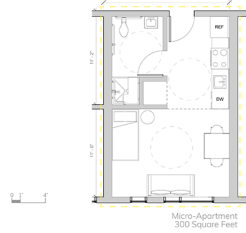




Micro Community

There is a gradient from public to private from North to South across the site. The common buildings are located on the South end, and the residential units are on the North end. On the second level of the common building, there are micro-apartments. To the east of the common building, there are micro-houses. To the west of the common building, there is a farm-to-table restaurant. To the east of the common building, there is a farm-to-table restaurant. To the east of the common building, there is a farm-to-table restaurant.

Micro Community | Durham | Nicole Simeonsson



Common Building and Common Living House

The Common Building holds the street edge of Angier Ave. The main level of the Common Building holds administrative offices, mail and laundry rooms accessible from outside for 24-hour access, small and large group gathering spaces, living, gym, and recreation room.

The Common Building and Common Living House open to the community green.

The Common Living House is adjacent to the Common Building and opens to the main site parking lot. This space contains a kitchen, living, and dining area for residents to enjoy these activities together. Concrete sliding glass doors create a visual connection to the formal, community green, and when opened allow access between indoor and outdoor activities.

Micro-Apartment

On the second level of the Common Building there are 8 micro-apartment units at 300 square feet each, and all are ADA accessible to encourage aging in place. There is an elevator in addition to the two stair cases for access.

Micro-House

The plan of the micro-house unit consists of two bays that wrap each other one that hold the more public space: living, reading dining and one that contains the more private space: bedroom and bathroom. The main living space is open with floor-to-ceiling on both ends, which allows the single bedroom to be moved and placed at around the table or coffee and can be the entry elevation. All micro-house units face a green space in the front, and in the back and the space through nature of the living space. The plan allows residents to easily access all adjacent green spaces.

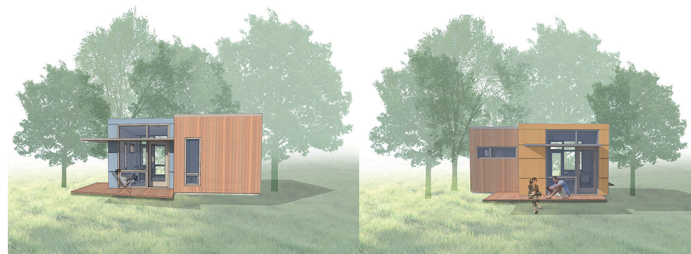
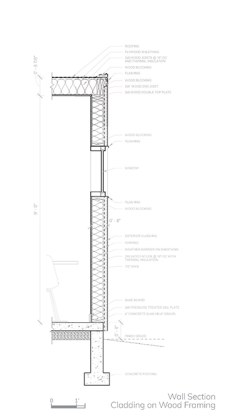
Additionally, this plan is ADA accessible, so there is no foundation and all units encourage aging in place. There are 30 micro-house units on the site at 400 square feet each.



Green Gathering Spaces

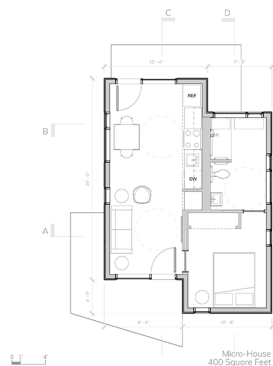
The smallest scale gathering space occurs between the micro-house units. This shared green space serves as a meeting place for residents, and a medium for social interaction.

The open ends of the floor plan of the micro-house unit allow both visual and physical connection between the interior and the spaces outside. Porches at each entry are the perfect size for the resident of the micro-house to relax and enjoy the view of the green space. The porches are just large enough to accommodate a table and two chairs. Since there is a porch at both ends of the living volume, it does not matter which way the micro-house faces. In a way, the dwelling units are two-faced; they hold the formal edge of the main path they are placed along, and face the informal green space created between the units.

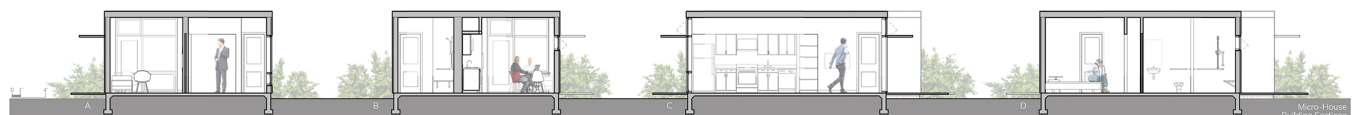


Micro-House Entry Elevation
Entry into Living Space

Micro-House Entry Elevation
Entry into Dining Space

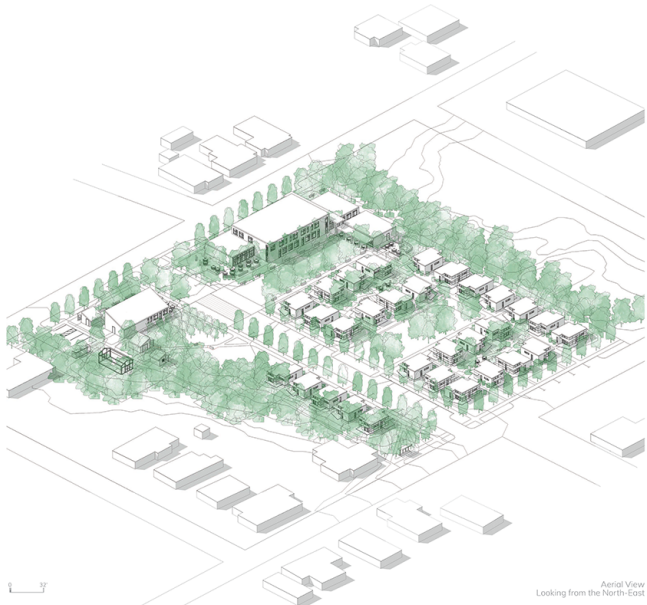


Micro-House
400 Square Feet



MICROHOUSING FOR HOMELESS + DISABLED VETERANS

NC State College of Design, School of Architecture | NC Coalition to End Homelessness



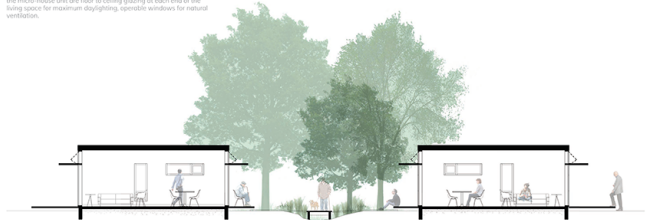
Aerial View
Looking from the North-East

Sustainability Strategies

The gathering space between the micro-house units serves not only as a functional space for the use of residents, it also serves as storm water mitigation. The perches of the dwellings are connected to the paved gathering spaces by wooden decks that go above natural grass and water retention areas.

All the paving, additionally, is permeable to encourage infiltration into the site and prevent storm water from running off the site.

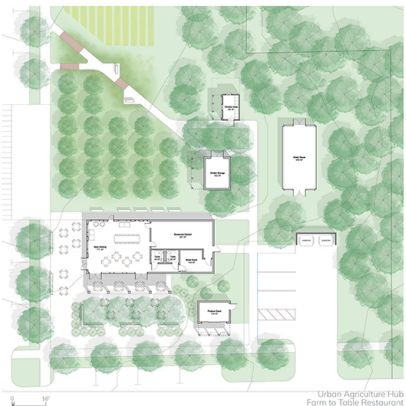
Some other sustainability strategies integrated into the design of the micro-house unit are floor to ceiling glazing at each end of the living space for maximum daylighting, operable windows for natural ventilation.



Sustainability Strategies
Section through Micro-Houses

Urban Agricultural Hub

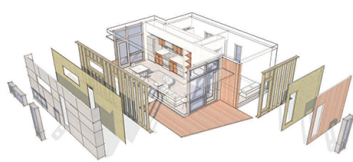
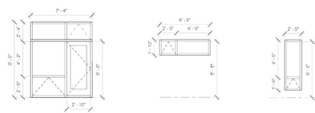
The Urban Agricultural Hub contains a field for growing crops, an orchard, a green house and a chicken coop. All produce and products harvested on site supply the Farm to Table Restaurant and small produce stand that hold the street edge of Angier Avenue. There is indoor and outdoor seating. There is an outdoor storage building situated amidst the outbuildings that serve to equip the farming operations.



Urban Agriculture Hub
Farm to Table Restaurant

Window + Door Modules

There are three sizes of glazing on all the micro-houses. The large storefront with integral door spans both ends of the living space volume. The horizontal window is used above the dining space, and in the bathroom, to allow more privacy while still permitting daylight and fresh air through an operable panel. The vertical window is used in the living space and in the bedroom to allow views to the green spaces outside, daylighting and natural ventilation through an operable panel.



Materials + Construction

The micro-house units are constructed by a slab on grade concrete foundation, and wood framing. The floor inside is exposed wood concrete. The walls are insulated for energy efficiency, and for sound. The large living space volume is clad in metal panels, which add color and a touch of masculinity to the otherwise traditional and agricultural feel of the site. The volume with the bedroom and bathroom is clad in vertical wood siding. The exterior cladding acts as a rain screen, and is attached to framing with an air gap between the cladding and plywood sheathing. The plywood is attached to the steel framing. A thin metal piece of flashing wraps the top of the roof around the entire structure.