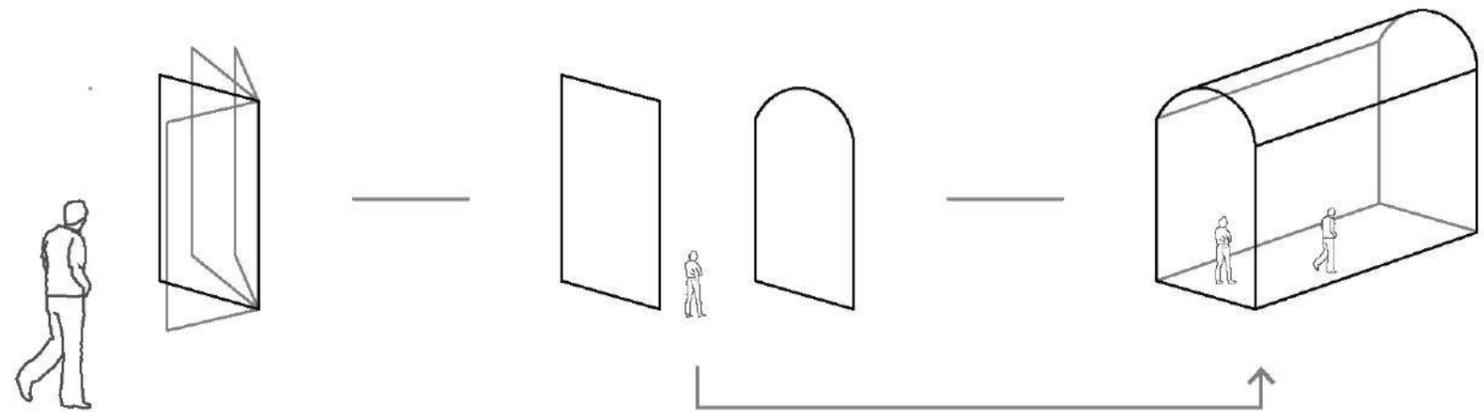


Thickness of borders -  
Walking routes as mediation in an urban space

Transformation of the courtyards in Yekaterinburg, Russia.

# - Threshold -

The Threshold is the spatial property of the small territories  
It conveys a transitional atmosphere and dual characteristics of a space



common room door  
(close and open,  
separation / connection)

doors with enlarged dimensions

passage  
as an extended door  
(indoor and outdoor)

( The Spatial characteristics  
corresponding to the sense  
of scale of the objects )

( privacy )

( from privacy to public )

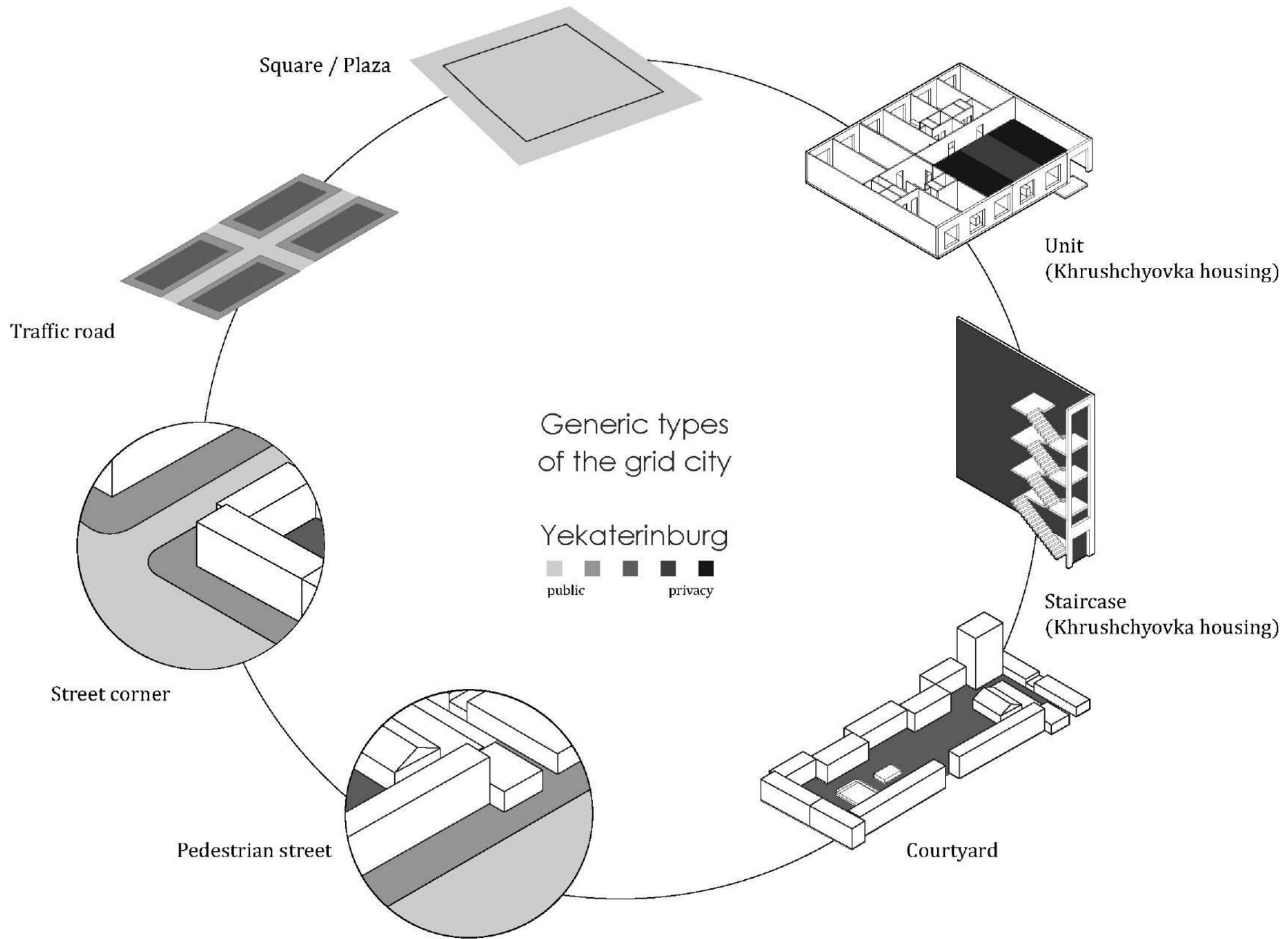
( public )

- Goal of project -

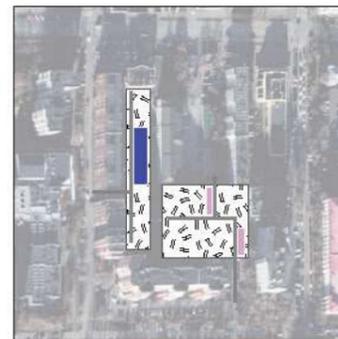
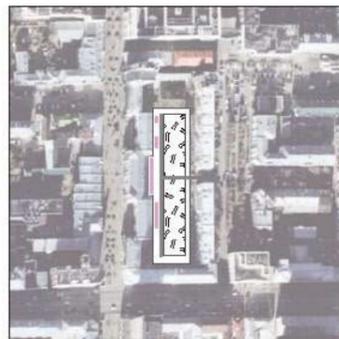
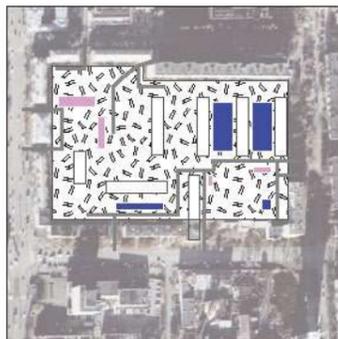
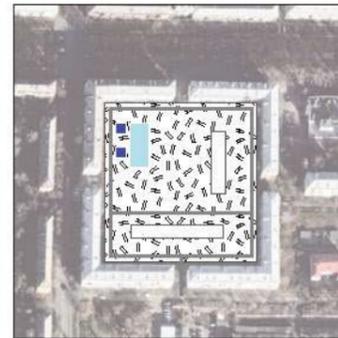
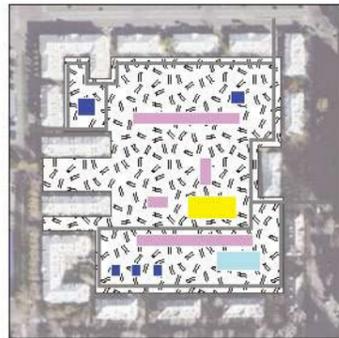
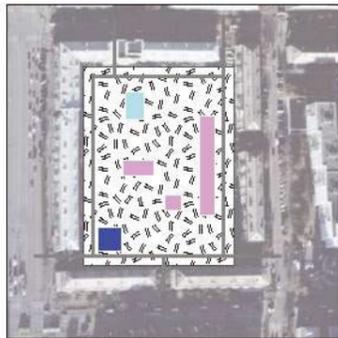
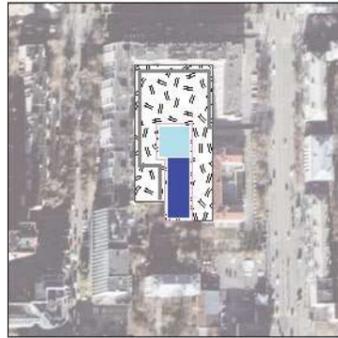
The goal of the project maintain a part of the living habits and create new walking routes through the  
small territories

City - Yekaterinburg, Russia





# Generic type: COURTYARDS in the city



- parking space
- warehouse, facility, additions
- store
- playground
- sport ground
- tree, grass land

# Grid City - Yekaterinburg City Center



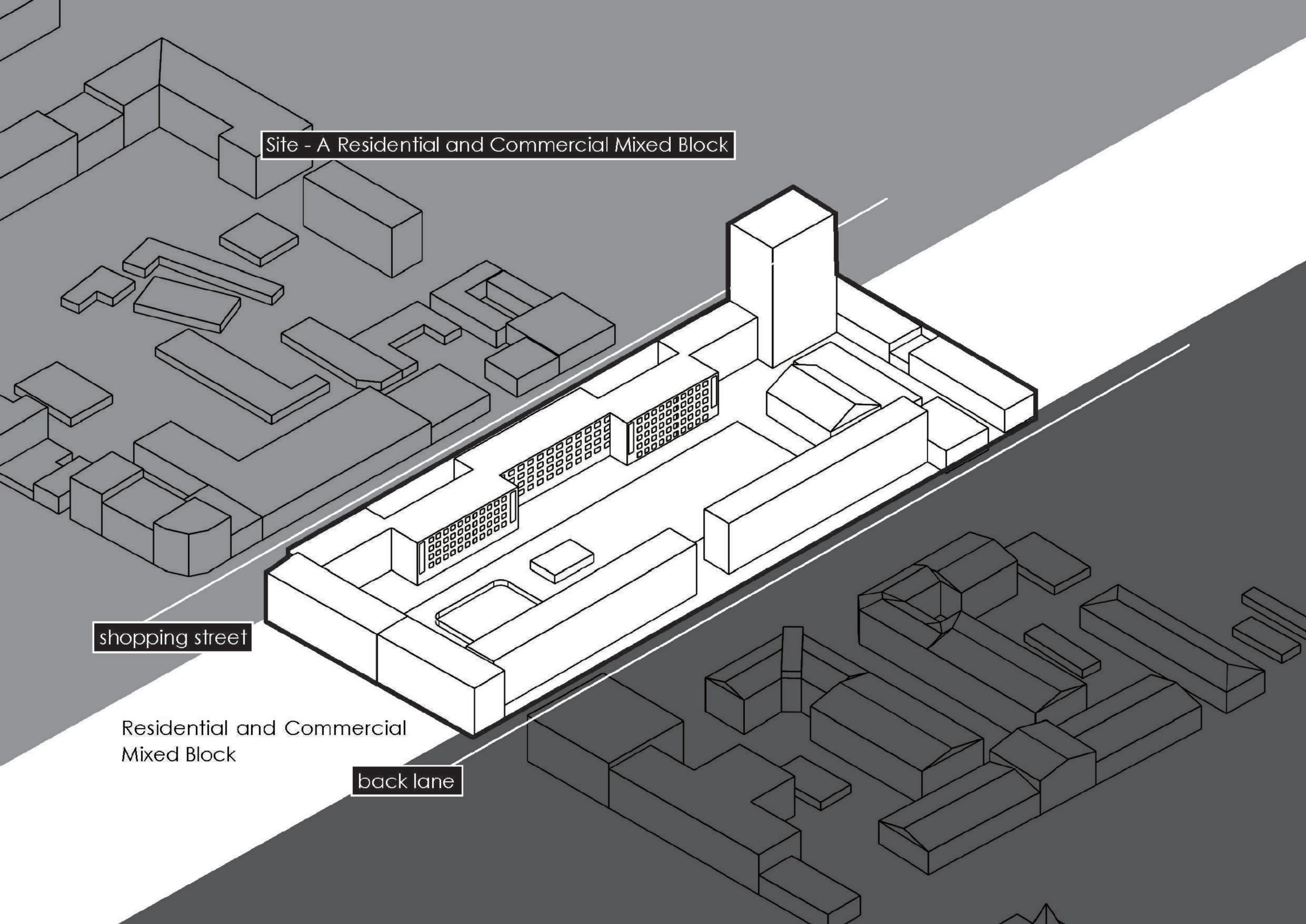
- house in the courtyard  
(kindergarten, store, religious building)
  
- no fence
- playground
- sport ground
  
- fence
- playground
- sport ground
  
- roundabout
- parking area
- square
- old house
  
- subway station
- tram stop

Grid City - Yekaterinburg City Center



Roof Plan 1:1000

Site - A Residential and Commercial Mixed Block



shopping street

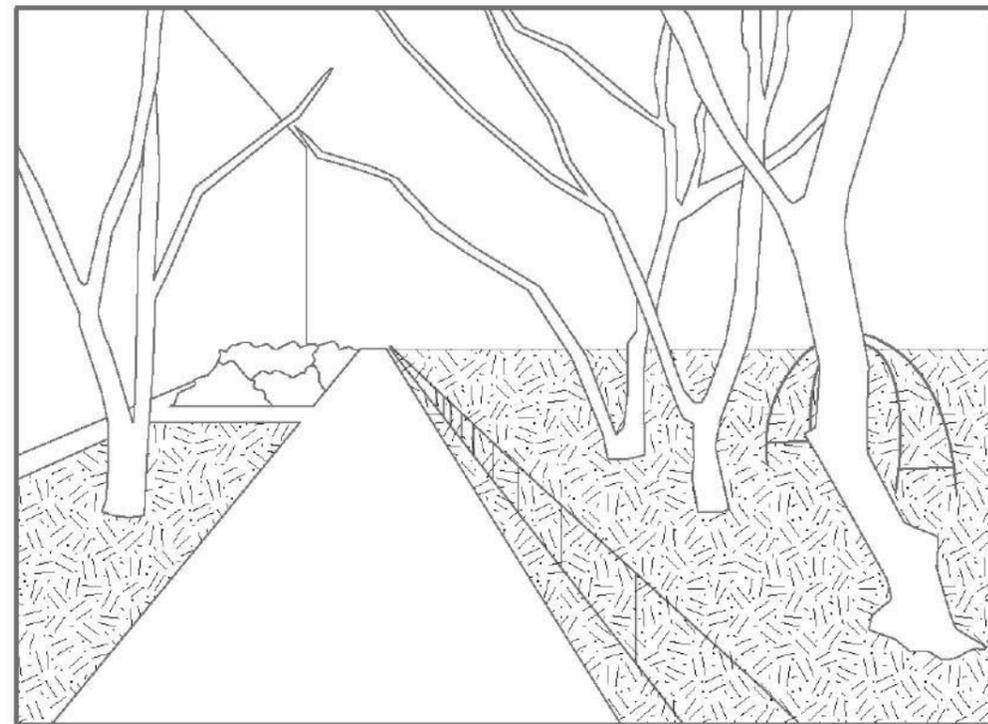
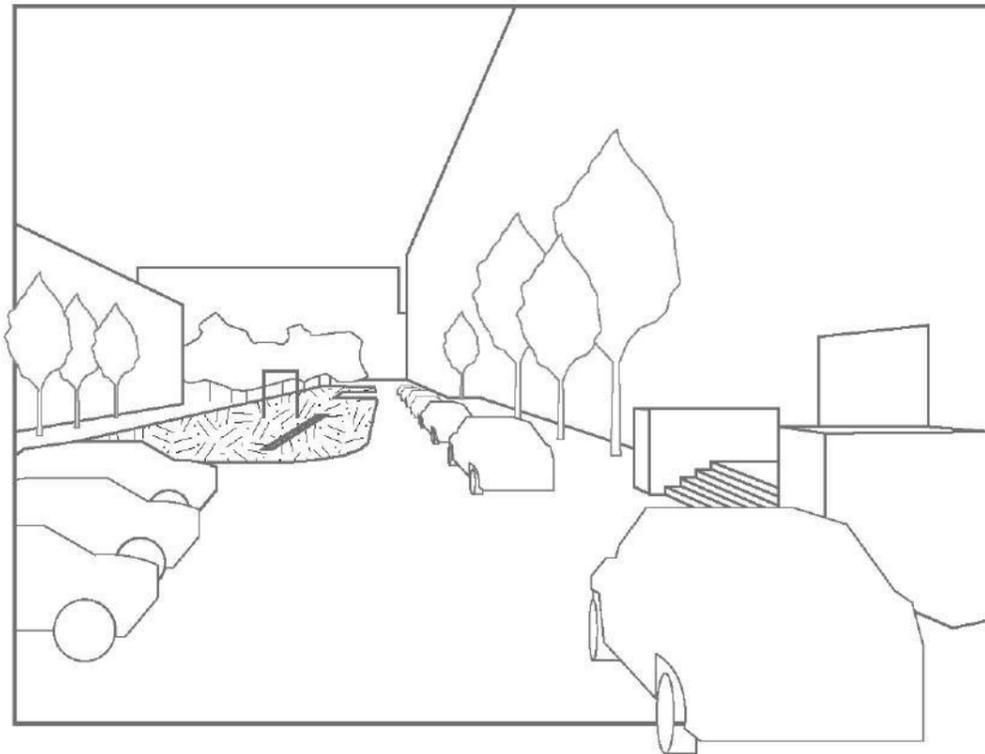
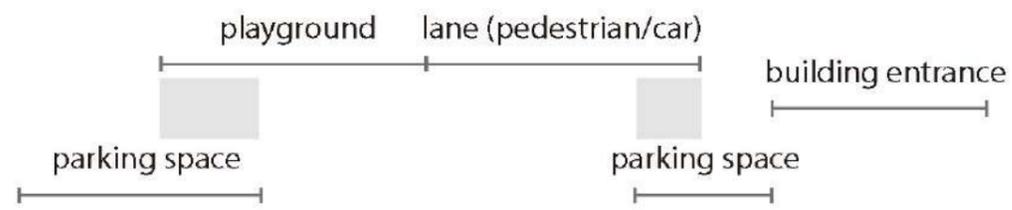
Residential and Commercial  
Mixed Block

back lane

Site - Functions & Atmosphere?



Site - Problem and Issue of the courtyard



Unfriendly and Friendly layout of the courtyard

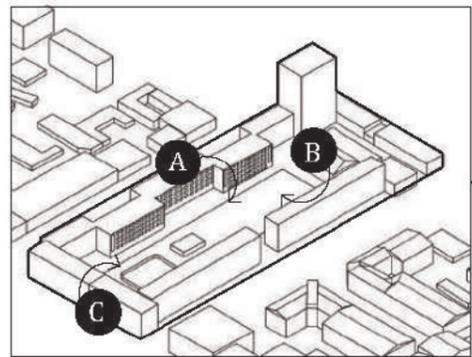
## Site - Existing situation of the courtyards



Artifacts of the courtyard - They display how the yards are used and the living culture in Yekaterinburg because these artifacts are common in most of the courtyards.

# Design - New / Old Functions & Dual atmosphere

## Functions



Old

### A - Kitchen Function

(The kitchen is the main social space in the standard housing)

eating space

meeting space

### B - Transformation of the existing functions



garden

vegetable field



car parking space

bicycle parking space



storage locker



playground

New

### C - New Functions for sport

running track

skating ground

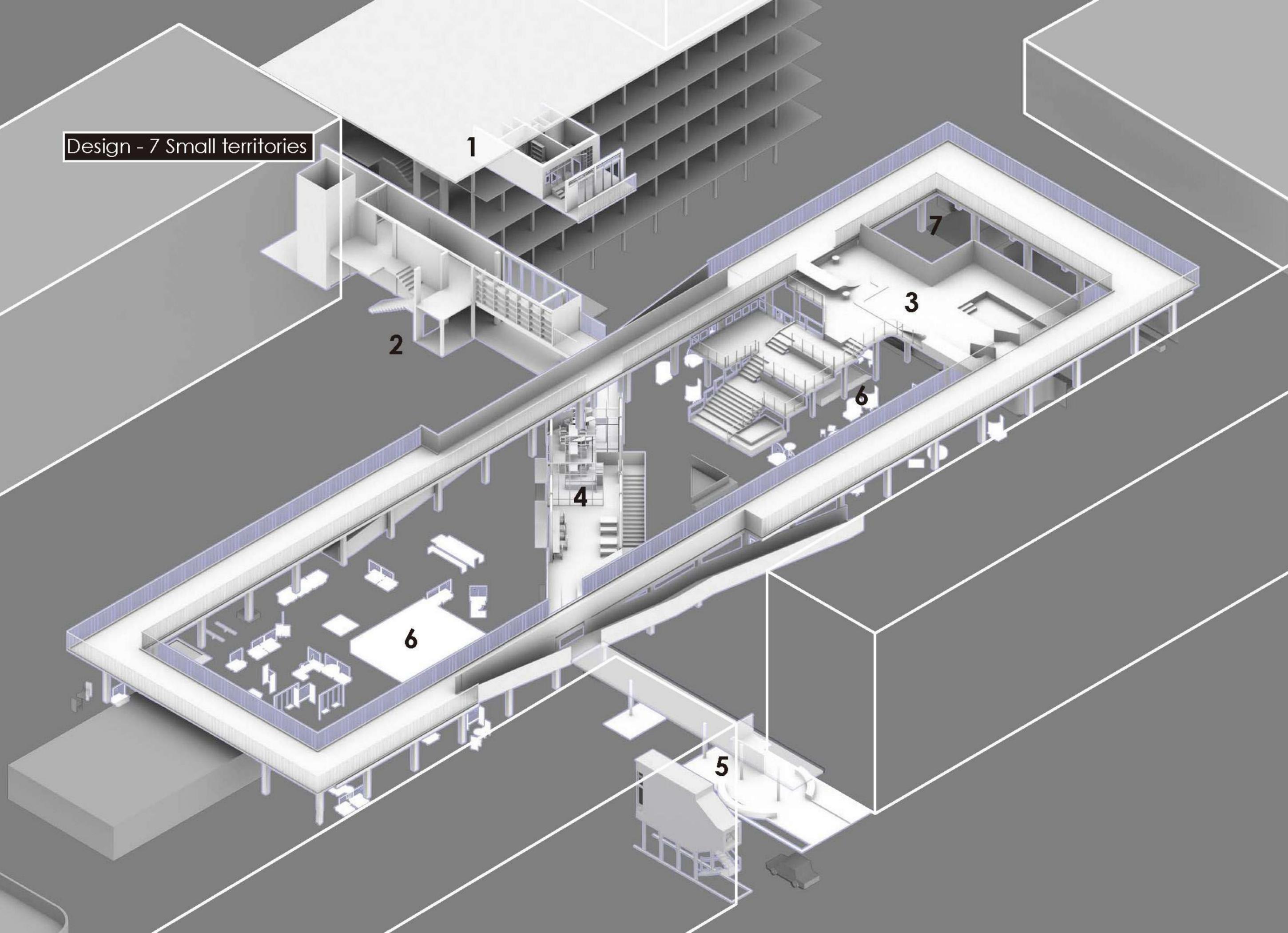
## Atmosphere

### Dual spatial properties (characters)

e.g.

- interior / exterior
- seeing / be seen
- connection / separation

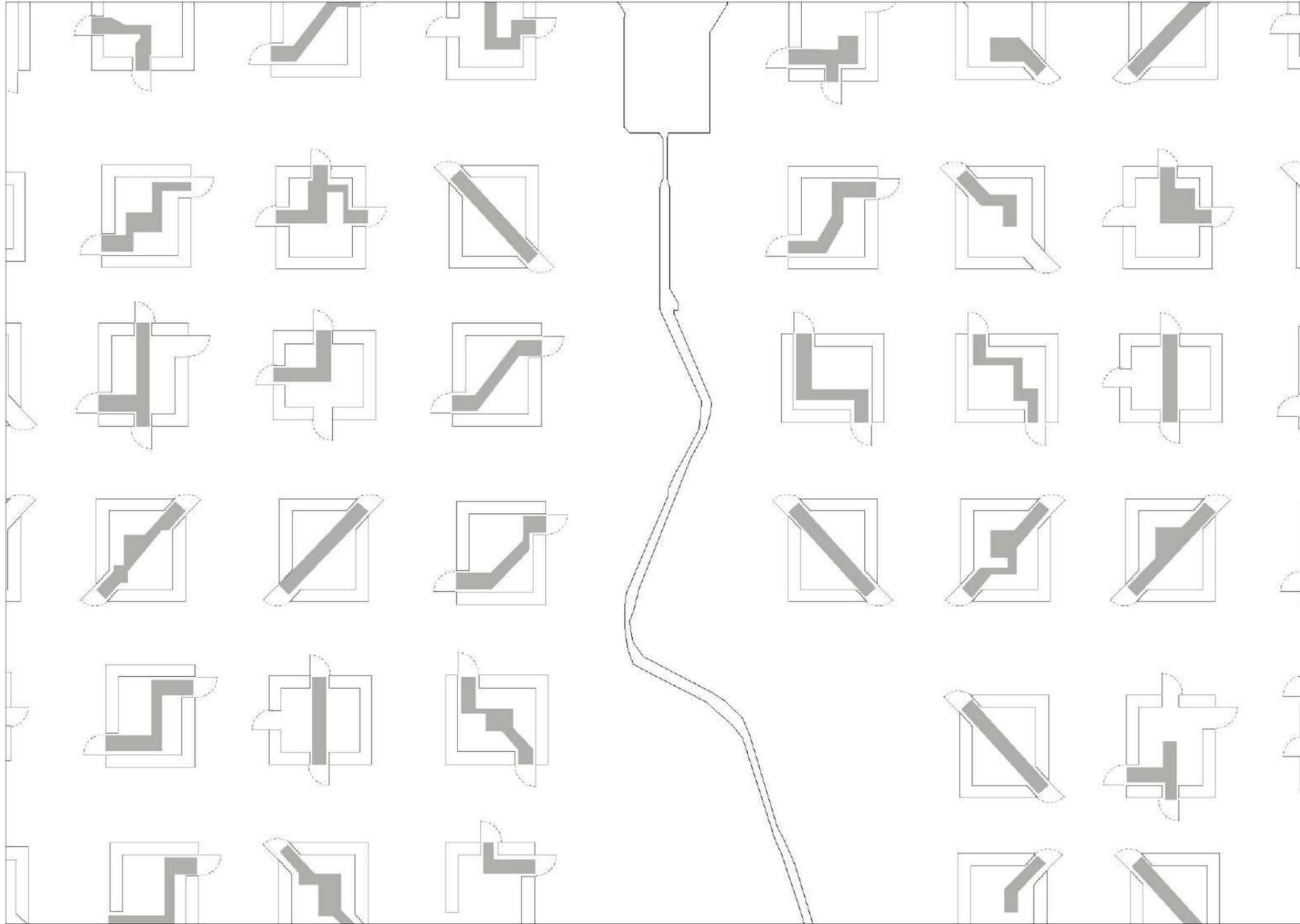
Design - 7 Small territories



What is the value of the small territories?

Why they are called small territories?

Manifesto of city

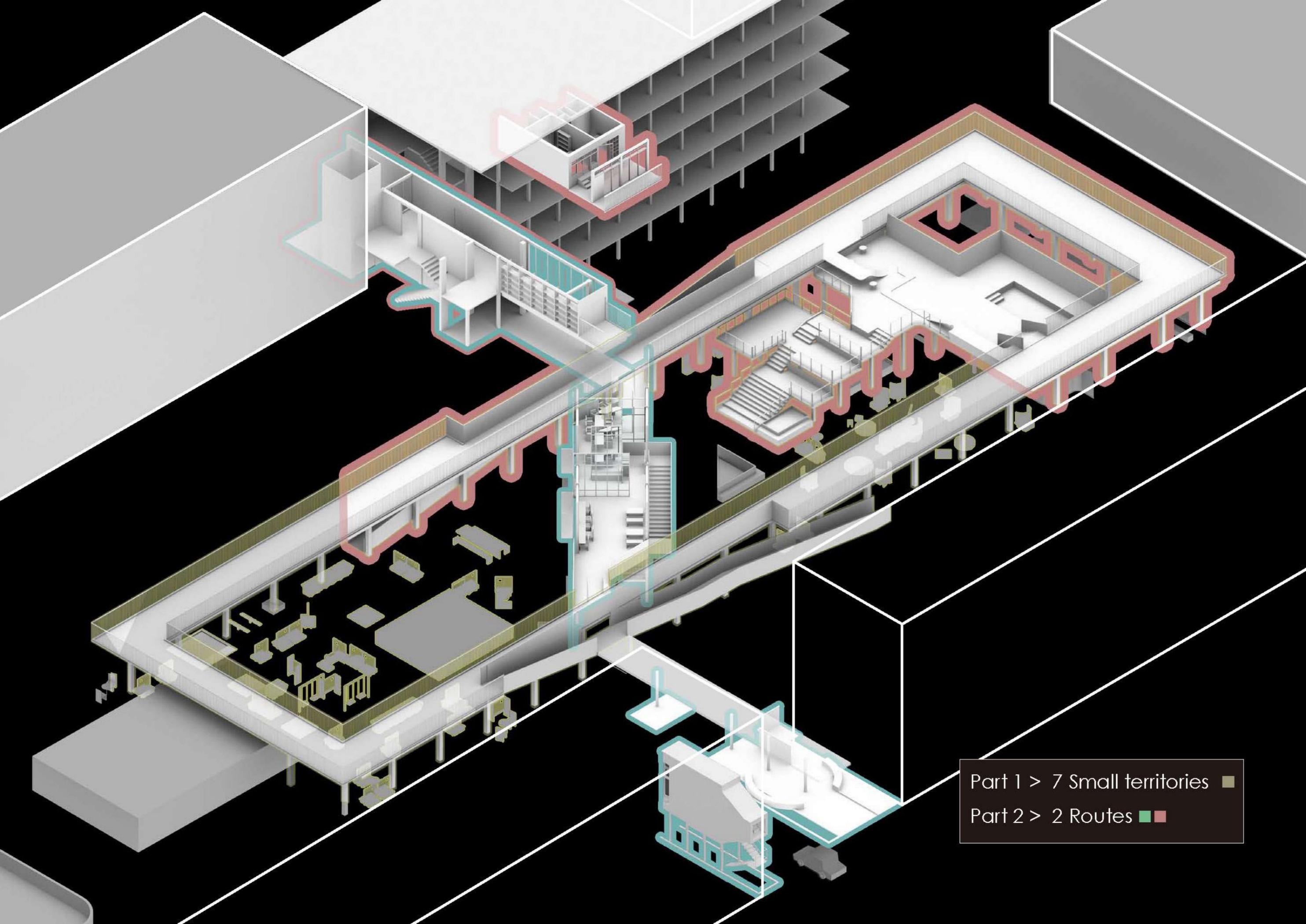


THE DOOR CITY

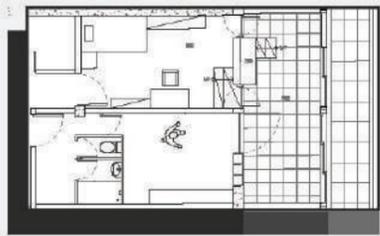
- Goal of project -

The goal of the project maintain a part of the living habits and create new walking routes through the  
**small territories**

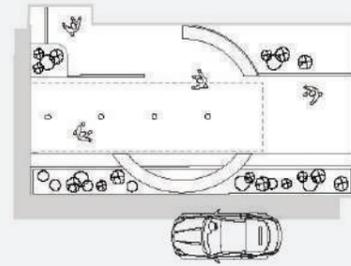
Transformation : a part of the housing and the courtyard within the street block



Part 1 > 7 Small territories ■  
Part 2 > 2 Routes ■■

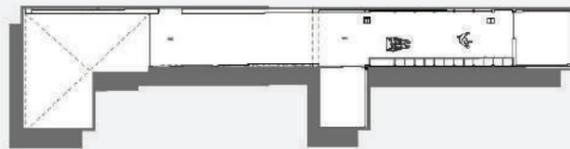
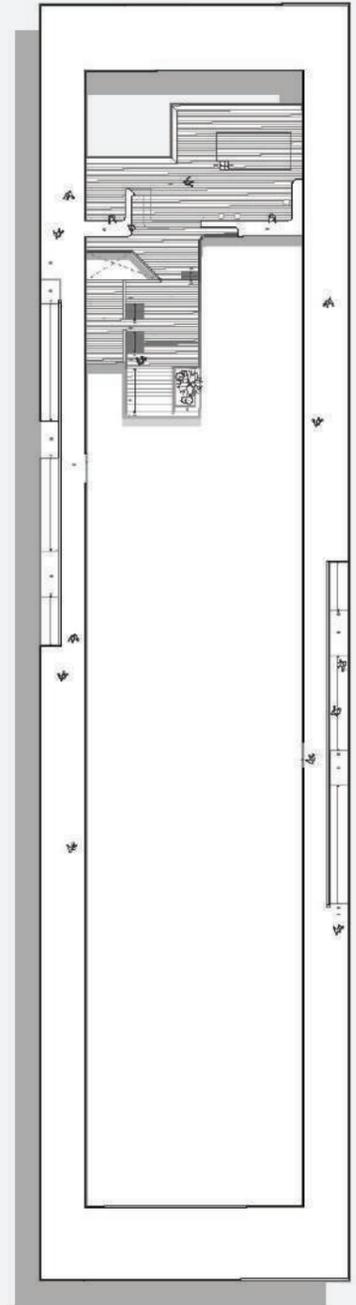


Room



Canopy Entrance

Running Track with A Staircase



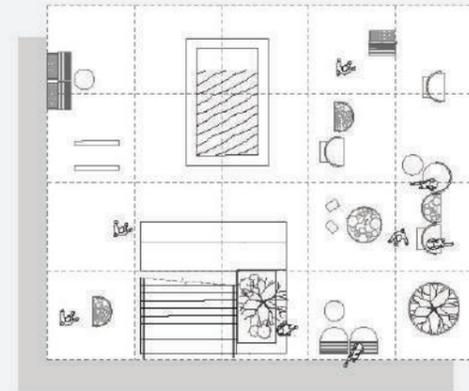
Building Entrance



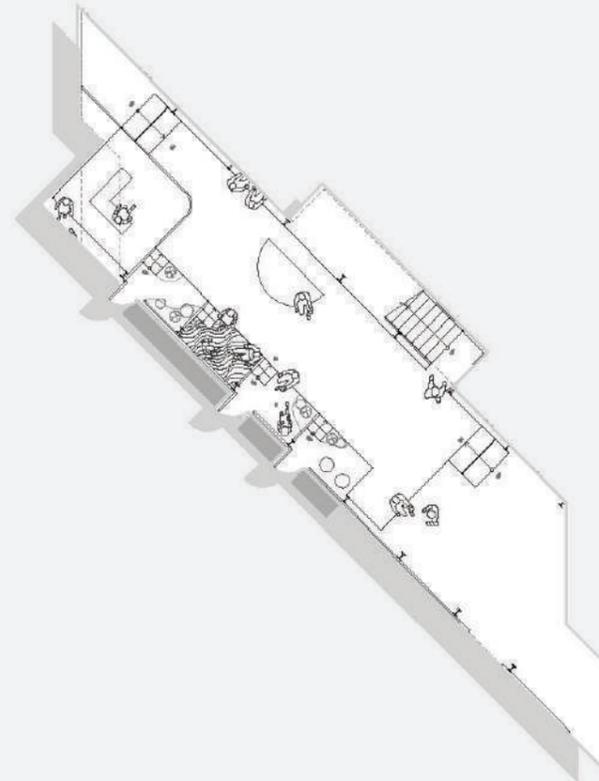
# Part 1

## Small Territories

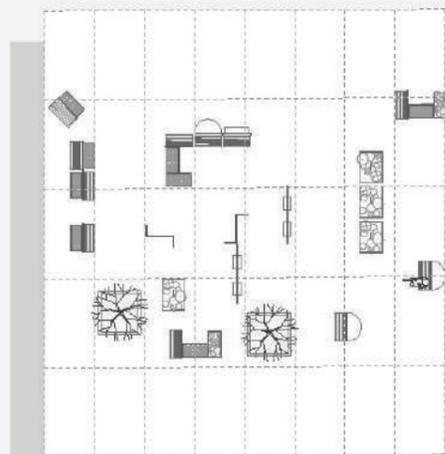
- Design Intervention in the courtyard



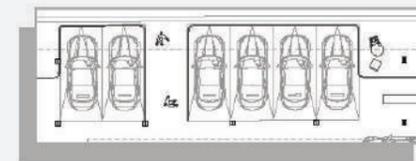
Fences Courtyard



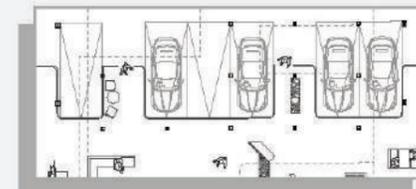
Room Pavilion



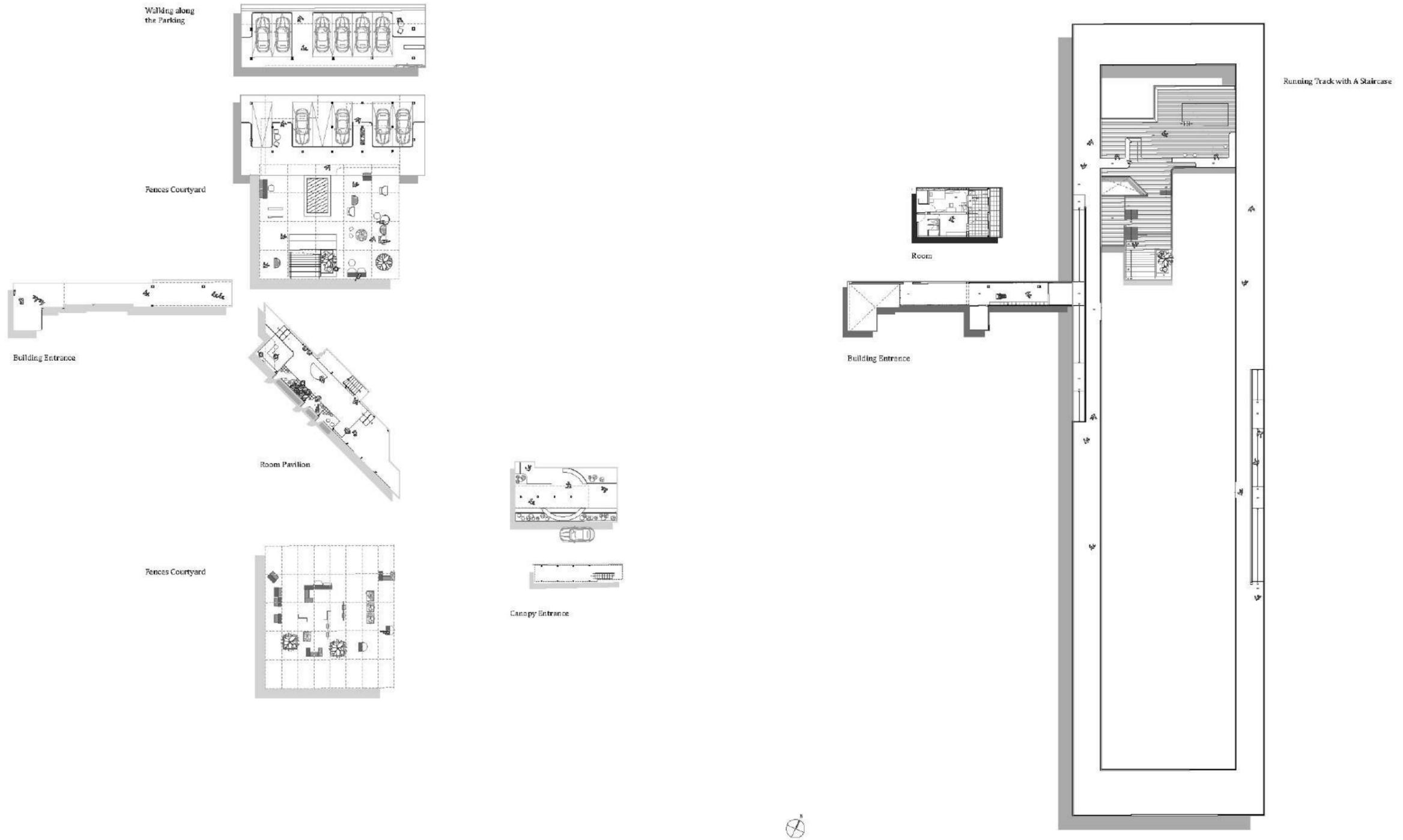
Fences Courtyard



Walking along the parking ground

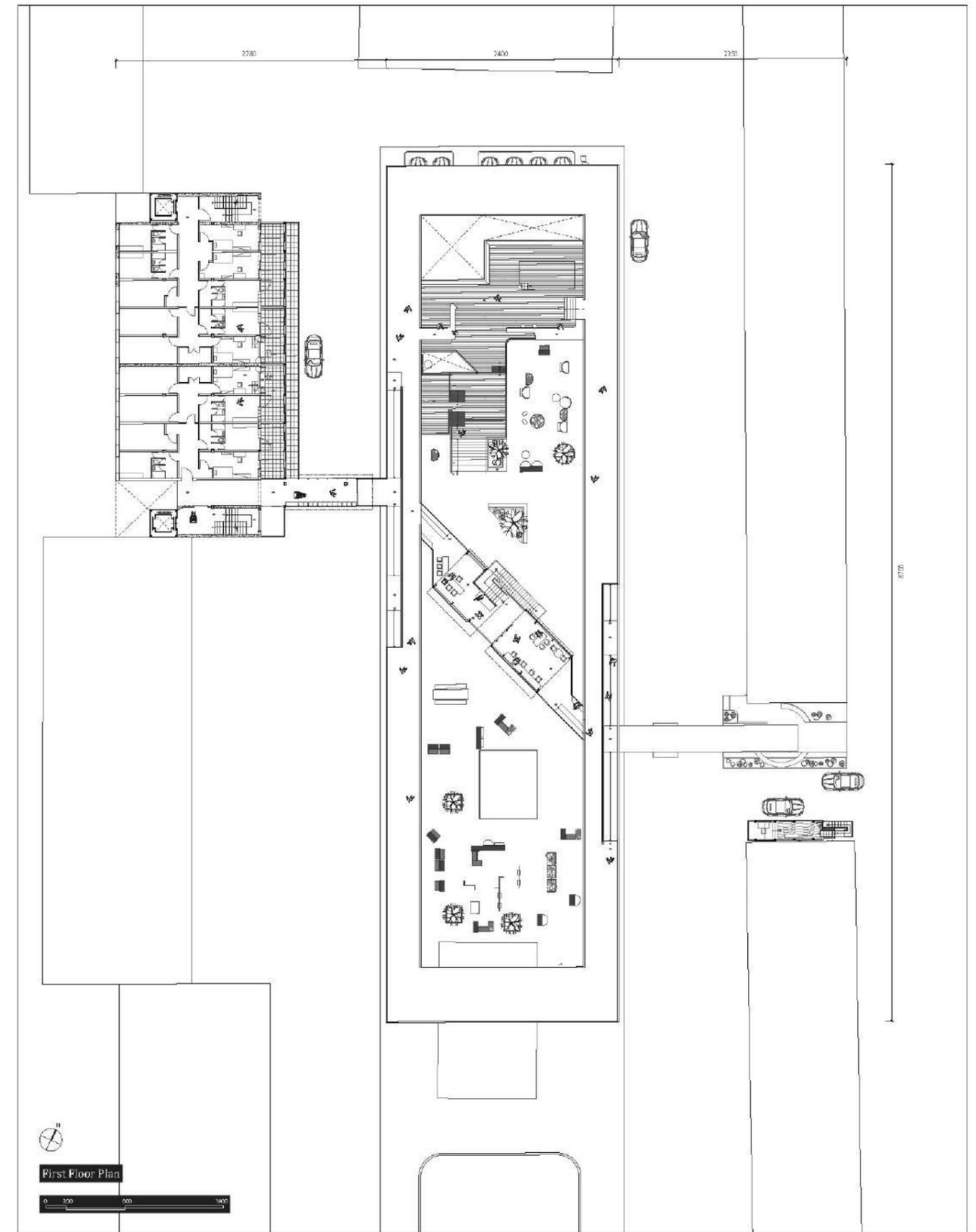
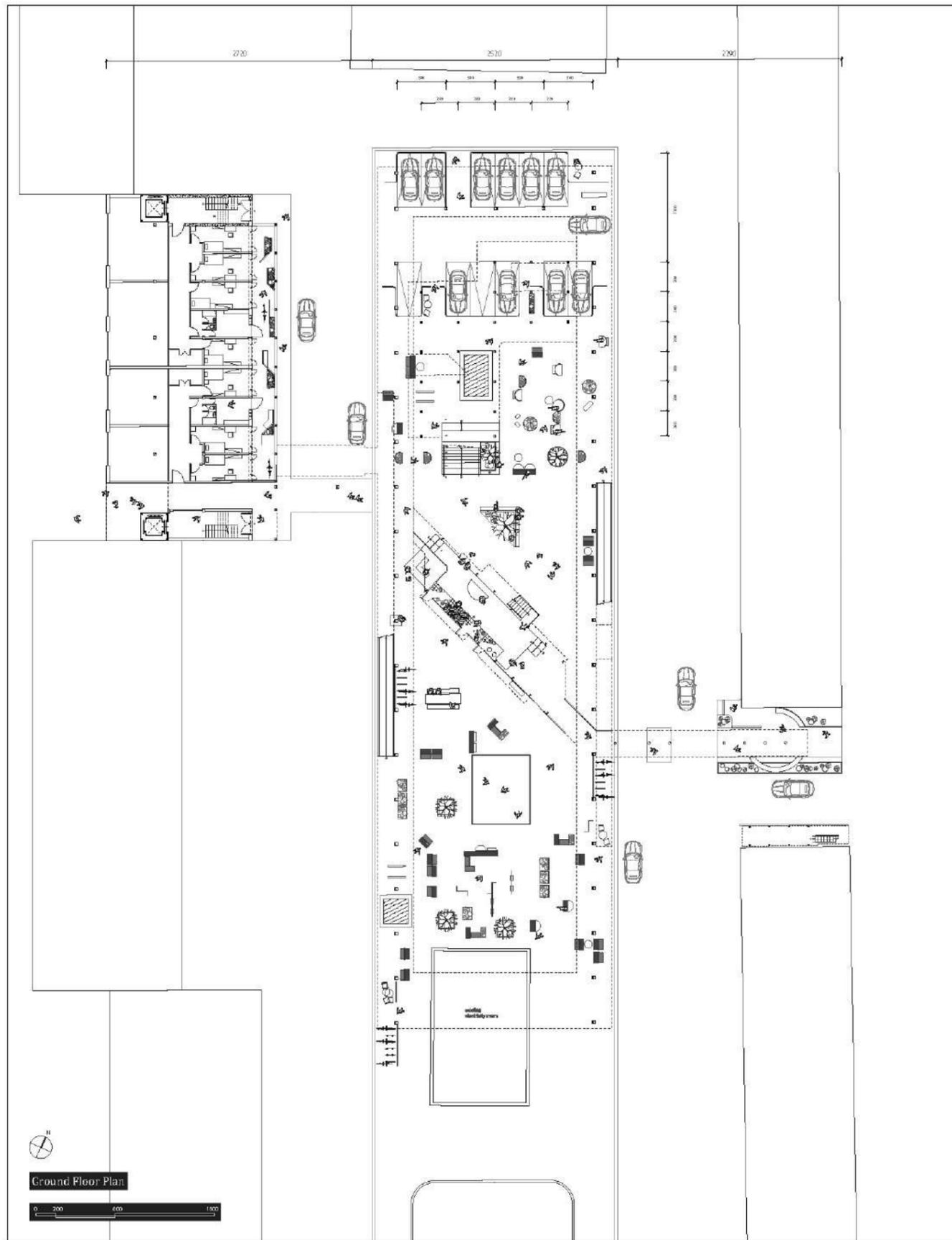


Small Territories



Overall Plans

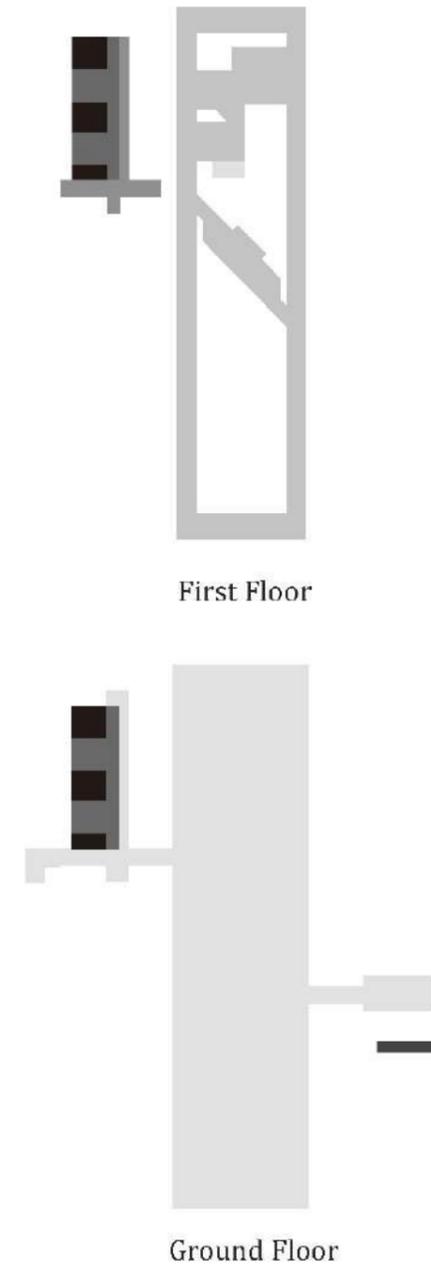
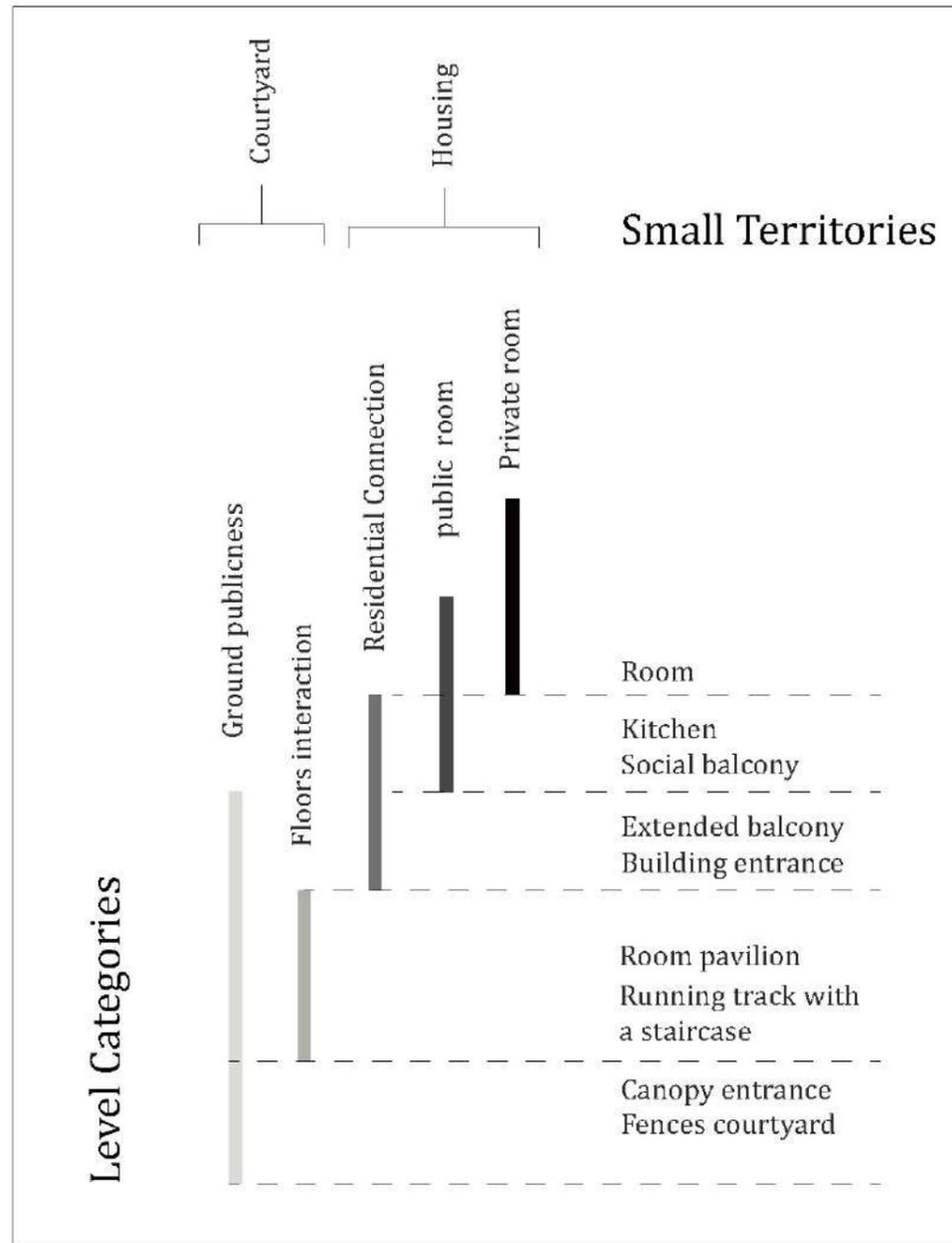
Each of the territories is distributed at the different locations of the street block.  
( in the housing, the courtyard, the edge of the block)



### Overall Plans

Each of the territories is distributed at the different locations of the street block.  
 ( in the housing, the courtyard, the edge of the block)

Levels of openness



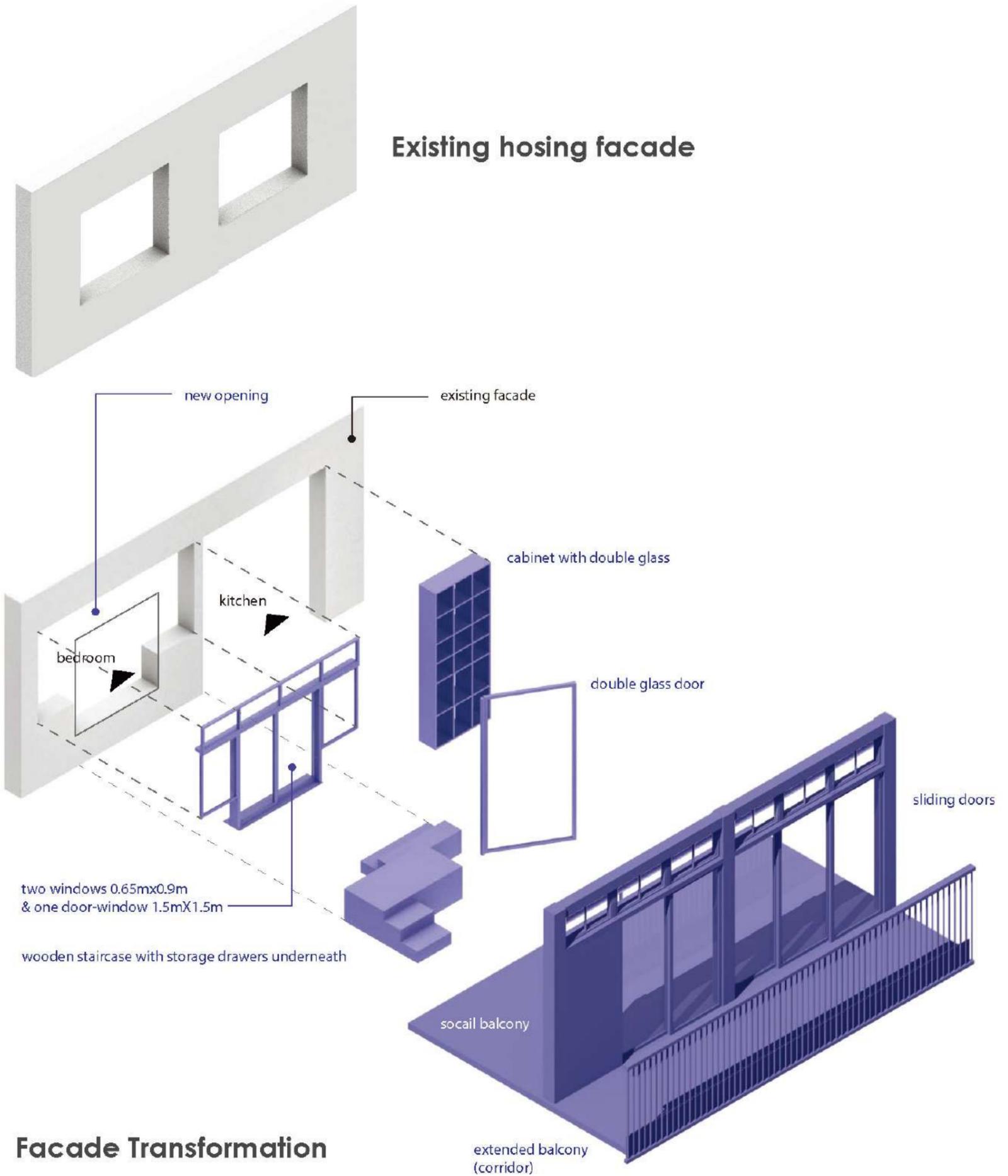
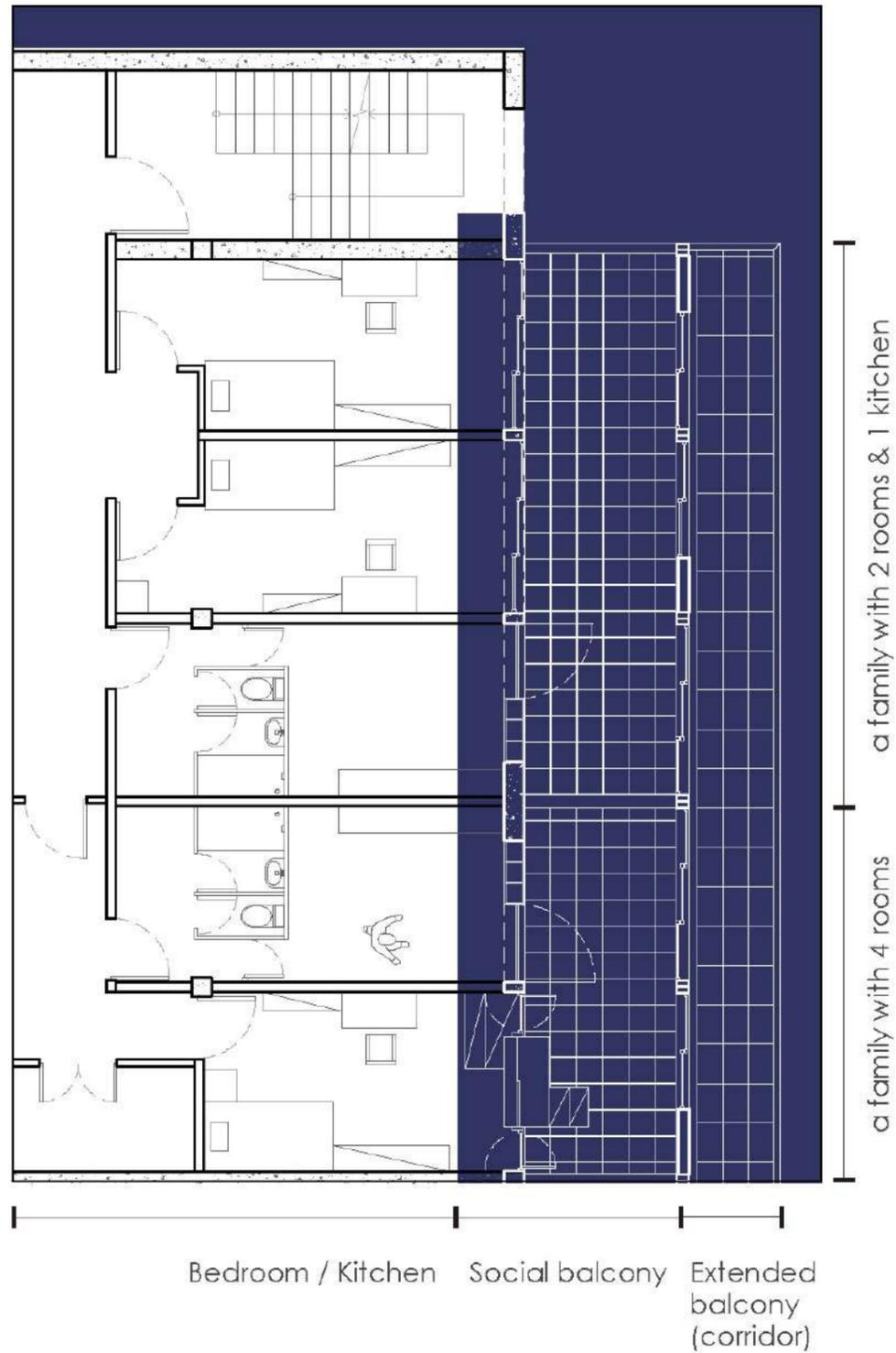
Small territory 01 -  
Room



Small territory 01 -  
Room

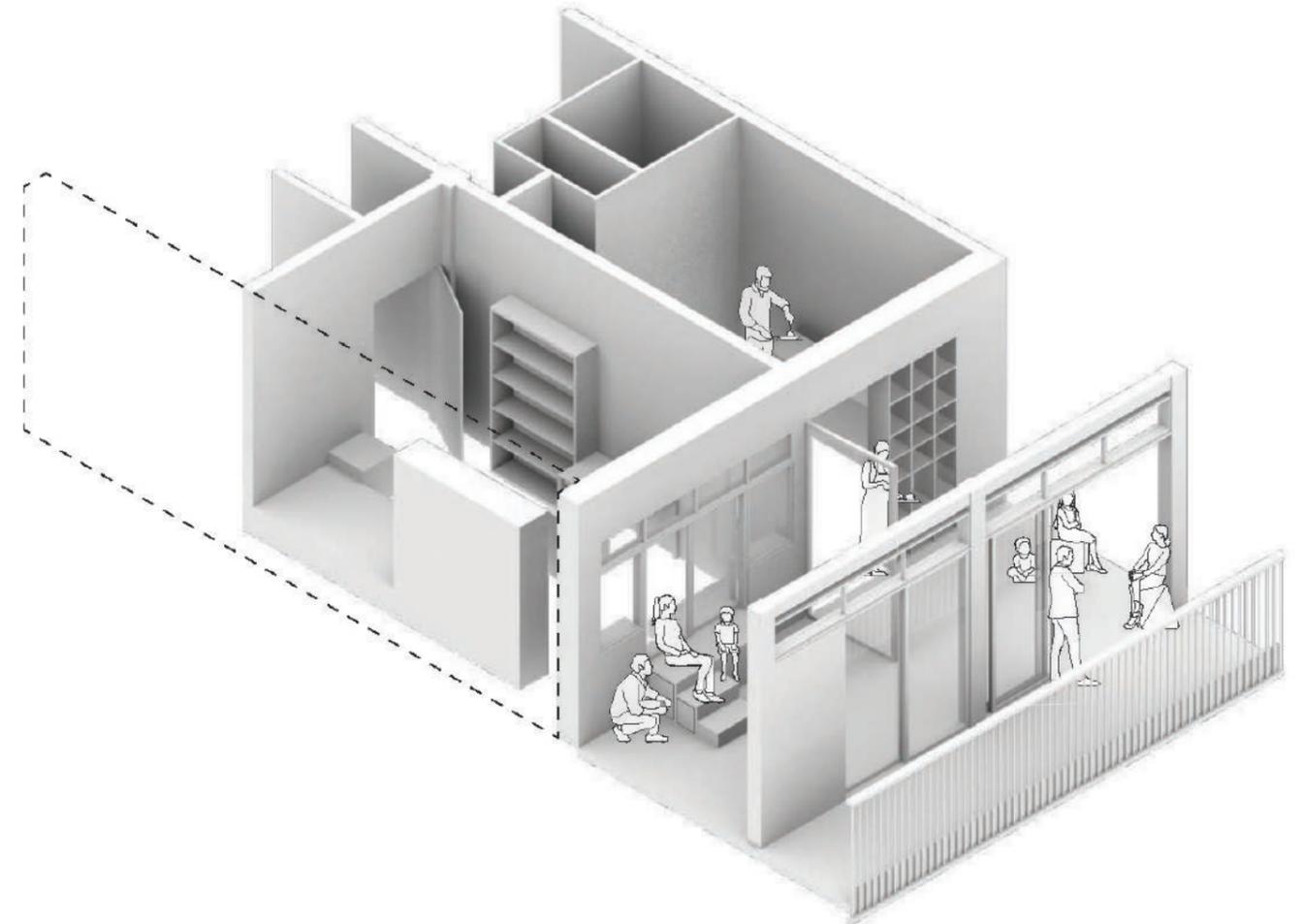
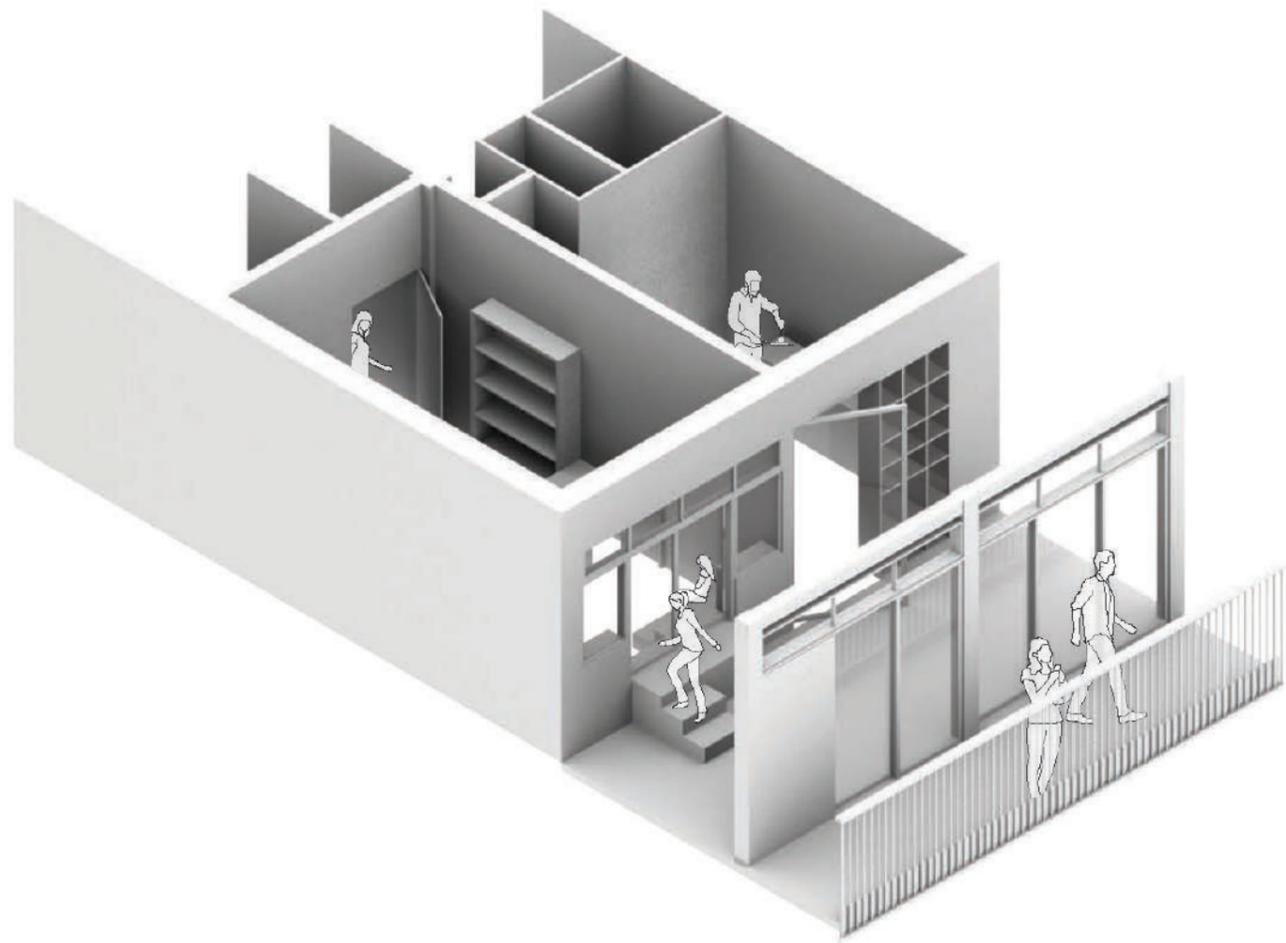


Small territory 01 -  
Room

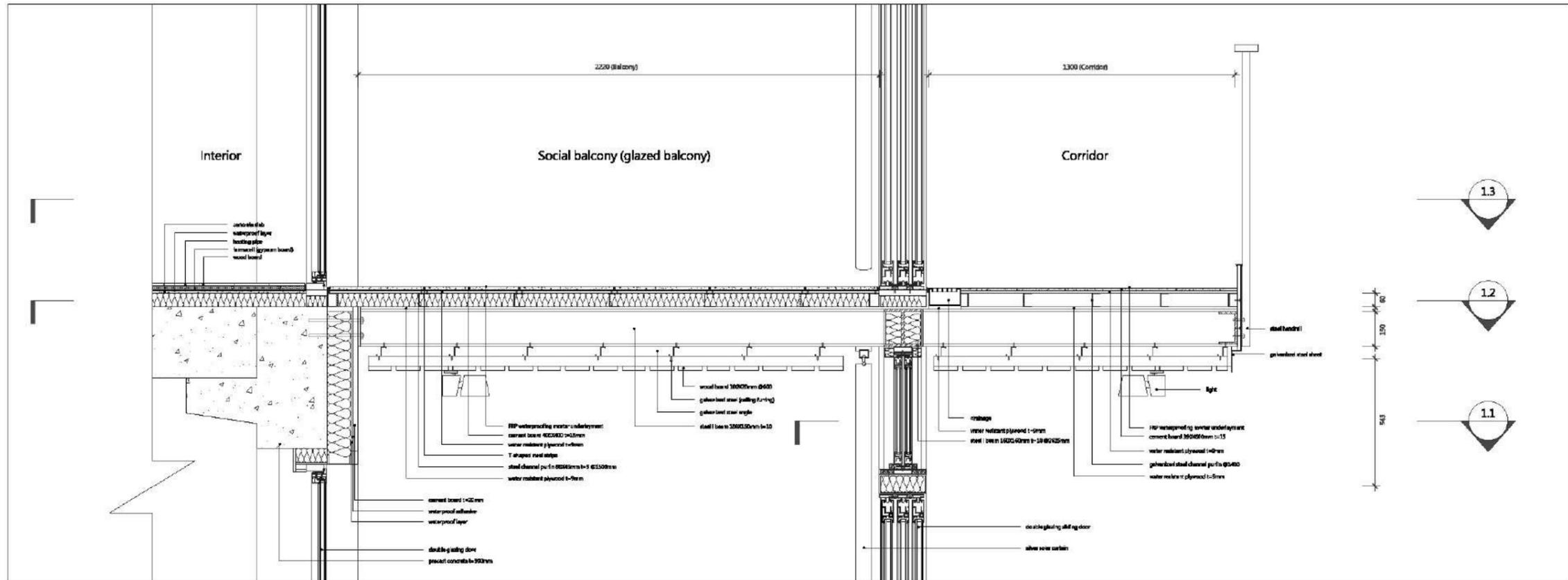


**Facade Transformation**

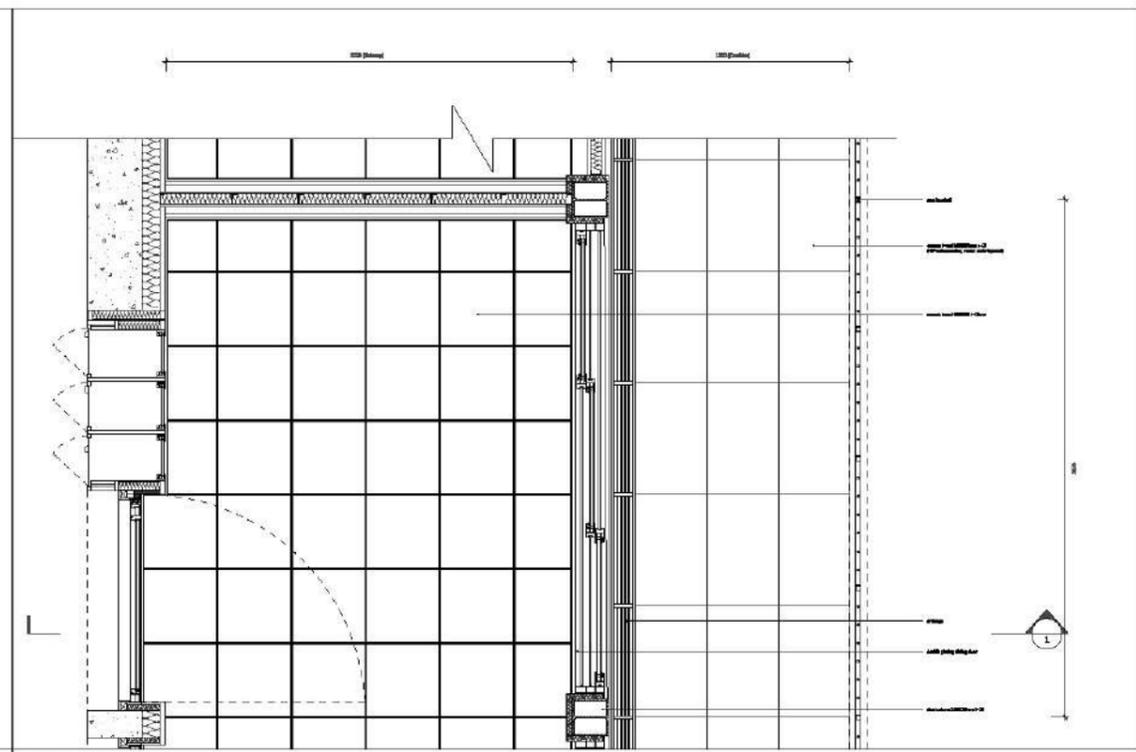
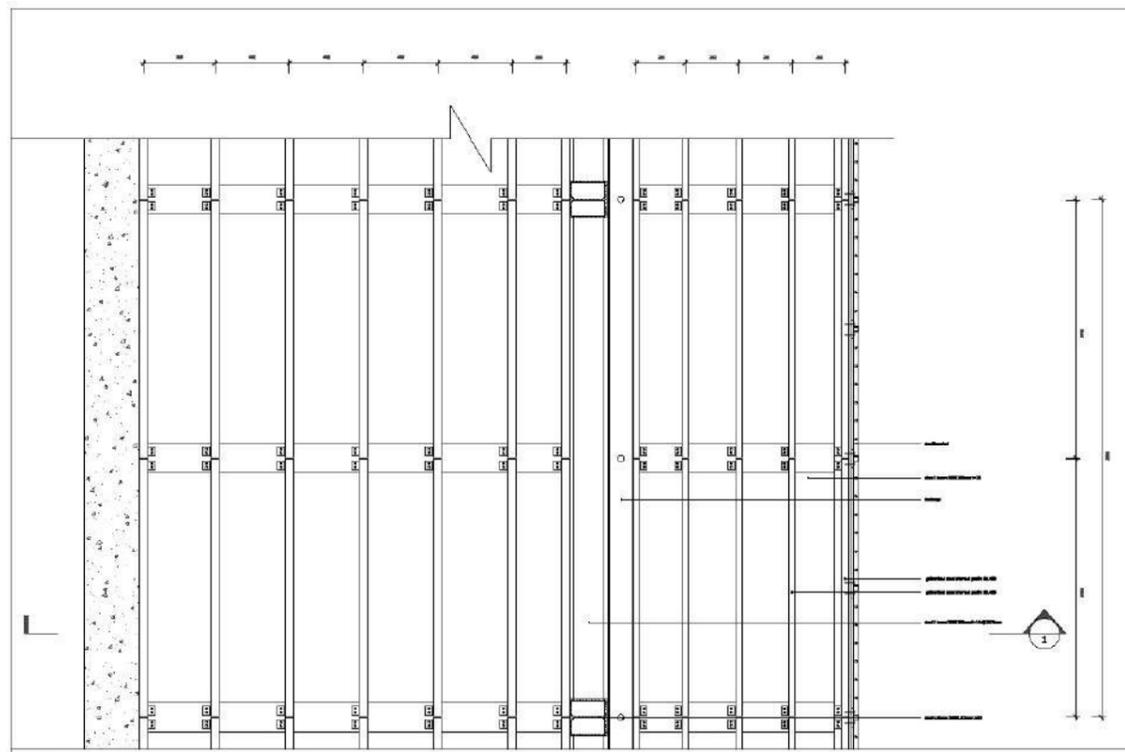
Small territory 01 -  
Room

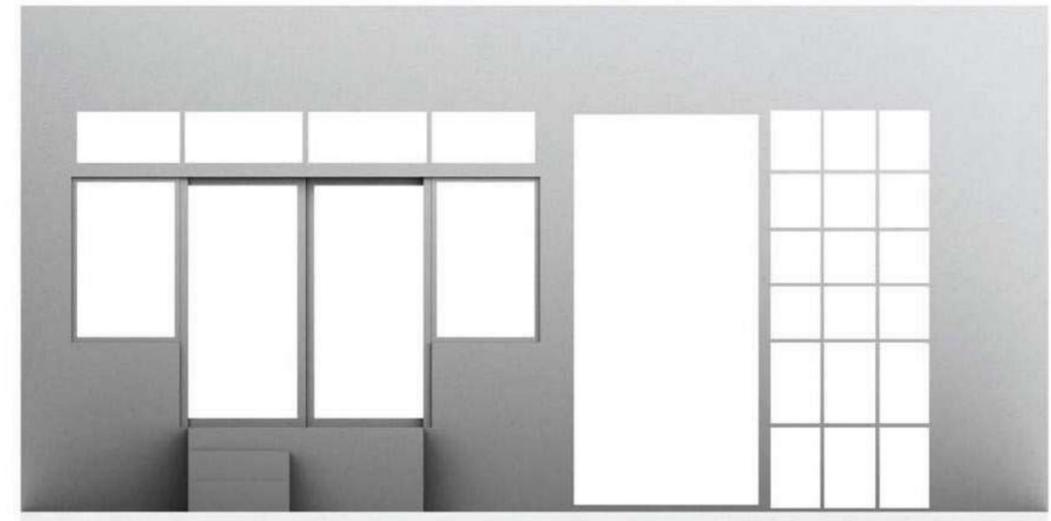
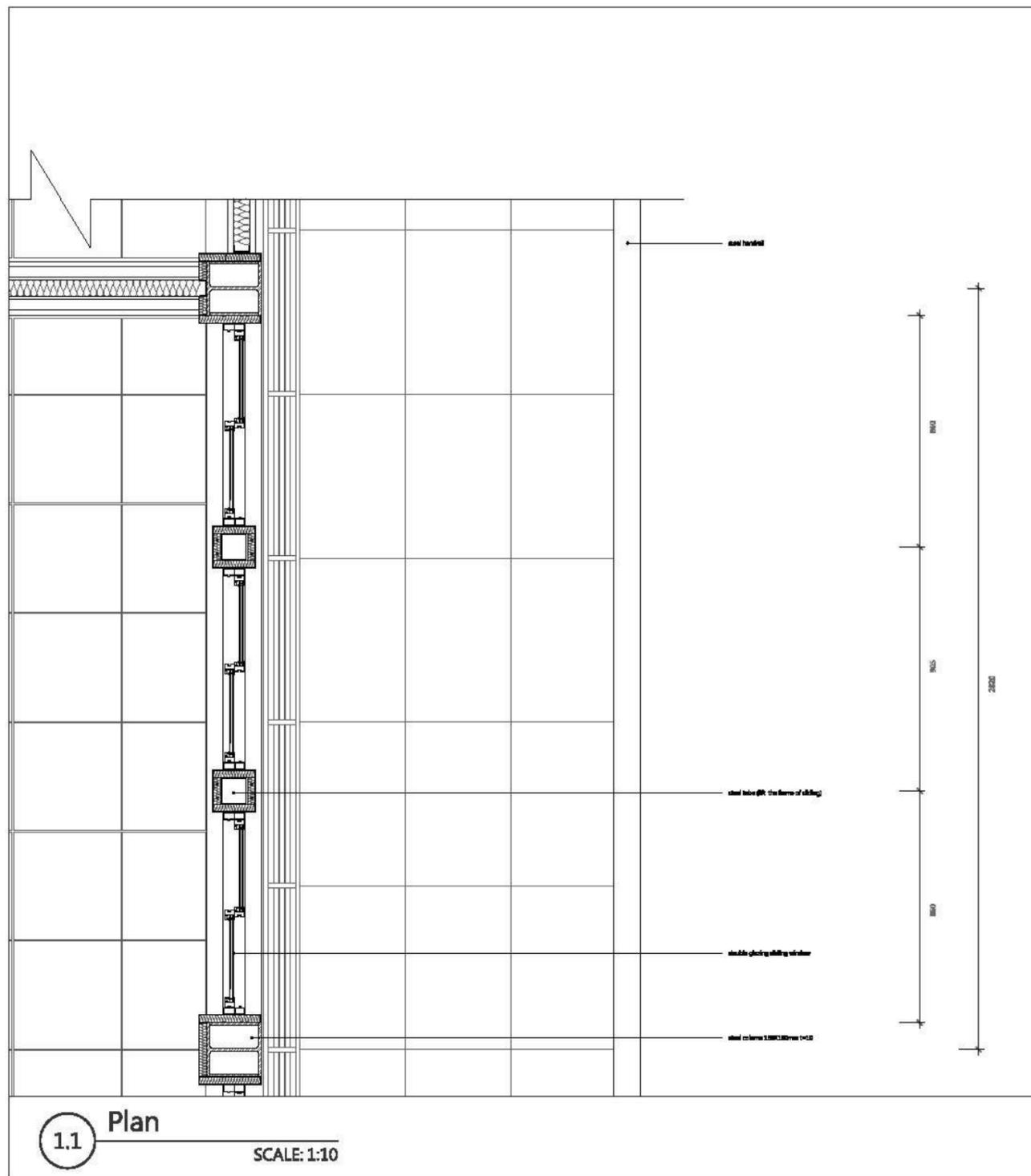


Multiple Functions / Flexible Usages

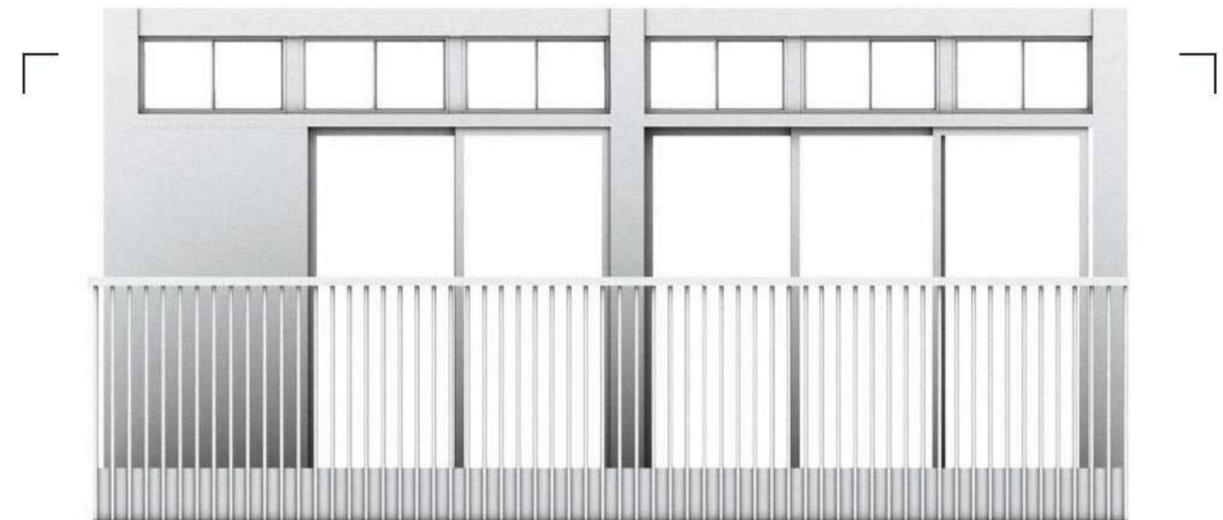


1 Detail  
SCALE: 1:10

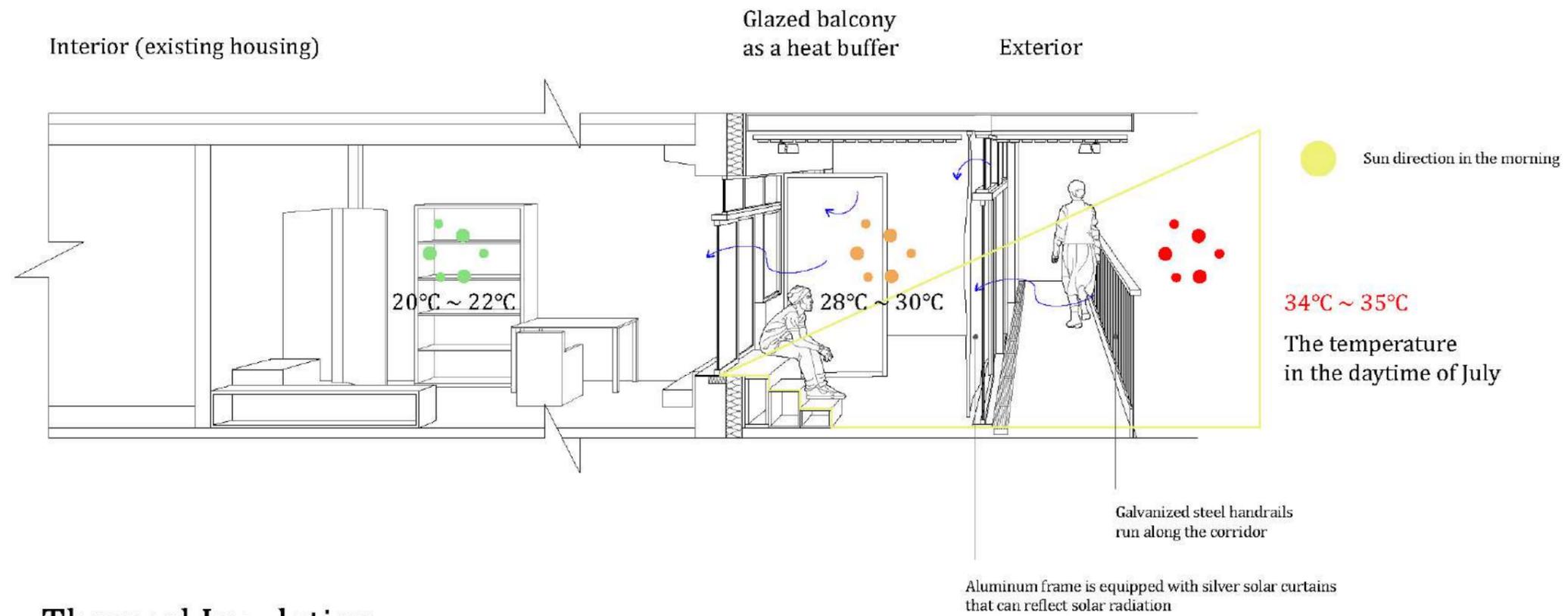




Elevation between balcony and interior

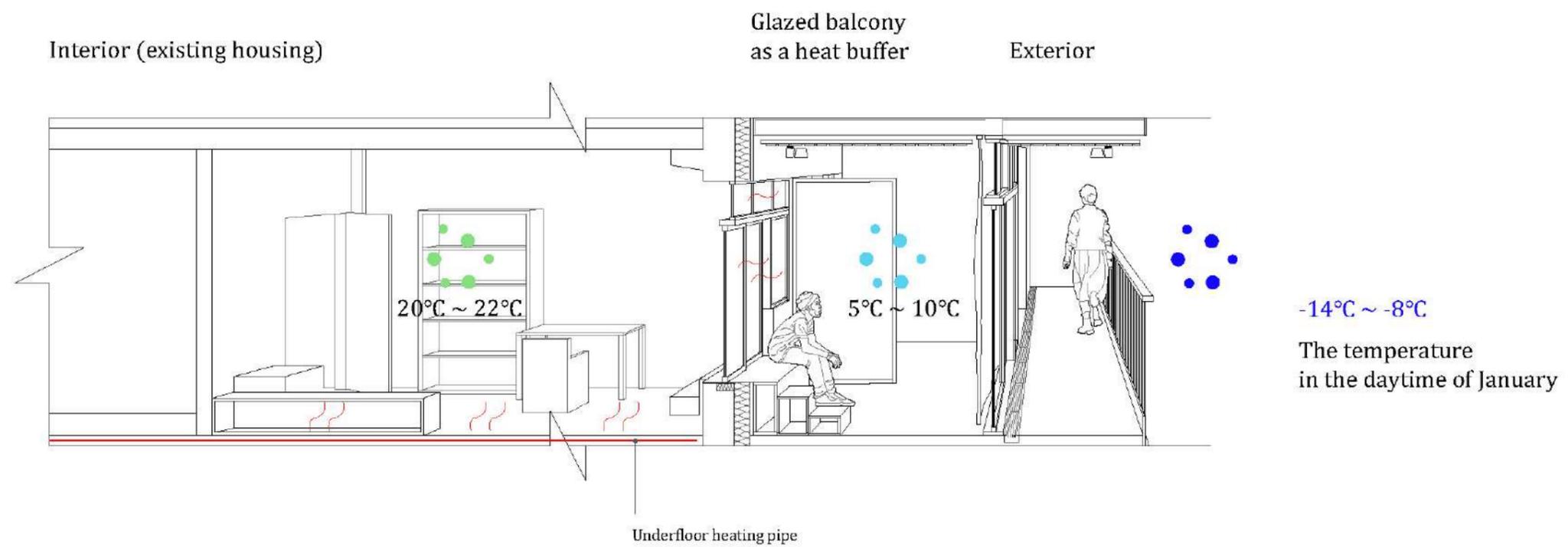


Elevation



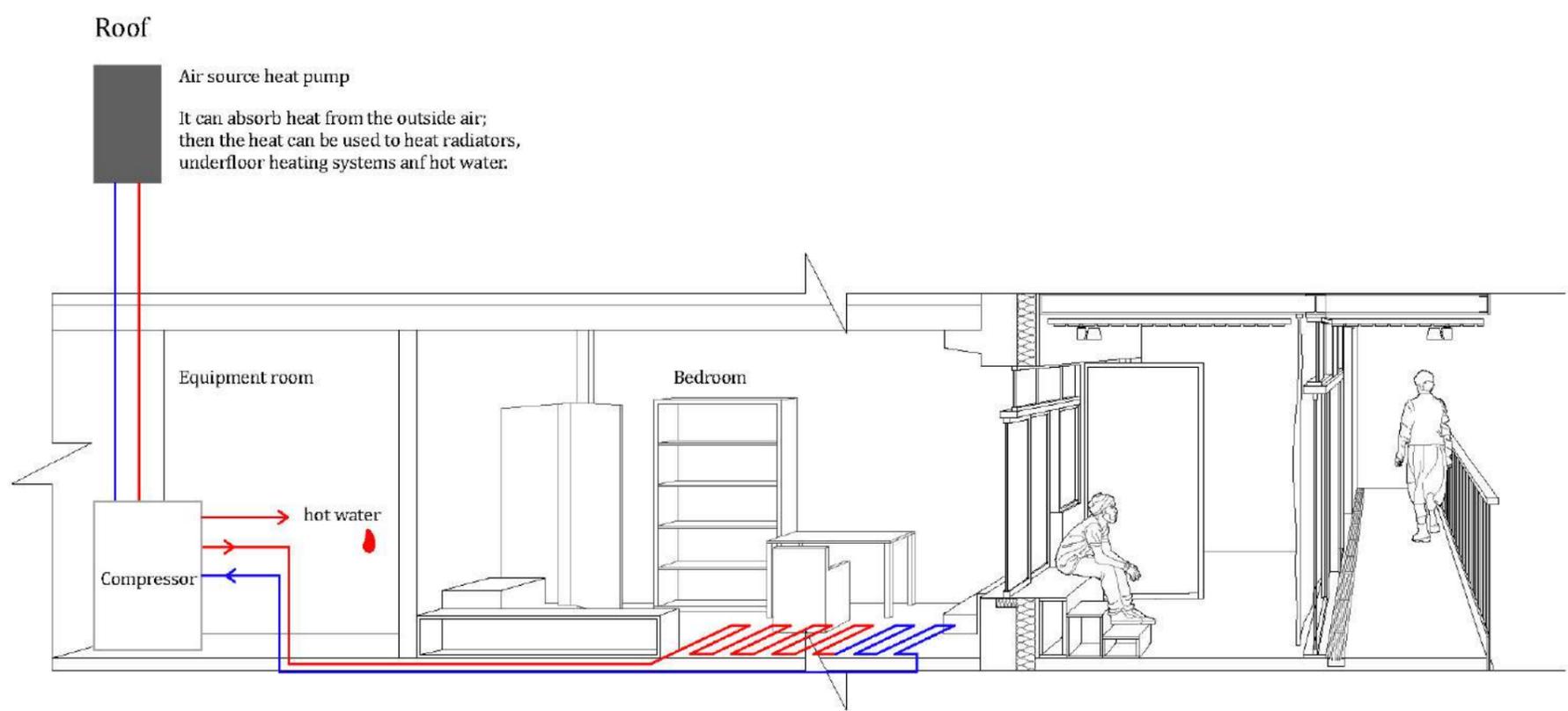
## Thermal Insulation

SUMMER



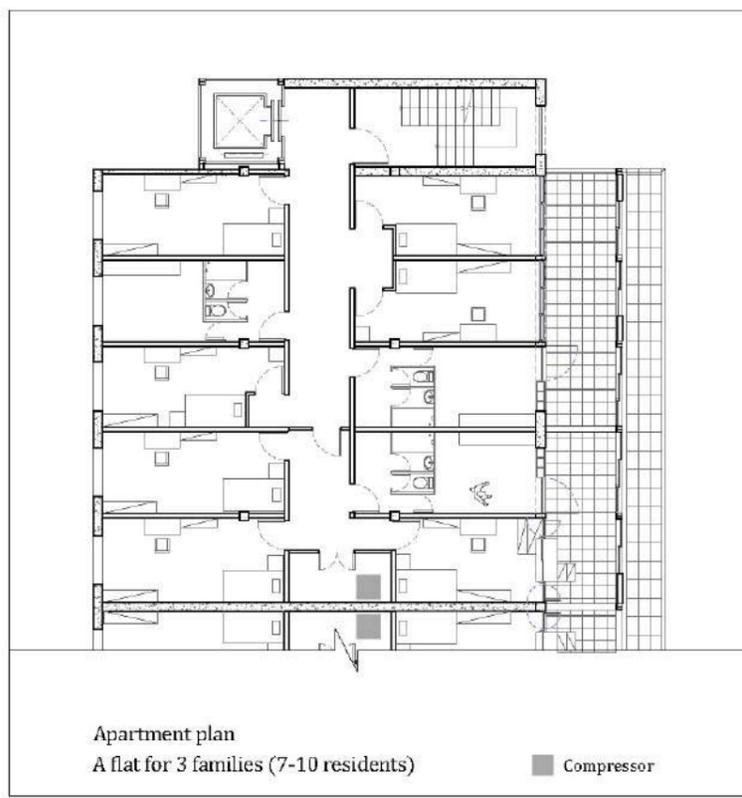
## Thermal Insulation

WINTER



## Energy strategy

Air to water heating system

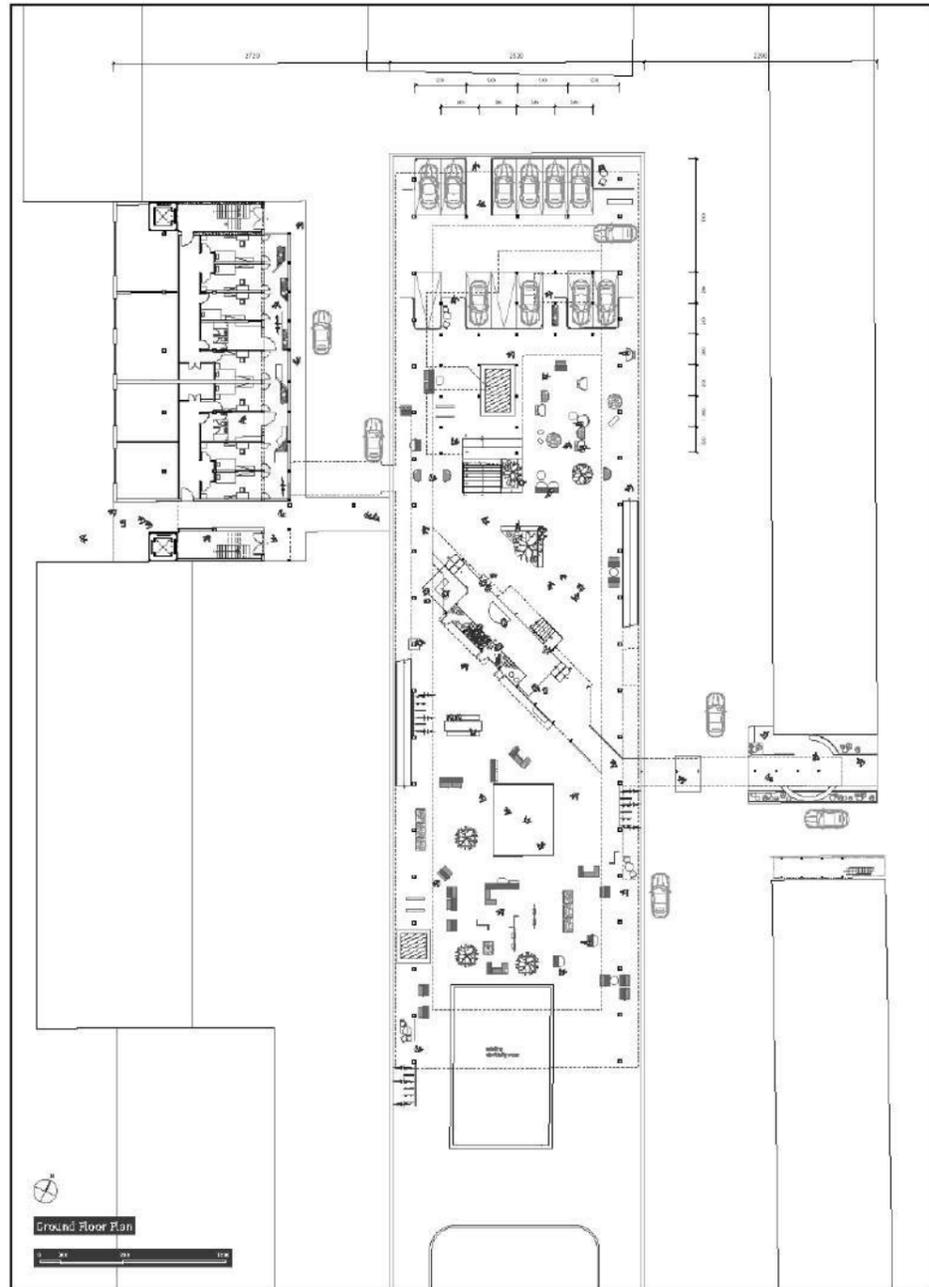




Small territory 02 -  
Building Entrance

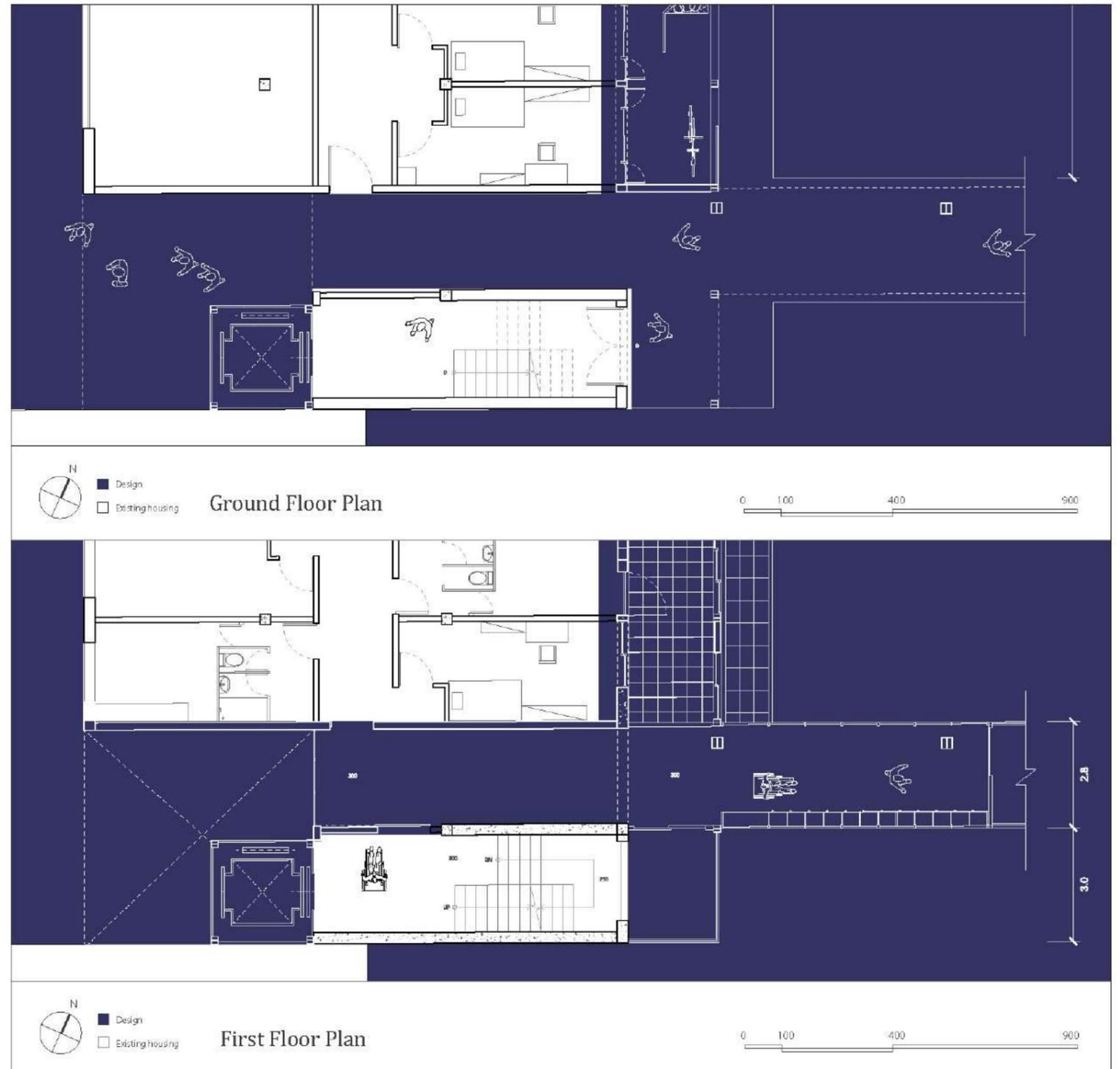


Small territory 02 -  
Building Entrance

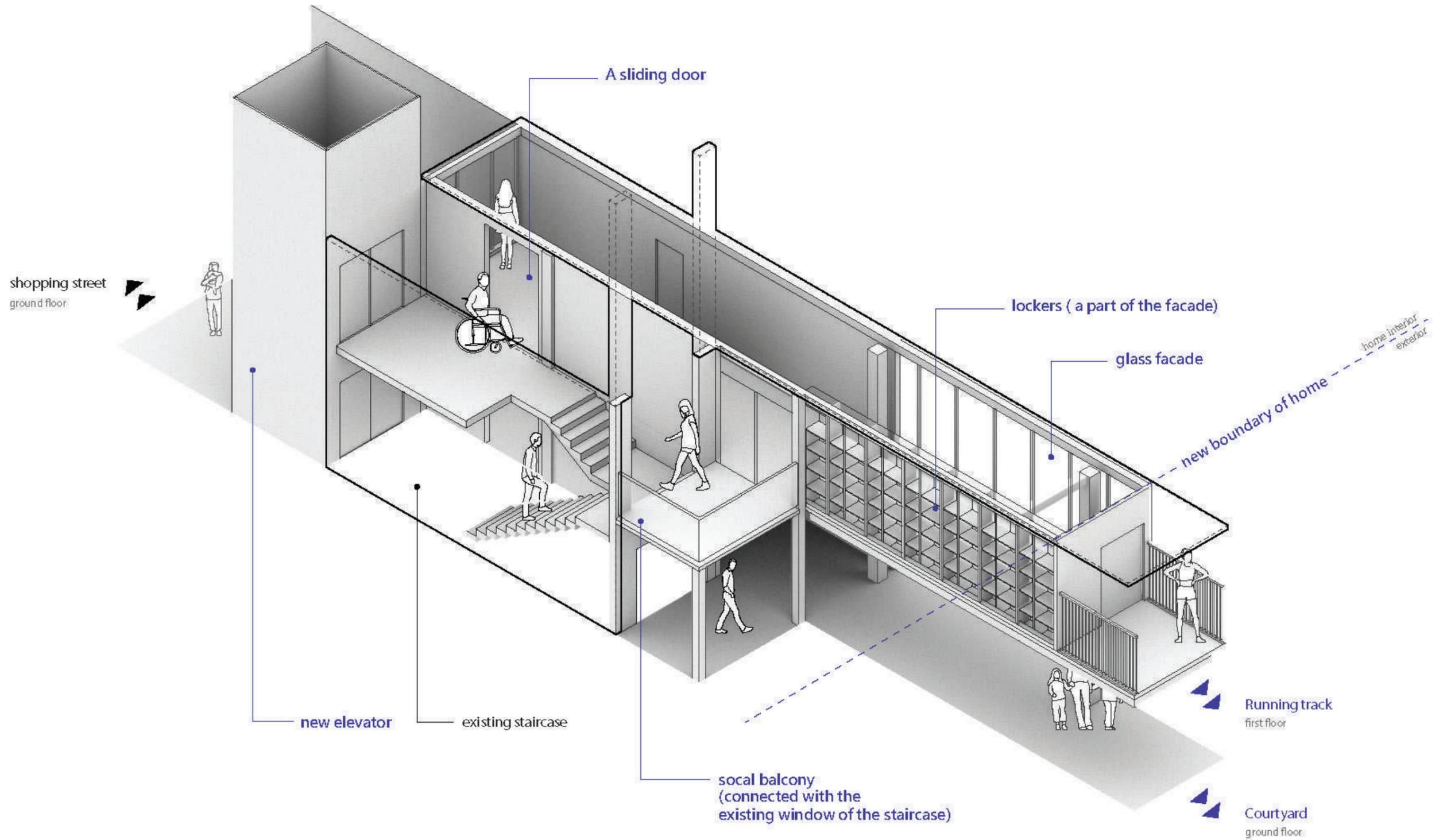


Remove a part of the building on the ground and the first floors.

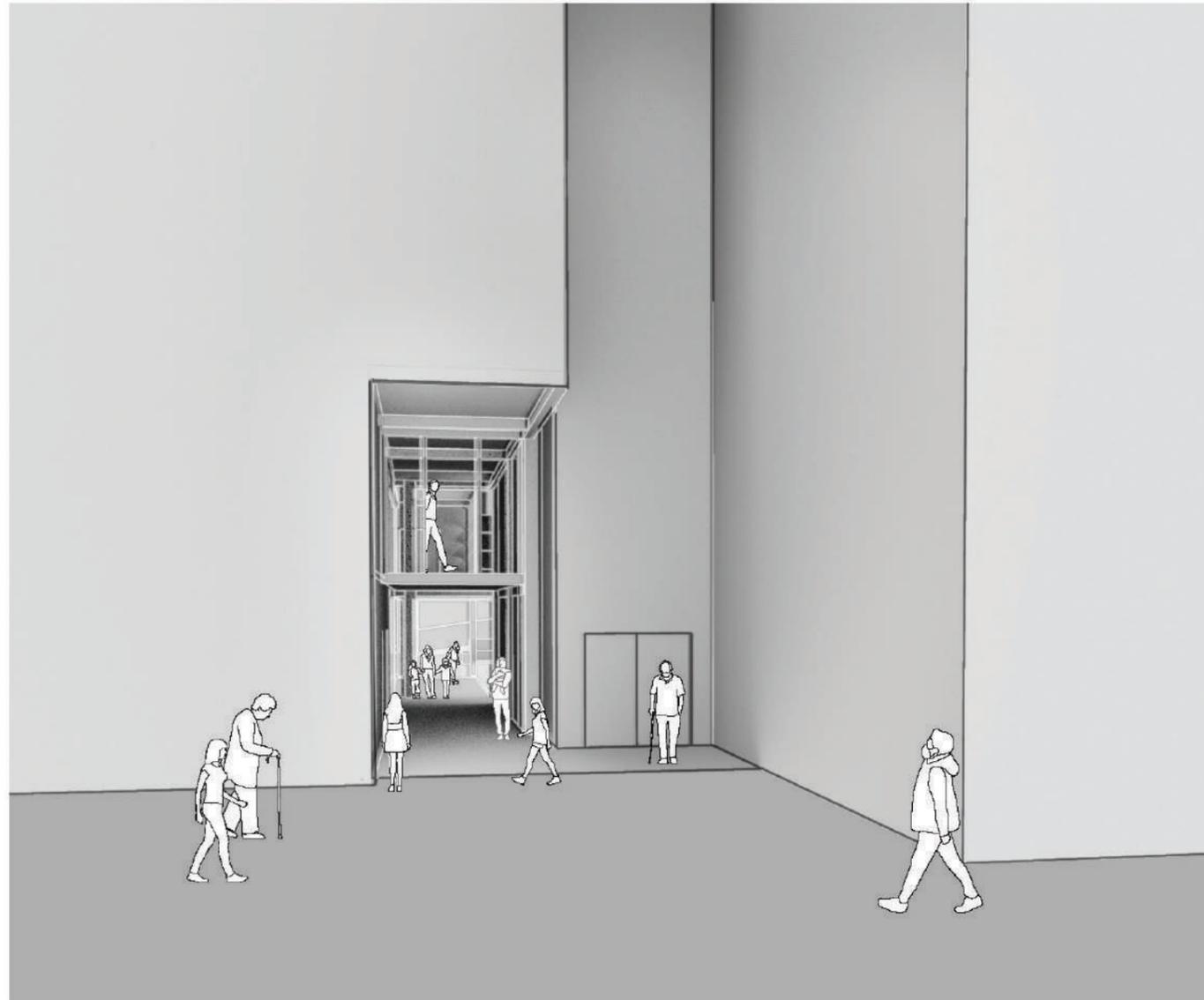
- Define the new boundary of home



Small territory 02 -  
Building Entrance

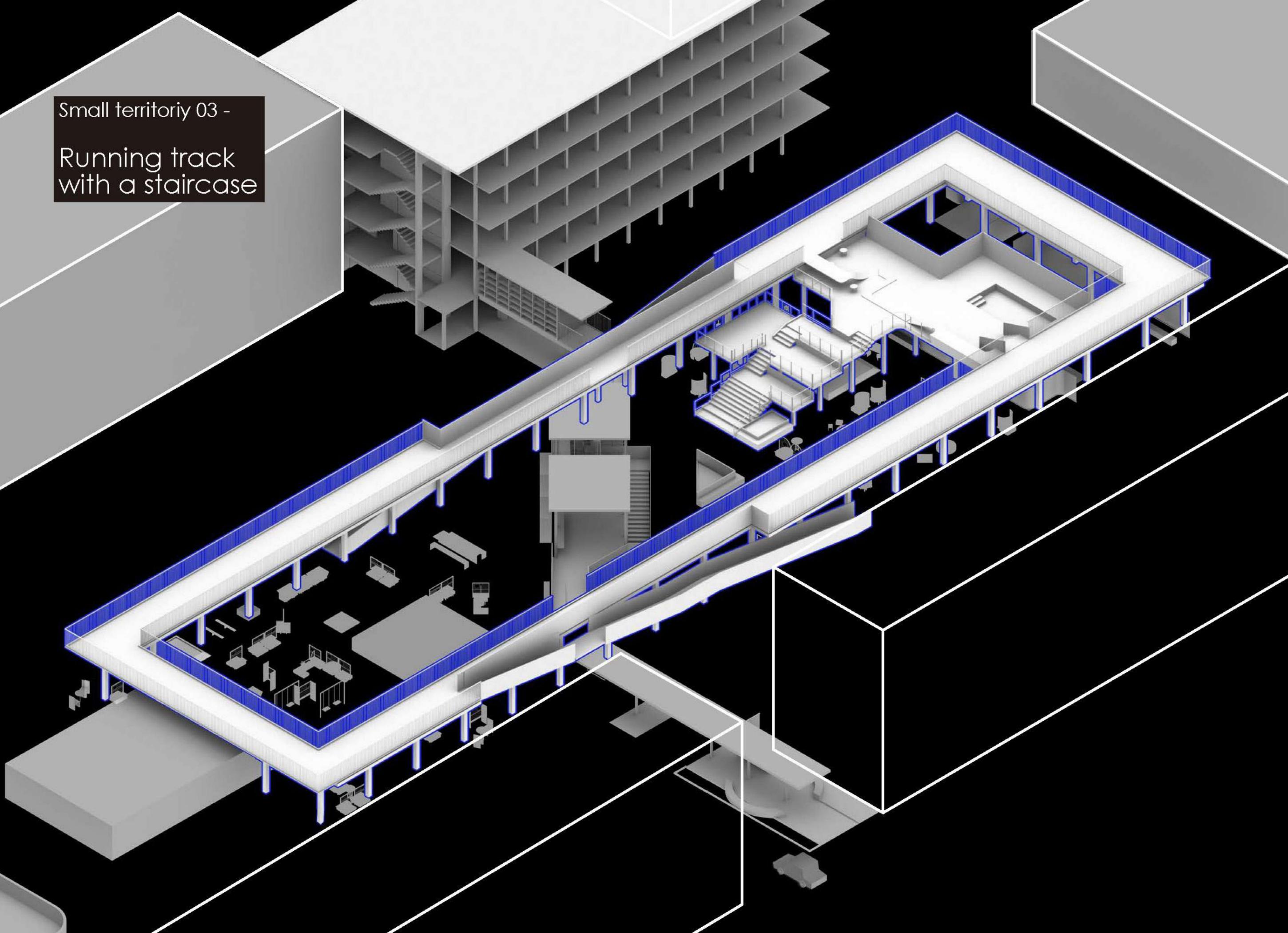


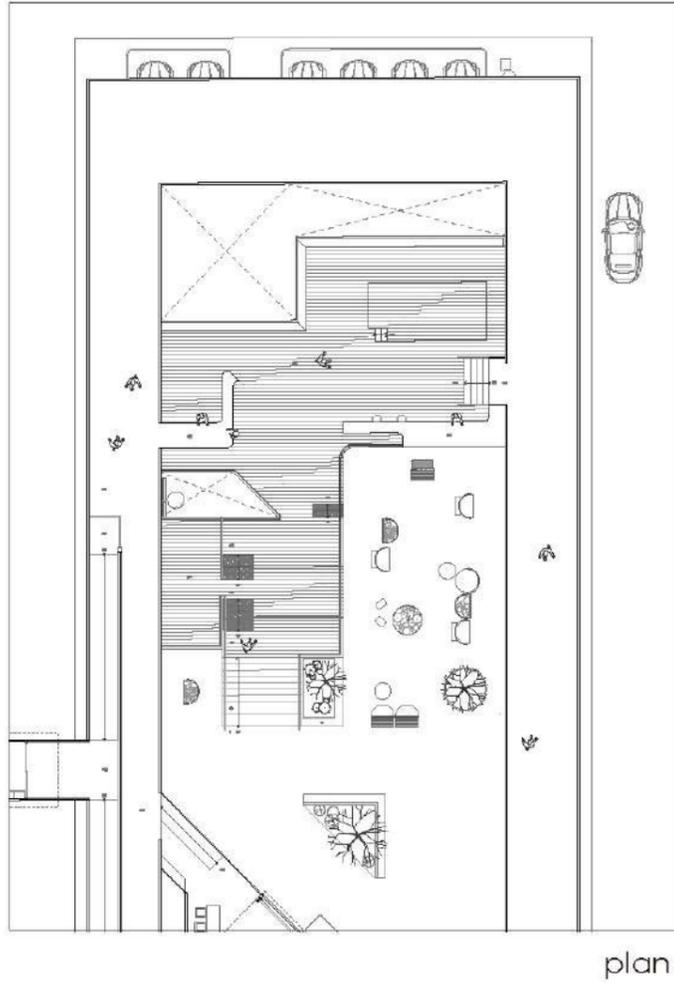
Small territory 02 -  
Building Entrance



View from the shopping street

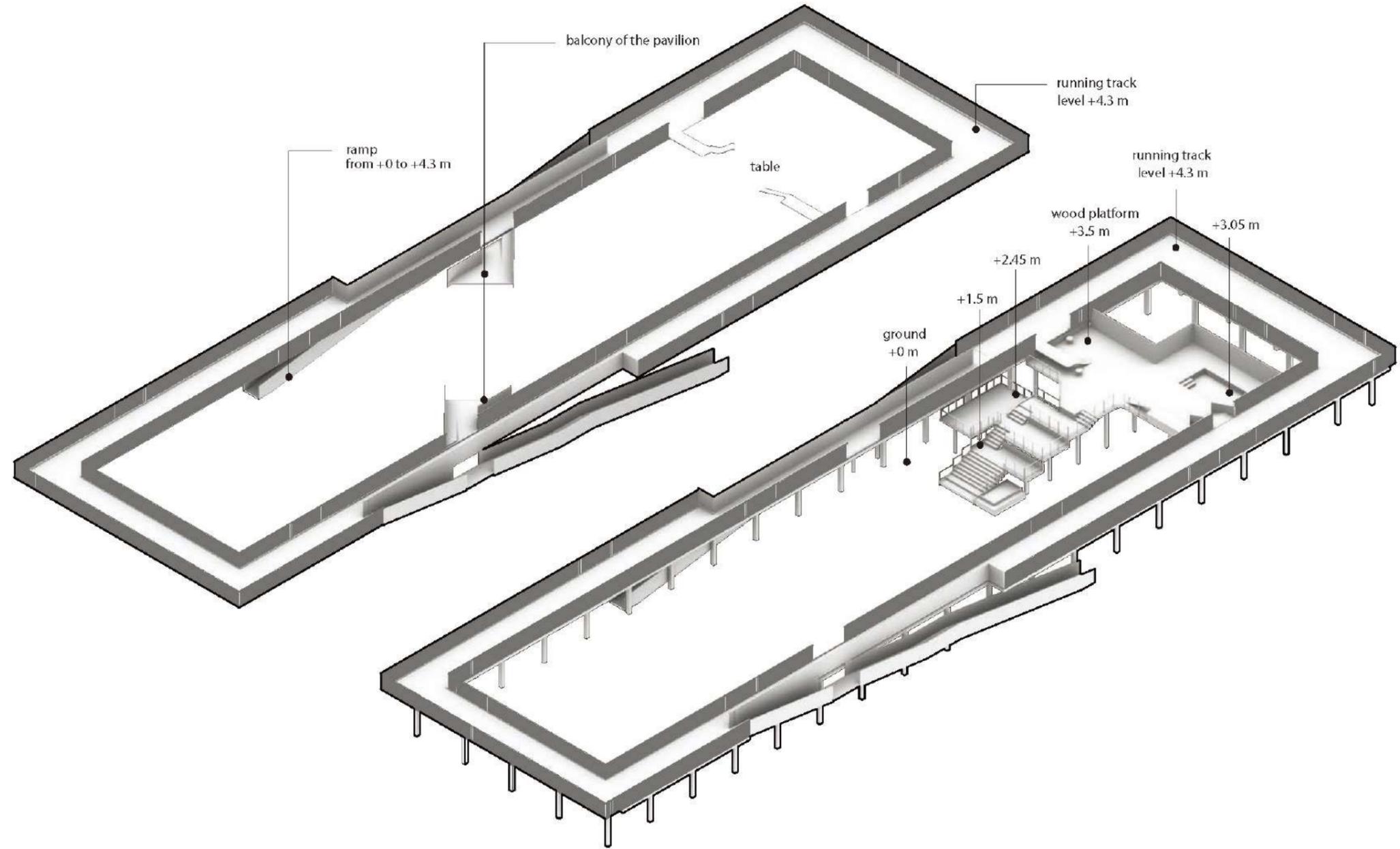
Small territory 03 -  
Running track  
with a staircase





### Running track with a staircase

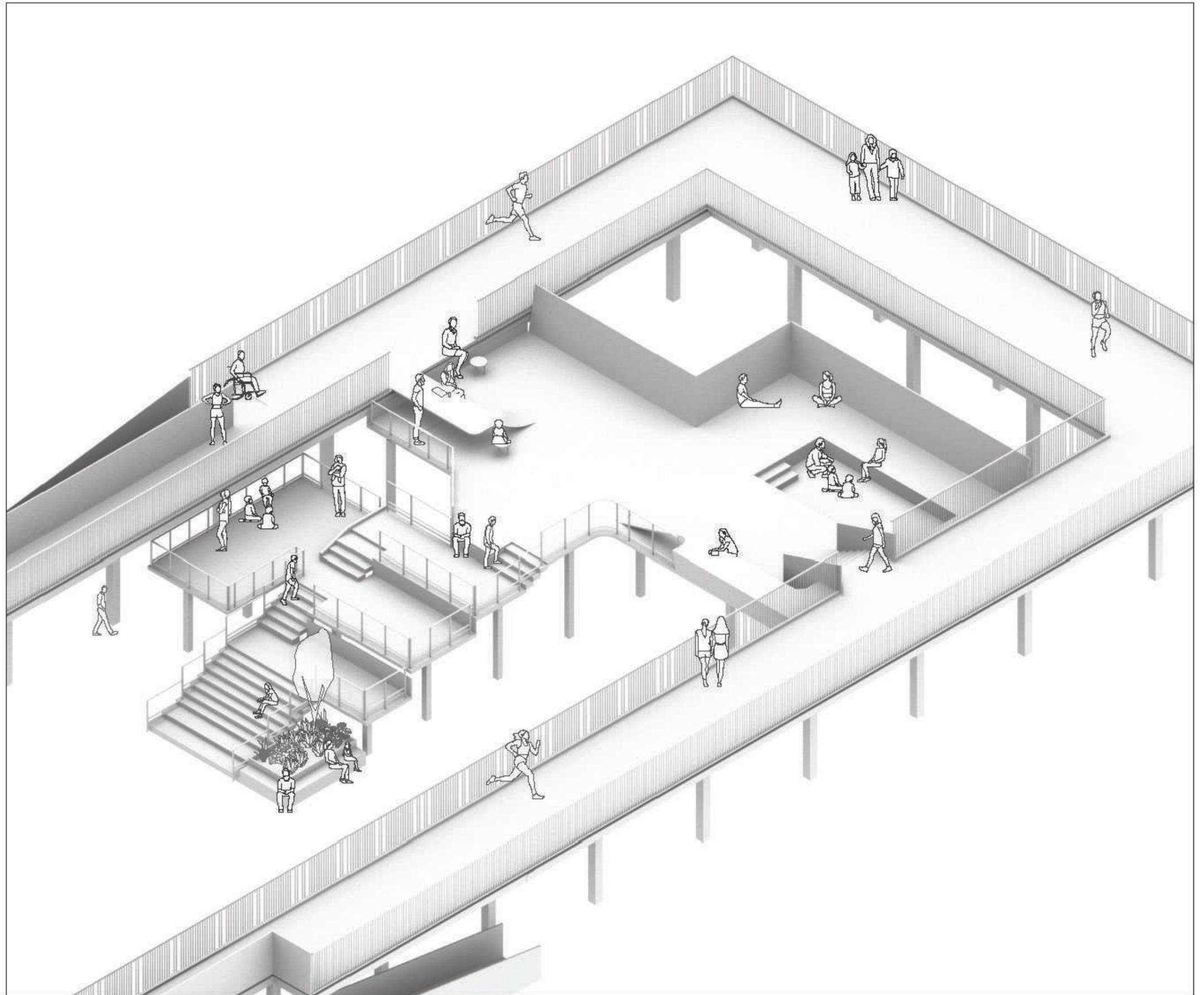
- Integrate the acts and programs through the linear surface



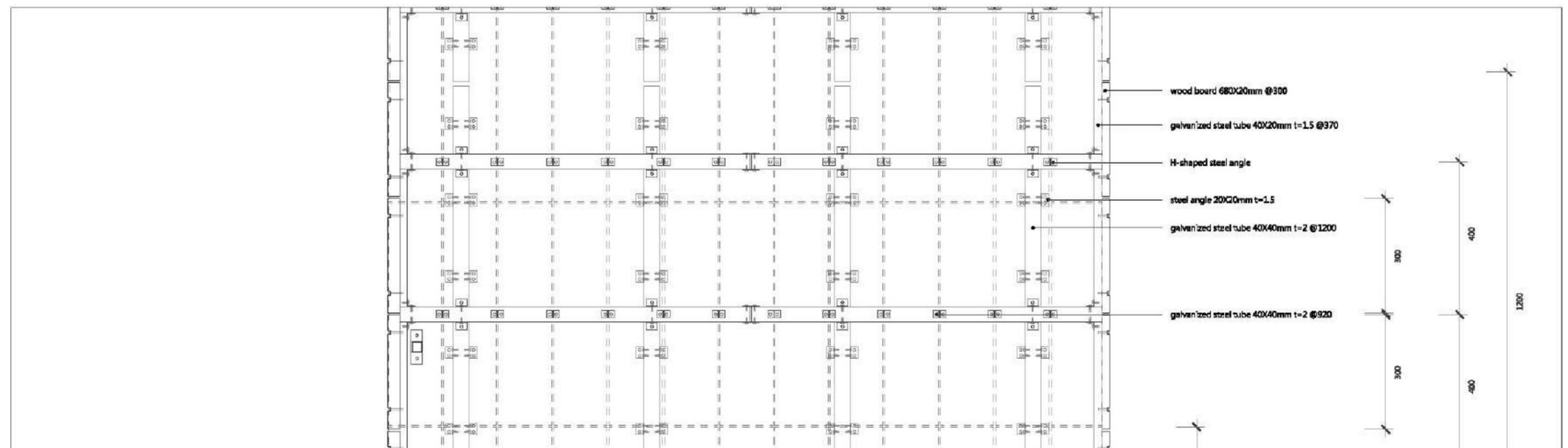
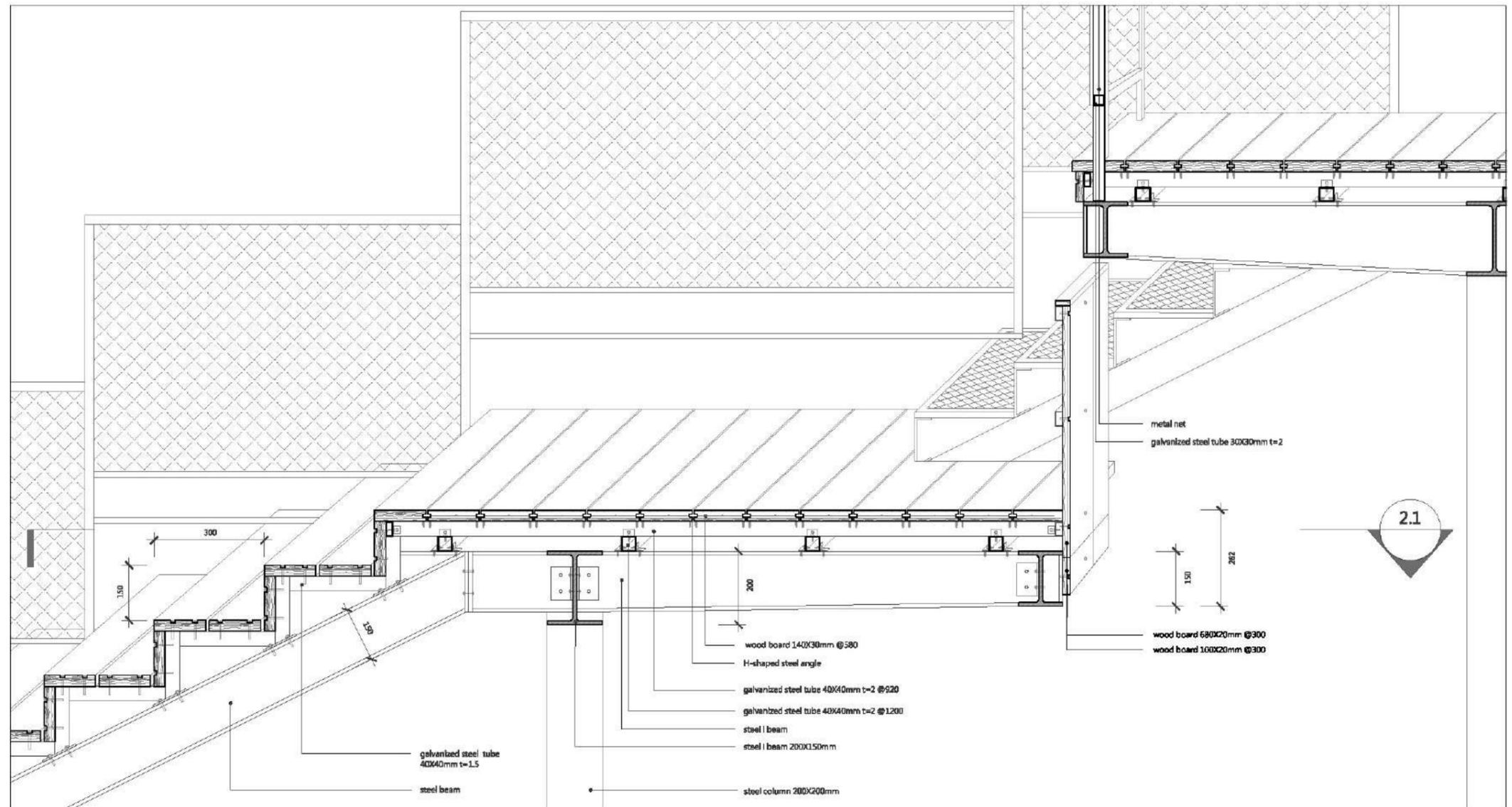
### Different usages of the track at different levels

When the people are approaching the track from the ground, there are different distances between their position and the track. These vertical distances let the track provide various programs, such as canopy, sitting area, or eating table.

Small territory 03 -  
Running track  
with a staircase



Small territory 03 -  
Running track with a staircase



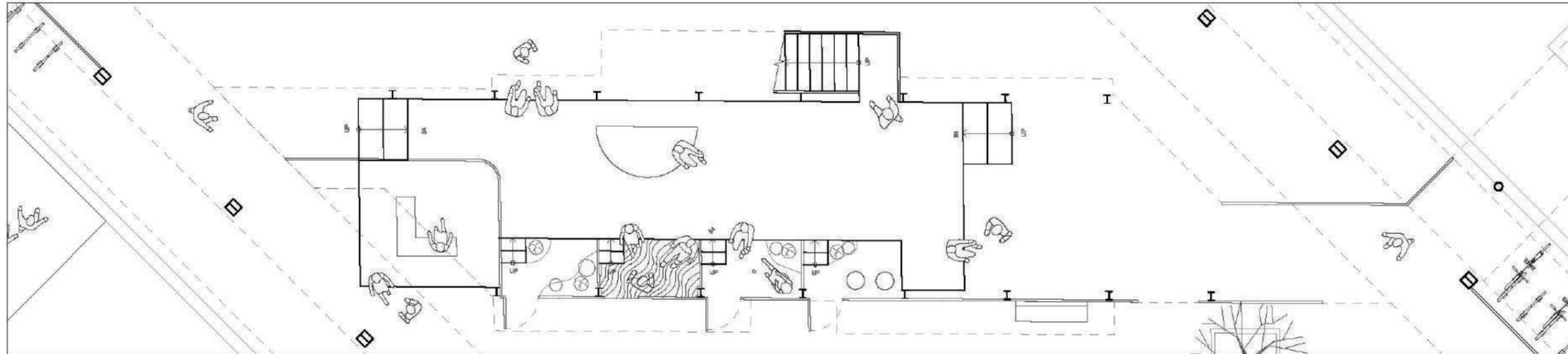
Small territory 04 -  
Room pavilion



Small territory 04 -

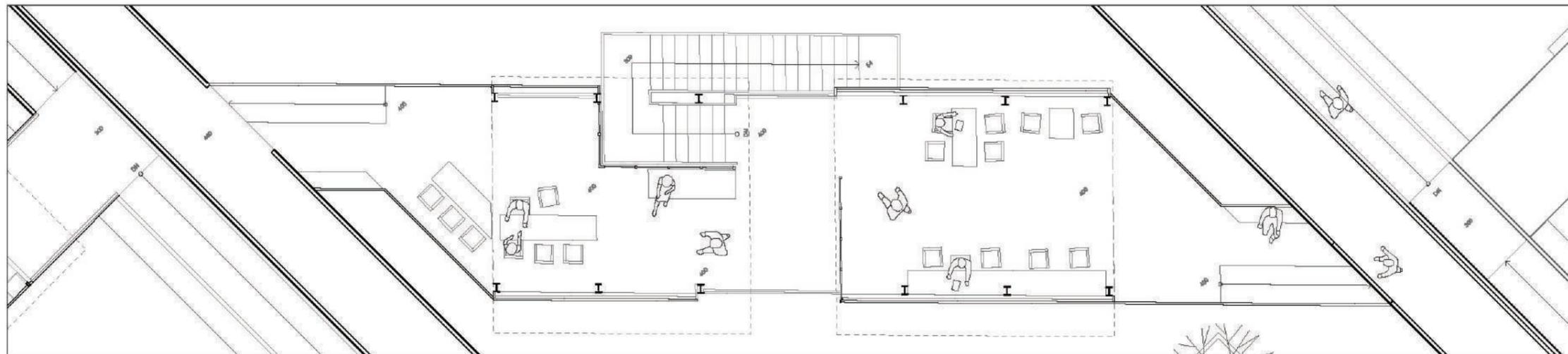
## Room pavilion

- The public pavilion as a rest space, attracts the people from the streets



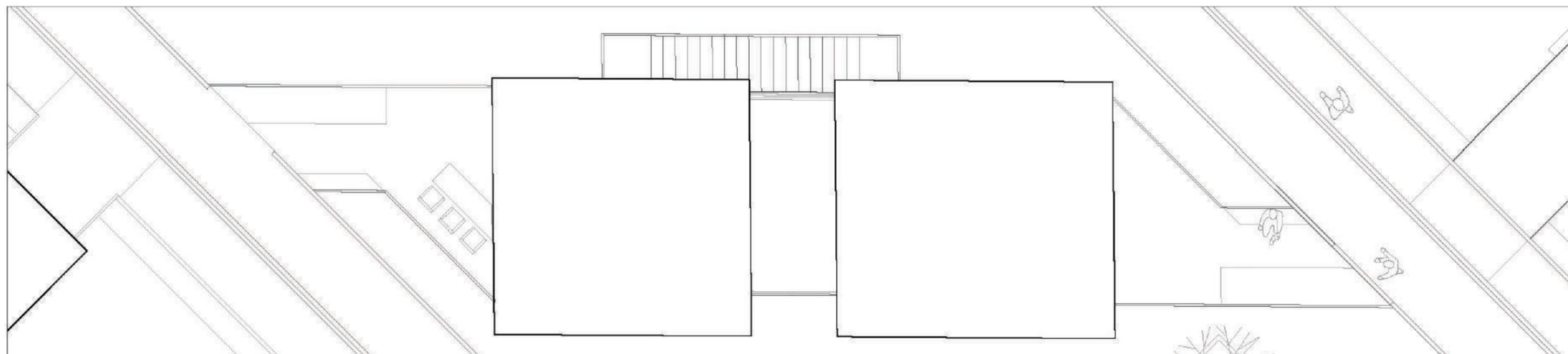
- raised wooden platform
- two ideas for the edges:
  1. linear stripe = open
  2. room = semi-open

**Ground Floor Plan**



- the balconies connected with the running track
- eating, reading tables
- the middle balcony is the entrance of the two rest spaces

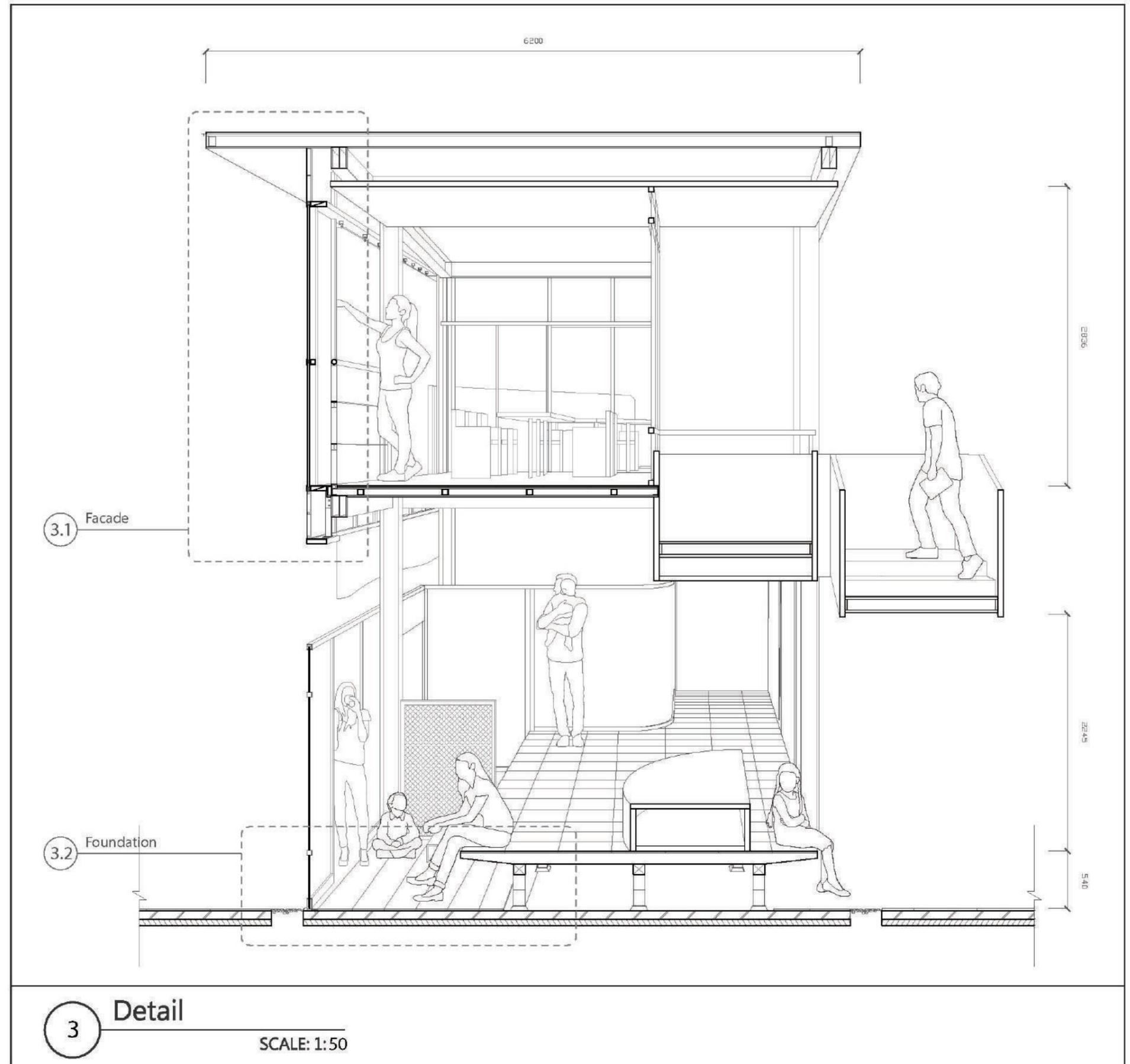
**First Floor Plan**

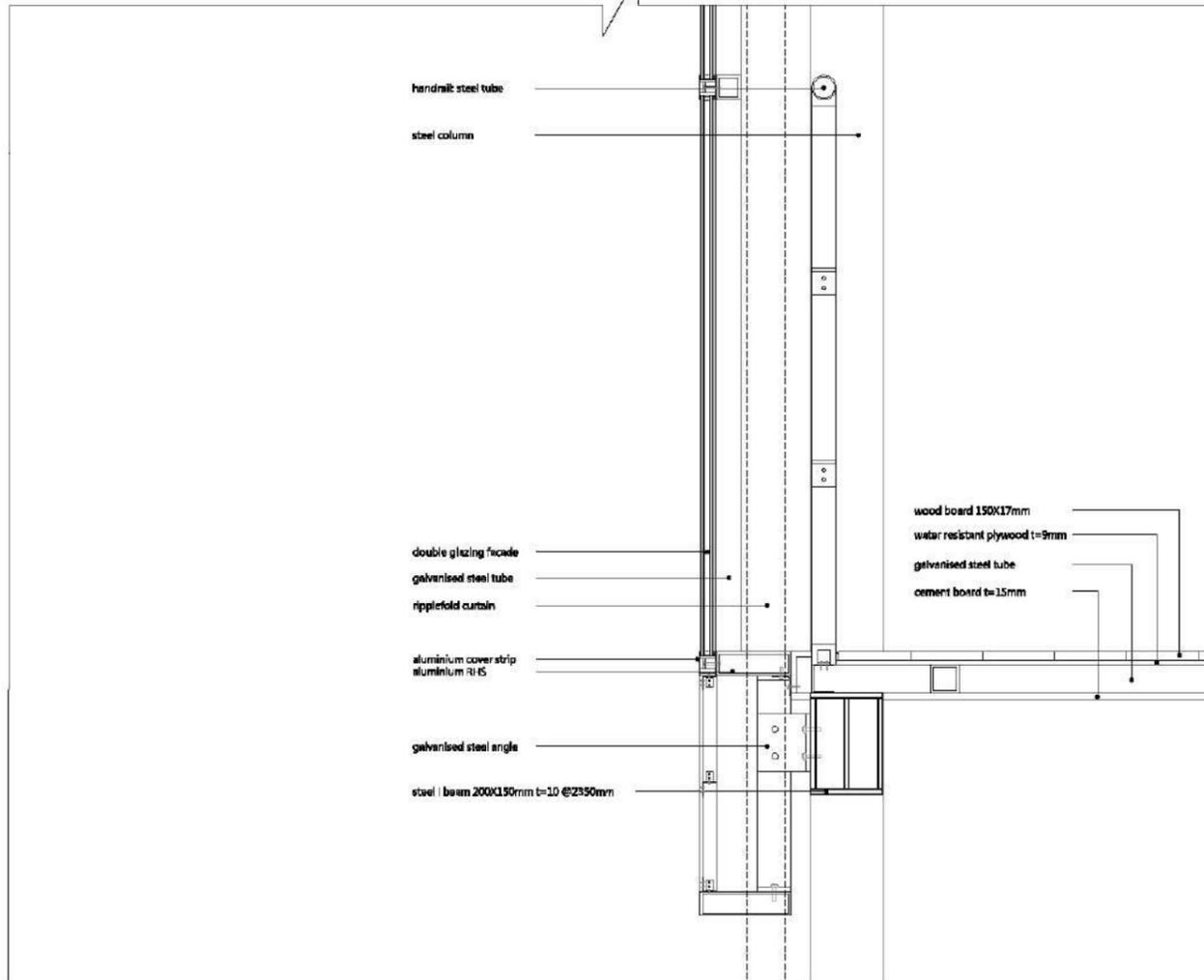
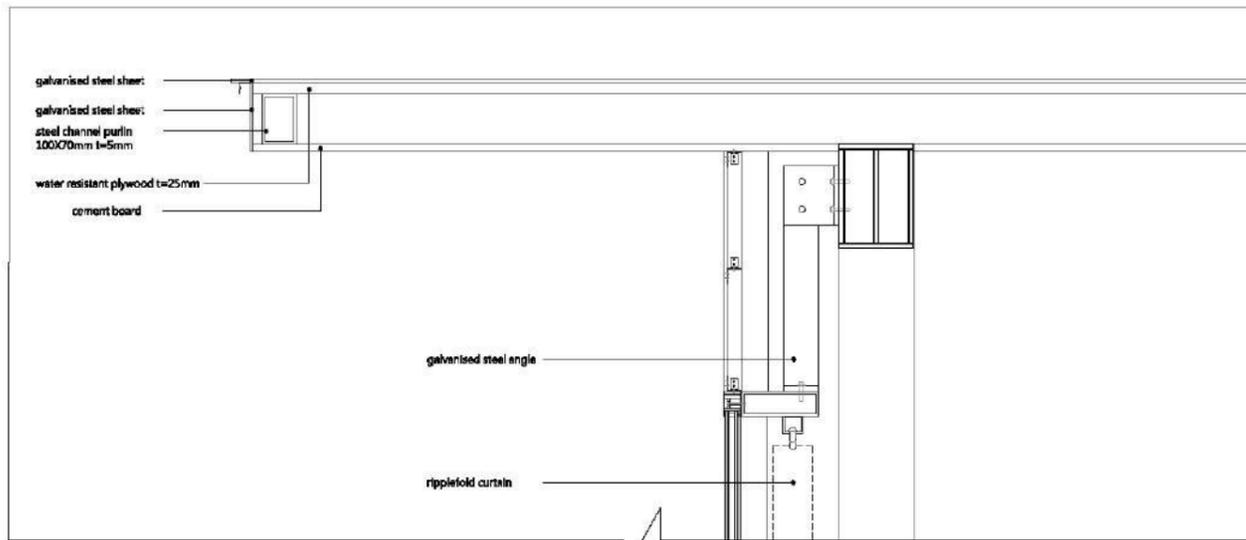


**Roof Plan**

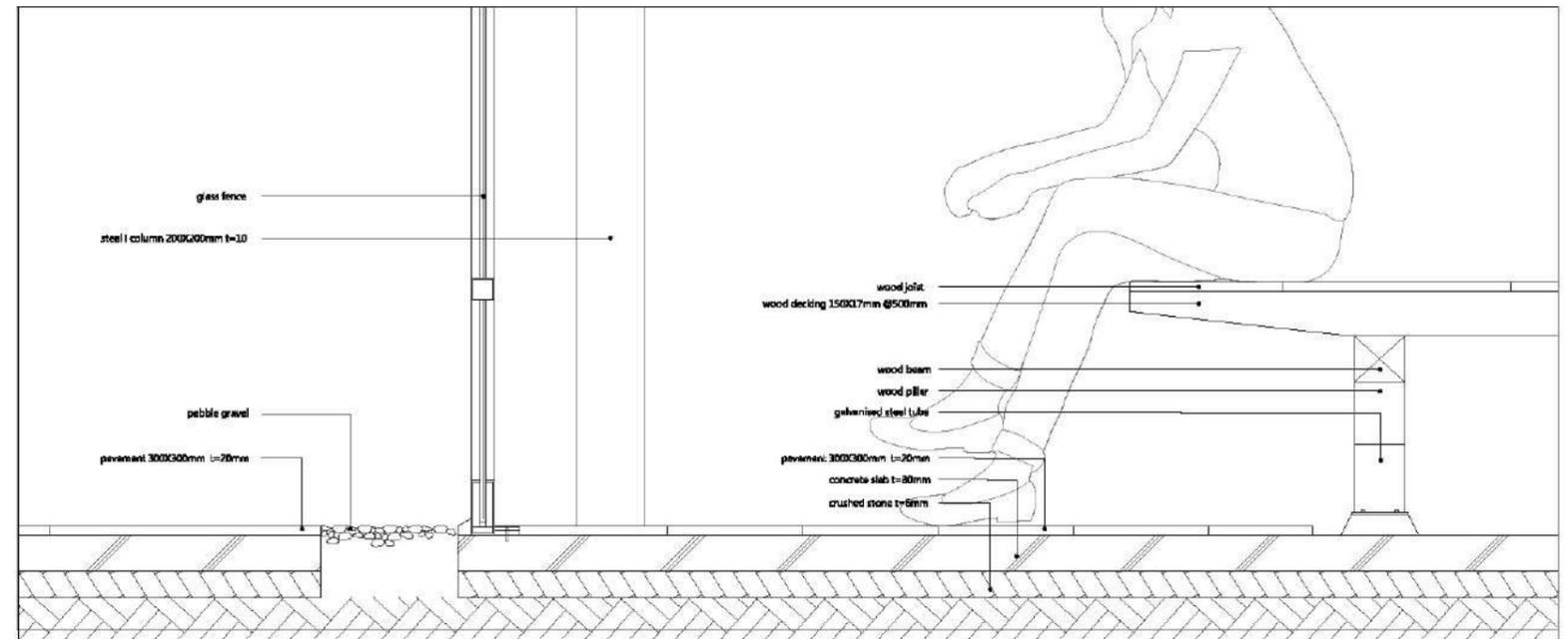
Small territory 04 -  
Room pavilion

- indirect interaction of the two floors through the curtain
- various vision at different levels (observation pavilion)





Facade Detail 1:10

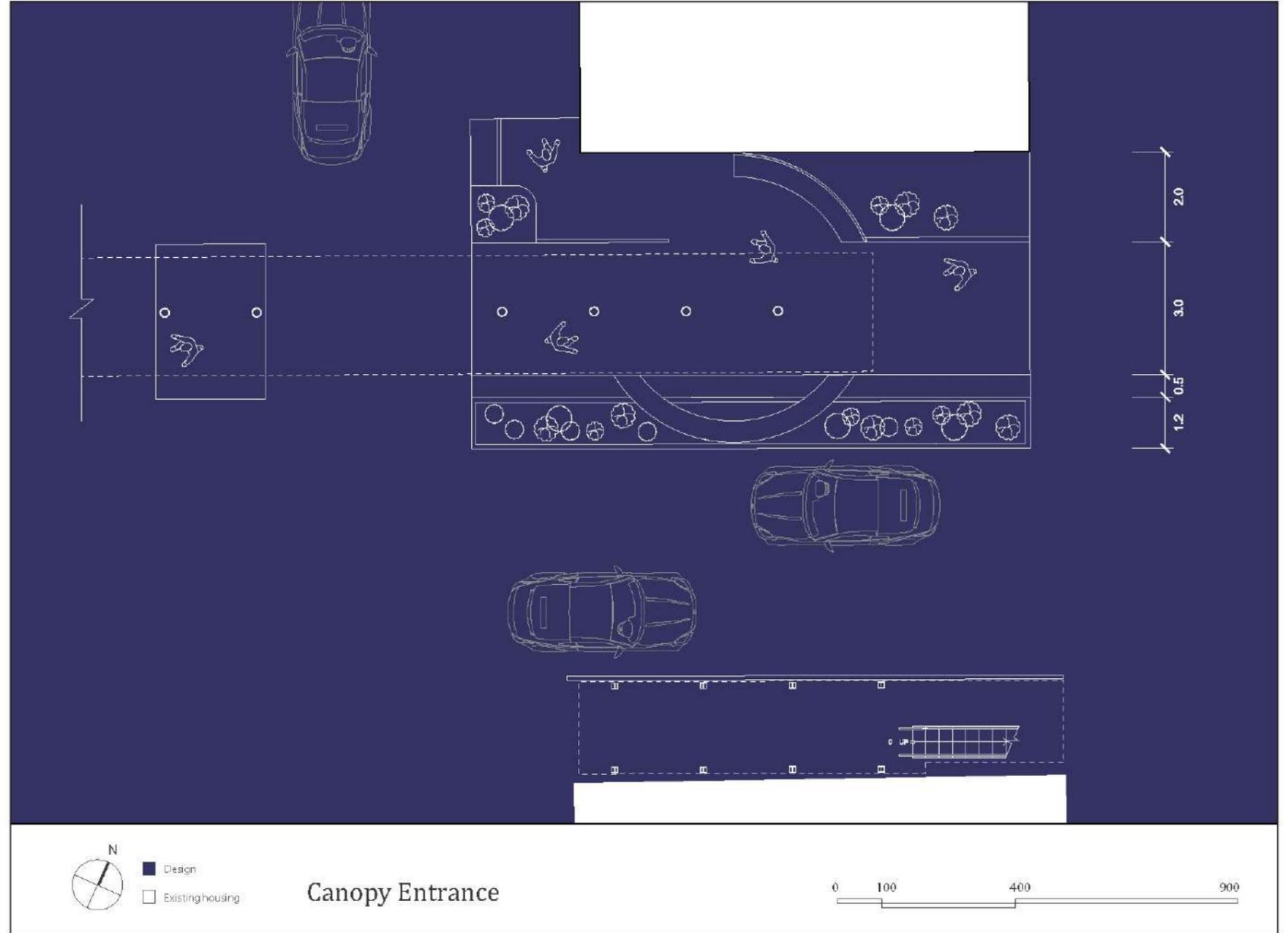
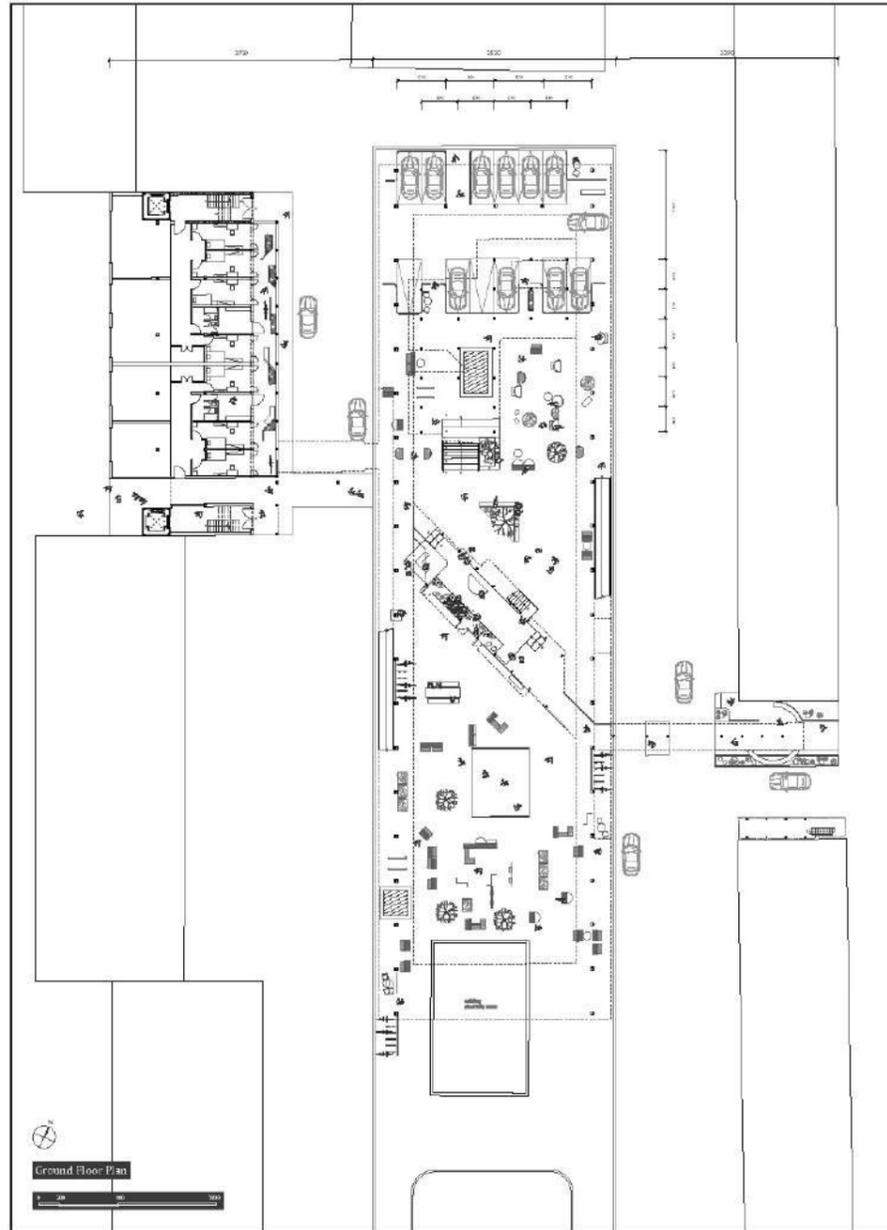


Foundation Detail 1:10

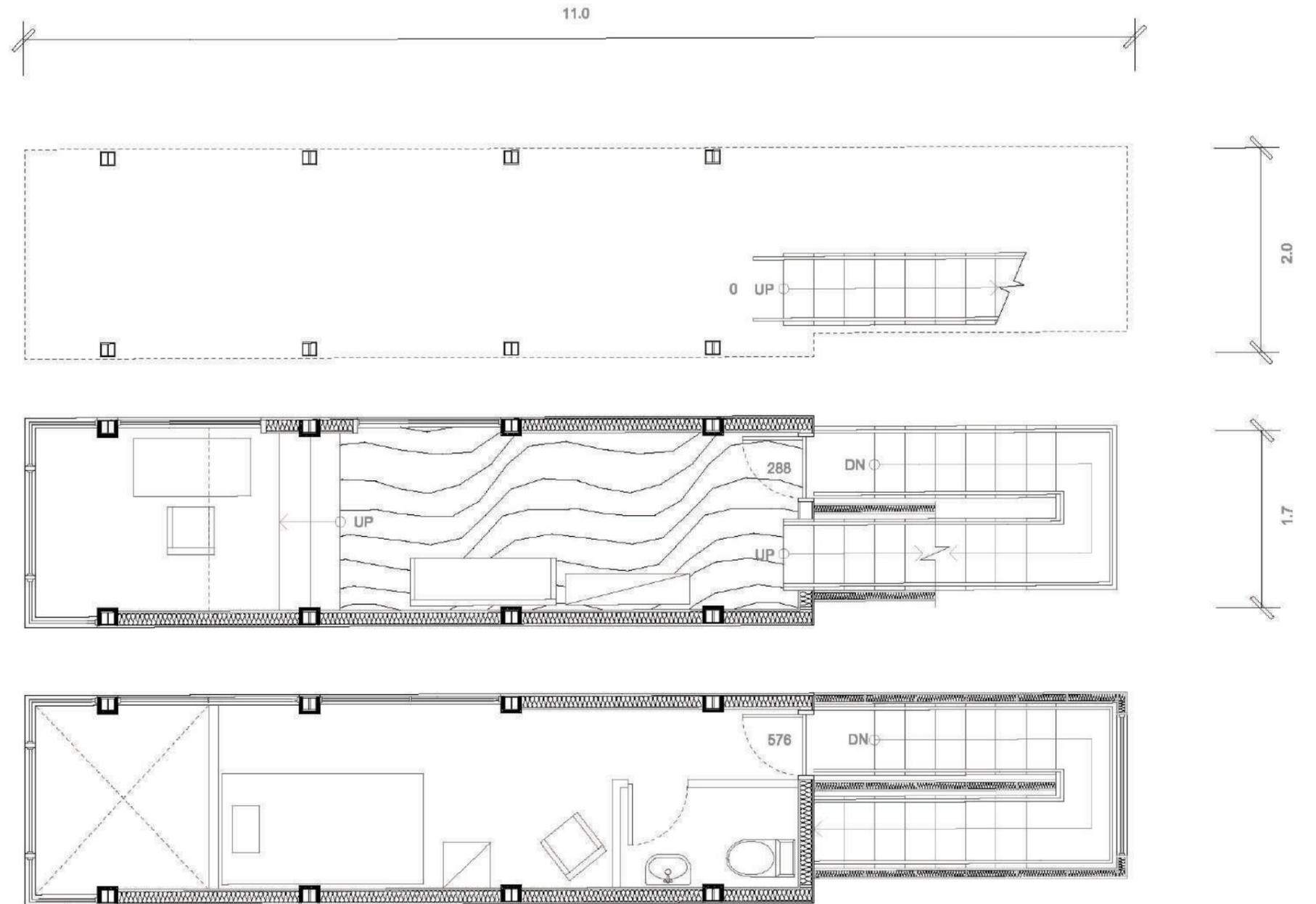
Small territory 05 -  
Canopy Entrance



Small territory 05 -  
Canopy Entrance



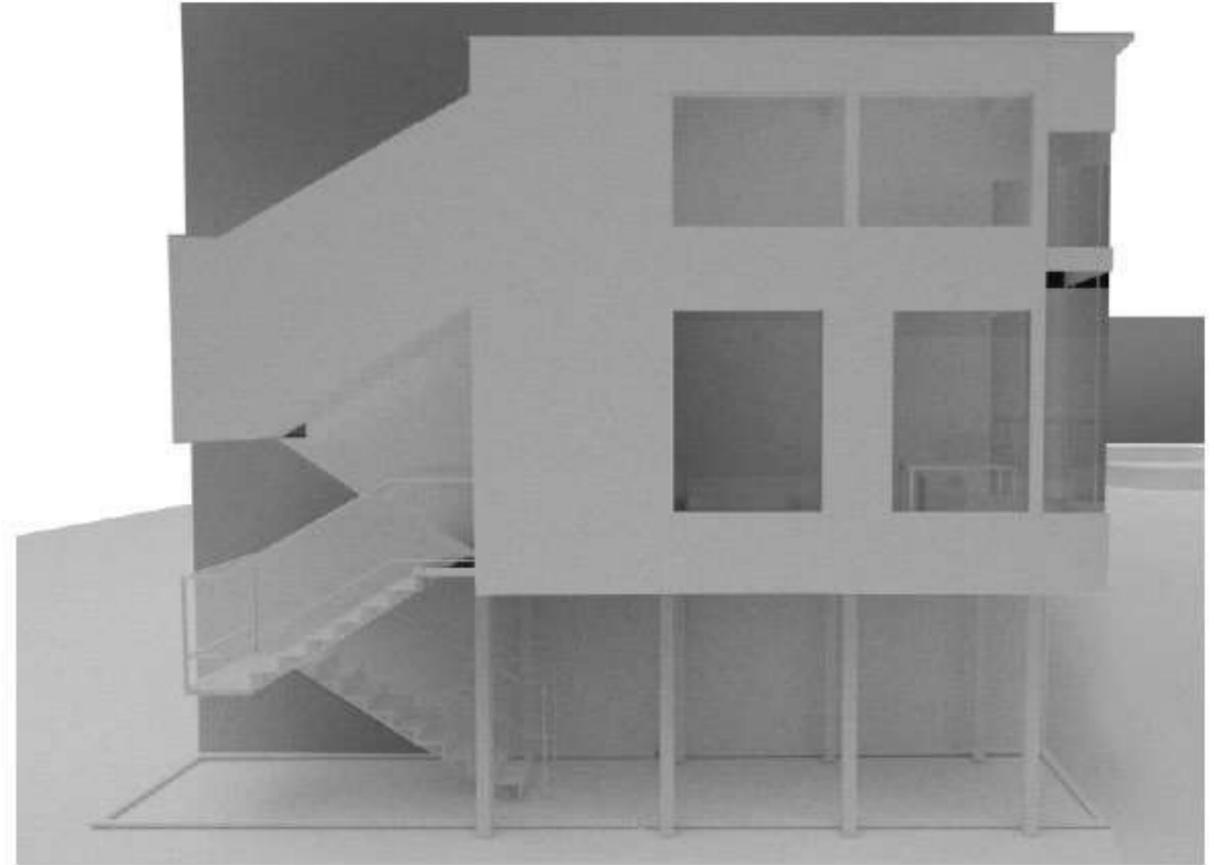
Small territory 05 -  
A house of  
courtyard keeper



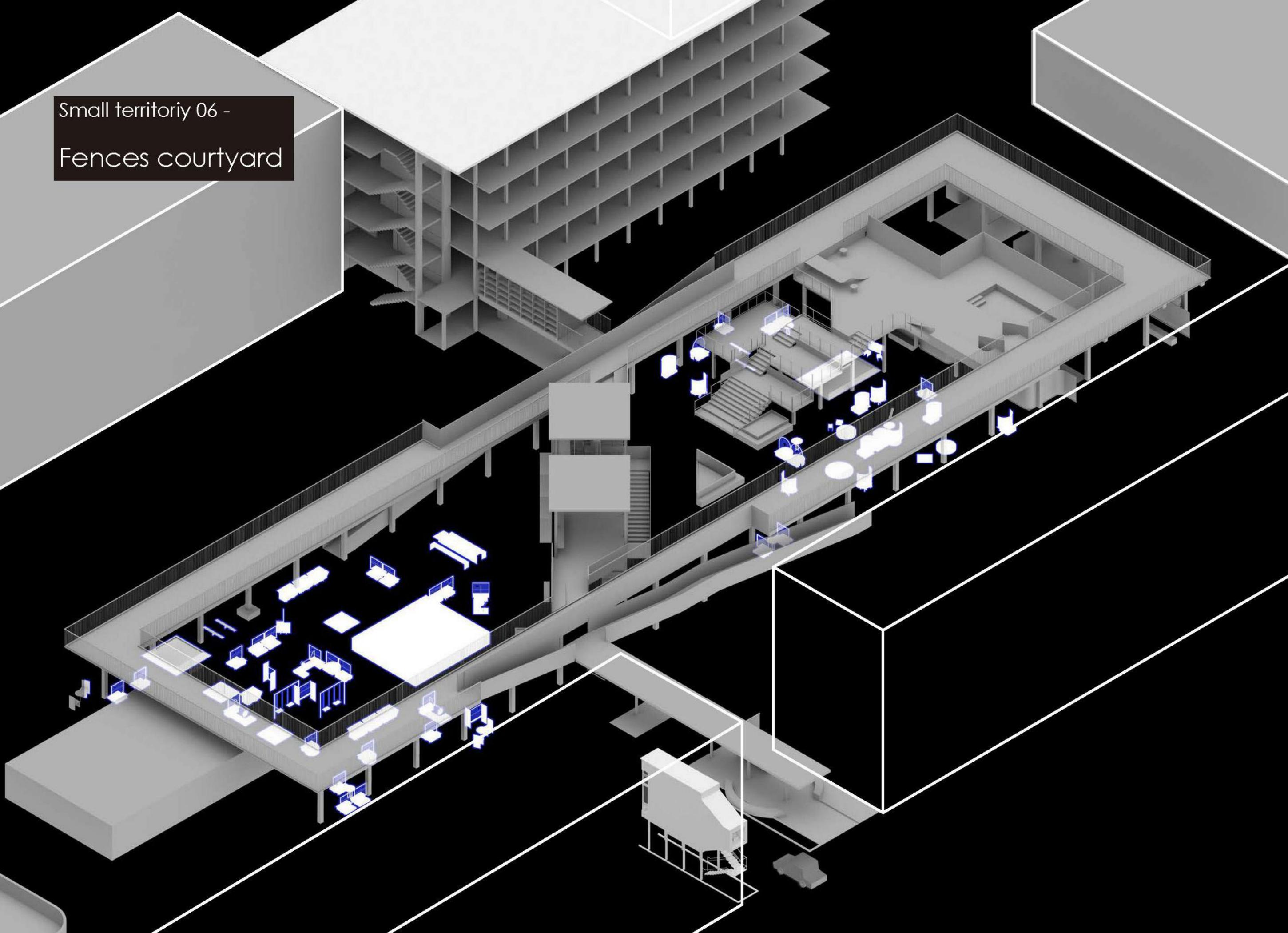
House of courtyard keeper  
Scale 1:50

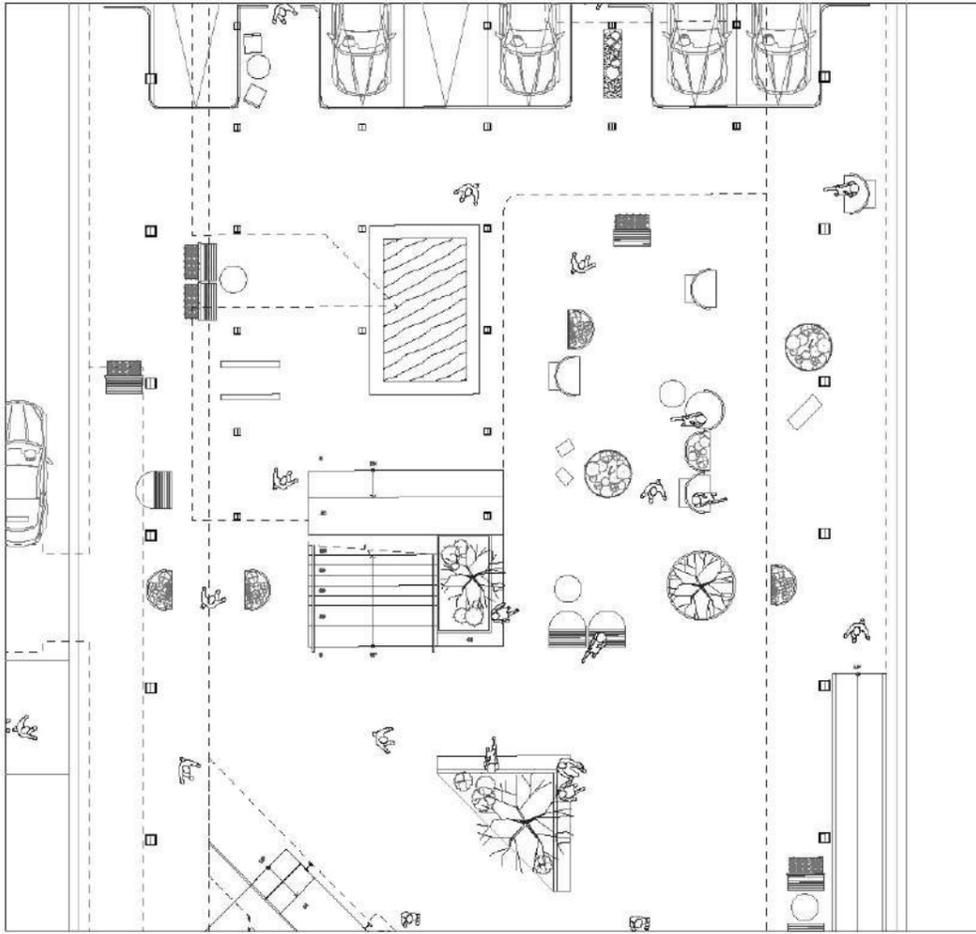
Small territory 05 -

A house of  
courtyard keeper

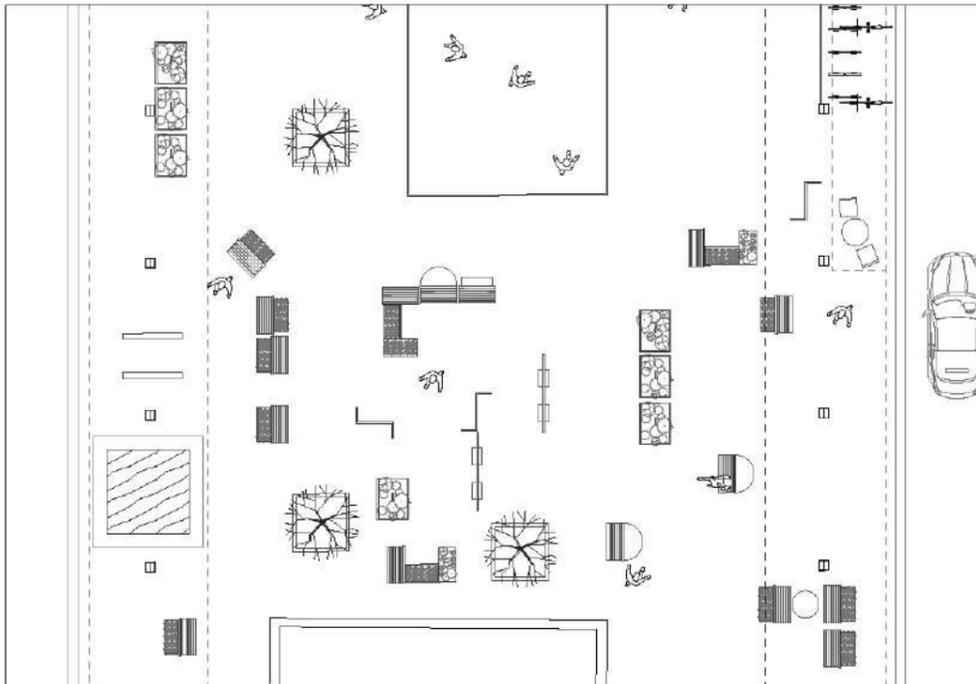


Small territory 06 -  
Fences courtyard

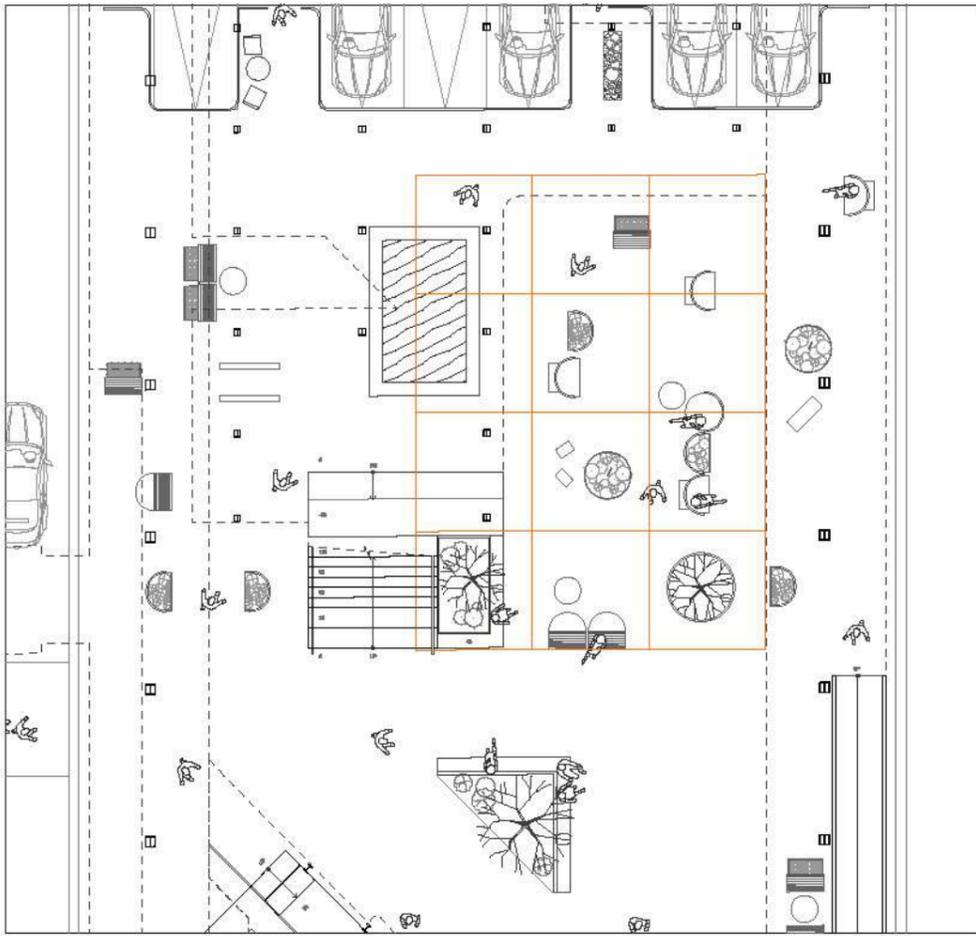




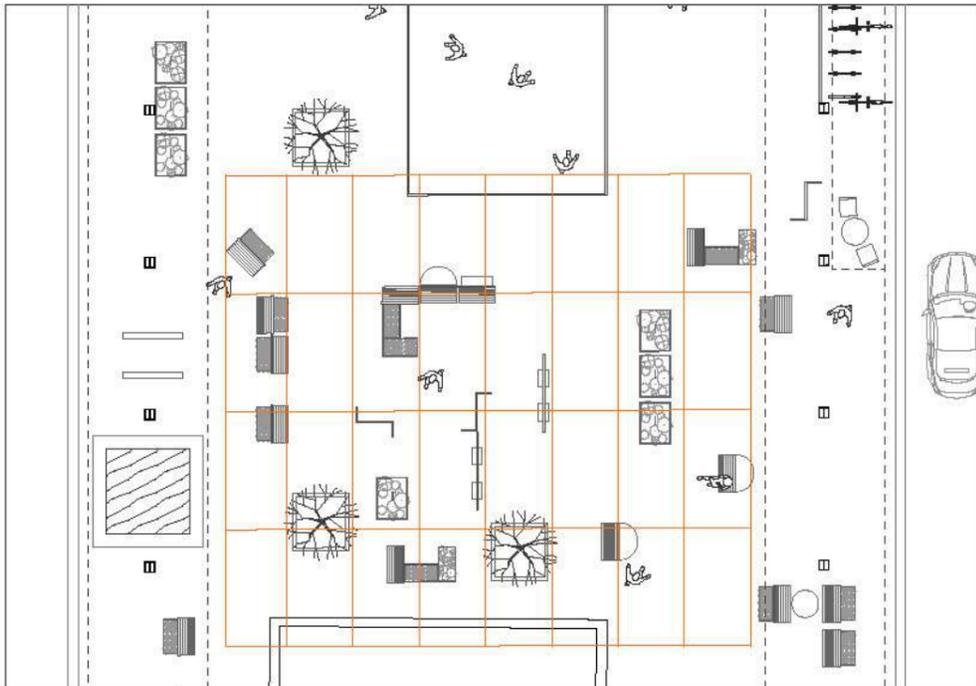
Northern Yard - playground with gardens and fields



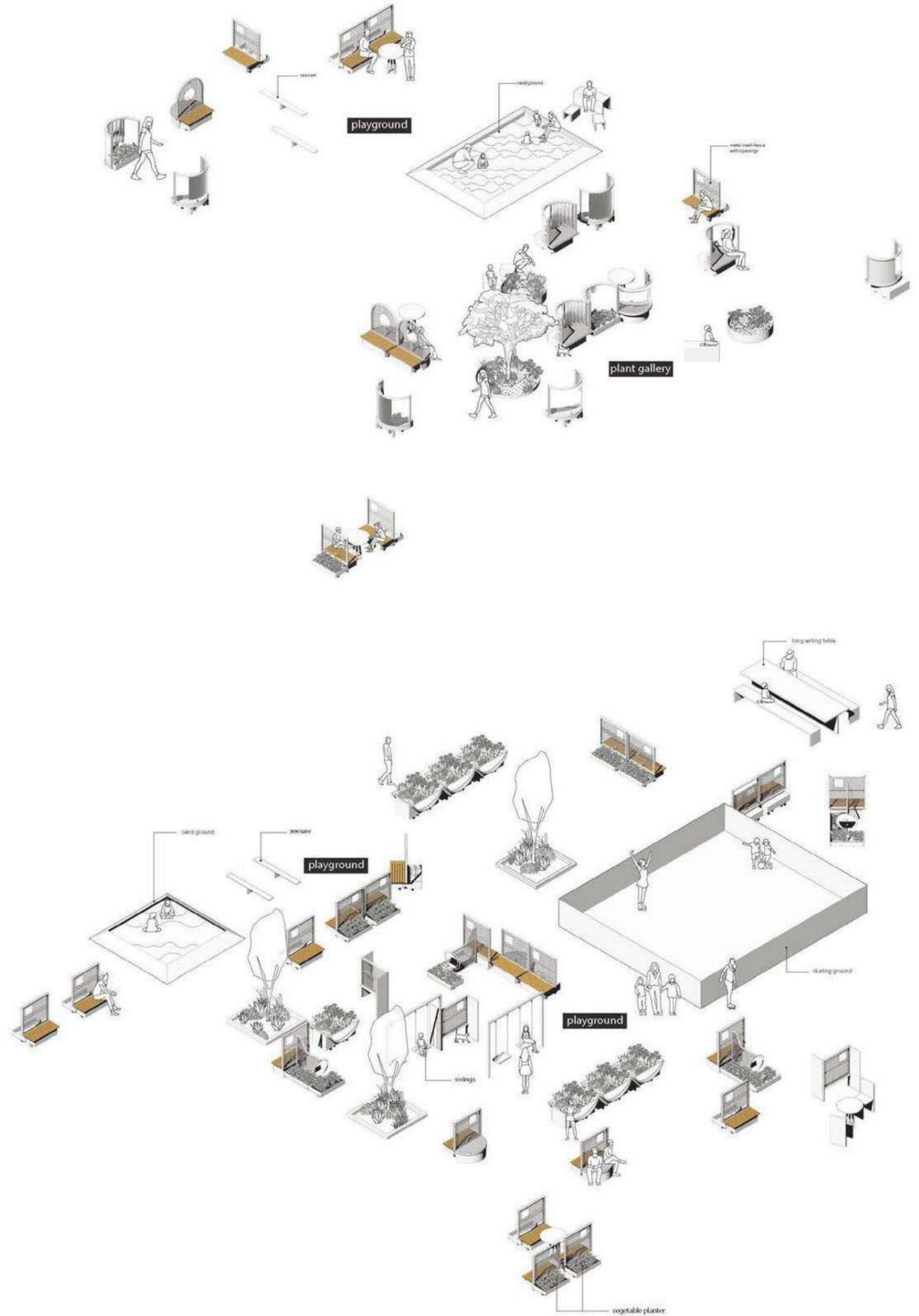
Southern Yard - garden with playground



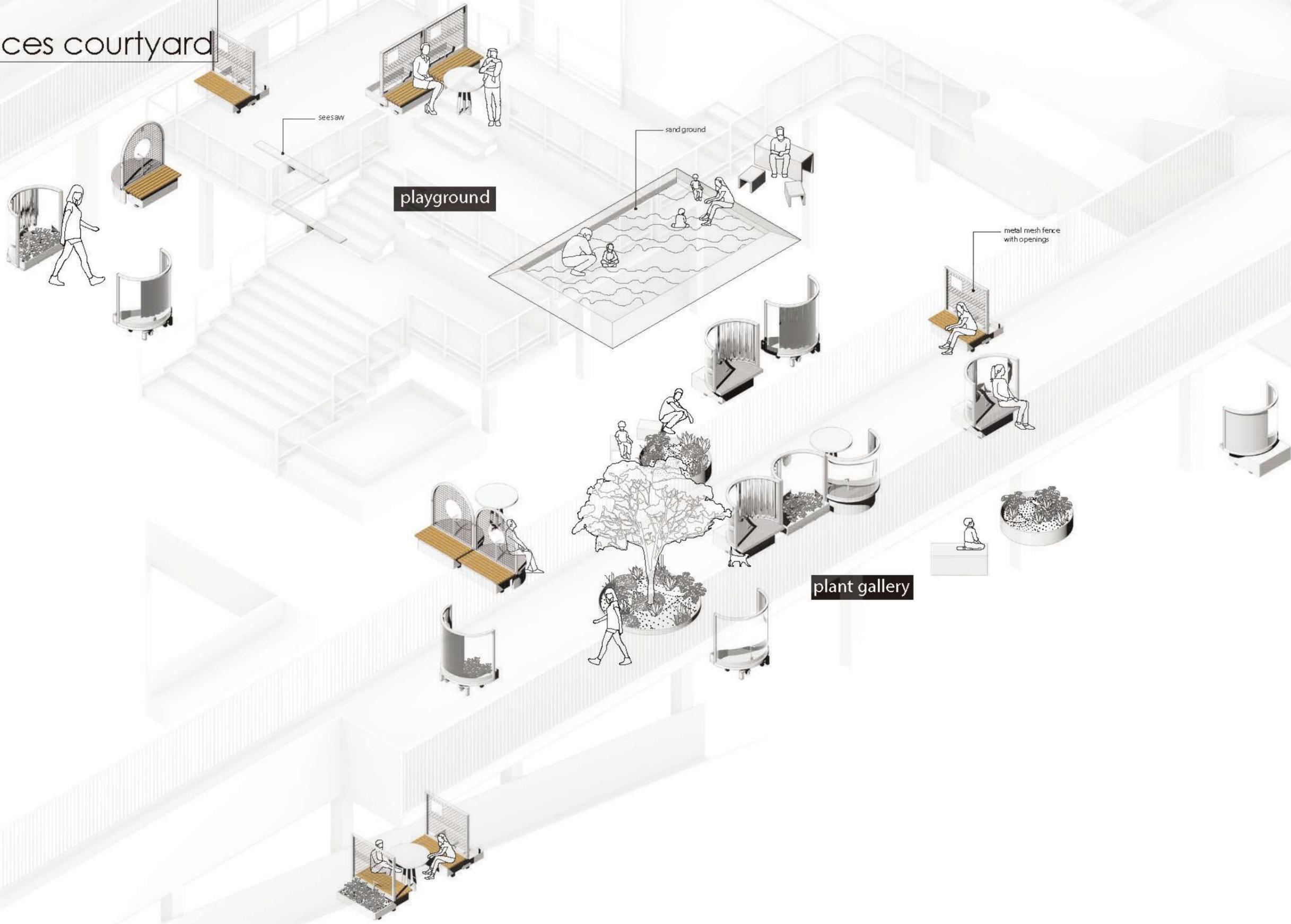
Northern Yard - 3.5mX3.5m Grid division



Southern Yard - 2.0mX2.0m Grid division



Small territory 06 -  
Fences courtyard



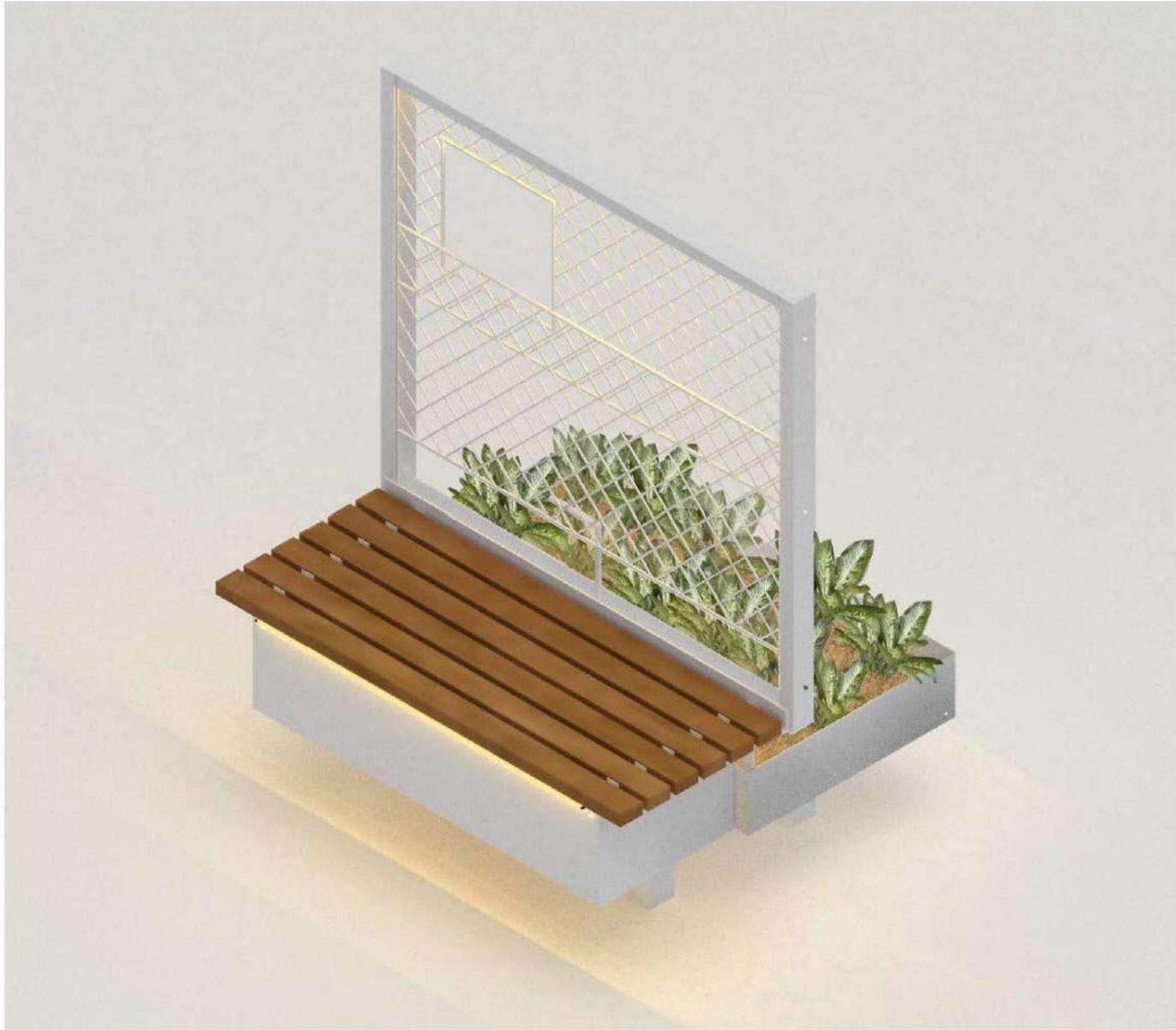
playground

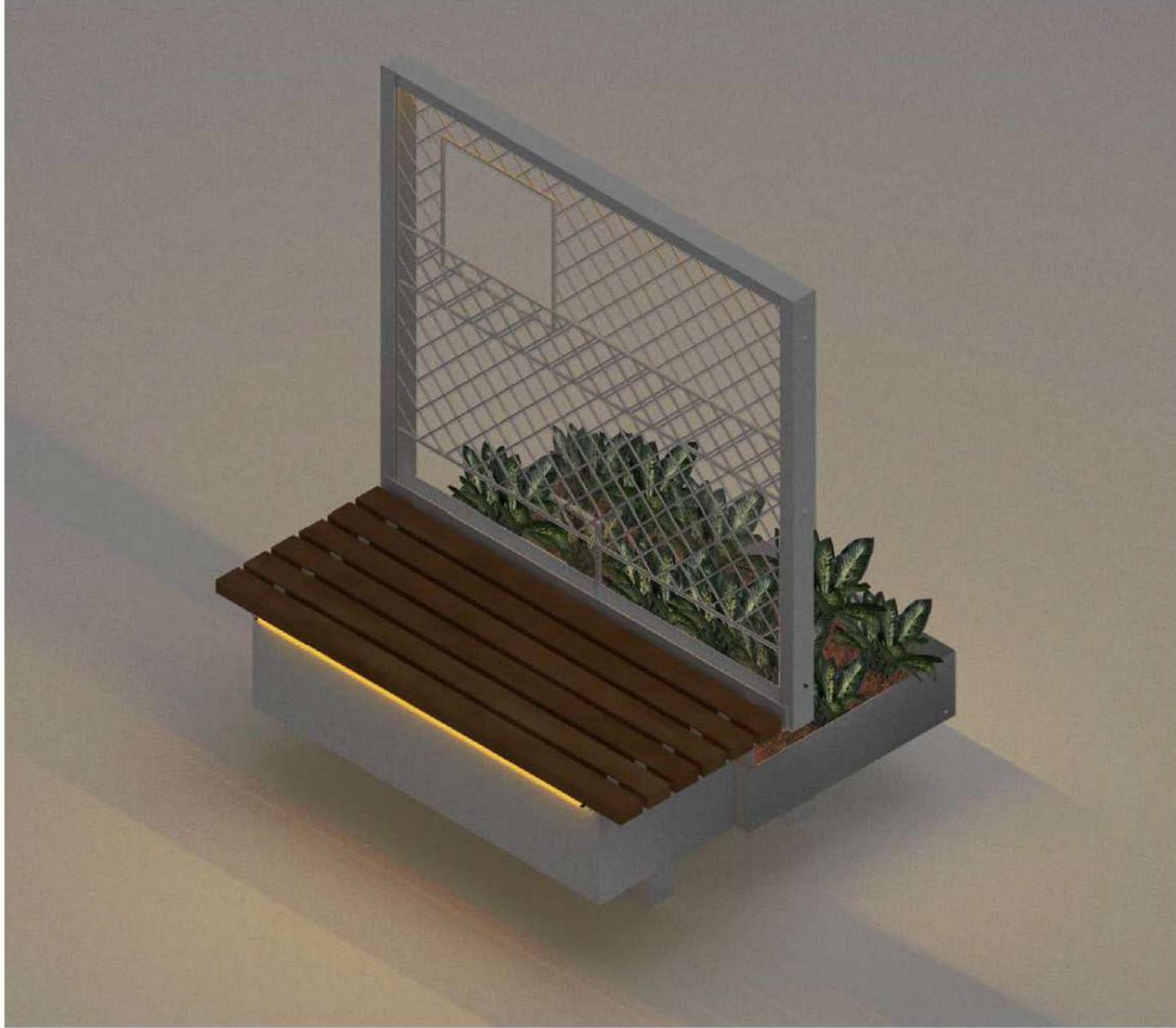
seesaw

sand ground

metal mesh fence  
with openings

plant gallery







Planter ( garden & vegetable field)



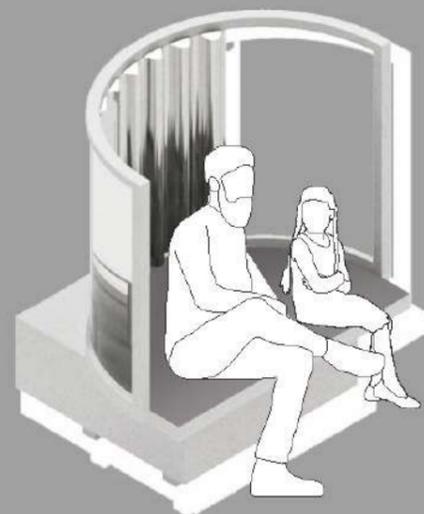
Hybrid Fence with planters



Fence seat (square and half-round)



Glass fence seat (round)

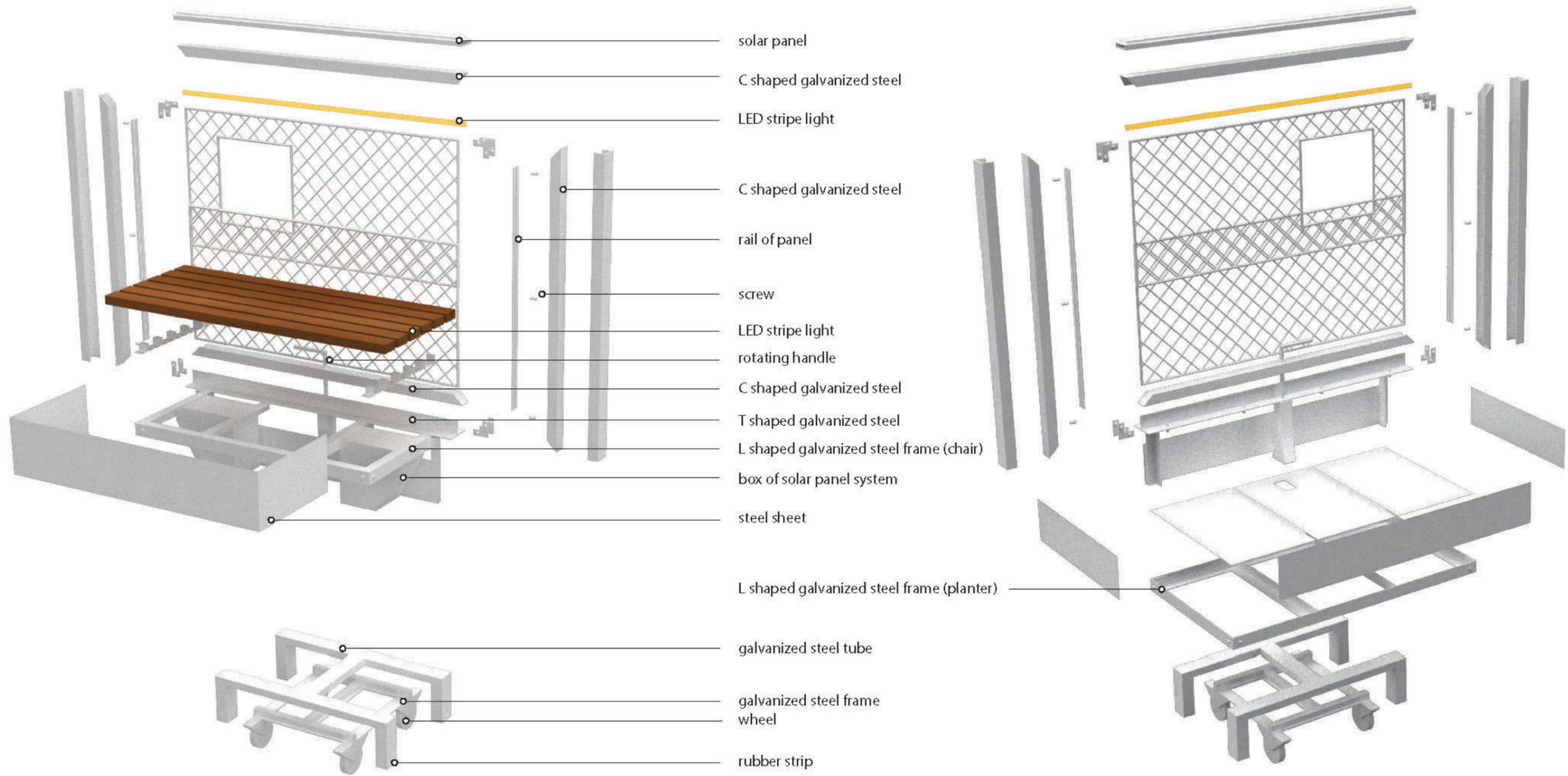


Glass fence seat (half-round)

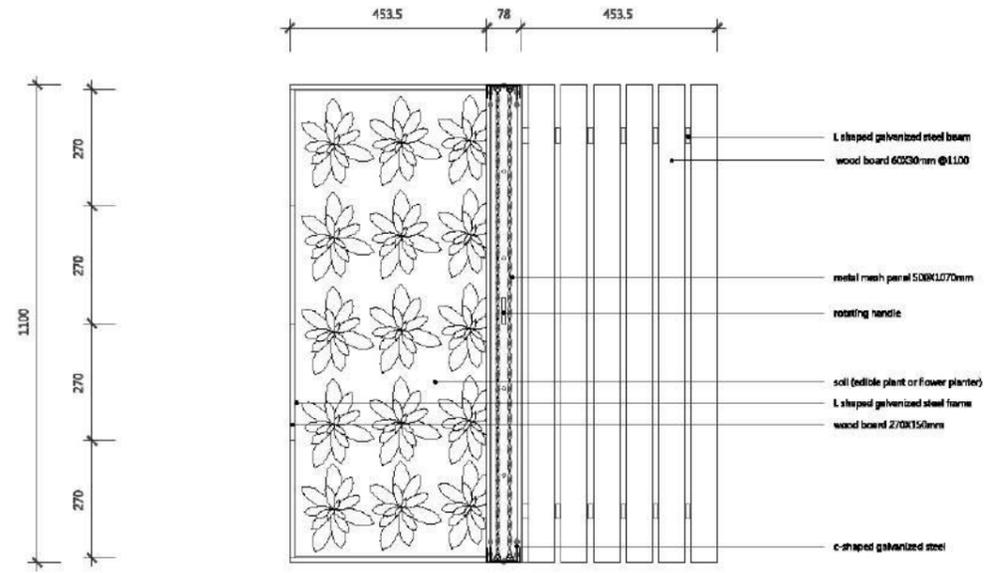


Planter ( garden & vegetable field)

Small territory 06 -  
Detail of fence

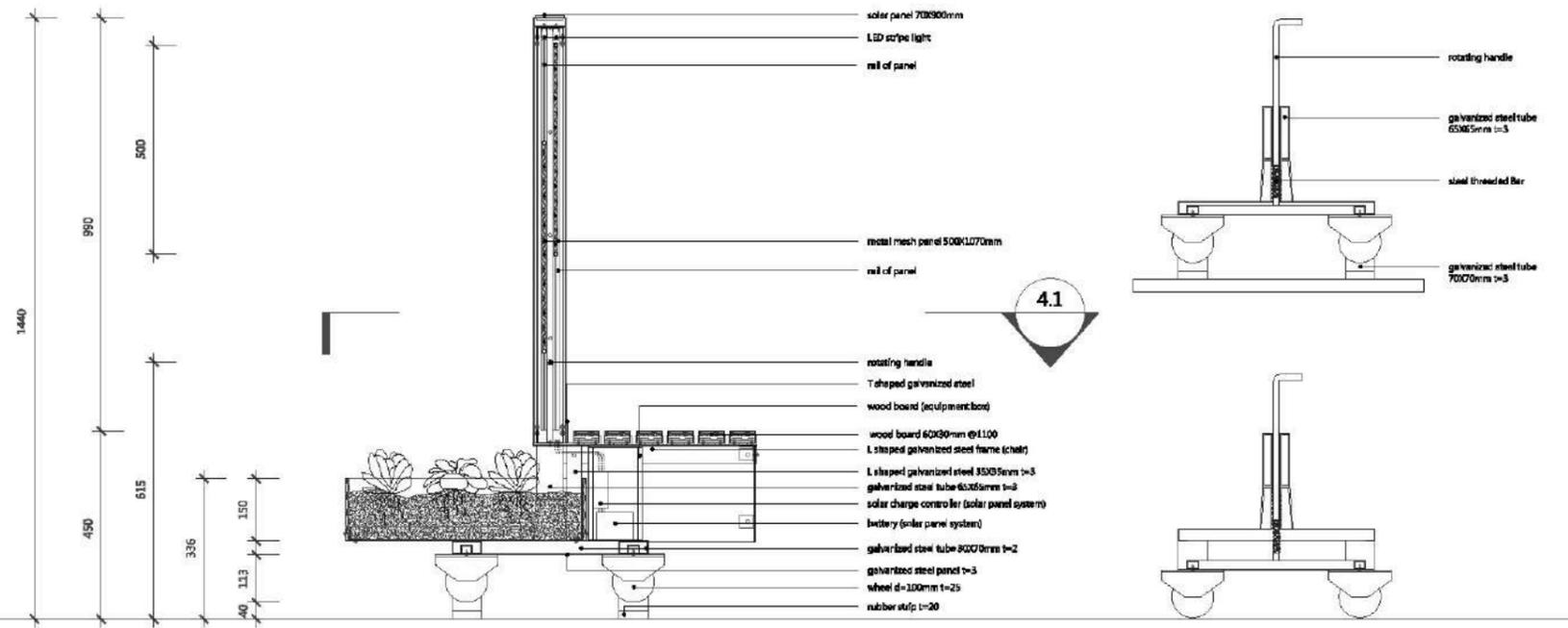


Small territory 06 -  
Detail of fence



4.1 Plan

SCALE: 1:10



4 Section

SCALE: 1:10

Day and Night

Fences courtyard









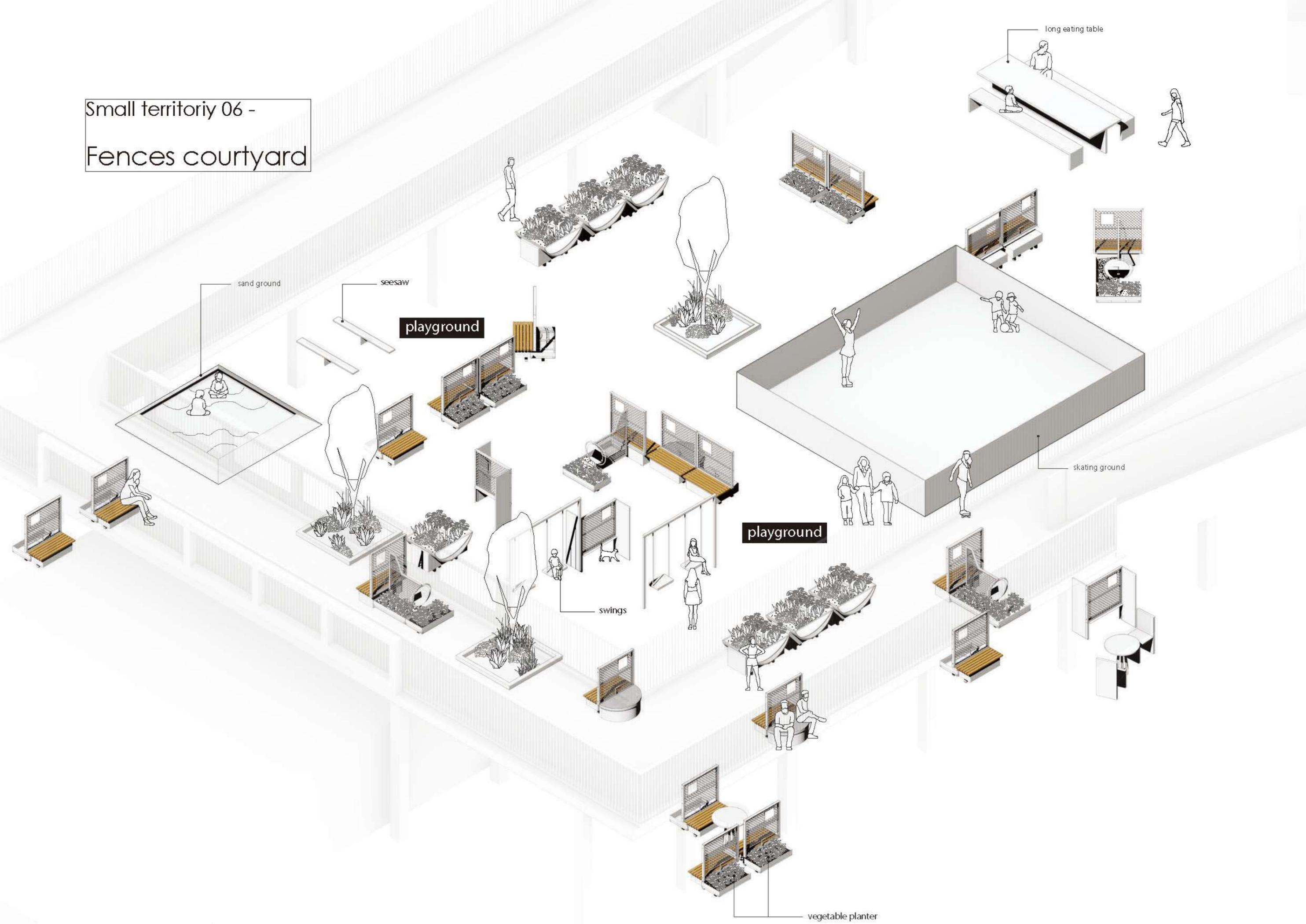








Small territory 06 -  
Fences courtyard



sand ground

seesaw

playground

long eating table

skating ground

playground

swings

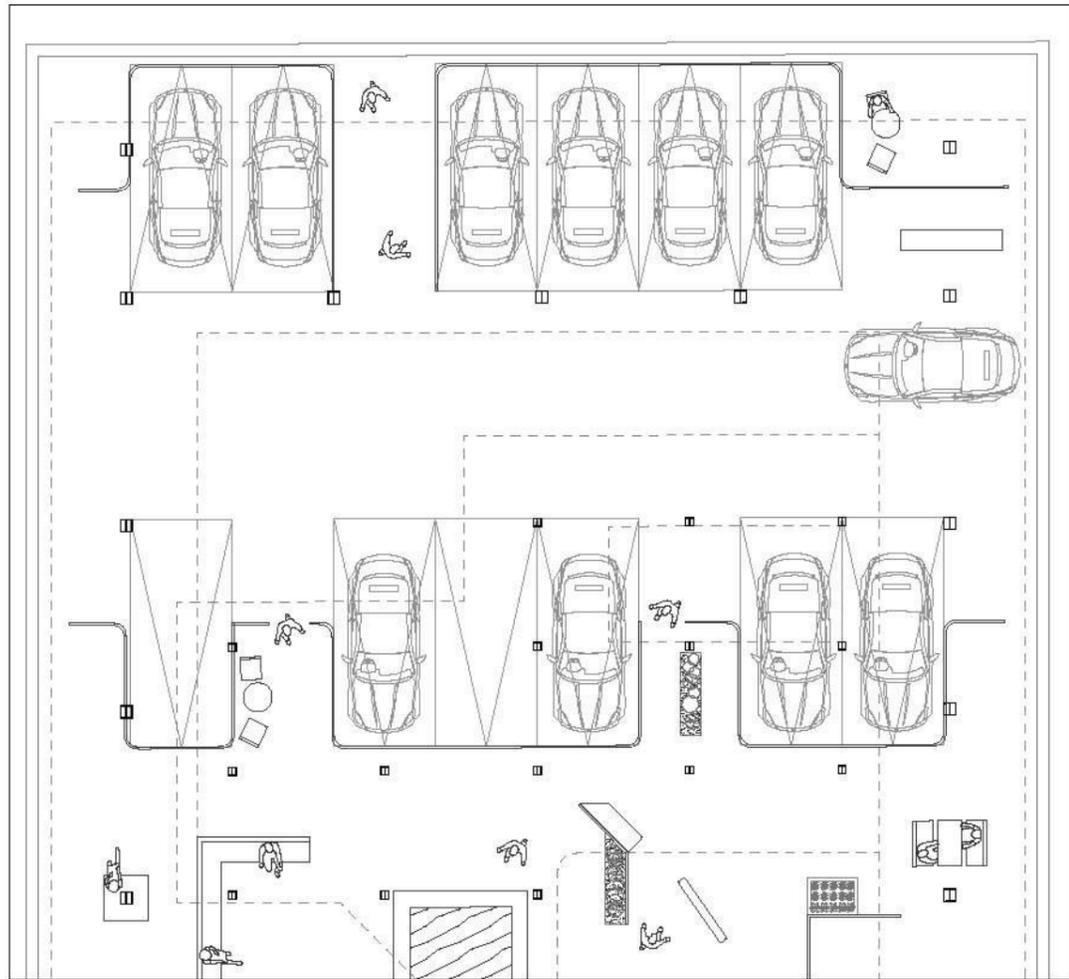
vegetable planter



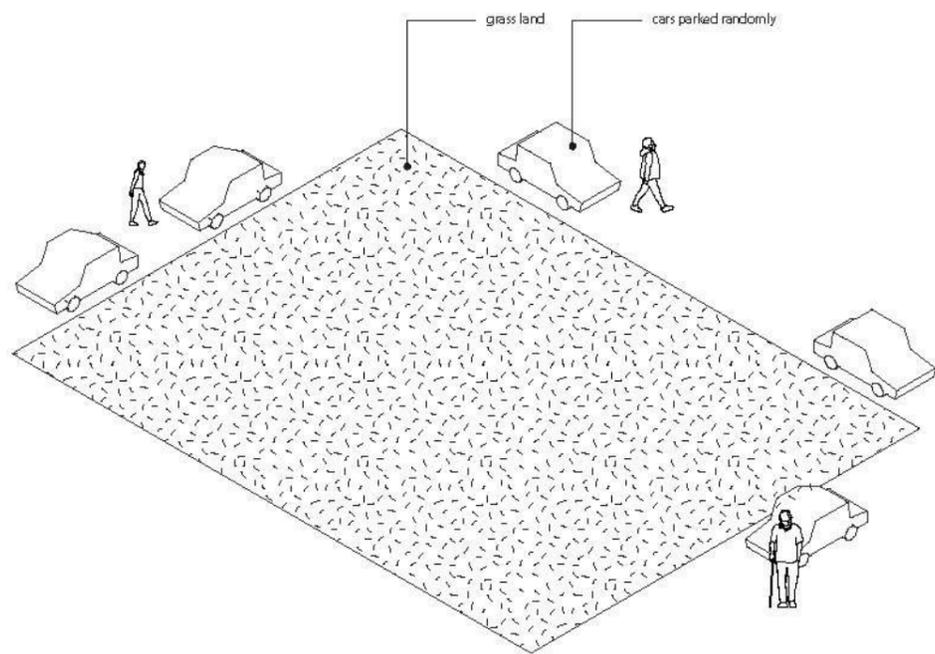


Small territory 07 -  
Parking ground



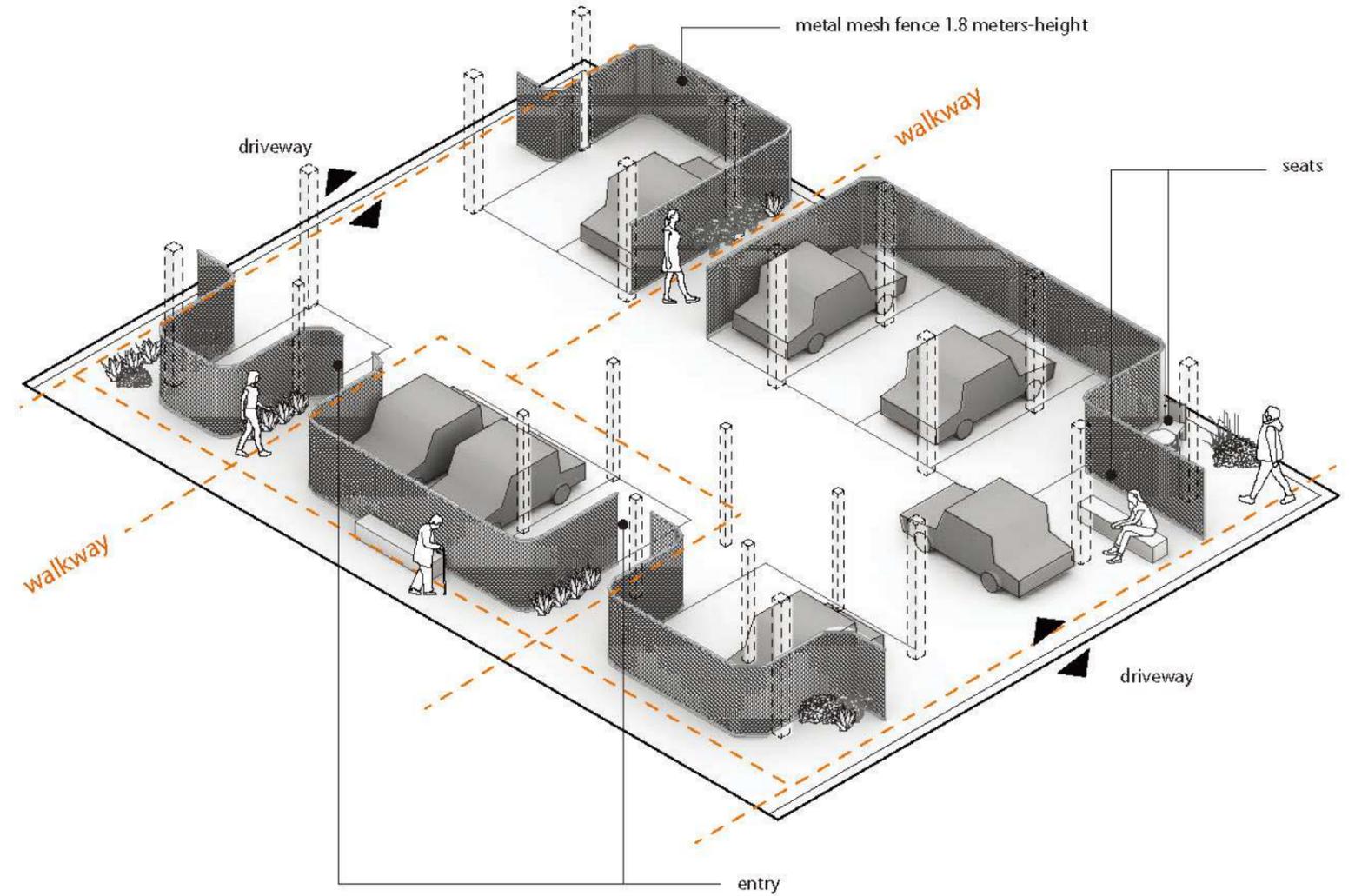


Plan



Existing situation

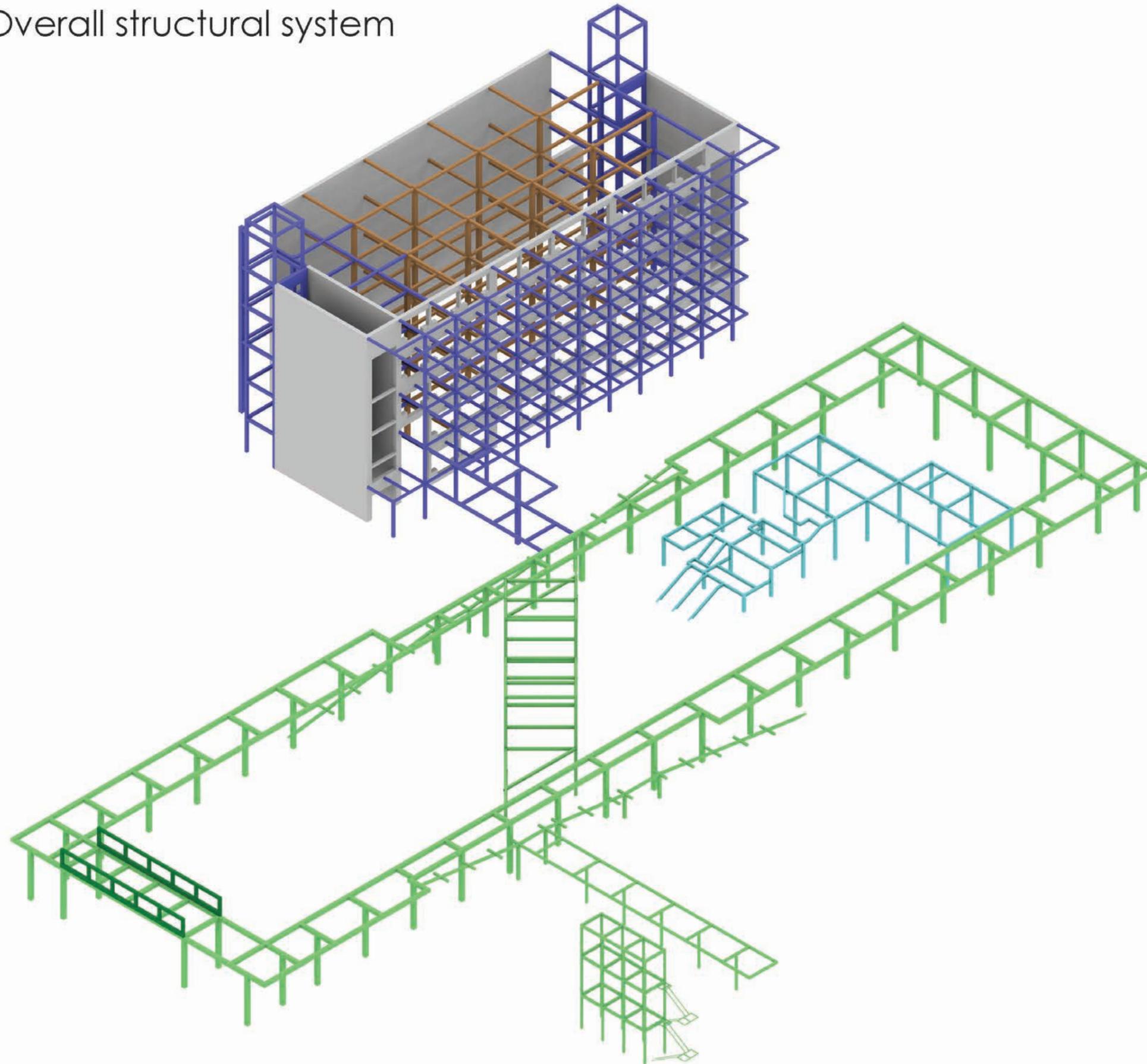
people have to walk on the road beside the cars that parked randomly



### Strolling ways with car parking spaces

Transformation - the walkway is interweaved with the parking spaces and divided by the white metal mesh fences

# Overall structural system



## Existing apartment structure

■ precast load-bearing concrete wall

■ precast concrete beam and column

## New structure after renovation

### Apartment

■ Steel frame system of the balconies and the roof

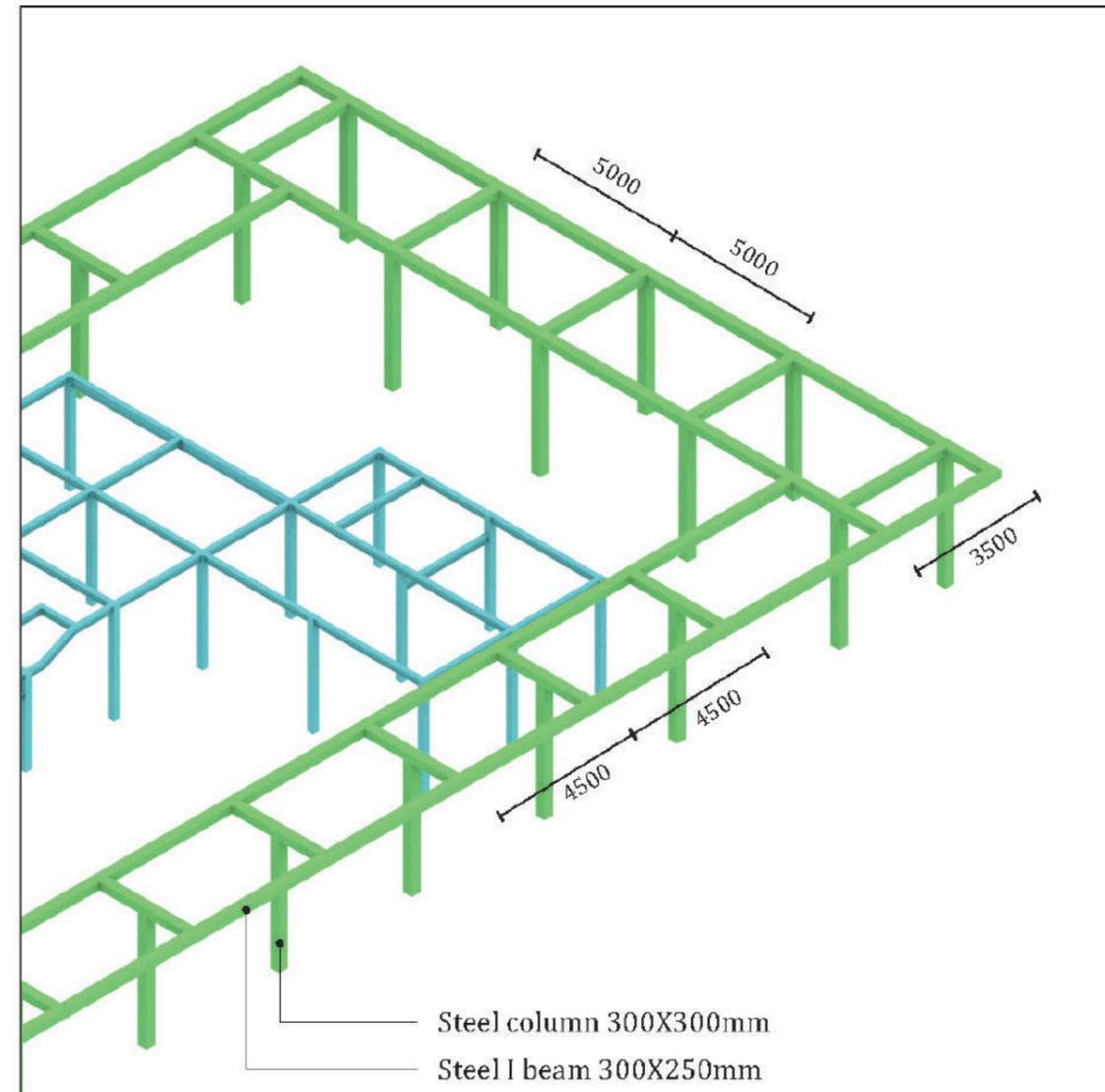
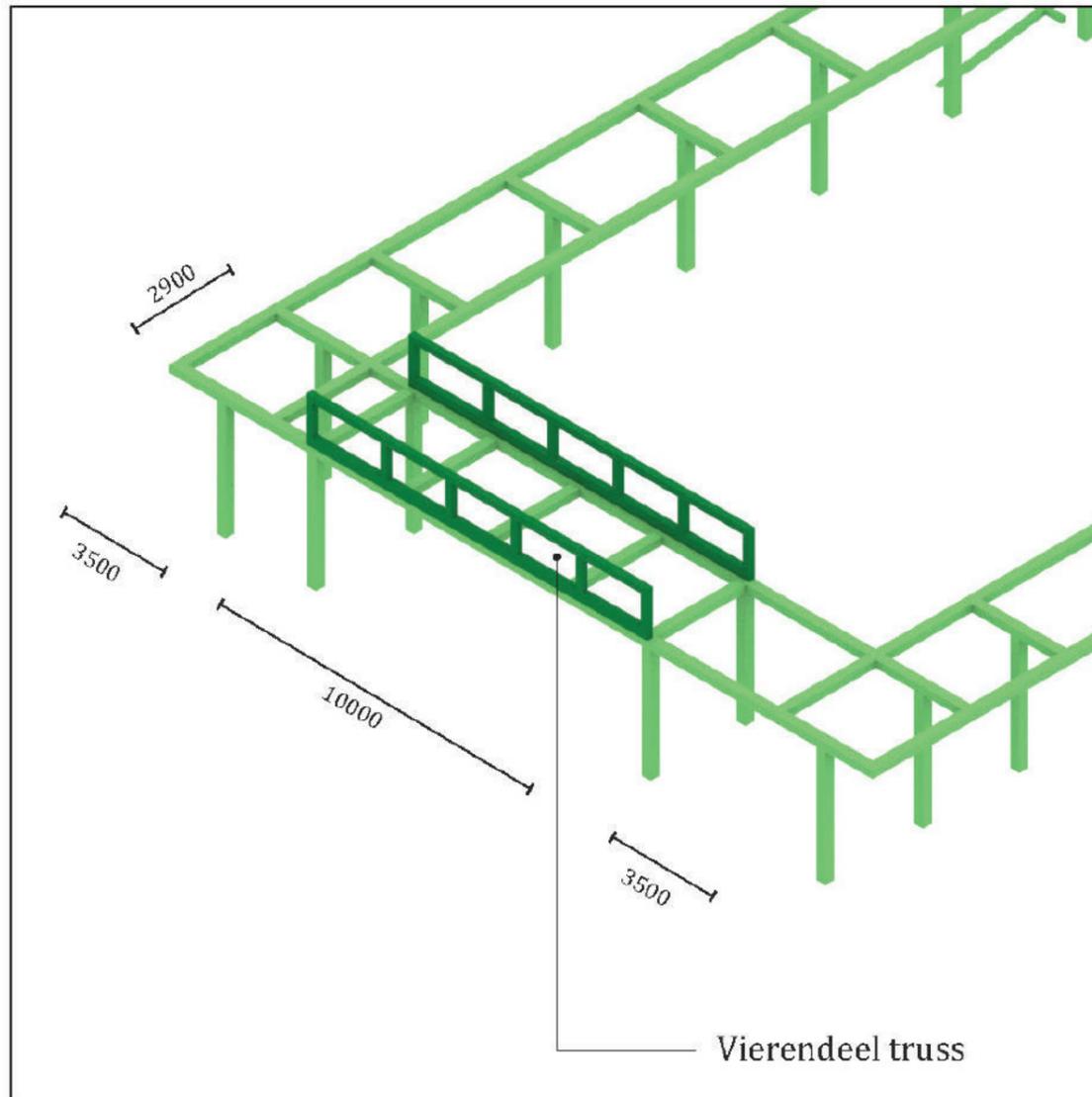
### Courtyard

■ Steel frame system of the running track, the room pavilion, and the house of courtyard keeper

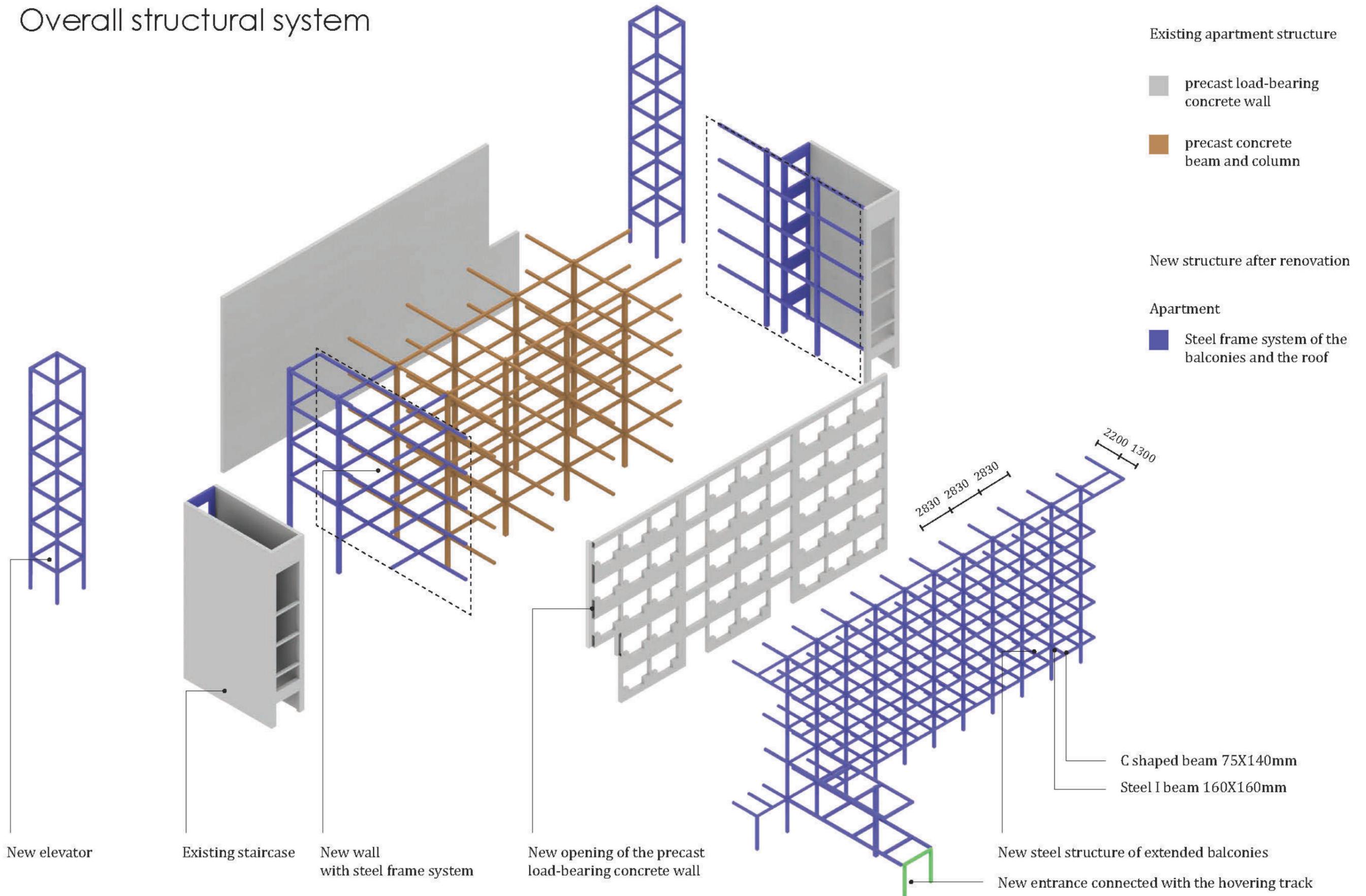
■ Vierendeel truss

■ Steel frame system of the big staircase

# Overall structural system



# Overall structural system



## Route - Extended Interior

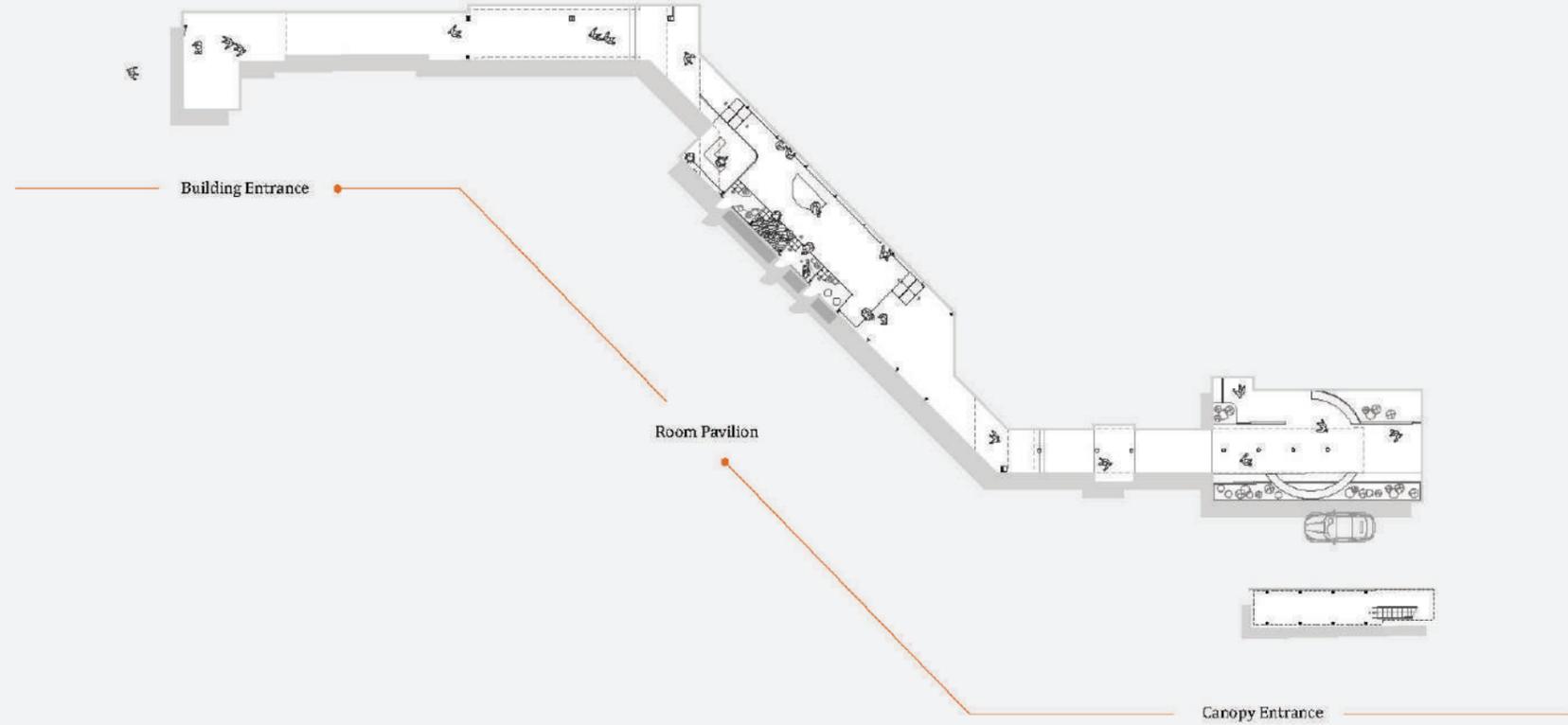
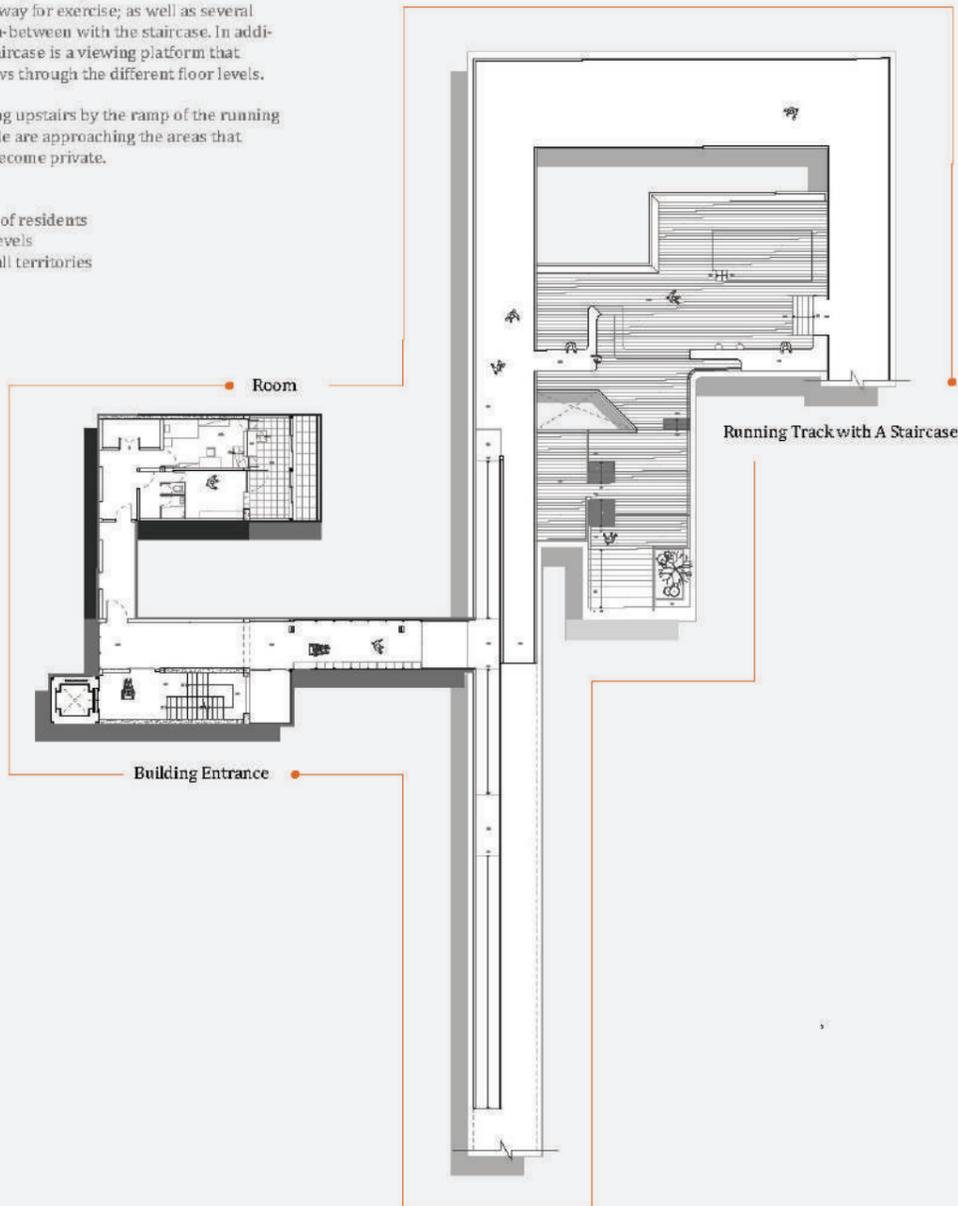
This route refers to the activities of the inhabitants. From the individual's room, the intervention is a renovation plan built on the outside of the building. The Social Balcony and the Extended Balcony (the corridor) provide additional spaces for neighbors to interact. Also, the transformation of the facade allows more sunlight, wind flowing, and wide vision.

Going downstairs, the Building Entrance with storage lockers re-defines the boundary of a home. The idea is related to the act of taking off the coat, which is considered to be the first action we take before entering a home; thus this act allows for the awareness that we have arrived home. If the inhabitants take off their coats at the building entrance, at that moment, they would feel that they have arrived at home. The lockers are the common object in the typical courtyards in Yekaterinburg so, I keep and re-design them as a part of the facade of the entrance, where they are used to put clothings or umbrellas.

After going out from the first floor of the entrance that is linked to the hovering running track. People can meet with others, play with kids, or reading in the yard. The track provides a linear walkway for exercise; as well as several functions in-between with the staircase. In addition, the staircase is a viewing platform that creates views through the different floor levels.

Finally, going upstairs by the ramp of the running track, people are approaching the areas that gradually become private.

- A journey of residents
- multiple levels
- Three small territories



## Part2

## Routes

- Design Intervention Collection

## Route - Public Passage

The passage is a type with dual spatial properties, involves both indoor and outdoor atmosphere because it has a high roof and an open walkway. It is also a high door if you only look at the facade. This passage is constructed by the three small territories, Building entrance, Room pavilion, and Canopy entrance. Each of the small territories characterizes the ambience of the residential interior, functions small activities, and acts such as eating, talking, or seating.

Also, it serves as a link to the two streets next to the block. The scene of walking for pedestrians is transformed from a conventional (regular) way to a free way. There are various possibilities after the people access the courtyard. Hence, in my view, the passage can be regarded as an extended door (city door) in the courtyard. The conventional concept of doors is challenged and creates a new walking experience within the urban scale.

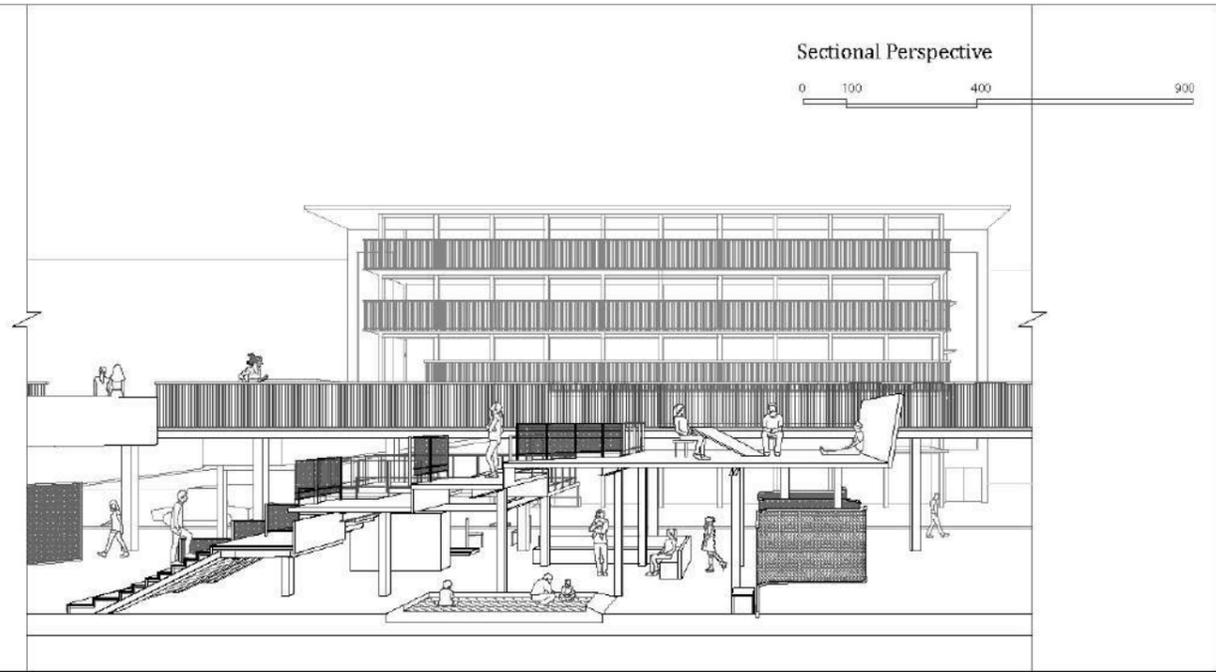
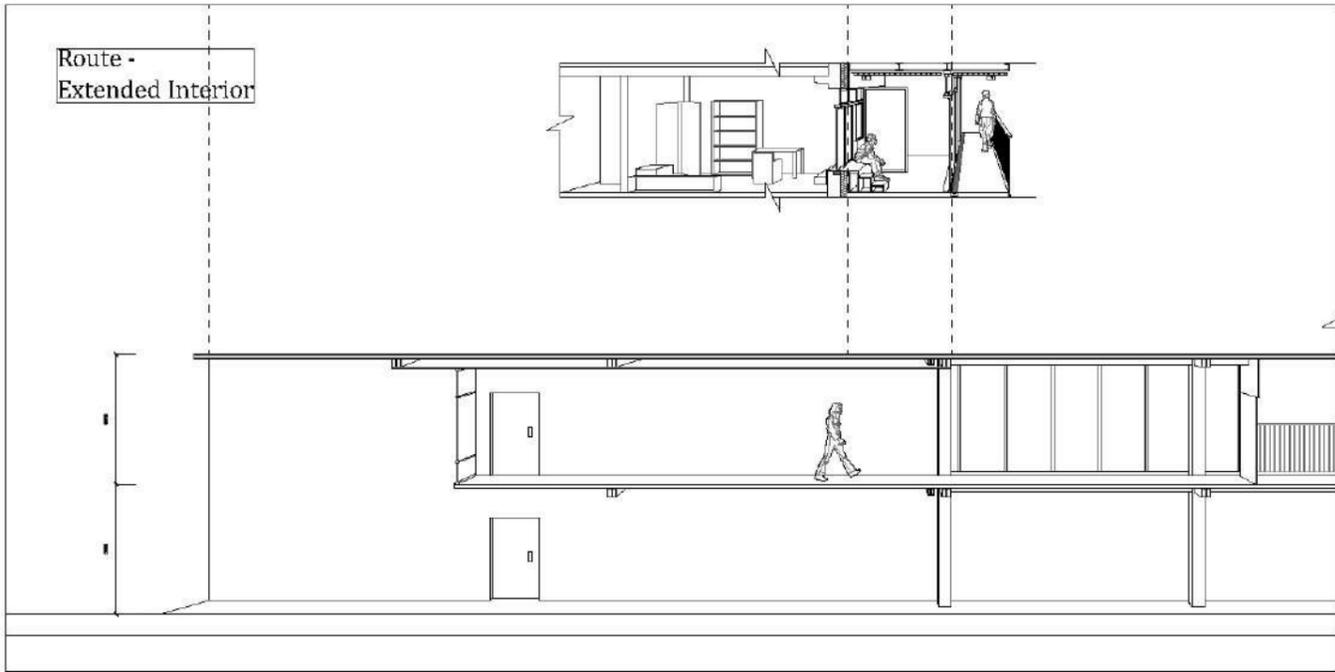
- An exterior with an interior atmosphere
- Threshold of the courtyard
- Three small territories

Route 01 -

## Extended Interior

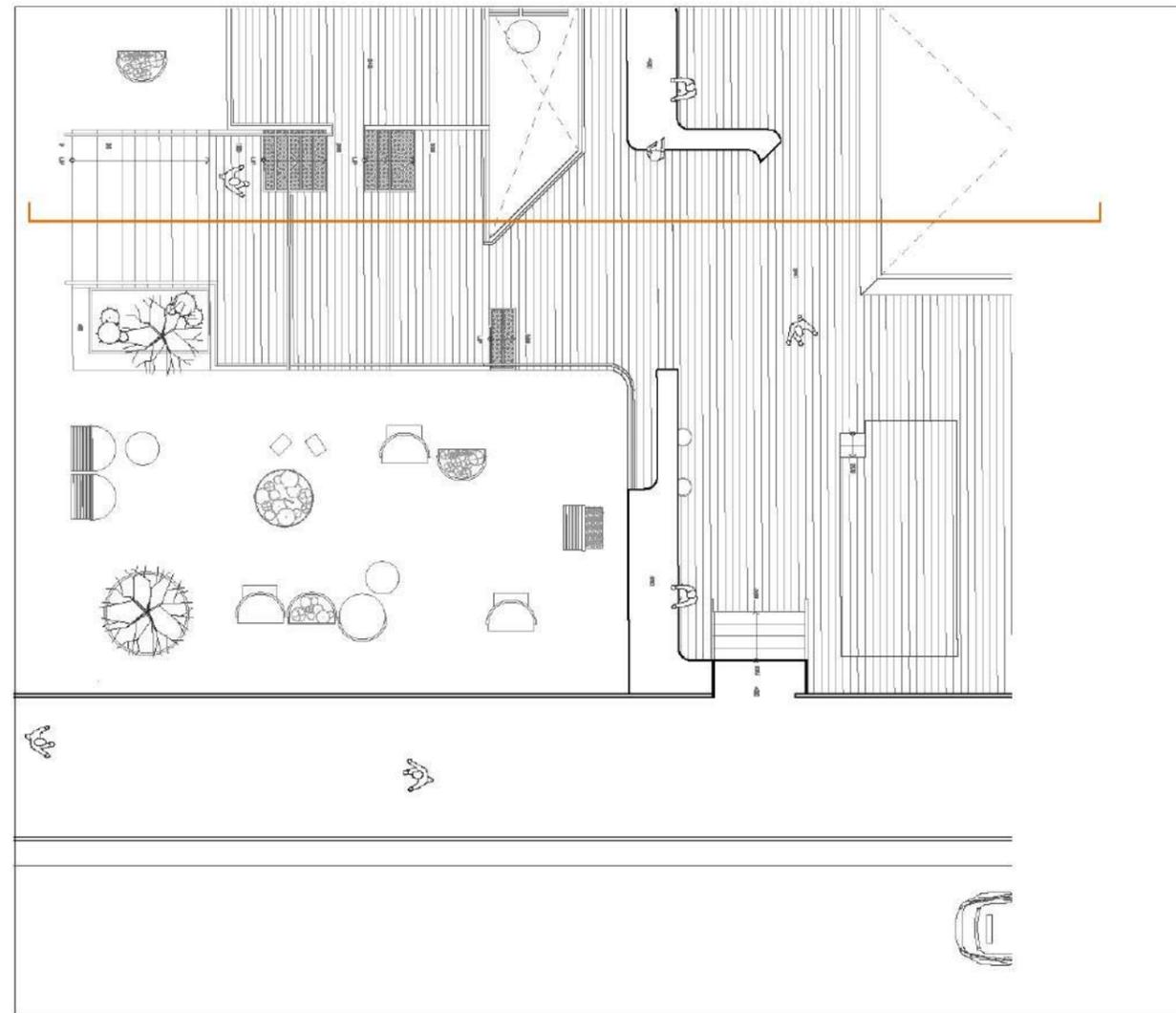
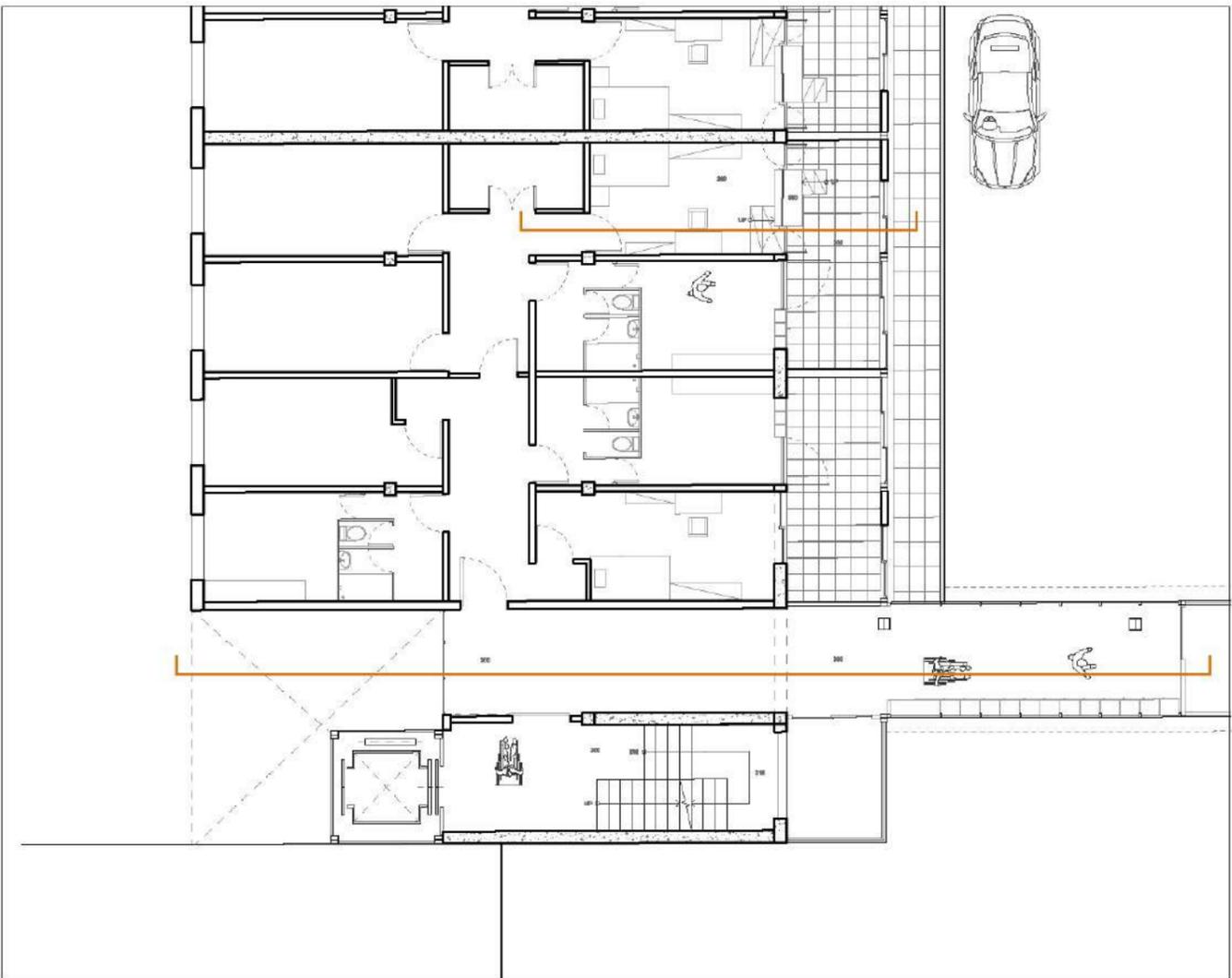
- A journey of residents
- Multiple levels
- Three small territories

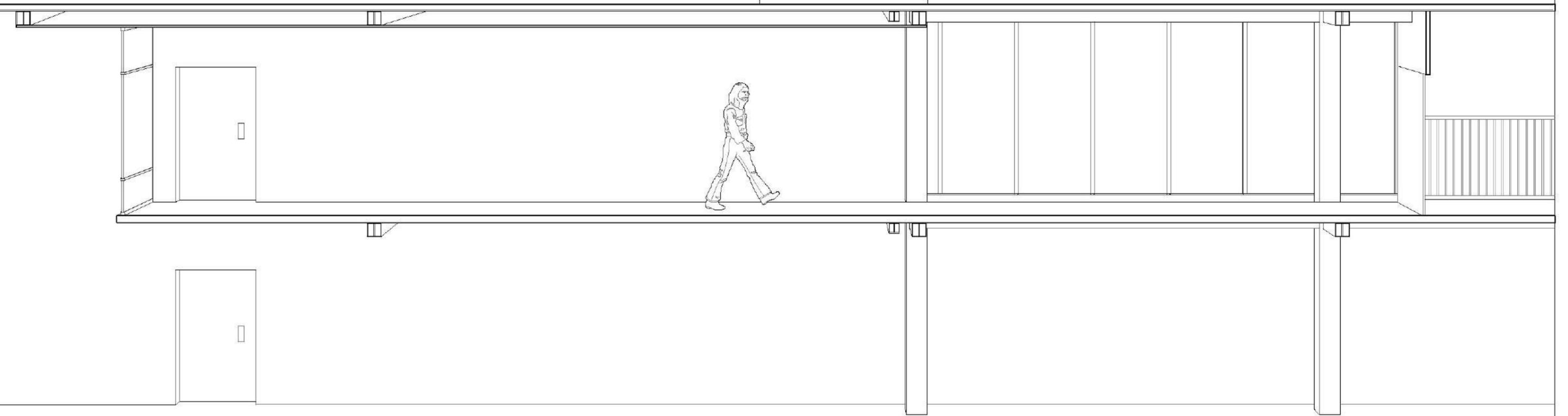
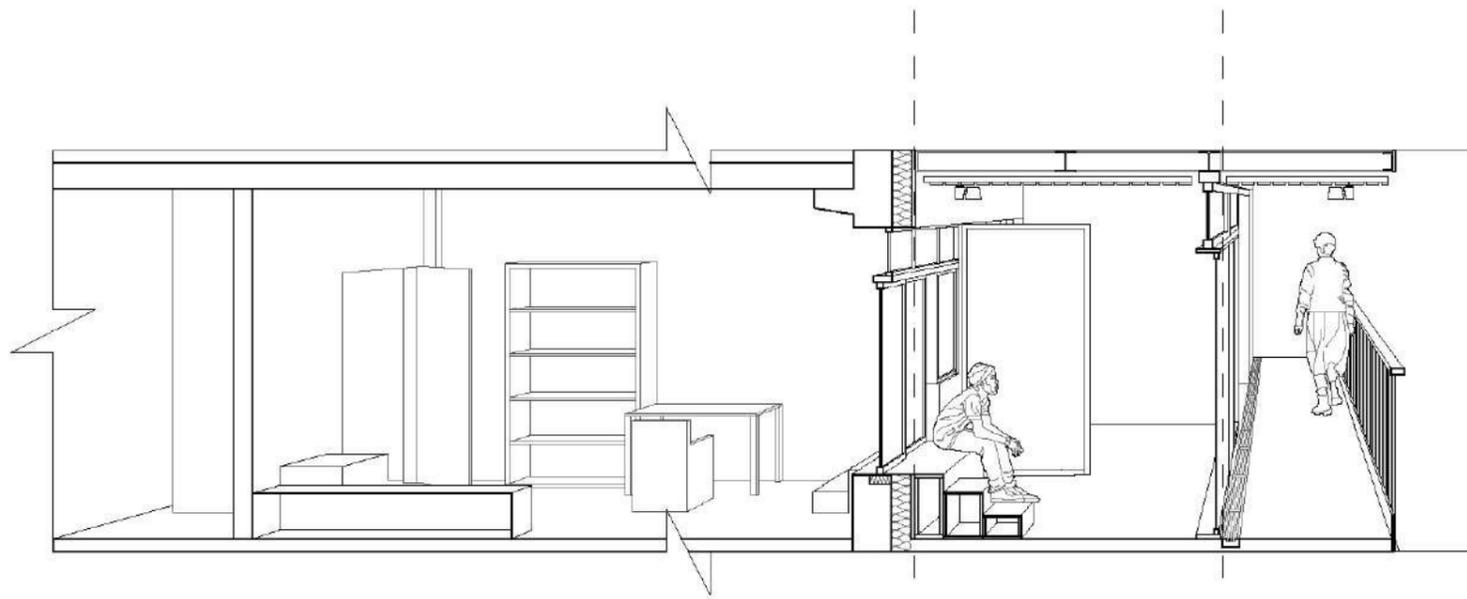


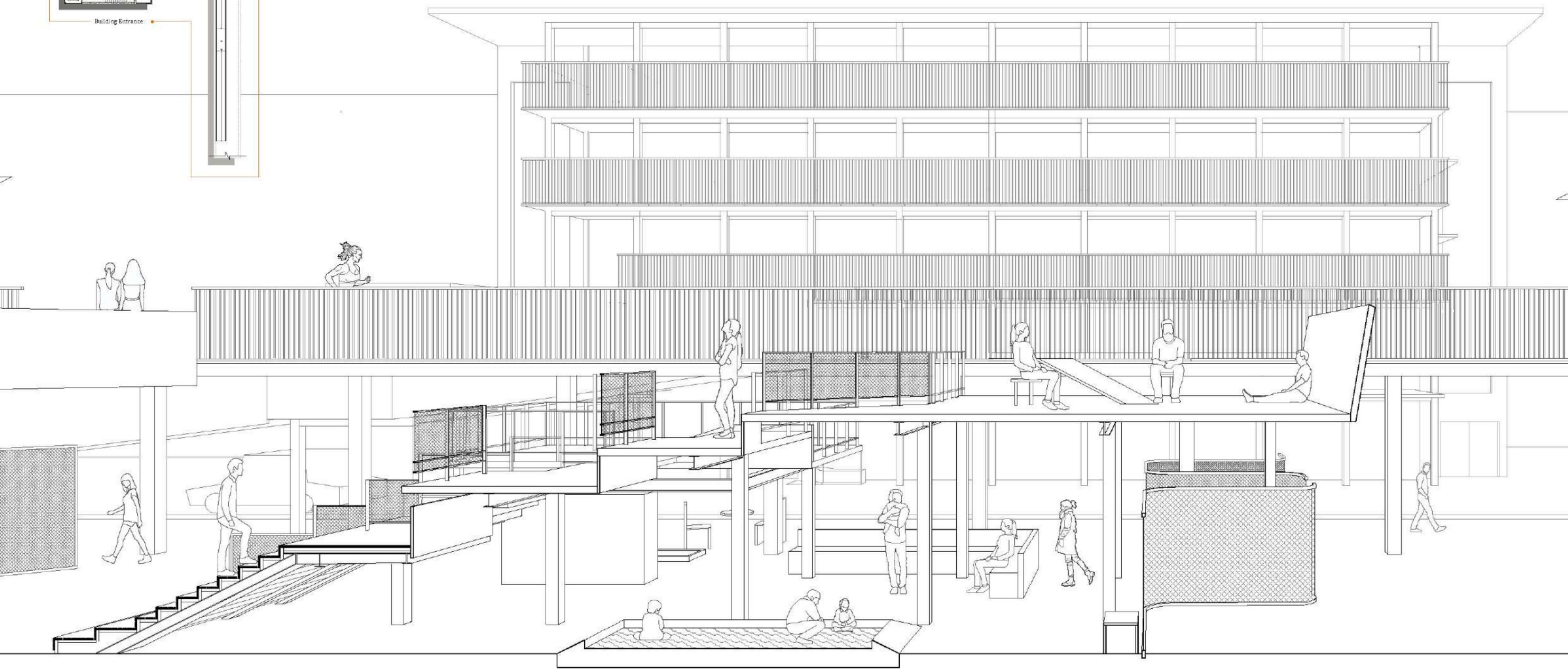
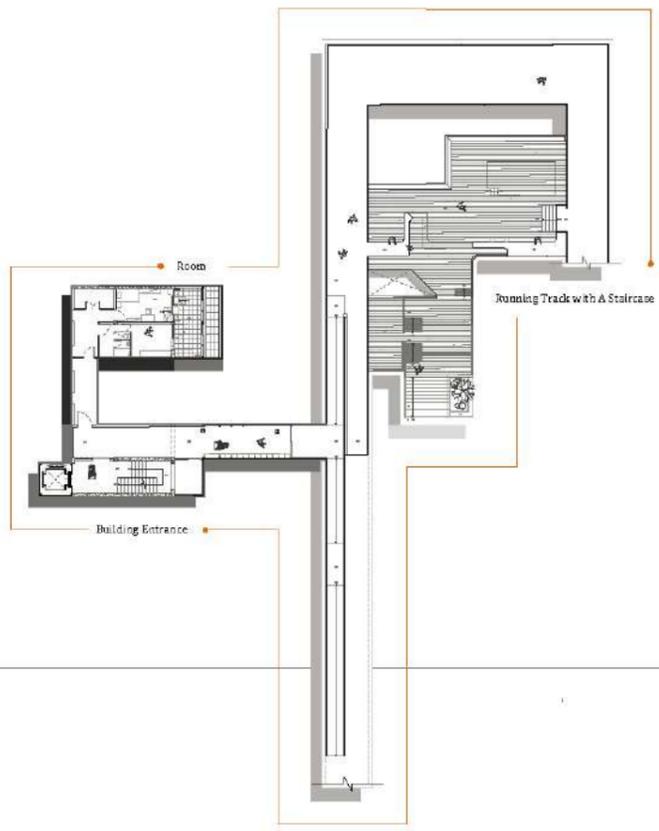


Room  
Building entrance

Running track with a staircase



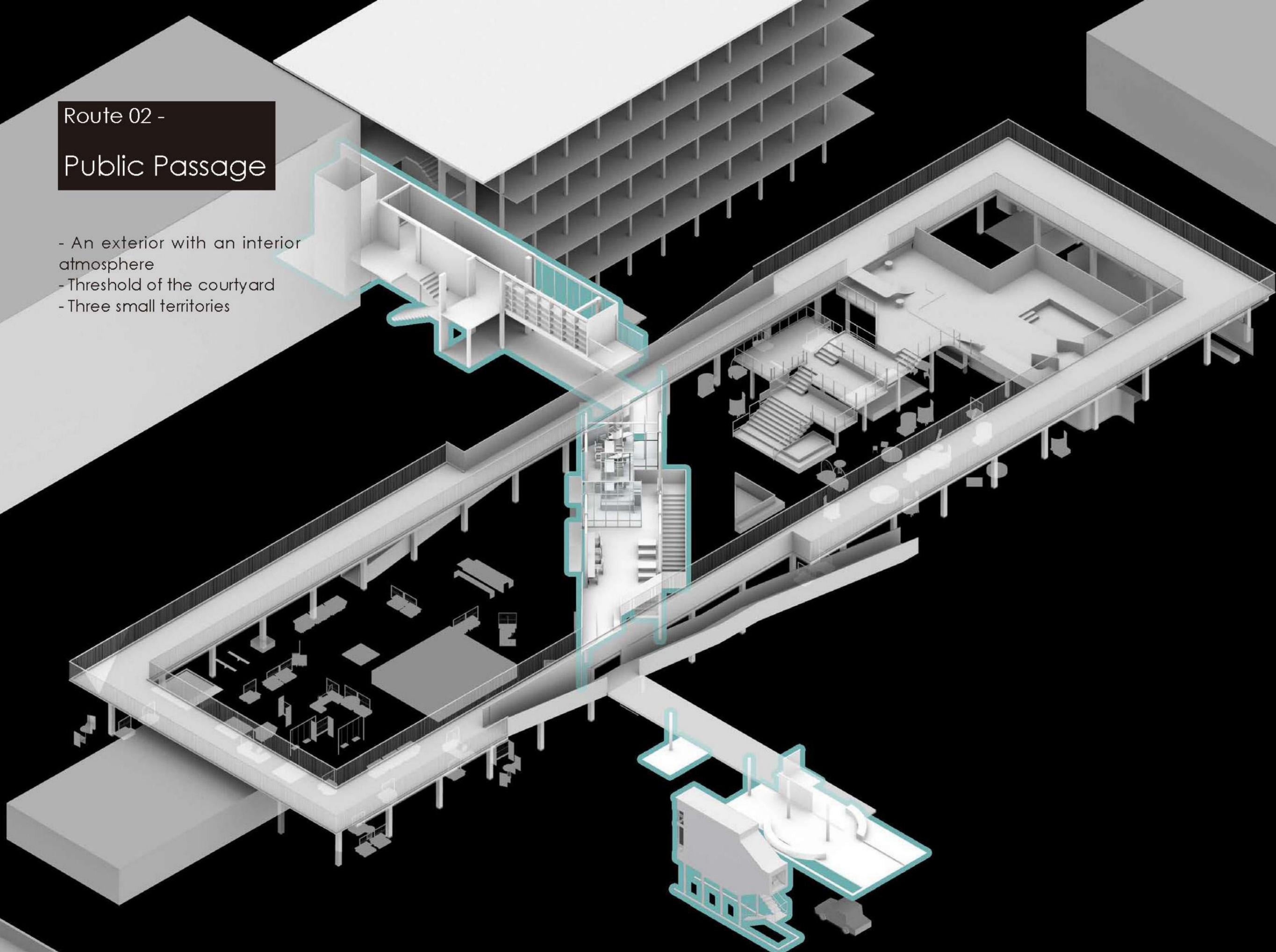


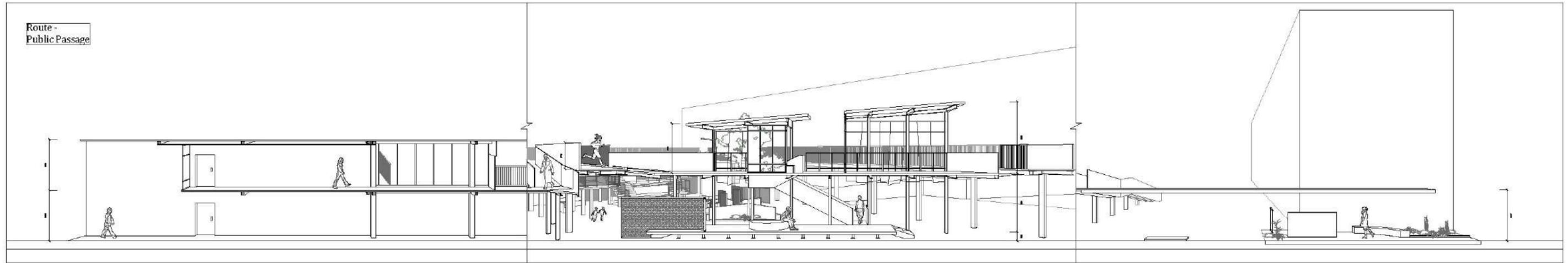


Route 02 -

## Public Passage

- An exterior with an interior atmosphere
- Threshold of the courtyard
- Three small territories

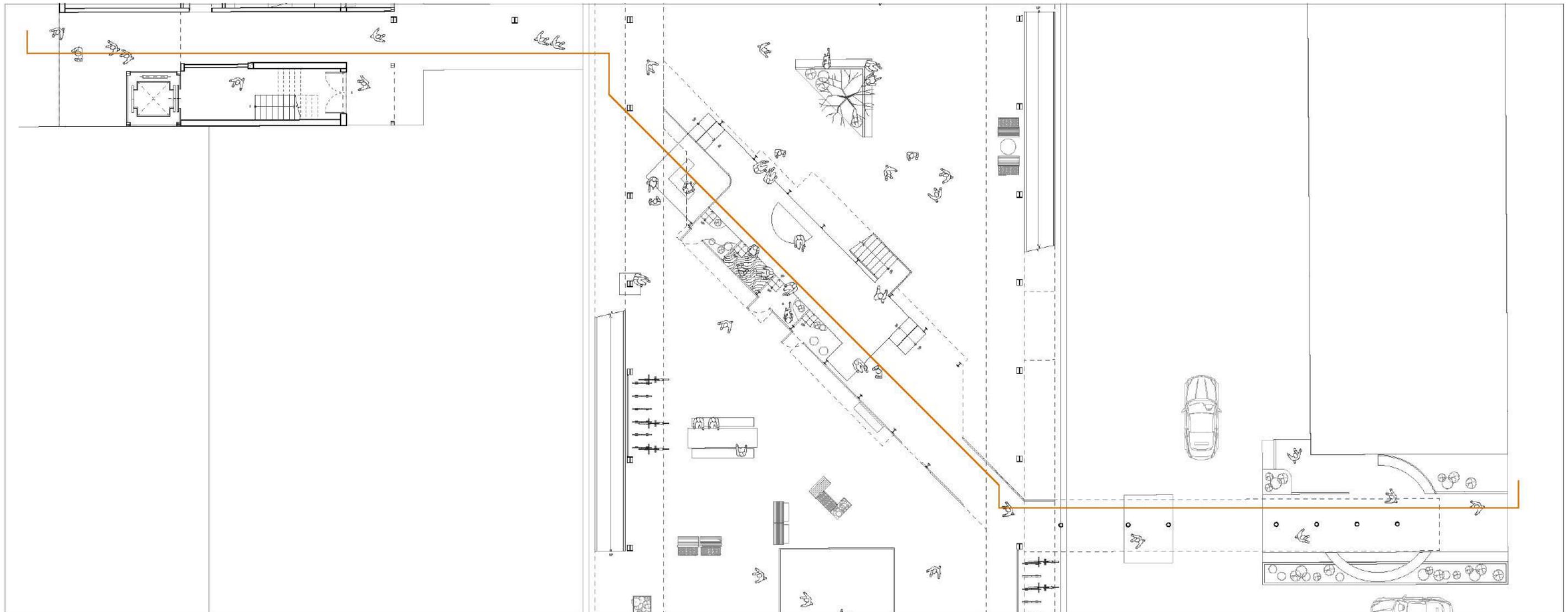




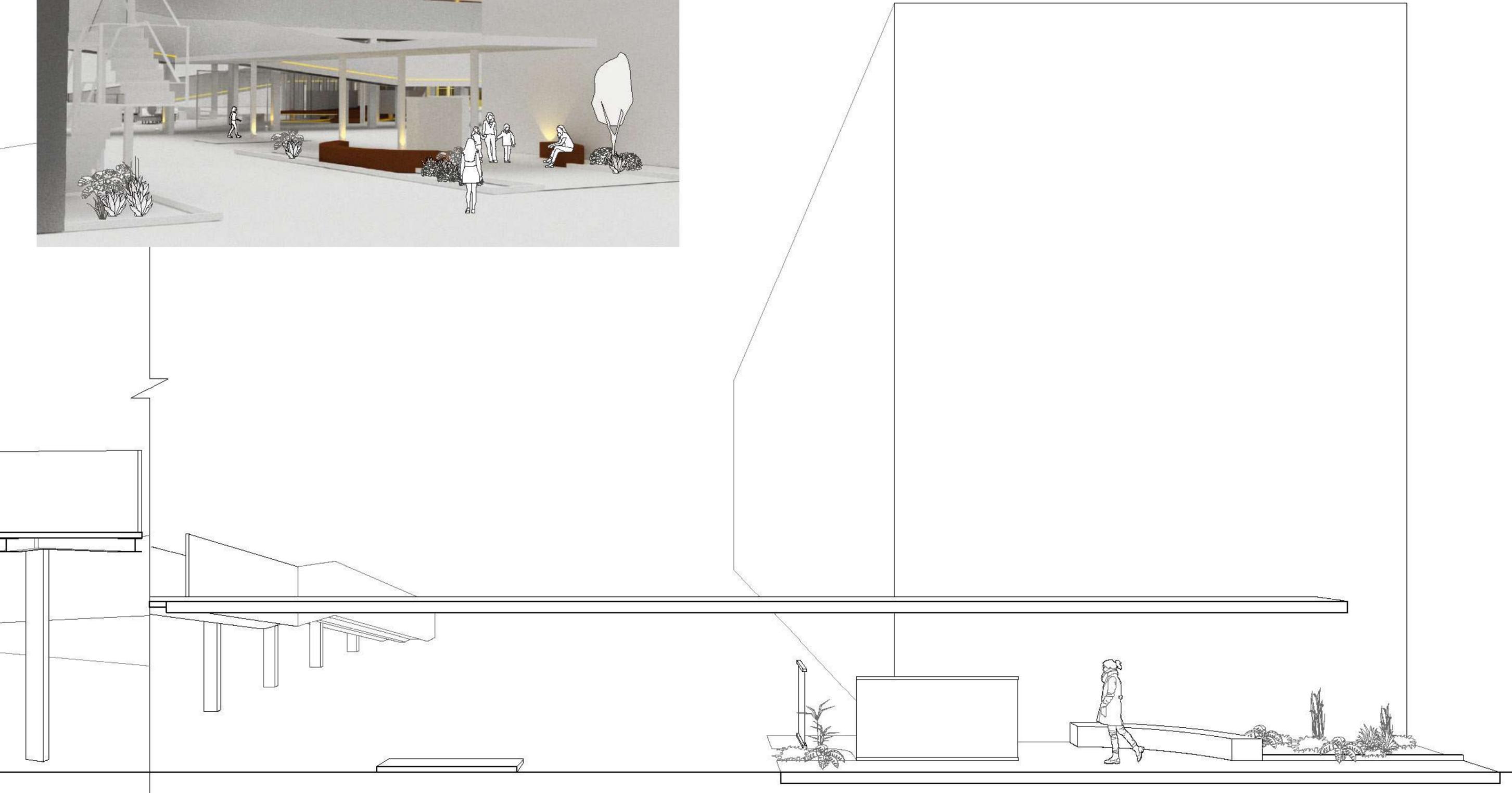
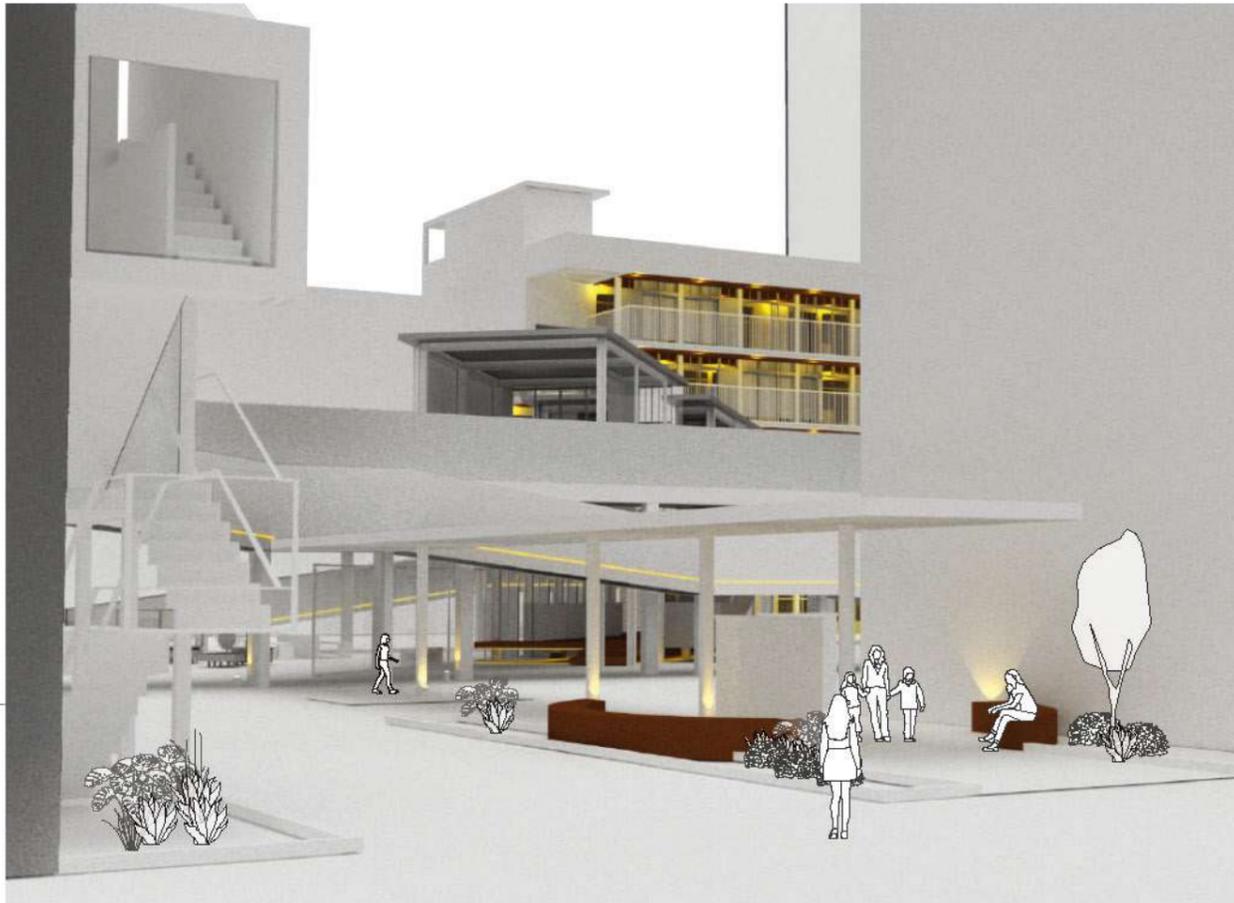
building entrance

room pavilion

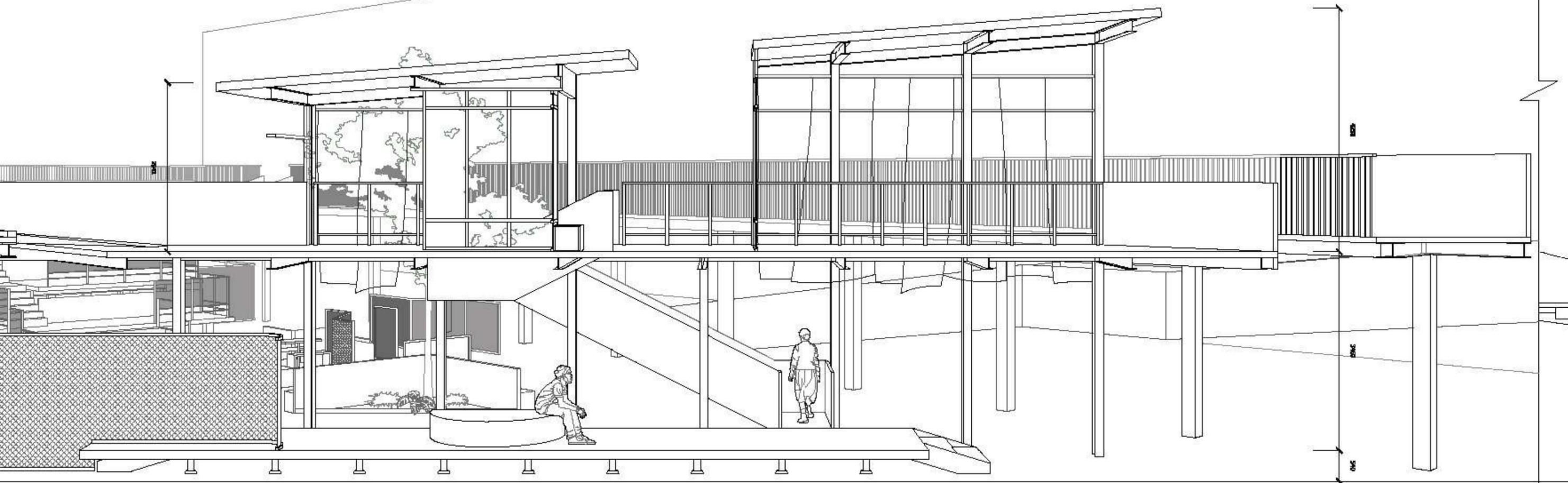
canopy entrance



Canopy entrance



Room pavilion



Room pavilion



