

**POLITECNICO  
MILANO 1863**

MSc Thesis in Architecture Built Environment Interiors  
Politecnico di Milano a.y. 2024-2025  
School of Architecture Urban Planning Construction Engineering  
Supervisor: Professor Jacopo Leveratto

# **(De) CONSTRUCTIVE VALORIZATION**

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# Concept

Building Typology: Cultural and participatory center

Concept: Valorizing a construction site to allow the immediate community to take ownership of their assembling space.

This thesis investigates how architecture can create value in places where it has been lost or overlooked. It operates simultaneously at the scale of the site by reactivating abandoned land, and at the scale of materials by reclaiming elements typically dismissed as waste. In doing so, it challenges the dominant take-make-waste model that treats buildings as disposable and leaves behind "ghosts" after their functional life ends.

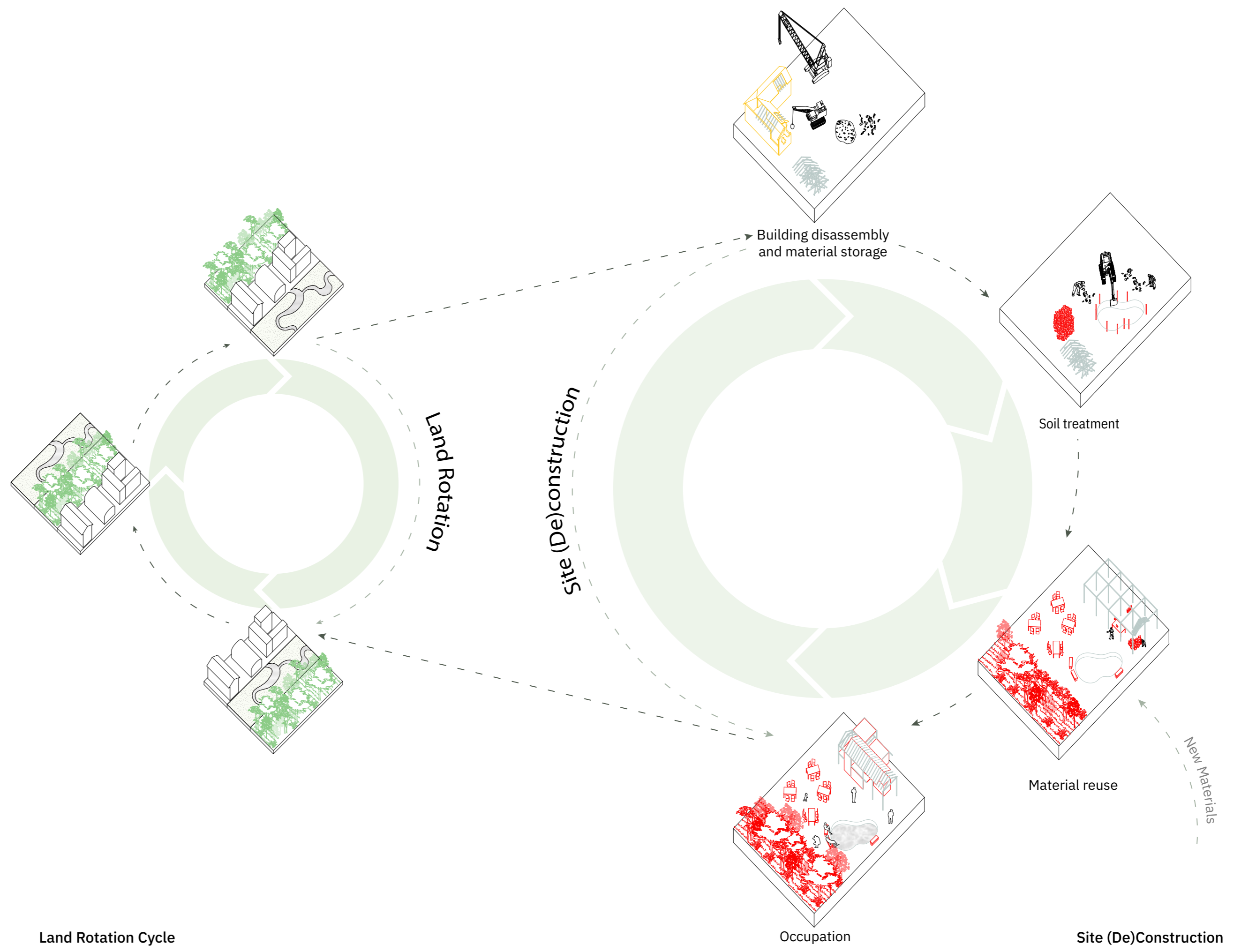
Contemporary architectural practice often reinforces an illusion of permanence, prioritizing creation while neglecting the inevitability of deconstruction. This denial results in the careless abandonment of materials. Confronting impermanence is therefore essential if architecture is to respond meaningfully to ecological and cultural realities.

The thesis repositions deconstruction as a central architectural concern. It explores how architecture can acknowledge its temporality both materially—through the reuse and reassembly of components—and immaterially, through shifting cultural value. By embracing cyclical processes of disassembly, reuse, and transformation, the project reframes architectural worth not as fixed in built mass but as embedded in ongoing processes.

To ground these principles, the project proposes a cultural and participatory centre in Corvetto as a pilot for reactivating abandoned sites in Milan. Two systems structure the design:

1. A **land rotation system** of three zones—a forest, a park, and a building—whose uses cyclically exchange to maintain soil health and assert equal territorial rights.
2. A cyclical **site (de)construction system** of four steps that recognizes the inherent value of all site elements, natural and artificial, ensuring their continuous reuse.

Together, these strategies articulate an architecture that accepts its mortality, foregrounds circularity, and invites the community to participate in the ongoing reassembly of their environment.



# Site Hunting



Criteria Design Flexibility →

• **RESTORE:**  
Applied to buildings that, while not officially historic, contribute architectural value to their surroundings. These will be preserved and reinforced as needed to maintain their original character.

**A** Restore ○  
Reuse ○  
Recycle ○

**B** Restore ×  
Reuse ×  
Recycle ○

**C** Restore ○  
Reuse ×  
Recycle ○

**D** Restore ×  
Reuse ×  
Recycle ○

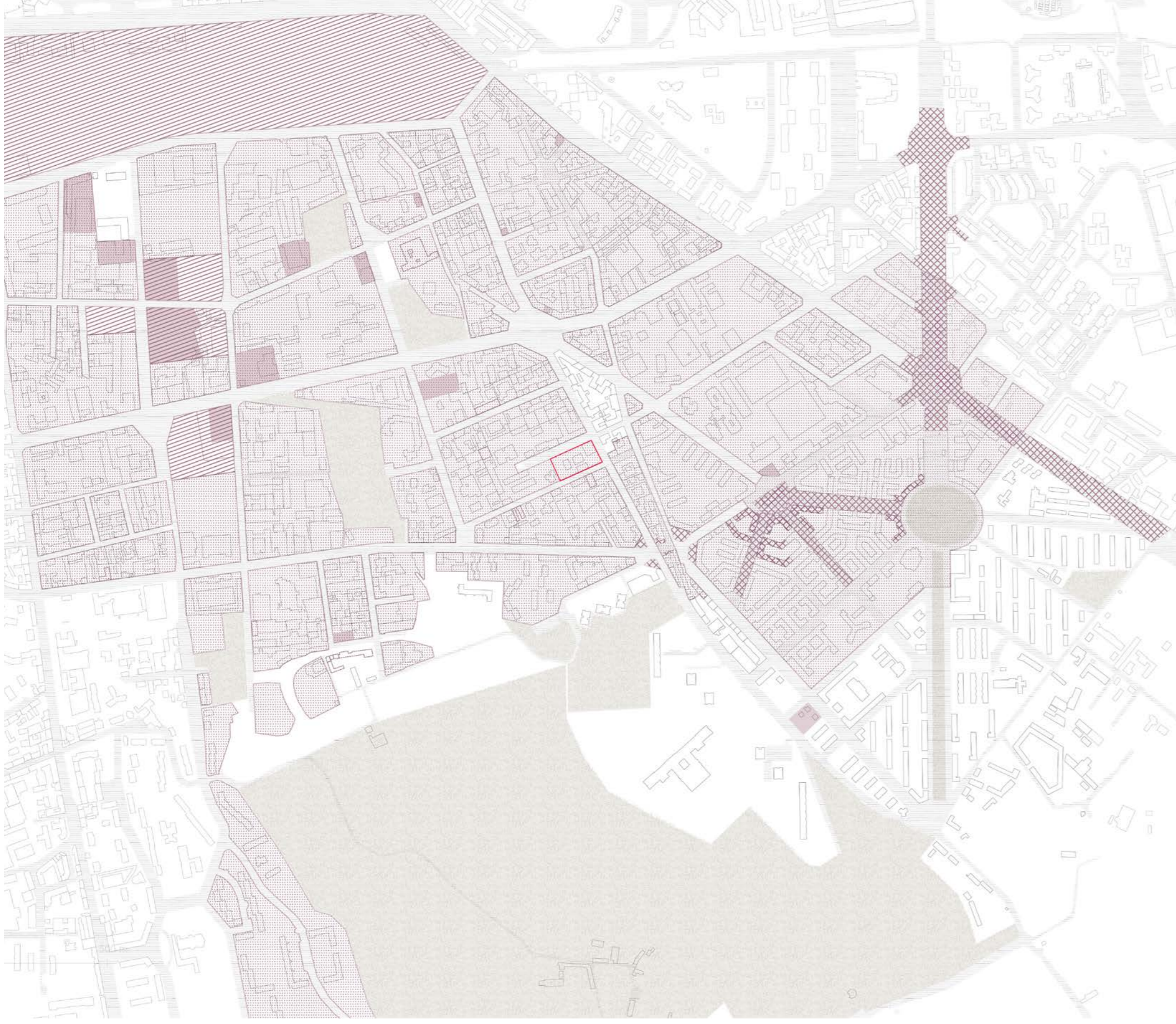
**E** Restore ×  
Reuse ×  
Recycle ×

• **REUSE:**  
The existing shell and/or structure of the building is reusable, considering its value and condition. Therefore, they will be retained and adapted into a new function.

• **RECYCLE:**  
Buildings with unusable structures but salvagable materials will be dismantled, and components will be processed into raw materials for new construction - resulting in the highest transformation.



# Context Analysis - Corvetto



■ Constructed or renovated after 2020  
 ■ Abandoned Sites  
 ■ Privately funded urban renewal  
 ■ Publicly funded urban renewal  
 ■ PGT Regeneration ART. 15  
 (R10 Carta del Consumo di Scuolo)

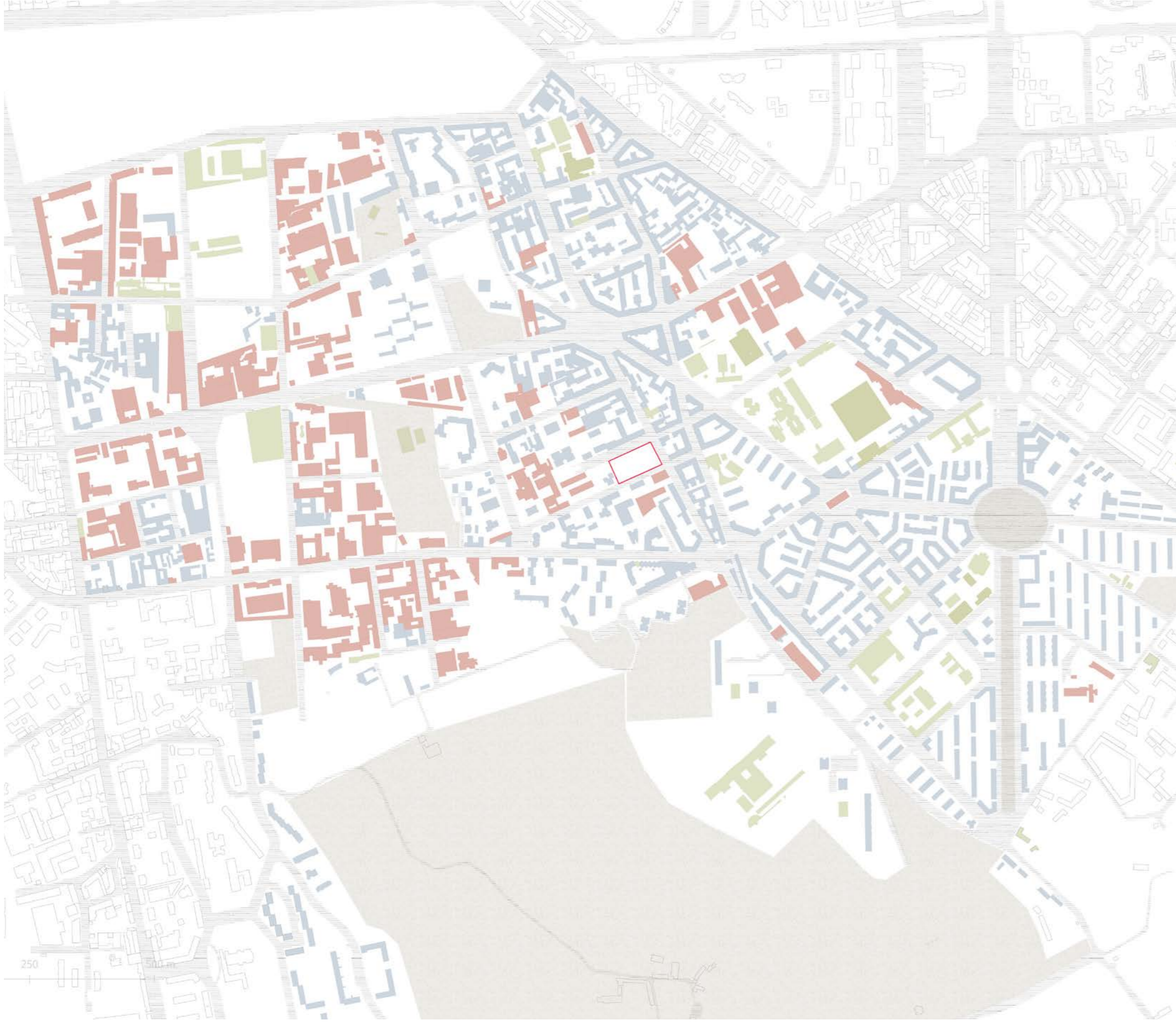
Urban Development



**Building Occupancy Ratio**  
 ■ Low  
 ■ High  
 ■ Very High  
 ■ Highest

**Land Occupancy Ratio**  
 ■ Low  
 ■ High  
 ■ Very High

Occupancy Ratio



■ Business Establishments  
 ■ Residential  
 ■ Community Infrastructure

Program Typologies

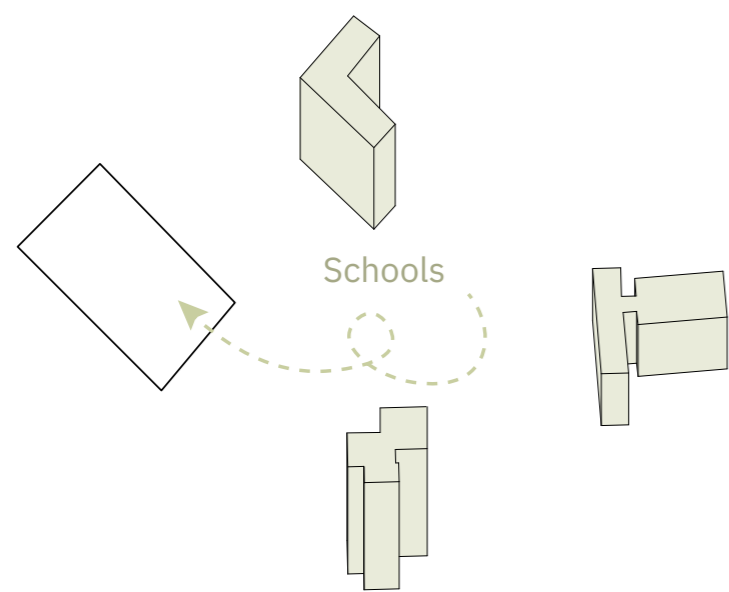


■ Educational Infrastructure 1-10 yrs old  
 ■ Educational Infrastructure 11-18 yrs old  
 ■ Cultural Center  
 ■ Others  
 ■ Associations without tutoring support  
 ■ Associations with tutoring support

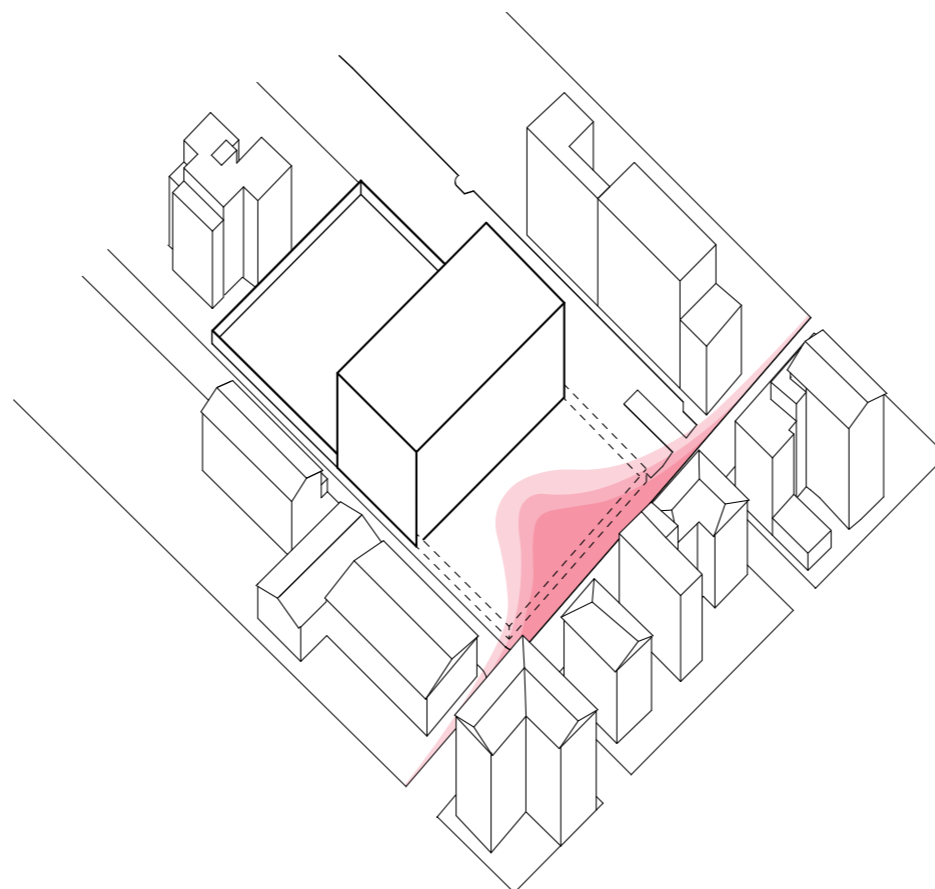
1. ISAD - Higher Institute of Architecture and Design
2. Fondazione ENAC Lombardia
3. Orientamento e Formazione Srl
4. Vocational School 'Galdus'
5. ITSOS Albe Steiner
6. Secondary school "Lombardini"
7. ICS Milano Internationl School
8. 6 Secondary school "Lombardini"
9. Primary School "Marcello Candia"
10. Primary school "Fabio Filzi"

Community Infrastructure

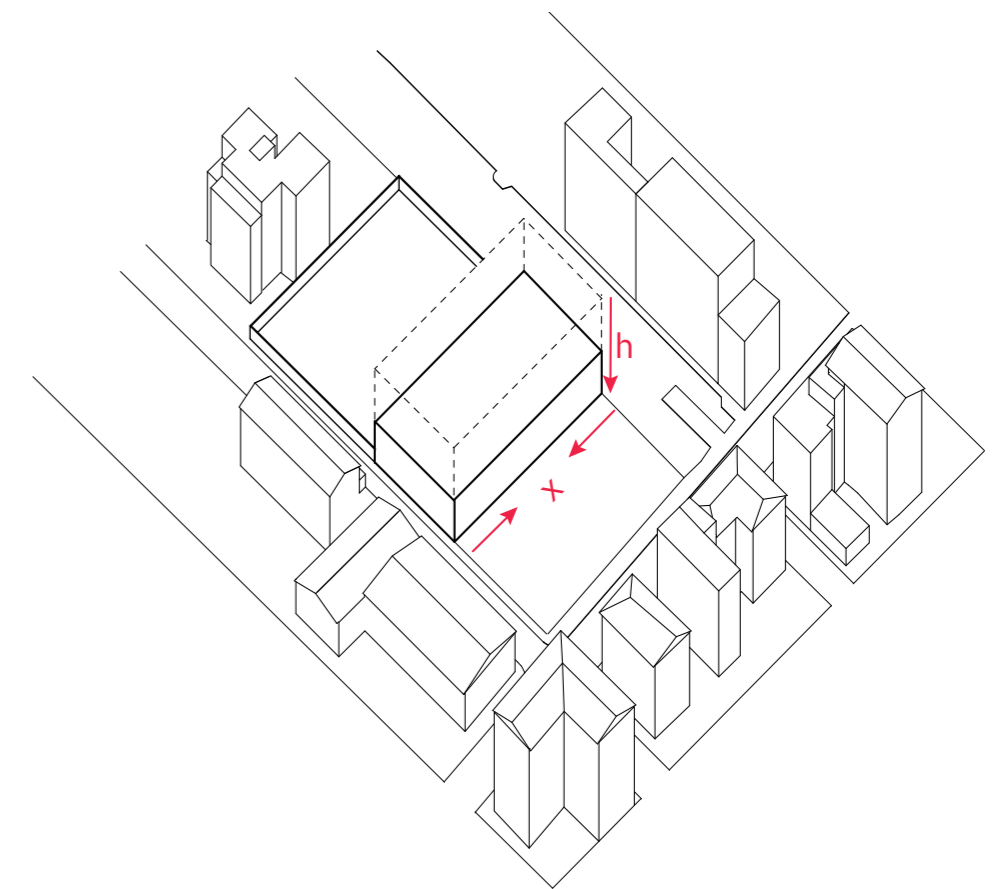
## Context Analysis Conclusion



01 Program Typologies

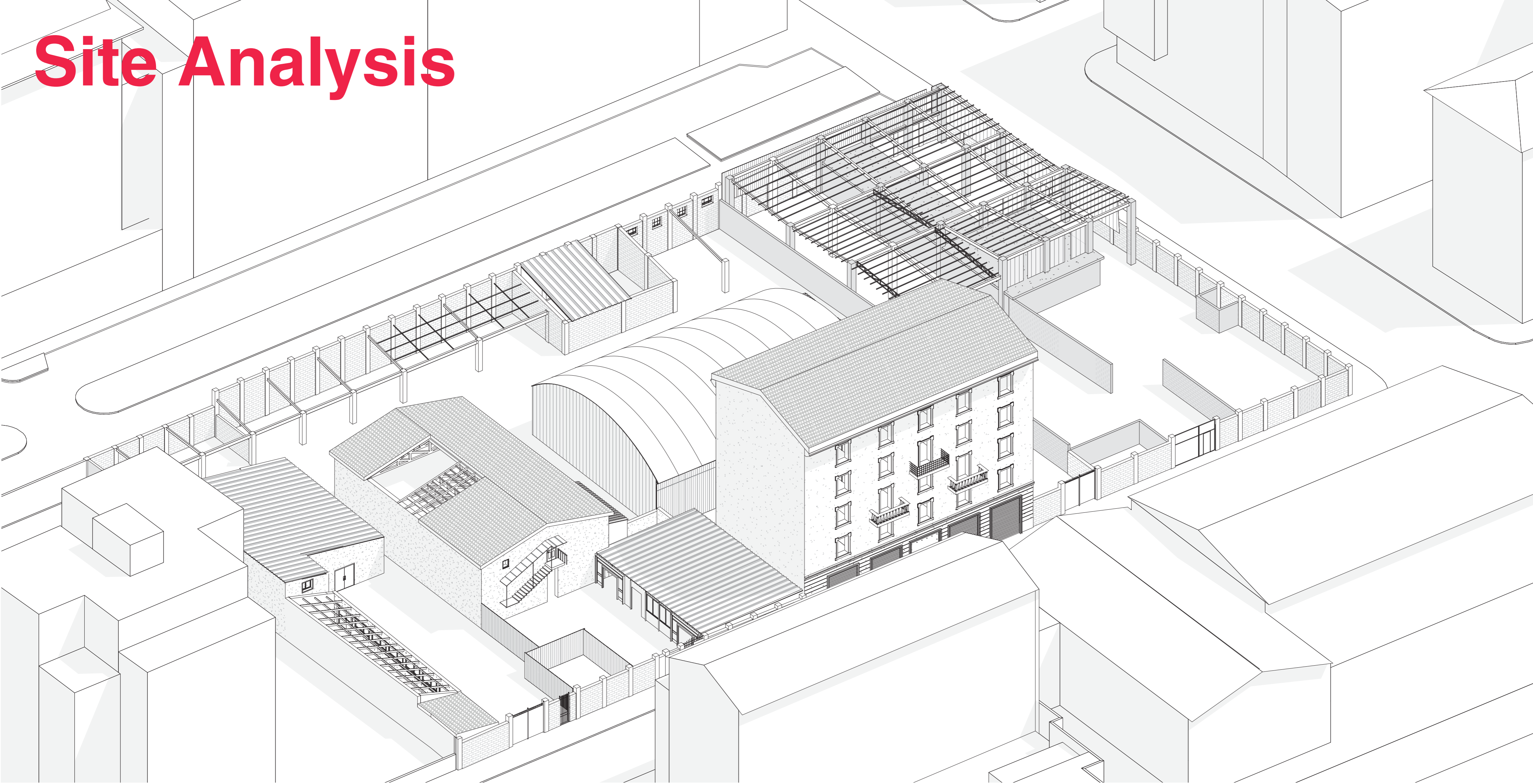


02 Program Typologies



03 Program Typologies

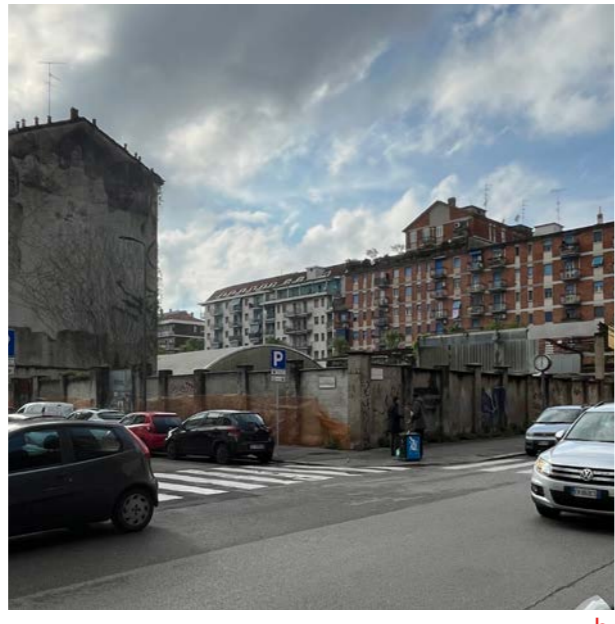
# Site Analysis



Existing Birdseye View



a



b



c



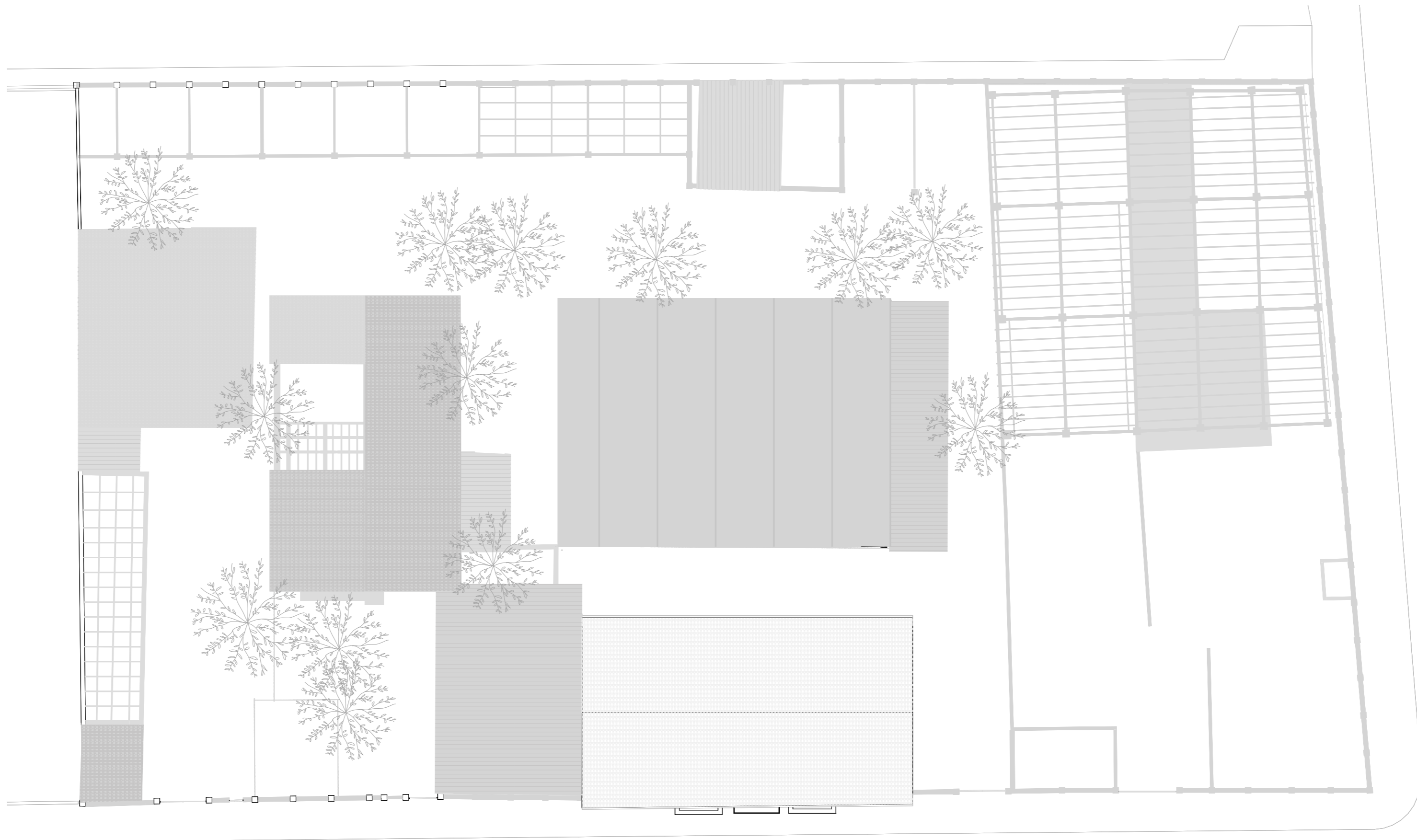
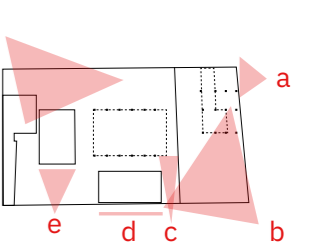
d



e



f



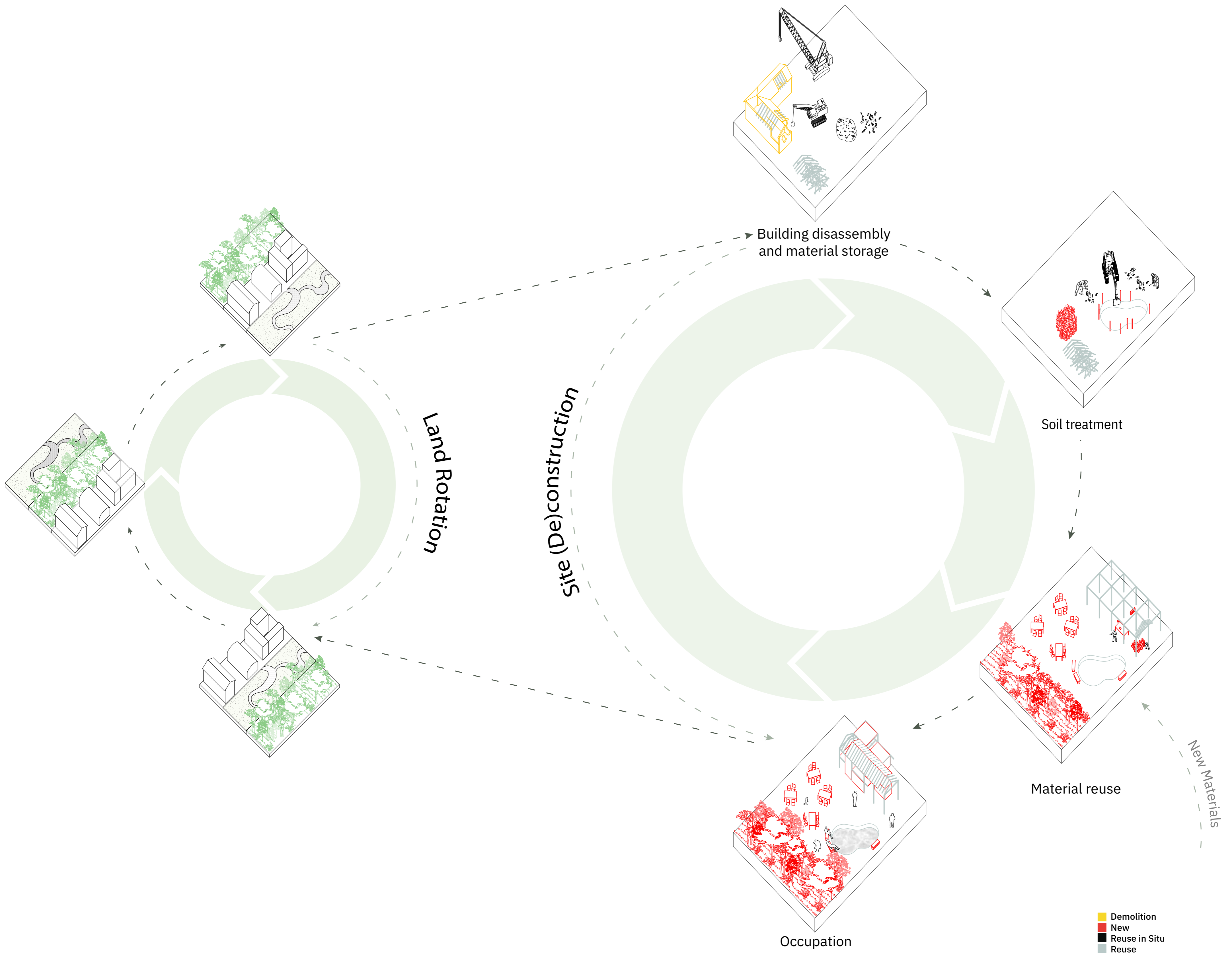
1:250  
Existing Site Plan



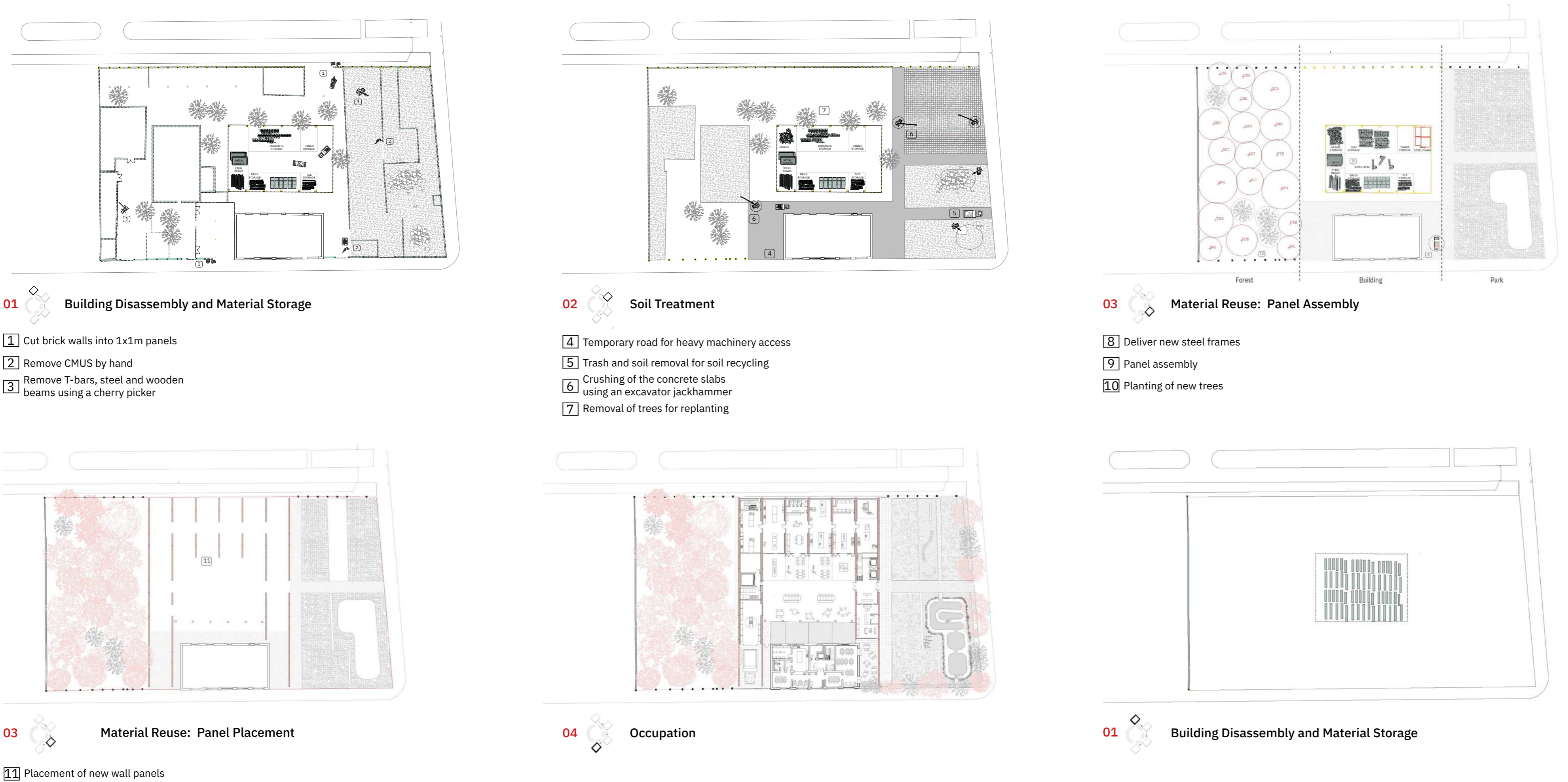
1:250  
Existing South Elevation

# Site (De)Construction

## Land Rotation Diagram

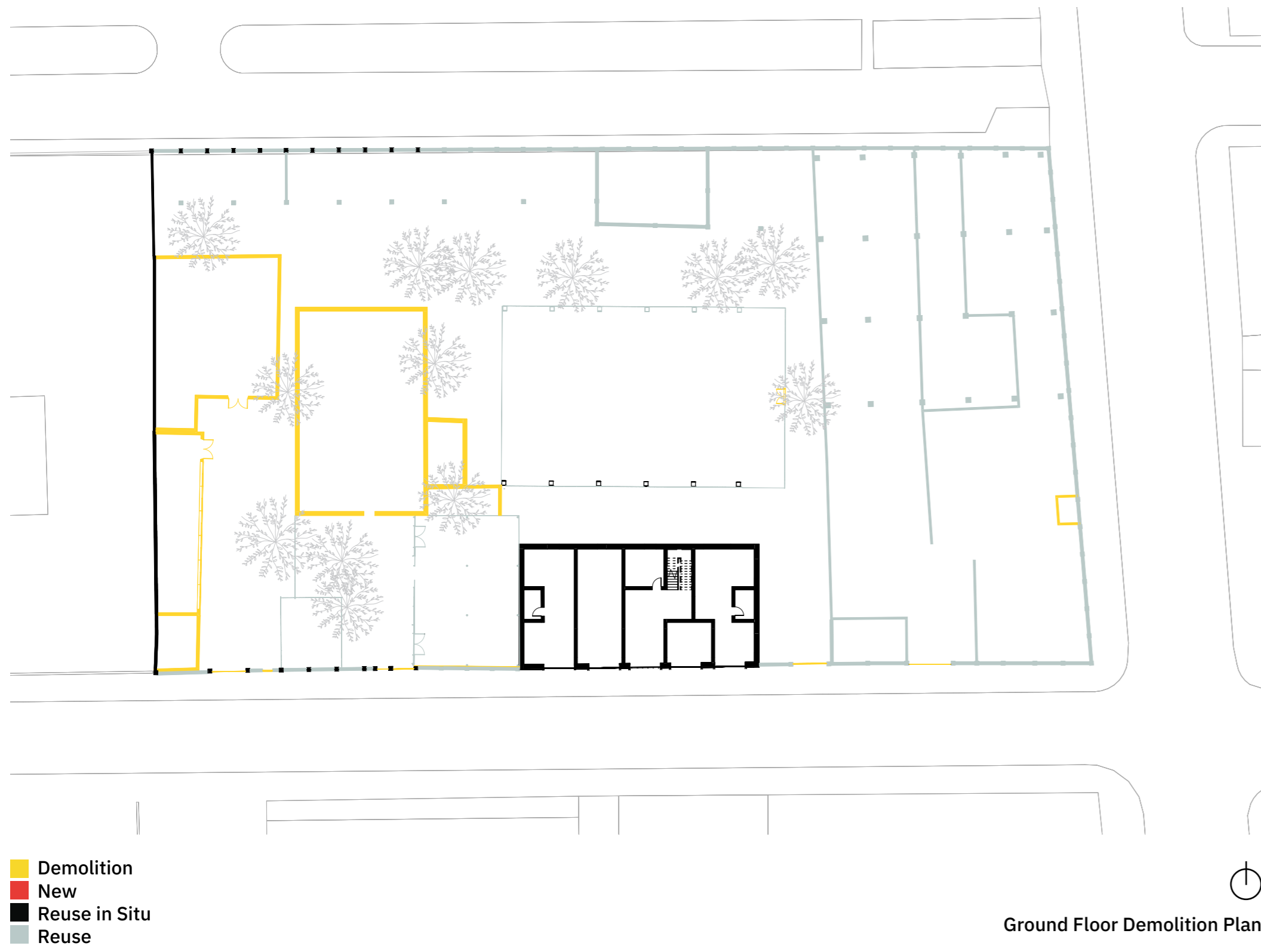


## Site (De)Construction Intervention

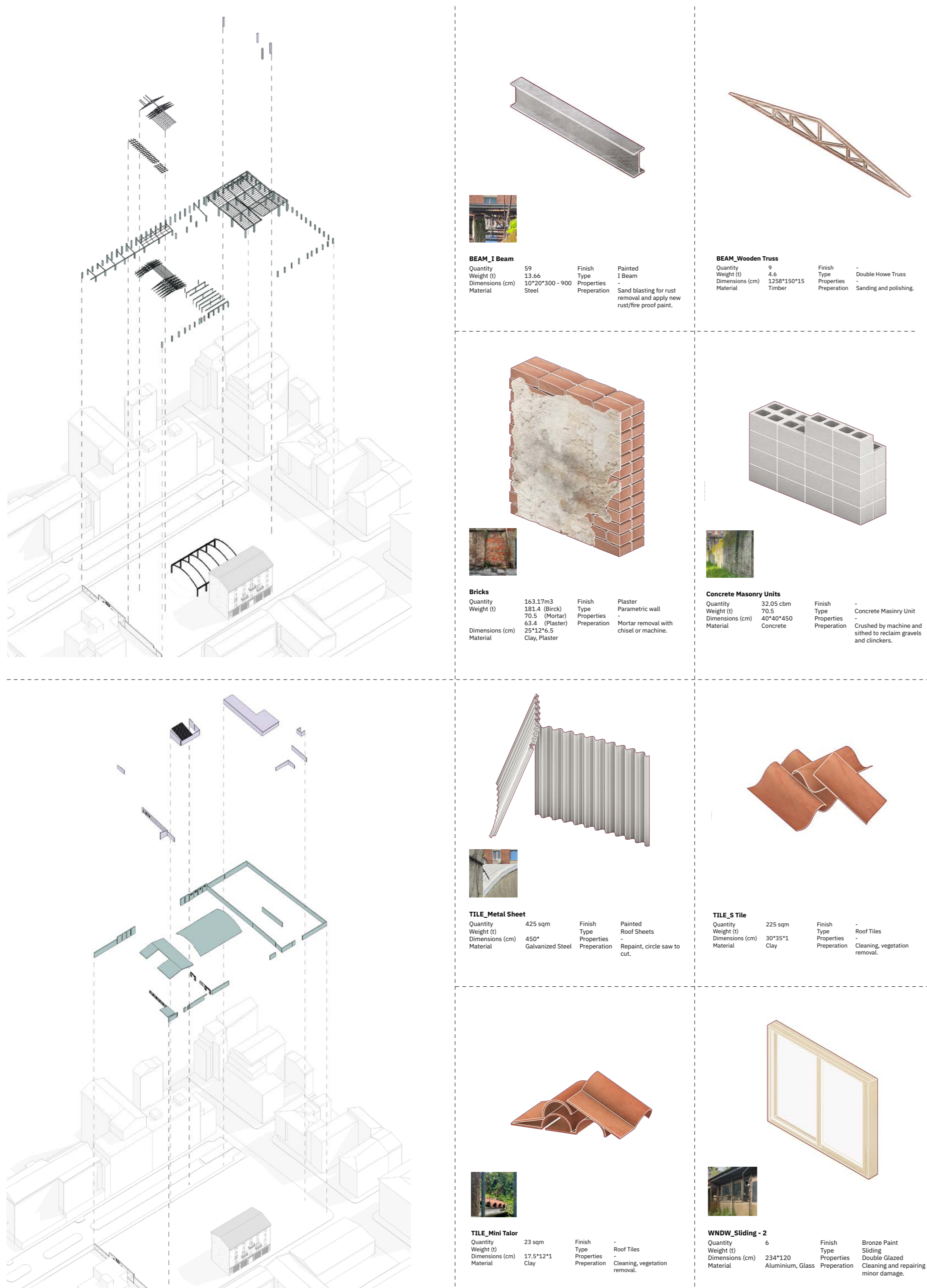


# 1. Building Disassembly and Material Storage

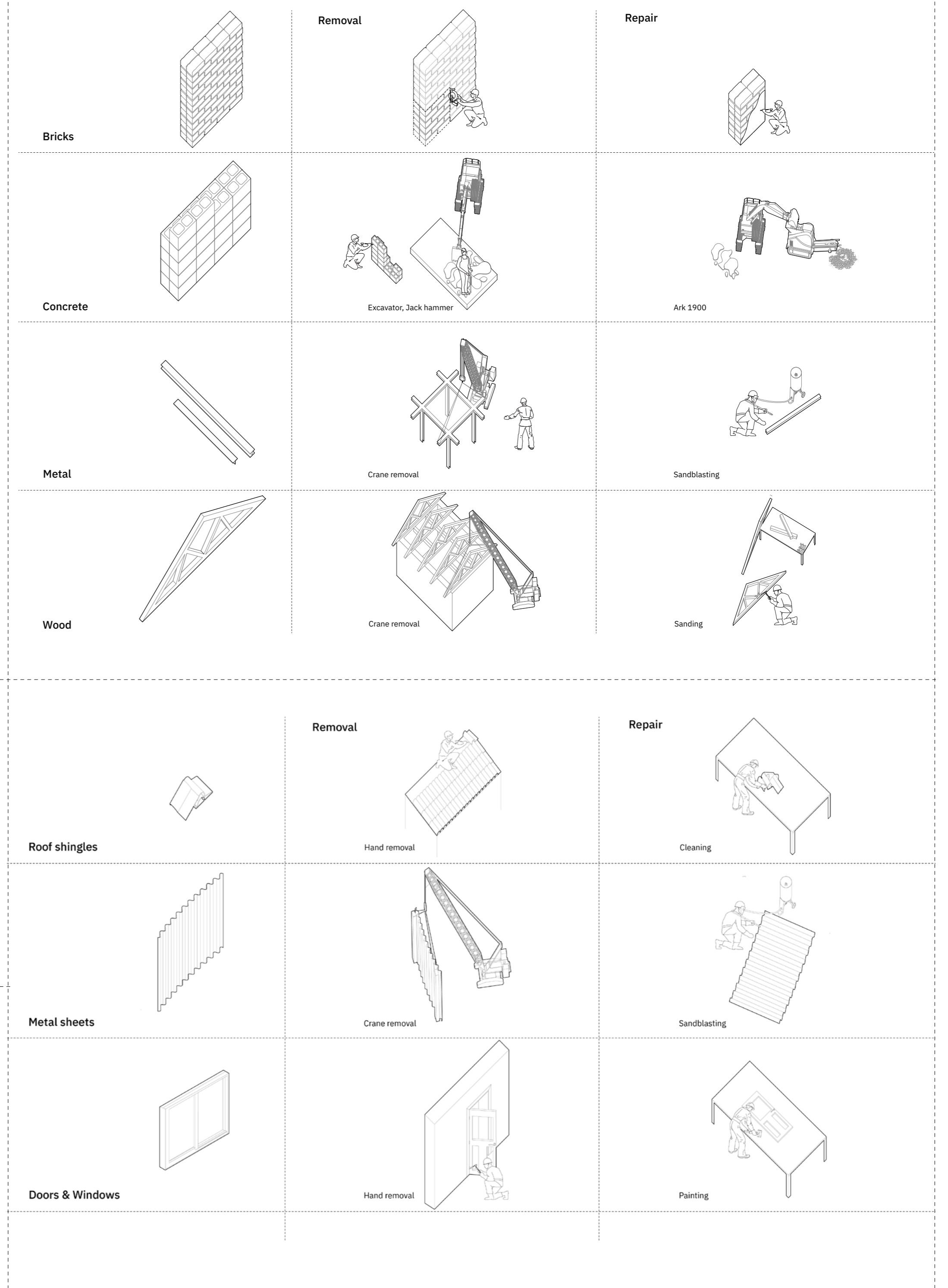
## Demolition and Reuse Plans



## On-Site Reclaimed Material



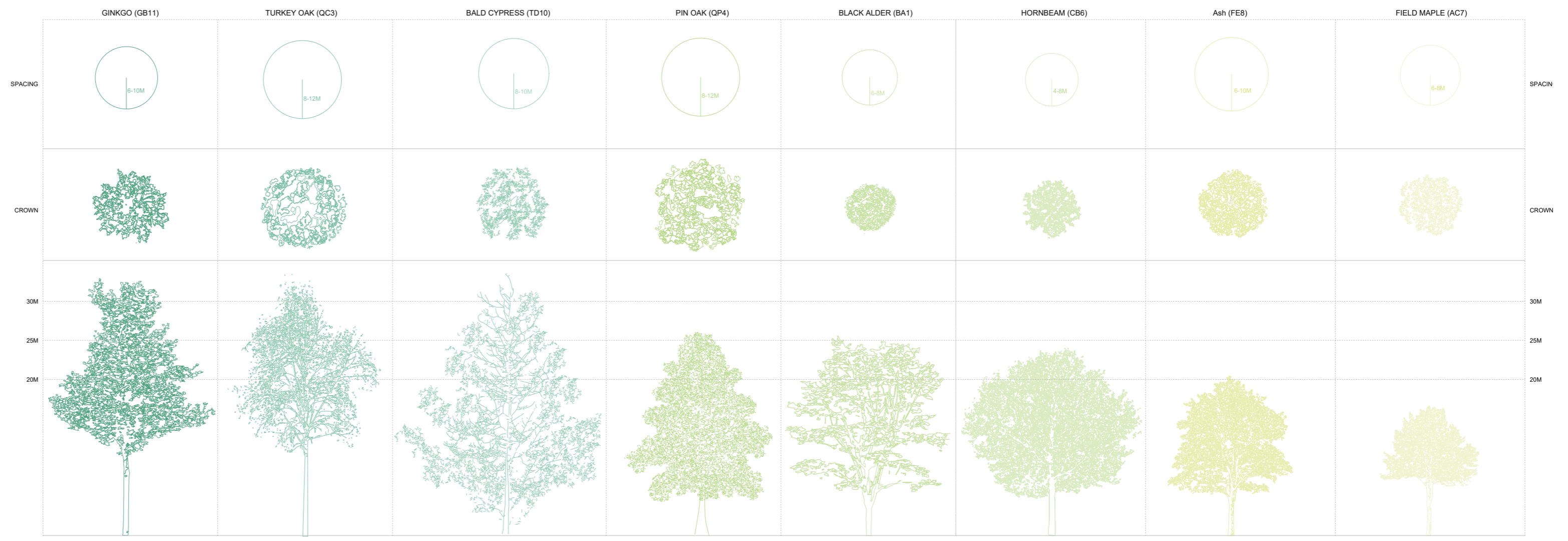
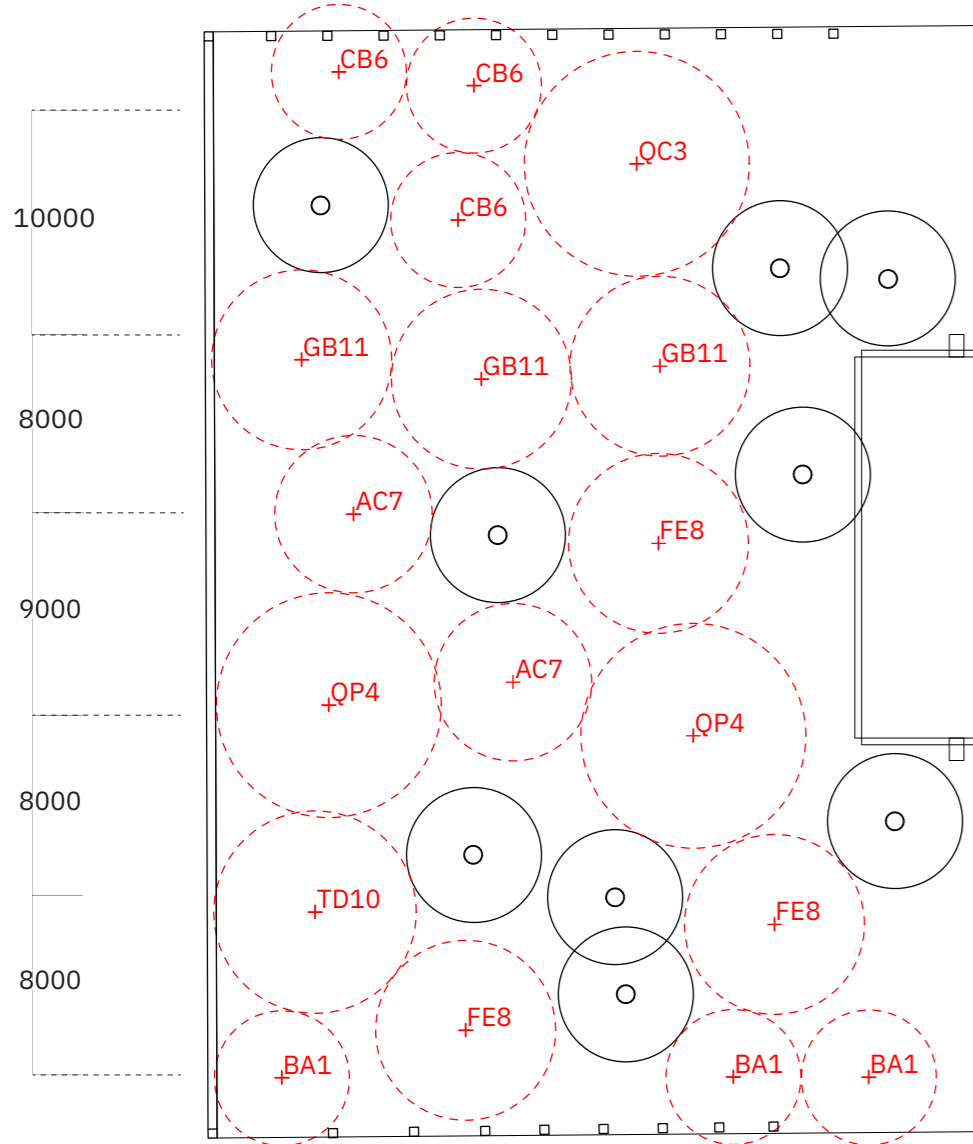
## Material Removal and Preparation



2.

# Soil Treatment

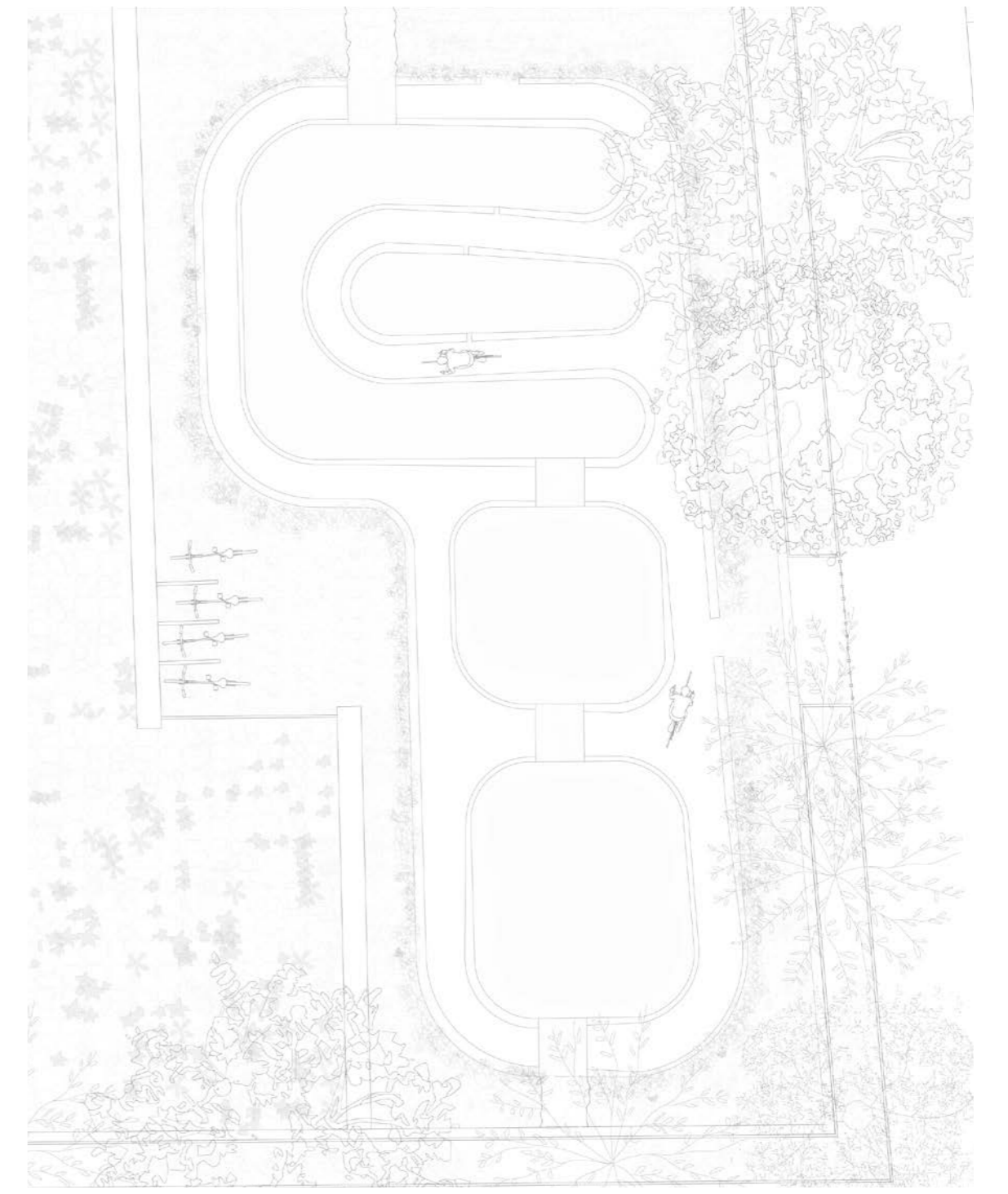
Forest Development



Park Intervention

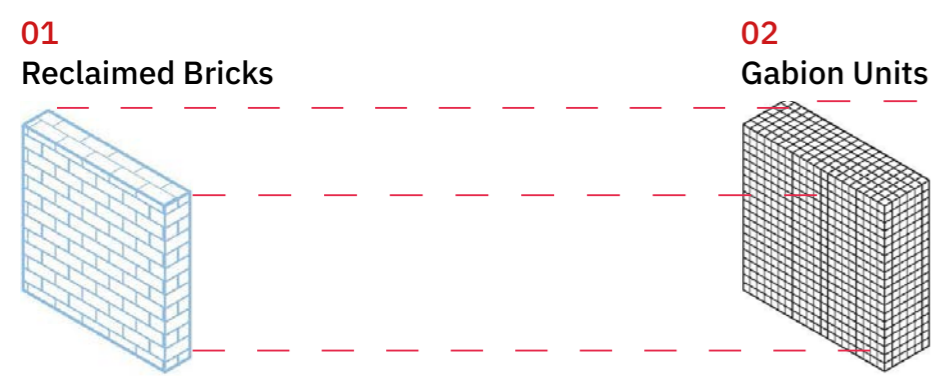


Soil Recycling

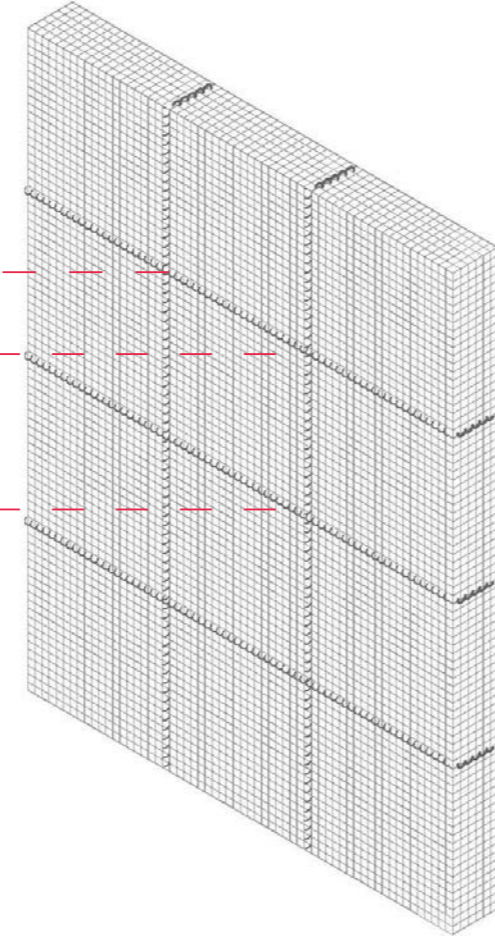


3.

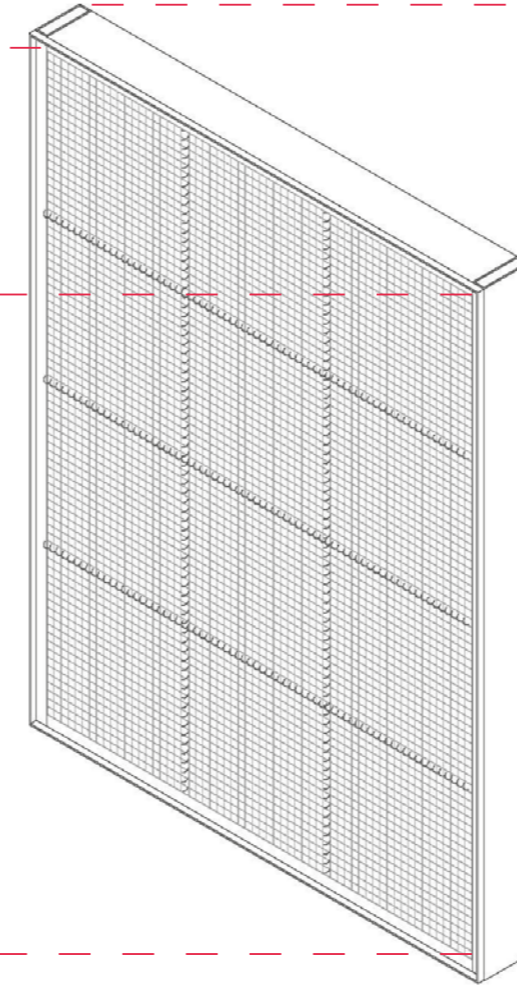
# Material Resue



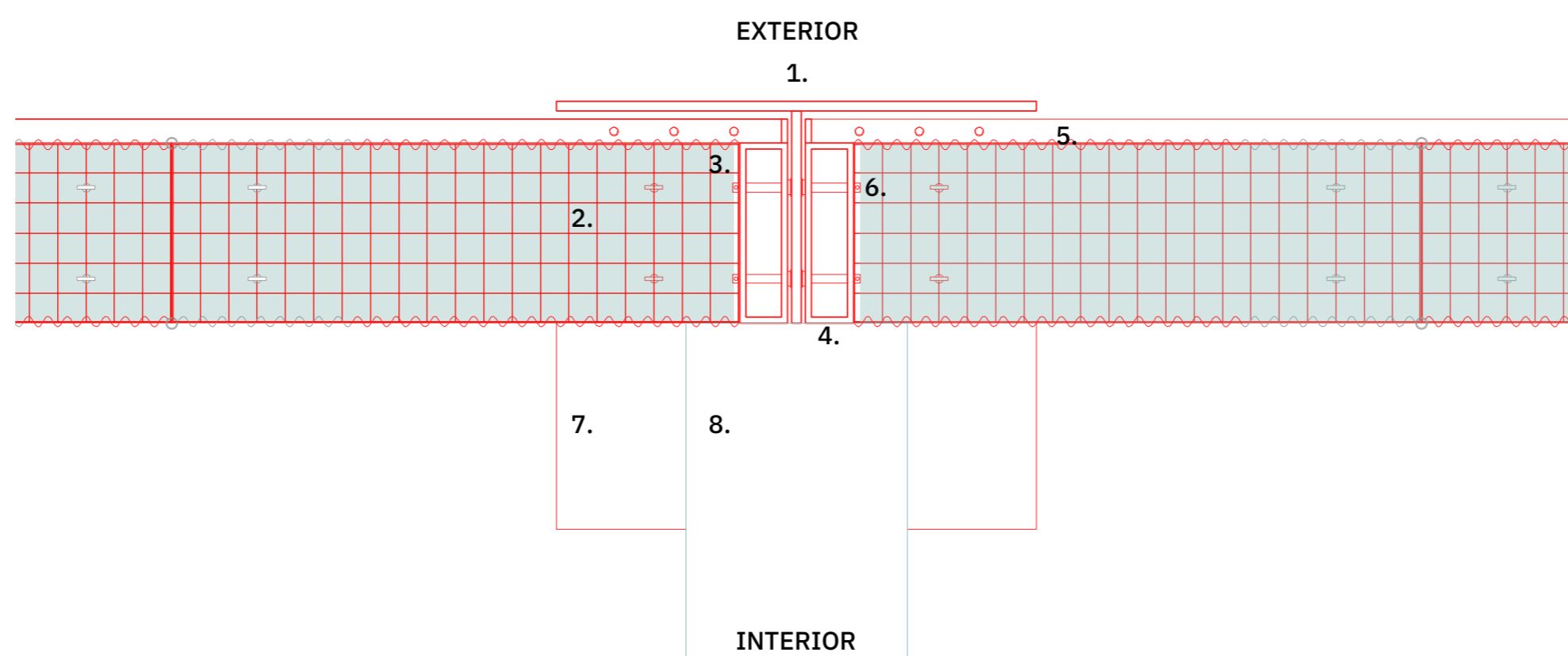
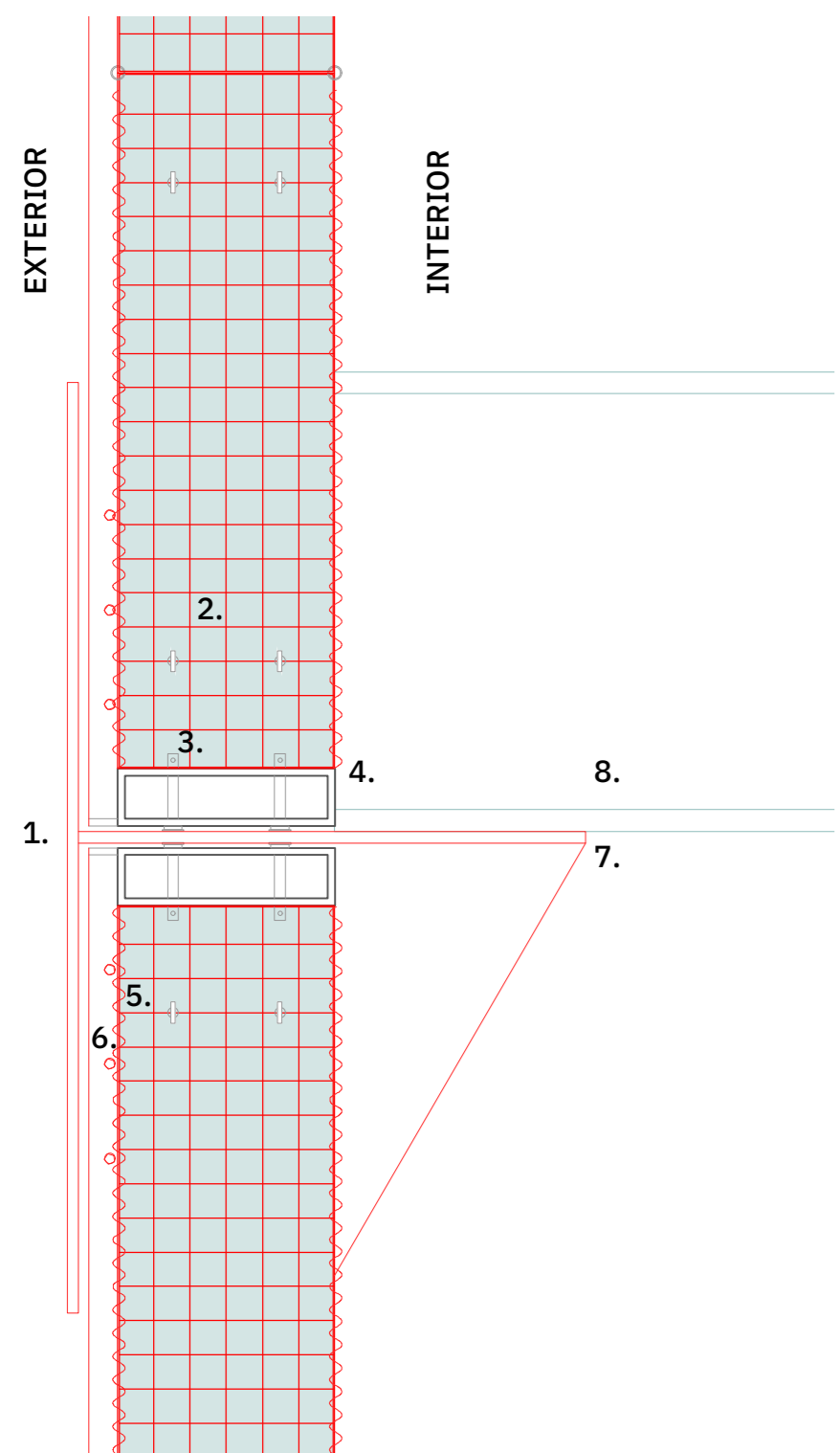
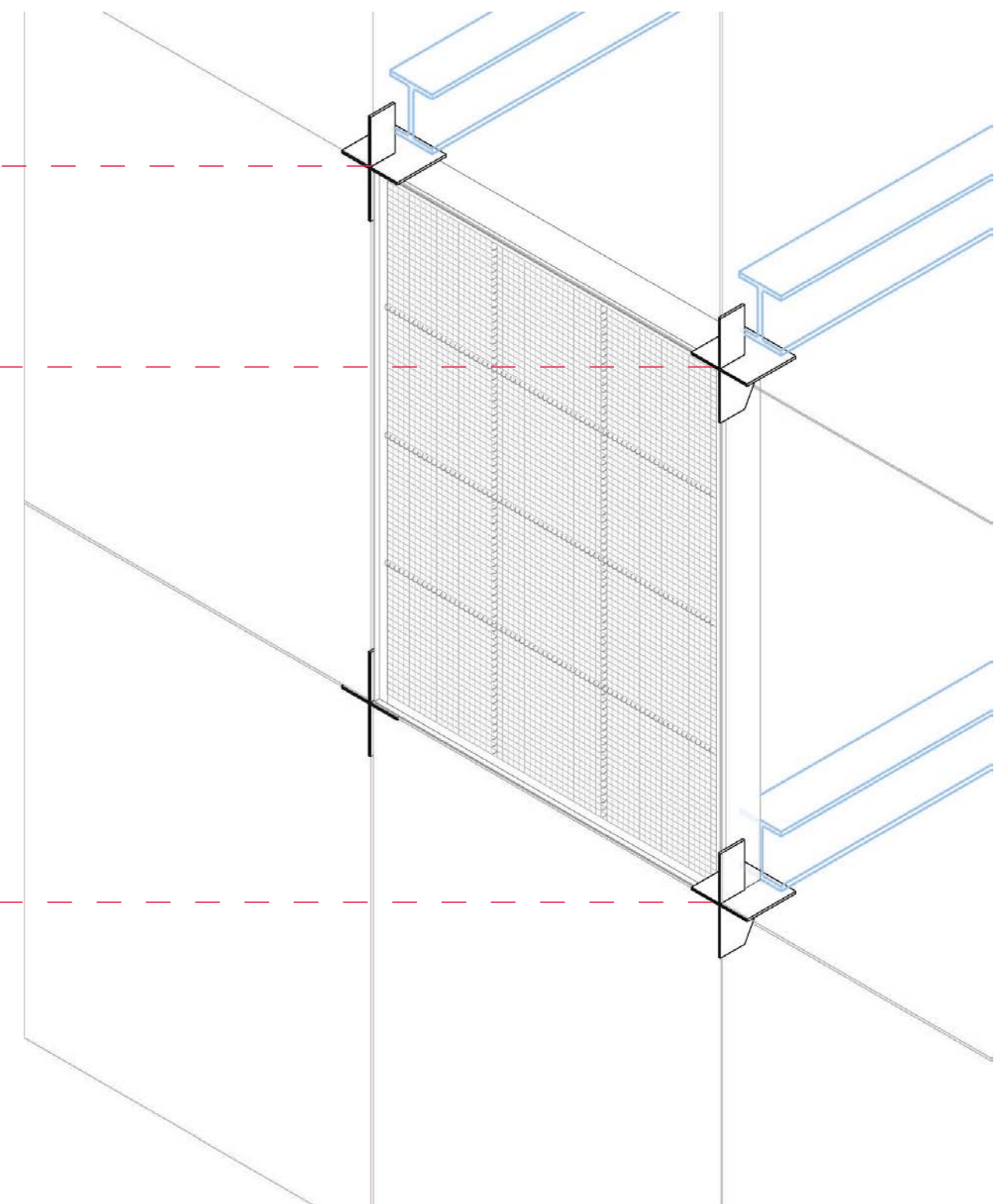
03 Gabion Assembly



04 Panel Construction



05 Building Construction



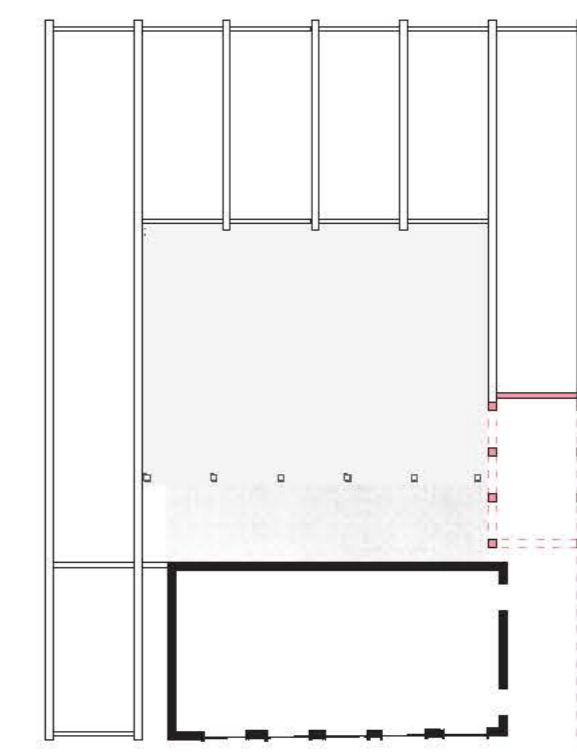
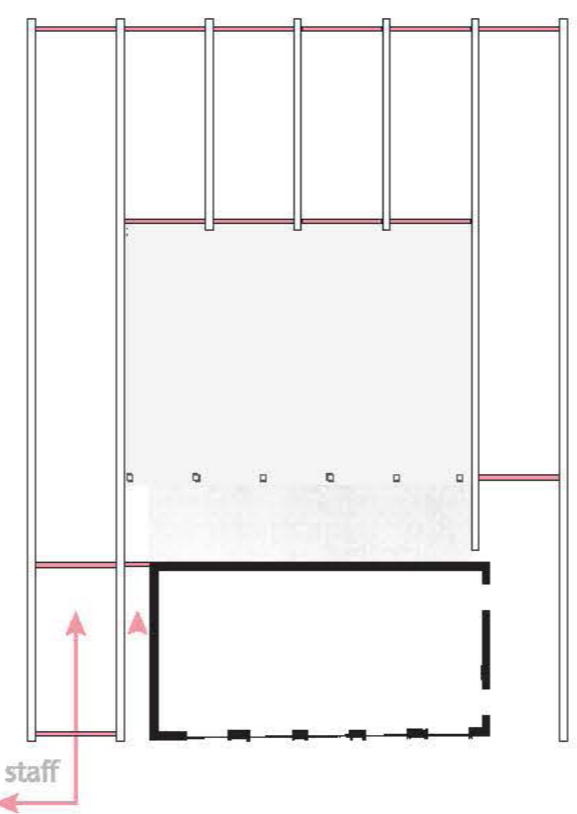
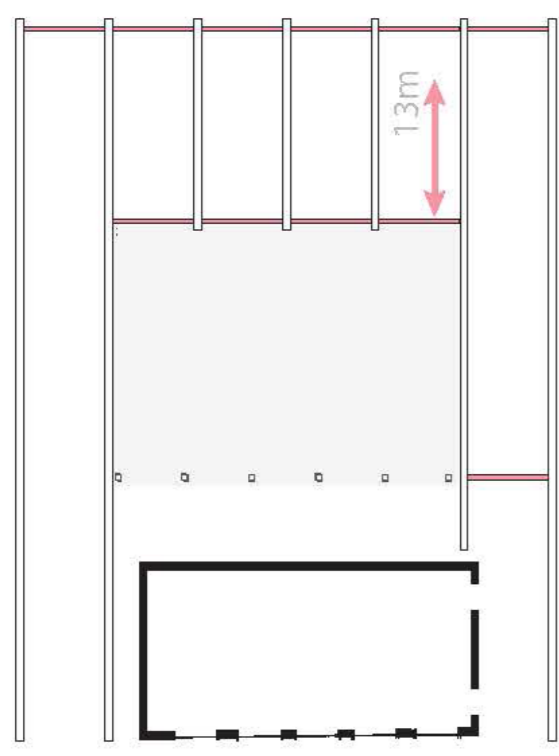
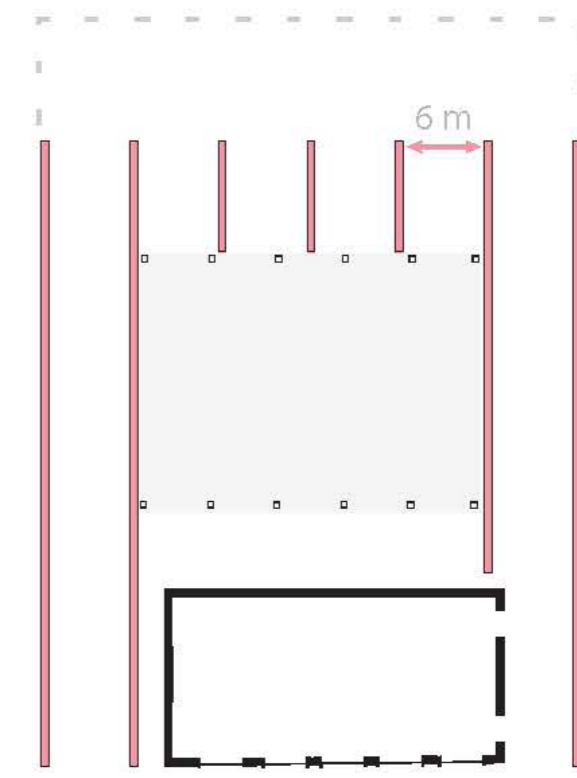
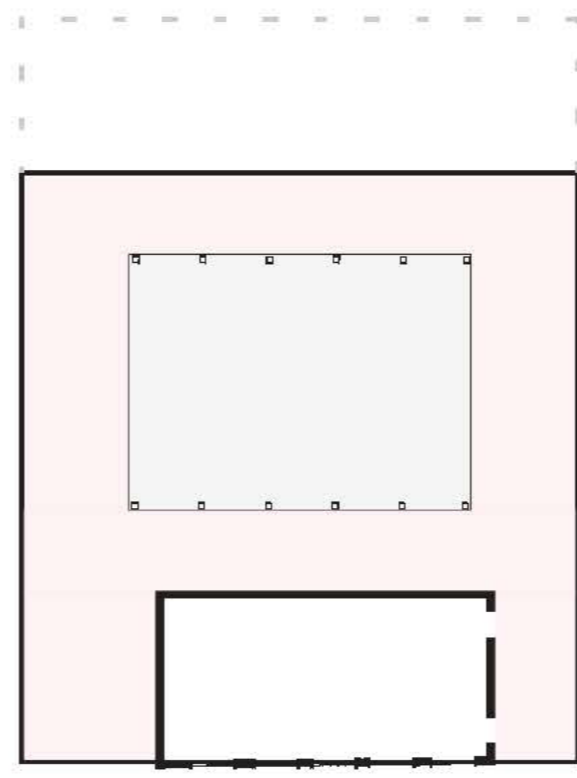
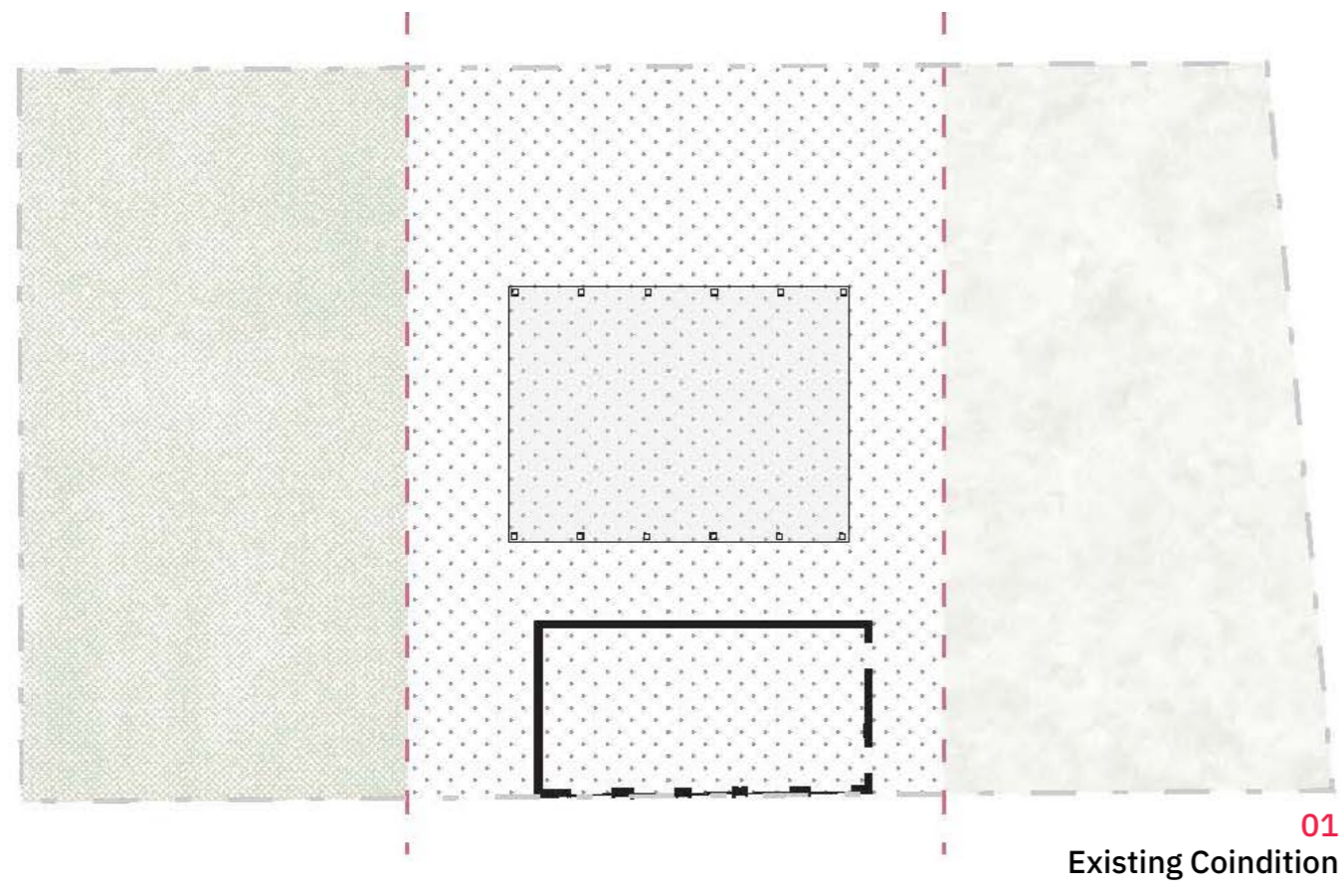
## Panel Detailing

1:20

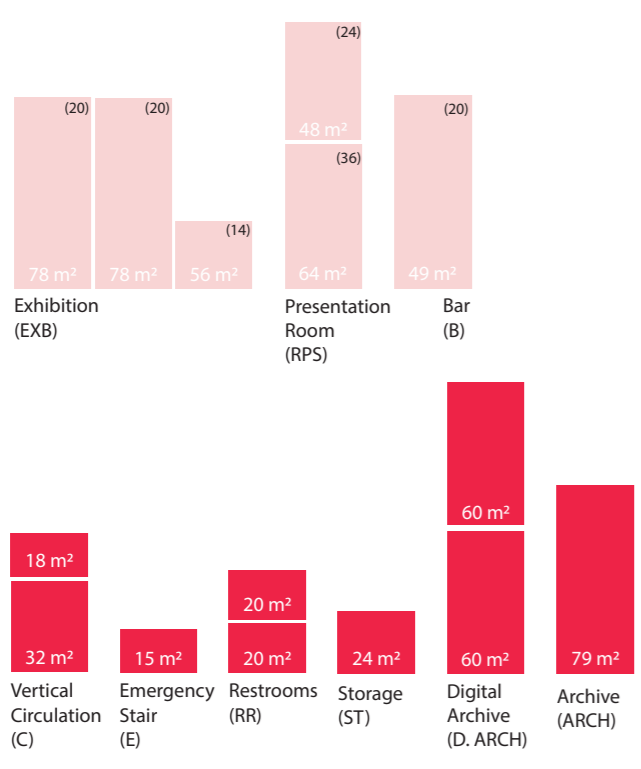
1. Cross joint
2. Gabions caging reclaimed brick
3. Bolts connecting gabions to steel frame
4. Steel frame
5. Steel spiral
6. Bolted connection of panels to cross joint
7. Steel plate
8. I-Beam

■ New Material  
■ Reclaimed Material

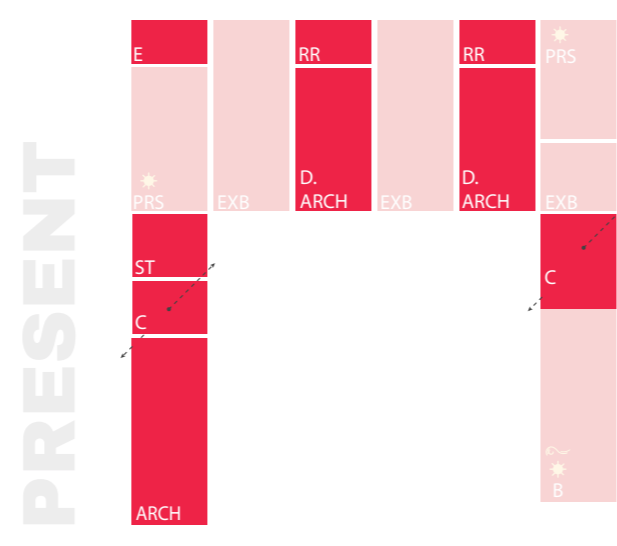
# 4. Occupation



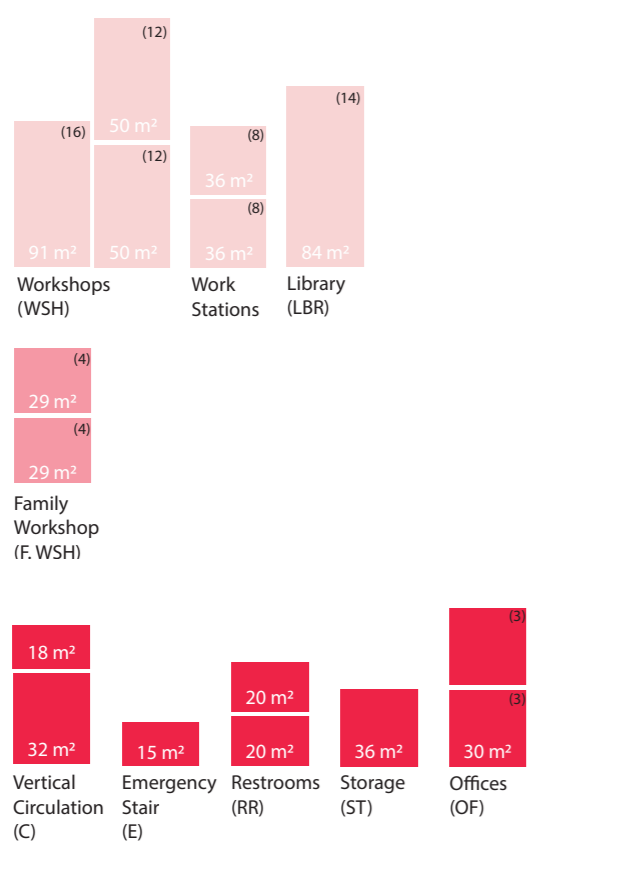
## Level 2



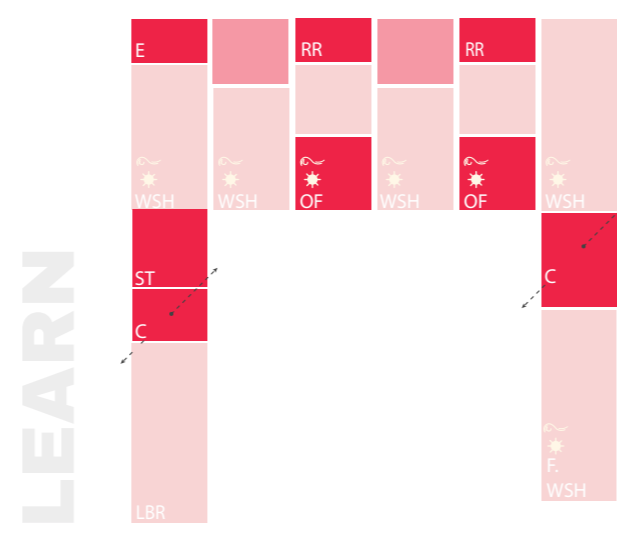
Capacity: 134 People



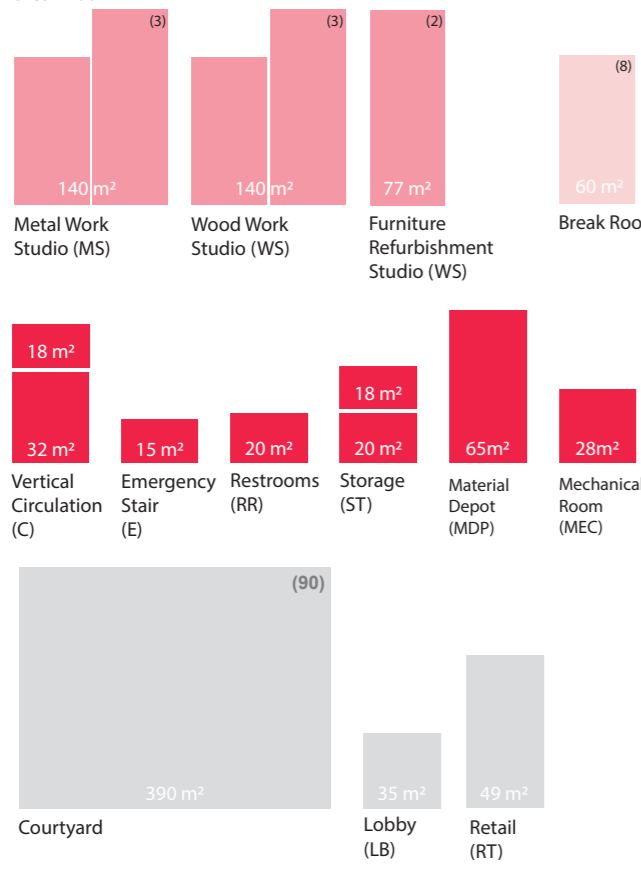
## Level 1



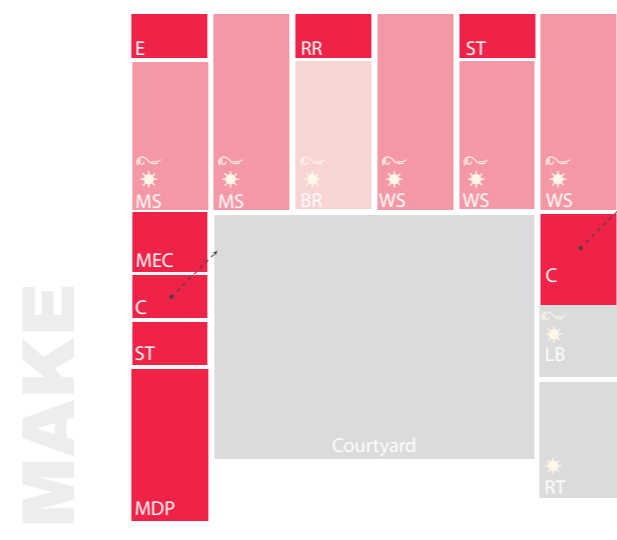
Capacity: 84 People



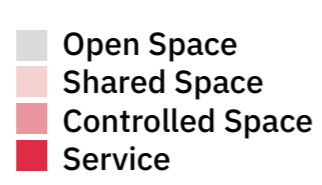
## Ground Floor



Capacity: 16 People (+90)

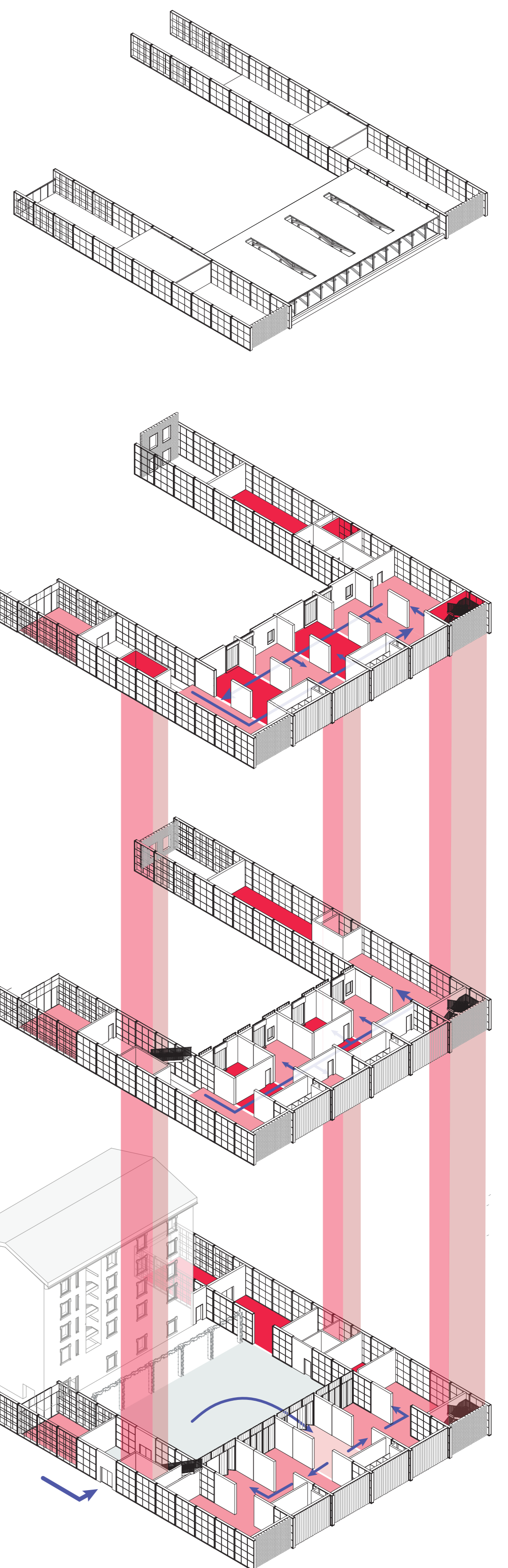


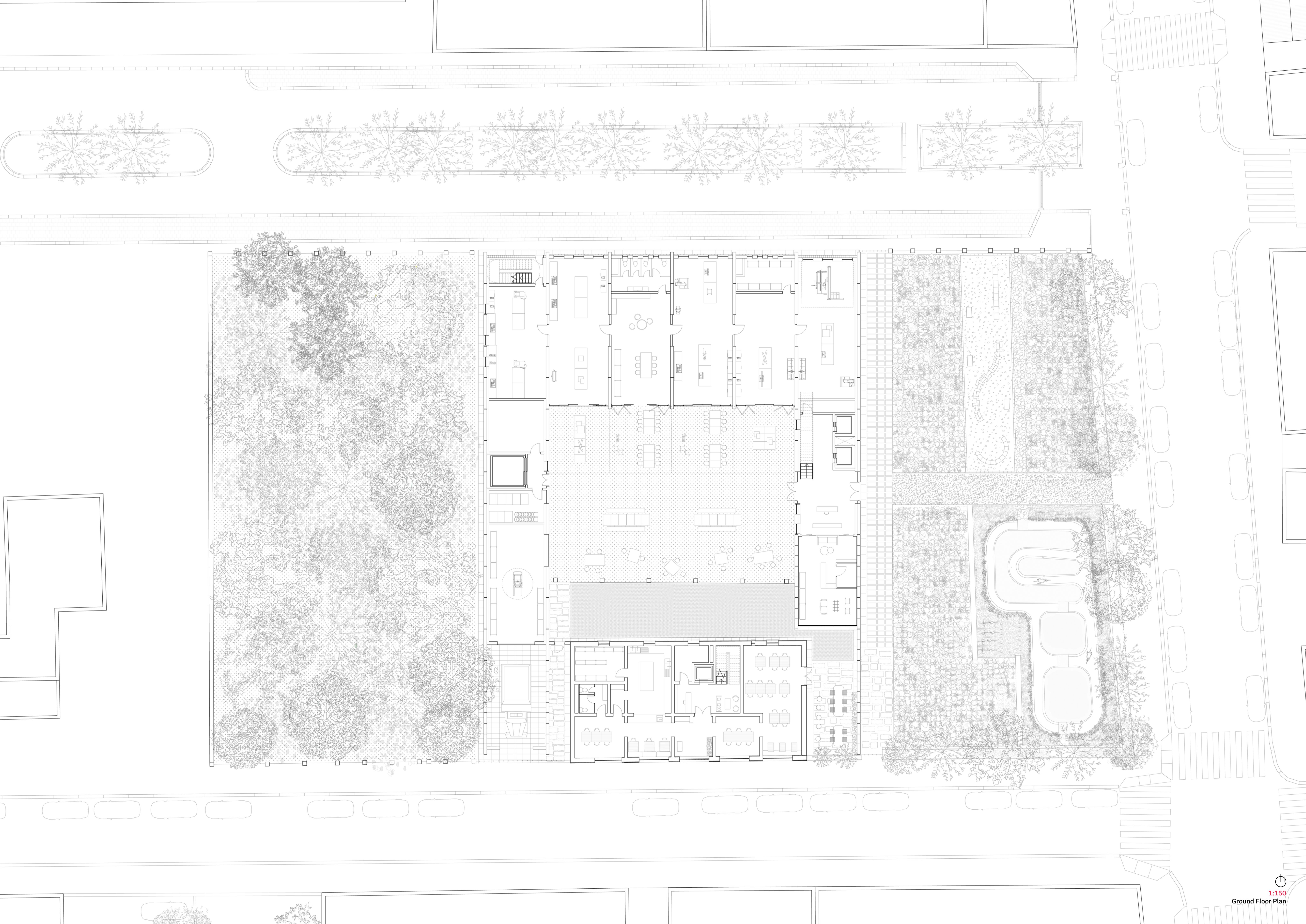
### Program Matrix

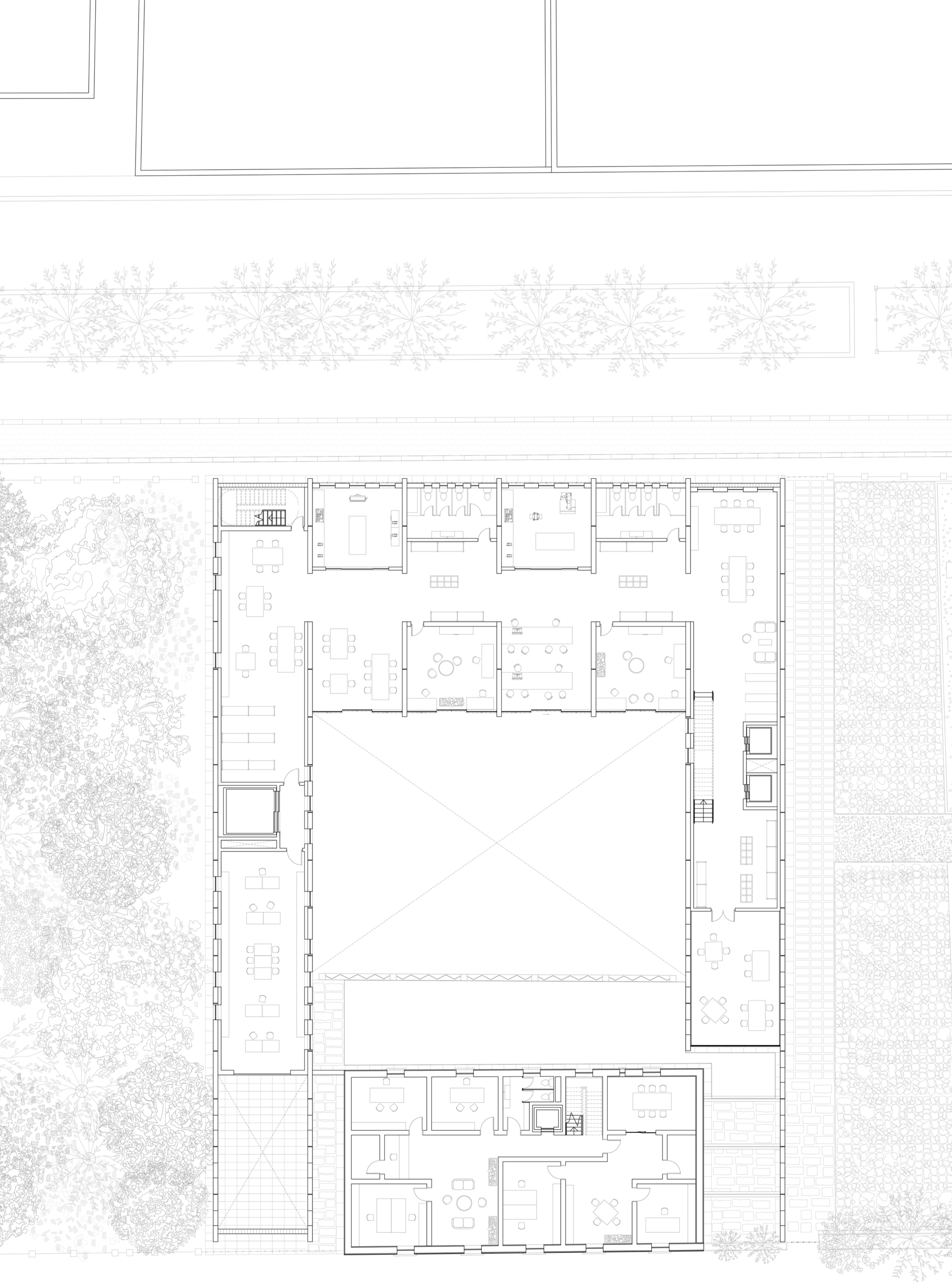


### Organization Logic

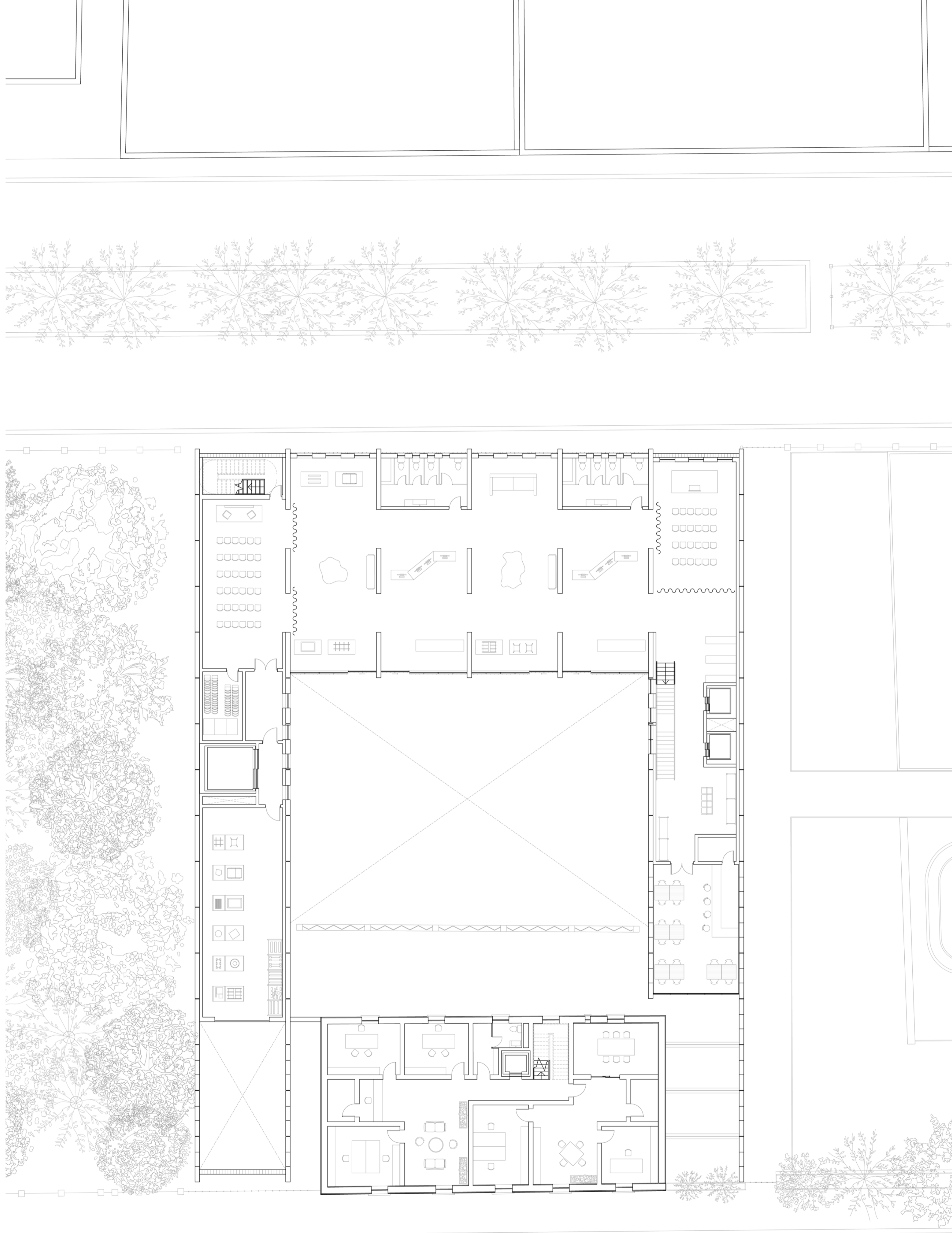
### Circulation Logic







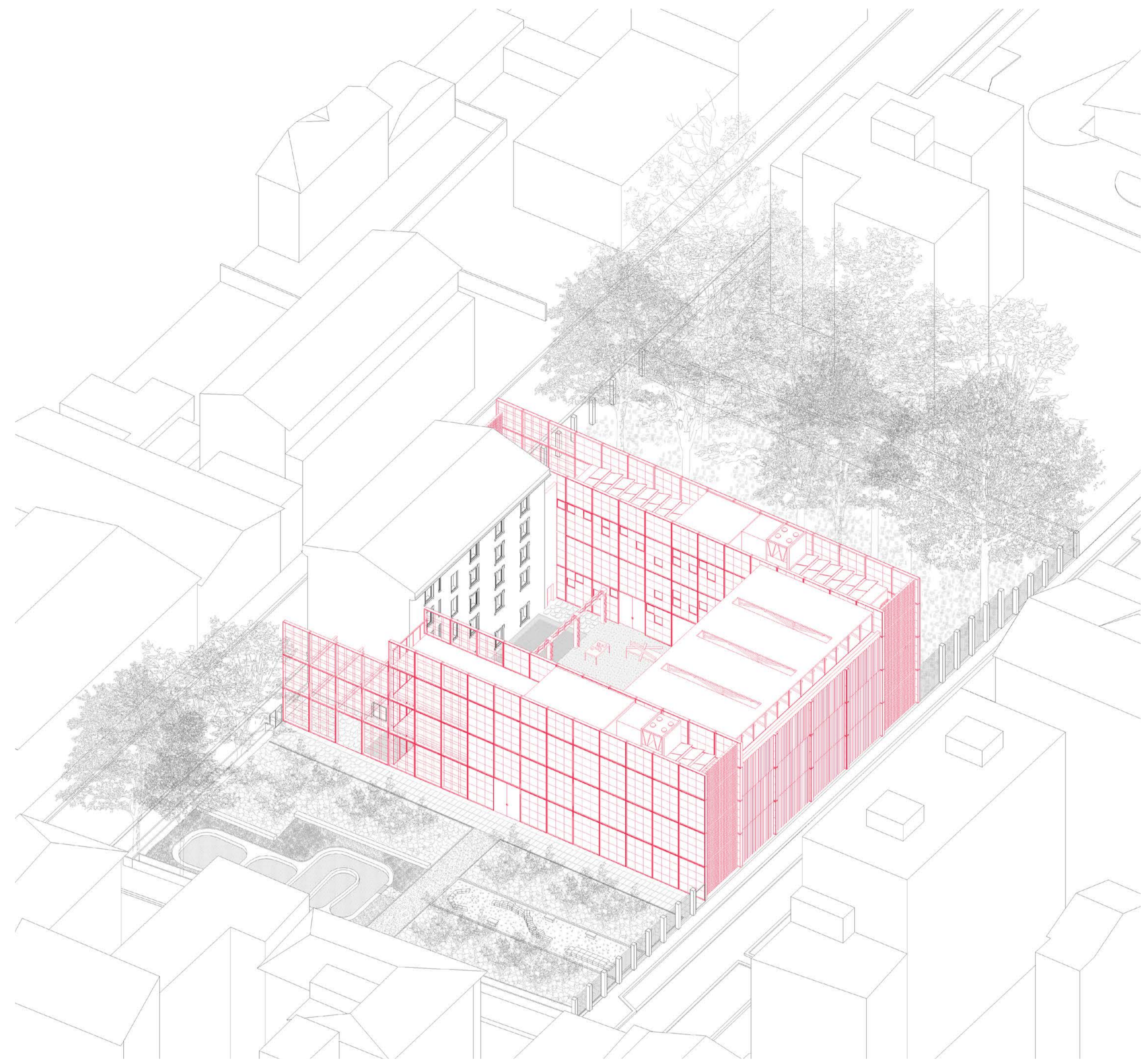
1:150  
First Floor Plan



1:150  
Second Floor Plan



1:150  
Roof Plan

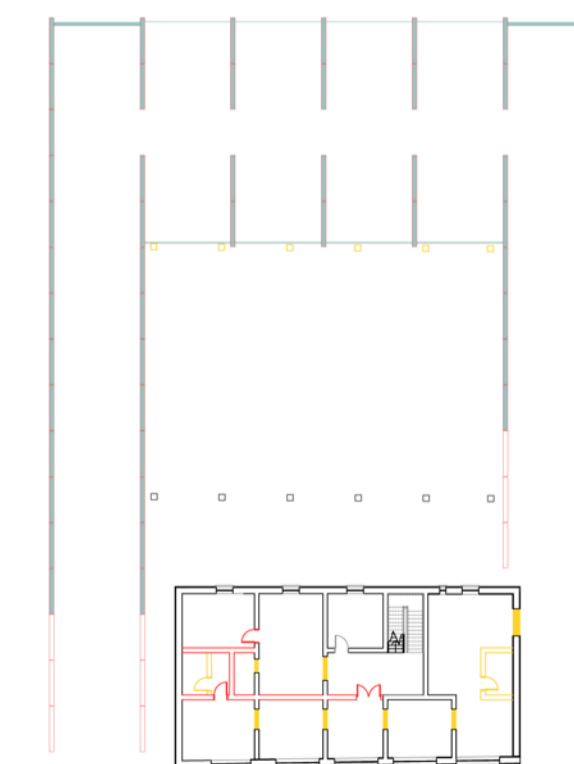


3D Birdseye View

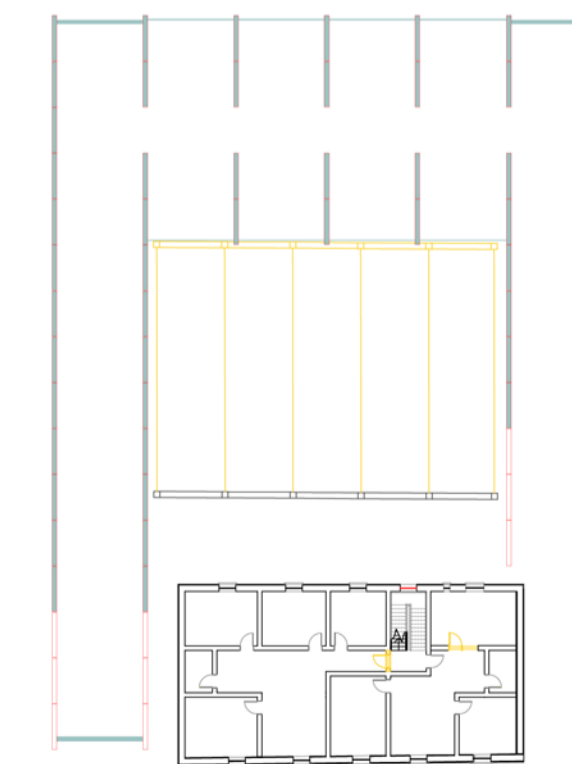
## Reuse Plans

1:500

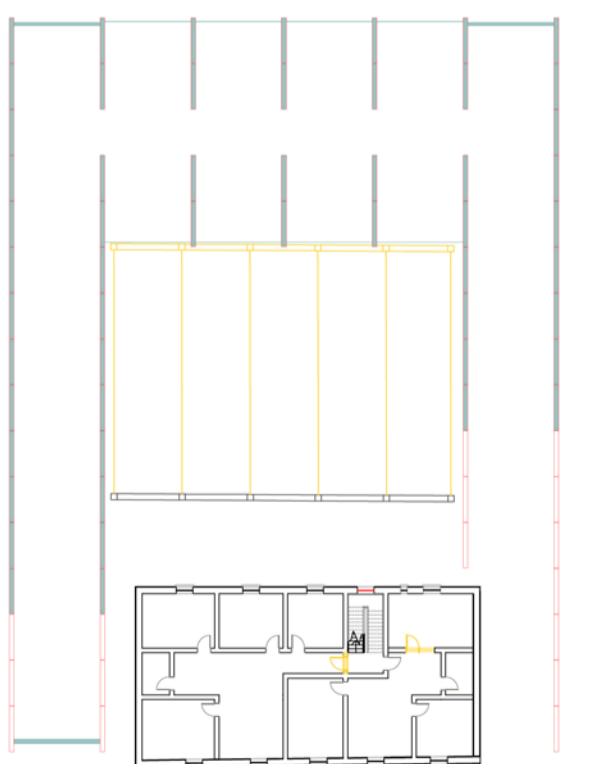
- Demolition
- New
- Reuse in Situ
- Reuse



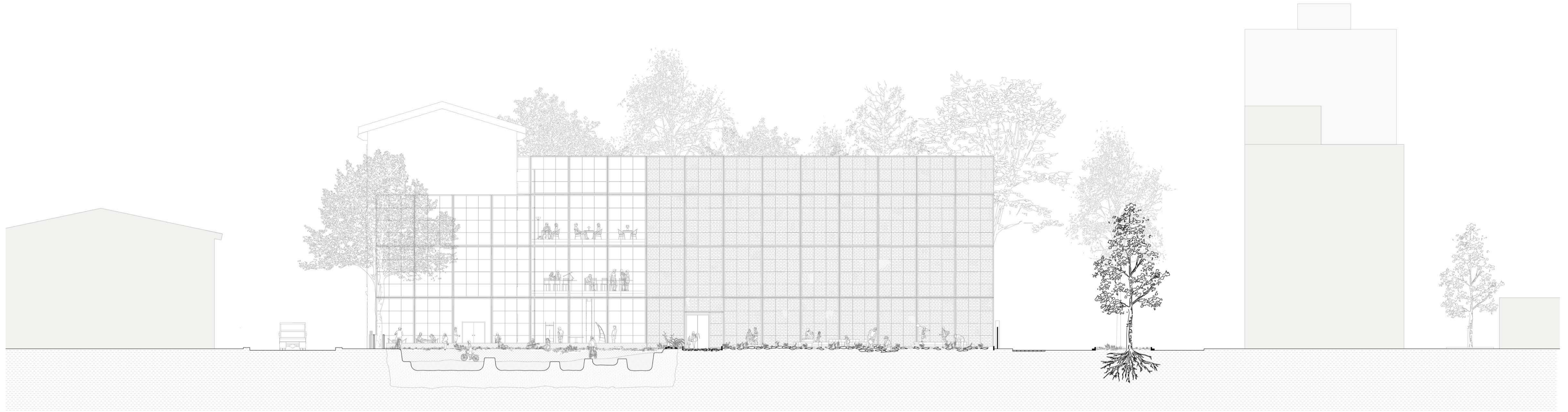
01  
Ground Floor Plan



02  
1st Floor Plan

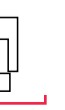


03  
2nd Floor Plan



1:150

East Park Section



1:150

South Elevation

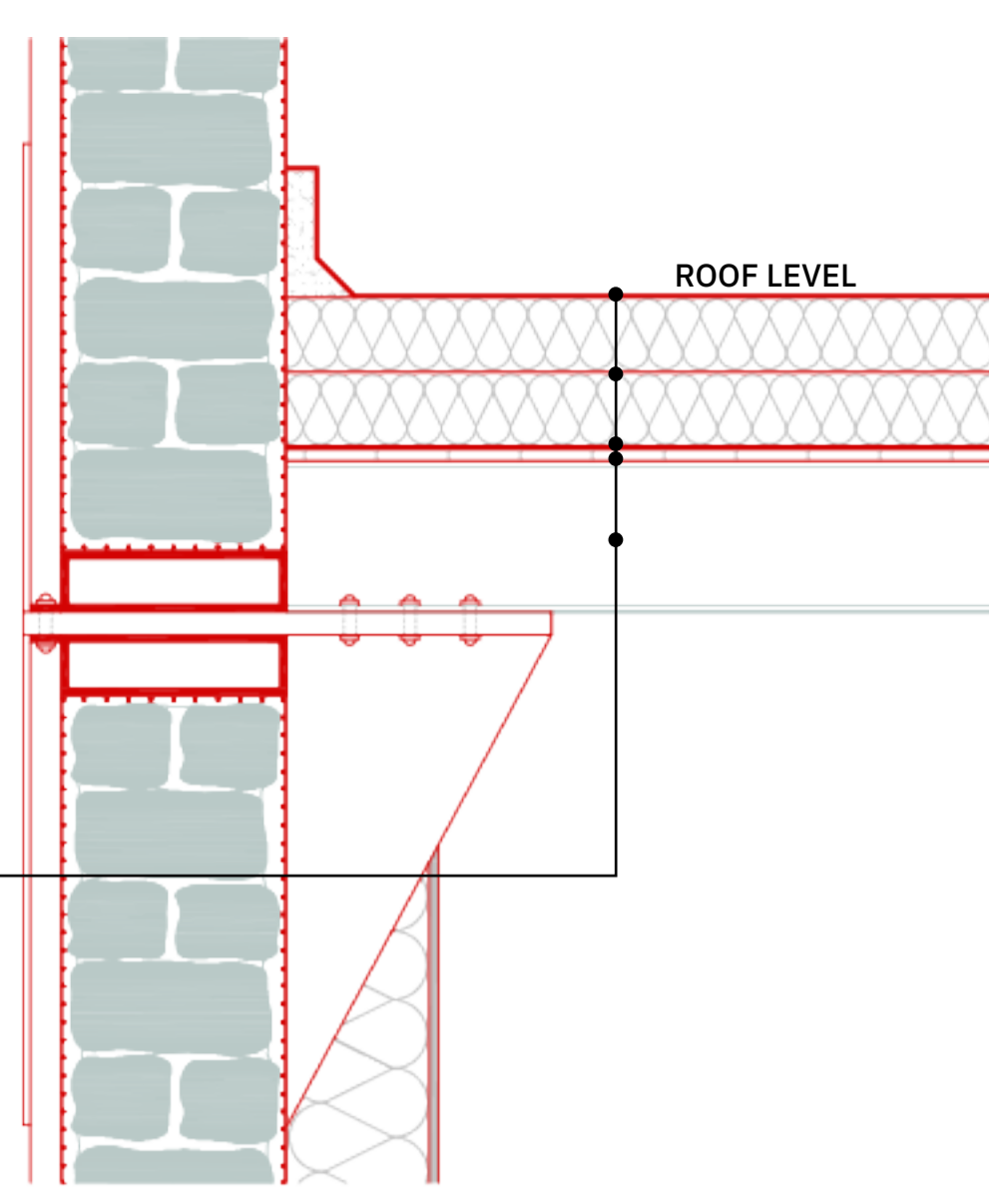


1:10  
Wall Section Detail

- Demolition
- New
- Reuse in Situ
- Reuse
- Remove for Reuse

EPDM MEMBRANE  
MINERAL WOOL INSULATION  
SMART VAPOUR CONTROL MEMBRANE  
CLT STRUCTURAL DECK  
RECLAIMED STEEL BEAM

100+100  
18  
200

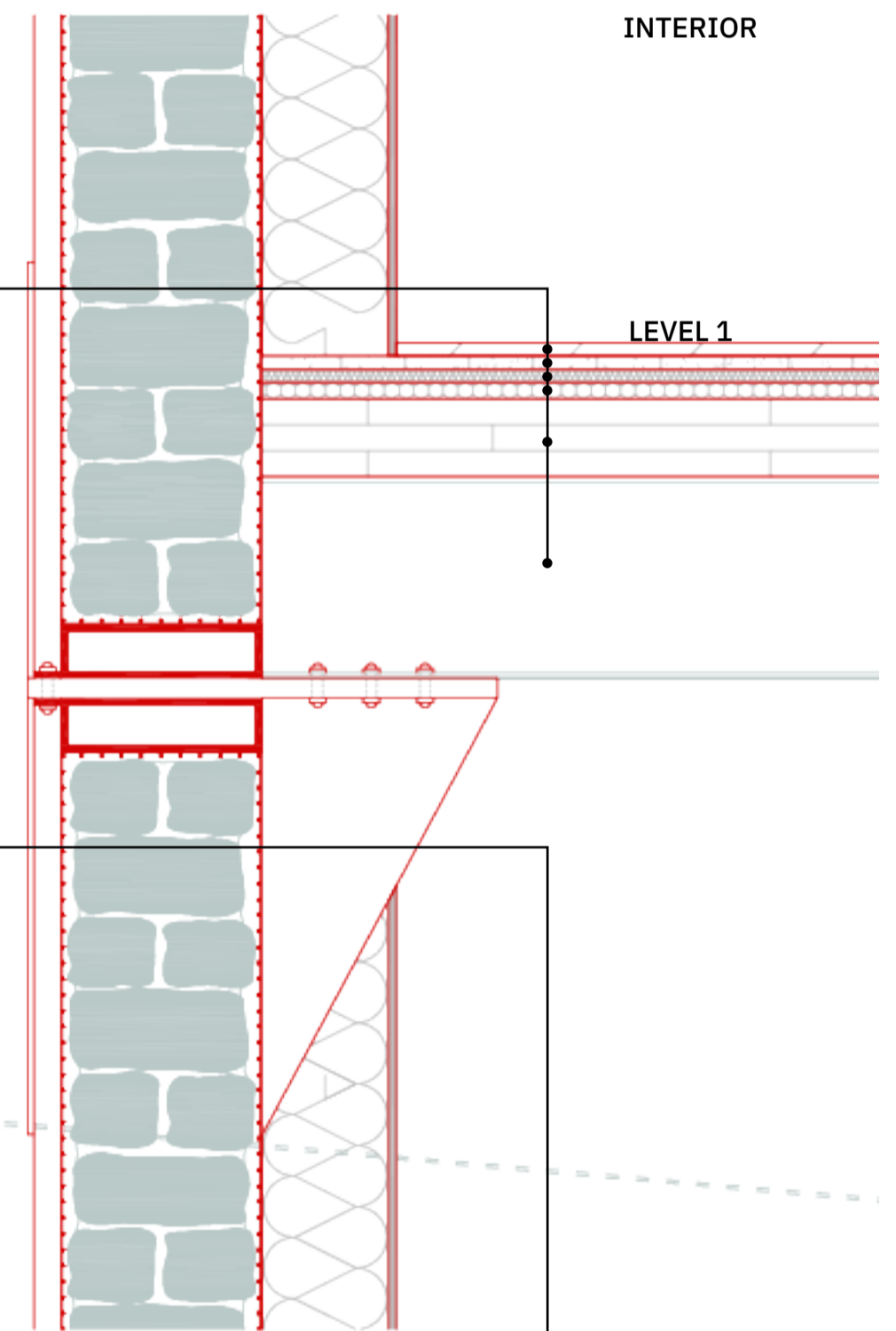


INTERLOCKING INDUSTRIAL PVC TILES  
MEDIUM DENSITY FIBER BOARD  
FLOOR HEATING AND INSULATION  
SOUND INSULATION  
CROSS LAMINATED TIMBER  
RECLAIMED STEEL BEAM

20  
20  
19  
25  
116  
300

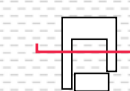
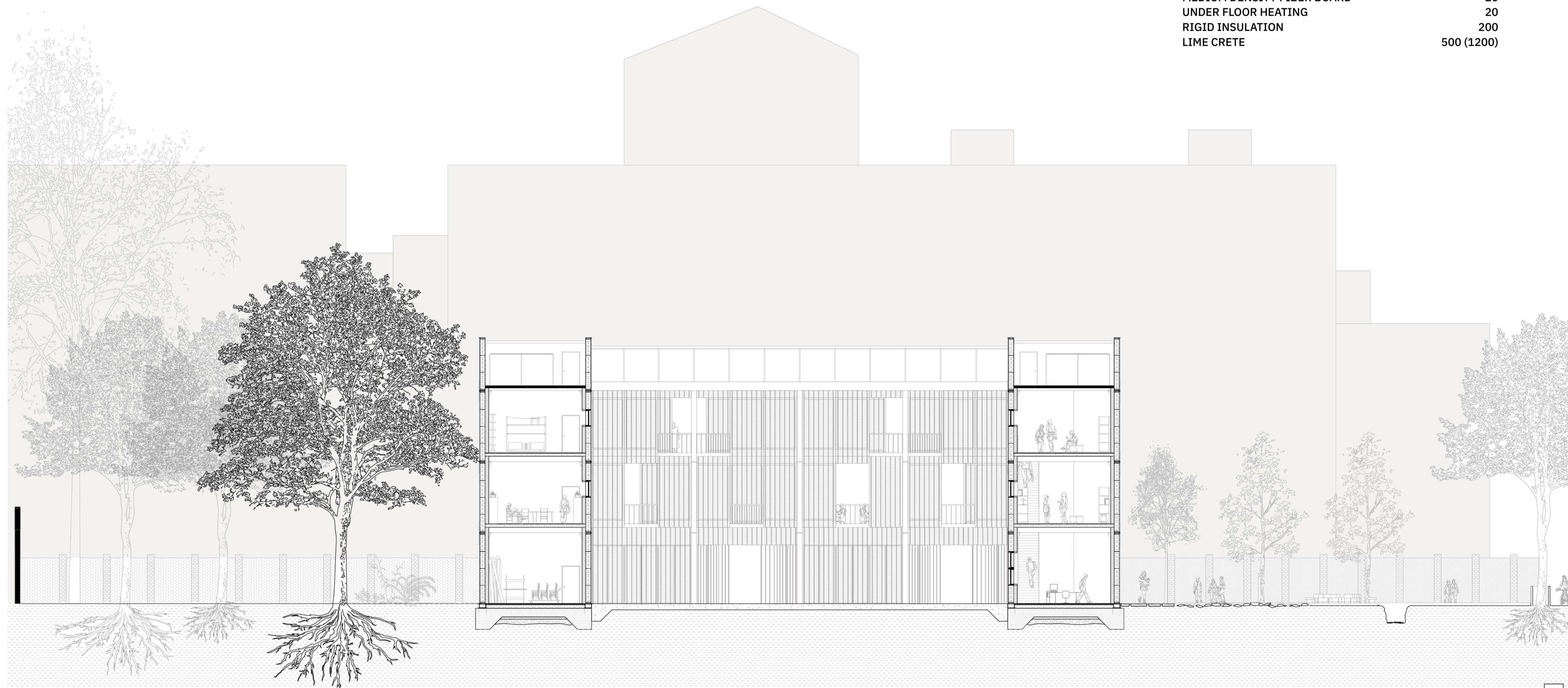
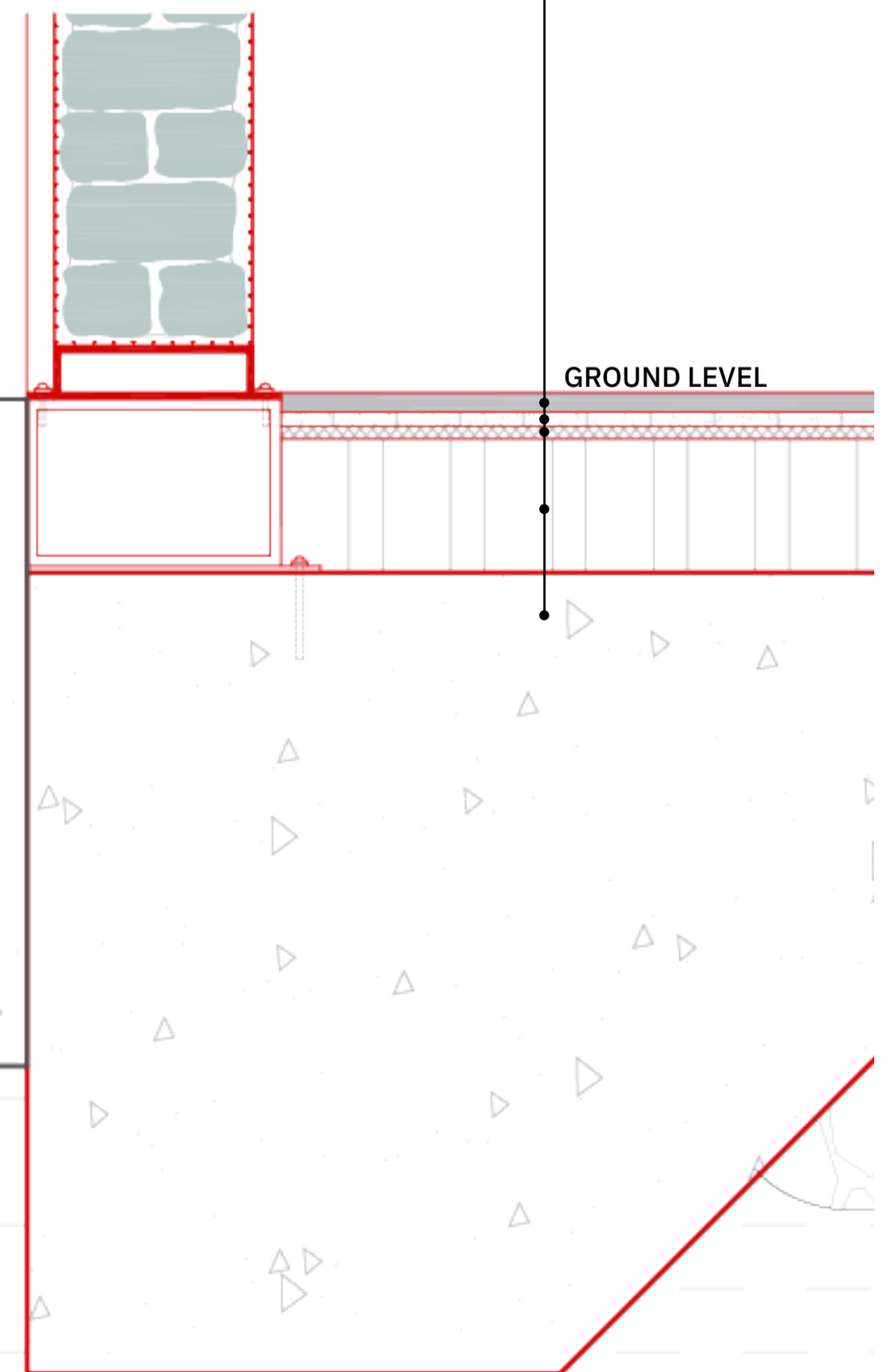
EXTERIOR

INTERIOR



INTERLOCKING INDUSTRIAL PVC TILES  
MEDIUM DENSITY FIBER BOARD  
UNDER FLOOR HEATING  
RIGID INSULATION  
LIME CRETE

30  
20  
20  
200  
500 (1200)



1:150  
Latitudinal Section

