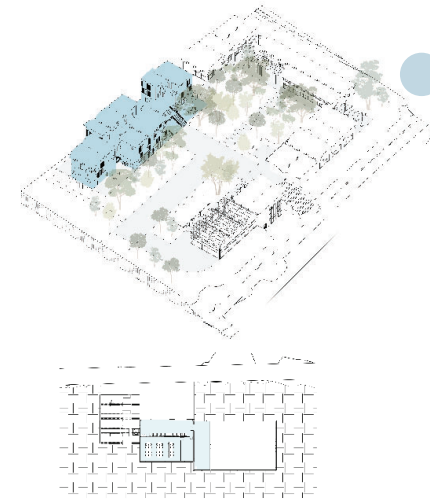




# SITE & FLOOR PLANS



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LEVEL 0 | BELTLINE



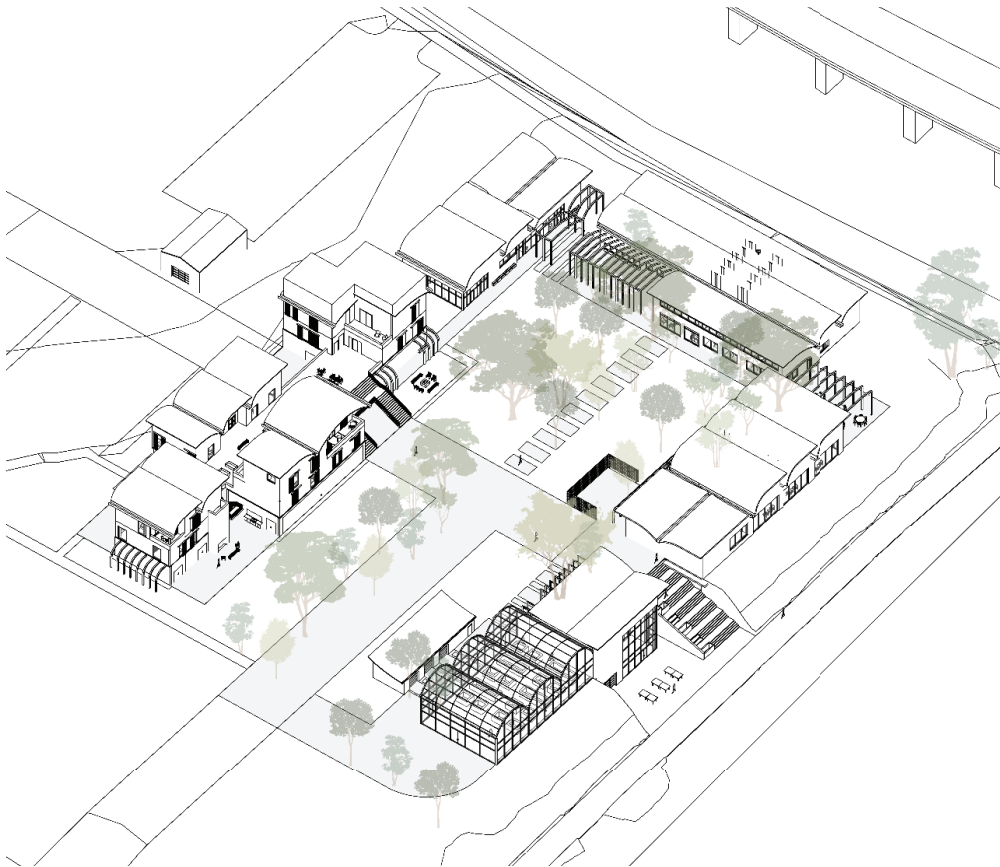
LEVEL 2 | HOUSING



LEVEL 3 | HOUSING

## MATERIAL

As a sustainable and aesthetically pleasing choice, recycled brick salvaged from the original industrial buildings has been utilized across all of the buildings on our site. Brick was chosen for its durability and painted white to create a striking contrast with the surrounding farm and orchard. Over time, the white brick will naturally accumulate dirt and wear from farming activities, resulting in a beautiful patina. However, the second and third floors of the housing structure are visually distinguished from the other more public buildings by using a lightweight, white fiber cement board.



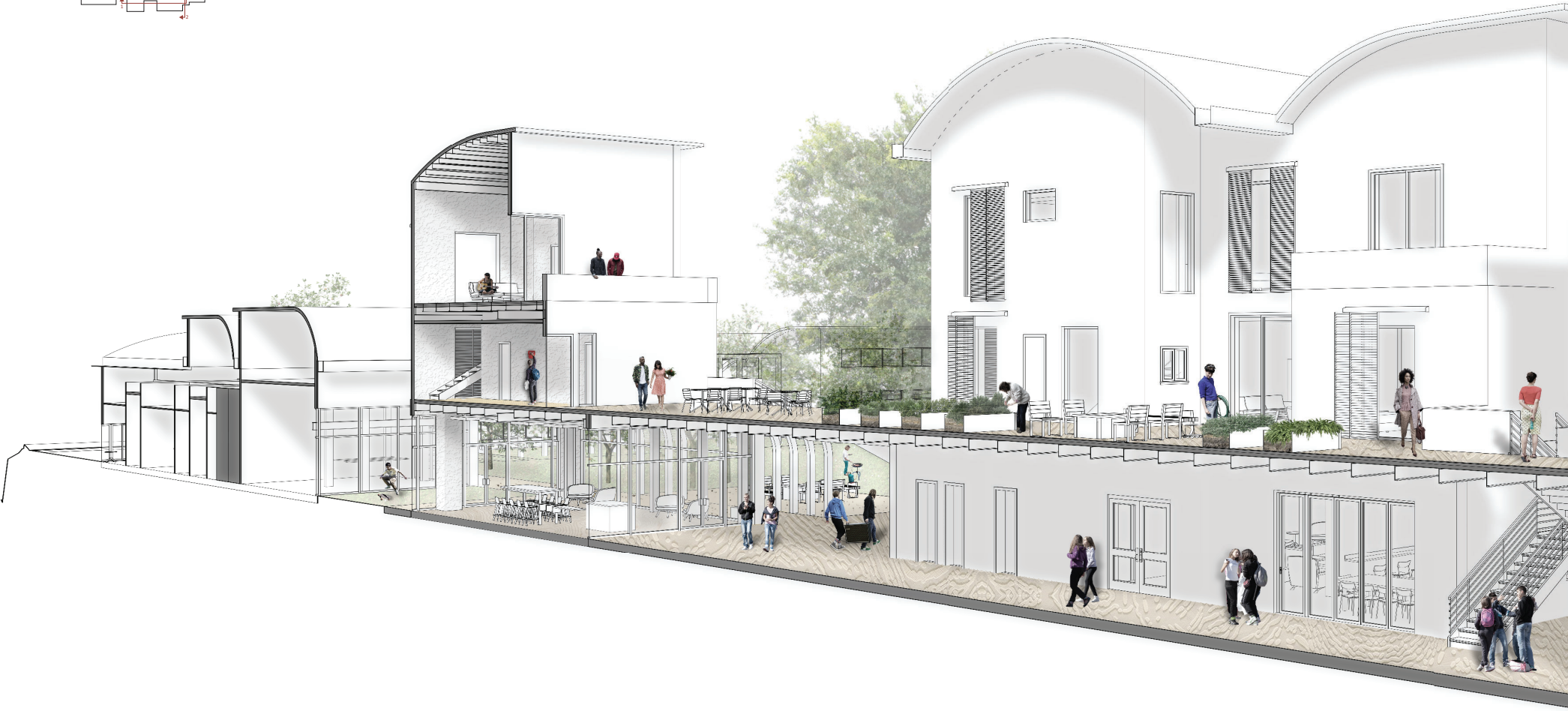
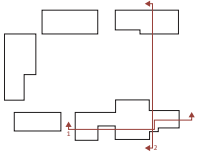




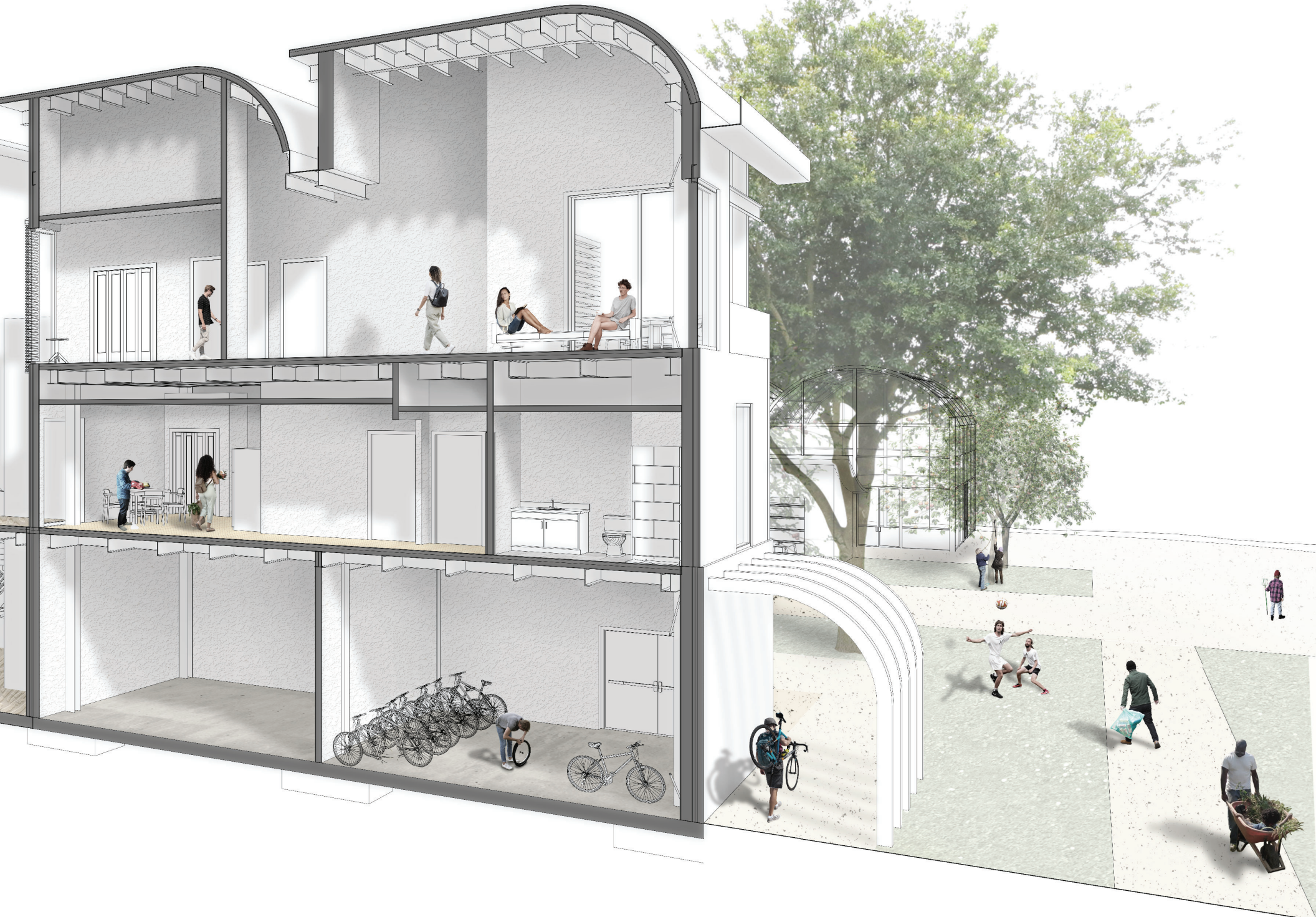
## SITE SECTIONS

This section perspective illustrates the strategic layering of program types for residences.

(Section 1 indicated in key plan below)



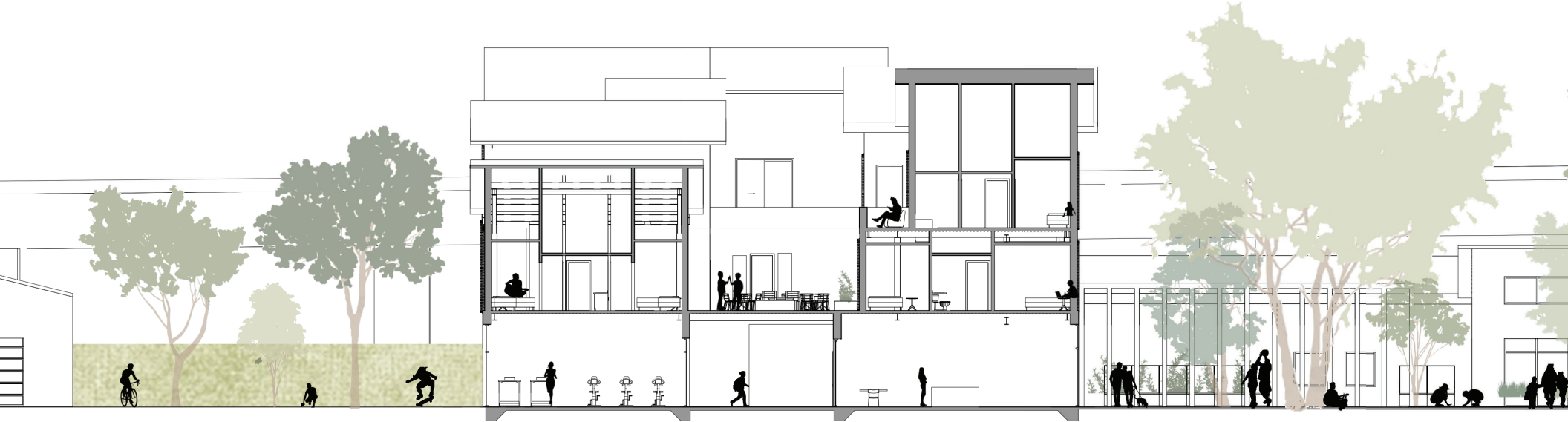
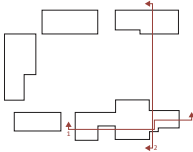




# SITE SECTIONS

This site section highlights the integration of our site with the Atlanta Beltline.

(Section 2 indicated in key plan below)







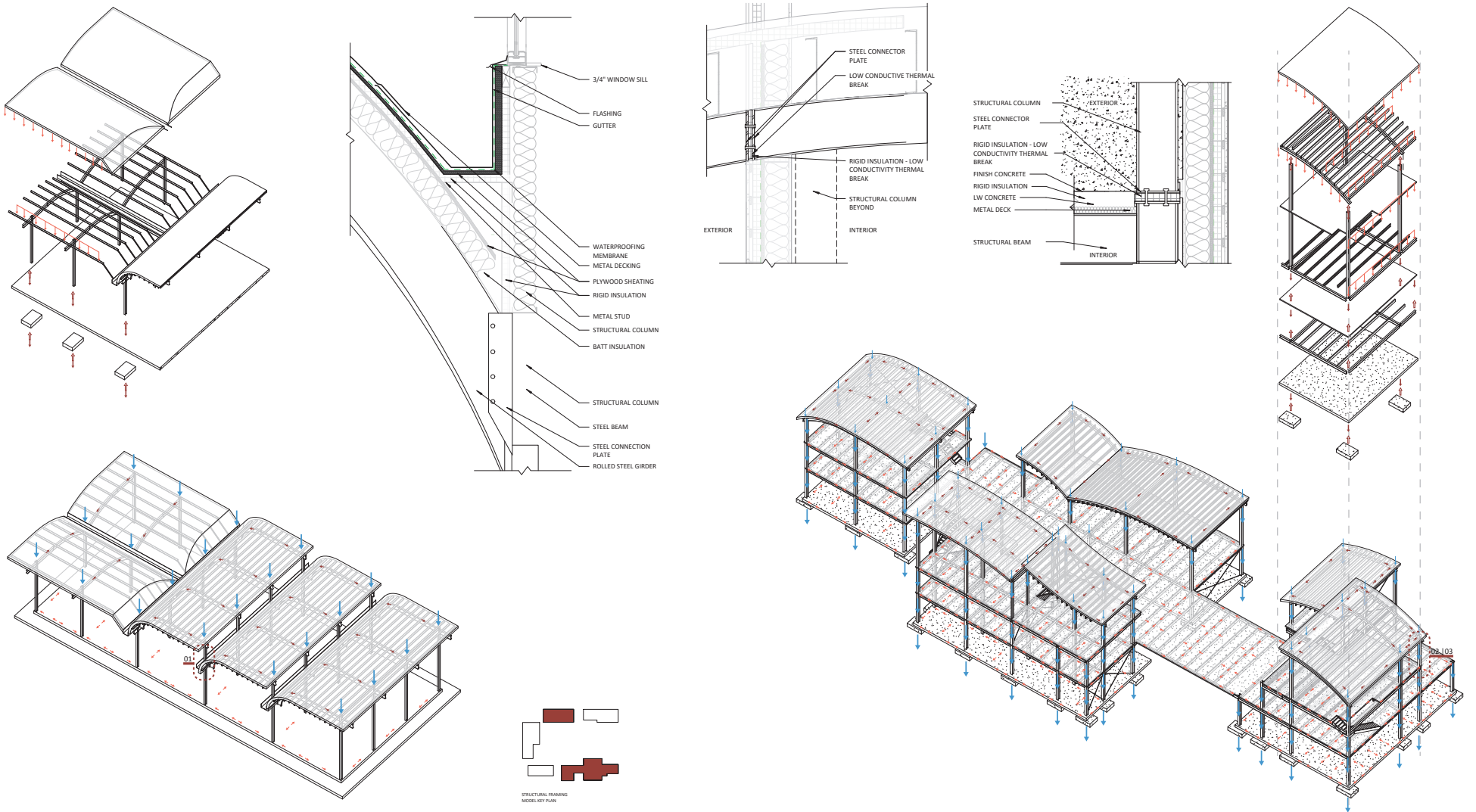
# STRUCTURE

This drawing below features two notable structural elements: the housing structure, which has an atypical organization, and the dining structure, which is relatively simple but has complex roof connections. Both of these unique features serve as case studies for the other structures on the site.

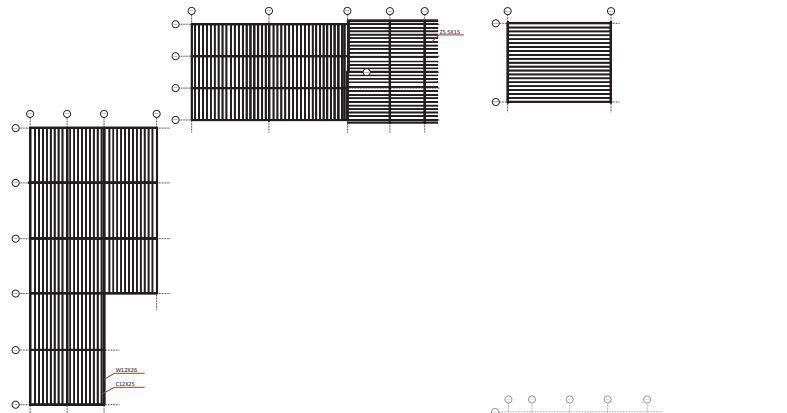
For these structures, we employed a mix of heavy and lightweight steel framing. The roofs are made of rolled girders to support the roof slope's form, beams to enhance the structure's rigidity, and a mix of Z channels in long-spanning areas and C channels in shorter spans as purlins to improve roof shape and rigidity.

Detail 1 in this drawing illustrates the connections between two different roof forms and how water is managed in the valley gutter. Details 2 and 3 demonstrate how we managed thermal breaks in the structure.

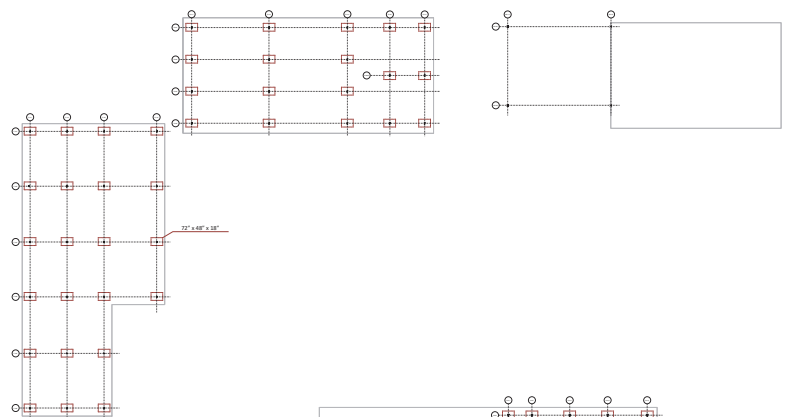
The drawings on the left show each building's framing and foundation plan. The housing foundation is designed to avoid any overlapping with structural bearing moments and the underground MEP system. While all buildings have a typical column grid, the housing structure has some variations in spacing and column placement to avoid program interruptions.



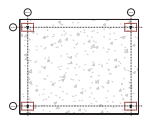
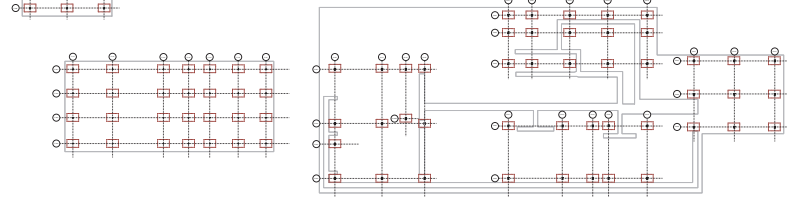




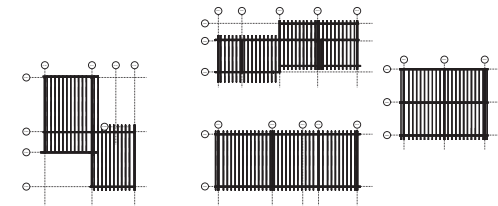
FRAMING PLAN | LEVEL 2



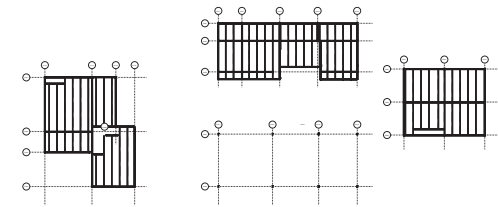
FRAMING PLAN | LEVEL 1



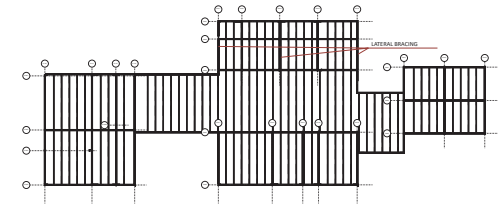
FRAMING PLAN | LEVEL 0



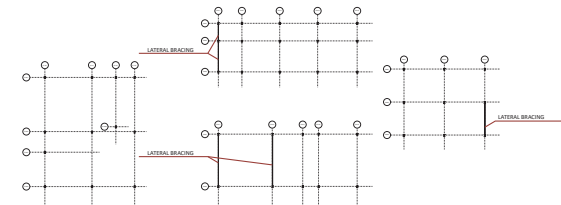
FRAMING PLAN | HOUSING ROOF



FRAMING PLAN | HOUSING LEVEL 3



FRAMING PLAN | HOUSING LEVEL 2



FRAMING PLAN | HOUSING LEVEL 1

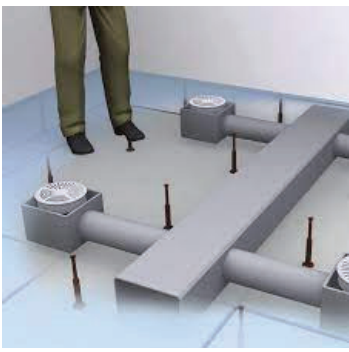
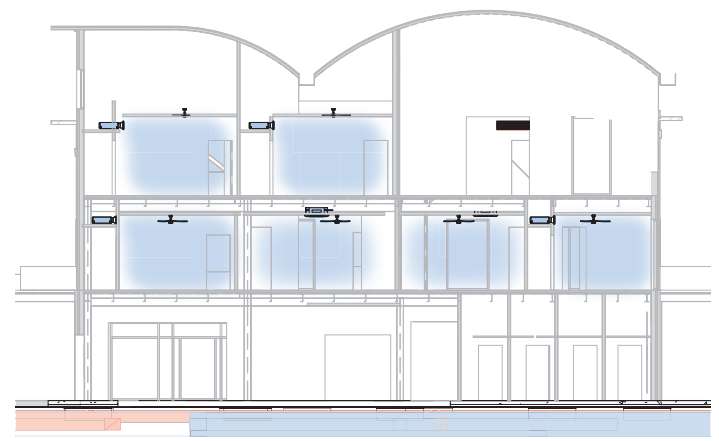
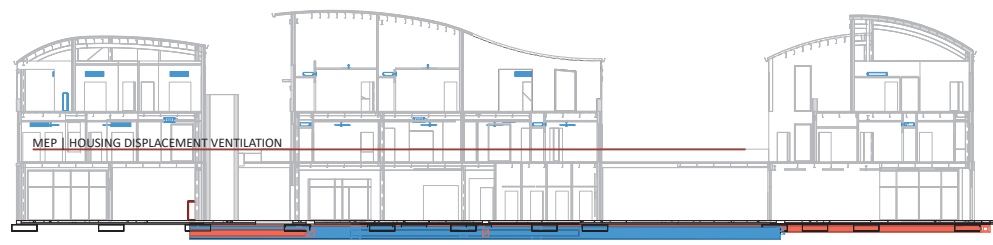
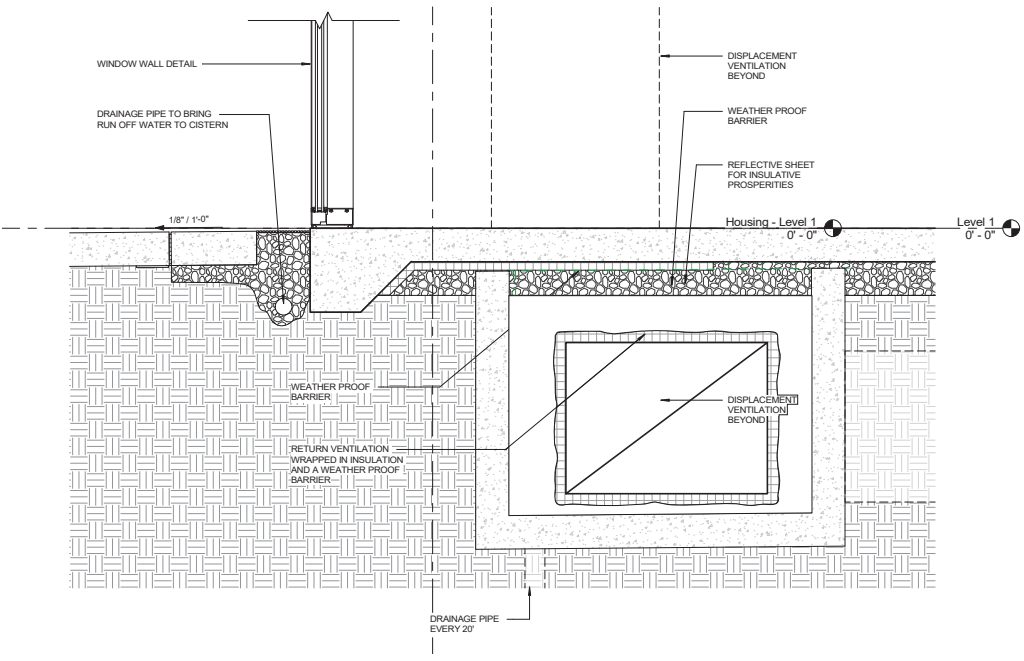
# MECHANICAL

Most buildings on the site utilizes typical VAV systems, except for the housing building which uses a unique combination of Displacement Ventilation and mini split systems. The drawing below shows the layout of ductwork, condensing units, fan rooms, fresh air intake, and exhaust air locations. Restrooms have their own exhaust system, and the kitchen has a hood fan, which are not shown in the drawing.

Displacement Ventilation is used on level 1 of the housing as an efficient way to heat and cool small spaces with interior-to-exterior transitions. Mini split systems are used on levels 2 and 3 to heat and cool the small dwelling units. Each cluster has a condensing unit located on one of the unit's terraces, following the manufacturer's recommendation of 9 mini split systems per condensing unit. Additional condensing units can be added as needed, as there is space available.



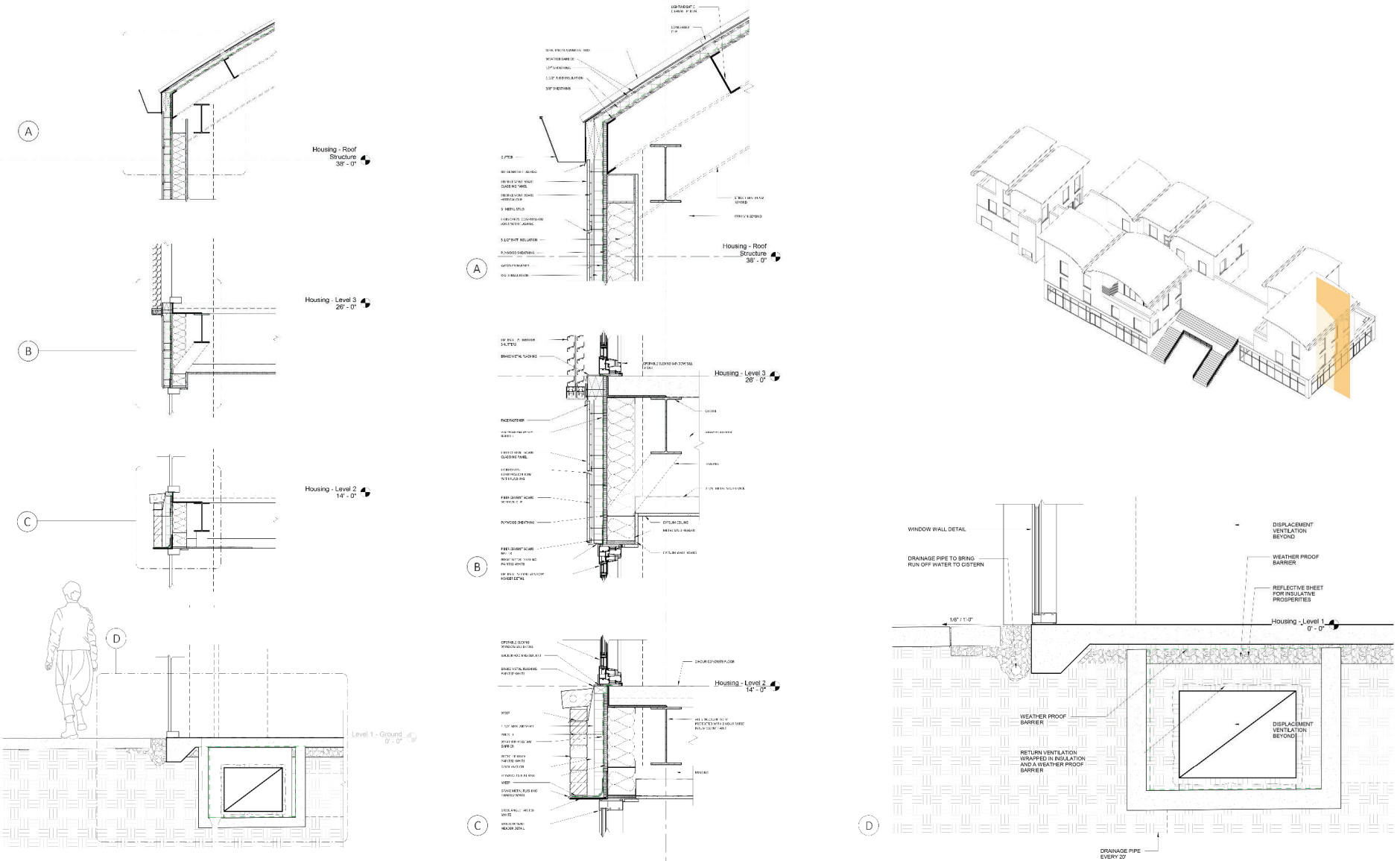




# HOUSING WALL SECTION & DETAILS

Our site utilizes two standardized approaches for our wall types, incorporating simple and common construction methods. The housing features a rainscreen system that includes a brick veneer on the first level, fiber cement board veneer on levels 2 and 3, and a series of window walls. The remaining buildings on the site feature a similar rainscreen system with a brick veneer and window wall systems.

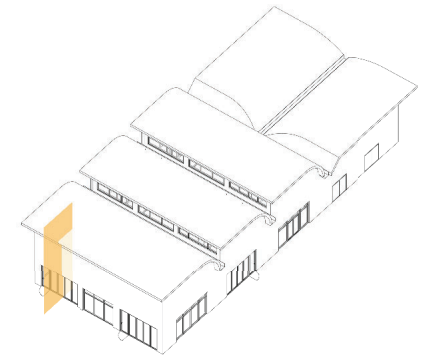
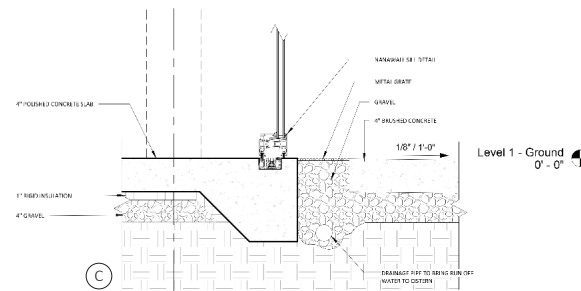
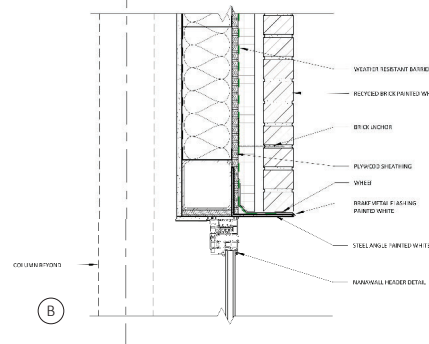
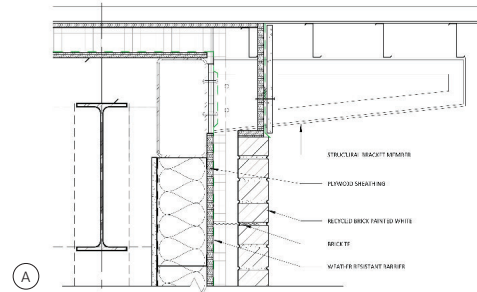
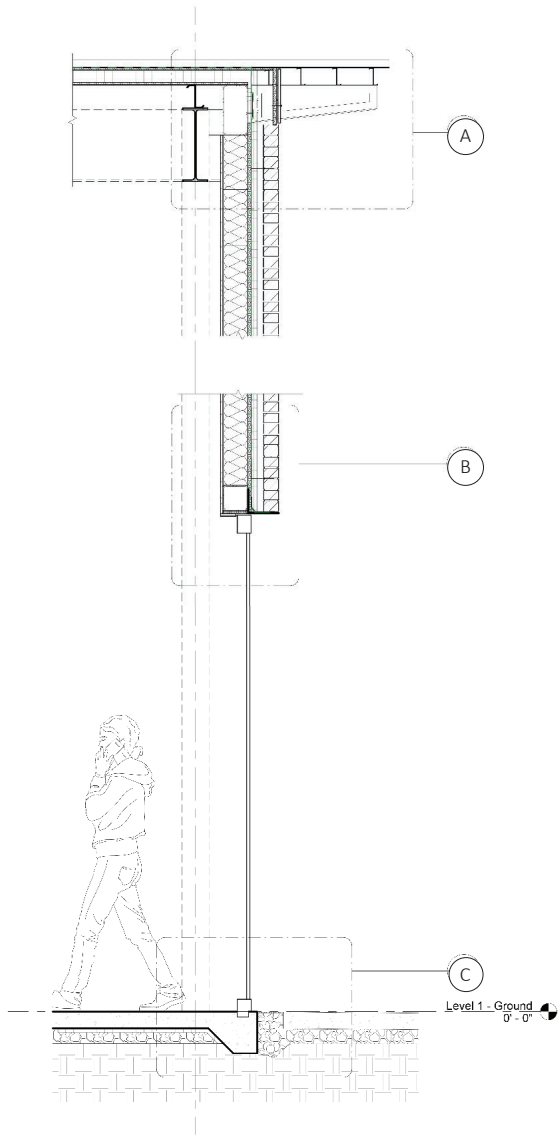
Further examining the housing layers, we have four distinct cases: the foundation, a transition from one floor to another with brick and a window wall, a transition from one floor to another with fiber cement board and a window wall, and a roof connection.





# DINING WALL SECTION & DETAILS

The dining details showcase three distinct case studies that provide a comprehensive understanding of the construction elements involved. The first case involves the foundation and nanawall connection, while the second case deals with a connection from a window wall that then continues with a metal stud and brick veneer. Lastly, the third case offers insights into the structure of the overhang on the roof.



## LIFE SAFETY

The buildings on our site are constructed of steel and concrete, and are classified as IIB non-combustible. The axon and code summary below indicate where fire separation is required between occupancies. Additionally, the code summary outlines the square footage, occupancy types, and accessory spaces for each building.

The drawing on the left depicts the egress path for each building. We have ensured that all travel distances meet the requirements outlined in code chapter 1017.2 for maximum exit access.

### Building 1: Greenhouse & Agriculture Center

Utility & Business Occupancy  
Separation of occupancies: 2 hour  
U 4200 sqft  
B 4400 sqft

### Building 2: Dining

Assembly (A2) Occupancy  
6000 sqft

### Building 3: Education

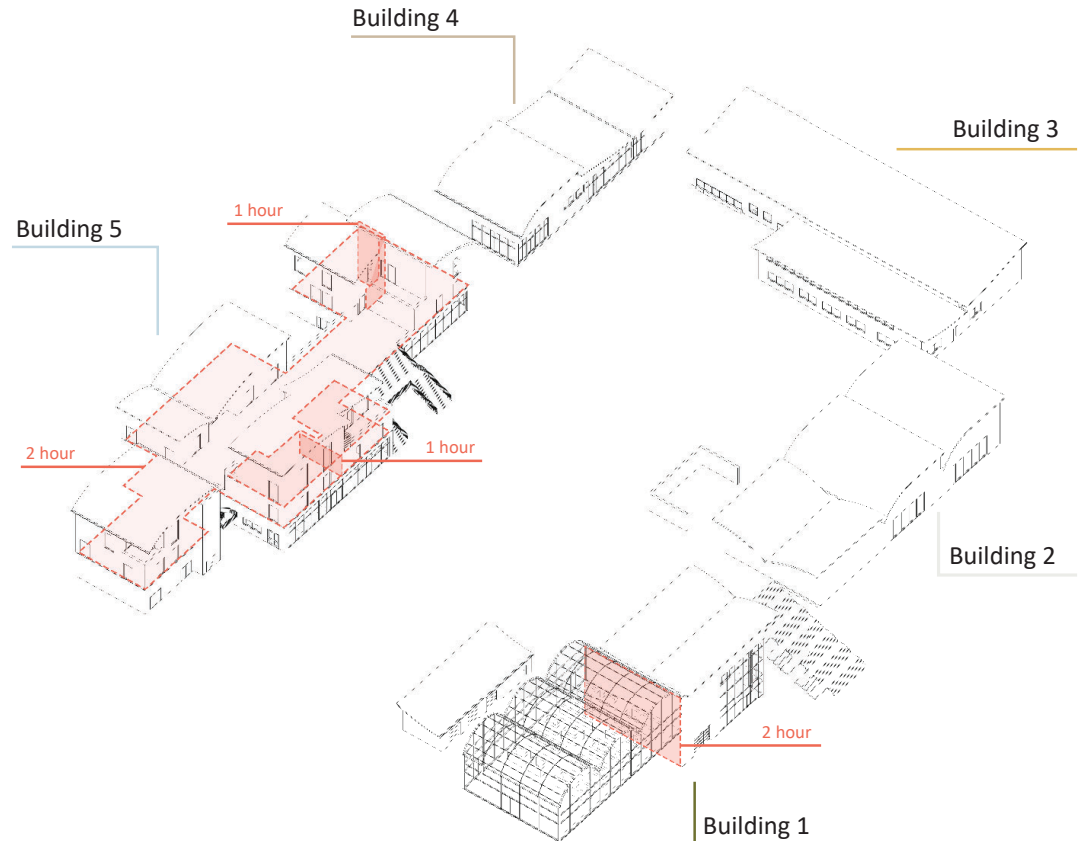
Education Occupancy  
7840 sqft  
Wood shop F1 Accessory Space - 415 sqft

### Building 4: Clinic & Thrift Store

Business & Mercantile Occupancy  
Separation of occupancies: None  
Total: 3870 sqft  
B 2690 sqft  
M 1,180 sqft

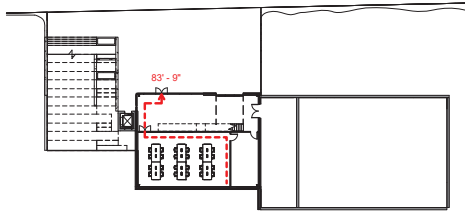
### Building 5: Office & Housing

Business & Residential (R3) Occupancy  
Separation of occupancies: 2 hours  
Total: 20,100 sqft  
Level 1 (B) 8228 sqft  
Bike Storage Accessory Space - 736 sqft  
Level 2 (R3) 7228 sqft  
Level 3 (R3) 4650 sqft

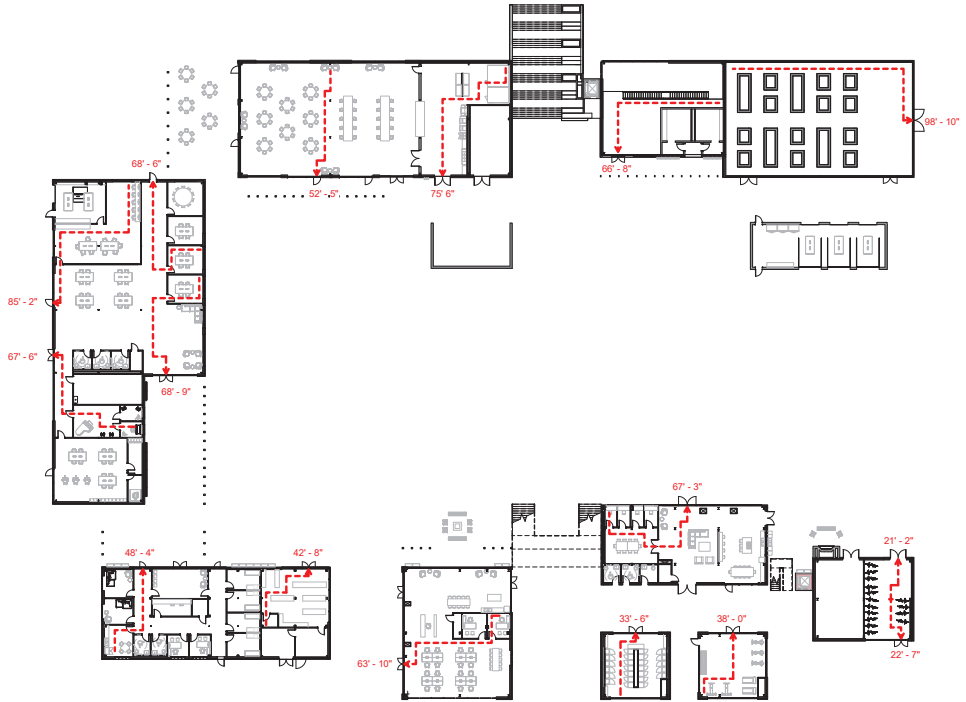


Programmatic Use: Education and Housing  
Location: Atlanta, Ga  
Construction Type: IIB  
Occupancy classification: B, U, A2, M, and R3  
Building height: 50' 0"  
Number of stories: 3  
Sprinkled: No  
Total square footage: 46,410 sqft



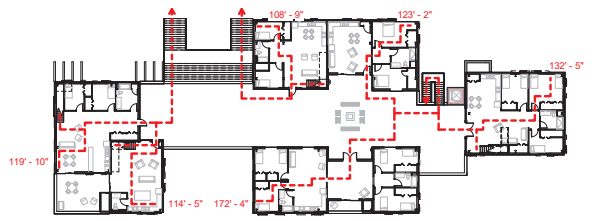


Level 0 - Belt Line

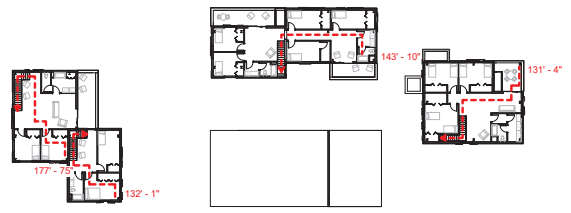


Level 1 - Ground

1017.2 Maximum Exit Access Travel Distance  
 A, E, M, R, B (without sprinkler system) - 200'  
 (with sprinkler system) - 250'  
 U (without sprinkler system) - 300'



Level 2 - Housing



Level 3 - Housing





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