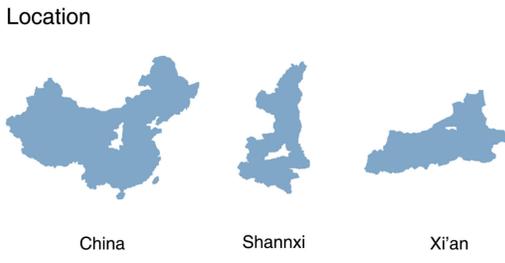


# Four senses elderly home

## Life under city wall



Xi'an(34°16' N 108°54' E) is the capital of Shaanxi Province, the ancient capital of the 13th Dynasty(1046BC-AD220,AD618-AD907). The total area is 10,752 square kilometers, and the registered population at the end of 2017 is 9,056,800.

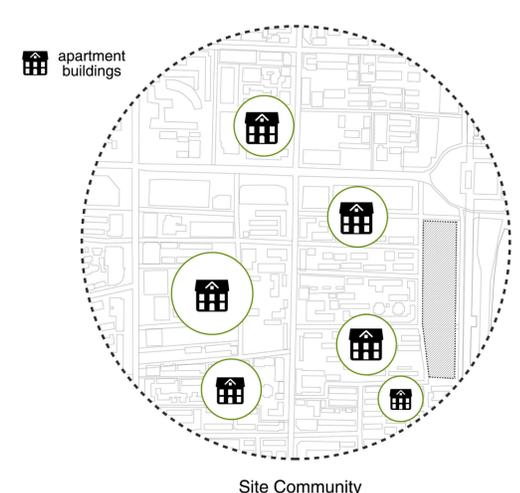
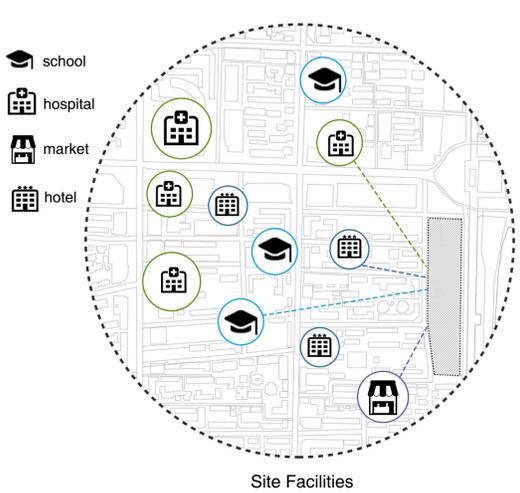
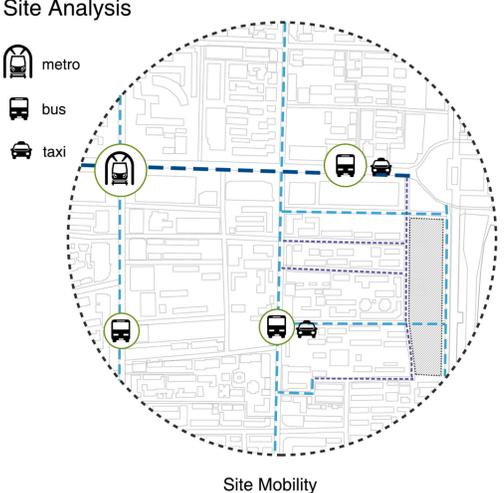
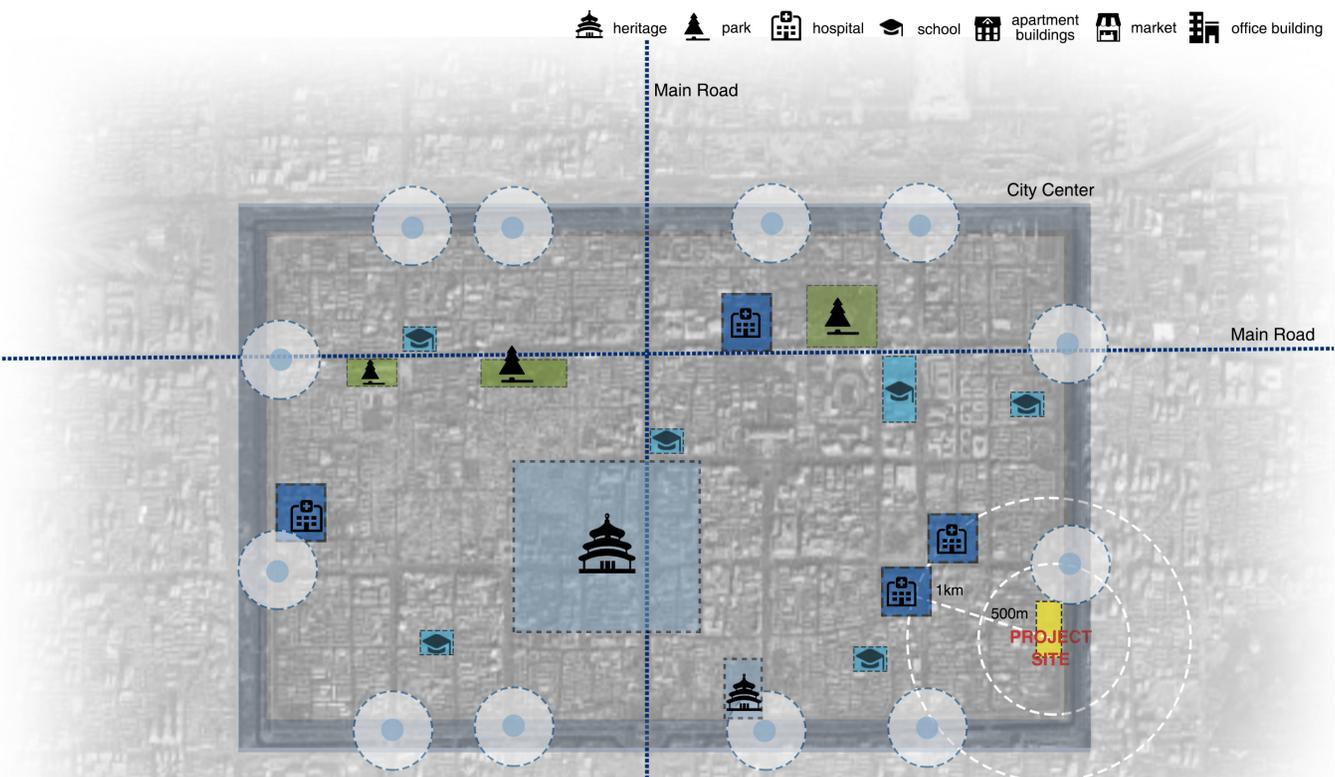
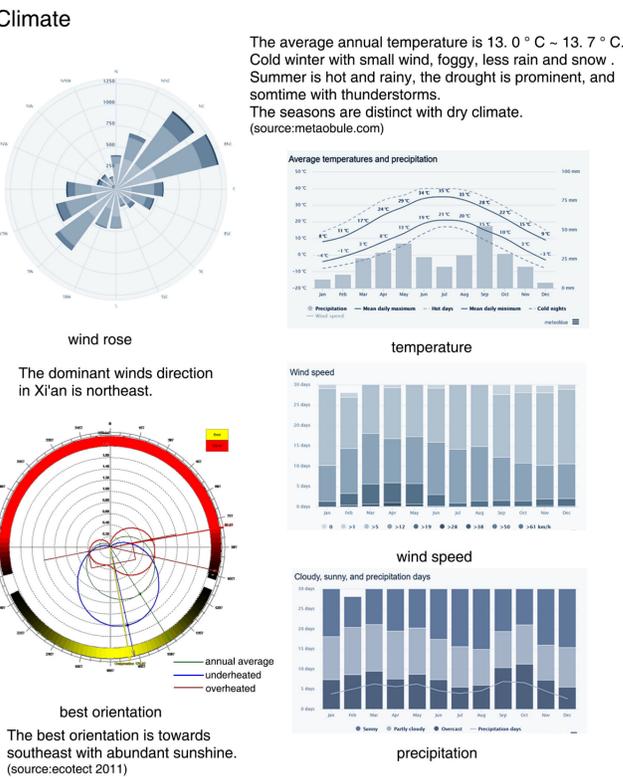
Xi'an is one of the best tourist destinations in China and one of the main cities in China. Xi'an is also an important national science and education center.

Xi'an City Wall is located in the downtown area of Xi'an, Shaanxi Province. The wall is 12 meters high, the top width is 12-14 meters, the bottom width is 15-18 meters, the outline is closed rectangle, and the circumference is 13.74 kilometers. The area within the city walls are used to call ancient city, covering an area of 11.32 square kilometers.

The famous Xi'an Bell and Drum Tower is located in the center of the ancient city.



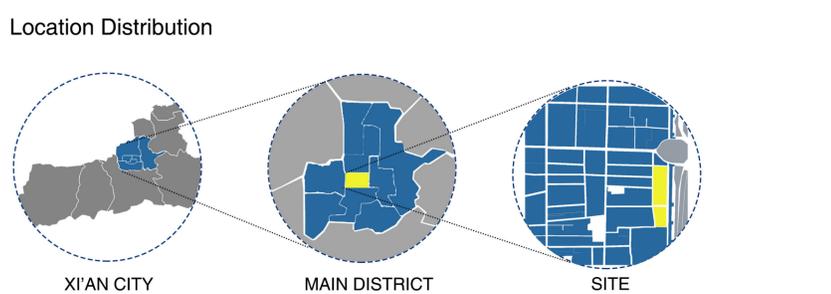
Chang'an is the ancient name of Xi'an, the first capital city in history of China. Zhou Dynasty made capital here. The name Chang'an , meaning "long-term peace and order". Chang'an is the ancient capital of the thirteen dynasties. It is the capital of the thirteenth Dynasty in Chinese history. It has the greatest influence of Chinese civilization and the cradle of the Chinese nation, with a permanent population of 185,000 during the peak period of the Tang Dynasty(AD618-AD907). As the capital and political, economic and cultural center of China for more than 1000 years, it is known as the Museum of Natural History area and a famous international tourist destination city. The influence of Chang'an culture is far-reaching, because the Zhou(BC1046—BC771), Qin(BC221—BC207), Han(BC202—AD220), Sui and Tang(AD618—AD907) dynasties, were the strongest and leading a chief period in ancient China.(source:ixian.cn)



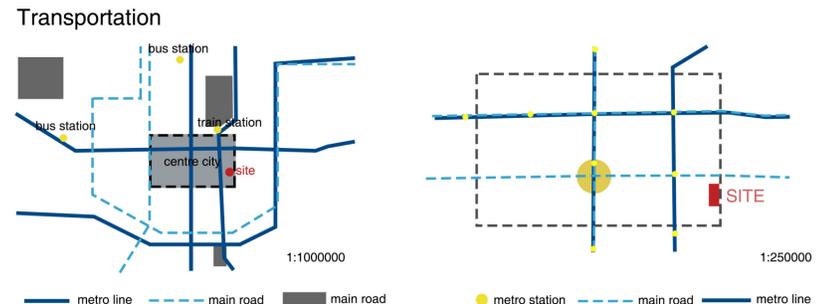
The site has a convenient transportation system, there are bus and taxi stations within 500 meters, which can be easily reached by the elderly.

The facilities around the site are good, hospitals, schools, hotels and supermarkets provide a satisfied daily life for the elderly.

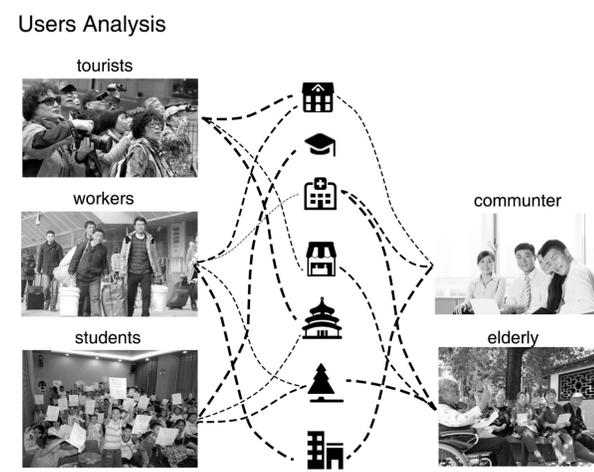
There are a large number of residential districts around the site, which ensures a convenient and safe living environment.



Xi'an is composed of seven urban areas. The center urban area is within city wall, which is the longest-development and most prosperous area in Xi'an city. The base is located on the southeast side within the city wall, inside town center.



The site is close to the city wall and enjoys the beautiful view of it. The transportation is very convenient, there are subway stations and bus stations within 1000 meters. The site also surrounded by parks, schools, hospitals and other facilities, which can be reached by walking. At the same time, less than 500 meters away from Changle Gate, one can walk freely in the park along the city wall.



Divided the possible users into five groups. Different group have different demand for public space. And the width of line shows the importance of demand.

# Four senses elderly home

Life under city wall

## Design Concept

With the increase of age, the physiological ability of the elderly is declining. The disability limits their activity type and space, the lack of care makes them often feel lonely, and the disconnection from society makes them lack of entertainment. In order to solve the problems, my design starts from a concept called *four senses*, by increasing their senses of vision, hearing, touch and emotion to expand their feelings and experience of world, so that they could have a better daily life.

Also, the project is located under city wall in order to satisfy their habits of having activities in a meaningful place. In this way, they can easily adapt to the new life without feeling anxious.

The building has mainly one floor to facilitate the activities of the elderly, and each room has a private yard to meet their needs for outdoor activities.

### phenomenon

increase elderly population  
lack of pension institution

### questions

less mobility  
degeneration of senses  
physiological diseases  
mental diseases

### answers

enrich experience  
peaceful environment  
convenient space  
access facility/public activity



## Masterplan 1:1000

### Technical and Economical Index:

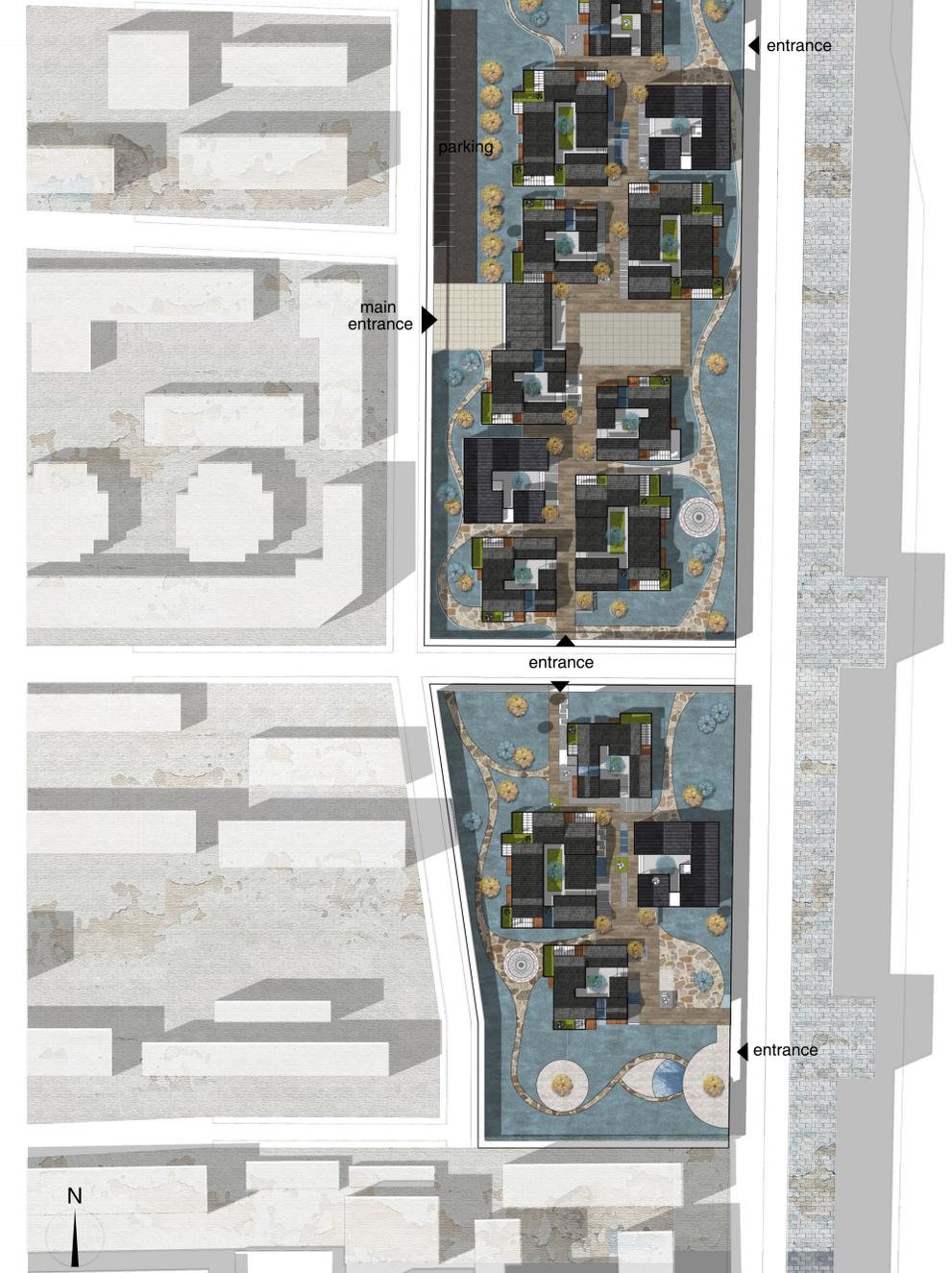
surface of plot: 32215m<sup>2</sup>

building density(ground surface/plot surface): 25%

building ratio(all floor surfaces/plot surface): 0.27

green rate of the plot area: 60.2%

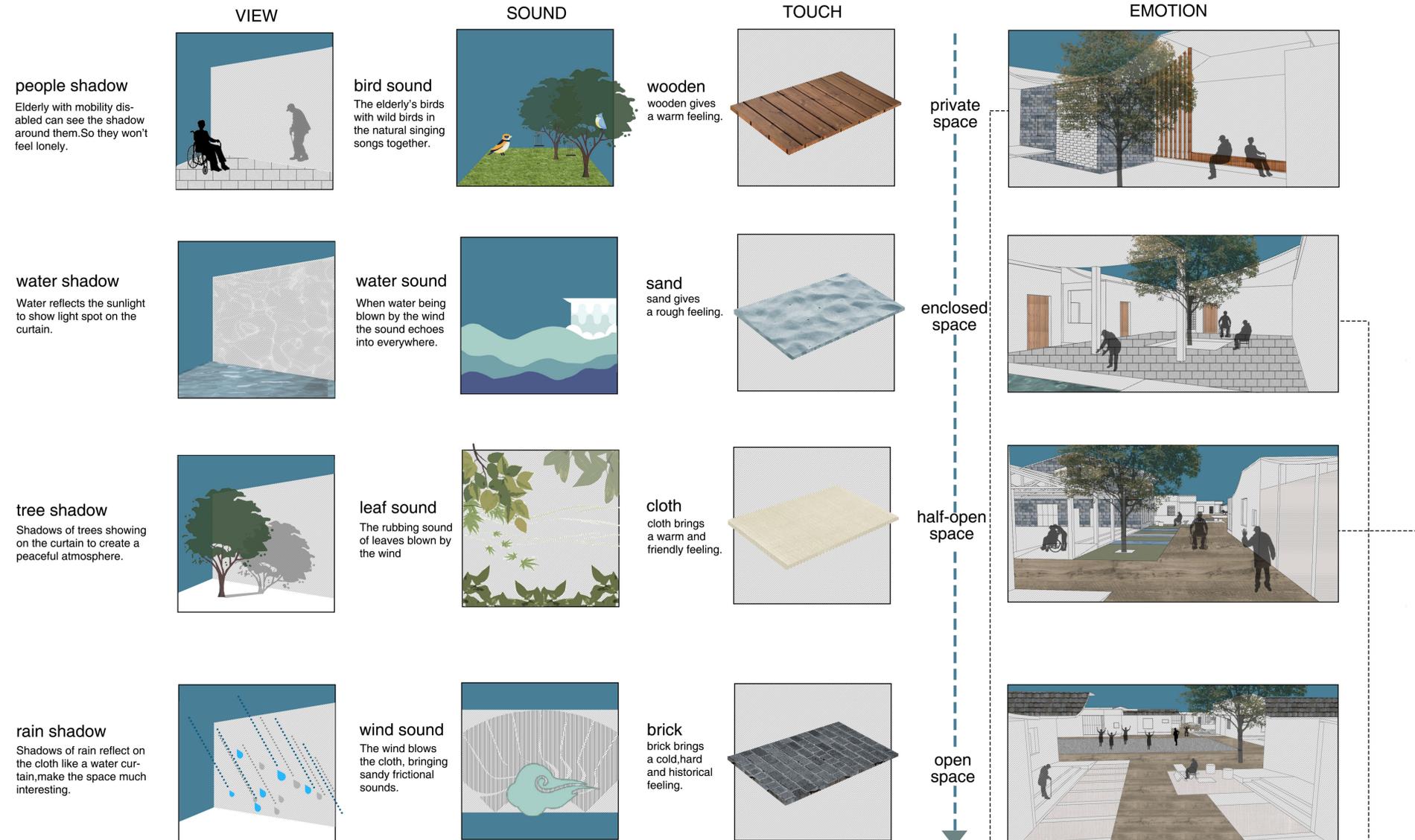
maximum height: 7.2m



# Four senses elderly home

## Life under city wall

### Four Senses

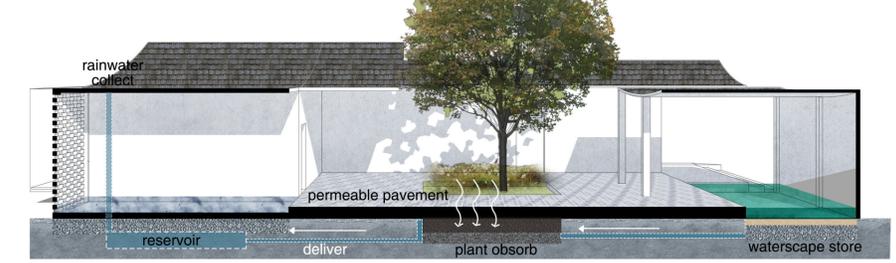


### Functions



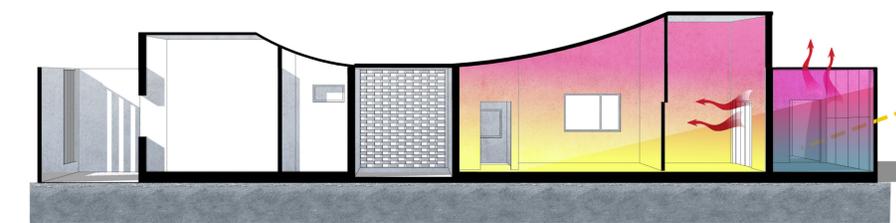
### Sustainable Strategies

#### Water Collection



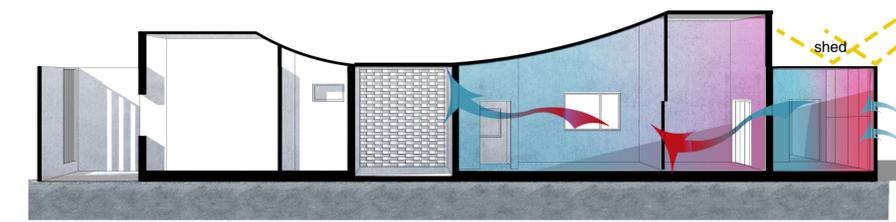
Plants collect rainwater by ecological filters, waterscapes collect water through natural storage, combined with permeable pavement and eaves water collect system, to collect rainwater into the bottom reservoir of buildings for daily use.

#### Greenhouse-Winter



Close the windows of the greenhouse in winter to make it a big greenhouse. With the sun heating the air inside house to form a good insulating layer in order to raise the temperature inside the room.

#### Greenhouse-Summer



Open the windows of the greenhouse in summer to let it have natural ventilation. With the outside cool wind blow through the room to bring in the cold air and bring out the hot air, making the inner space comfortable. The roof of greenhouse can also block sunlight by curtain.

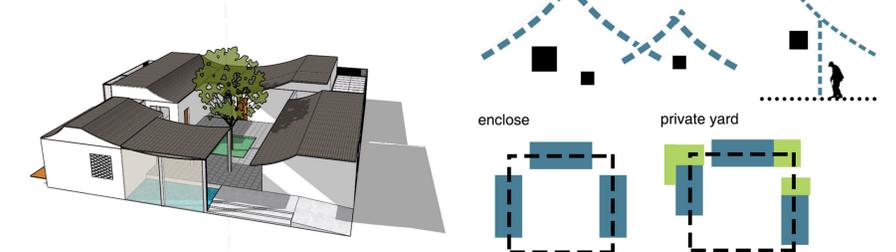
### Traditional Material



Traditional Chinese architecture is dominated by simple black and white colors. The strong contrast between black tiles and white walls is not only the initial inspiration for traditional Chinese wash painting, but also form a simple and unique cultural image. I try to extract material and color elements from traditional buildings and apply them to the project. So the project can adapt to the historical and cultural atmosphere in the city wall area and can create a harmonious contemporary architecture.

### Configuration

#### residential courtyard



Each residential units are organized by several rooms with courtyards, form a semi-private space for neighborhood communication. The roof is evolved from the traditional sloping roof. The curve of which forms a comfortable skyline under the city wall. The extended eaves of roof can provide in-between communication space while shading the sun and rain. Also every household has a yard, which satisfy the elderly's demand to have outdoor activities and privacy.

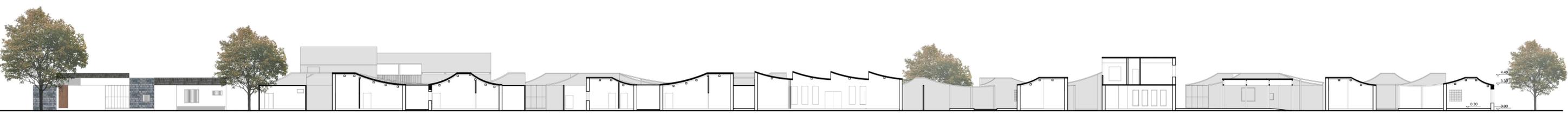
# Four senses elderly home

Life under city wall



Ground Floor Plan 1:250

0m 5m 15m



1-1 Section 1:250



West Facade 1:250

# Four senses elderly home

## Life under city wall



Through the bird view, showing the layout and spatial relationship of the building, it is combined by several different units linked by a wooden road in the middle. Also, through some small perspective pictures to show important spaces inside the building as well as how people use them.

entrance of residence



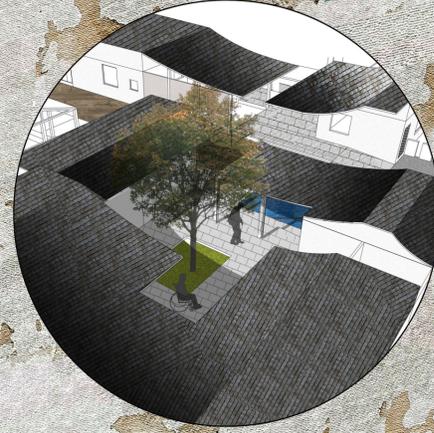
private yard



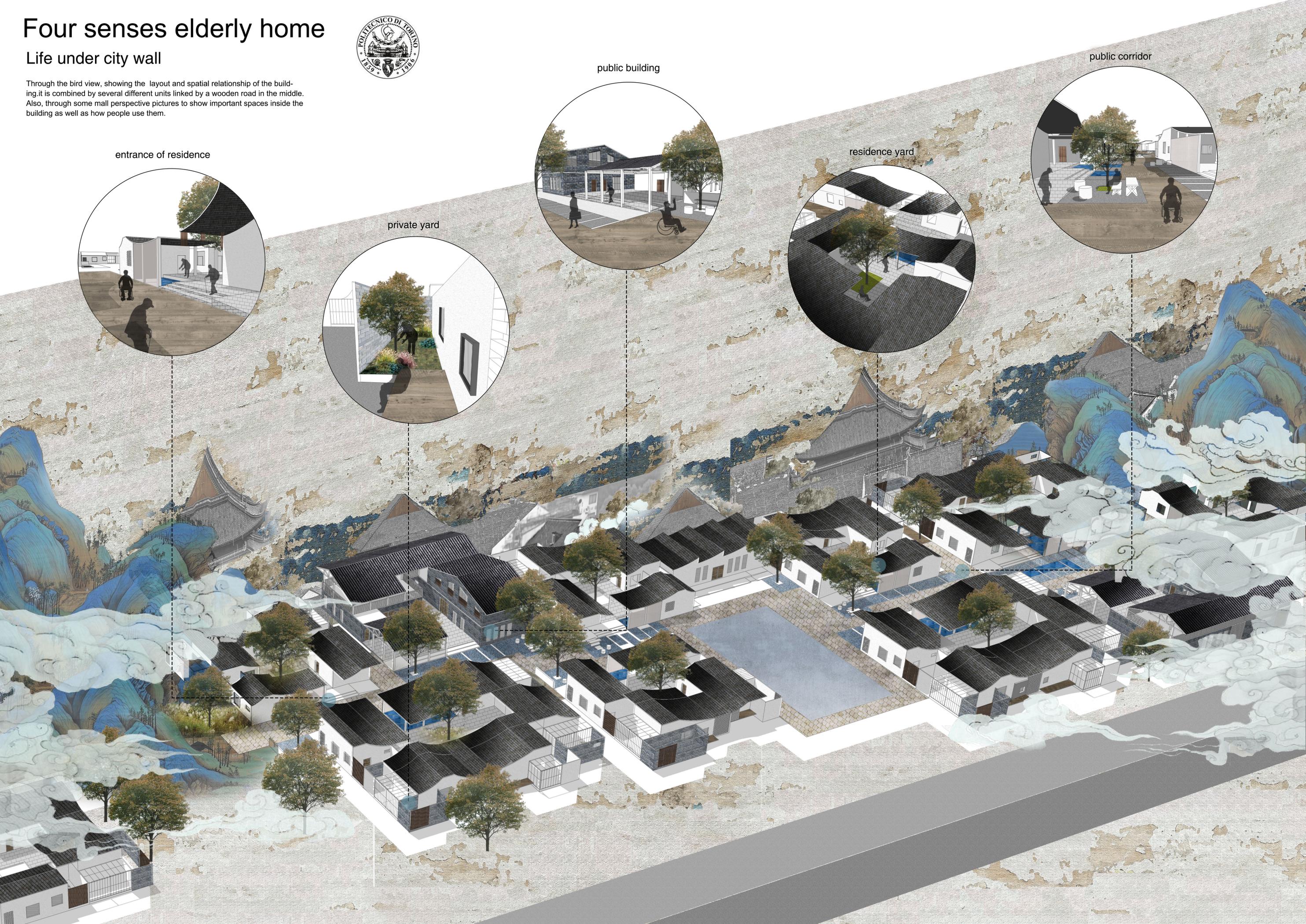
public building



residence yard



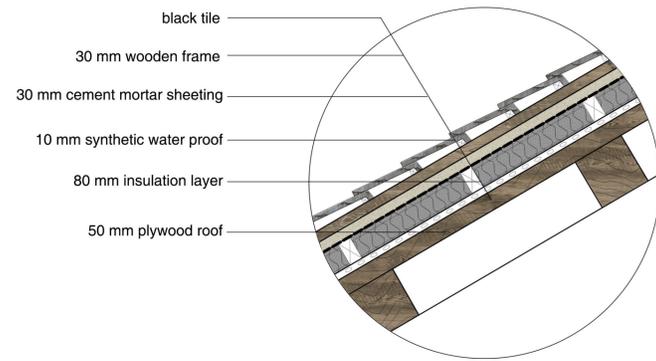
public corridor



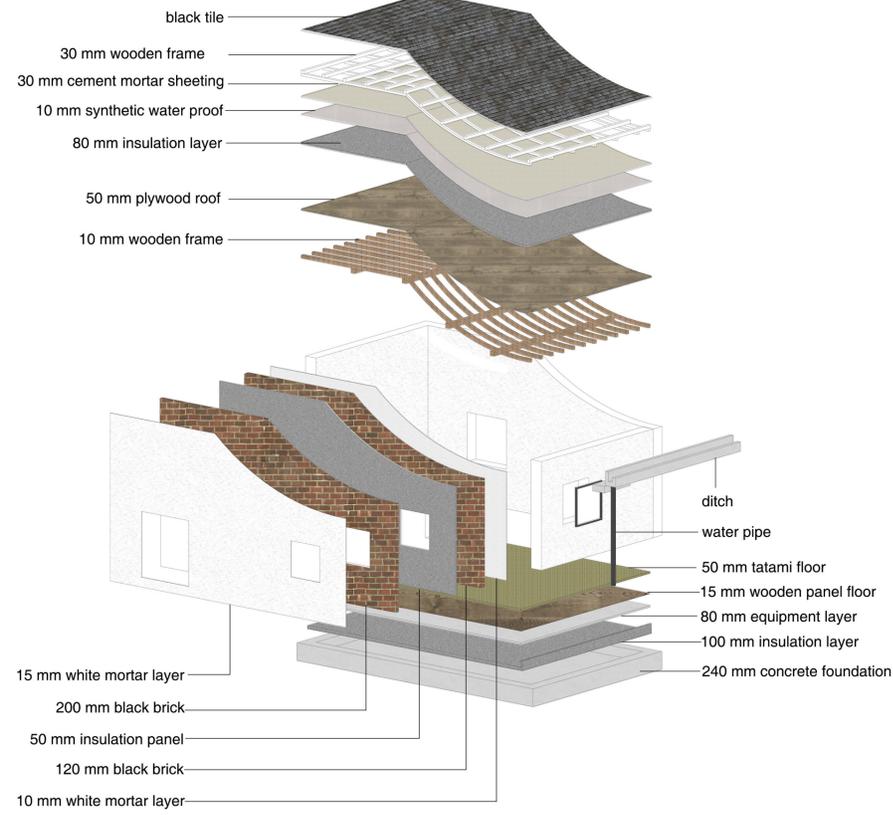
# Four senses elderly home

## Life under city wall

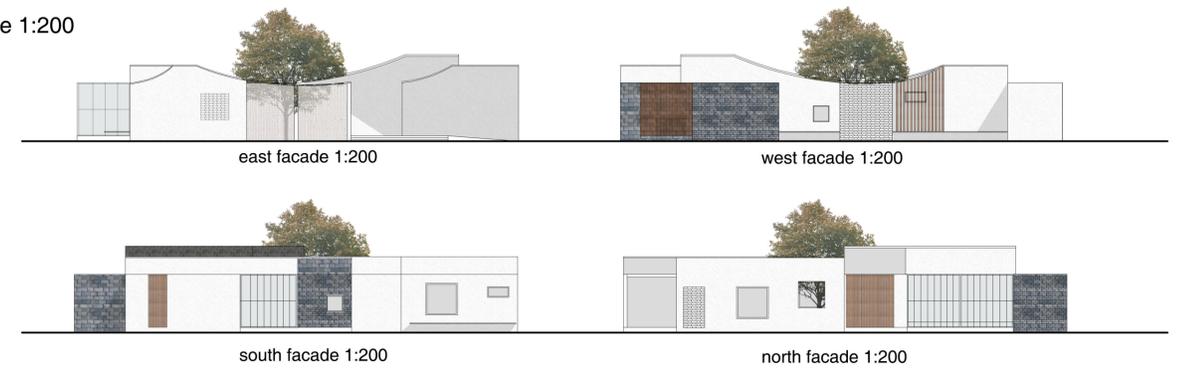
Roof Detail 1 1:10



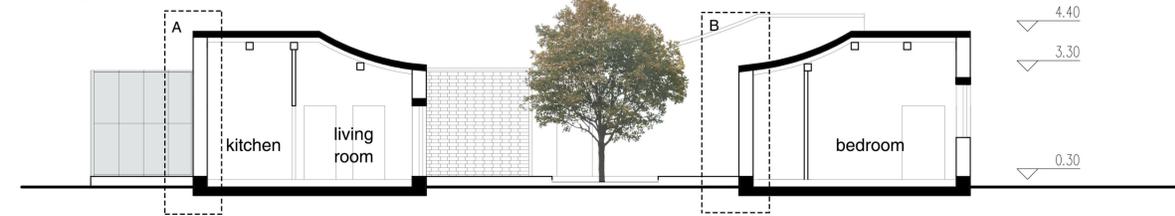
Layer Explode



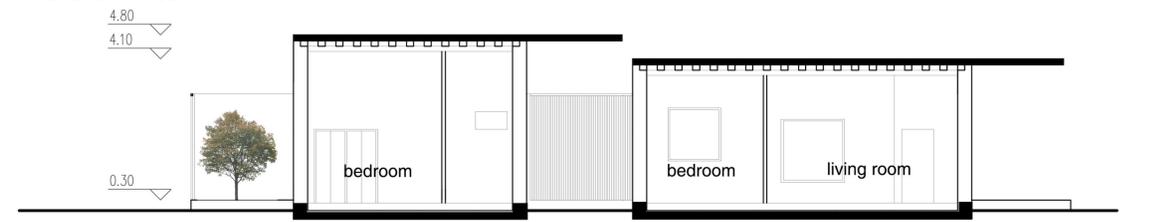
Facade 1:200



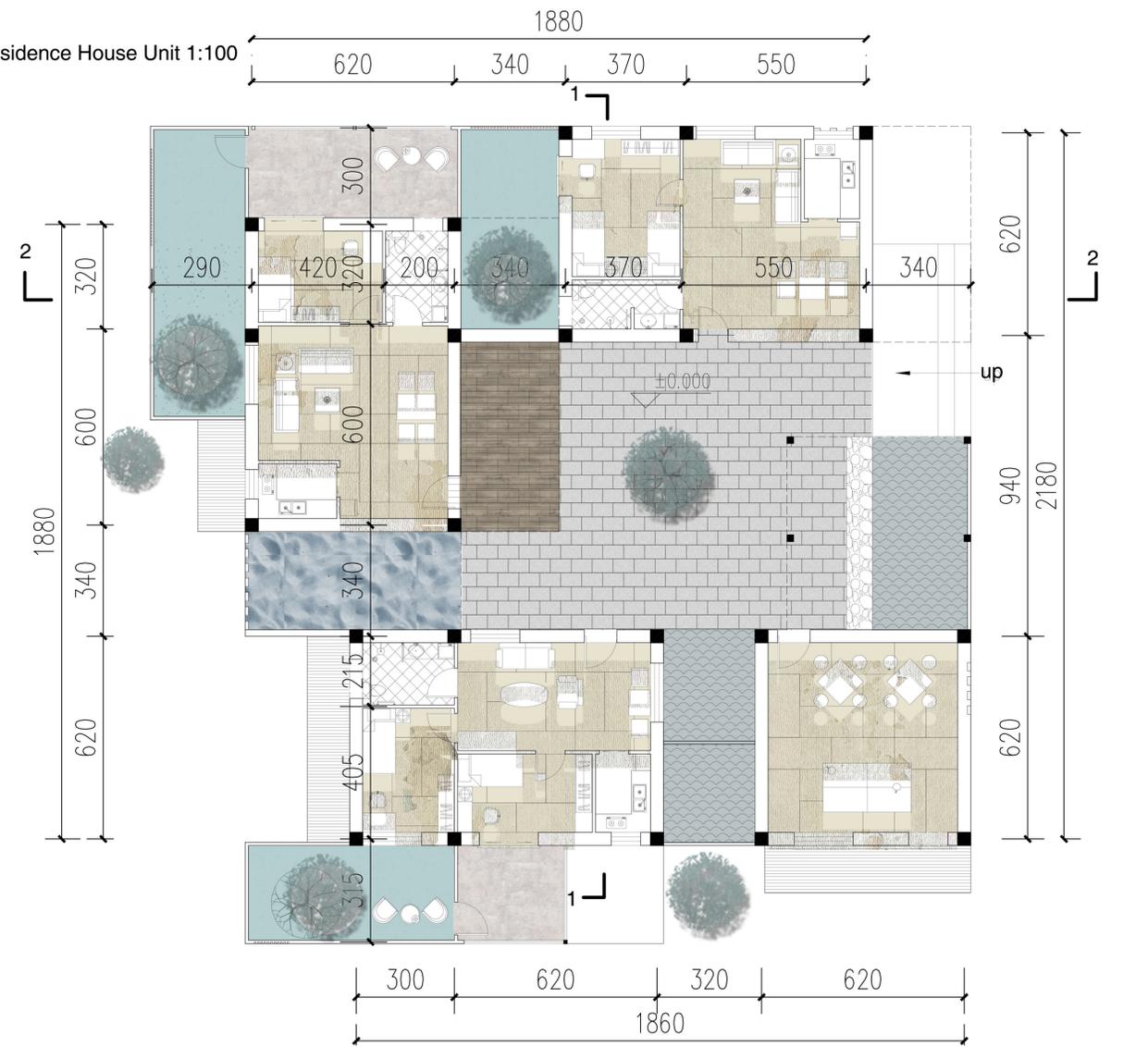
1-1 Section 1:100



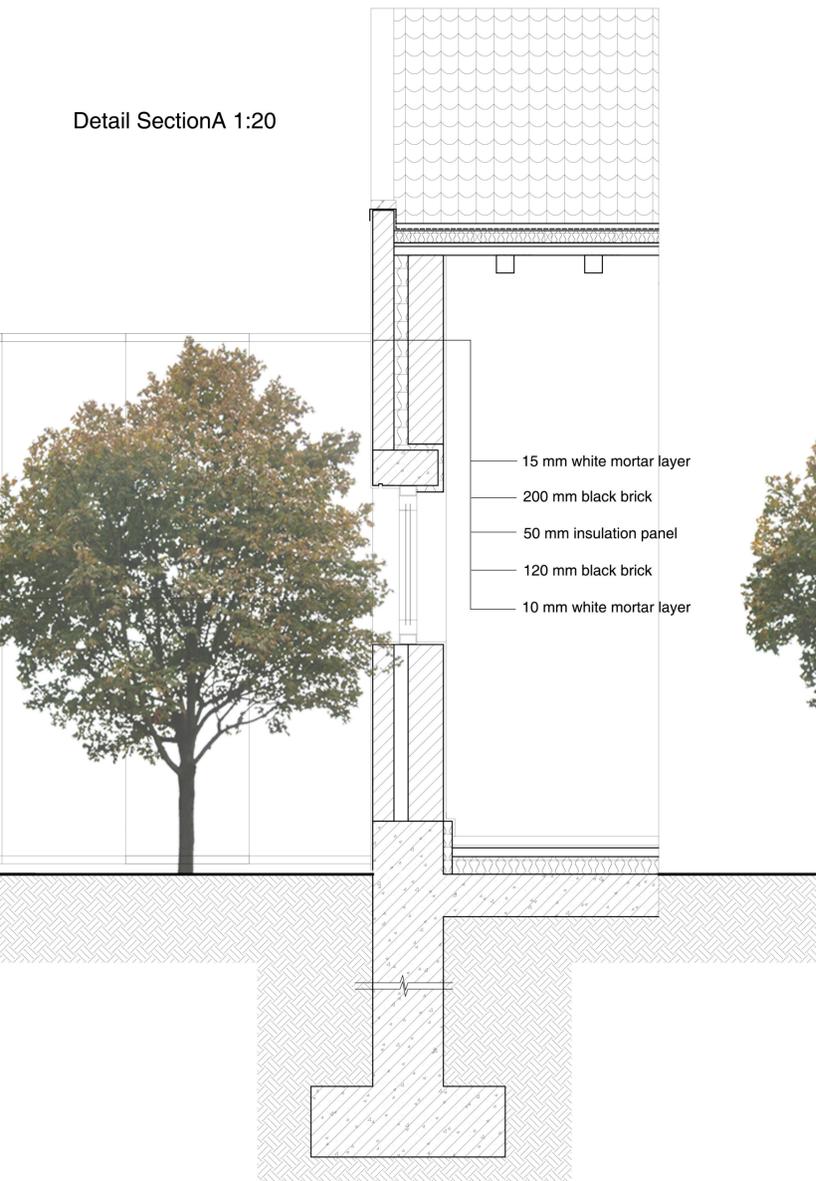
2-2 Section 1:100



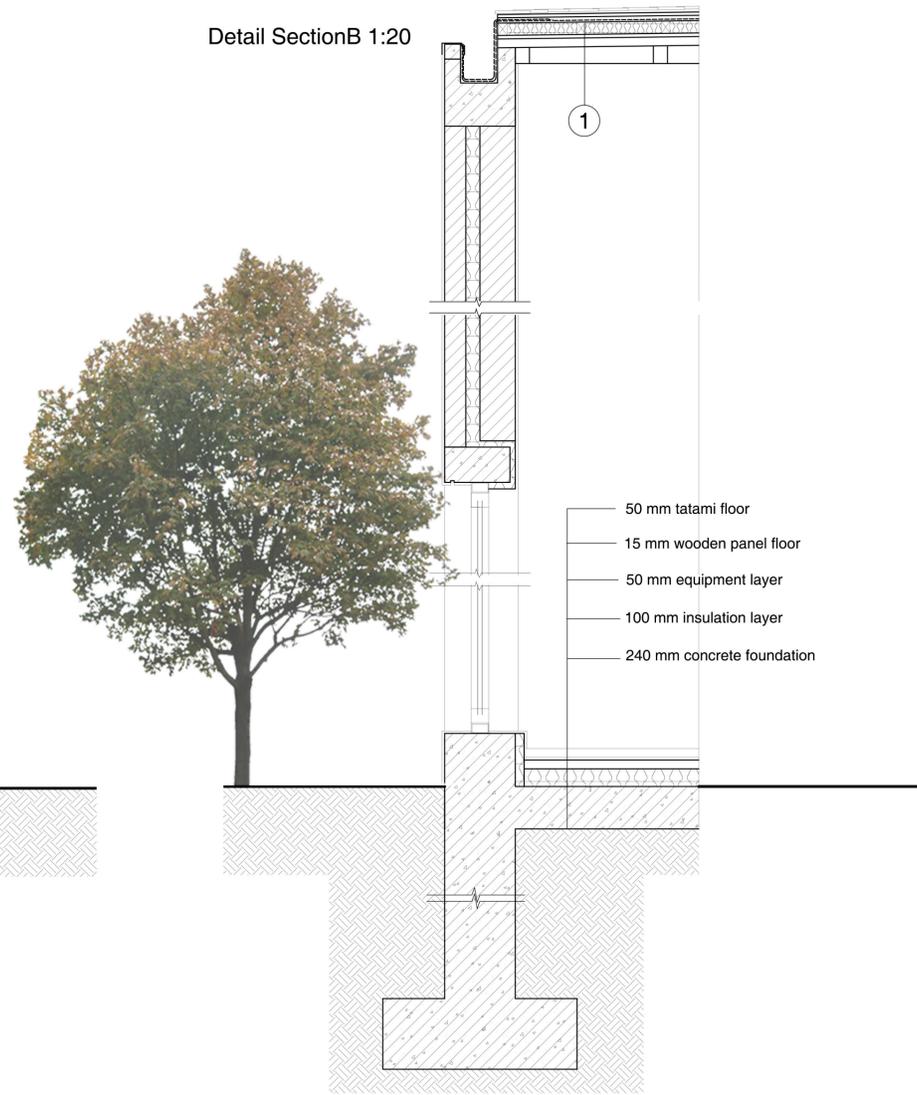
Residence House Unit 1:100



Detail SectionA 1:20



Detail SectionB 1:20



# Four senses elderly home

## Life under city wall

Detail Section A 1:20

1

- black tile
- 30 mm wooden panel
- 30 mm mortar sheeting
- 10 mm synthetic PVC
- 80 mm insulation layer
- 180 mm concrete roof

Detail Section B 1:20

- 50 mm insulation panel
- 50 mm insulation panel
- 200 mm concrete wall
- 30 mm cement mortar
- 120 mm black brick

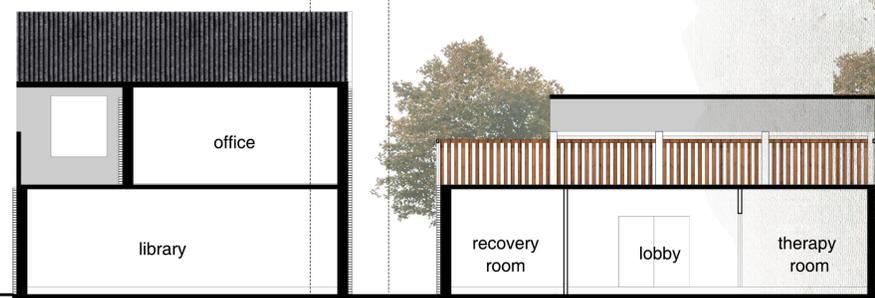
- 50 mm tatami floor
- 15 mm wooden panel floor
- 50 mm equipment layer
- 100 mm insulation layer
- 240 mm concrete foundation

Roof Detail 1 1:10

- black tile
- 30 mm wooden panel
- 30 mm mortar sheeting
- 10 mm synthetic PVC
- 80 mm insulation layer
- 180mm concrete roof

Section 1:100

- 6.10
- 3.10
- 0.30



1-1section 1:100

Public House Unit 1:100



east facade 1:200

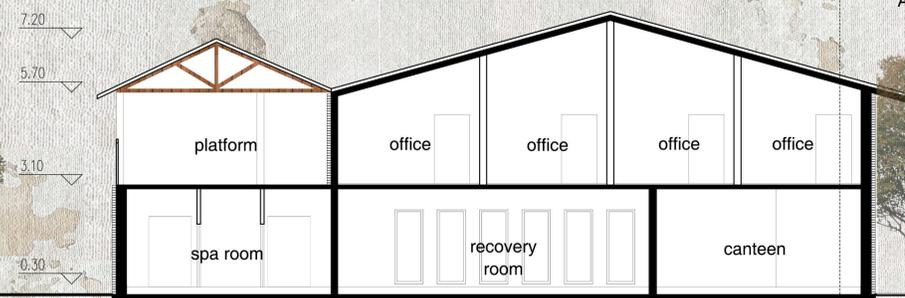
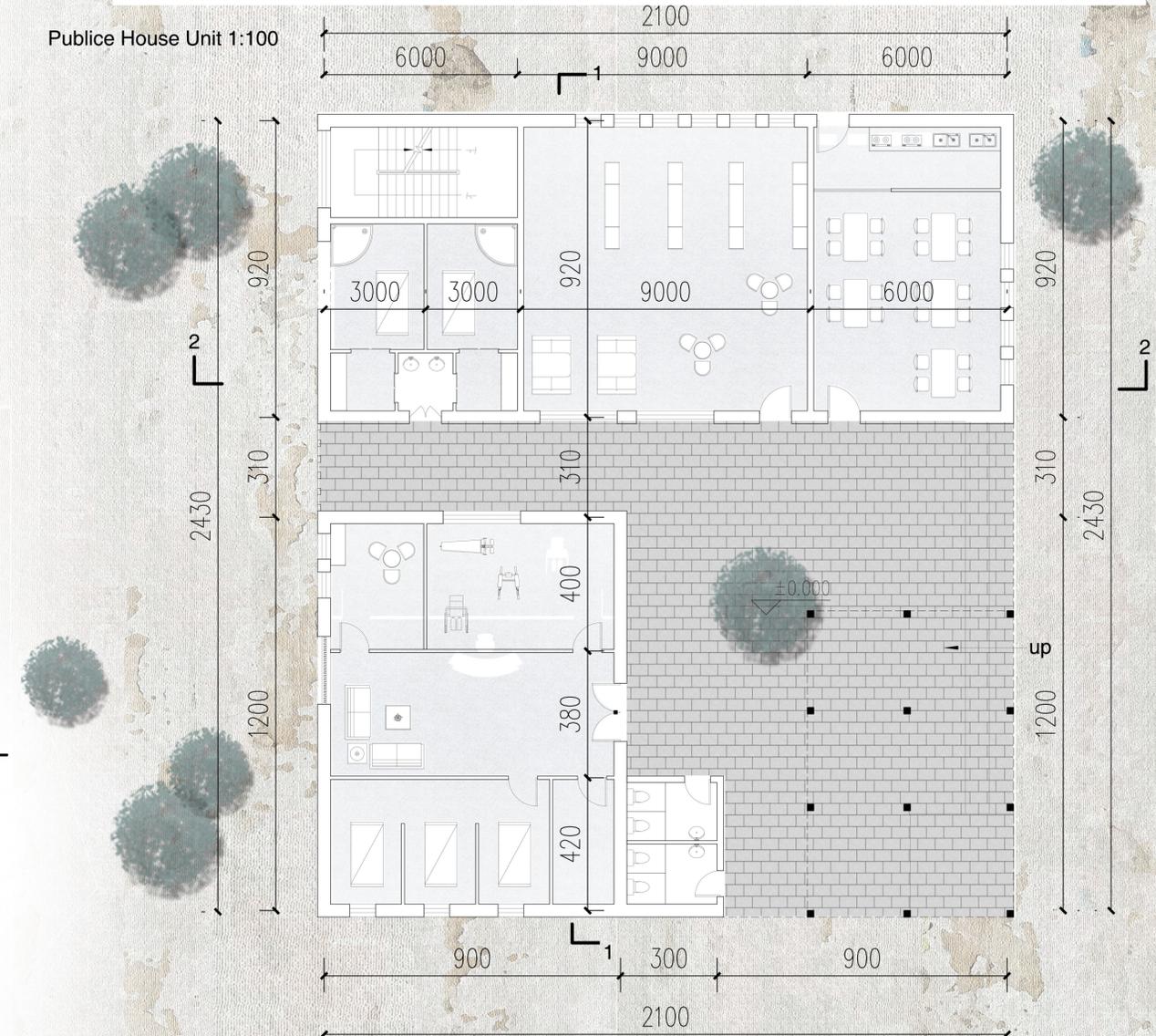
north facade 1:200



west facade 1:200

south facade 1:200

Public House Unit 1:100



2-2section 1:100