



ARCHITECTURE PORTFOLIO
SARA ARIF

01



SHEHER- A CITY WITHIN

Semester IV
1 - 16

02



CITY AS A HYPER BUILDING

Semester V
17 - 20

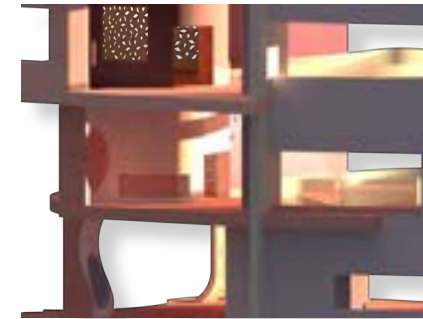
03



BACKYARD FARRAGUT

Semester III
21 - 32

04



THE MIDDLE SCHOOL

Semester II
33 - 40

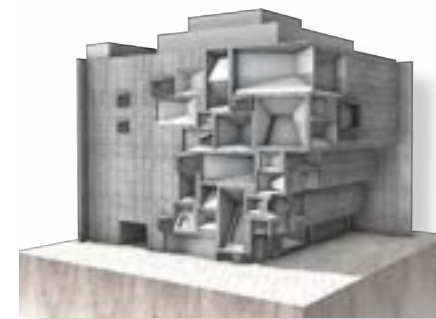
05



ARTIST IN RESIDENCE

Semester I
41 - 44

06



REINTERPRETING FACADE

Semester IV
45 - 46

01

Sheher: A city within

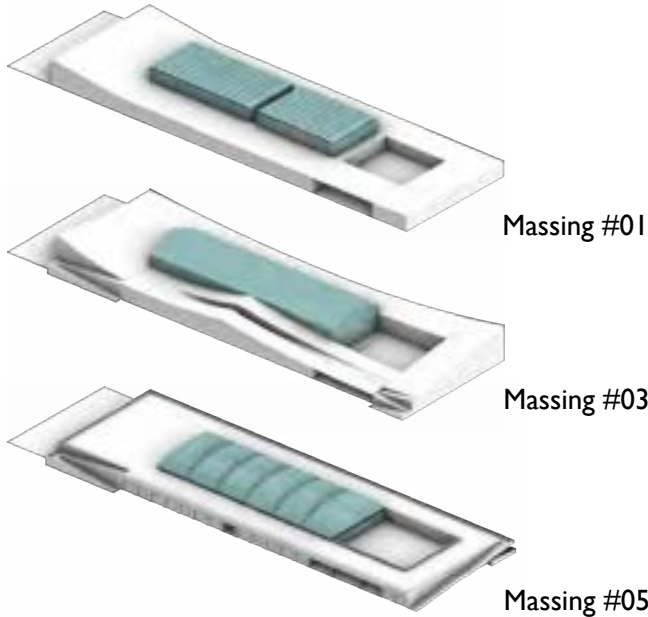
A market place where ‘Courtyard’ and ‘Community’ flourish
Co-Partner: Liya Fysel

The Greenhouse Enclosure at Sunset Park blends community, ecology, and adaptive design within a Peterson brick framework, transforming an industrial heritage site into a vibrant public space. Centered around interconnected courtyards, it features a recreational greenhouse, a restaurant, and an open-air market inspired by the Fulton Fish Market, with a “brick jali” wall allowing diffused light to enhance the ambiance. Ramps lead to a rooftop walkway, offering dynamic spatial experiences and reinforcing transparency in design. The Green House restaurant, with its urban farm, herbal garden, and flexible meeting areas, promotes sustainability and local agriculture. By addressing the challenges of urban density, food accessibility, and historical preservation, this project fosters social interaction, sustainability, and community engagement.

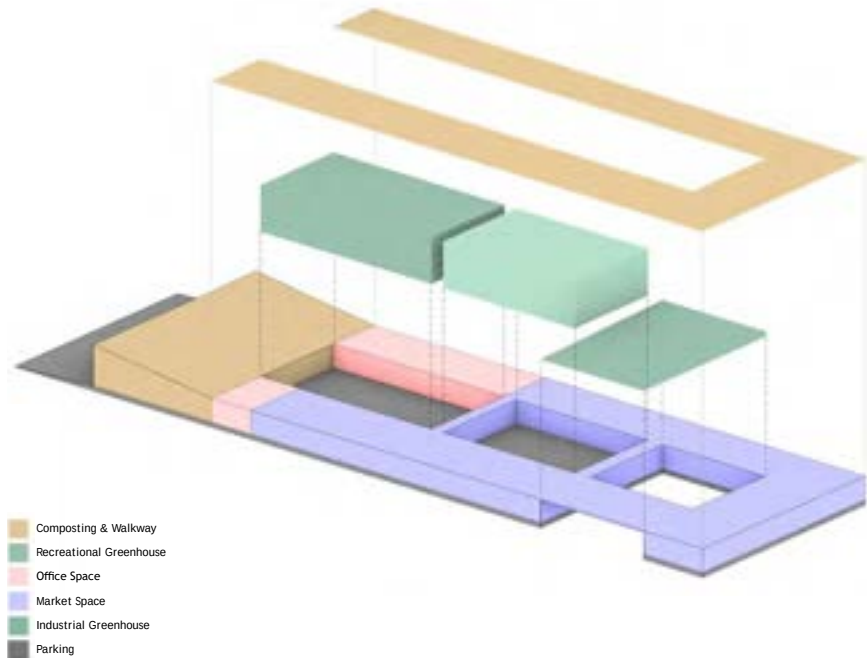


A Glimpse into Sheher

Exploration of green houses and courtyard



Exploration of programming



Site plan

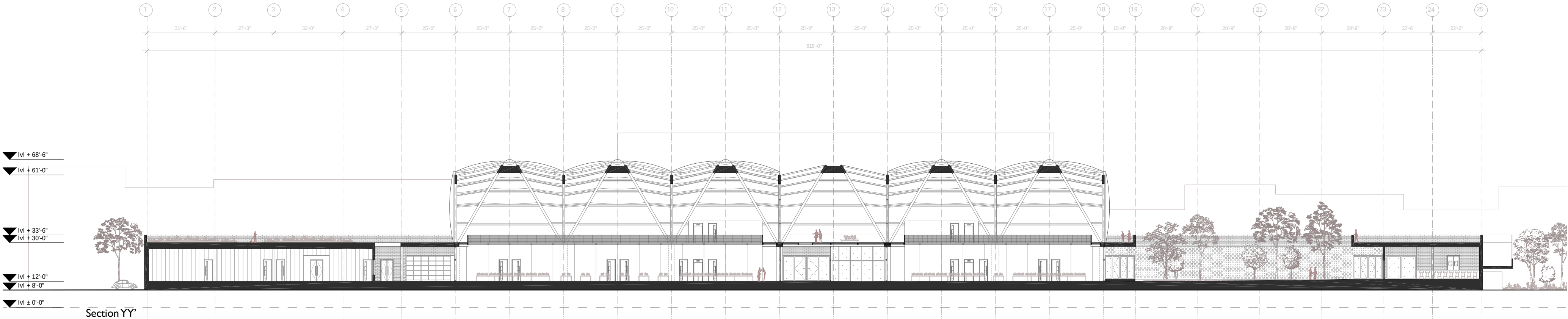


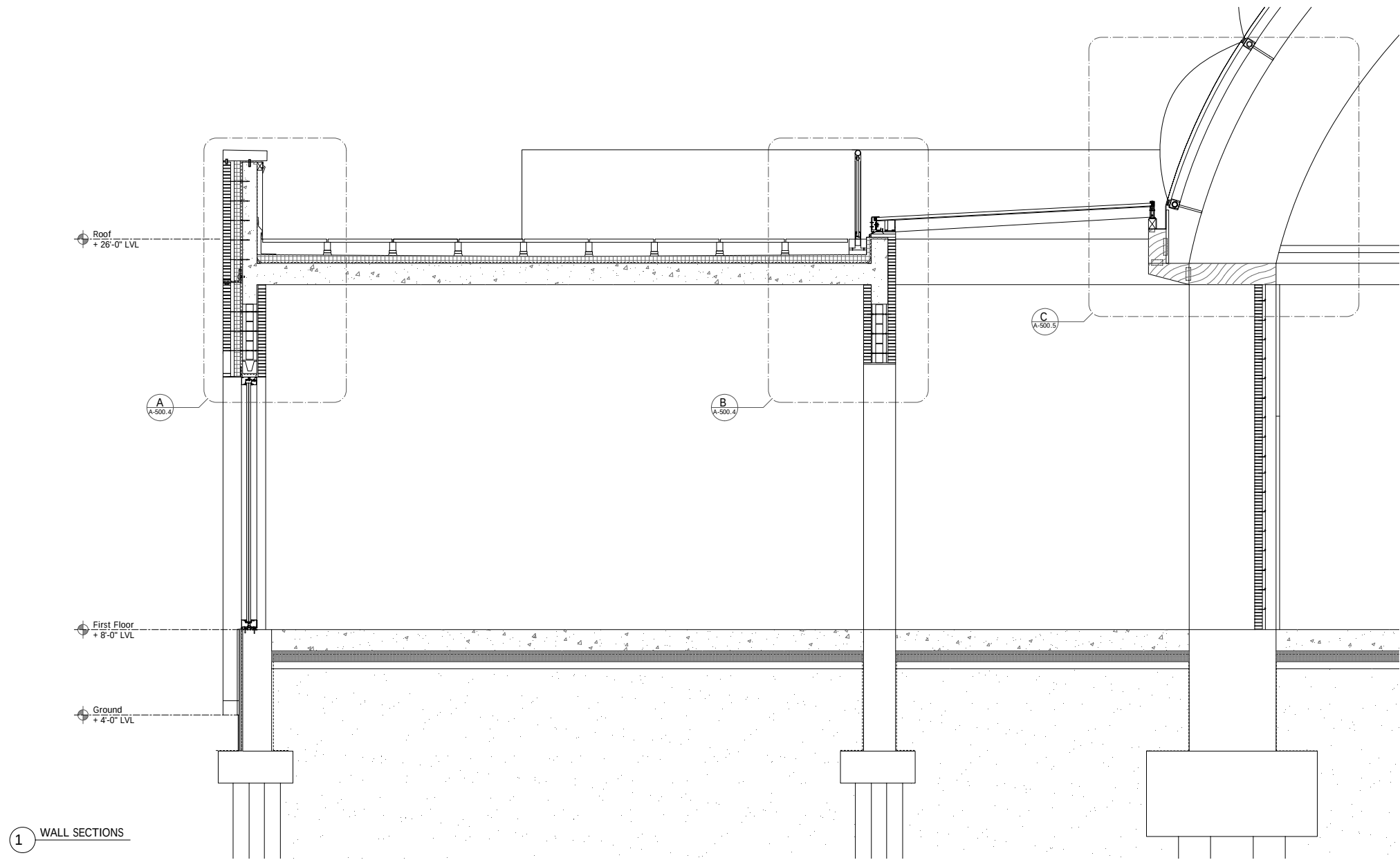


North elevation

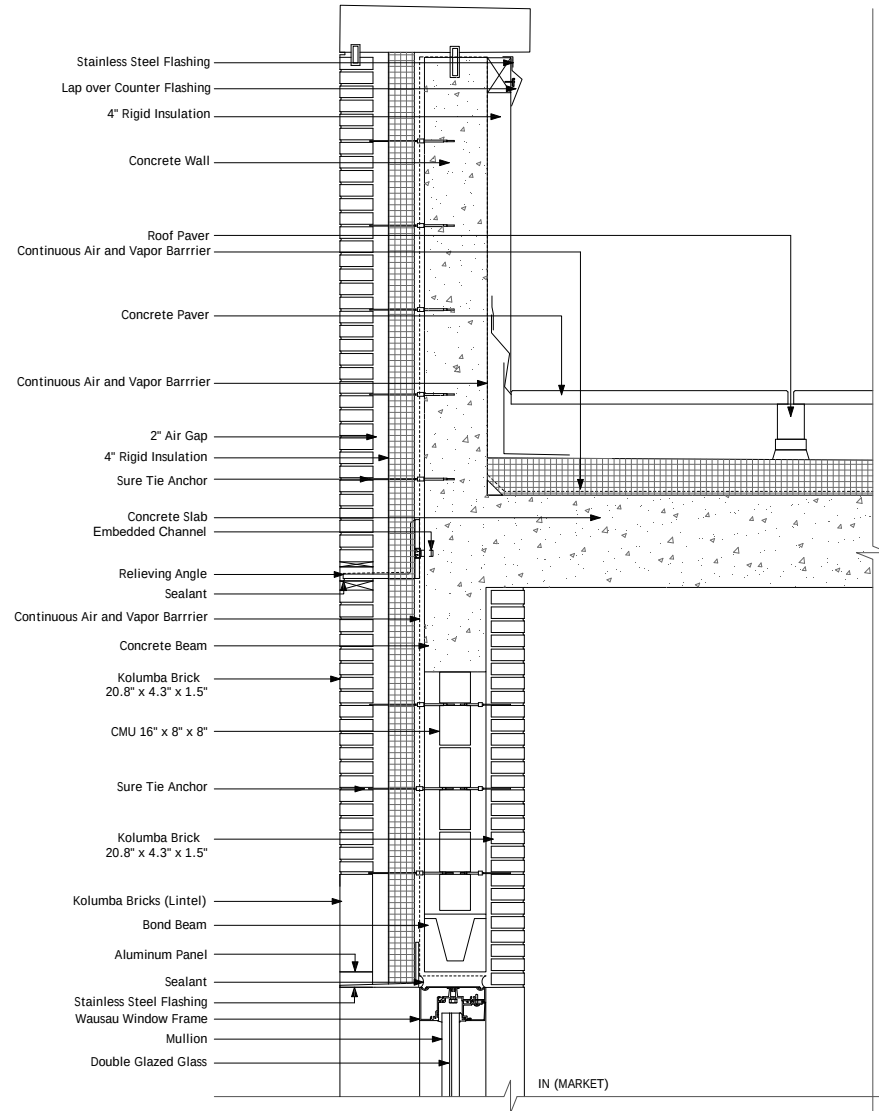


South elevation

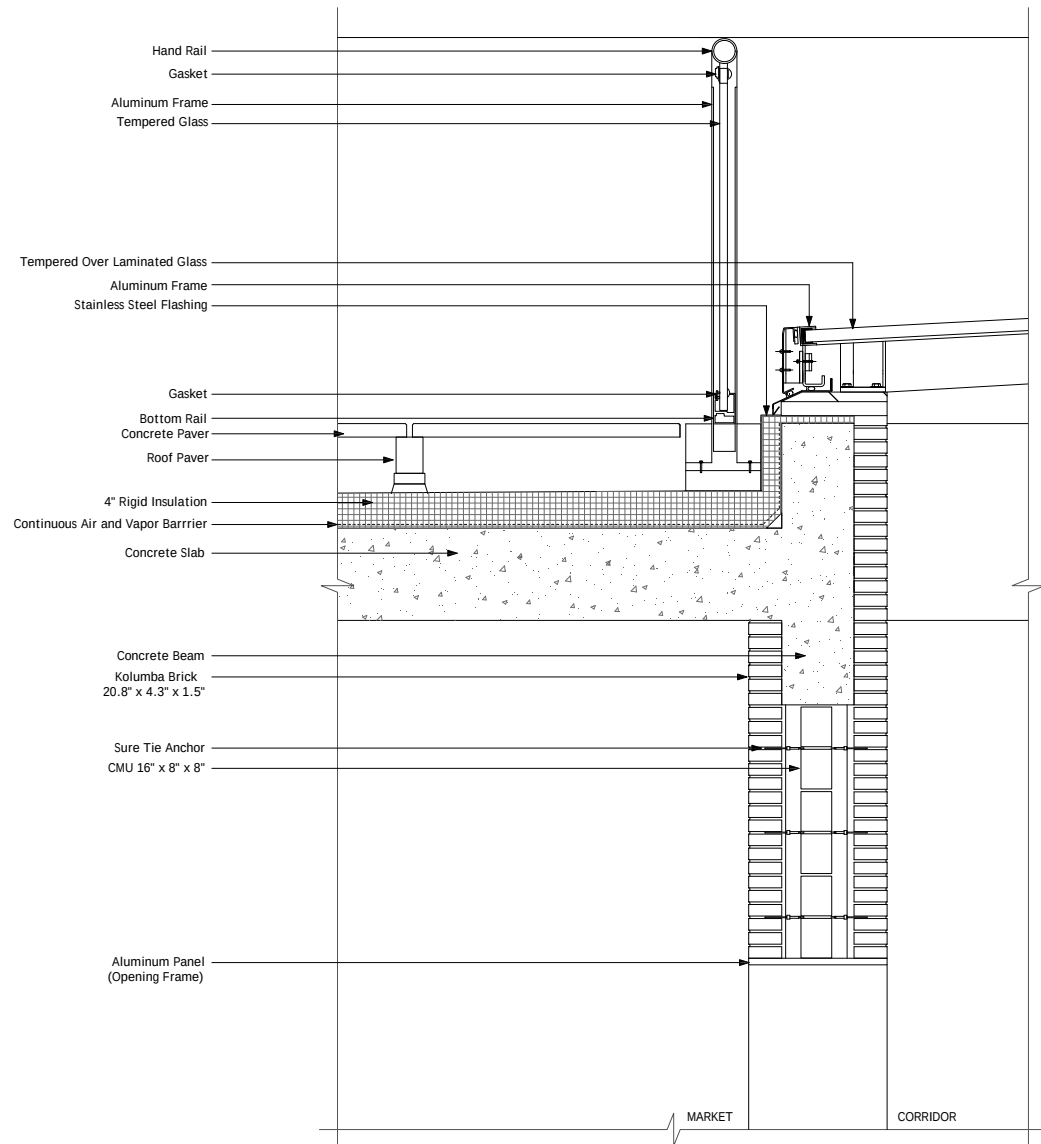




1 WALL SECTIONS



A EXTERIOR BRICK WALL AND PARAPET DETAIL



B INTERIOR BRICK WALL AND SKYLIGHT DETAIL



Fema 2020 100 year flood plan



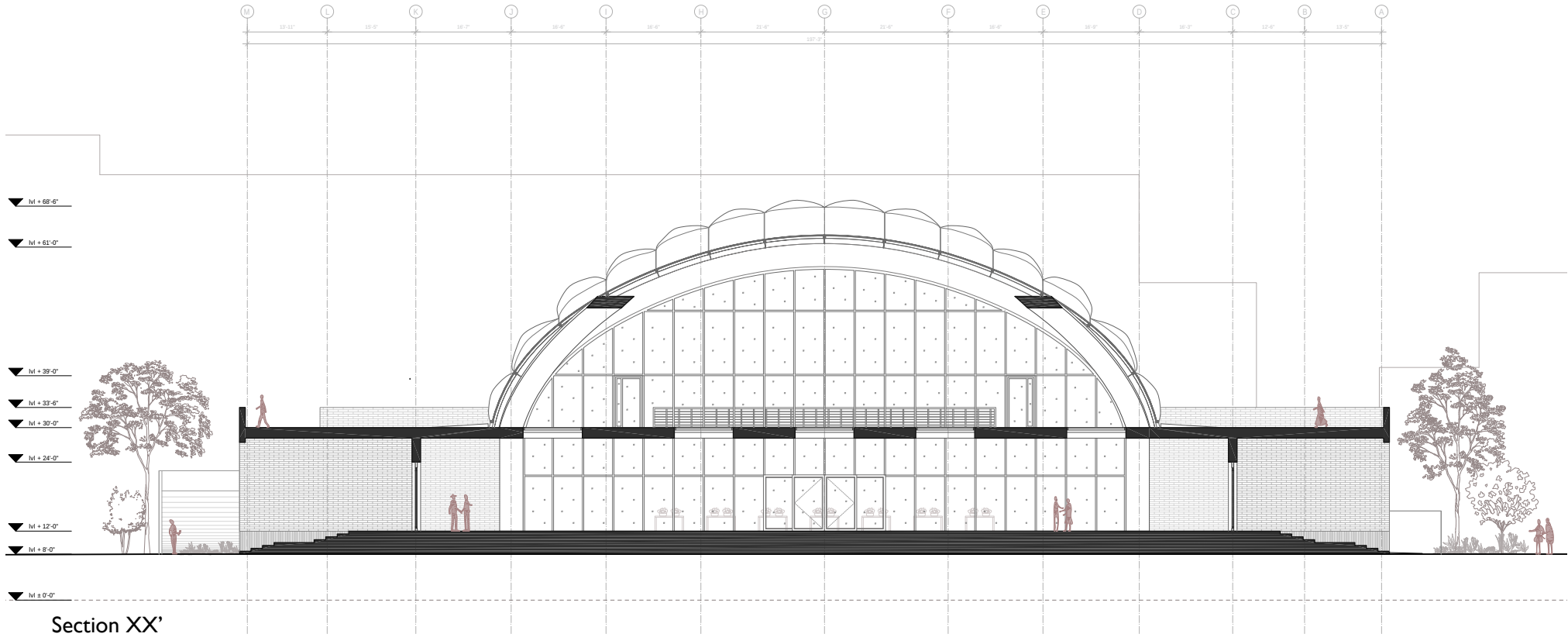
Fema 2050 100 year flood plan



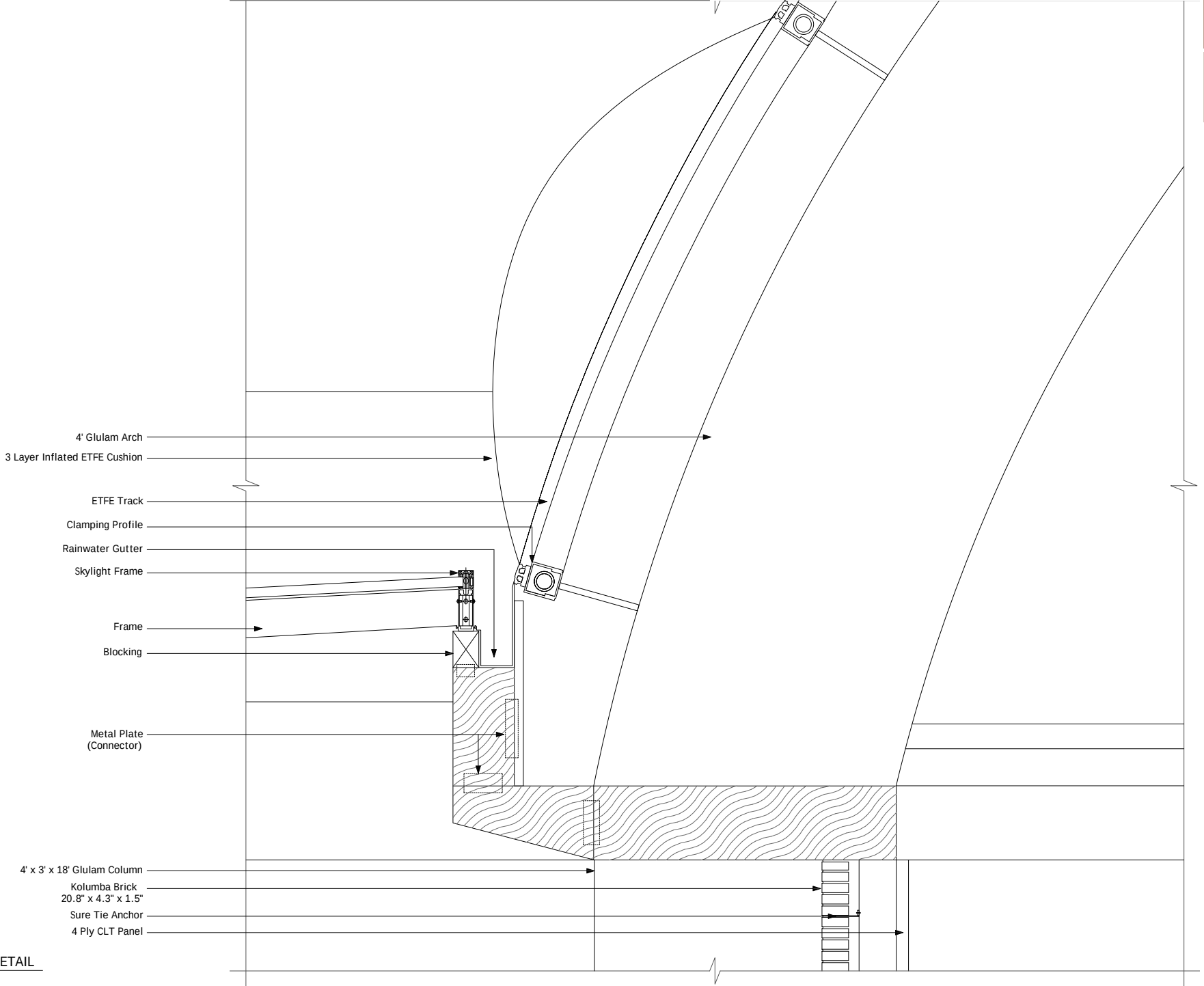
Fema 2050 500 year flood plan

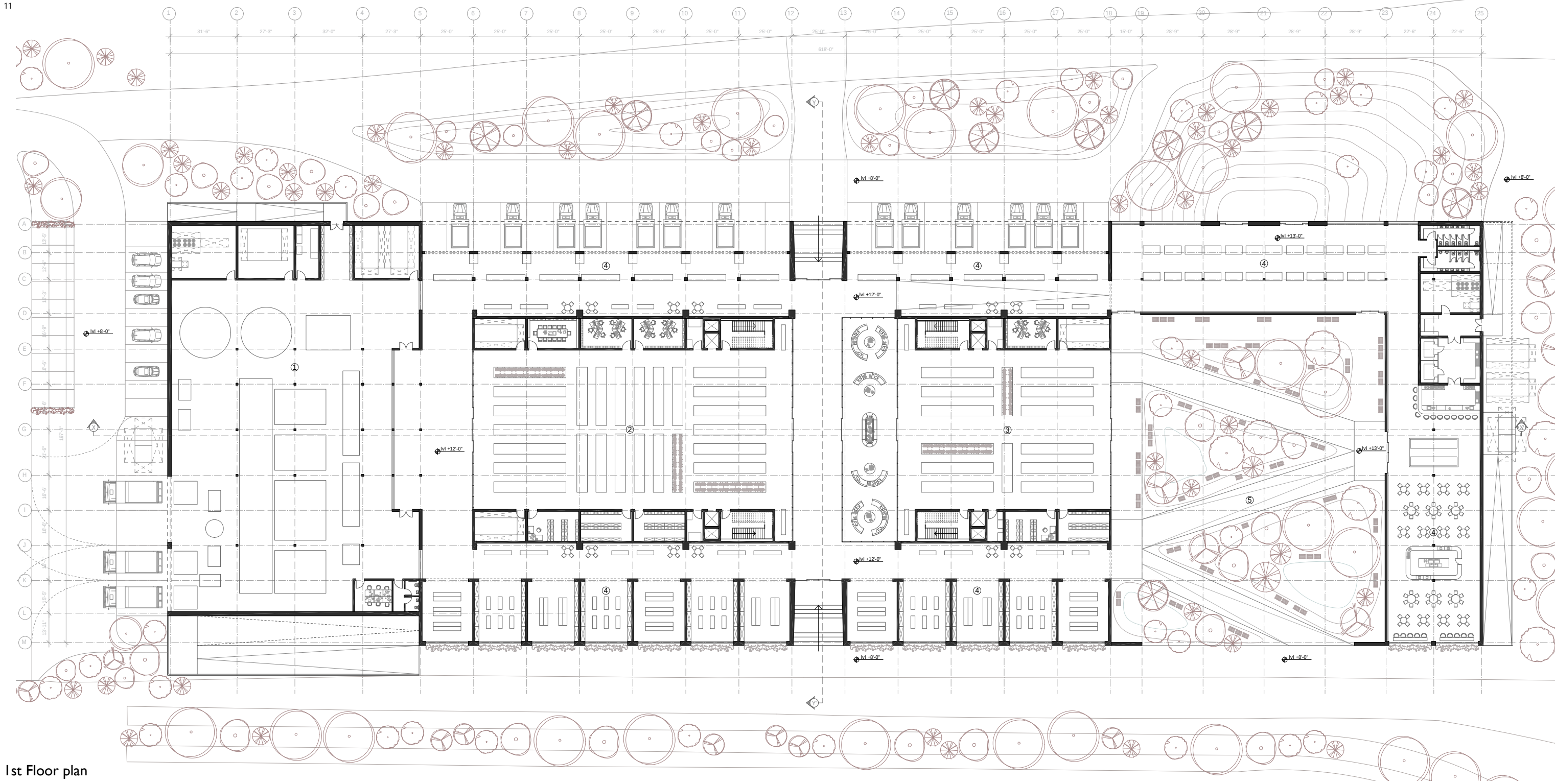
Site research and strategy for flood

Based on the site research and FEMA study, building is raised 4’ above the ground level to address flood prone site



C SKYLIGHT AND ETFE DETAIL





1st Floor plan

1. COMPOSTING FOOD WASTE FACILITY

 - Truck Bay
 - Mechanical Room
 - Generator Room
 - Electrical Room
 - Staff Room w/ Accessible Restrooms
 - Employee Parking
2. COMMERCIAL GREENHOUSE FACILITIES

 - Conference Room
 - Staff Office
 - Store Room
 - Lab
 - Cold Storage for flowers & seed
 - Locked storage for chemicals
 - Storage Room
 - Mechanical Room
3. RECREATIONAL/EDUCATIONAL GREENHOUSE

 - Interactive Zone
 - Store Room
 - Staff Office
 - Lab
 - Storage Room
 - Mechanical Room
4. MARKET SPACE

 - Retail Stores
 - Fresh Produce (Truck) Market
 - Flea Market
 - Dining/Bar
 - Kitchen
 - Locked/Cold Storage
 - Restrooms
 - Mechanical Room
5. OPEN COURTYARD

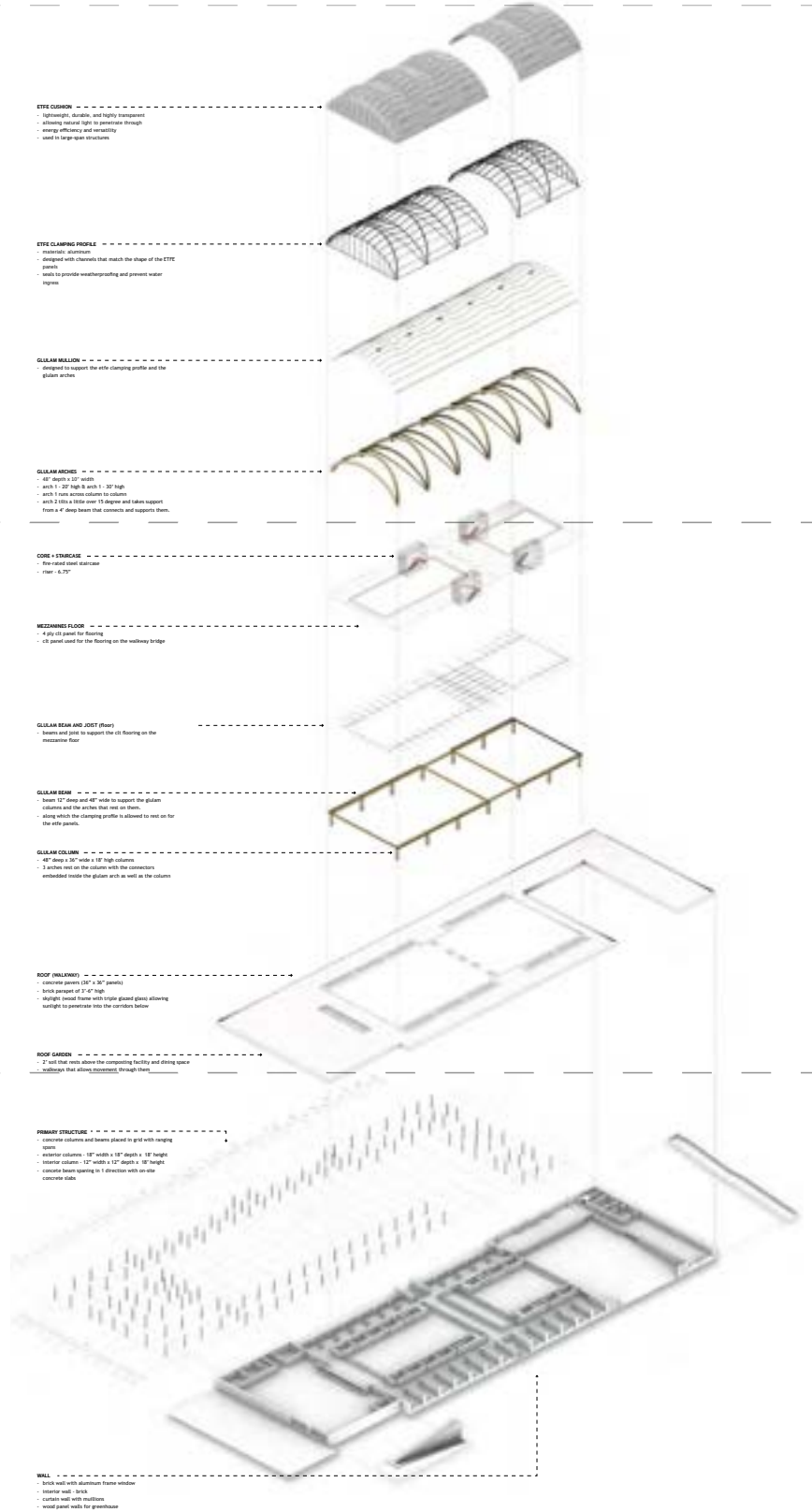
 - Sitting Space
 - Waterbodies

The design integrates commercial and recreational greenhouses at the center, with a composting area to the northeast and a marketplace wrapping around the greenhouses and courtyard. At its core, an open courtyard serves as a flexible gathering space, flanked by a recreational greenhouse and The Green House restaurant, while an open-air market at the rear, inspired by the Fulton Fish Market, fosters local commerce. A perforated brickwork wall filters daylight, creating a dynamic interplay of light and shadow throughout the spaces. Enhancing connectivity, exterior ramps on the north and west elevations lead to a walkable rooftop, where an open-air bridge with skylights links the greenhouses, providing natural light and visual connections to the lower floors. This design emphasizes transparency, interactivity, and a seamless relationship between architecture and the environment.

Part 3/3

Part 2/3

Part 1/3



General isometric of structure

CURTAIN WALL

- aluminum frame
- glass panels
- sliding doors

ROLLER SHUTTER

- transparent roller shutter with aluminum frame
- clear/polycarbonate panel

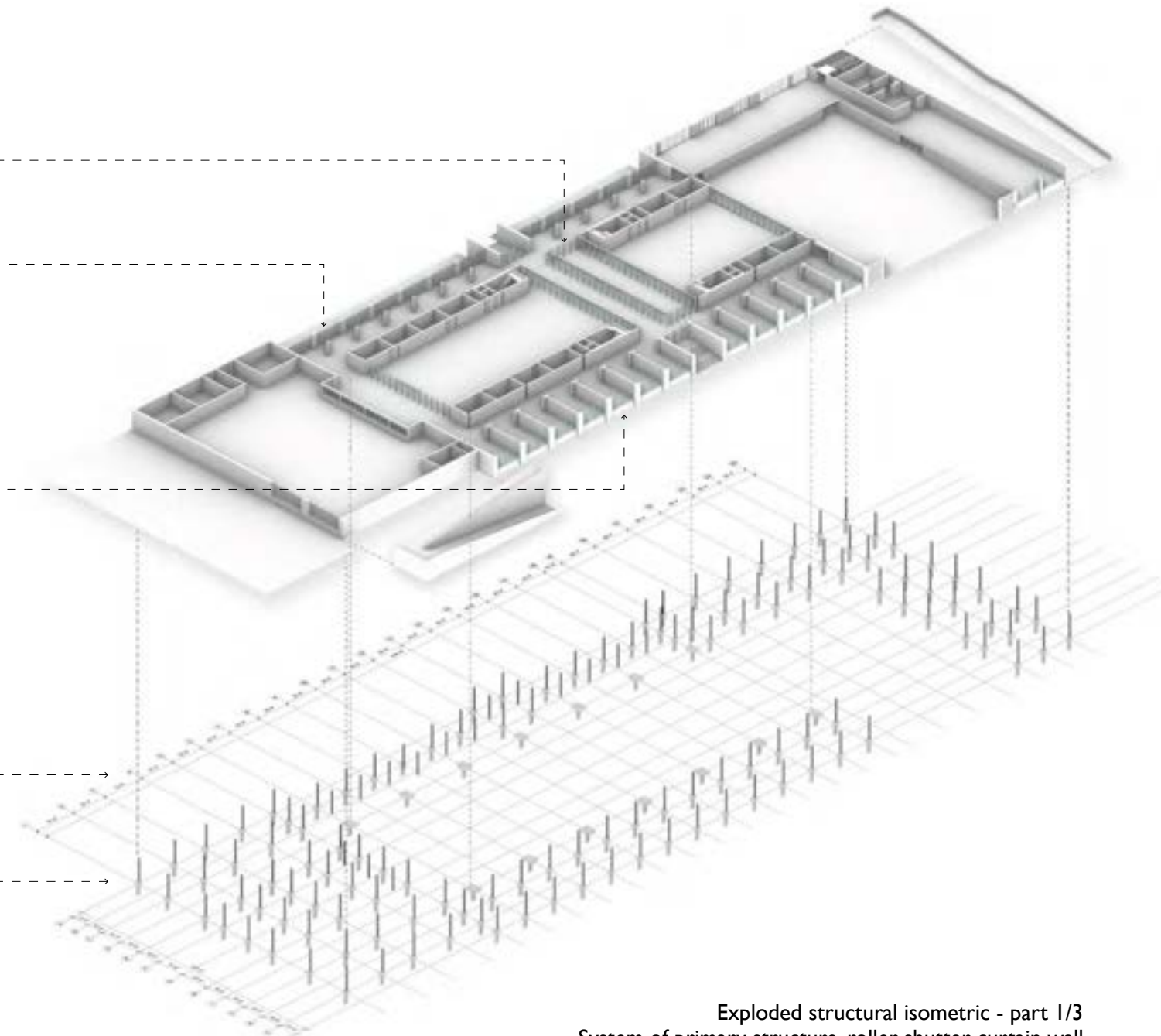
WALL

- brick wall with aluminum frame window
- interior wall - brick
- curtain wall with mullions
- wood panel walls for greenhouse

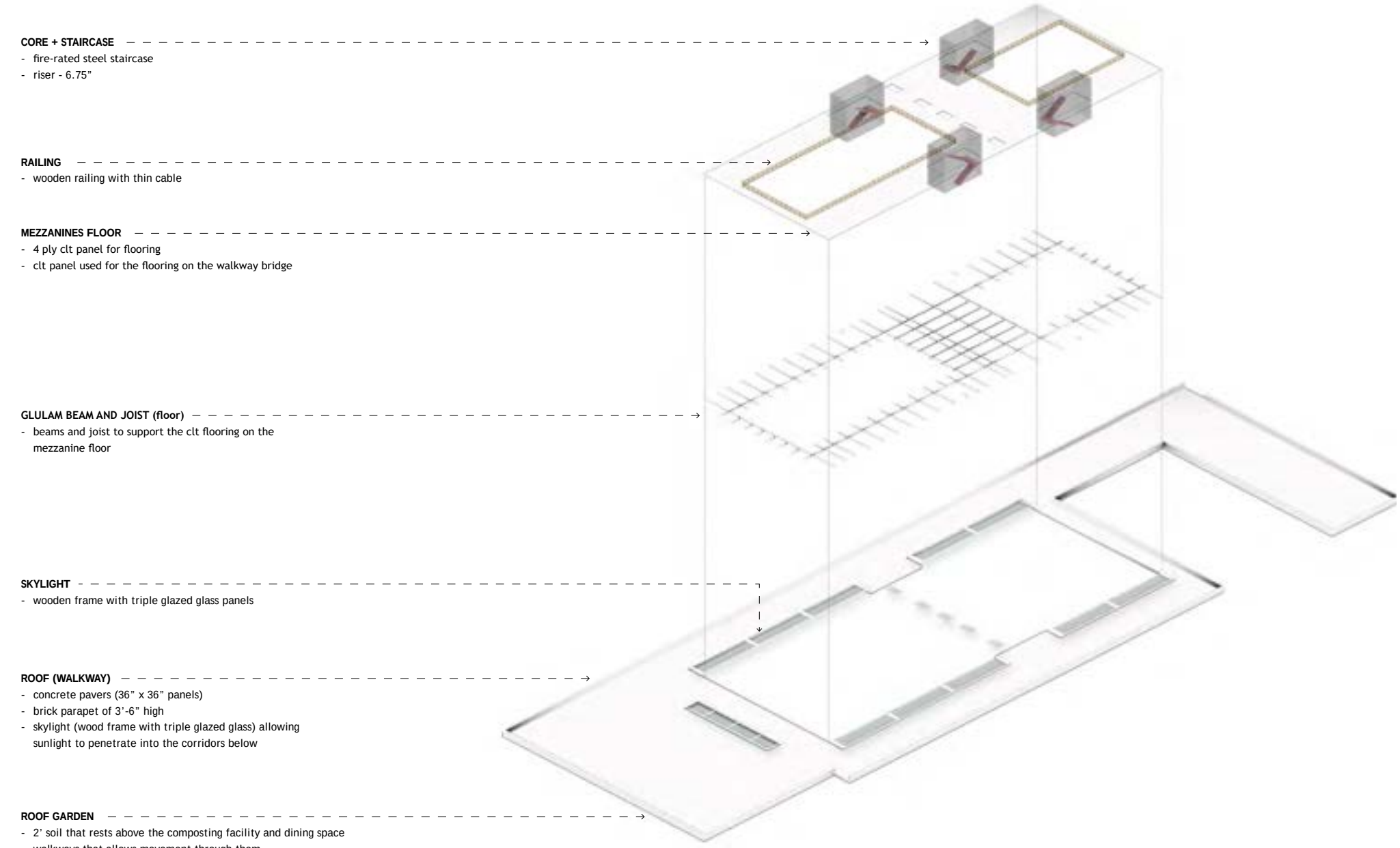
STRUCTURAL GRID

PRIMARY STRUCTURE

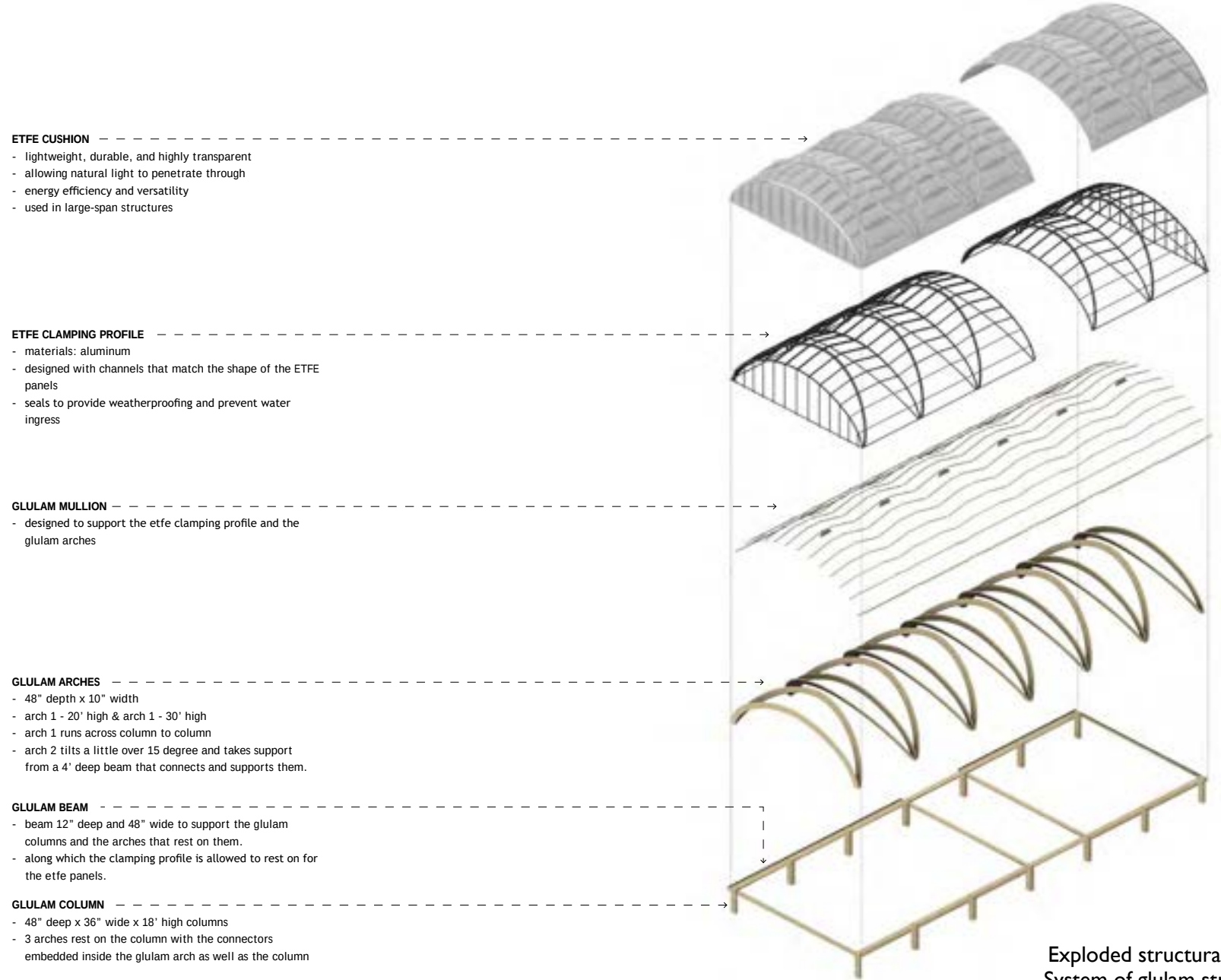
- concrete columns and beams placed in grid with ranging spans
- exterior columns - 18" width x 18" depth x 18' height
- interior column - 12" width x 12" depth x 18' height
- concrete beam spanning in 1 direction with on-site concrete slabs
- foundation - concrete pile foundation



Exploded structural isometric - part 1/3
System of primary structure, roller shutter, curtain wall



Exploded structural isometric - part 2/3
System of roof garden, skylight, glulam beam, mezzanine



Exploded structural isometric - part 3/3
System of glulam structure, ETFE system

02

City as a hyper building

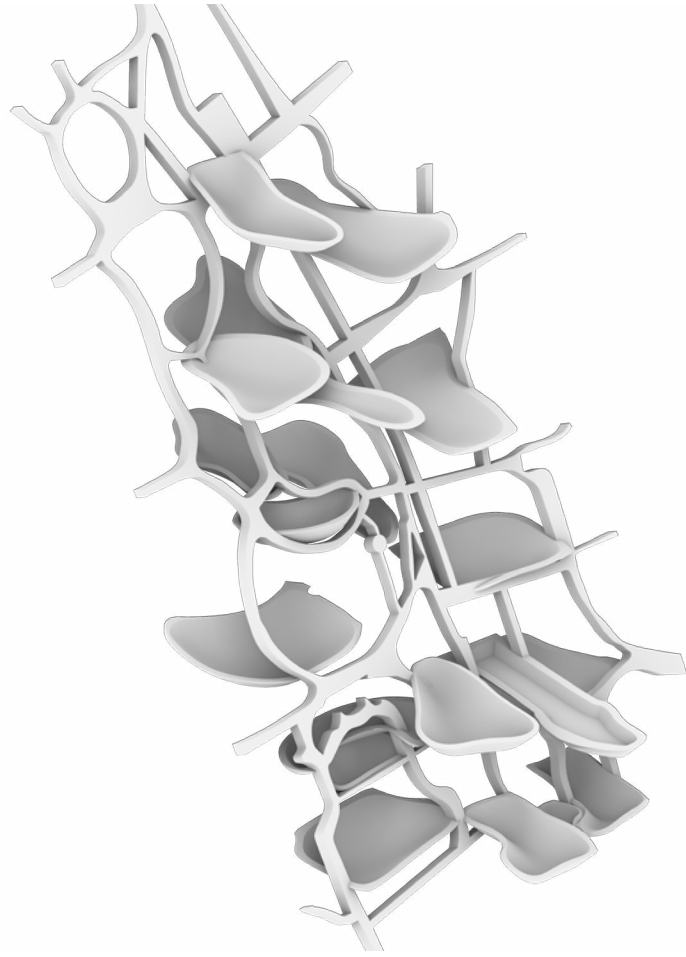
A new urban artefact

City as a Hyper Building” is a visionary project that reimagines urban environments by merging diverse building typologies into a unified, transformative framework. It challenges traditional notions of architecture and urban planning by presenting the city as a dynamic, interconnected system, where each structure influences and supports the others creating an ecosystem.

By integrating elements of Vienna such as bunkers, parks, power stations, and housing, the Hyper Building aims to reshape the urban fabric, blending form, function, and ecological sustainability into a cohesive whole system.

One striking aspect of the project is the fusion of Vienna’s Stadtpark with vertical hydroelectric power stations, transforming horizontal park into vertical source of renewable energy. The form of pathway of the park becomes water chanel containg turbines and the island of the park becomes lake, creating a vertical hydroelectric power system. Integrating this fusion with a bunker results in enhancing the lakes and the housing typology wraps around this fusion which creates a new integrated ecology





Park and hydro power station
Pathway of park becomes water canal and the islands of parke becomes lake



Form of the Stadd Park (Vienna) + Social housing
Housing wraps vertically around the pathways of park



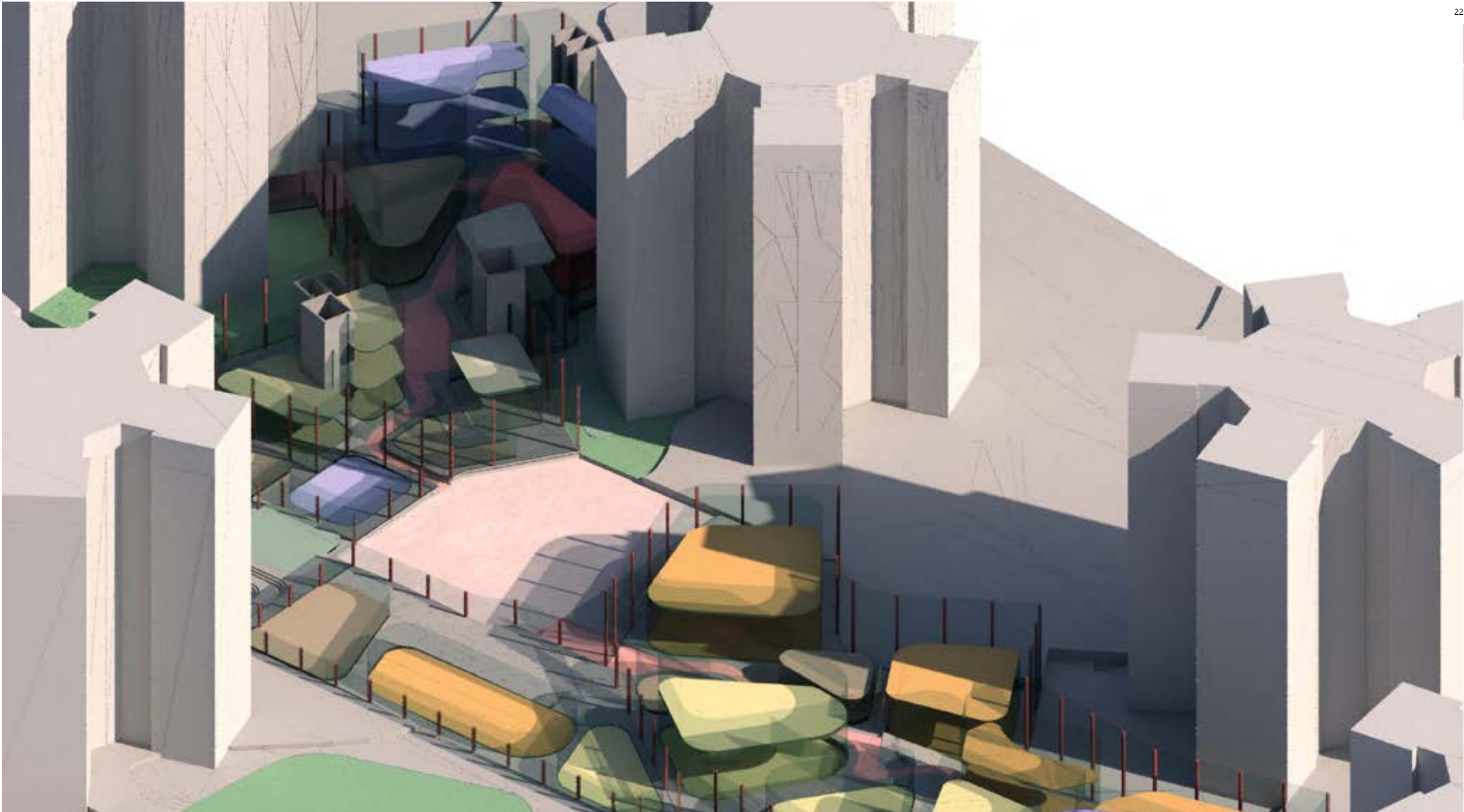
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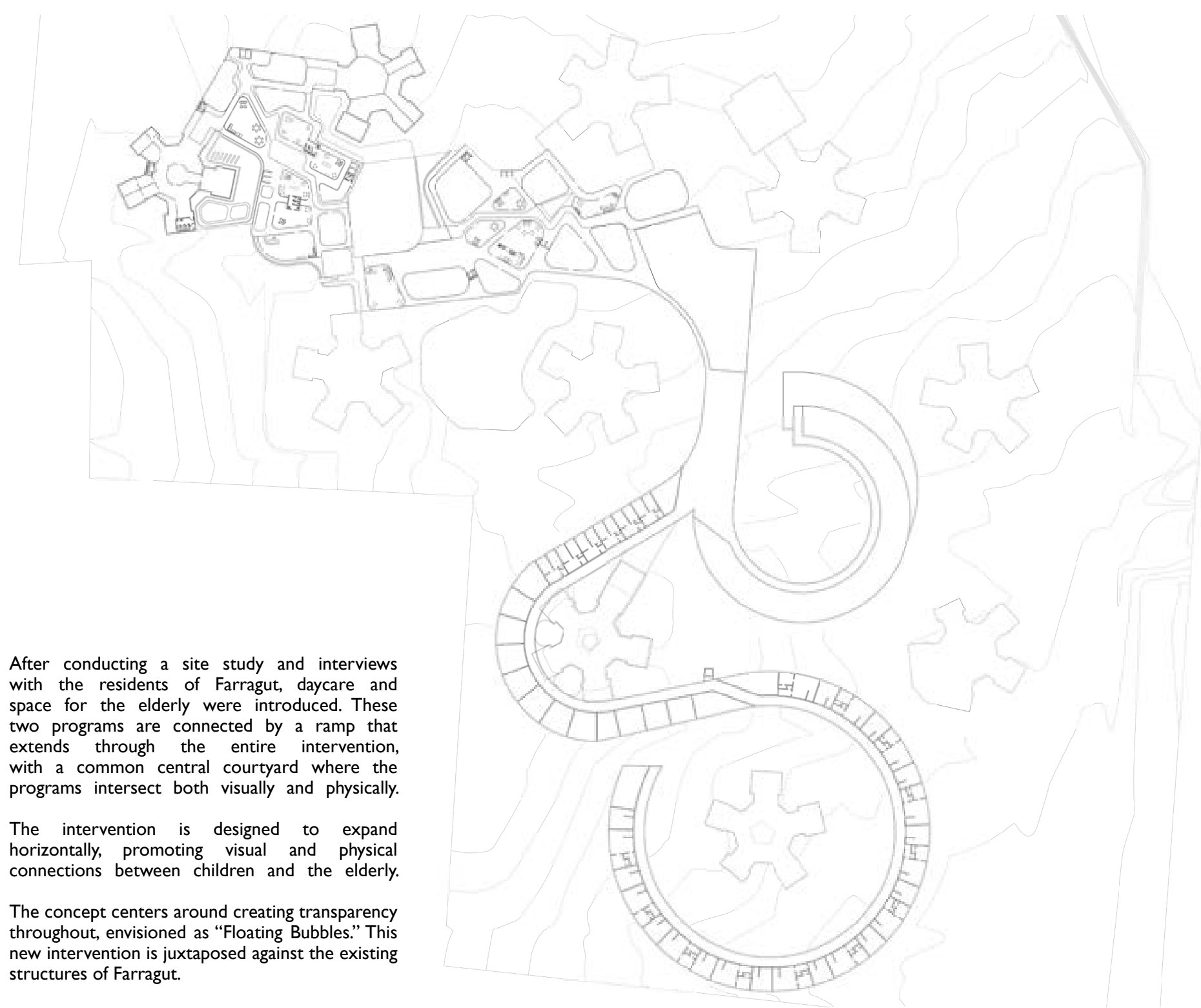
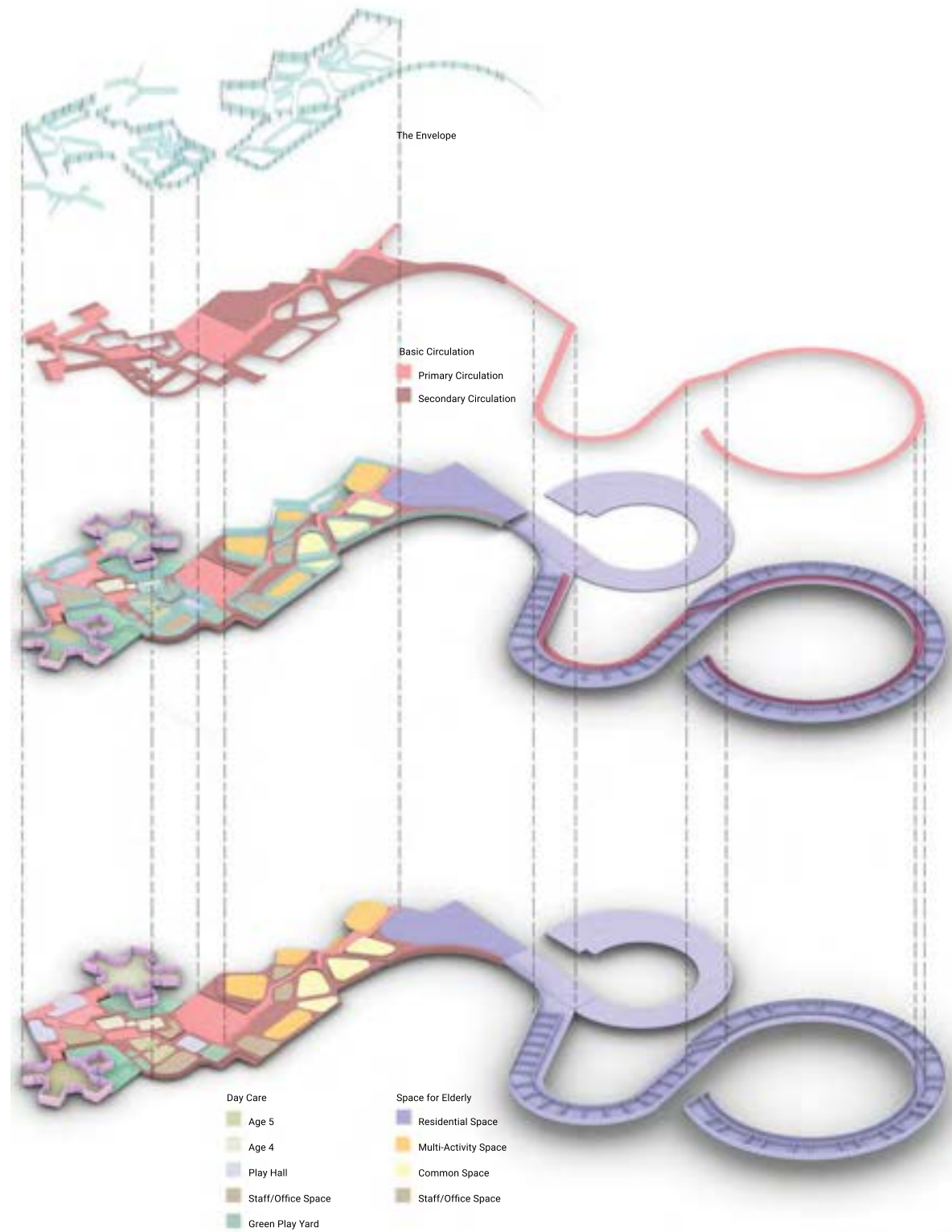
Backyard farragut

Revivng Farragut Community
Co-Partner: Sophia Alagoa

The project reimagines the relationship between the Farragut Houses community and its urban context by introducing a floating daycare and elderly space within a network of hubs. It leverages site geometry and green spaces to foster connectivity, inclusivity, and engagement with the outdoors.

The project's main challenge lies in redefining the relationship between the Farragut Houses community and its urban context while respecting the existing site geometry, overcoming spatial and social disconnects, and seamlessly integrating new programs that foster inclusivity and engagement.

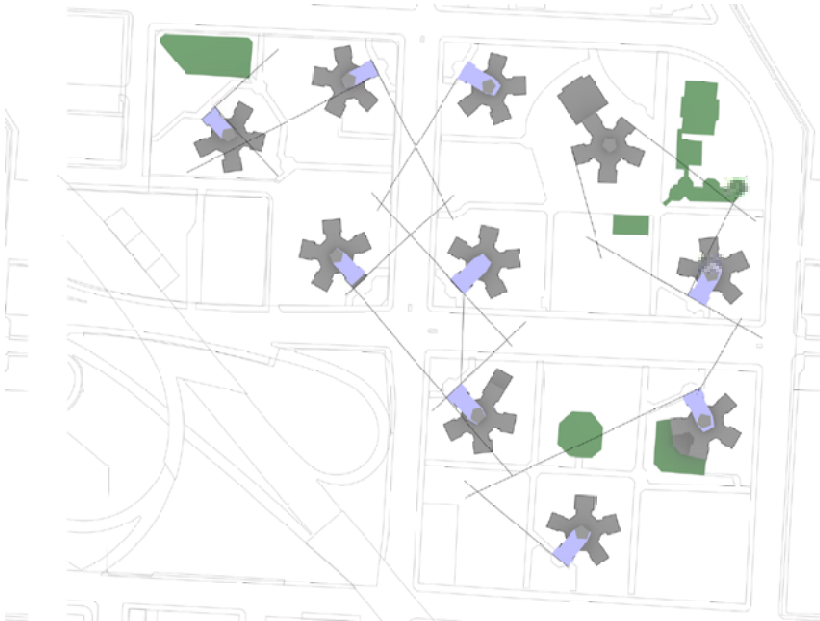




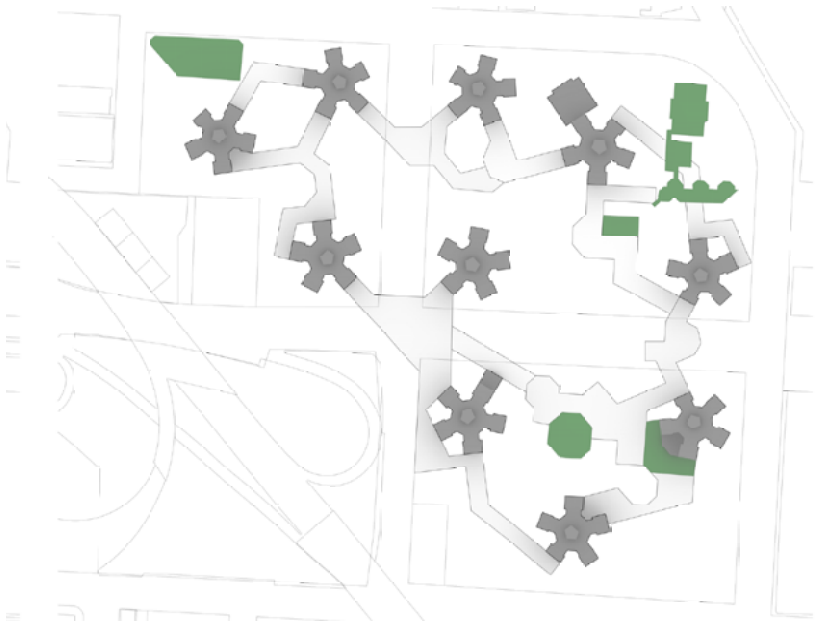
After conducting a site study and interviews with the residents of Farragut, daycare and space for the elderly were introduced. These two programs are connected by a ramp that extends through the entire intervention, with a common central courtyard where the programs intersect both visually and physically.

The intervention is designed to expand horizontally, promoting visual and physical connections between children and the elderly.

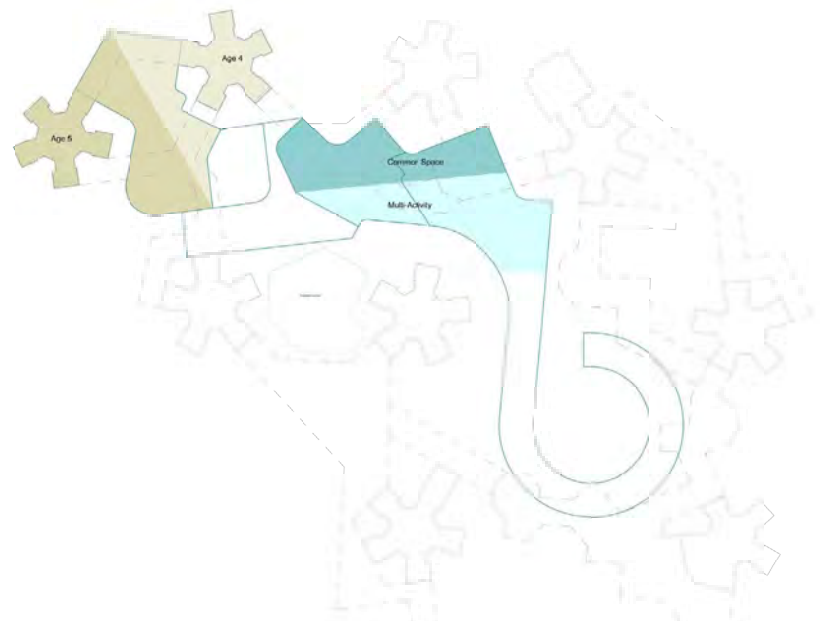
The concept centers around creating transparency throughout, envisioned as “Floating Bubbles.” This new intervention is juxtaposed against the existing structures of Farragut.



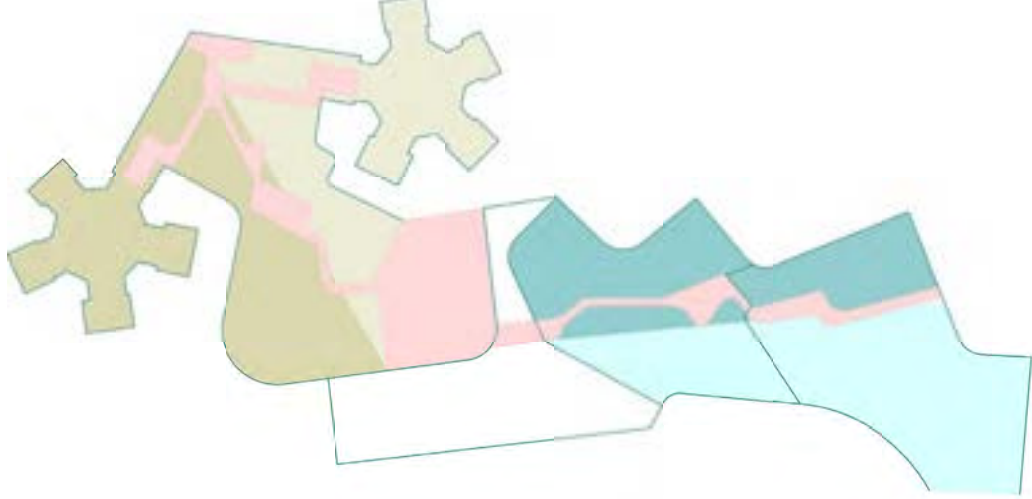
Identifying hub - taking reference from the existing entrances



Connecting farragut



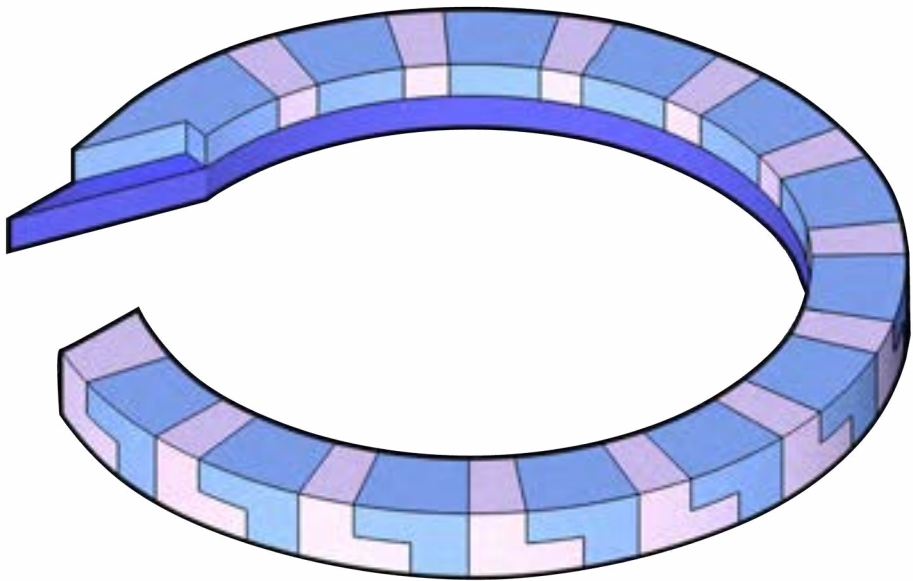
Reinterpreting language - subdivision of space



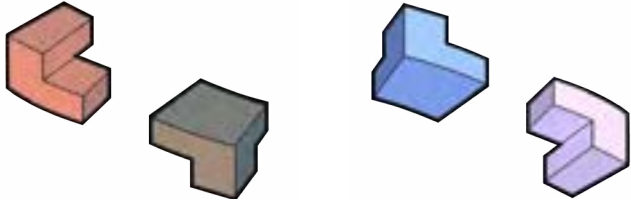
Space along ramp - creating connections



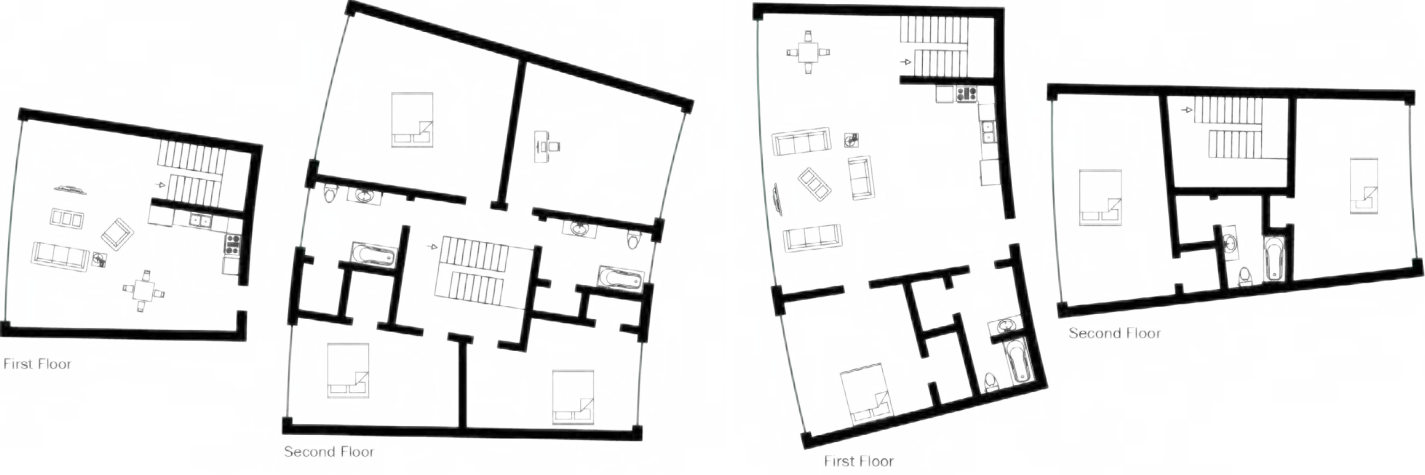
A five point pattern never used before in residential construction in 1947



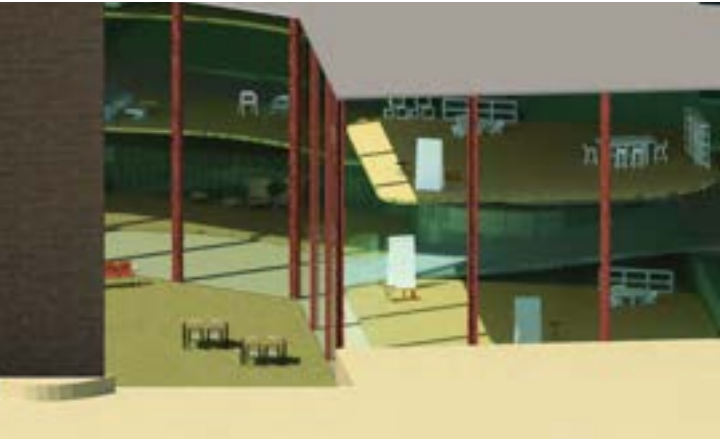
Assembling apartments around farragut



Interlocking apartments



Modular apartment plan



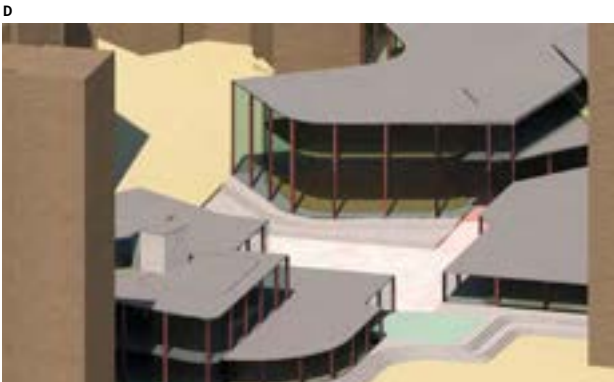
A SPACE FOR PAINTING AND LIBRARY



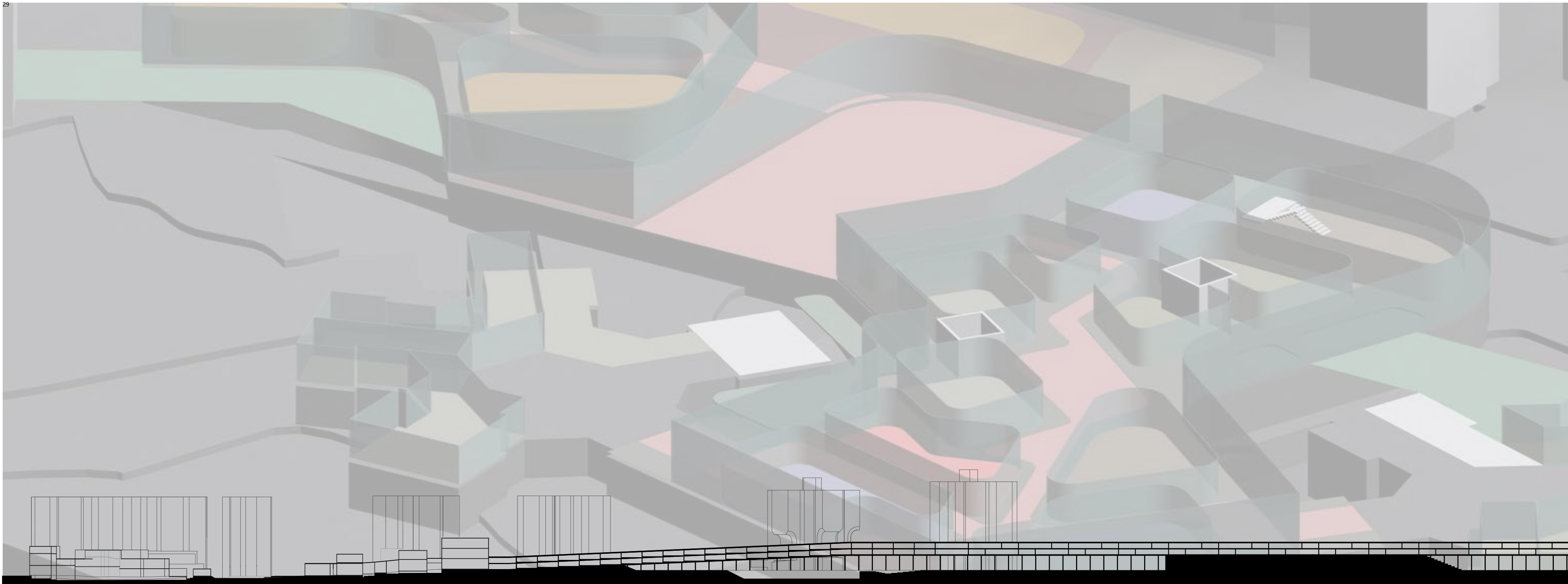
B DIALOGUE BETWEEN DAYCARE AND COURTYARD

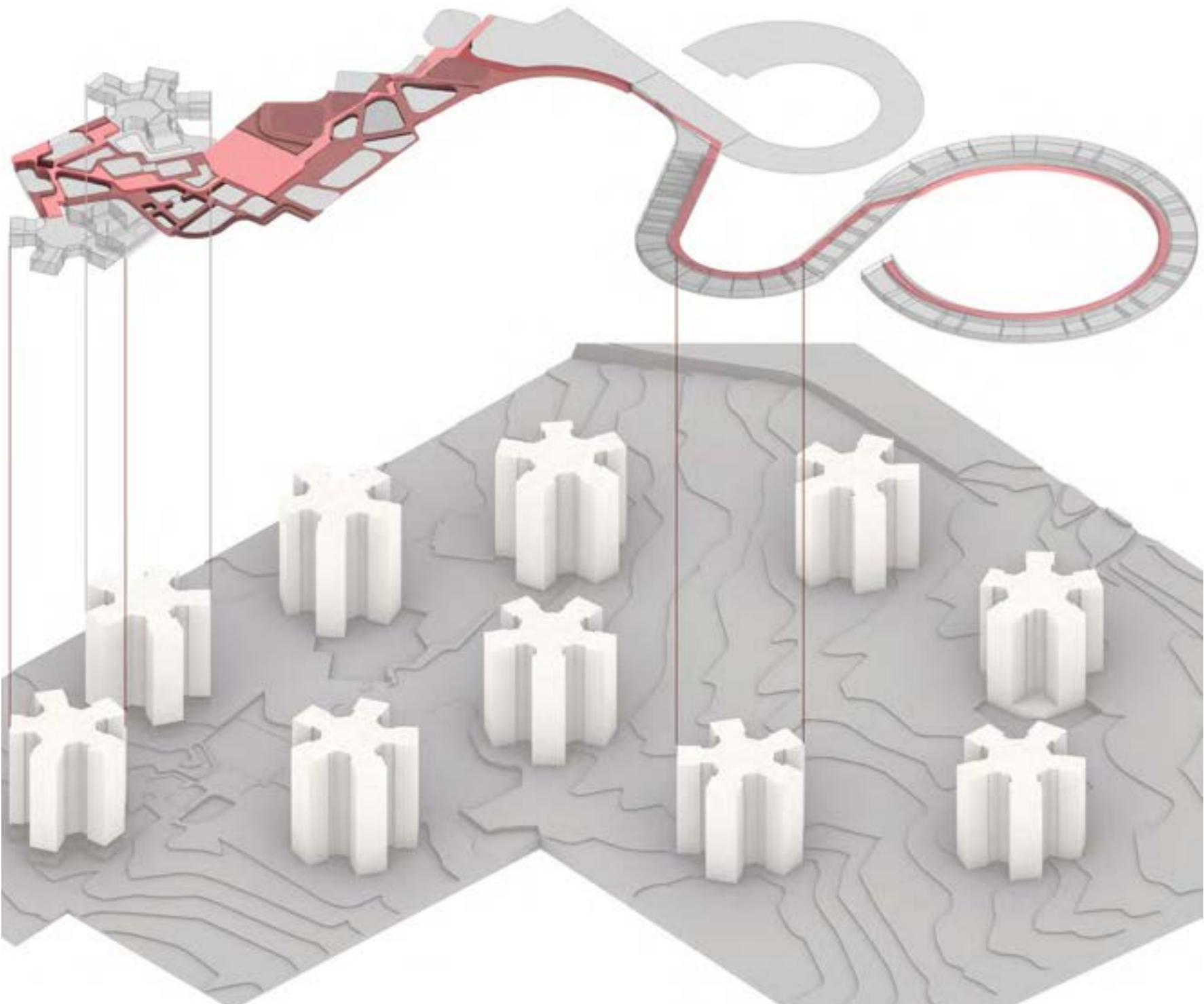


DIALOGUE BETWEEN DAYCARE AND
C SPACE FOR ELDERLY (LIBRARY)

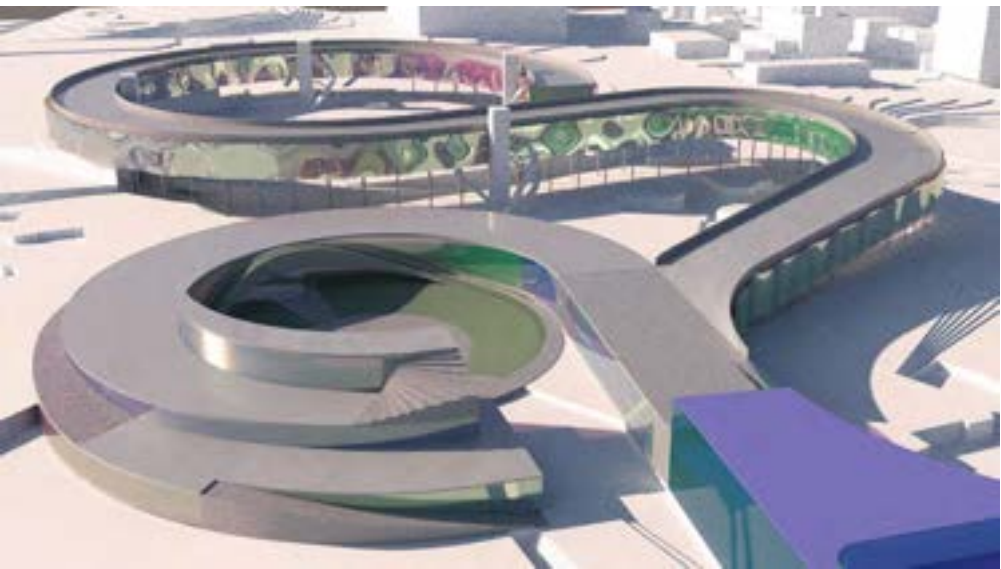
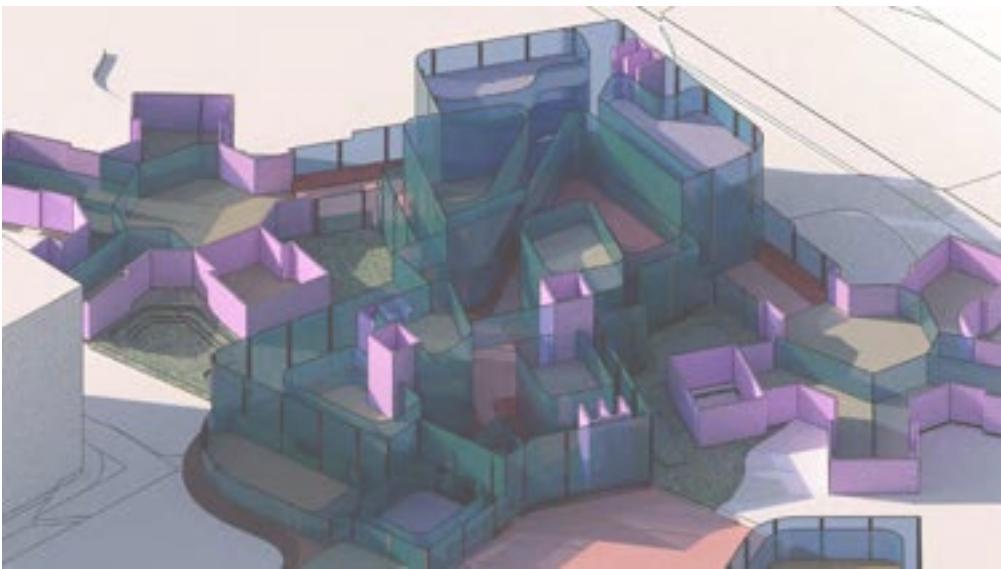


D





Primary and secondary circulation



04

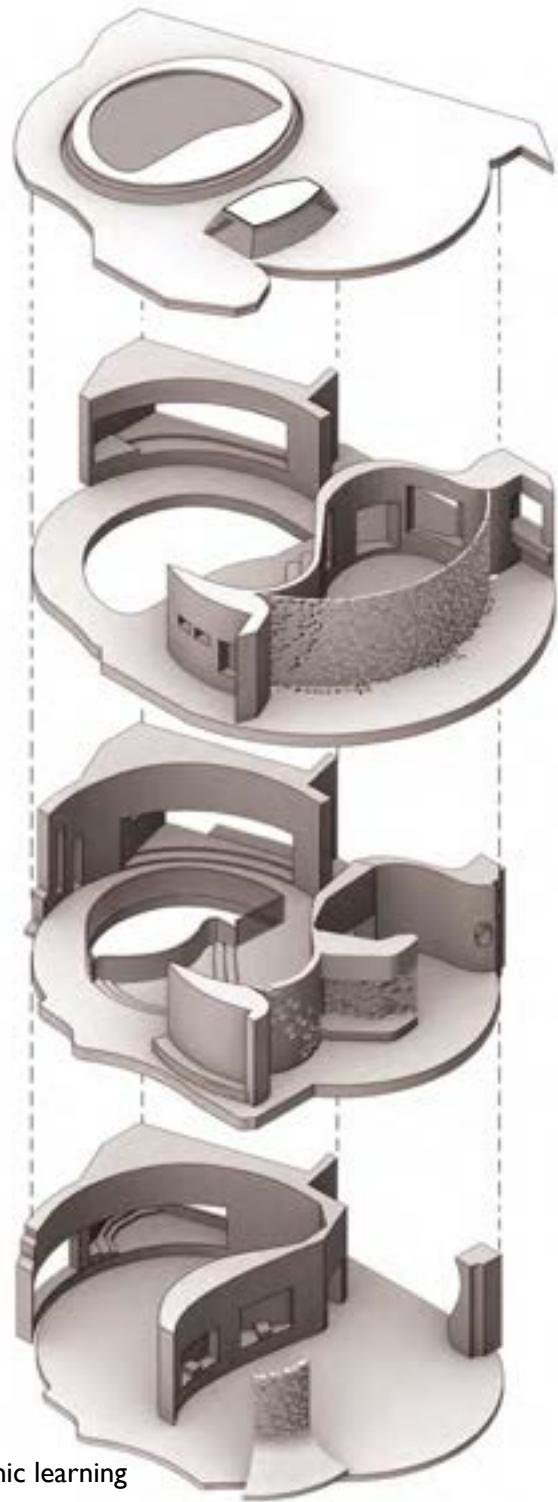
The middle school

A Rhythmic learning environment

This design project envisions designing a middle school in Red Hook that seamlessly integrates education, community, and resilience. It aims to create a dynamic, all-day learning environment where students can shape their own spaces through adaptable seating landscapes and engaging communal areas. The design fosters a rhythmic and inclusive atmosphere, extending learning beyond classrooms into hallways and recreational zones.

The site is flood-prone, particularly vulnerable to events like Hurricane Sandy, which led to the design of a flood-resilient first floor that can safely flood without damaging the interior or equipment. Additionally, water retention squares are incorporated to manage flooding while serving as recreational spaces during dry conditions, ensuring both protection and functionality.

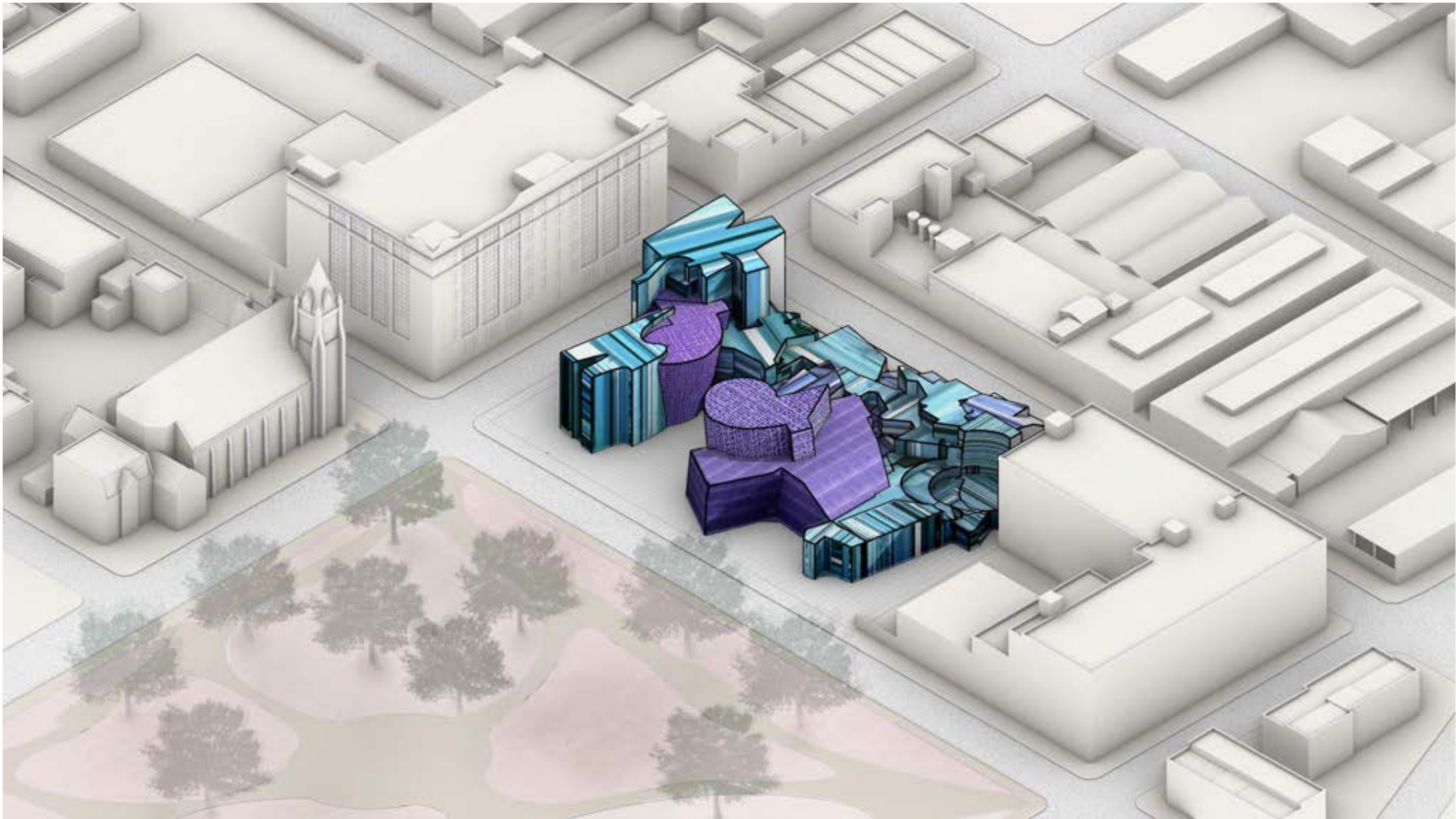




Exploded iso of rhythmic learning environment

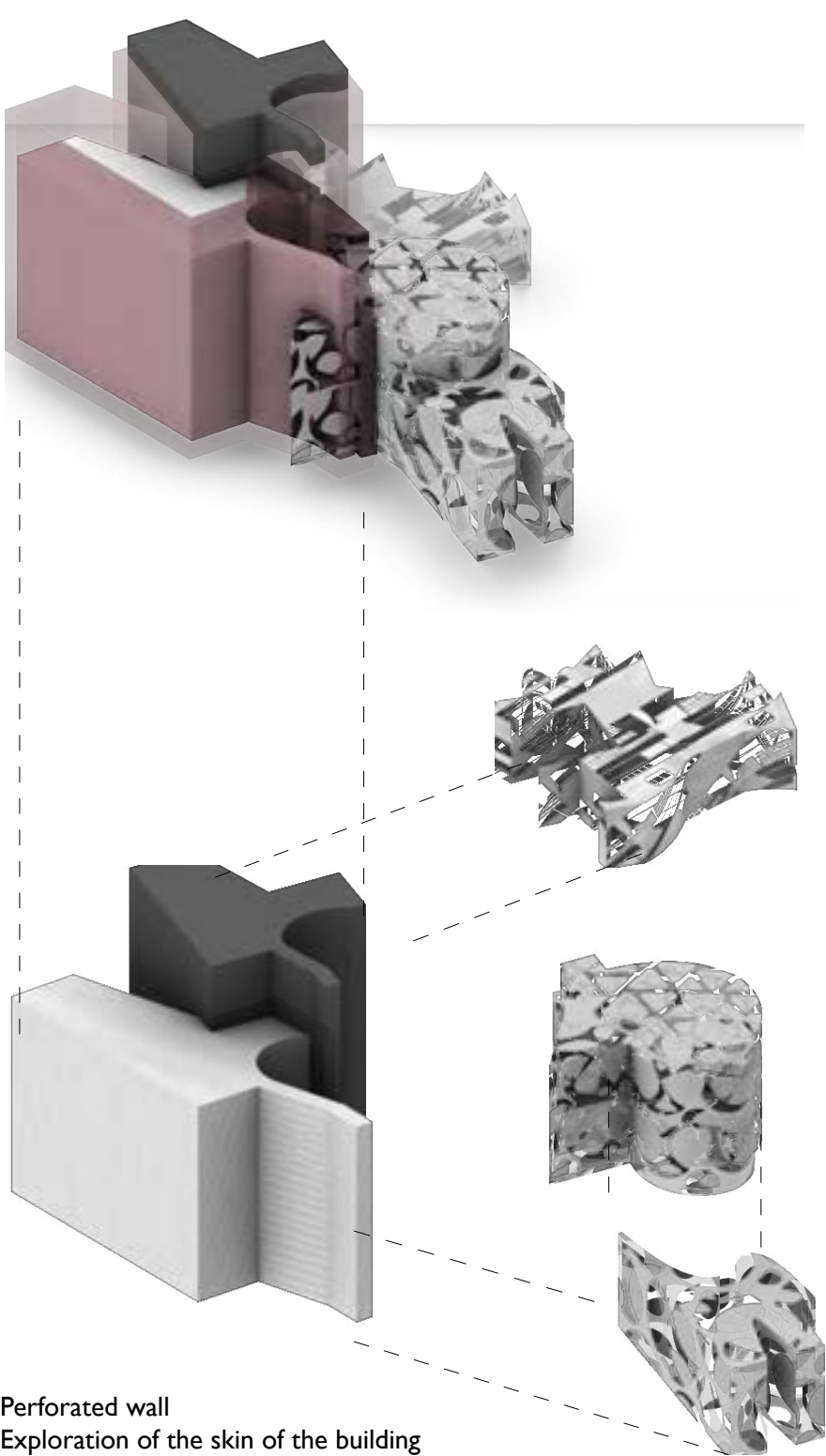
A key element of the design is empowering children to shape their own environment. This is achieved through seating landscapes with openings in the walls, allowing students to relax, experiment with different postures, and find comfortable positions for learning or play, departing from traditional seating arrangements. This approach encourages creativity and engagement, enabling students to actively participate in shaping their spaces.

Additionally, perforated walls are incorporated to enhance natural light, creating a brighter, more inviting atmosphere that fosters a positive and stimulating learning environment.

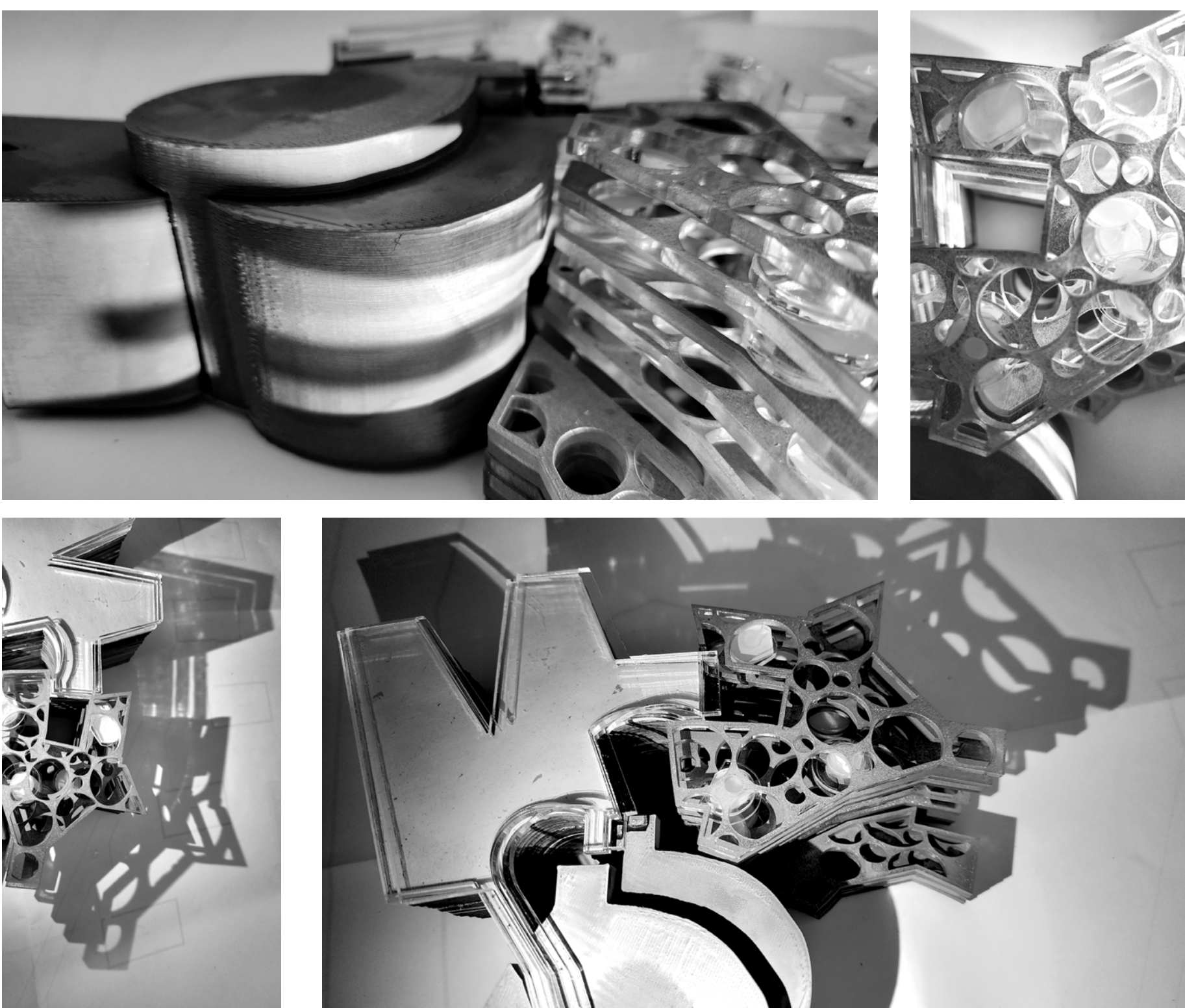


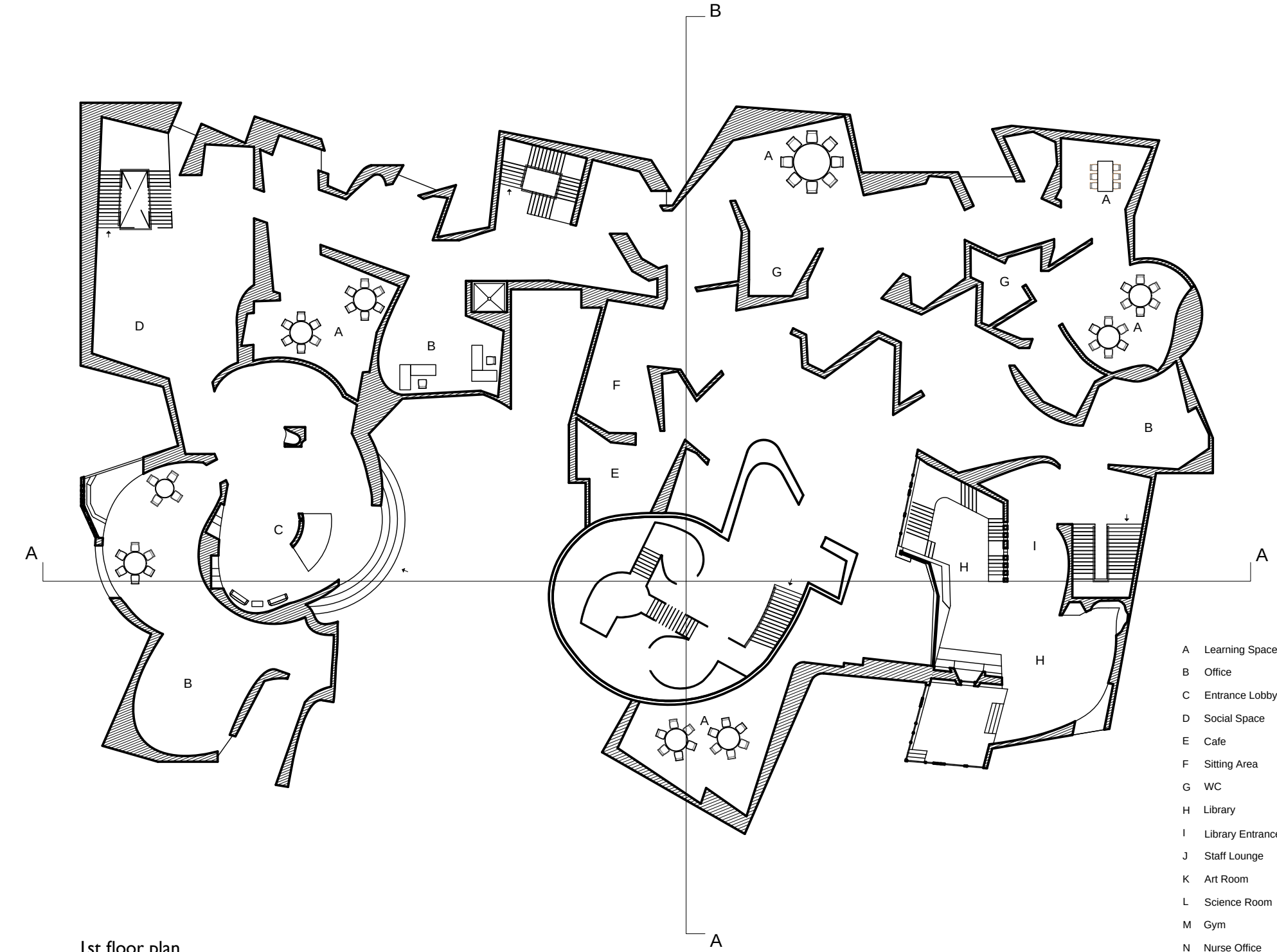


Extracting massing from different learning environments

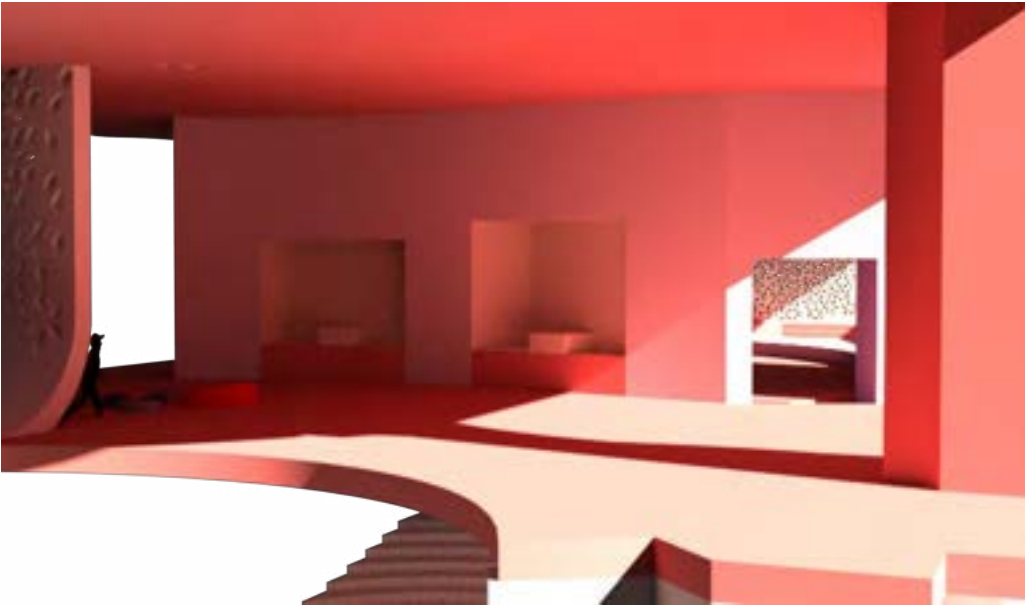


Perforated wall
Exploration of the skin of the building

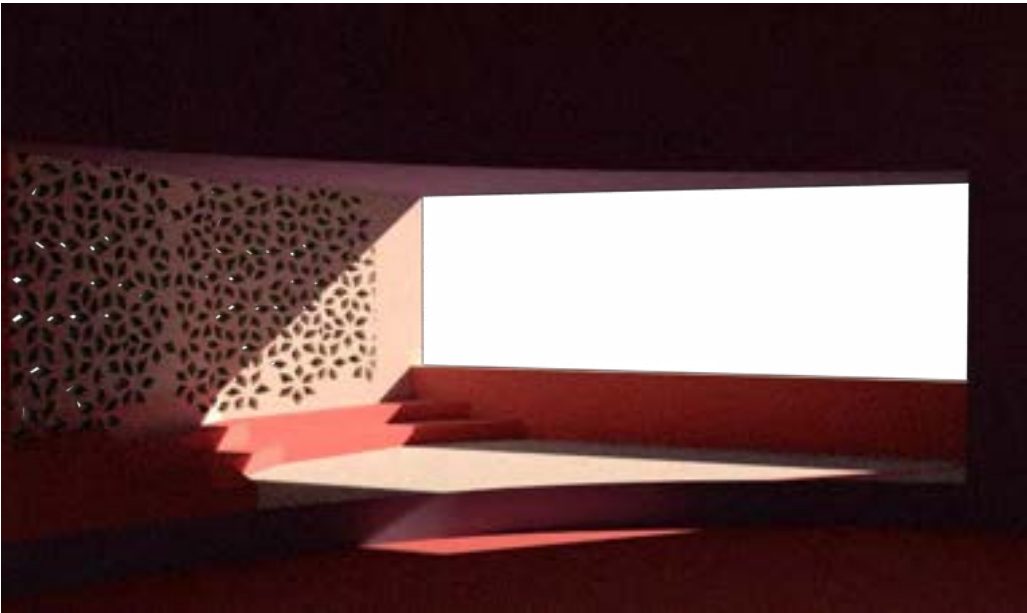




LIBRARY SPACE



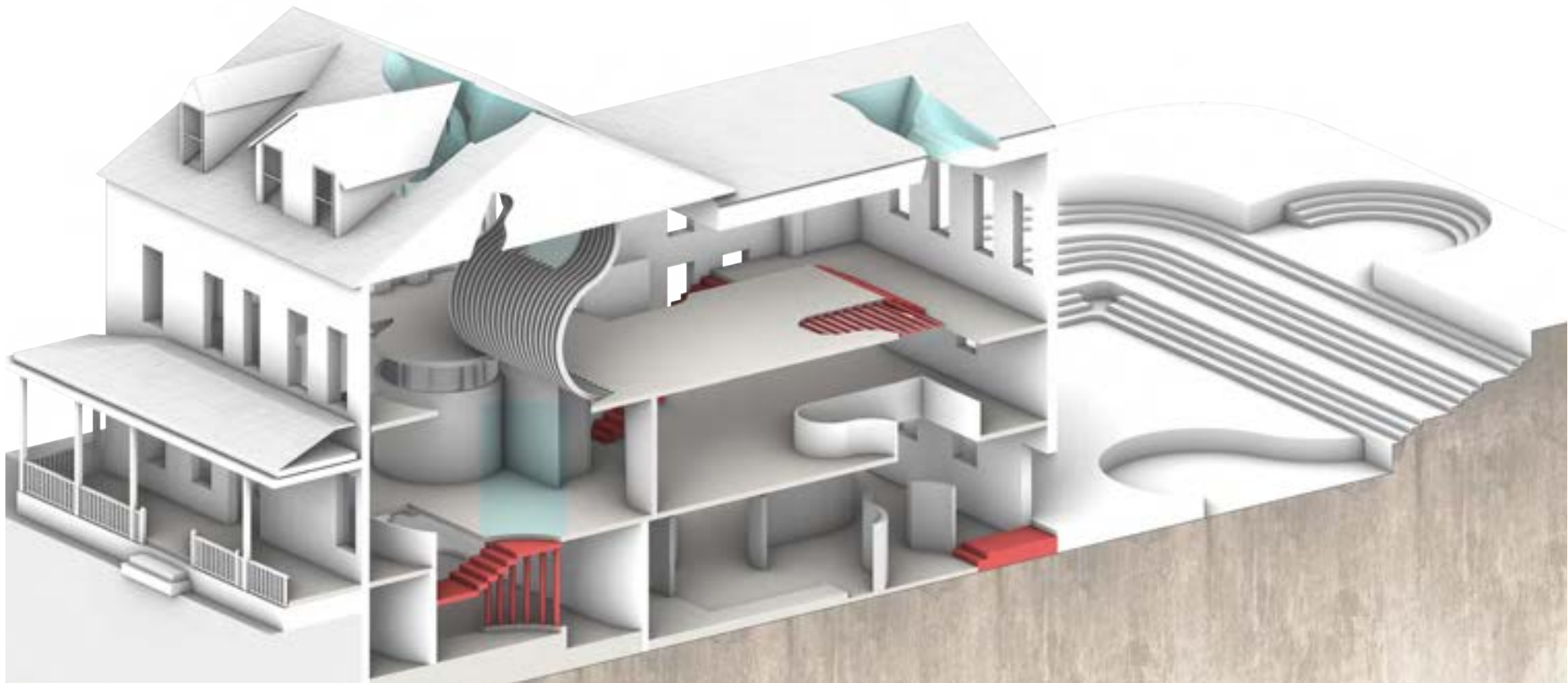
VARIOUS LEARNING ENVIRONMENTS



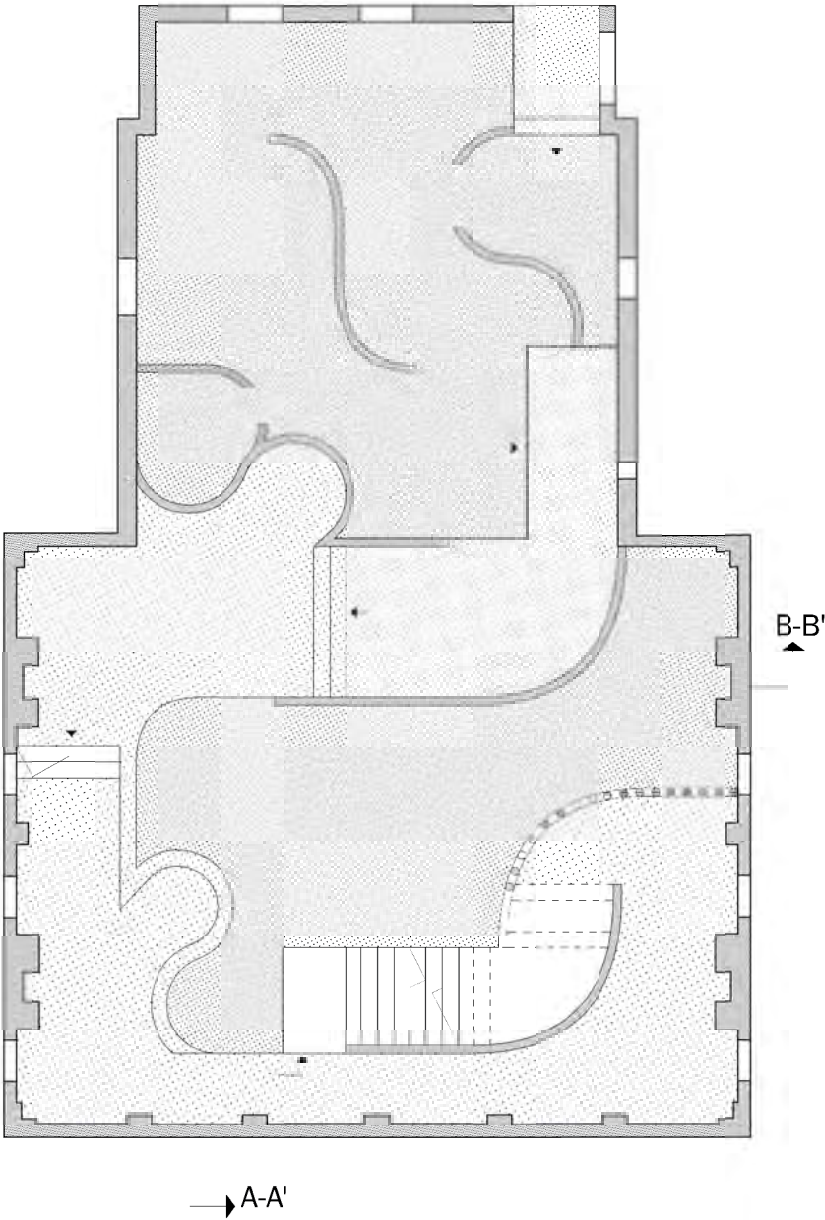
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Artist in residence

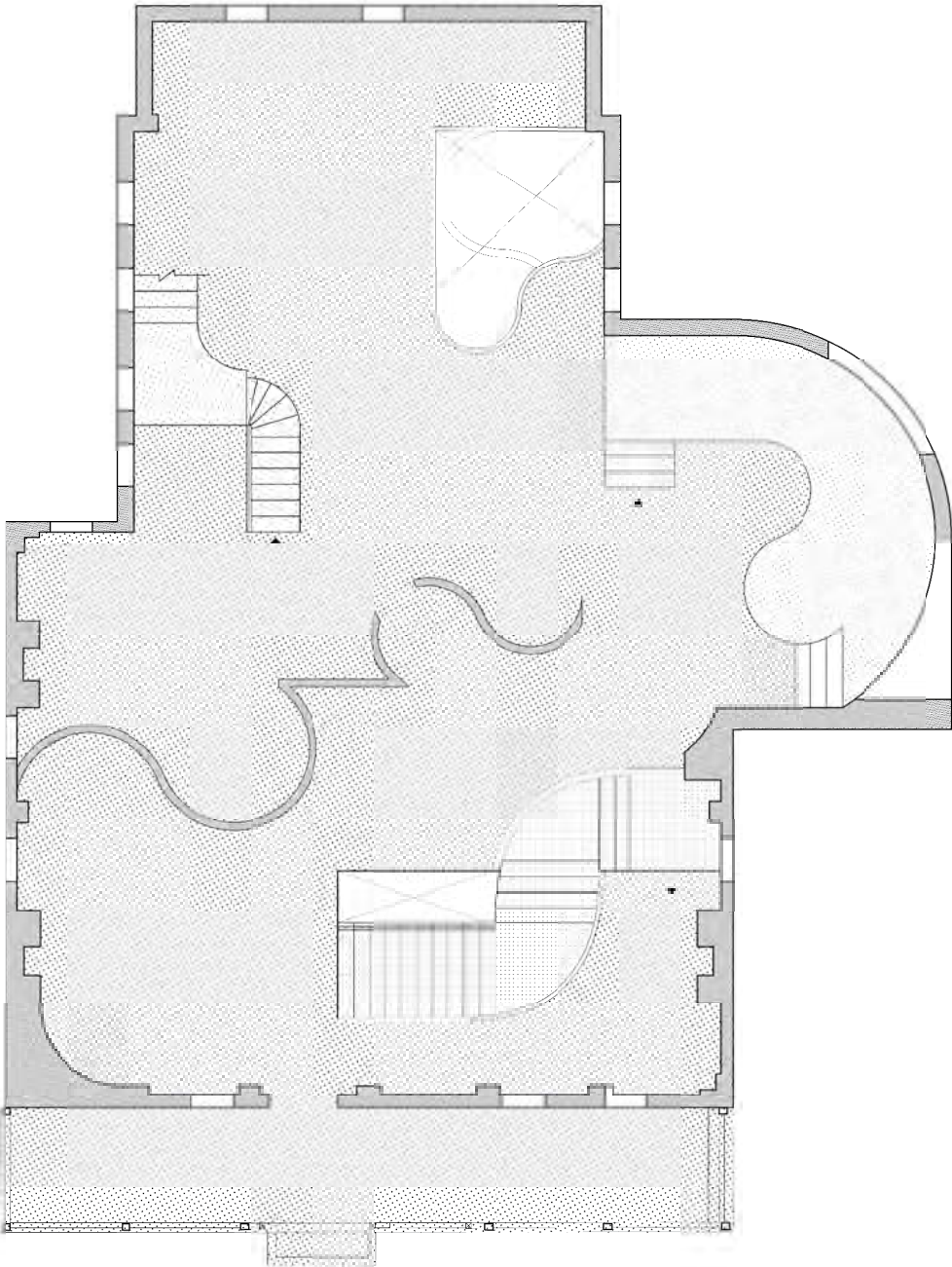
Blurring boundaries between public and private for artistic expression



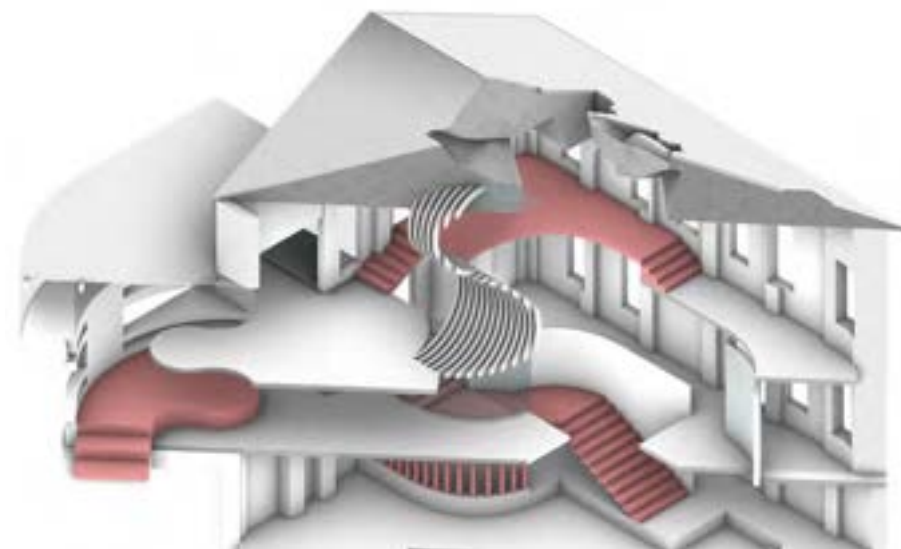
The alteration project of house 7 on Governors Island, New York City, is tailored to host an artist in a residency program. The building combines an existing wooden house with a new concrete shell structure, accommodating a mixture of private and public spaces, including ateliers, exhibition spaces, and terraces. The house got transformed into spaces for artist residencies, exhibitions and open studio events. The public flow of movement is guided through the entire building, partially merging exhibition and studio spaces, and public and private areas. The openness of the floor plan fosters social interactions, turning the building into a stage for artists and their work.



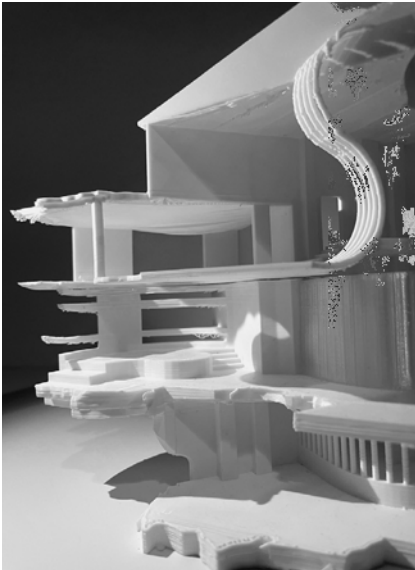
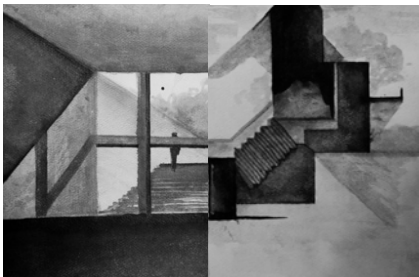
Basement plan



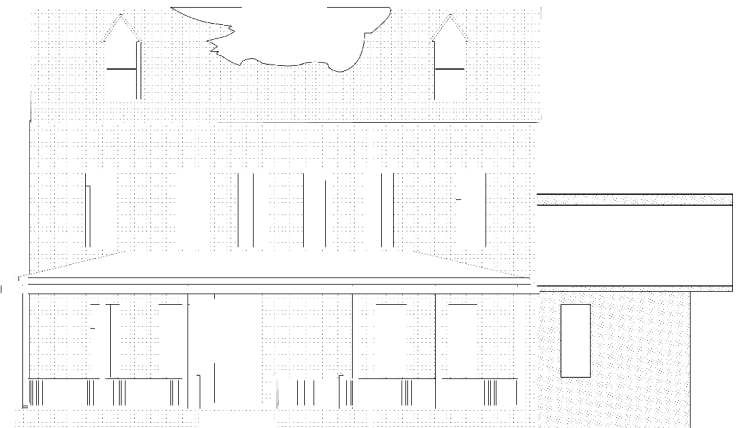
2nd floor plan



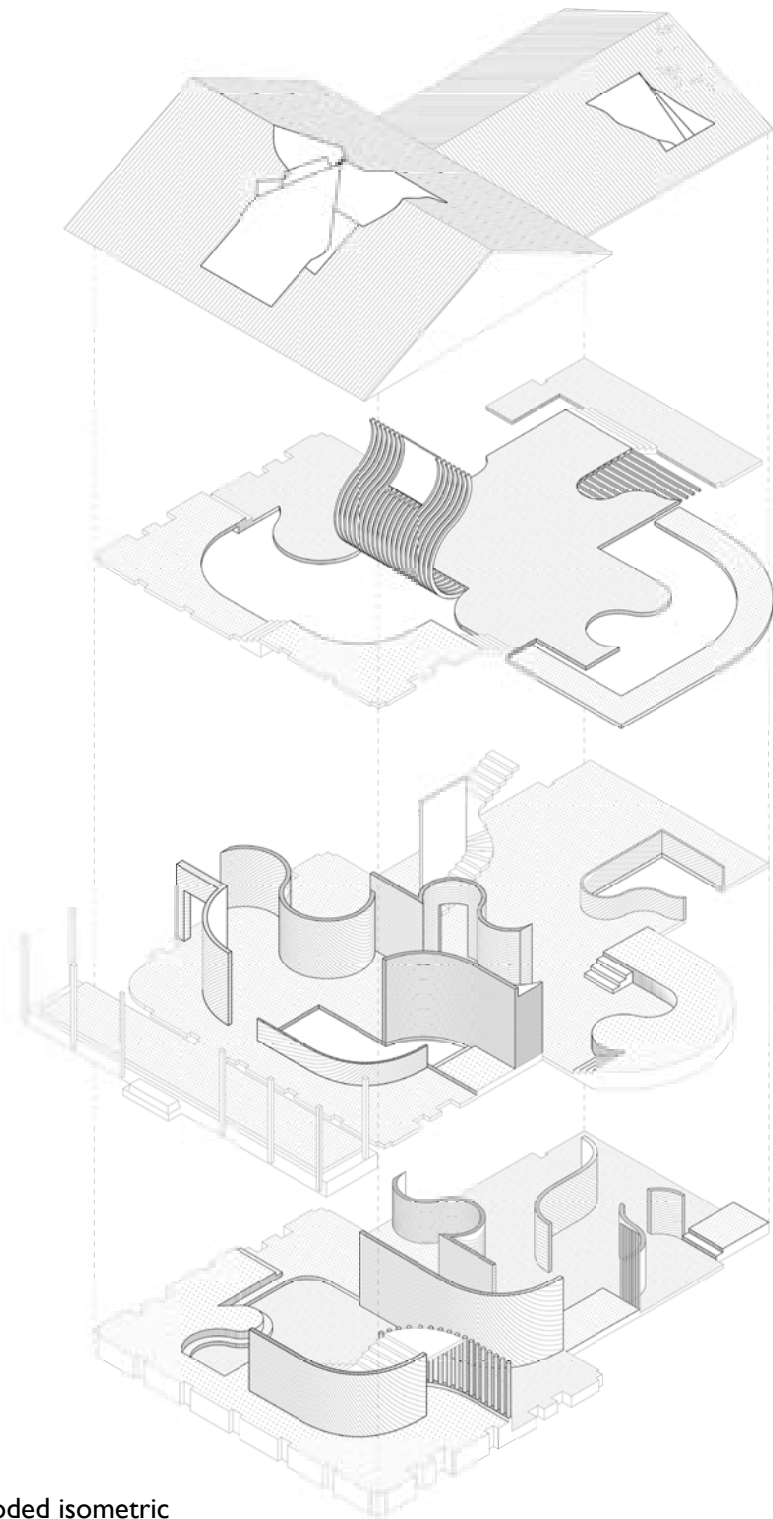
Chunk model



South elevation



West elevation

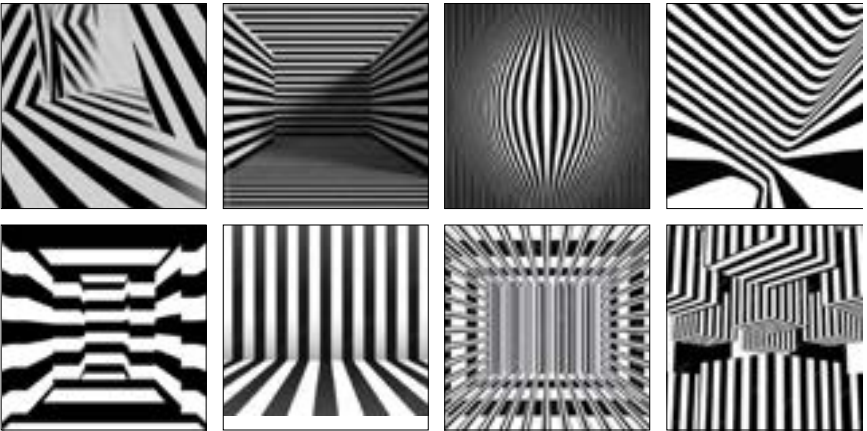
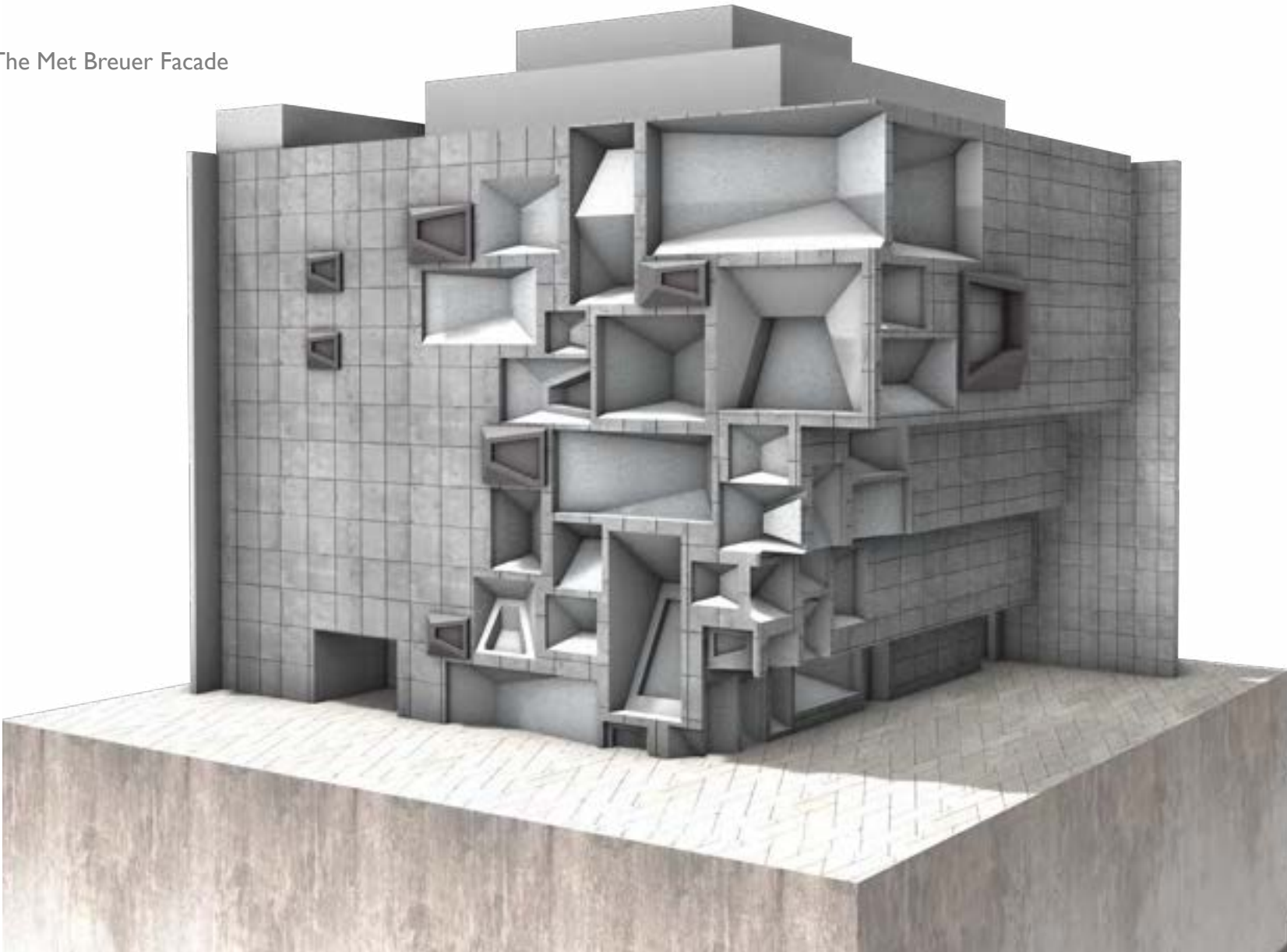


Exploded isometric

05

Reinterpreting facade

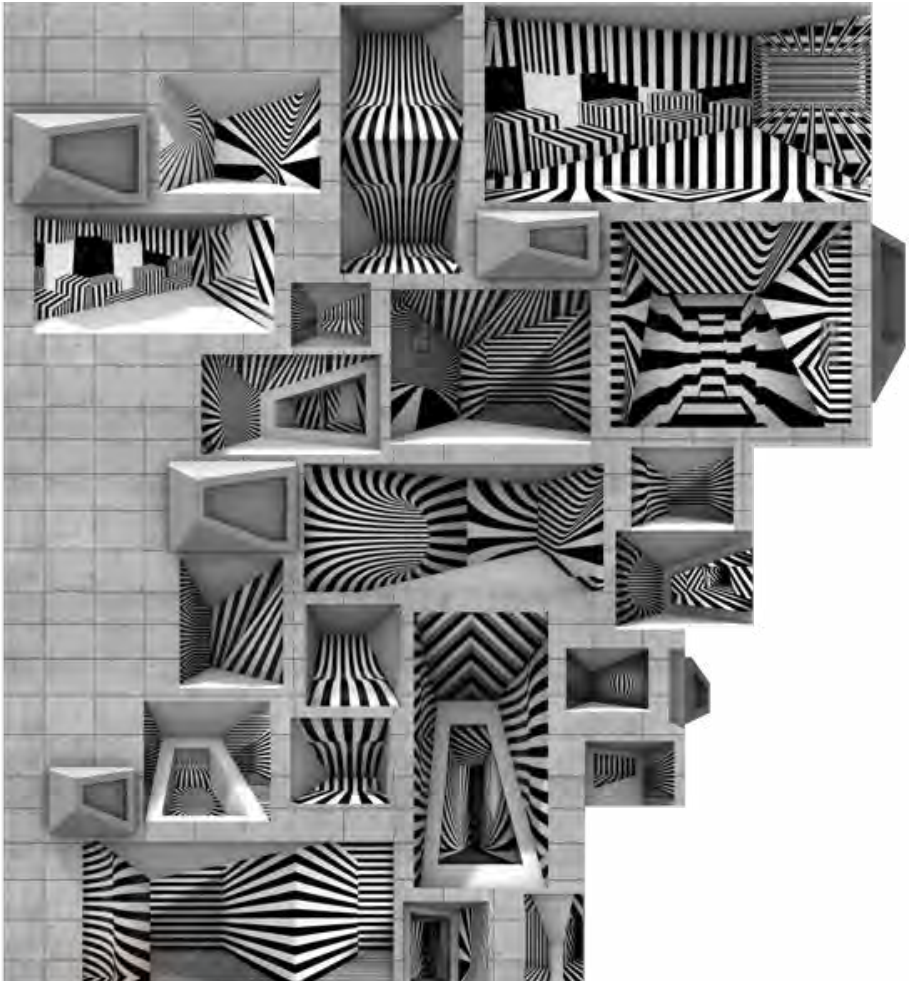
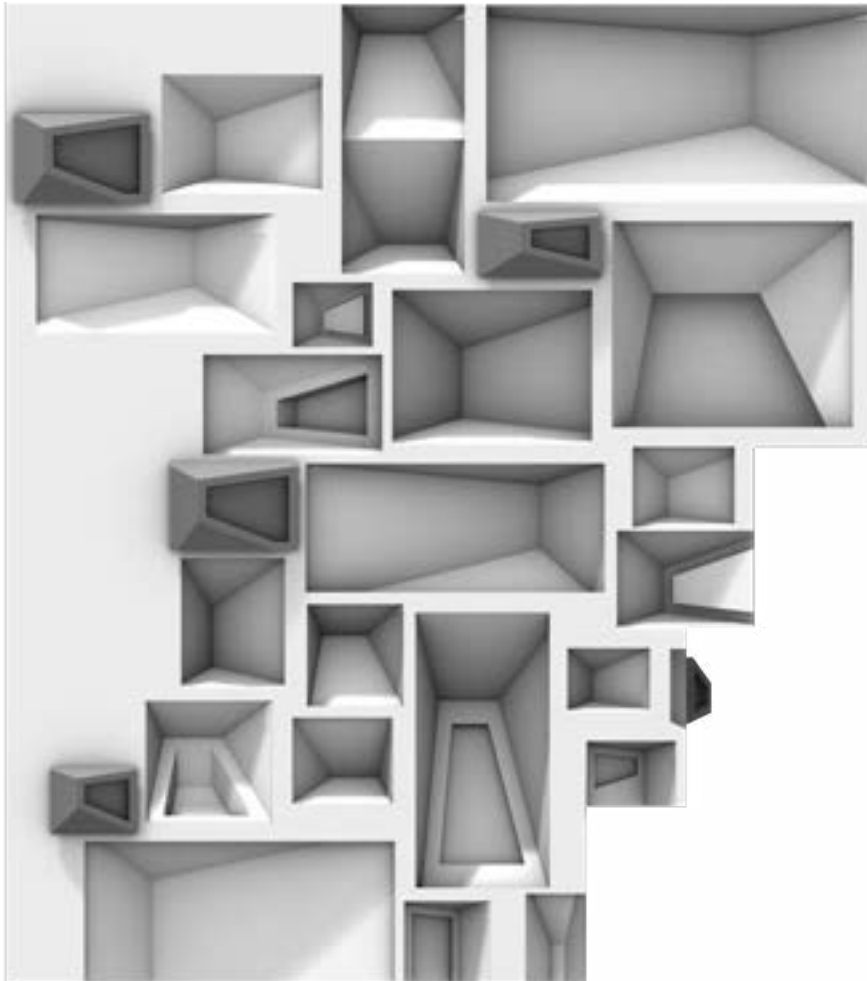
An imersive experience of The Met Breuer Facade



Razzle dazzle incorporation on facade



The Met Breuer facade and views





THANK YOU