

# PORTFOLIO

2014-2025 SELECTED WORKS

Columbia University **GSAPP, MSAAD**

Chih-Chia Huang

01 **WILDFIRE AS A GENTLE BOUNDARY** 03

# Climate Action + Community Center  
M.Arch-Adcanced Studio

02 **DISOLVING BOUNDARY** 11

# Education  
M.Arch-Adcanced Studio V

03 **TO FOLD** 18

# Gallery  
M.Arch-Adcanced Studio VI



# WILDFIRE AS A GENTLE BOUNDARY

Advisor: David Eugin Moon

Collaborator: Norman Sltu & Chao Tang Lin

Site: Los Angeles

Year: 2025

## The Challenge: Expanding Fire Territory

As wildfire-affected areas in Los Angeles continue to expand, highlighted by the recent Palisades fire, the growing overlap between urban settlement and natural systems raises urgent questions about coexistence within the WUI.

## The Conflict: Seasonal Hydrological Extremes

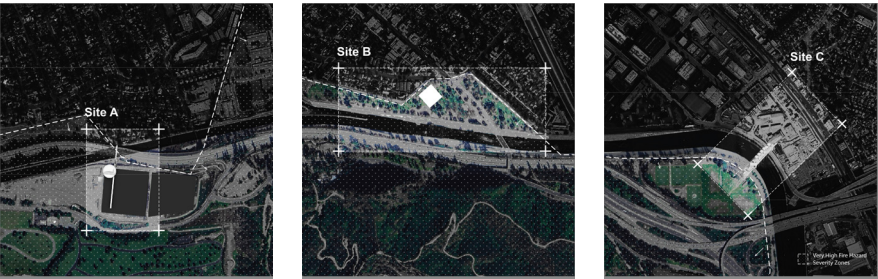
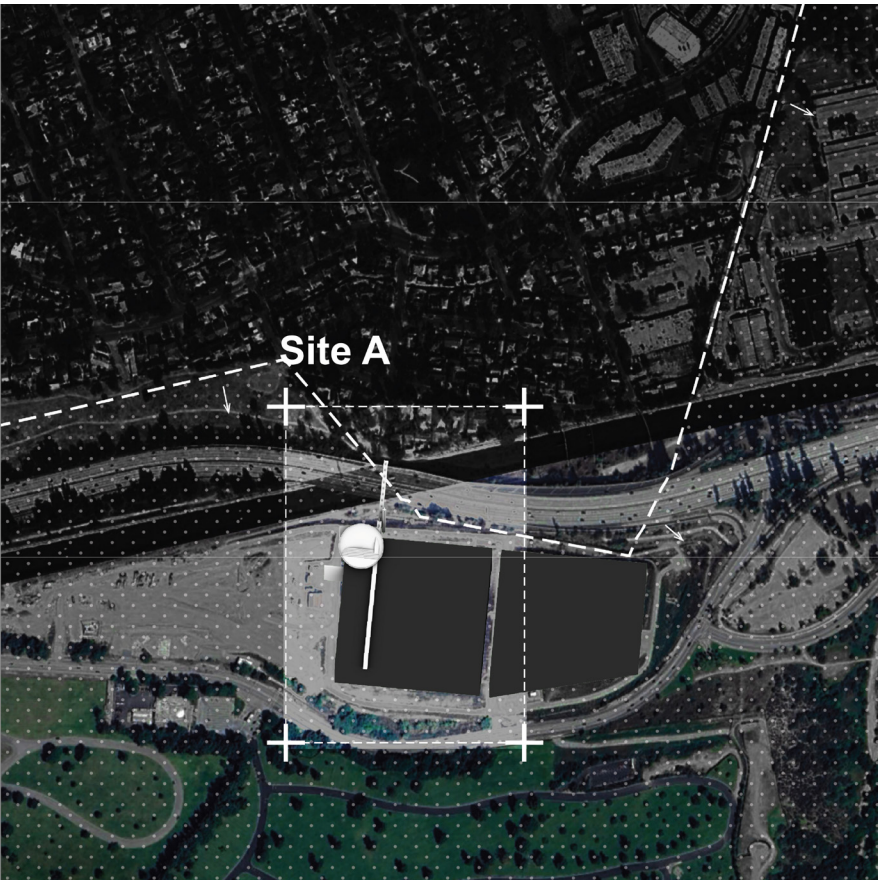
Along the WUI, the Los Angeles River oscillates between drought in the dry season and flooding during heavy rains, revealing a systemic failure in water availability precisely when wildfire risk is highest.

## Strategy: Adaptive Water as Civic Infrastructure

The project uses seasonal water fluctuation as its point of departure, transforming three adjacent sites into flood-control infrastructure during the rainy season and decentralized water supply and refuge spaces during the dry season, integrating everyday public use with disaster response.

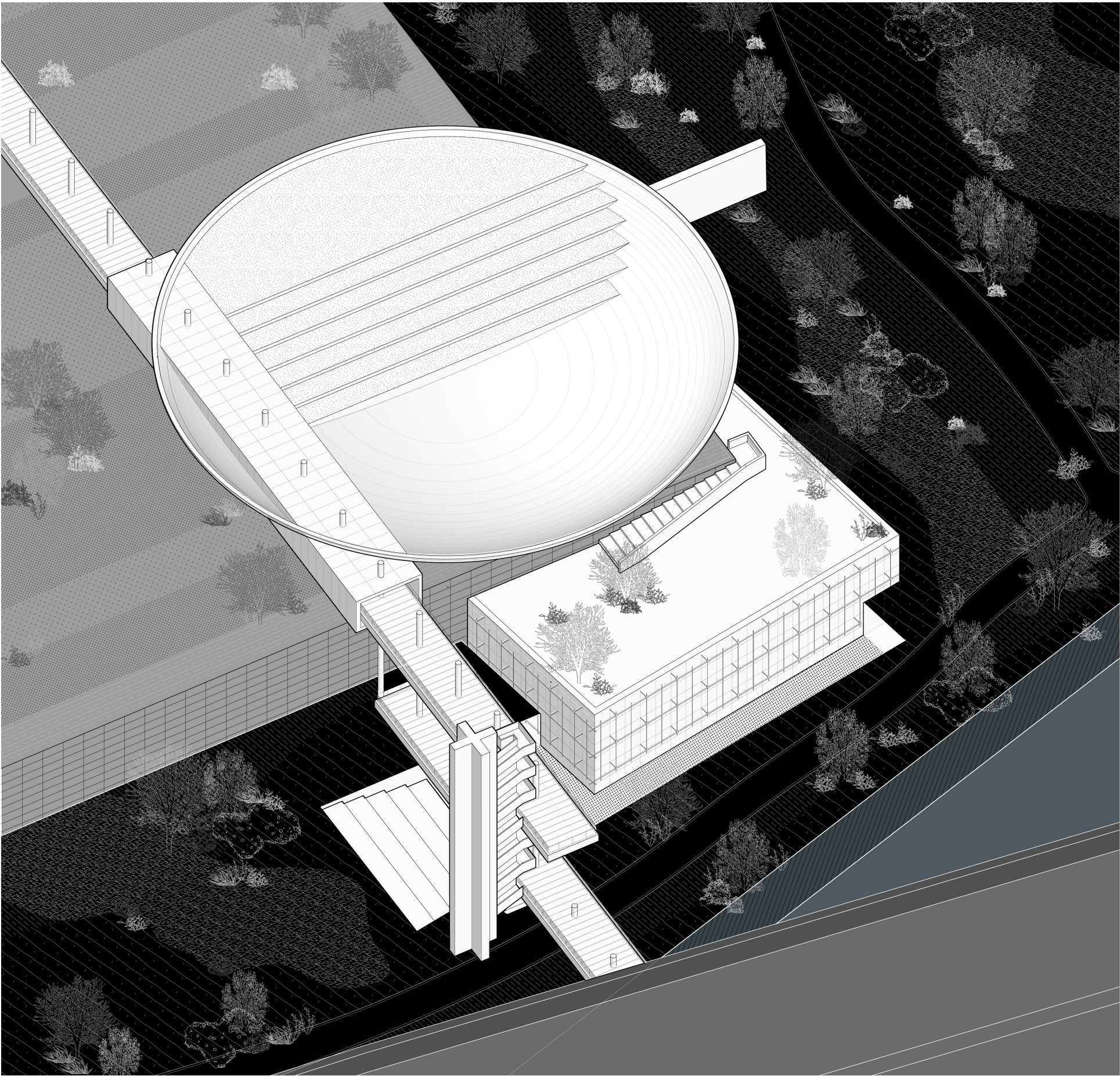






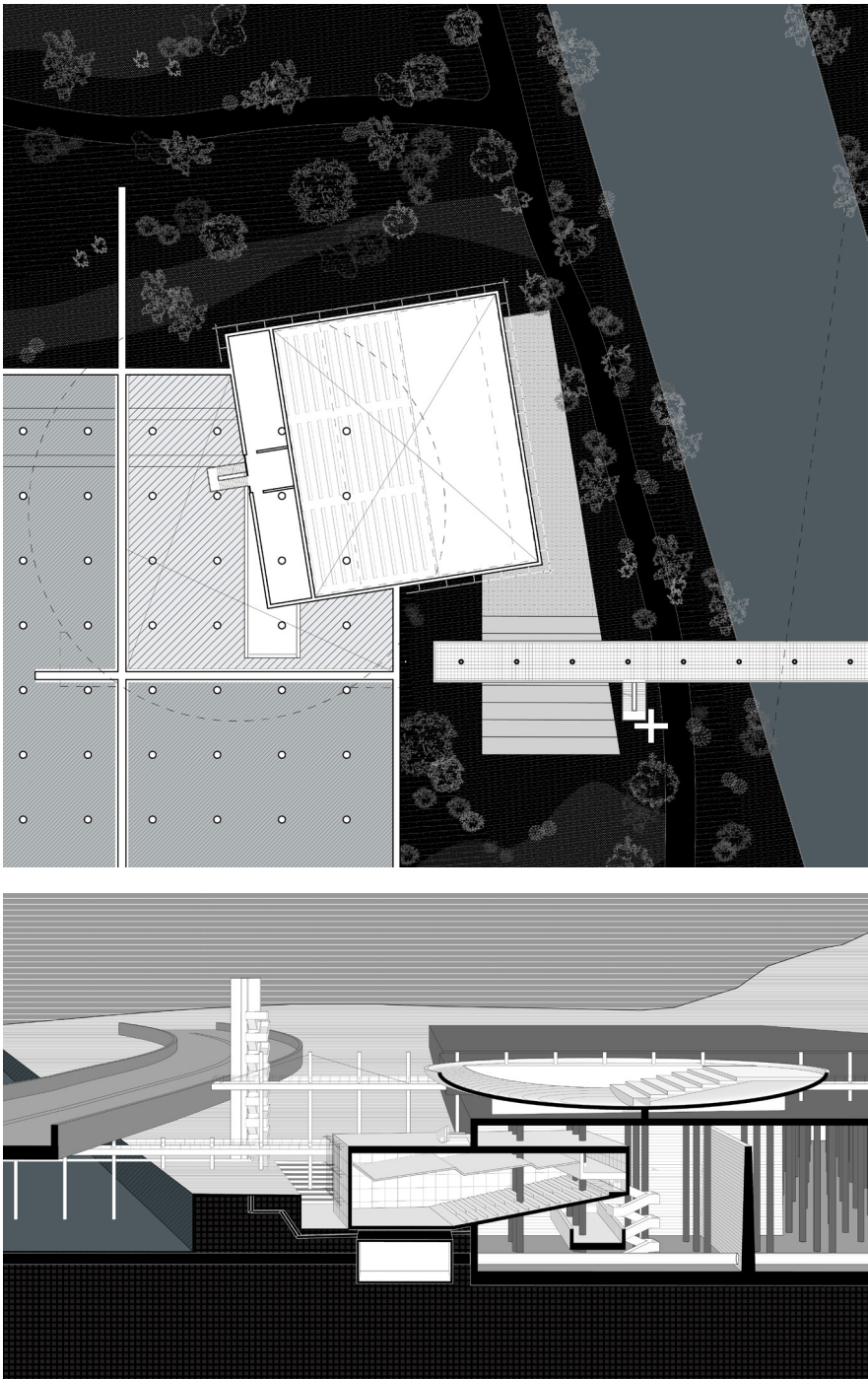
Slite A  
Before the fire: Reservoir  
During the fire: Theater& Shelter

Through an intervention on the existing reservoir, its broad enclosed space is reimagined as a wildfire shelter, while new bridge links fire-prone areas to safer territories, forming vital evacuation corridors during emergencies.



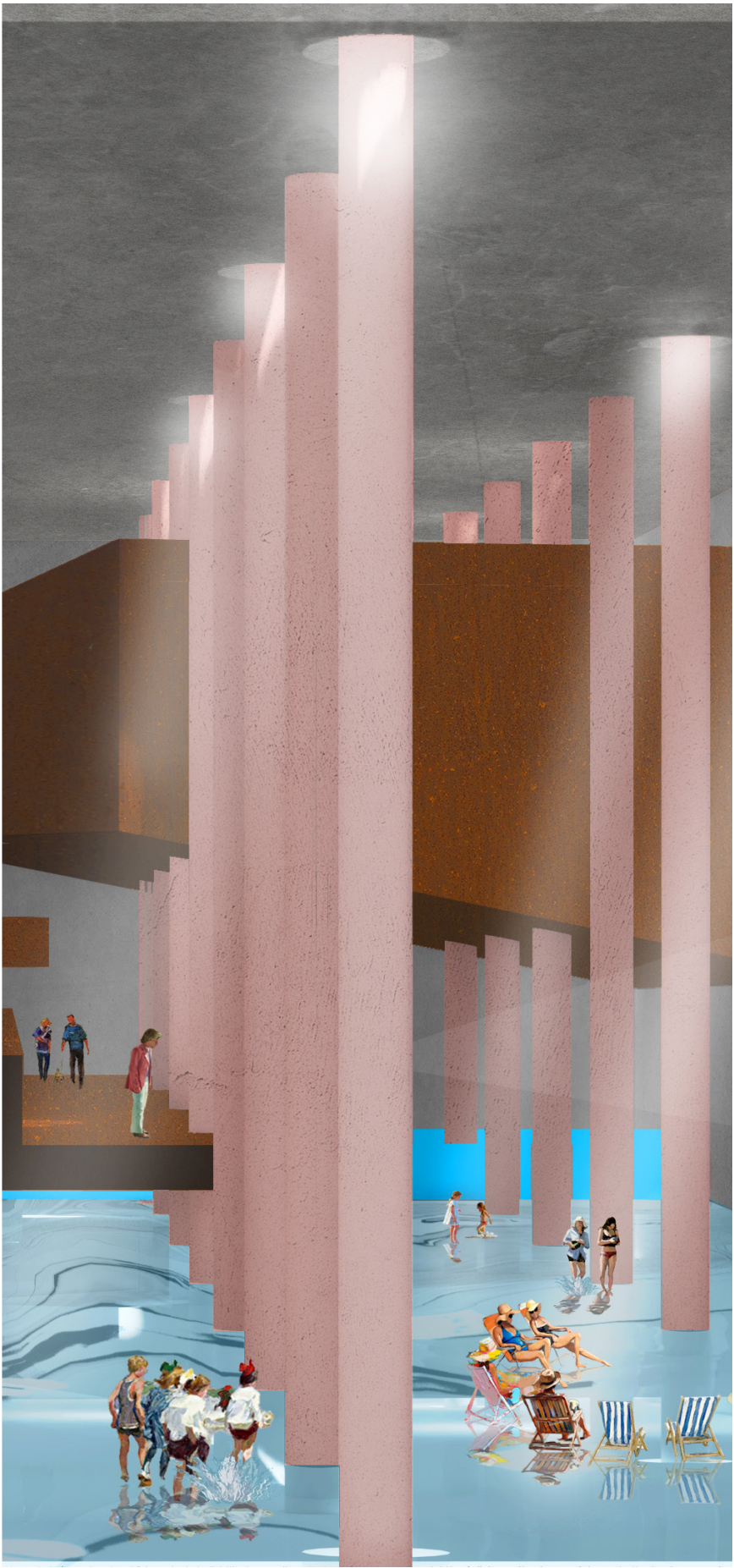
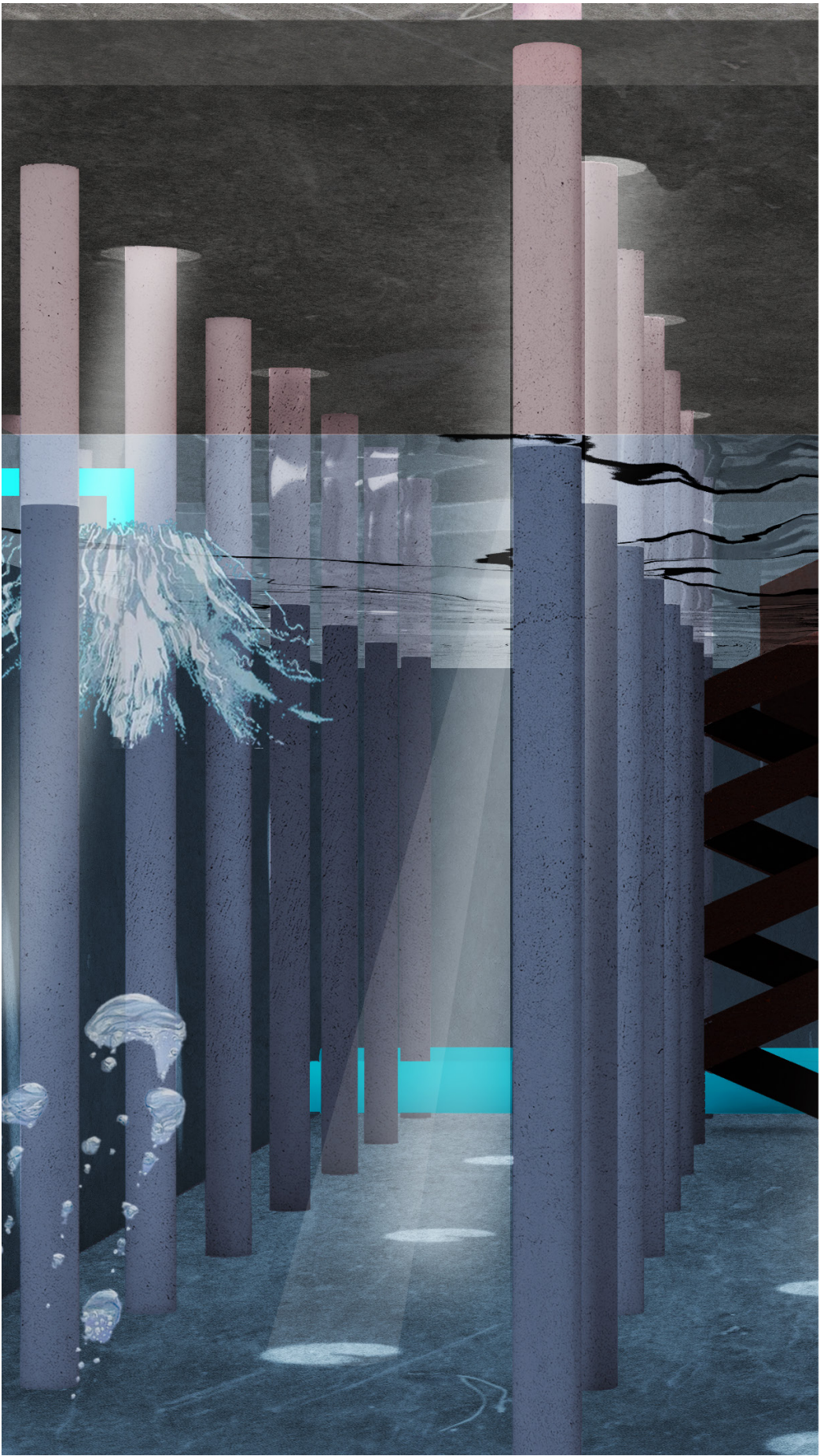
Wildfire as a gentle boundary



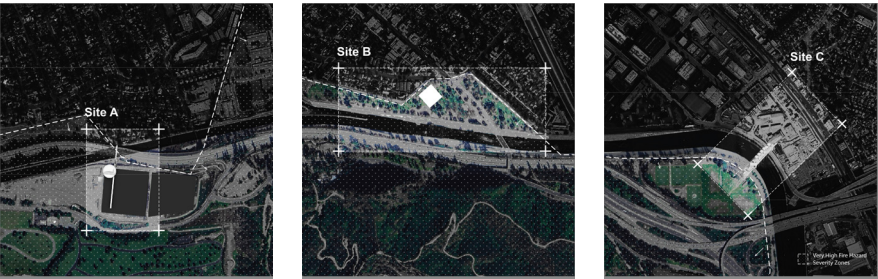
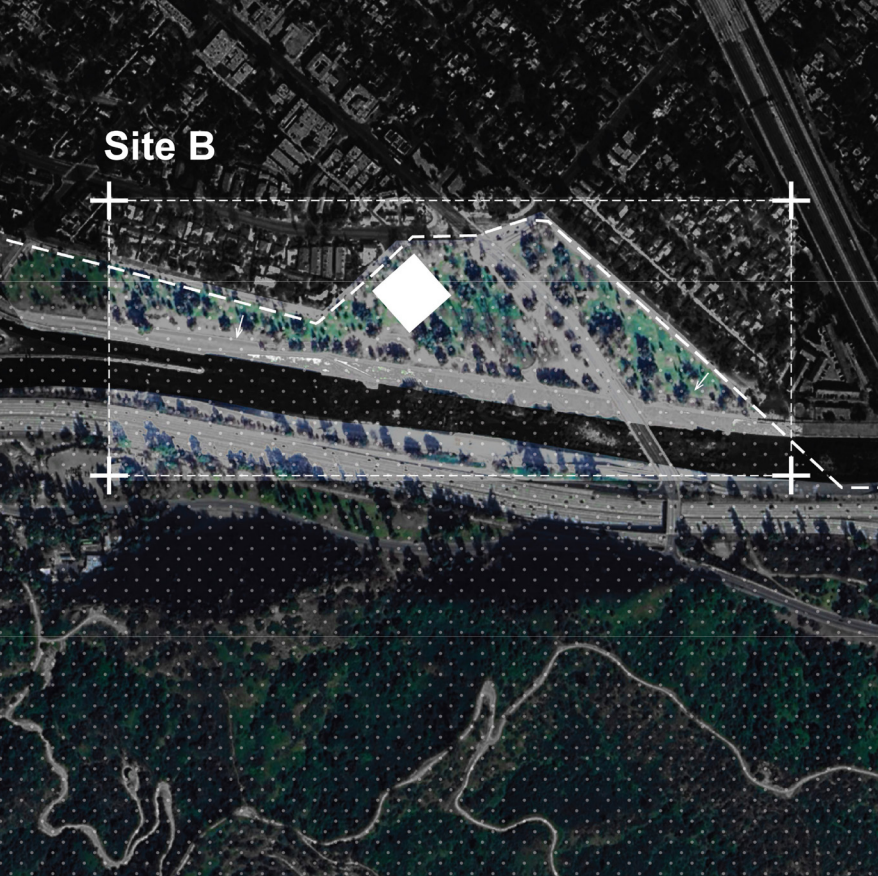


Slite A  
Before the fire: Reservoir  
During the fire: Theater& Shelter

Wildfire as a gentle boundary

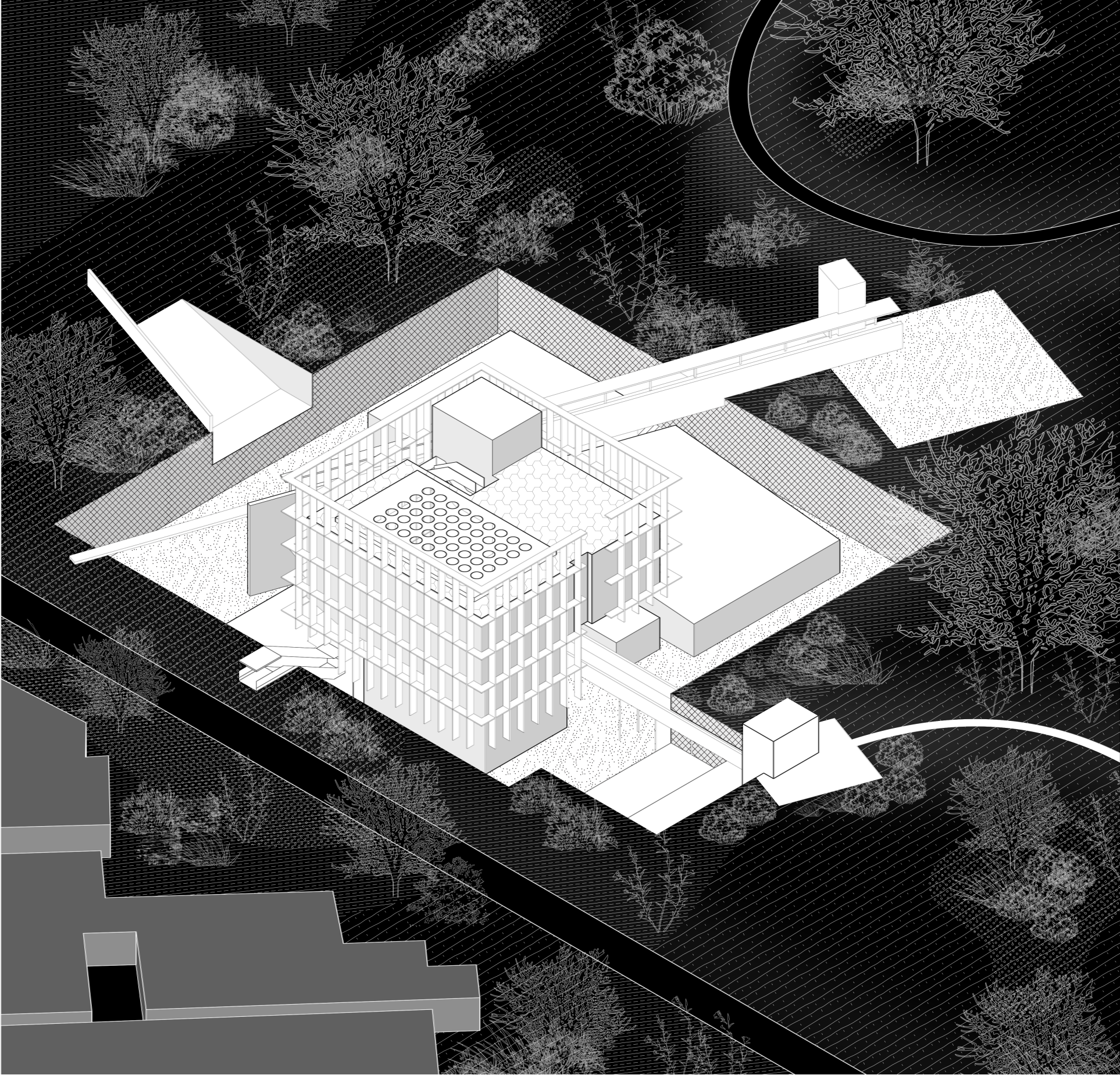






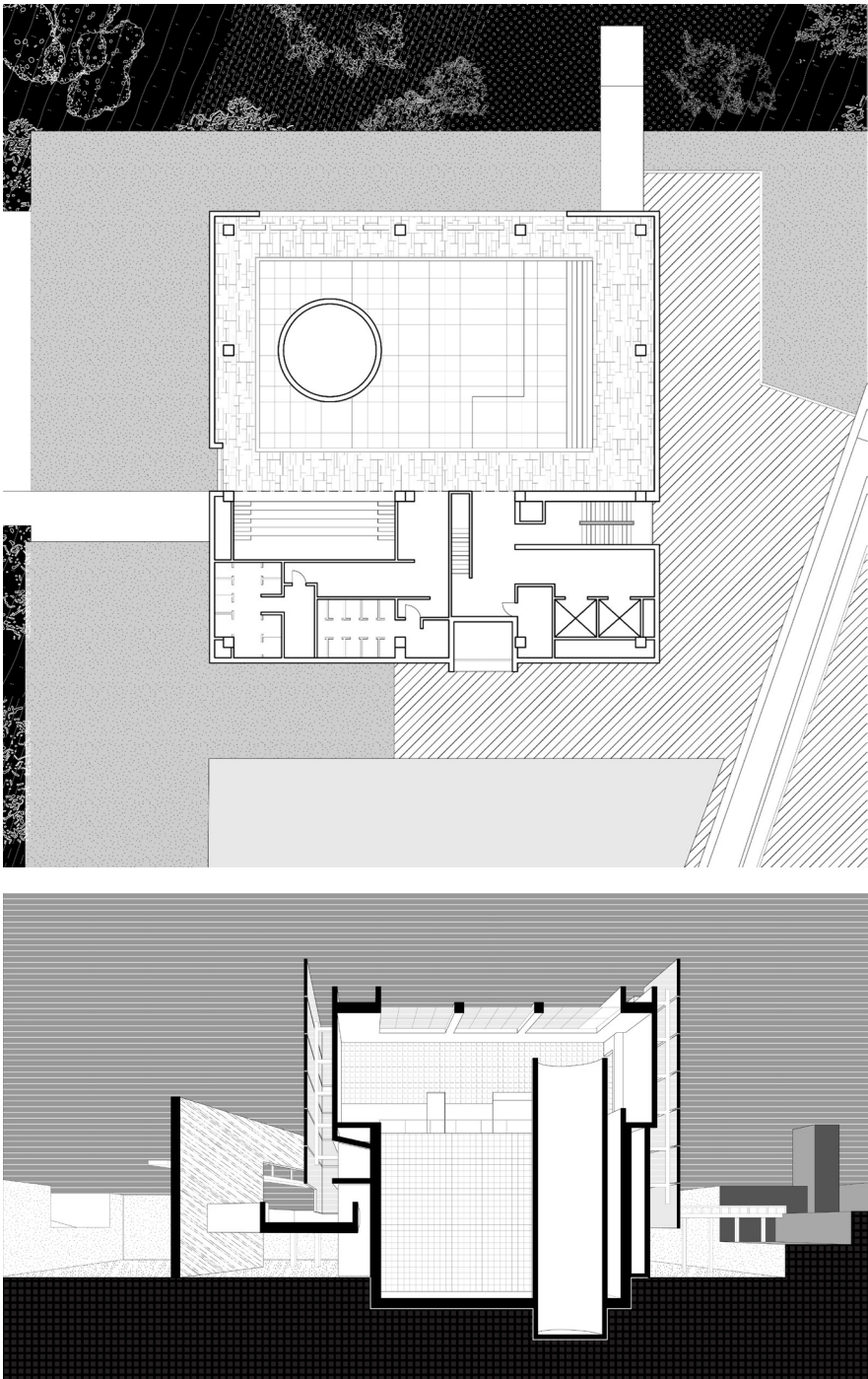
Slite B  
Before the fire: Community center & Diving center  
During the fire: Community water supply station& Shelter

Unused green space surrounding the community is reimagined as a hybrid community and diving center, where floodwater is filtered for recreational use while serving as a fire-reserve system. In times of disaster, the stored water is deployed to support community firefighting efforts.



Wildfire as a gentle boundary

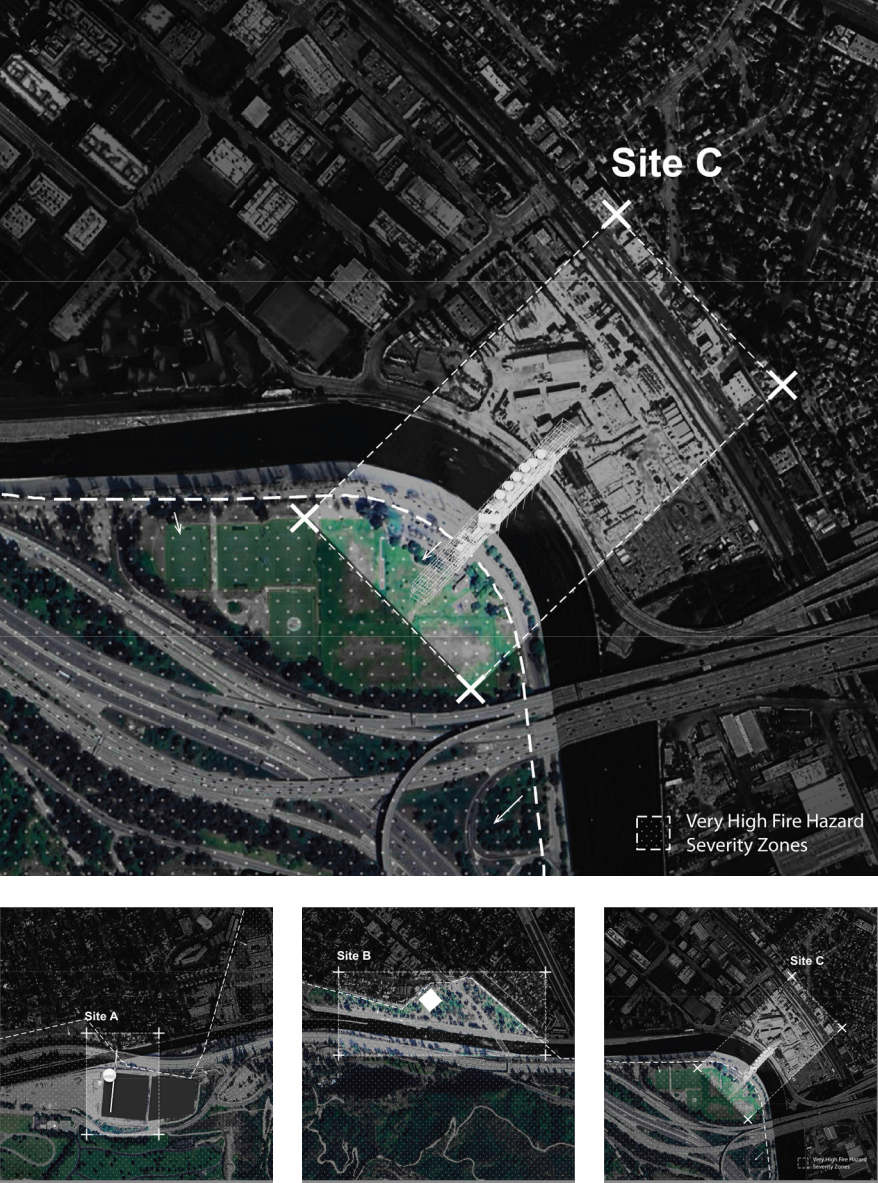




Slite B  
Before the fire: Community center & Diving center  
During the fire: Community water supply station& Shelter

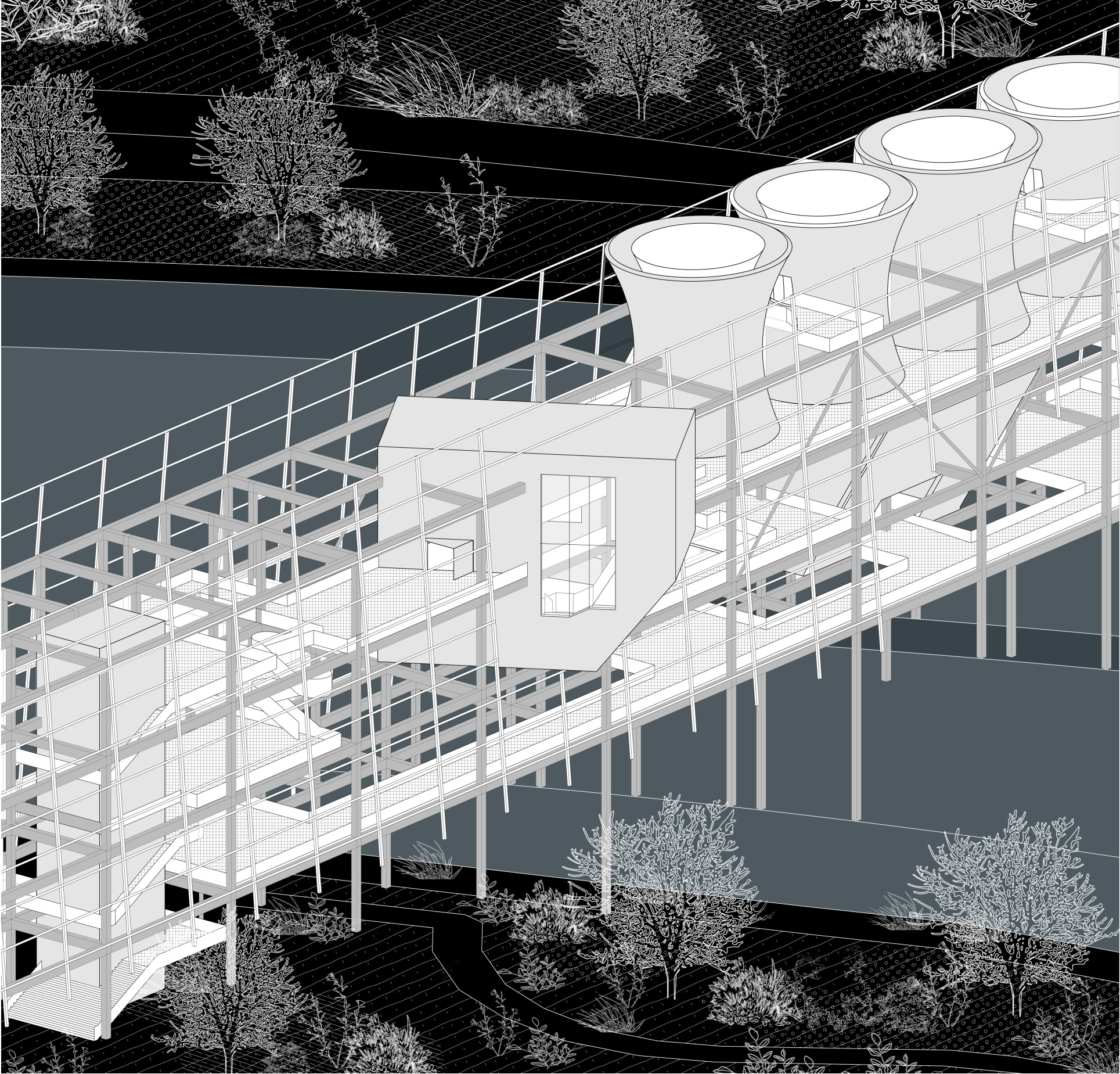




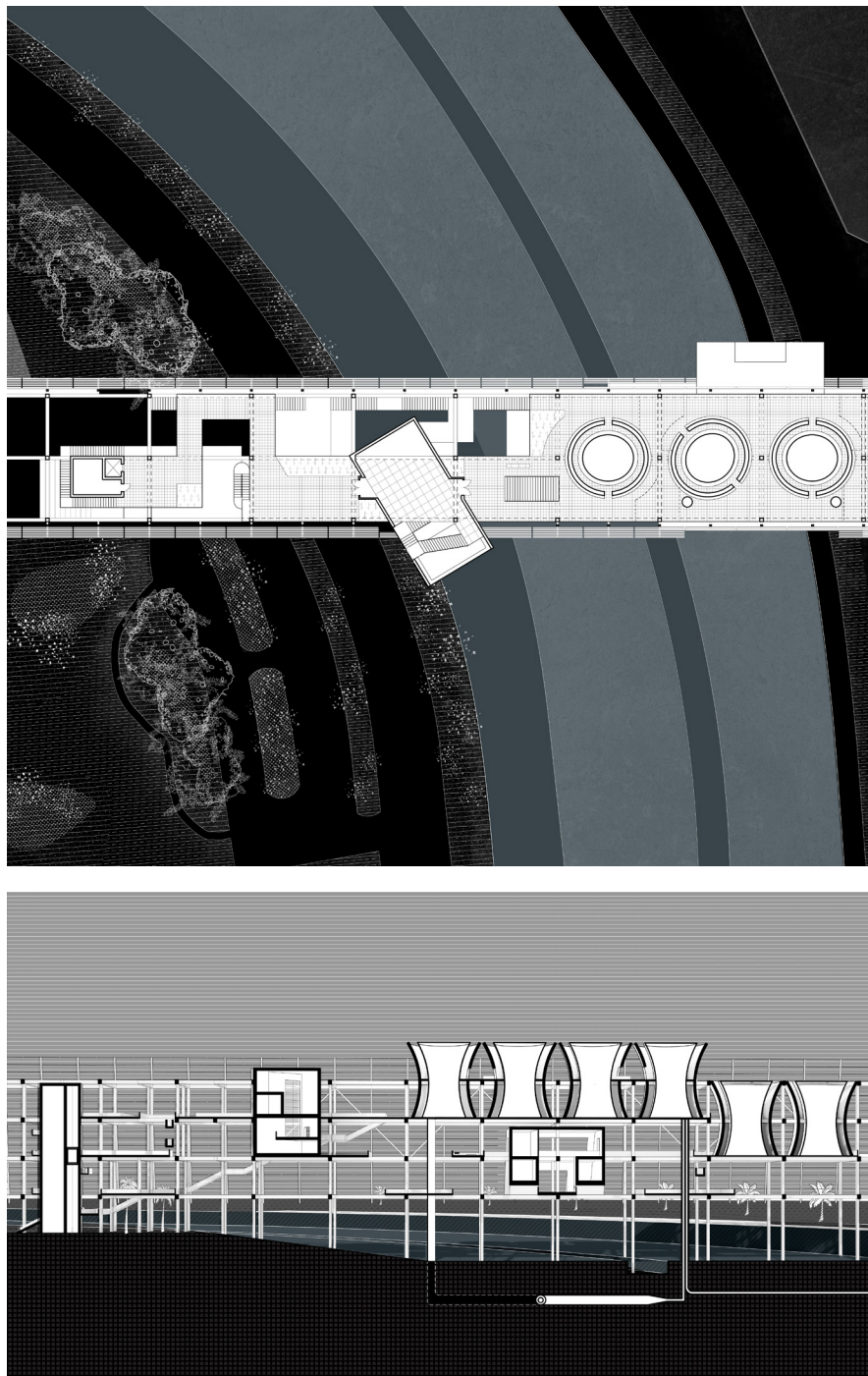


Slite C  
Before the fire: Water tank & Bridge  
During the fire: Water supply station

New bridges are constructed over the LA River to not only reconnect the existing city fabric with the surrounding green corridors, but also function as water towers that temporarily store floodwater. During disasters, these structures serve as emergency water supply stations.







Slite C  
Before the fire: Water tank & Bridge  
During the fire: Water supply station



Wildfire as a gentle boundary







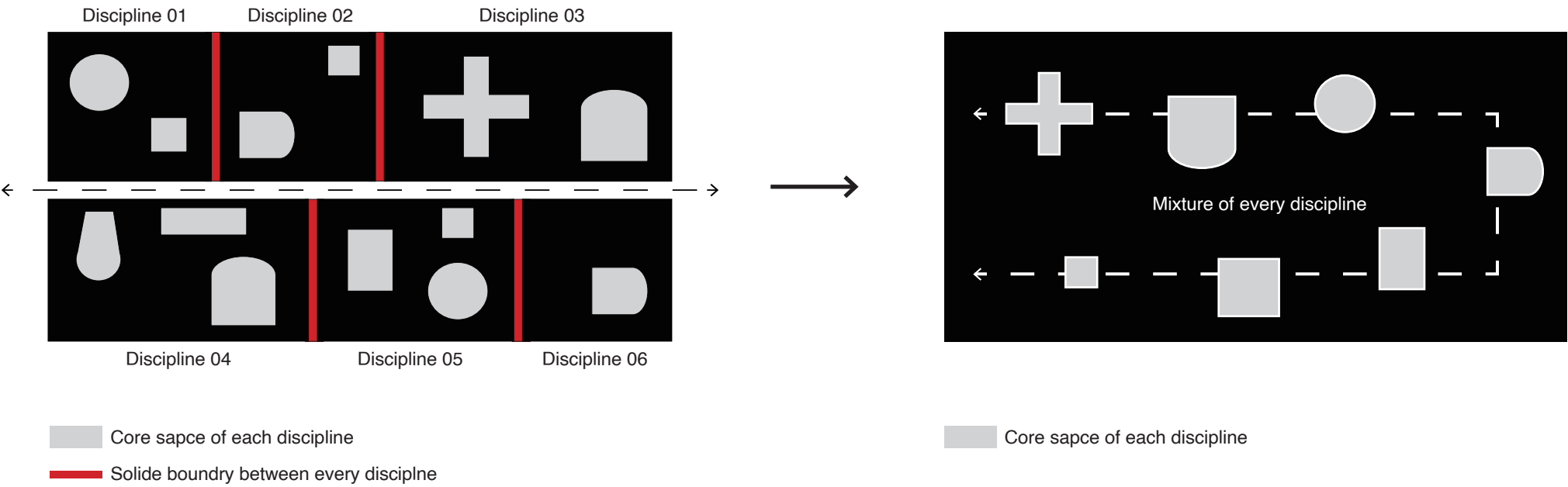
# DISSOLVING BOUNDARY

Advisor: Michael Bell  
Collaborator: Junge Huang  
Site: Berlin, Germany  
Year: 2025

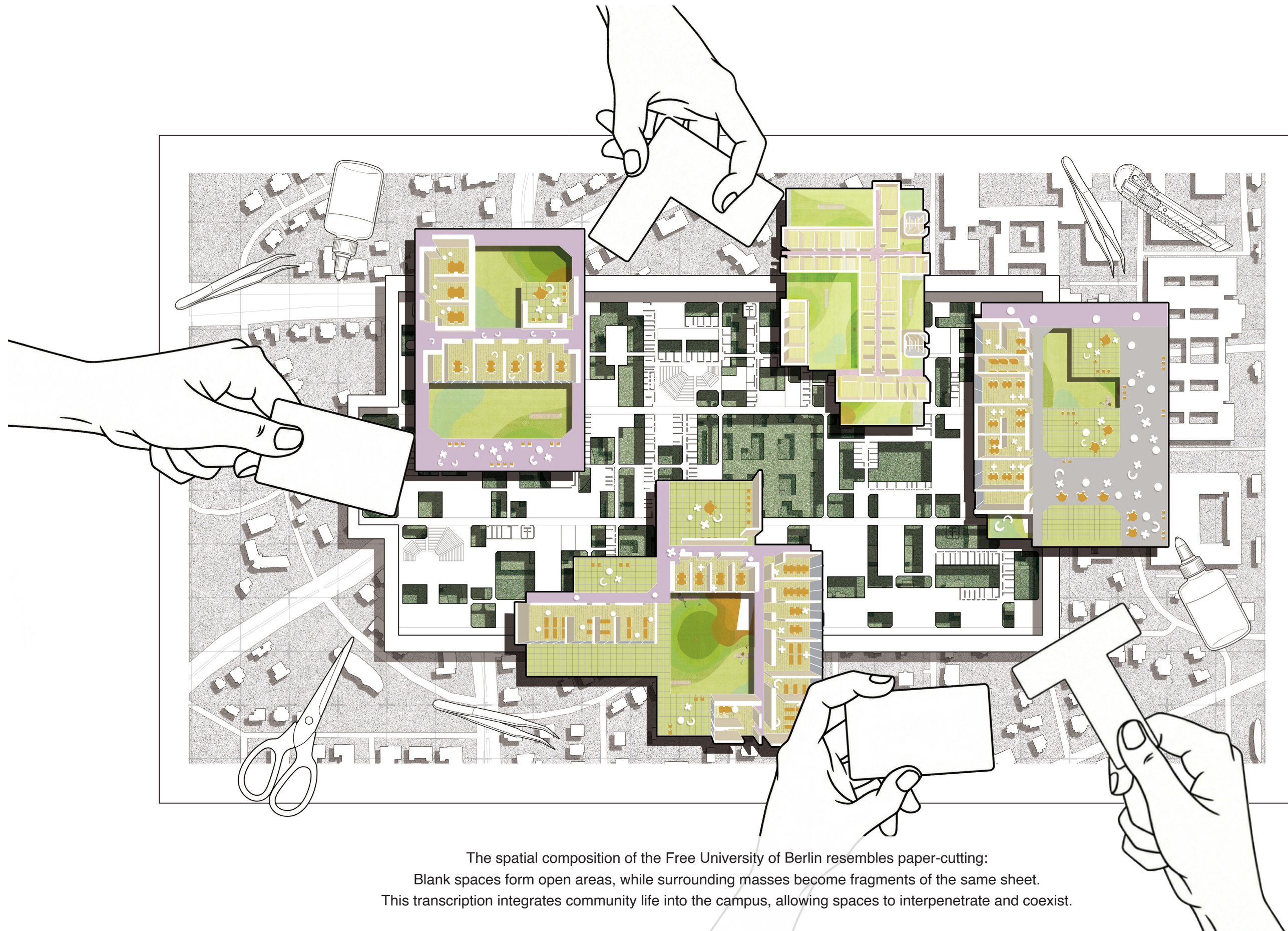
**The Challenge: Internal Urbanism**  
Modeled on the "mat-building" of Freie Universität Berlin, the site functions as an internal city. Its dense network of corridors and disciplinary blocks creates a non-hierarchical urban grain where architecture and knowledge are inextricably linked.

**The Conflict: Functionalist Silos**  
Physical proximity does not guarantee intellectual exchange. The existing grid often acts as a functionalist barrier, isolating academic departments into silos. This fragmentation stifles spontaneous synergy, reducing the potential for interdisciplinary interaction to mere transit.

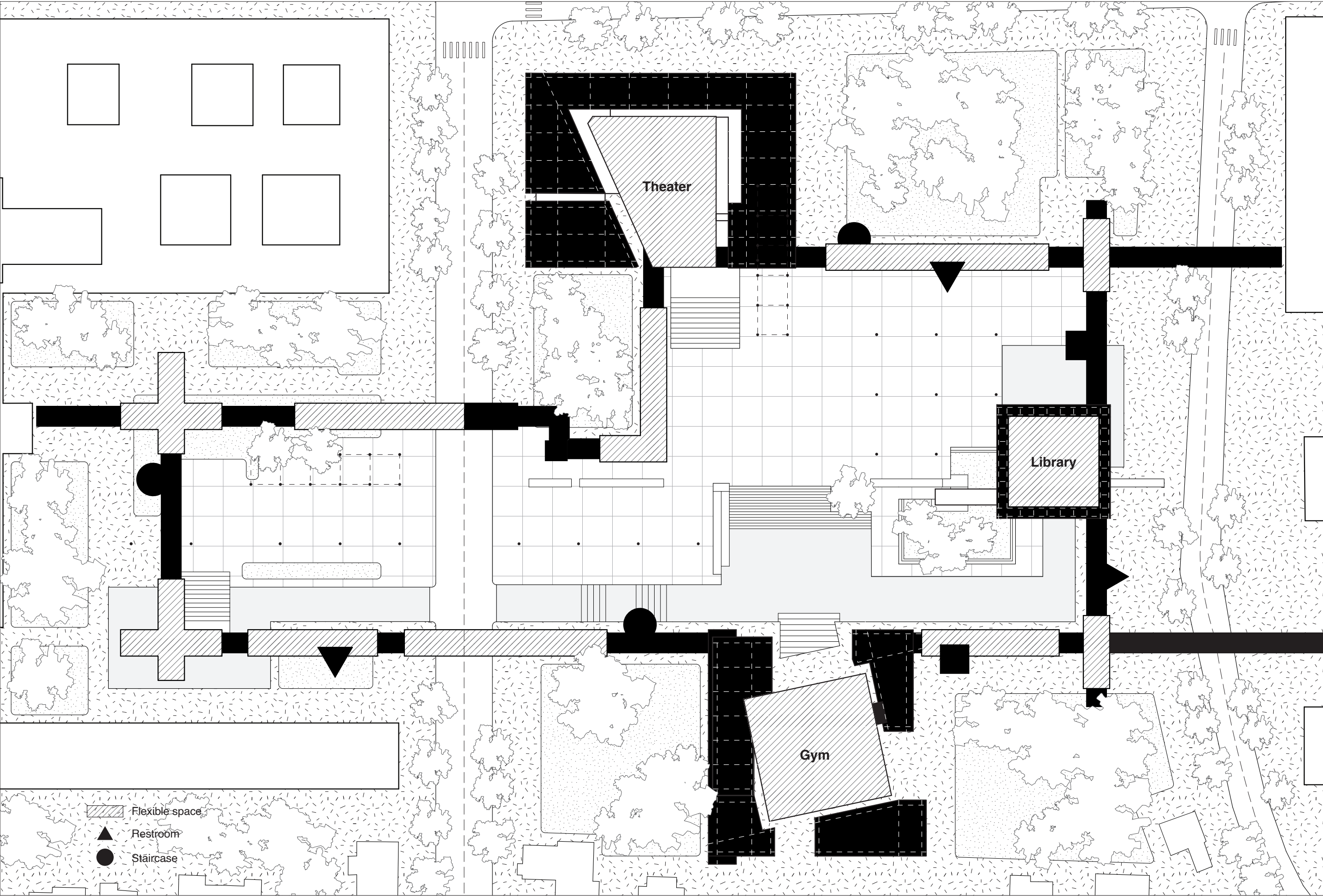
**Strategy: Decentralized Synthesis**  
The design proposes a decentralized ring system to catalyze academic osmosis. By repositioning specialized programs as active nodes along a circular loop, the project transforms the act of moving into a ritual of cross-disciplinary encounter, weaving disparate fields into a continuous social fabric.











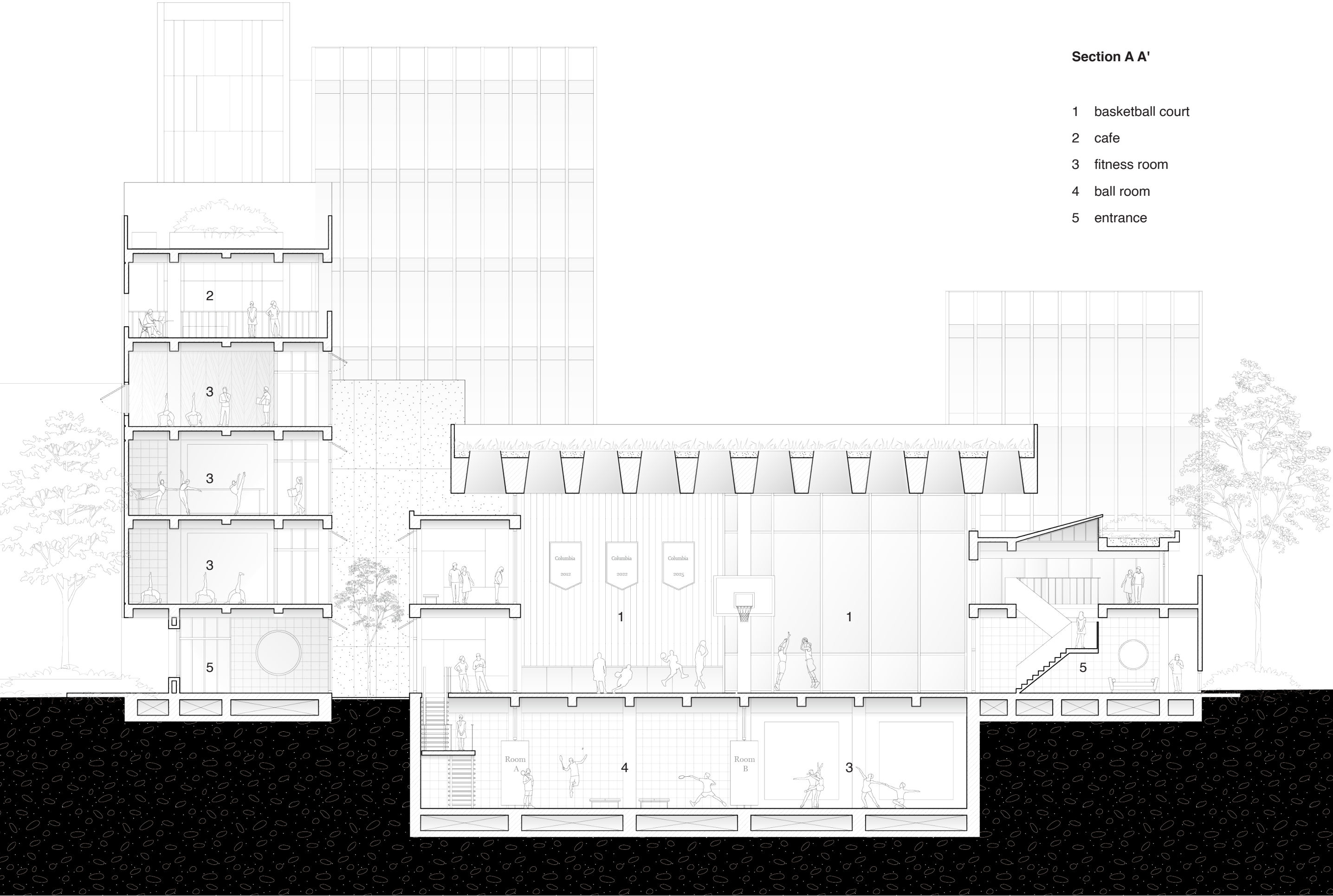


Gym  
Second Floor Plan

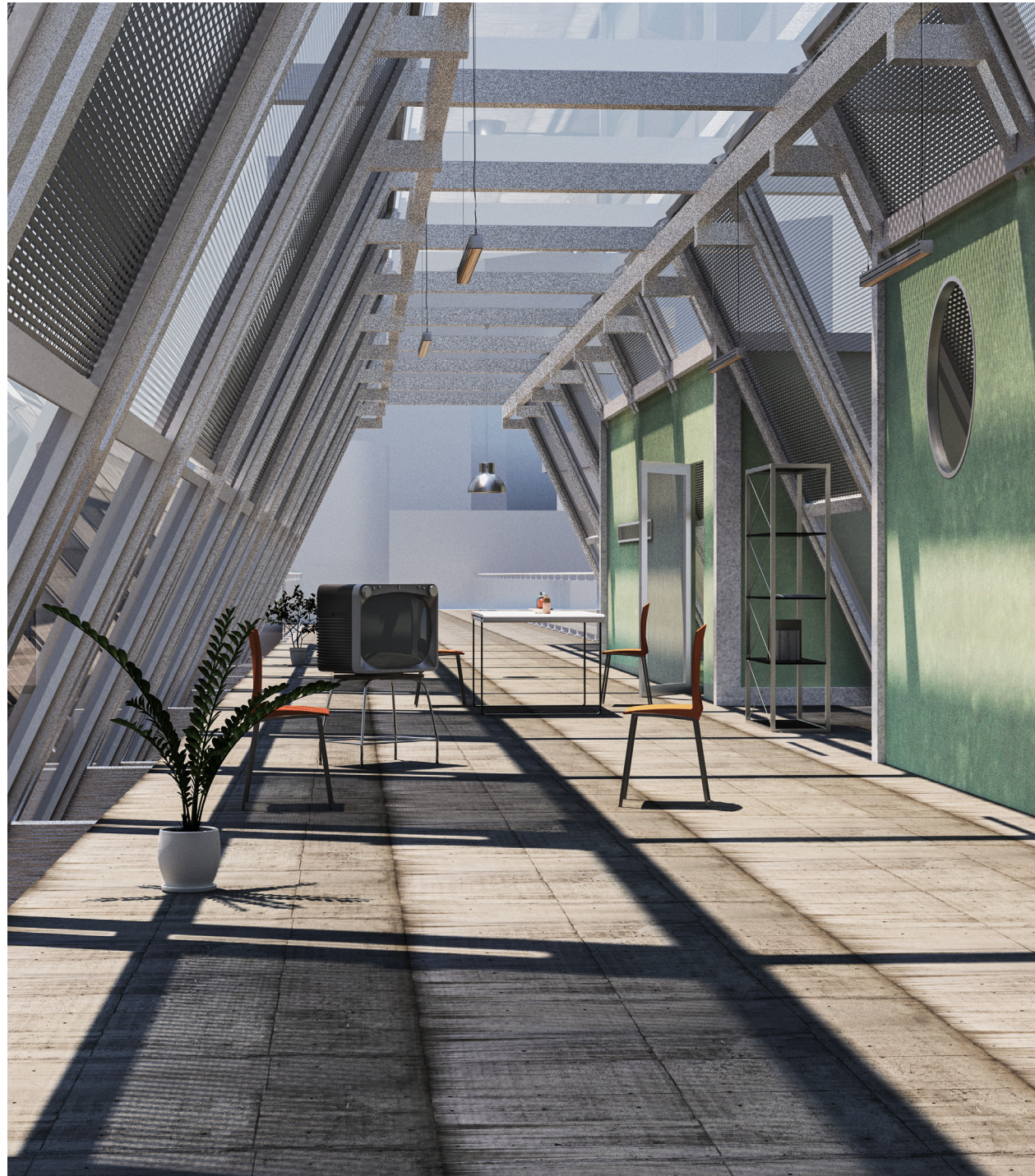
- 1 entrance
- 2 basketball court
- 3 storage
- 4 meeting room
- 5 fitness room

















# TO FOLD

## THE BERGGRUEN INSTITUTE HUDSON VALLEY

Advisor: Steven Holl + Garrick Ambrose

Collaborator: Yoyo Chen

Site: Hudson Valley, New York

Year: 2026

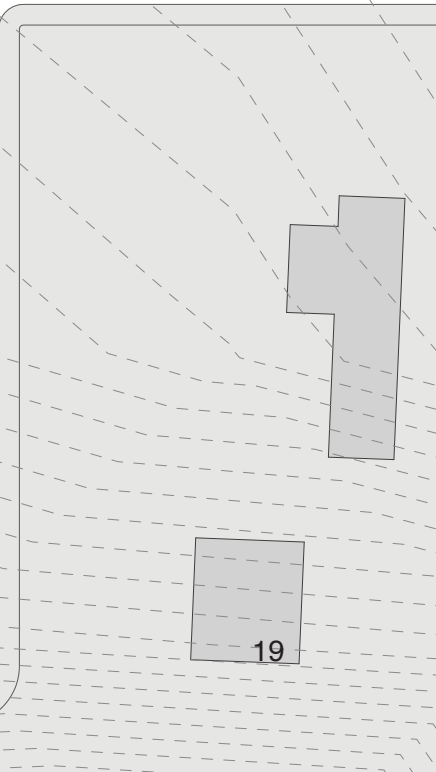
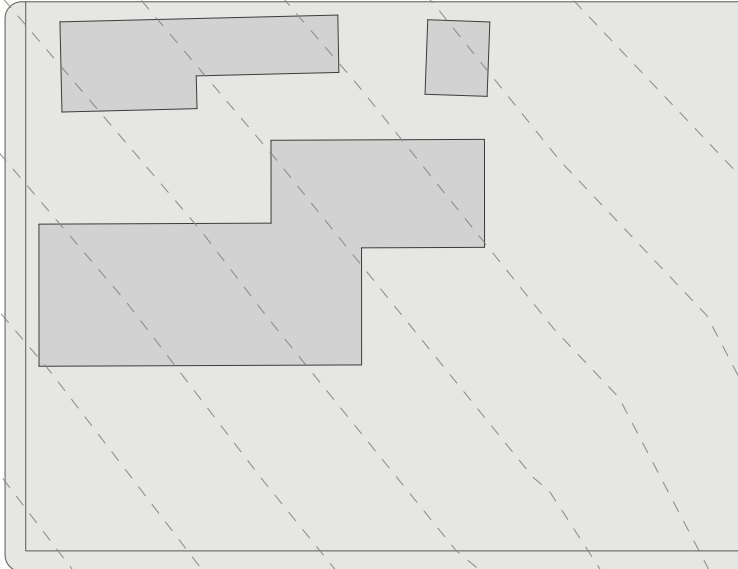
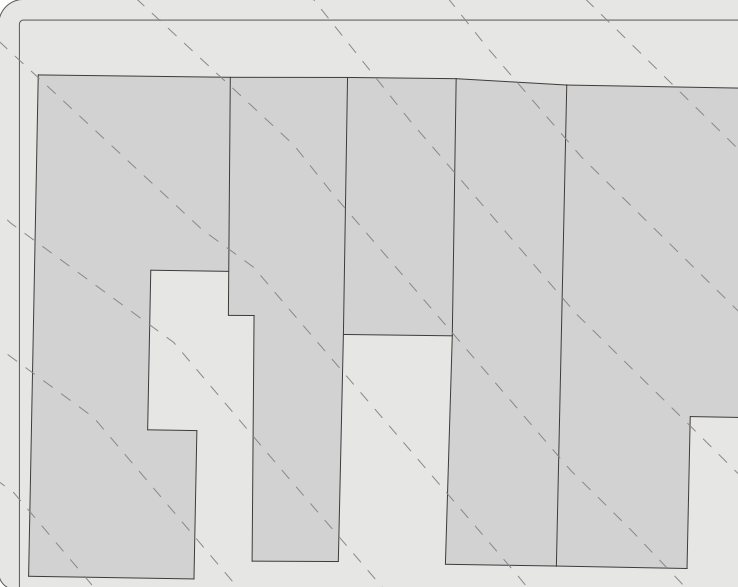
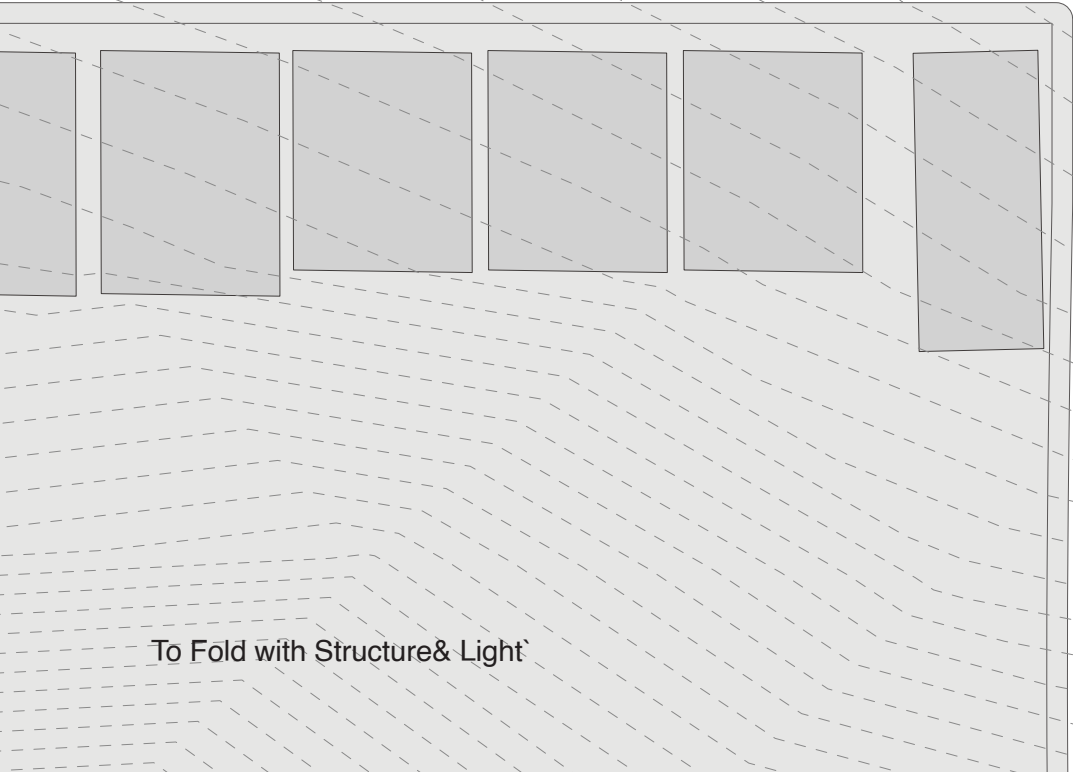
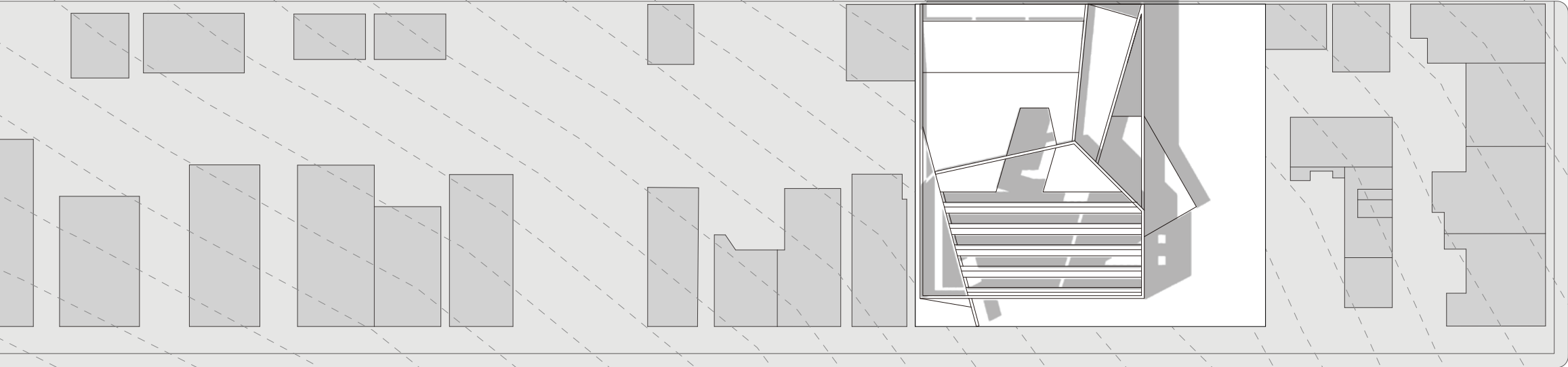
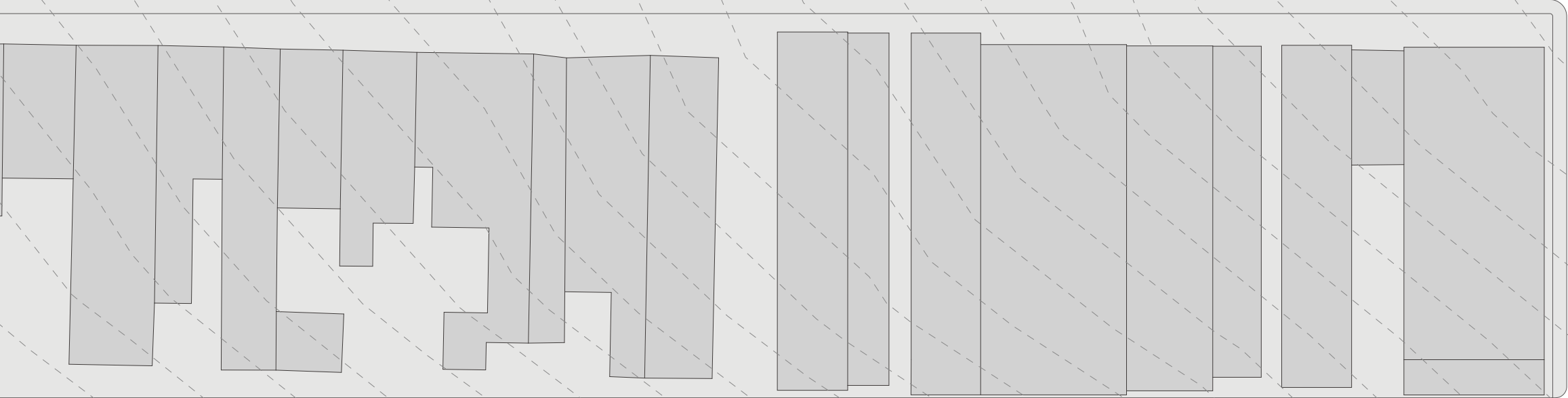
**"Folding planar surfaces bend and open to bring natural daylighting inside the building."**

The folded language creates spaces that blur traditional boundaries of interior and exterior space. Exterior spaces sometimes feel interior and interior spaces sometimes feel exterior.

Our folding concept is not only expressed in the exterior form, but also embedded in the spatial experience. Folded CLT planar surfaces create openings that allow light to enter the gallery, entrance, studio, and the entire building. Within the light void, daylight is drawn deep into the interior. And the folded steel plate staircase becomes both an architectural element and a guide for visitor circulation.



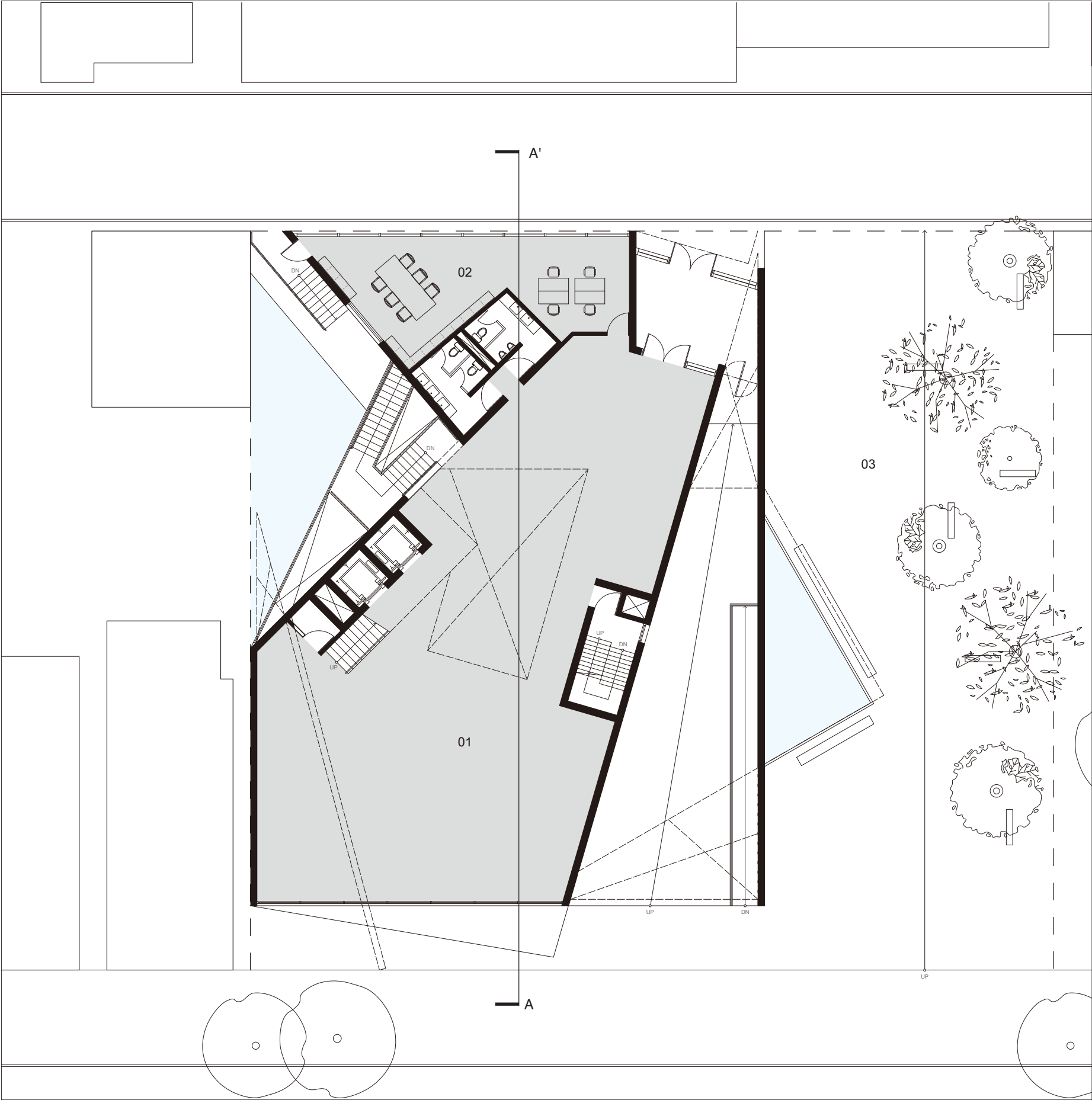






Ground Floor Plan

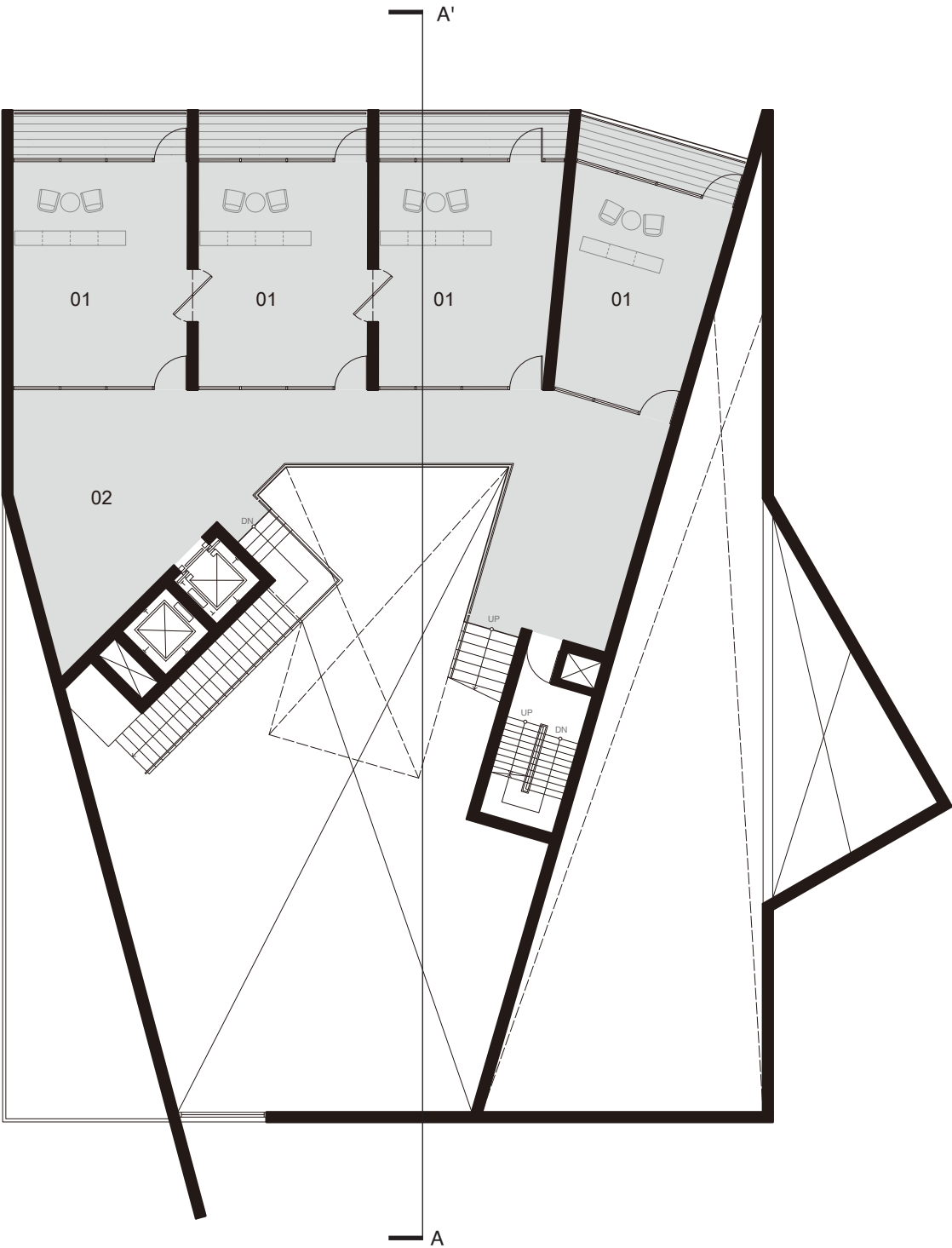
- 1 gallery
- 2 office
- 3 community plaza







Light Void\_  
An atrium connects entire building with natural light.

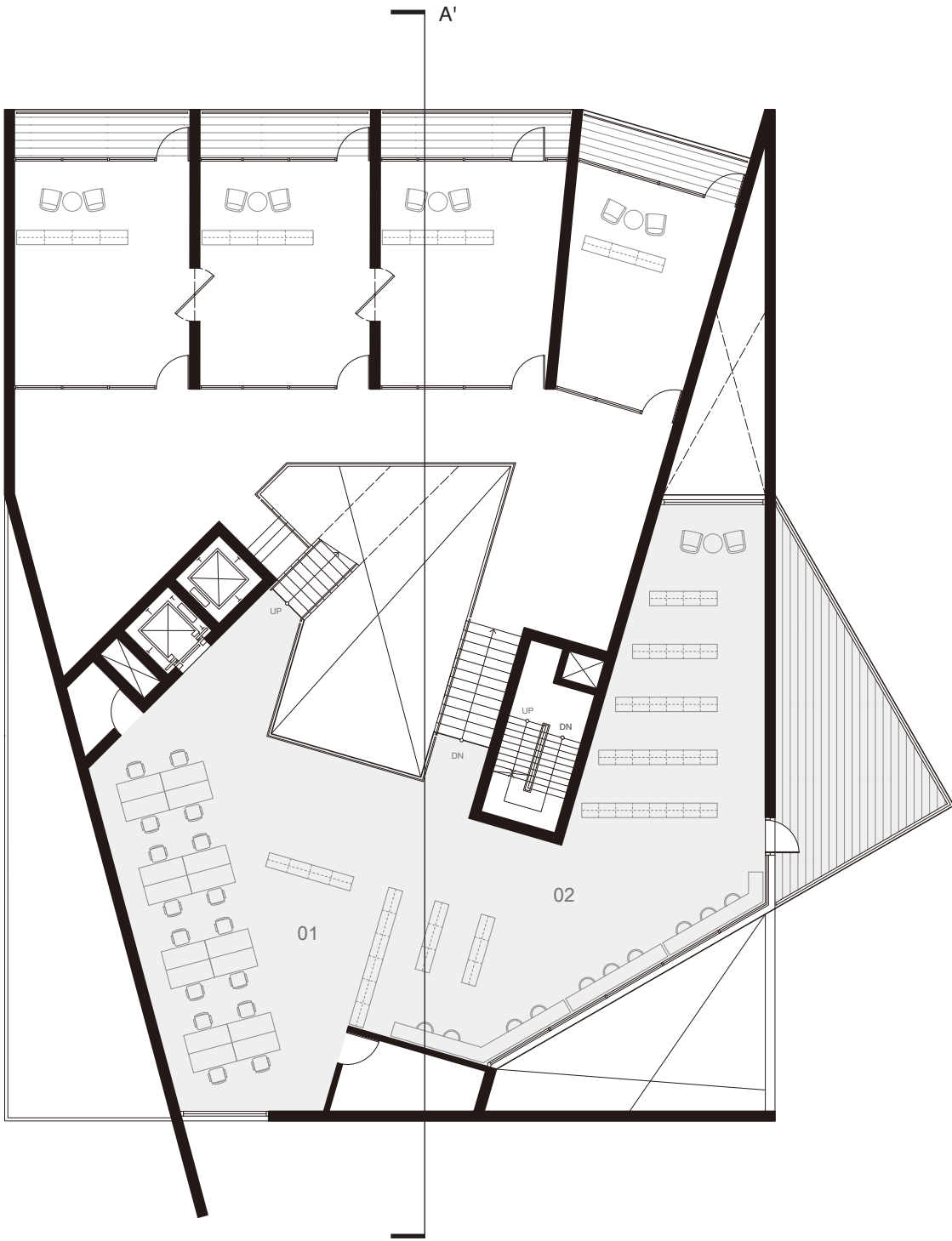


**2 Floor Plan**  
1 studio  
2 pantry





The flow of space\_  
1Glass partitions between the studio and corridor create a mutual sense of presence.

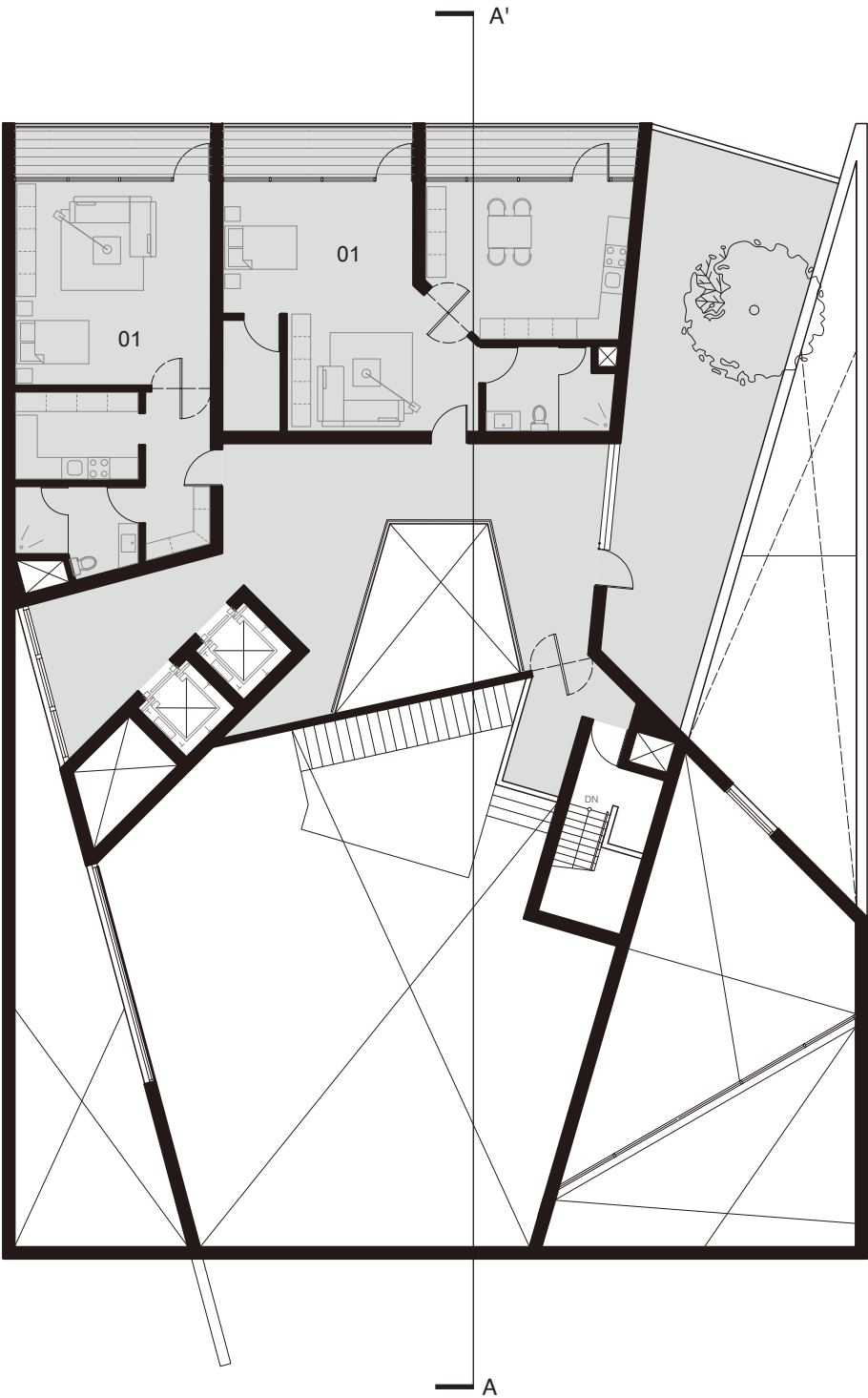


**2M Floor Plan**  
1 office  
2 library



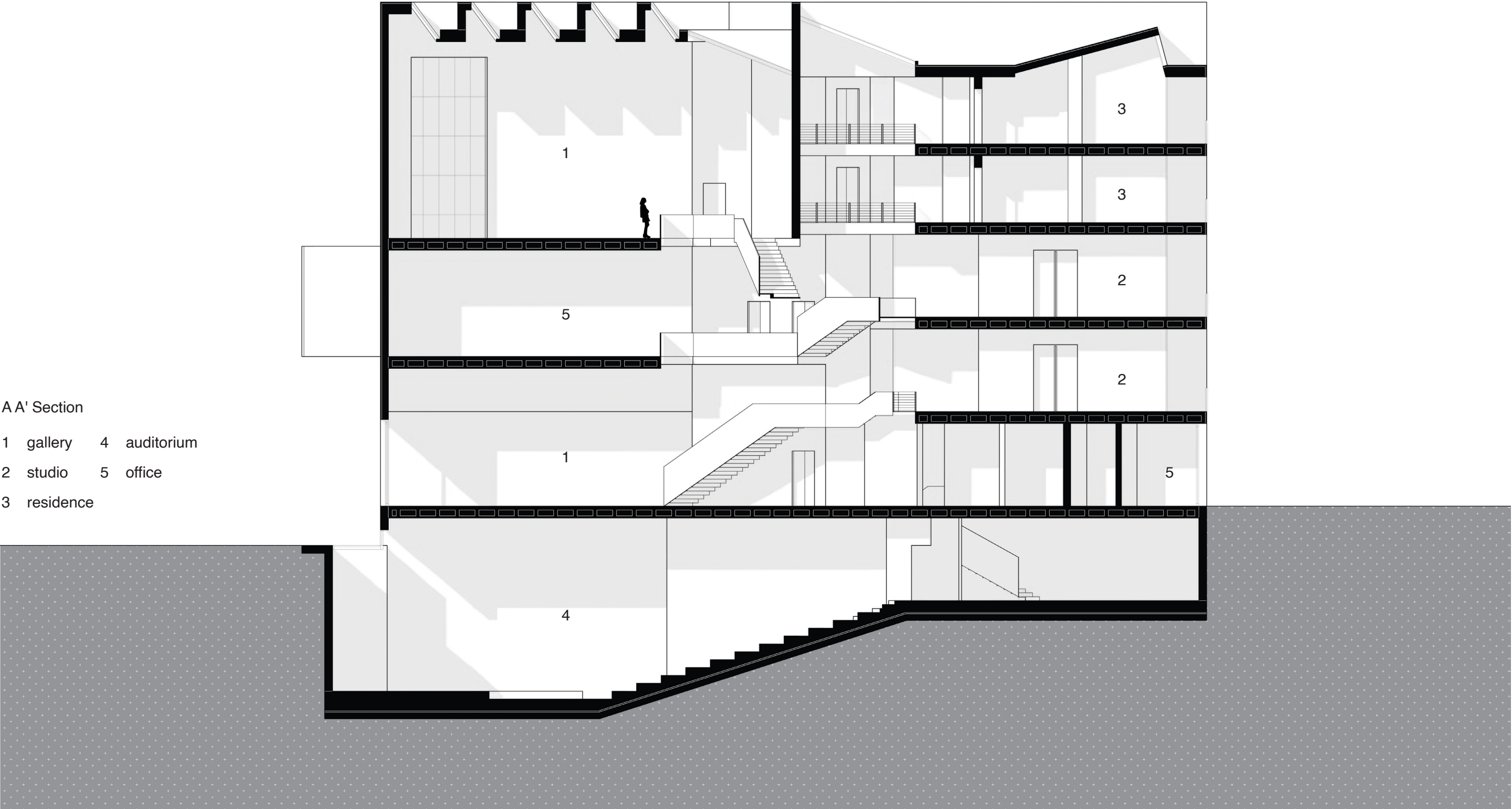


Top Gallery\_  
Exposed CLT sections highlight the interior's structural honesty, while natural light filters through the sawtooth roof.

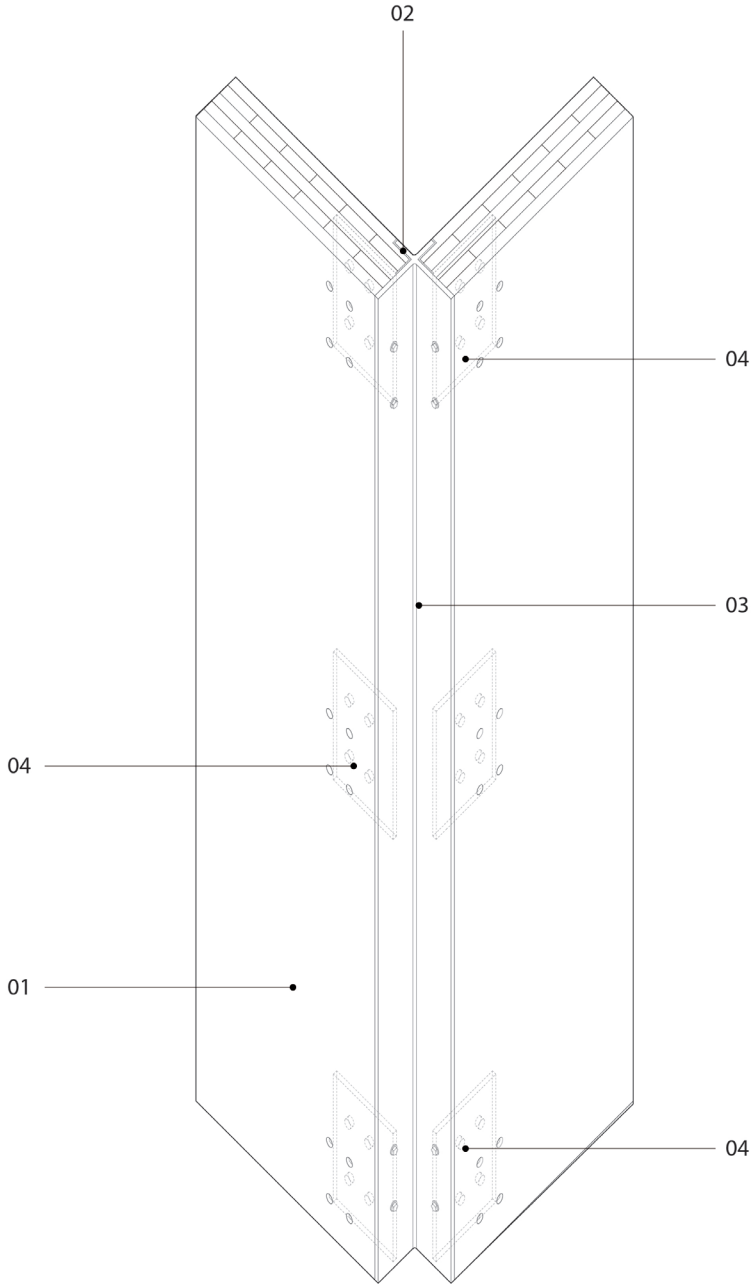
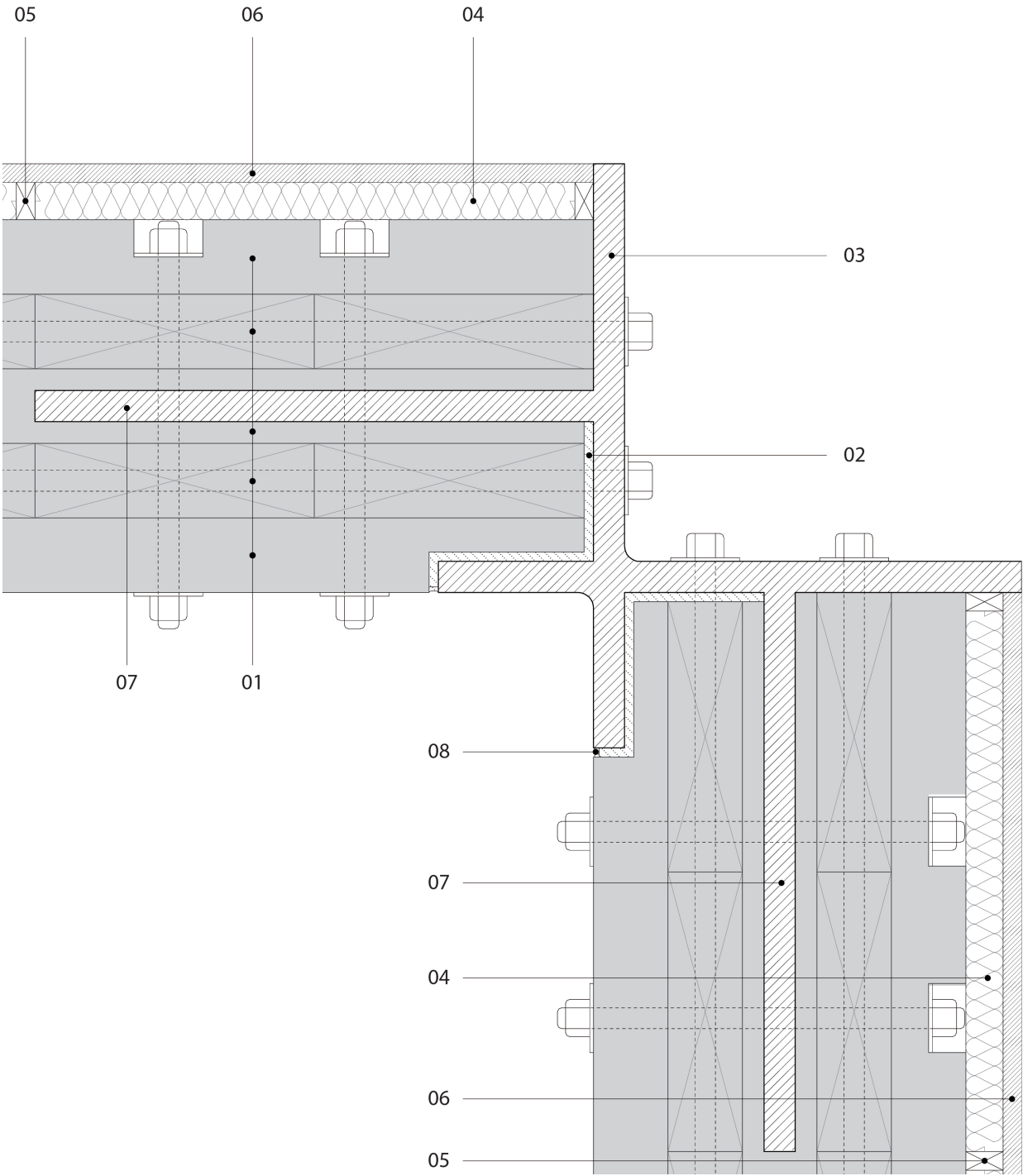


**5 Floor Plan**  
1 residence



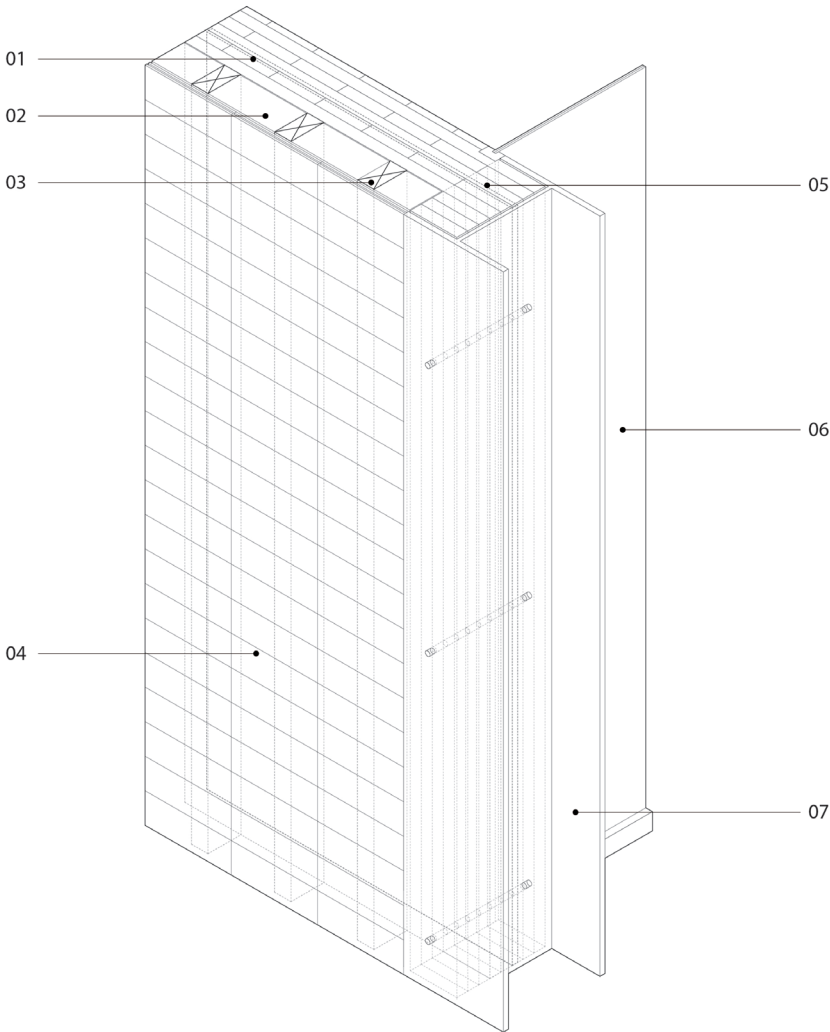
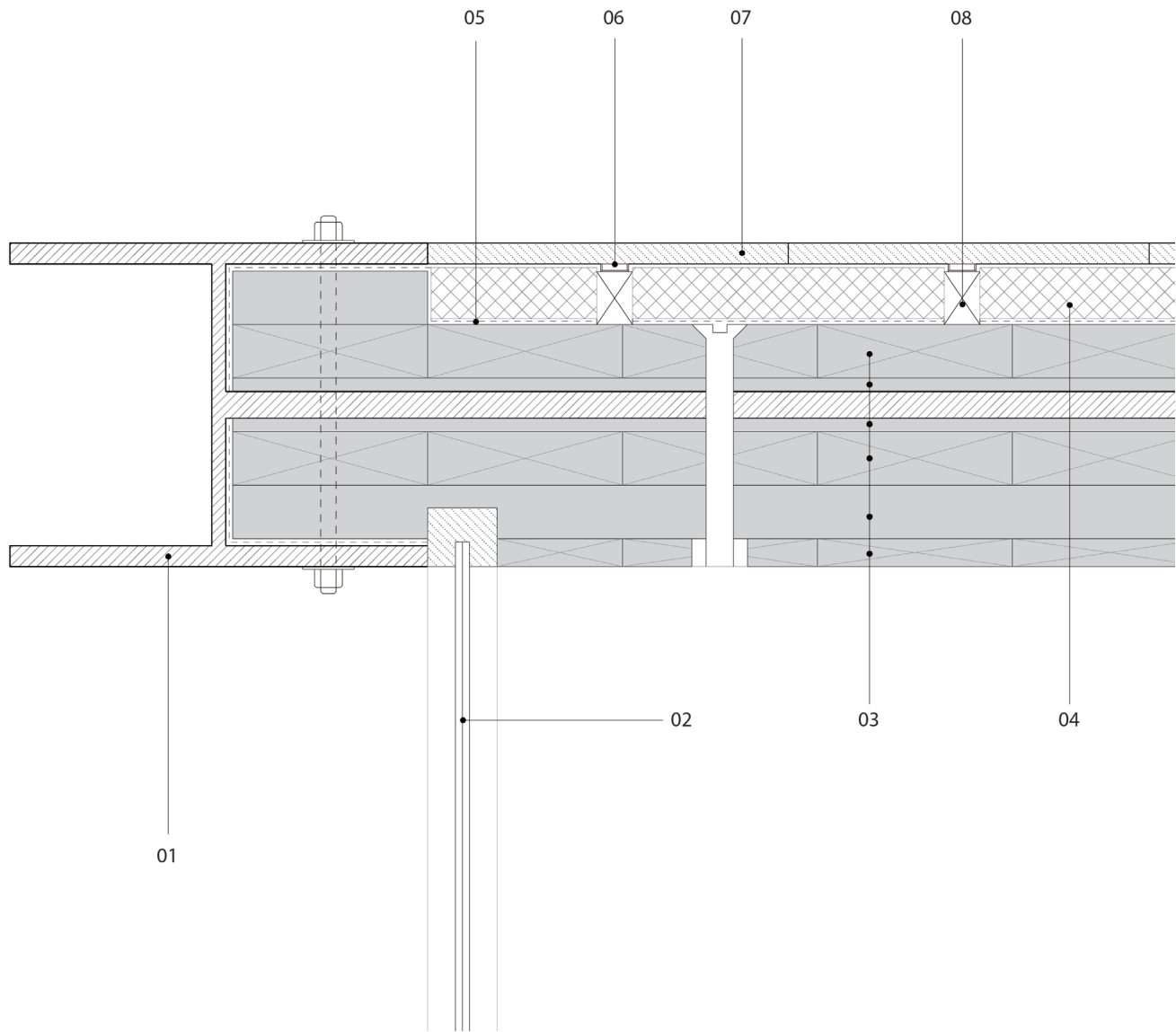






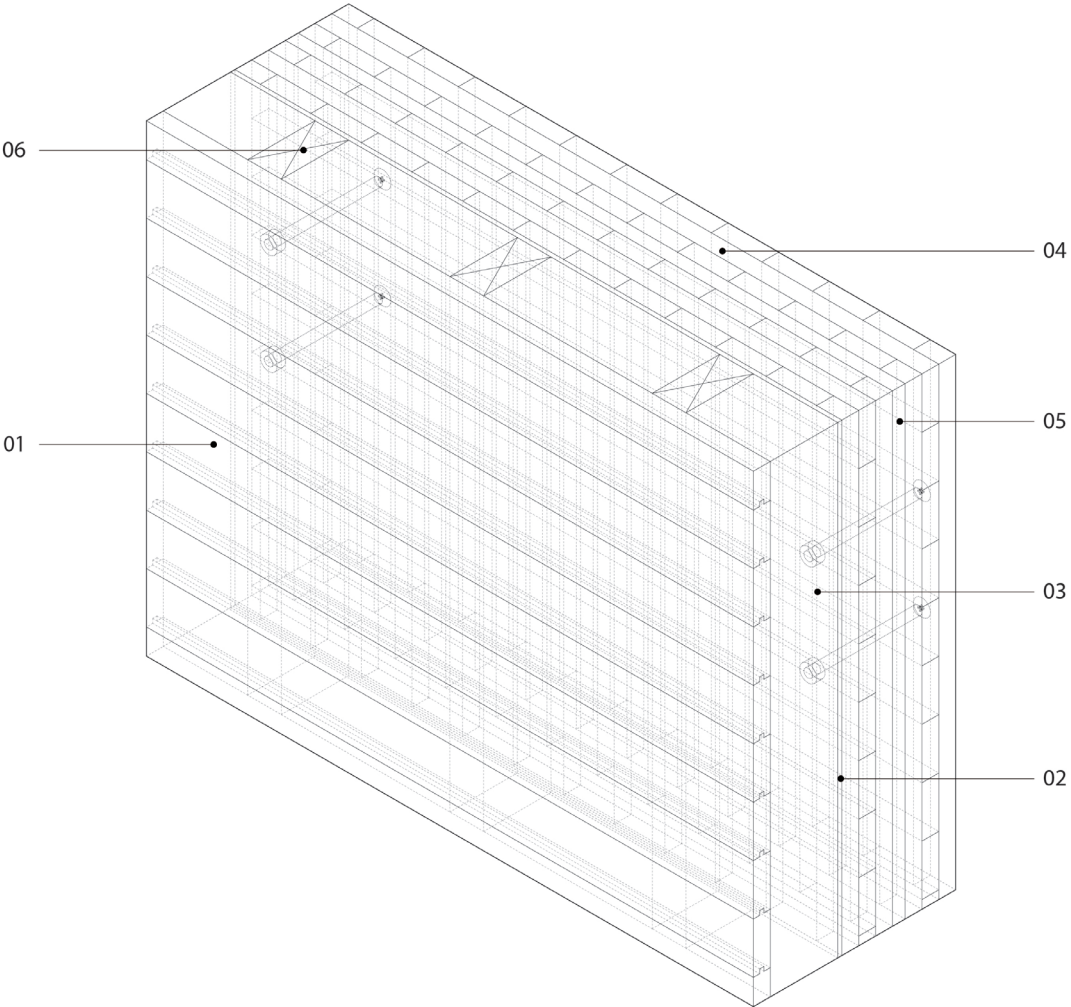
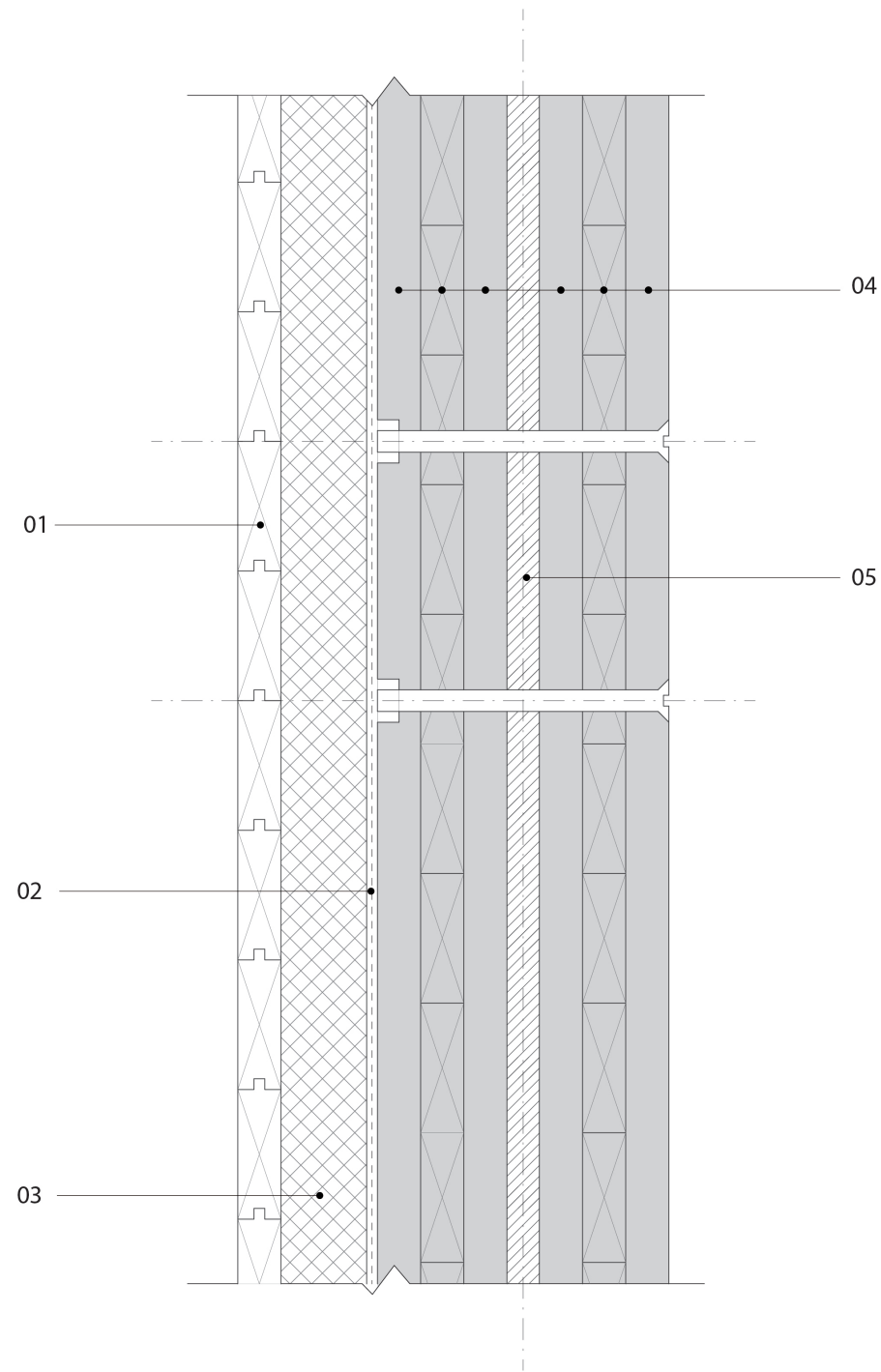
- 01 CLT wall panel
- 02 Form tape
- 03 Steel plate
- 04 Insulation
- 05 Batten
- 06 Siding
- 07 Stainless Flitch Plate
- 08 Silicone





- 01 H Beam
- 02 Double Glazing Window
- 03 CLT Panel
- 04 Rigid Foam Insulation
- 05 Waterproofing Membrane
- 06 Vanish Clip
- 07 Tongue and Groove Cedar Siding
- 08 Battens





- 01 Tongue and Groove Cedar Siding
- 02 Rigid Foam Insulation
- 03 Waterproofing Membrane
- 04 CLT Panel
- 05 Stainless Fitch Plate



