ALEXA GREENE Columbia GSAPP / Architectural Porfolio

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## CLIMATE BUBBLE / LINDSEY WIKSTROM COREI

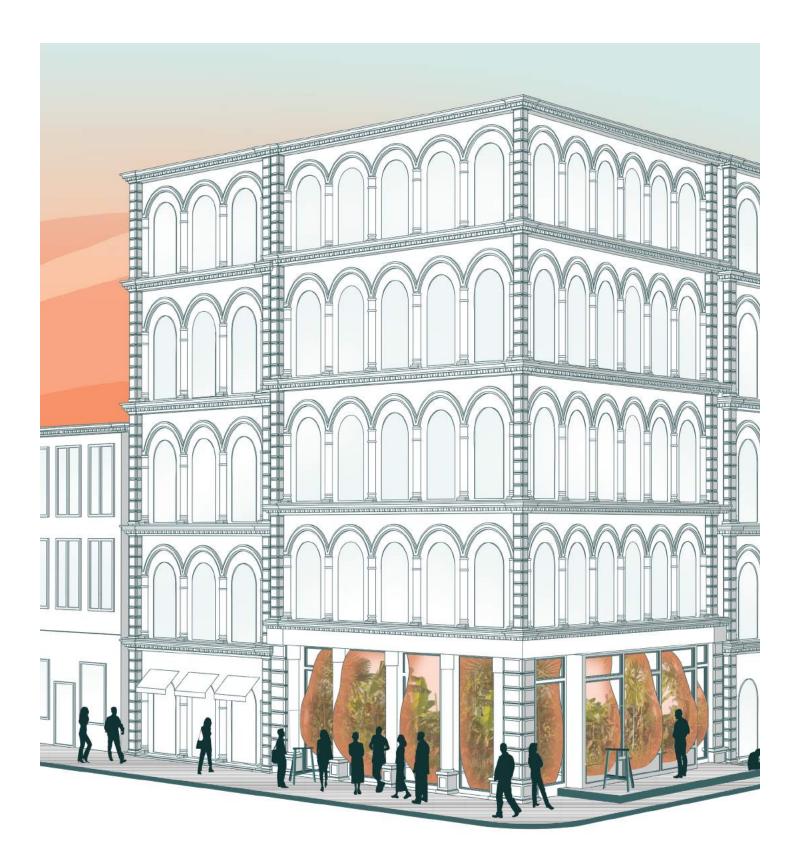




The Climate Bubble is a pop-up inflatable structure used as an election polling location. Polling sites typically occur in school gymnasiums, and take 11 days to set up, run elections, count ballots, and break down.

The bubble was created instead to occupy a retail pop-up lot in Manhattan, but could easily be reassembled and inflated in countless spaces. The accessible, flexible nature of the Climate bubble will increase election visibility and voter turnout.





Climate change is a critical discussion point in all future elections and the next 10 years are essential to enact green policy. Inflatable infrastructure from recycled plastics offers the unique opportunity to manufacture an environment, and the interior of the bubble in this project mimics a tropical climate. It is one of the most at risk eco systems. When voting in the climate bubble, individuals witness at-risk climates first hand. The space highlights the need for voters to understand the time-sensitivity of climate change, while increasing overall voter turnout.

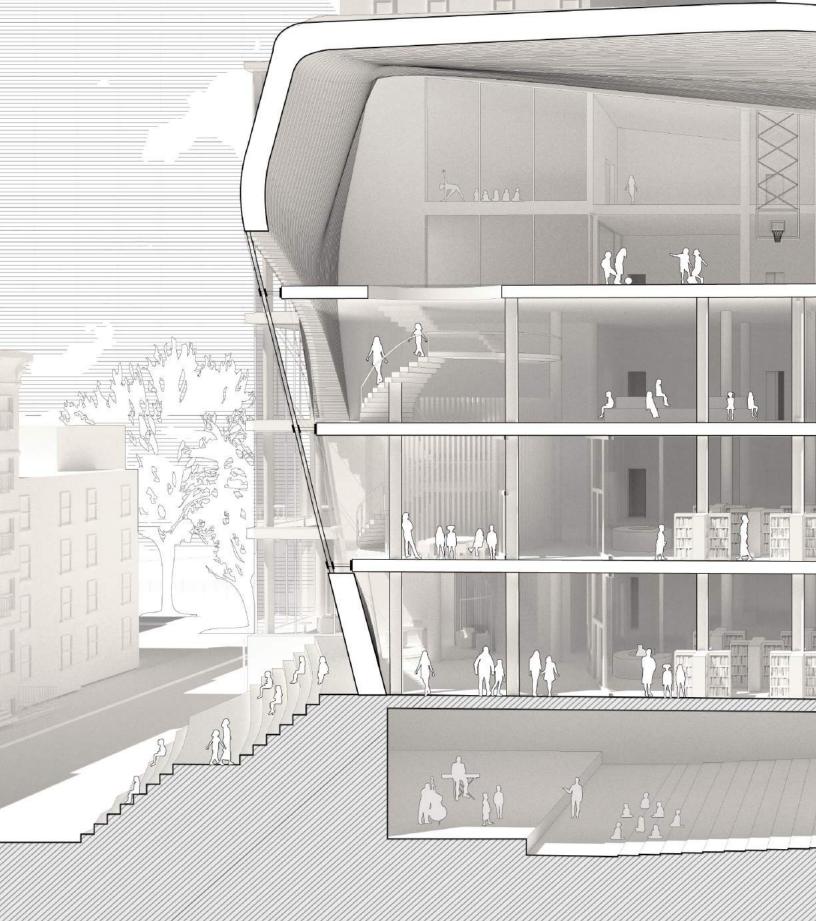


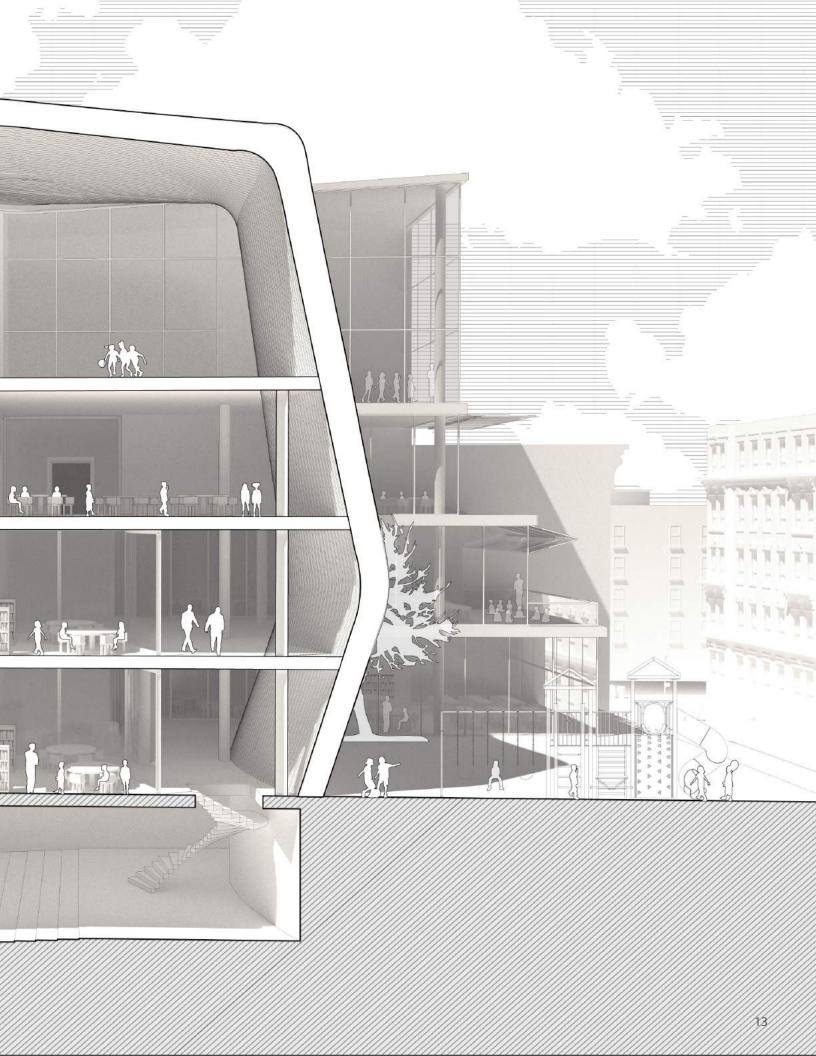






## SCHOOL FOR COGNITIVE HEALTH / DAISY AMES CORE II

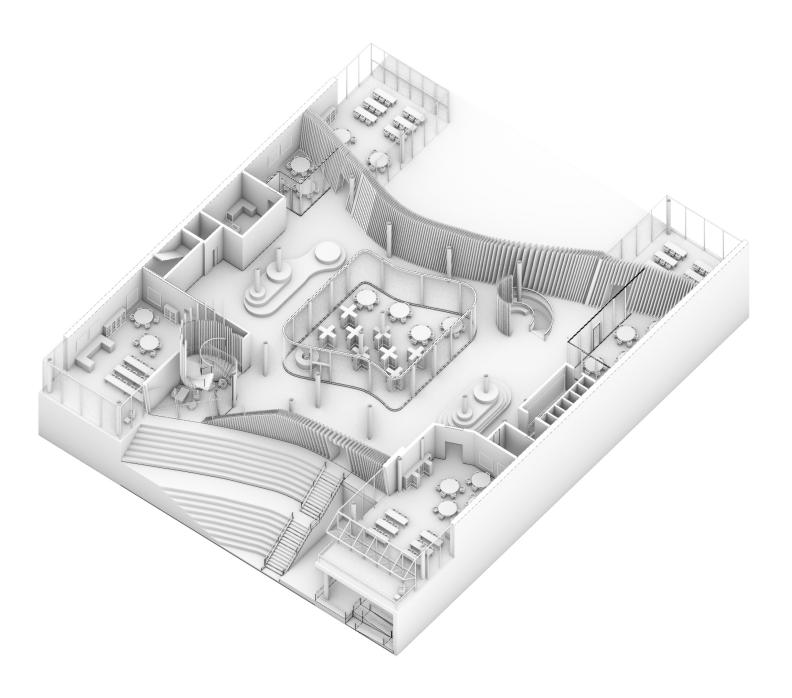


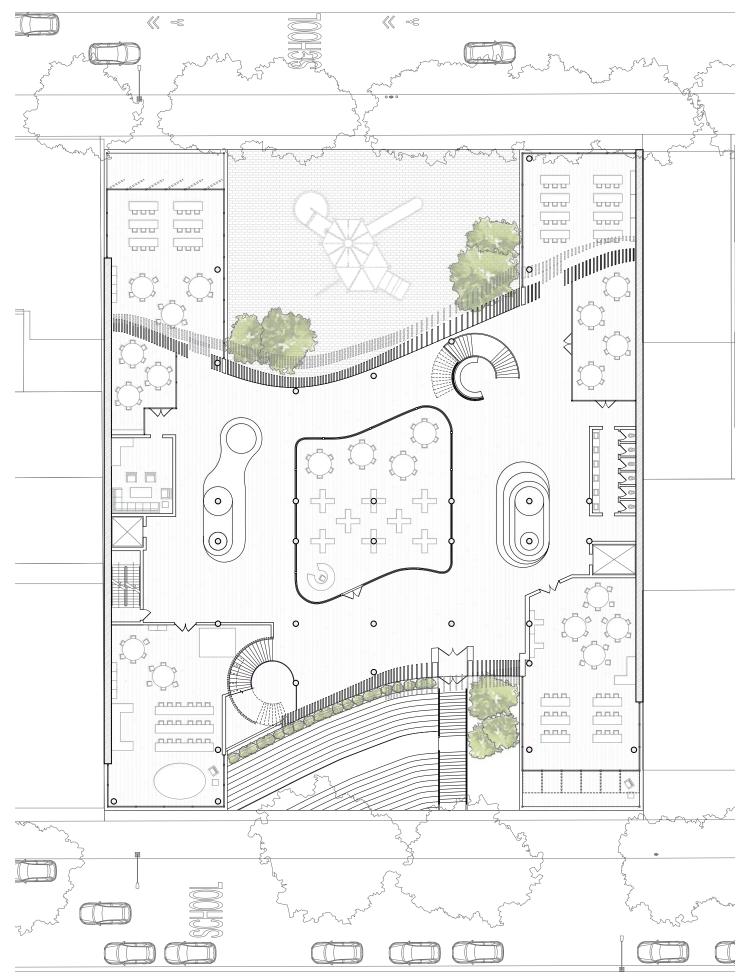


The School for Cognitive Health addresses common musculature weakness within the eyes that can cause the debilitating "post-concussion syndrome" following a mild or severe head injury. All humans are born with natural deficiencies – common examples being a weak knee or bad elbow.

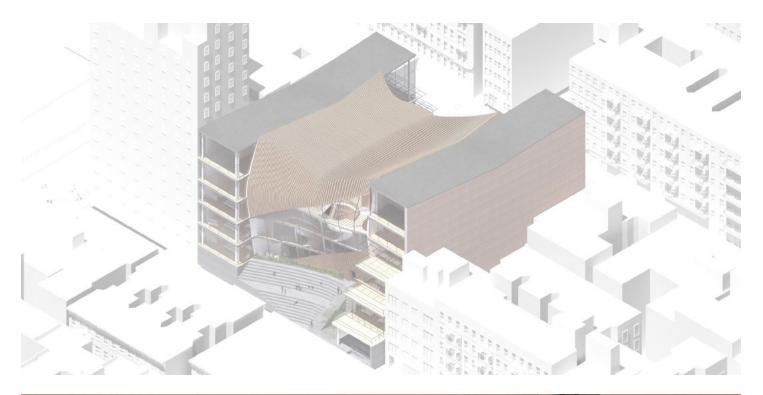
These deficiencies are usually minor, and with exercise and compensation, rarely impact daily life, and have the greatest benefit when addressed in children. A common musculature deficiency can occur within the eyes, where the muscles move unevenly and thus receive information at mismatched angles. In this event, the brain compensates for the mismatch between the two eyes and stitches the two skewed images into an even picture of the world. Upon impact or trauma, the brain stops performing these compensatory elements while healing.

Eye muscle weakness is typically diagnosed in children, and can be preventatively treated by spatial eye function exercises, eliminating symptoms later in life. The School for Cognitive Health incorporates these exercises into the building fabric, passively healing students as they move through the space.





These exercises address four major eye functions: base in, base out, jump function between base in and out, and optokinetics. Simply defined, base in is the eyes in the focused position, base out is relaxed, jump function is the movement between the two, and optokinetics is the collective interpretation of how the eyes see the world and how the body feels gravity. If the eyes see the world at a skewed angle, but the body feels gravity in an upright position, individuals feel sensations of spinning, floating, and rocking. The school incorporates floor to ceiling windows to exercise base out position. Base in is exercised naturally through reading and focal points. The windows act as education drawing boards in the classroom, so that students can easily switch their vision from reading the writing on the window and gazing out at the view.





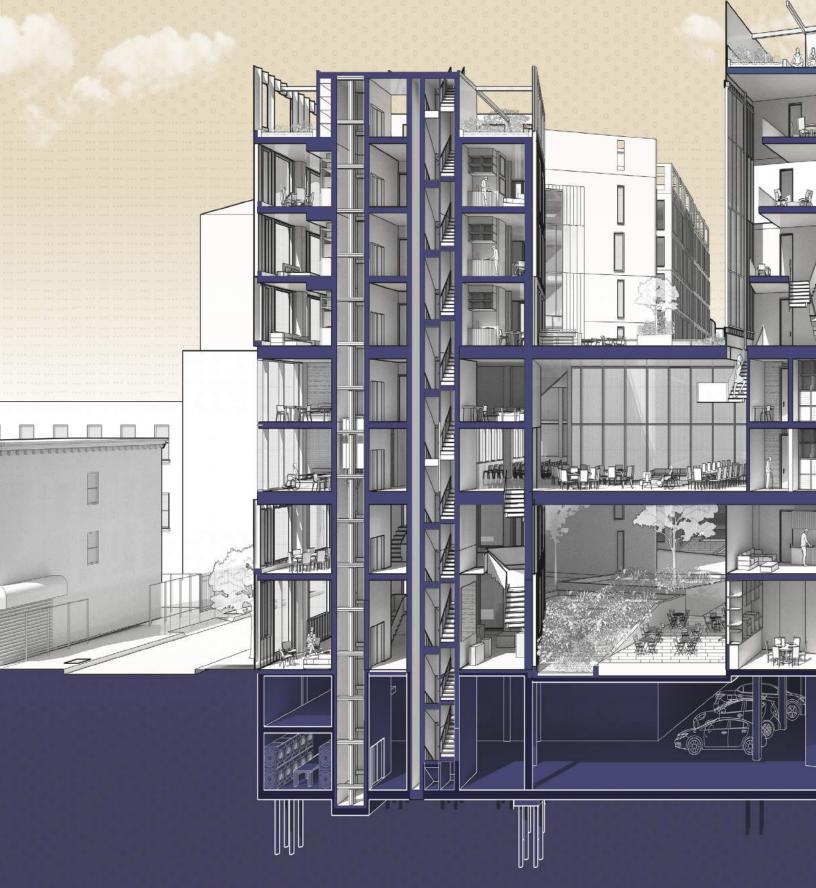




Vertical slats are integrated at a macro and micro scale, exercising optokinetics as students move past these elements. The striation forces the brain to allow the eyes to rotate smoothly and not stick to the appeared "stripes" during movement  such as climbing staircases and longer stretched transitions.
The building is a healing tool, and an equalizer, in preparing students for stronger, healthier lives and providing all students the potential to thrive.



## BRONX BRIDGE / ERIC BUNGE CORE III





The Bronx Bridge proposes a hybrid typology for housing meant to enrich the lives of local Melrose residents. The design links towers of microunits and flex-able apartments with senior and resident services.

In this hybrid geometry, eight towers share a plinth and semipermeable courtyard, creating a microcosm of echo-chambers for urban life on the block. The design employs connected social armature between the towers and plinth.

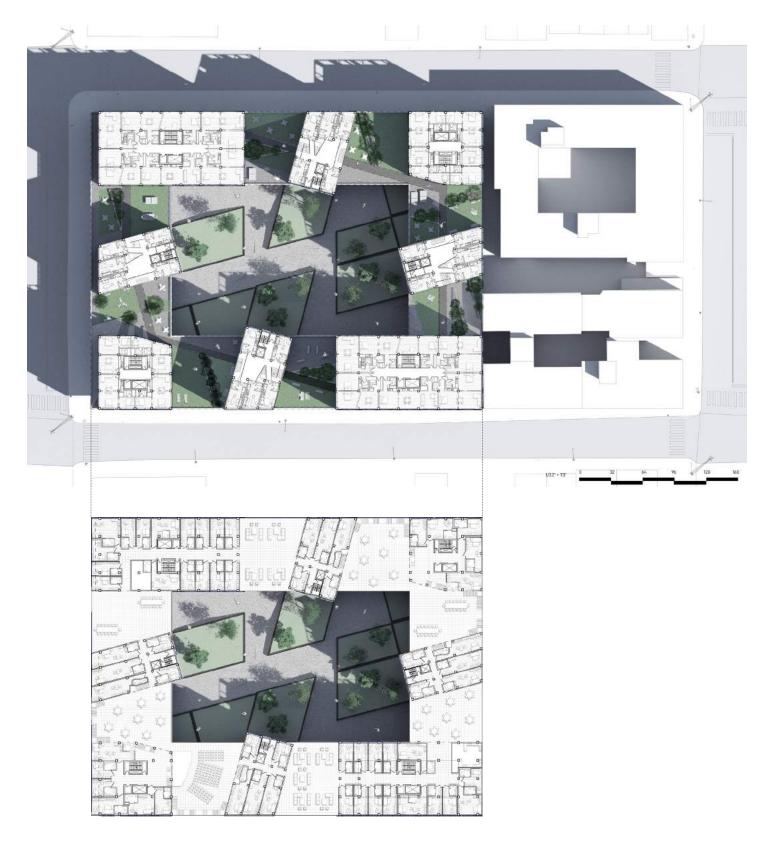


Travel is seamless from the microunits to the towers and through the plinth. From the street, at Cortlandt and 151st, the commercial and BDC face is peeled back and more open to pedestrian traffic. Similarly, the plinth band is sheathed in an opalux translucent material that glows at night, but allows for privacy from the street. Here, the plinth is a beacon and living advertisement to the new possibilities of intergenerational living.

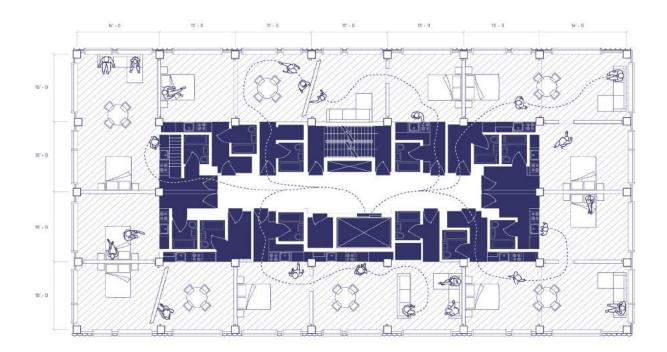


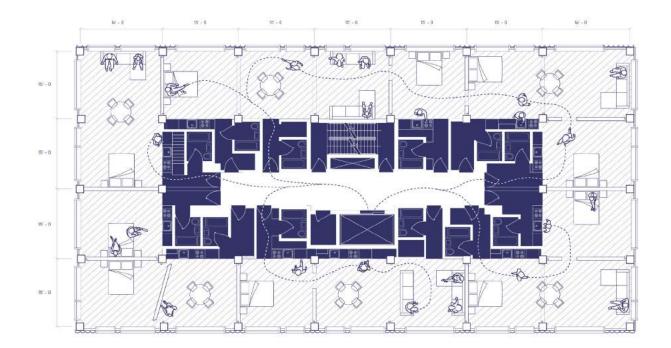


The plinth plan shows how services, like healthcare, dining, and education are woven into the block. At the typical upper floor plan, multifamily flex-able units are found at the corners and the microunit towers in between. Because each tower has a unique private and public movement, the room and armatures of the family towers create a concentric band. By pressing dense function and utility into central armatures, the outer private residential spaces allow for free movement and flex-able living combinations.



The moveable walls of the family tower living spaces are easily installed and suit the changing extended family structure common in the neighborhood. For the microunit towers, a non-linear accessory stair doubles as meeting space. The senior living units are HPD and SARA compliant (Senior Affordable Rental Apartments). The design allows for aging in place, ensured by a sliding scale of care.



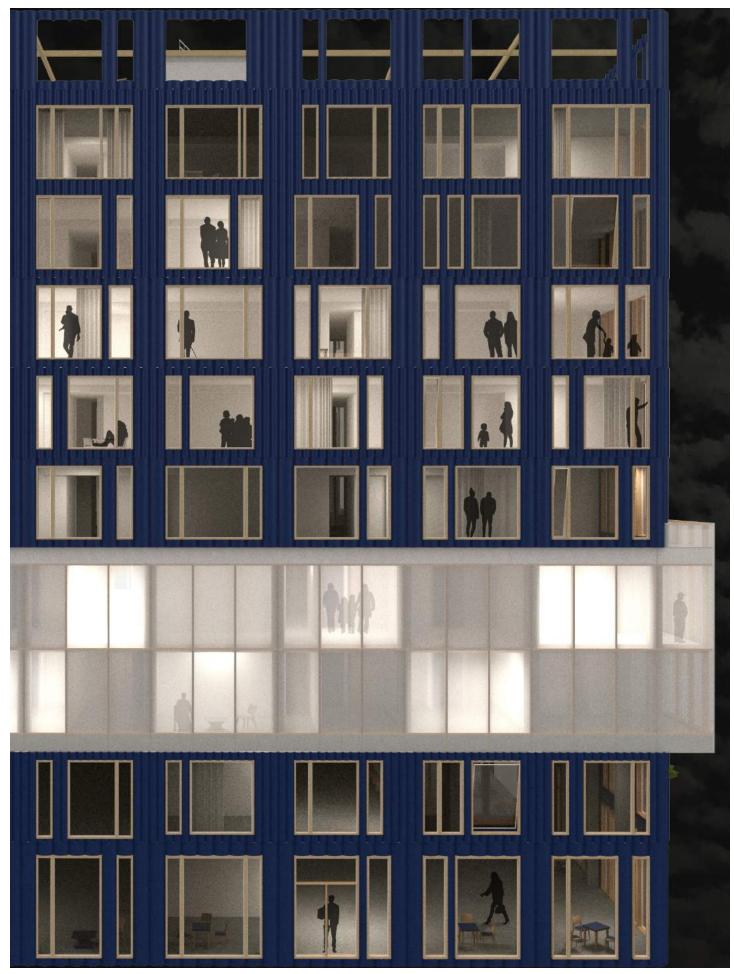


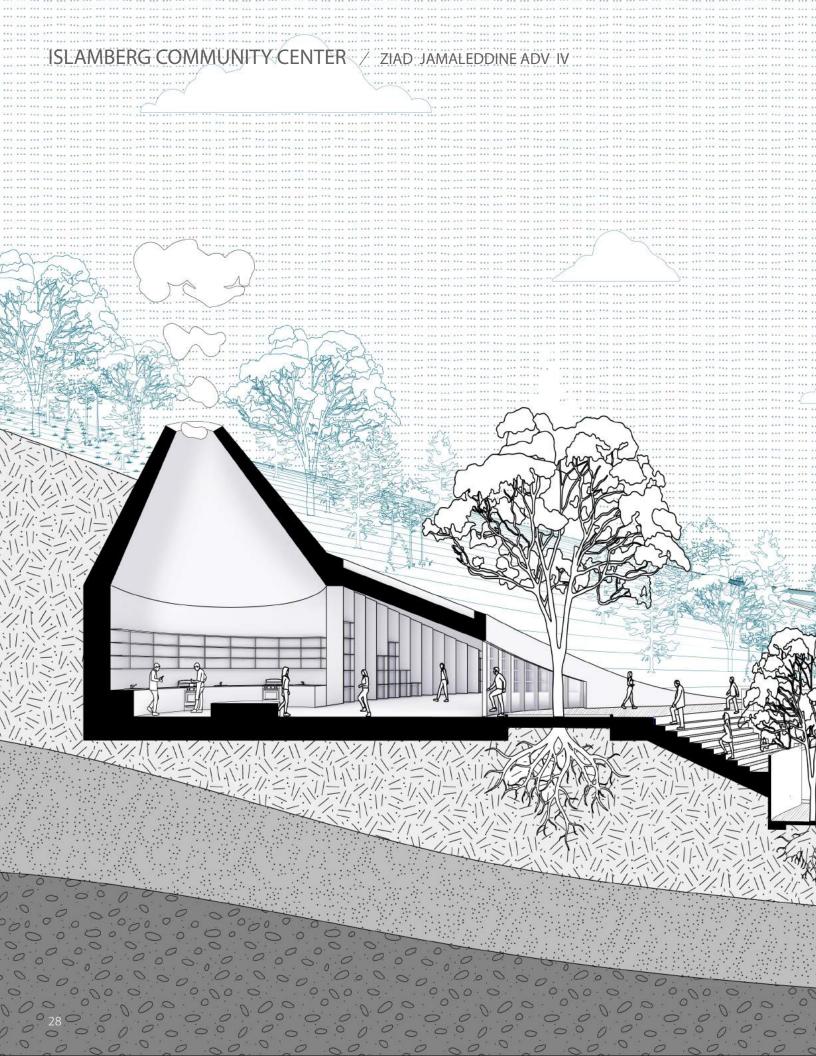
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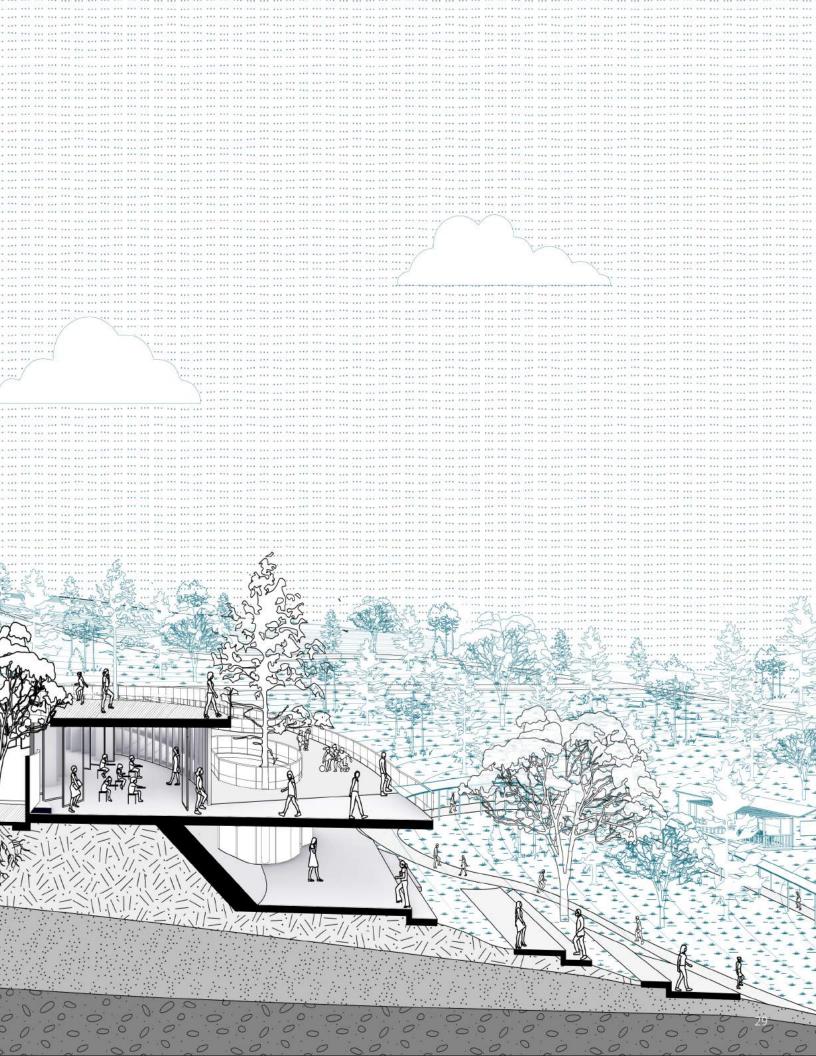




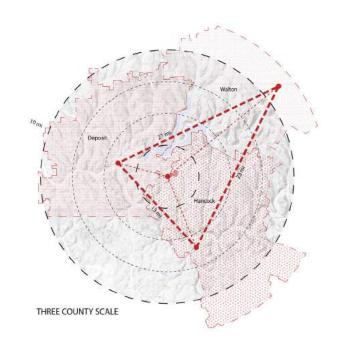


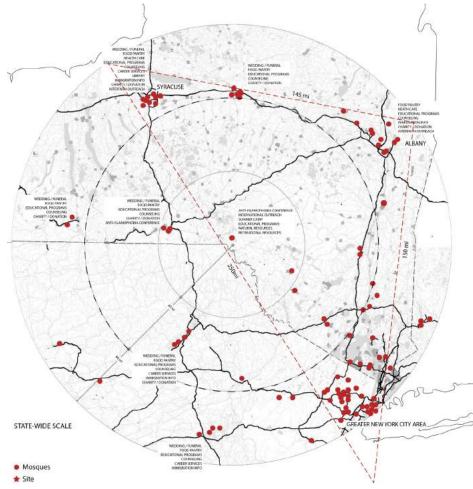




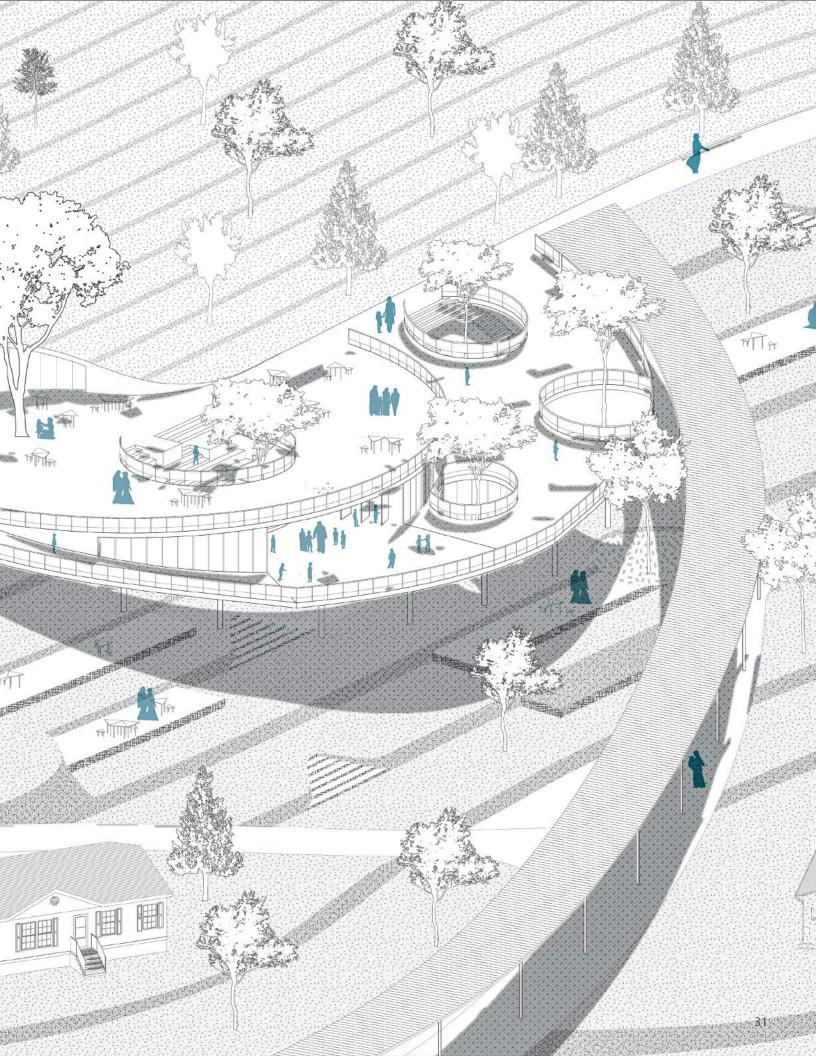


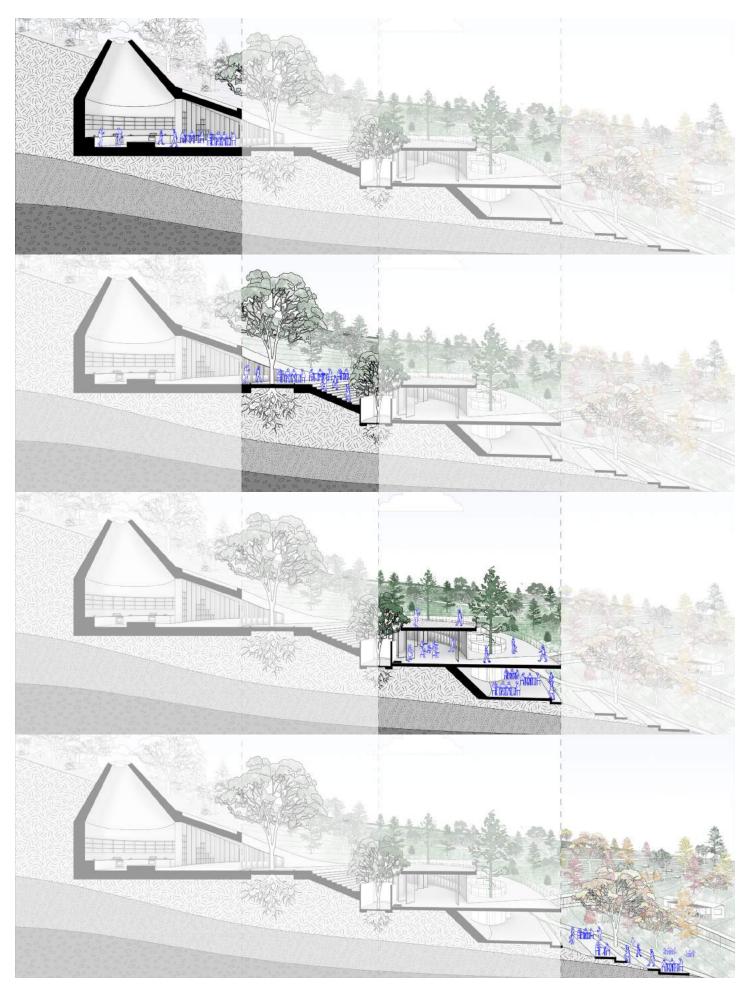
Islamberg is a small Muslim hamlet roughly 3 hours northwest from New York City. It is a town of 250 residents, all practicing the Mulim faith. Though far from urban centers, the town is an active participant in the greater Muslim community of New York state. Religion is an integral element to the town's behavior and culture, and the Islamberg Community Center aims to enrich both daily activity and practice as well as celebratory events.

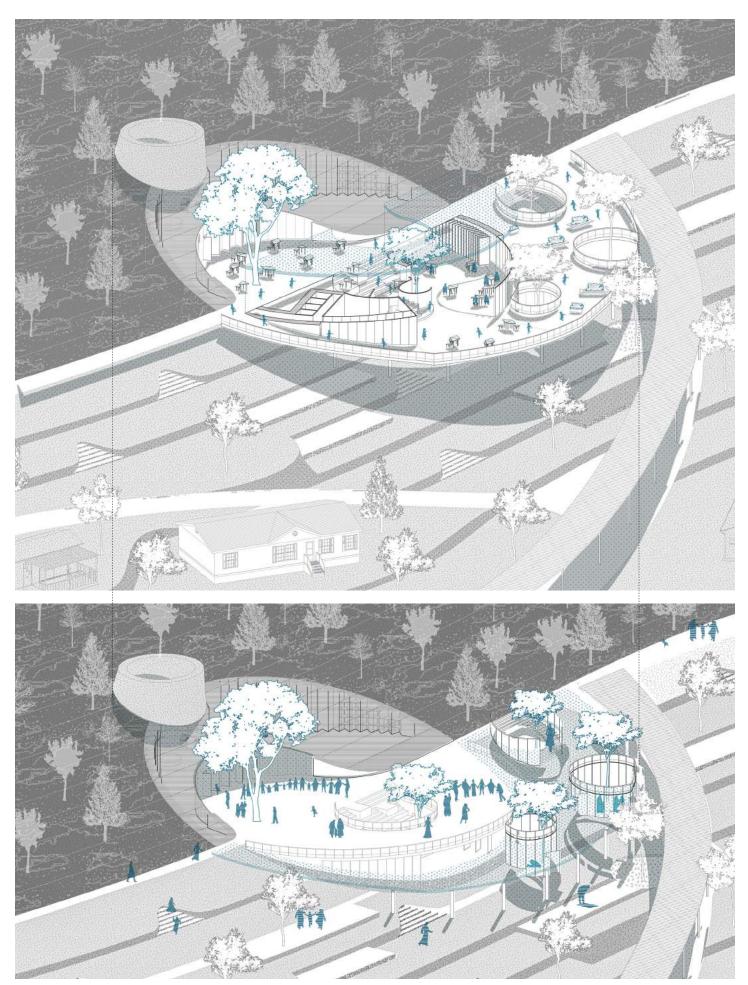




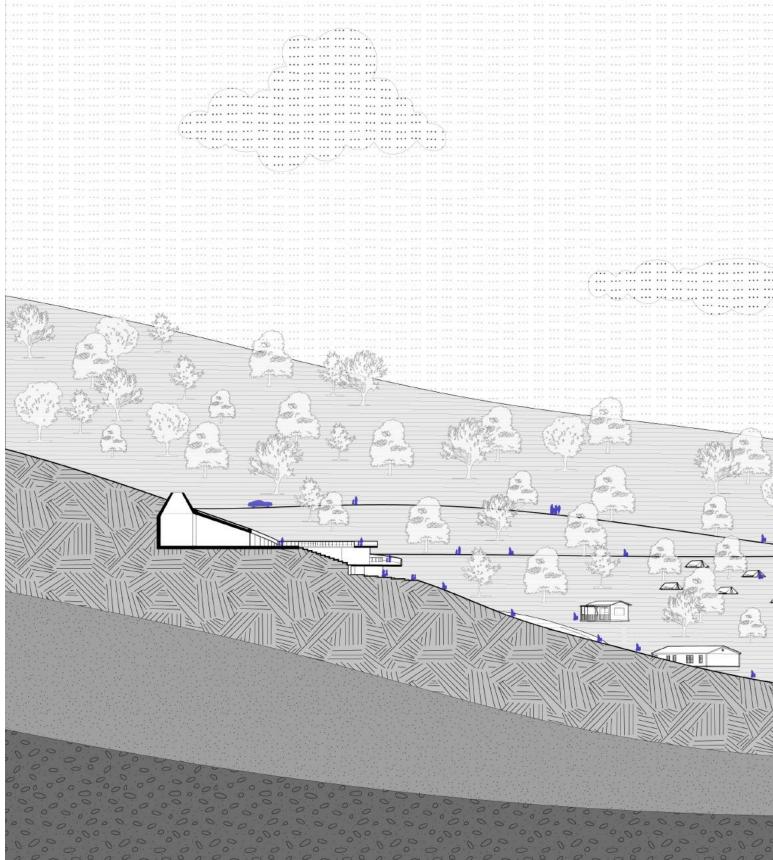


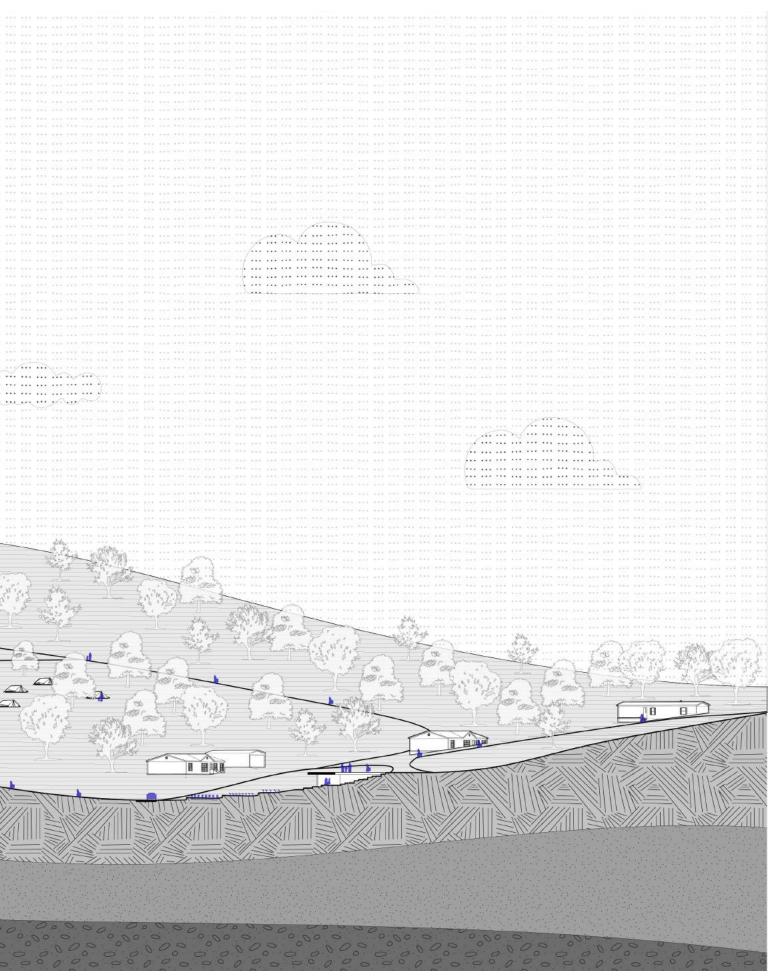




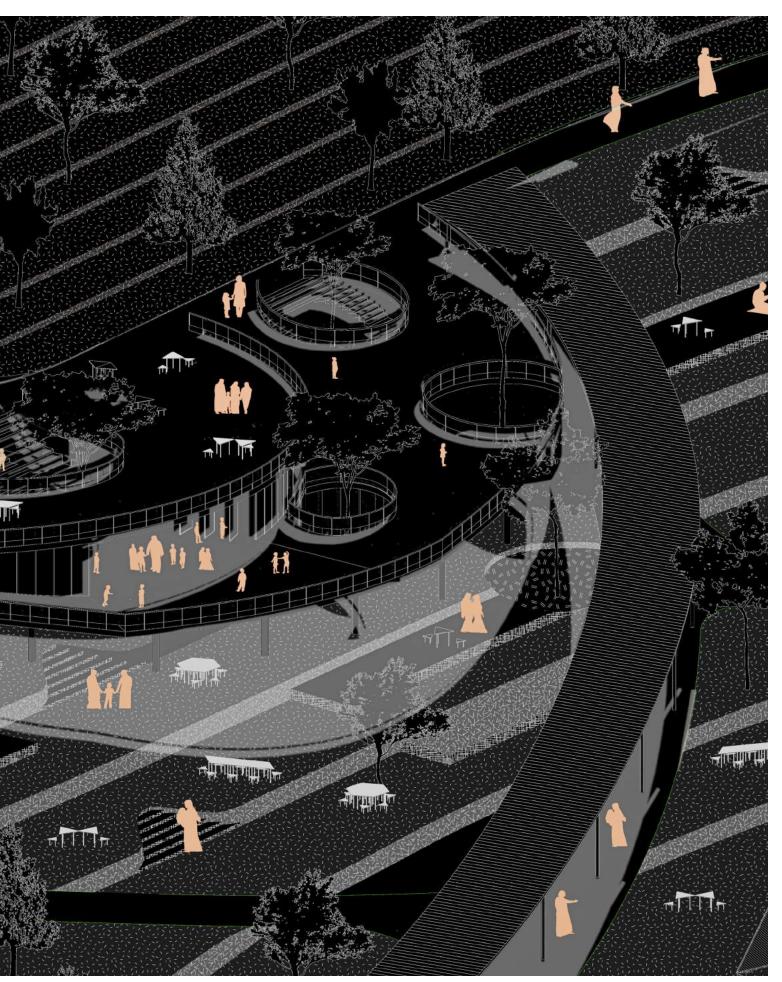


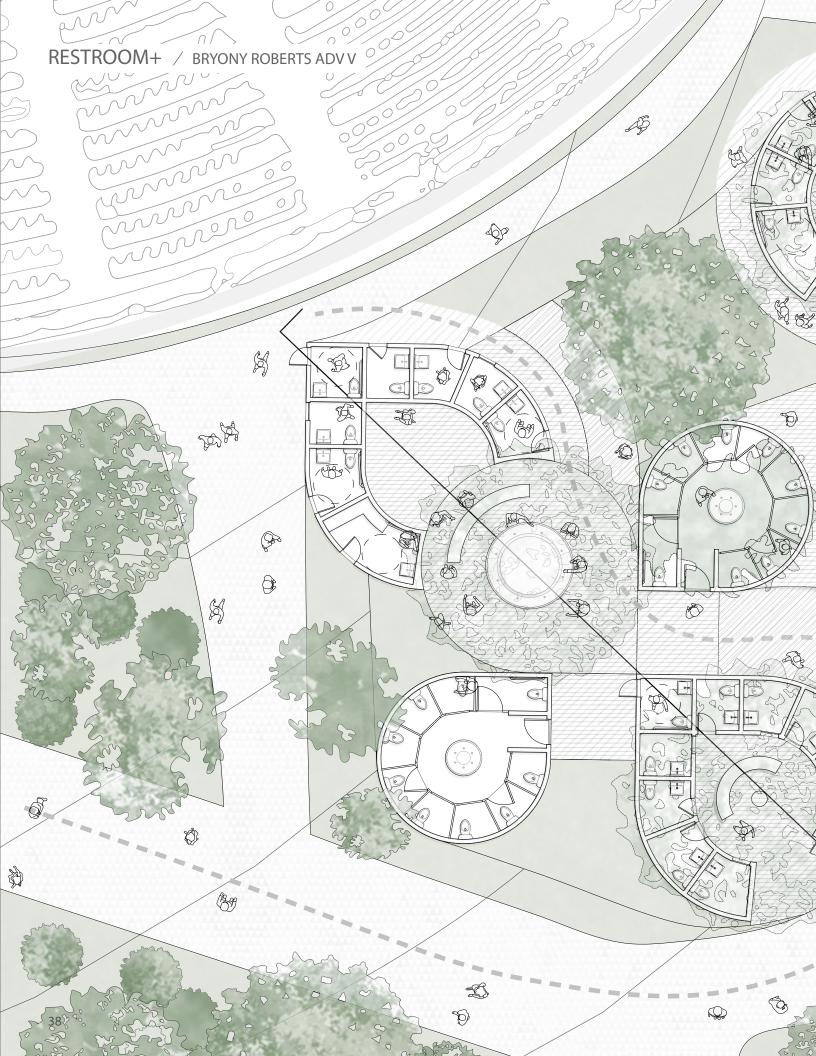
Most of the town's gatherings are faith based events which follow the Muslim lunar calendar. The lunar calendar consists of 355 days, and thus celebratory events are constantly moving seasons. The community center offers an improved school for the students in the town to use all days of the year, and is surrounded by a ring of connected, dynamic gathering spaces that shift with the seasons. The communiy center itself is situated at the north end of the town, with a new walking path connecting resident's home in an easily accesible and minimally changing elevation. Covered portions protect access during all seasons and allow children a safe route to and from the new school building.

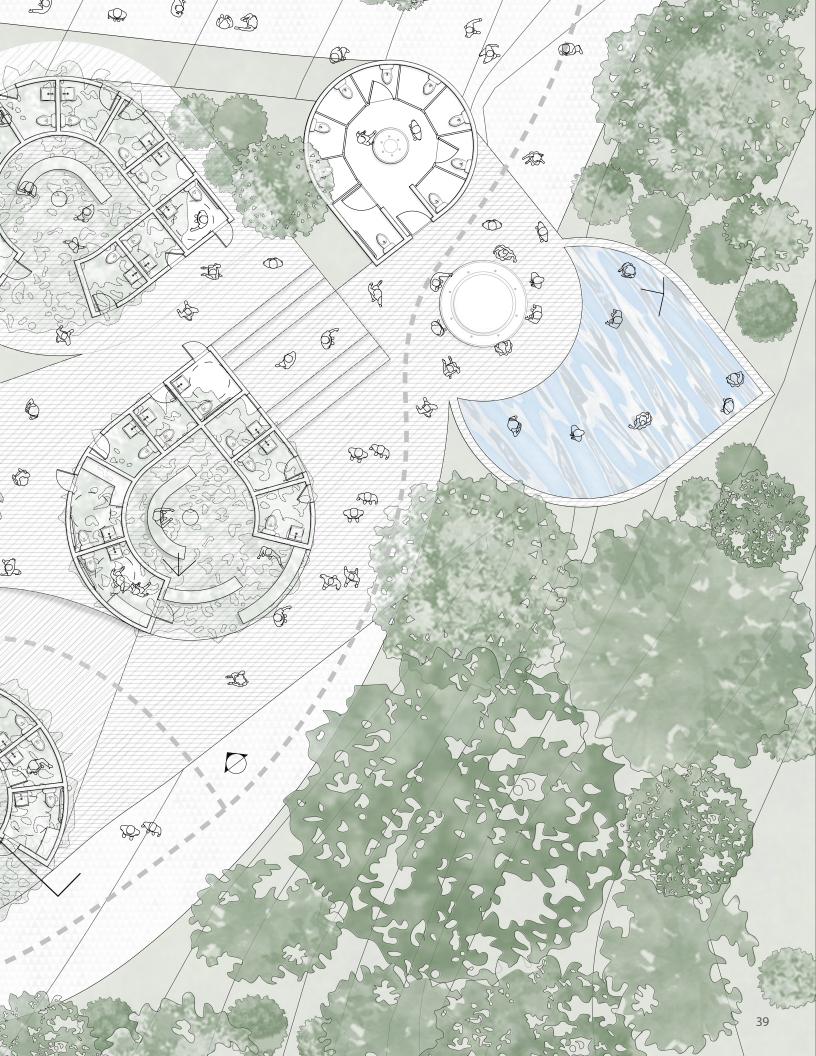














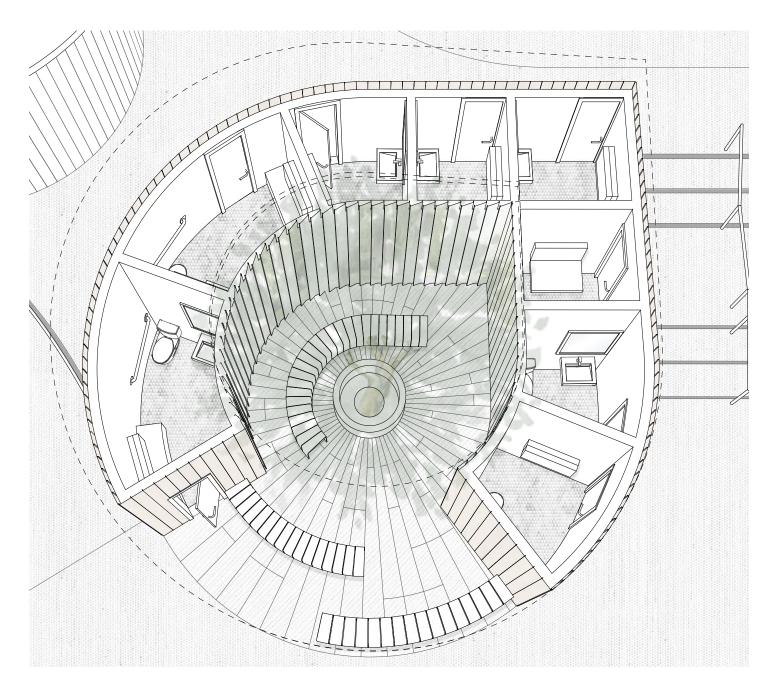


The previous conditions did not have enough restroom stalls to meet the demand. The reimagined space addresses the wide array of program and needs that individuals seek from a restroom, and offers a sensory safe haven to neurodivergent visitors.

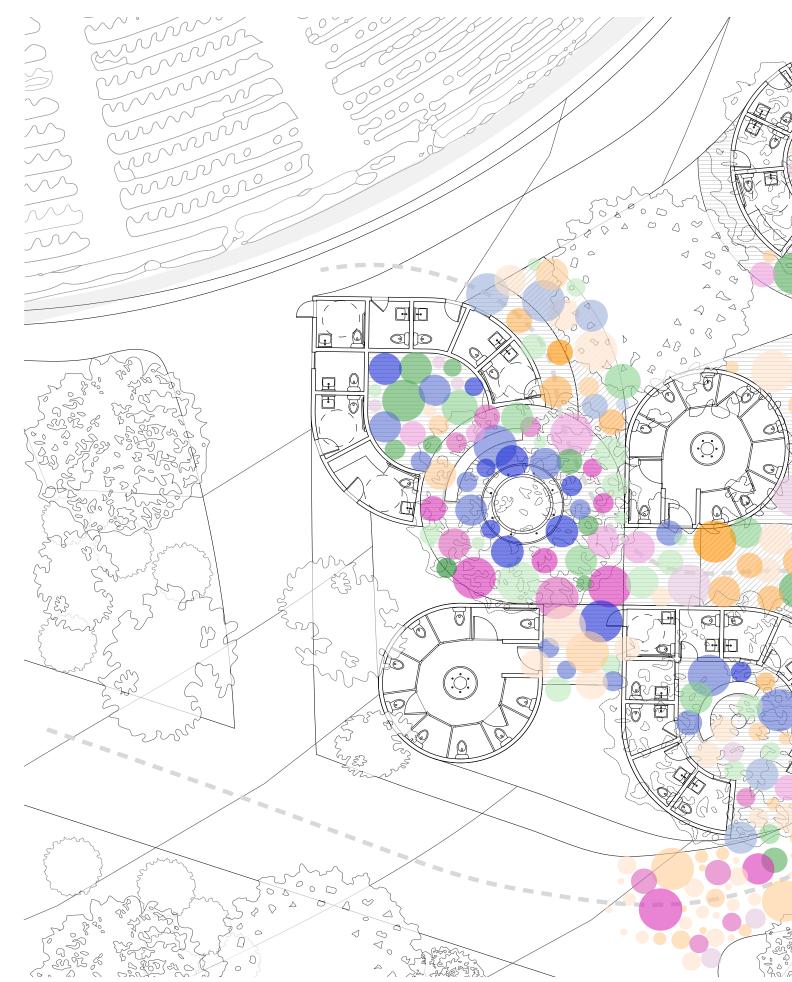
Aside from offering an increased stall count, the project seeks to reimagine space for rest, refresh, privacy and small gathering.

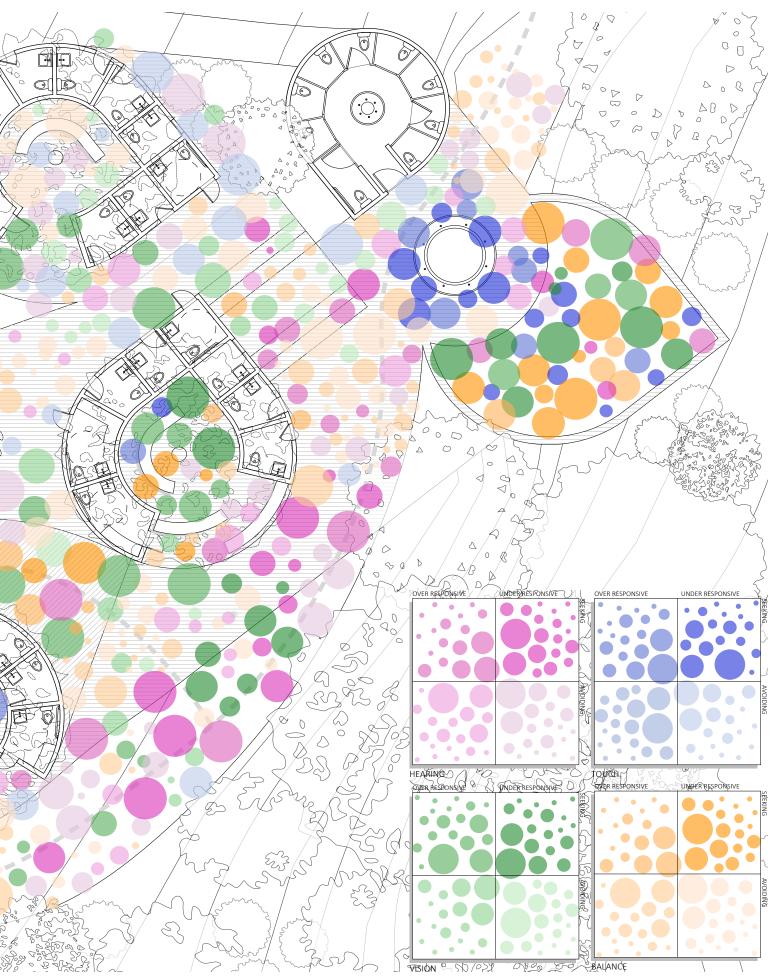
The form is defined by mimicking the natural curves of the surrounding walking paths, cut with orthogonal barriers that use both water and mirrors to create different levels of privacy and sensory isolation.

These elements carve out newly defined space to meet the needs and comfort levels of anyone visiting the restroom.









The dense greenery of the park acts as another visual and auditory barrier, working with the mirror and water to further emphasize the diverse options of sensory-safe spaces. There are elements that engage with the senses, while other areas of the restroom dampen sense, so that any individual can seek a safe and comfortable haven at the site.



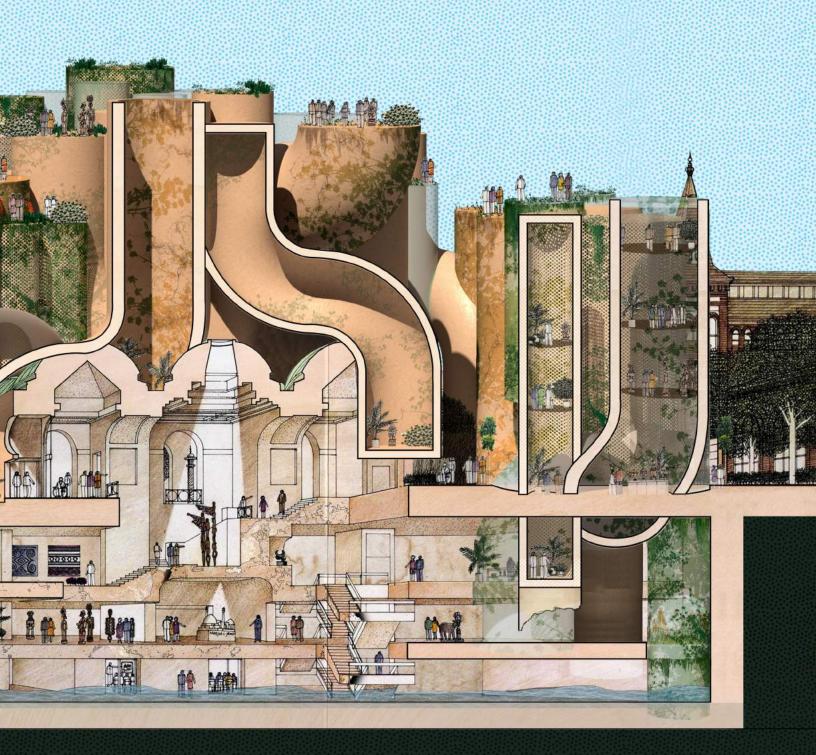






## UNCONSTRAINED WETNESS / EMANUEL ADMASSU ADV VI





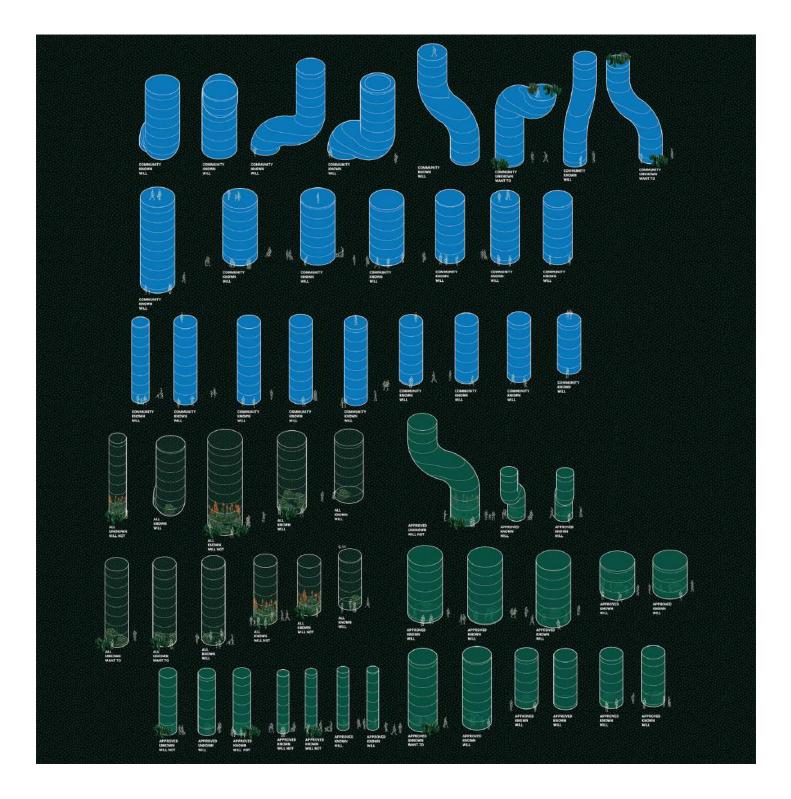
The story of the theft of the Bangwa queen and accompanying sculptures starts in 1899 in what is now present day Cameroon. The sculptures adorned the facade of the chief's home. The queen sculpture herself was considered a lefem, personifying sacred ancestry, and held deep meaning in its location and method of display. The sculptures in their original home and display were more than art. They served a spiritual connection. The objects were looted and the museum methods of display strip the objects of their connection to their home land and home people. Museum display disregards the intentions of the pieces, their ties to the home environment and architecture, and sacred significance.



This image can be read both in-out and front to back. The light cannot find the objects constrained by the grid (representative of cold museum display and faceless storage) but instead finds cracks in the grid to reveal green foliage native to the Bangwa mountains. The cracked ceiling caves to reveal the mountain scape, with the silhouette of the birds representing the trapped objects flying freely towards the greenery. The darkness of the gridded constrained cavern contrasts the vibrance and unconstrained beauty of native foliage, with the branches of the native Baobab tree cracking through the walls of the grid.



Looking at the history and current state of the museum landscape, the reimaged museum pushes back against the traditional narrative of the gallery, with its focus on sterility, preservation, and a sense of timelessness and lack of context. Instead, embracing the messy process of restitution and reparations. The environment once so carefully controlled and contained separated from the art spaces enters the new museum, removing the sterility and bringing back context for the artifacts to reside in. they will degrade over time and they will change as they site in wet, earthy environment.



In the section, it is easier to see the different levels of access to the objects expressed by intervention. The forms demonstrate who can and cannot view these objects. There are three levels of material use, with completely solid and transparent forms, and an in-between state of limited access using a mesh enclosure. The access level of the objects are determined by their combined state of reparation, determining how accessible the architecture surrounding the objects is, formally indicating to the average viewer what art spaces they can and cannot participate in.

