Located on the hills of Los Angeles next to I-405, the Institute of Water aims to address the water issues in LA and act as a manifestation of water collection, filtration and reuse system while creating its own water ecological typologies and unique landscapes that are educational, meditative and entertaining.

When visitors approach the site, they will be met with a slowly ramping down path through the main reservoir, which then opens up to the hilly site of the entire institute. The above ground circulation follows the paths of water and leads people around the campus in a loop, while the underground circulation cut through the center of the loop to generate quicker path while also framing water as part of the discovery underground.

The three main institute resembles three different speed of water. In the algae institute, water flows the slowest, stopping almost completely to form algae ponds. In the energy institute, water flows the fastest, creating channels and waterfall to push turbines. In the leisure institute, water flows in a median speed to accommodate the slowing down of pace as visitors approach the lowest point of the site.
Existing Site Topography
Construction of a Reservoir
Distributed Typology Along the Hill
Water Flow from Top to Bottom
Human Circulation as a Loop
Integration of Housing in Each Block
Invention of Public Programs
Creating Intersection Between People and Water
Located in one of the most culturally diverse areas in New York City, One Community aims to provide an affordable housing typology for people within the area. In order to support the variety of the site and the lack of green and public space around it, this project started by creating two different living conditions, a tower and a plinth, providing choices for different needs.

In the plinth part of the housing, public programs including dining hall, gallery, auditorium, after school care, restaurants and retail, and a redesigned Bronx Documentary center are residing on mostly the first floor. Breezeways cut through the block to make the six different courtyards more accessible towards the city, also providing a shortcut through the giant block. The tower, although being vertical, is treated similarly as the plinth. Voids break through the tower on upper floors to match the porous condition on the ground, while bringing sunlight to the north of the site.

A total of 301 units are available in One Community, ranging from townhouses to standard apartments to co-living units, truly providing a choice for all the people in the area.
Townhouse
Circle Studio
Co-living Units
Typical Units

West Elevation
Beds in Total: 301
Fire has always been perceived as a dangerous element, causing large-scale, uncontrollable wildfire catastrophes. However, the domestication of fire not only provided light and warmth to human beings, but fire also became the central element around which architecture was first erected. Ever since, fire has been fundamental to human life and further expanded our interactions with the other elements: earth, water and air.

The project innovates in programs by intertwining the use of fire in biomass plant with fire experiential and exhibition spaces. Visitors are invited to experience fire through understanding its function and how it generates new purposes of the other three elements. Finally through the project, fire is no longer seen as a danger but rather a catalyst for creation, allowing the coexistence of fire and forest.
Fire and Air Pavilion
The Trellis is an open structural framework that creates an inseparable triangle between human, architecture, and nature. Serving as an immediate vaccine center, the Trellis employs prefabricated modular elements for quick construction. The inoculation process is also a sensorial experience that adds a collective memory to people’s physical and mental consciousness, thereby building up trust, equity and connections within the community. The Trellis follows the topography and gradually grows into a dwelling space for seeds, plants, and nature. Functioning as a community seed bank, it can help ameliorate seed quality, preserve local species, and foster active exchanges and communications. Through an integrated variation of climate, landscape, and activities, the Trellis attempts to trigger people’s sense of respective interdependencies and encourage people’s engagement in seed diversity and food security.
Vaccine Center Axon

Vaccine Center Section

Vaccine Center Plan

Phase 1

Phase 2

Phase 3

Phase 4

Overall Floor Plan
Libraries are sanctuaries for people, as well as books. The presence of a neighborhood branch library gives our smaller residents a destination and means of connection. In this project, a giant staircase connects the vigor and energy of Broadway to the tranquility of a neighborhood street and provides pedestrians with direct access to their homes. At the same time, the stairs become a roof for the library below while allowing multiple entrances on different levels. Pedestrians will be greeted with a café entering from both top and bottom. The top café carving into the existing cliff is more serene and gives people a view into the staircase library below, while the bottom café drops down into a livelier sunken plaza to compensate for the low level of stairs above. In between the two cafés lies multiple reading spaces, studying rooms, meeting rooms, and book storages with a choice of having natural sunlight or indoor lights. Floorplans at each level are set back to provide double-height space in every level and produce a direct view from top to bottom.
The school I have designed is an art school for students, but more importantly, it is proposing a new form of education, both to students and teachers. In my school, the organization of one class is completely changed, instead of sitting in the same room for 45 minutes, students actually travel between different locations led by their teachers. In a typical floor plan, I have organized four different classroom spaces: the lecture style, discussion style, studio style, and gallery style. Depending on the requirement of certain classes, teachers can design the route students take in a certain class. The design of the ramp system and utilizing the rather larger floor height of the existing structure, I sliced up the existing floors to some mid-levels, which allows another path of connection between floors, other than the ramps and fire stairs.
Located in the Melrose Community in New York City, this multi-use community center serves as a gathering point for the diverse cultures and people within the area. A strip of void wraps around the building to provide outdoor terraces and to bring sunlight in on all the levels, while a large central atrium span from first to fourth floor so that visitors can walk up around it accessing all the public programs in the building.

This is a collaborative project completed during the Integrated Systems and Technology class offered by GSAPP, and the main goal was to learn to draw details and supporting drawings for a DD submission. I was highly involved in modeling the building in Revit and producing detail drawings.
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