

INHABITED WALLS

an alternative approach for preserving Changmen
community

FOR SUZHOU



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DI TORINO**

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Design

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Master degree Thesis

Inhabited walls for Suzhou:

**an alternative approach for
preserving Changmen community**

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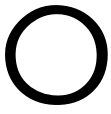
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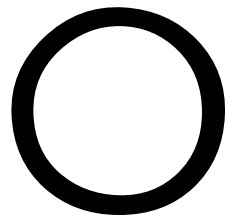
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Intro



Photo by the author, view of Suzhou canals

000

Foreword

My experience in China is related to a workshop I attended in Suzhou at XJTU university, near Shanghai. The main topic of the workshop organized by Pierre-Alain Croset was the urban regeneration of an ancient district, Changmen district, in the historical center of Suzhou.

The workshop was really stimulating because of the conditions of project site, different approaches (in the workshop were involved six schools of architecture: XJTU, University of Liverpool, TU Graz, Roma La Sapienza, ENSA Paris Val-de-Seine and Politecnico di Torino) and the different culture and needs students had to relate with.

It is important to underline that the whole district of Changmen in meant to be changed by Suzhou municipality.

In particular, one of the site turned to be really interesting for its inner potential and attracted my attention; slightly outside the walls of Suzhou historical center and facing a waterfront, it was already under construction.

Back in Italy, I started doing some researches about Changmen and I discovered that the site was meant to be transformed in a sort of touristic attraction for the rich middle class.

Suzhou municipality wanted to restore the image of the site and recreate the ancient commercial area of the historical city which was there by relocating the com-

munity living in that part of the city.

The project was intended to become only a commercial area.

In addition, in order to recreate the ancient image of Suzhou commercial area, municipality has adopted the "Suzhou style" for the new constructions, creating a fake image of the area.

The debate on preservation is growing in importance in China as the Chinese government included it in the 13th five-years plan for economic and social development of the People's Republic of China.

However, it has a long tradition and both Chinese and Western architects are involved: in my researches, the approaches of authors like Liang Sicheng (considered the father of architectural history in China), Yinon Xu and the American sinologist Frederick Mote were fundamental.

The aims of this thesis are questioning Chinese developers' approach in the preservation of Chinese historical city center and the creation of programmatic approach based on a strategy of memory: the ruined walls of the area will be restored in order to create a new infrastructure able to answer to both commercial and community needs.

001

Acknowledgment

The completion of this study could not have been possible without the patient supervision of my thesis advisers: Roberta Ingaramo, Pierre Alain Croset and Alberto Bologna. In particular, professor Ingaramo for following me in this study and finding a way through the accomplishment of this thesis, professor Croset for the help given in a moment of stasis with his expertise about Chinese architecture and architects and professor Bologna for taking me to China for the XJTU work-shop and for the precious advices about the use of the materials.

I would like also to express my gratitude to professor Wallace Ping Hung Chang from Hong Kong university and professor Austin Williams from XJTU for answering my email and explaining me something about planet China.

I would also like to thank all the friends that I met in these years of study for making me the man I am today. Last but not the least, I would like to thank my parents and Giulia for being always there supporting me. Without you none of this would indeed be possible.

002

On board diary

2nd Suzhou International
Architecture Workshop
“Urban Conservation and Modern
Interventions in Changmen Historical District”
Xi’an Jiatong-Liverpool University

“Arriving at each new city, the traveler finds again a past of his that he did not know he had: the foreignness of what you no longer are or no longer possess lies in wait for you in foreign, unpossessed places”.

Italo Calvino, *Invisible Cities*

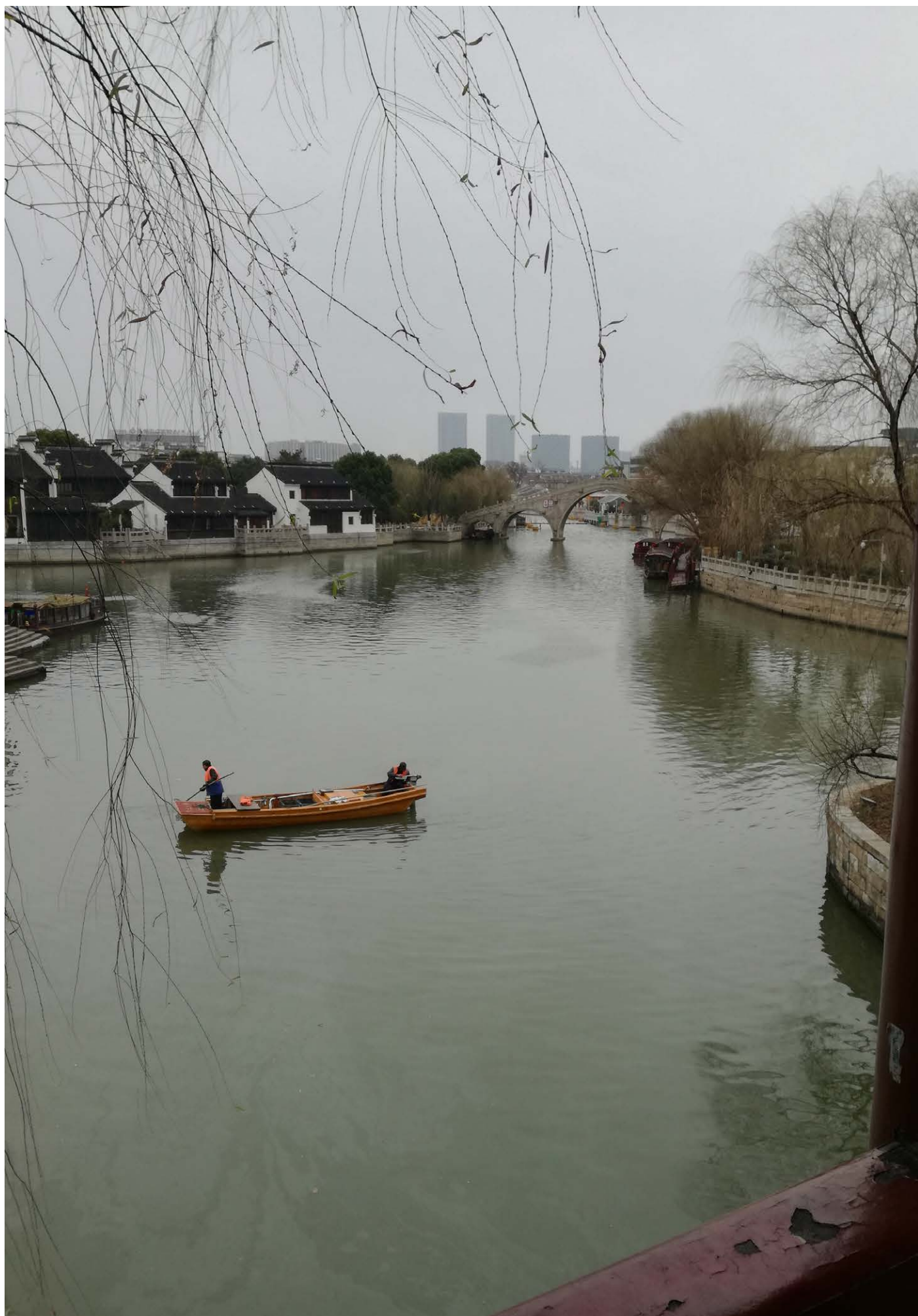


Photo by the author, view of Suzhou canals

First of all, I'll try to explain how I discovered the city of Suzhou and, in particular, Changmen district: in February 2017, I was involved in an international workshop created by the XJTLU (Xi'an Jiaotong-Liverpool University) of Suzhou. I worked with people from all around Europe (University of Liverpool, TU Graz, Roma La Sapienza, ENSA Paris Val-de-Seine and Politecnico di Torino) that were invited with their schools of Architecture in China and scholars from the XJTLU in order to find solutions for the renewal of Changmen district.

During the 5 day Workshop, students and teachers from the six schools of architecture worked at Xi'an Jiaotong-Liverpool University to develop solutions for the redevelopment of Suzhou's historic Changmen District, conserving heritage architecture and introducing modern innovations.



Photo by XJTLU: one-day inspection through Changmen district



Photo by XJTLU, workshop participants and tutors in the Yipu garden

It was the second time this workshop has been held at XJTLU. It was organised by Pierre-Alain Croset, head of the Department of Architecture at XJTLU, with assistance from lecturer Juan Carlos Dall'Asta. The aim of the workshop was to analyse the district, visiting its well-preserved historic architecture, in particular, its historic garden (Yipu garden or garden of Cultivation) and find solutions to regenerate it.

Changmen has been divided in 14 sites, one for each groups participating to the workshop; group's strategies were not just focused on mere preservation of the so-called "built heritage" but were a mixture of contemporary design while honouring the spirit of the past.

During the one-day inspection, a lot of considerations came out: from an architectural and "tangible" point of view, we considered the contrast between traditional dwellings and modern buildings, their different materiality and the connections in this dense and porous context.

The houses with courtyards, the main typologies one could find in the ancient part of the city of Suzhou, develop on the whole neighborhood. Some courtyards overlook the street, creating enclosed sharing places.

From the social perception, or from an "intangible" point of view, we were fascinated by the streets, real symbol of community and extension of the dwellings, in which residents perform most of their daily activities; the hanged clothes and the open-street kitchens, the shared meals with people next door harmoniously mixed together in a sort of street theatre scene, not caring much for the intrusions of the noisy audience of the day.

The space has naturally extended many domestic activities towards the outside and boundaries between the private and public, between indoor and outdoor have been eliminated. It also made the local people expose much of their daily activities and their privacy to the public eye.



Photo by Grimaldi D'esdra, Melchior: contrast between new and old

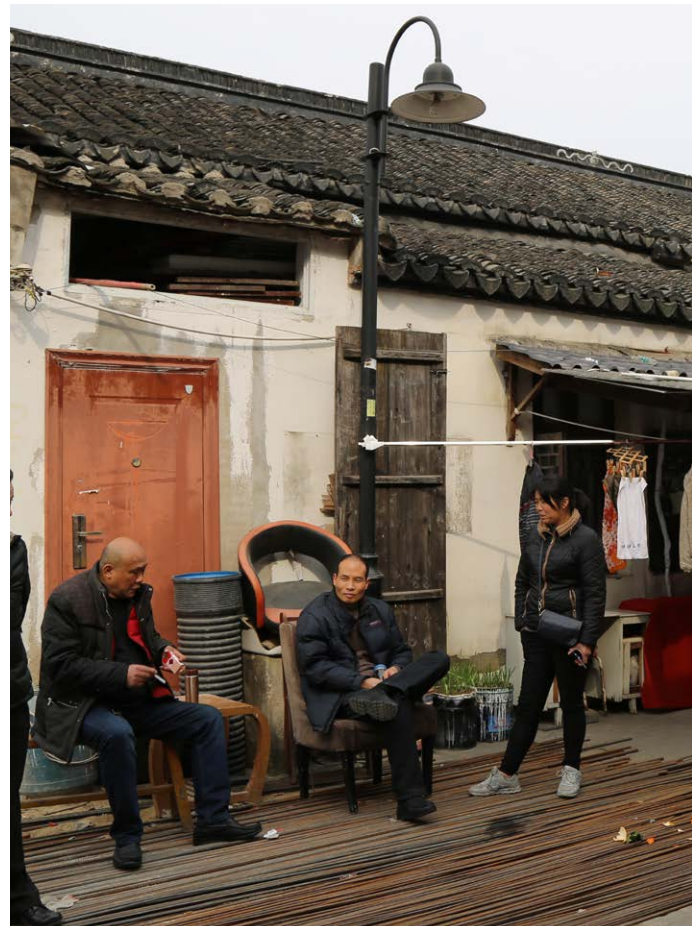


Photo by Rossel Villareal, Camila: street life in Changmen district



Group A. Photo by Grimaldi D'esdra, Melchior : site number 4

I was assigned to group A related to site number 4; we got rid of the buildings that were built up from mid-60s to mid-70s: we thought that they were absolutely incompatible with the ancient context and we decided to wreck them down. We opened new streets and connections from north to south and new public spaces as gardens and little squares. We tried to give back to the district its image of old chinese city but putting something new that could attract the middle class.

Generally speaking, we tried to create more accessible and comfortable spaces.

Finally, after a week of work, the proposals of the 14 groups were fused into a 'collage' plan of possible architectural projects for the Changmen Historical District.

Seven meters long panels and physical models were exposed in the central hall of XJTU.

Representatives of the Planning Bureau of Suzhou commented that they value a critical dialogue with XJTU on matters related to architecture and were interested in the innovations the University could offer.

After the workshop experience, I decided to develop my master thesis on the Changmen district.

In particular, I started wondering about the real meaning of "heritage"; is it only situated in the white washed walls and in the black roof tiles of the Changmen houses or could it be related to the rituals of the local people?



Photo by the author: Changmen physical model



Photo by Ronzani, Riccardo: workshop exposition



Photo by the author: view of site number 4



Photo by Grimaldi D'esdra, Melchior: Changmen gate

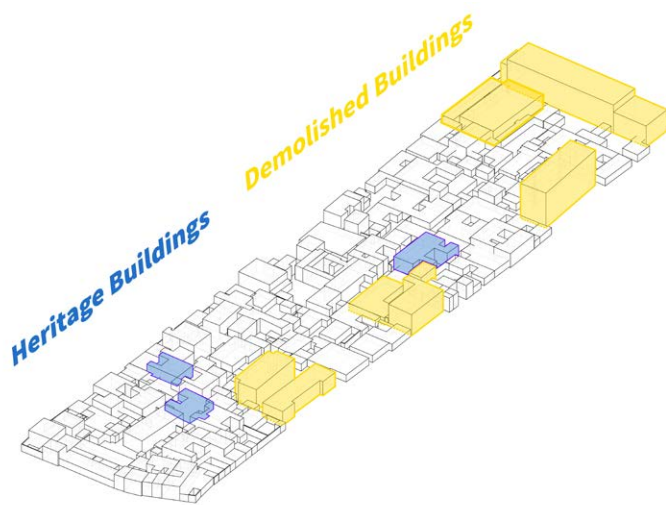


Group A. Photo by Grimaldi D'esdra, Melchior : group A in Xizhongshi, the ancient Changmen street



Sketch by Wu, Zhuoying: site number 4 state-of-art

Visual by Holland, Benjamin: site number 4 design proposal



Scheme by Schwarzmüller, Maximilian: site number 4 preserved and demolished buildings



Visual by the author: site number 4 design proposal



Photo by XJTU: site number 4 physical model

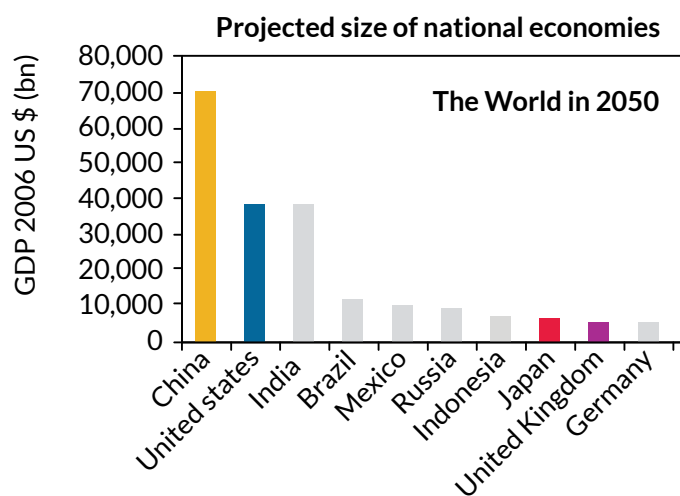
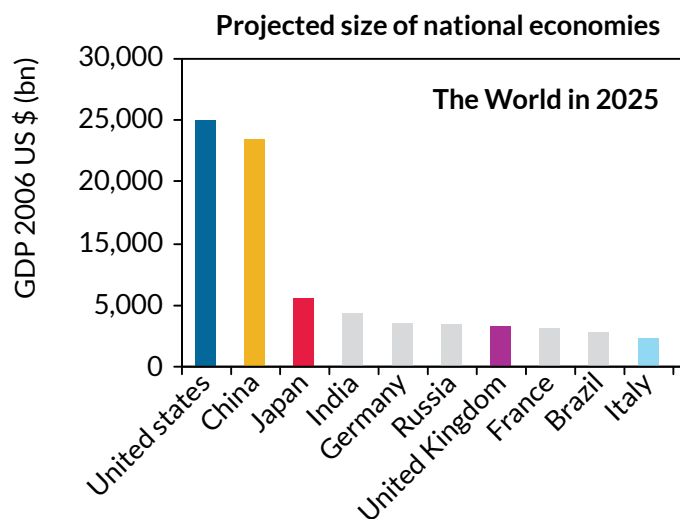
003

Understanding the rise of China

strenghts and weaknesses of a modernizing country

“China is a sleeping lion and when she awakes, the world would shakes”
(Napoléon Bonaparte).

“If one looks at Goldman Sachs projections in the *Global Economics Paper No: 153* released in March 28, 2007, Chinese economy will be almost the same size as the American economy by 2025. And if one look at chart for 2050, it is projected that the Chinese economy will be twice the size of the American economy, and the Indian economy will be almost the same size as the American economy. And we should bear in mind here that these projections were drawn up before the Western financial crisis.



Goldman Sachs, 2007

A couple of weeks ago, I was looking at the latest projection by BNP Paribas for when China will have a larger economy than the United States. Goldman Sachs projected 2027. The post-crisis projection is 2020. That's just a decade away".

That is what Martin Jacques¹ said in 2011, during a TEDtalks session registered in London, in which he was explaining the theories behind his book *When China rules the World: The End of the Western World and the Birth of a New Global Order*.

According to Jacques, China is going to change the world: it is, indeed, considered one of the leading country in terms of economic growth and urban development.

It is a huge developing country with a population of 1,3 billion people, which has been growing for over 30 years at around 10 percent a year, and within a couple of years, it will have the largest economy in the world.

But, above all, as the hegemonic country in the world, China, will be not from the West but from a different civilization roots. (Jacques, M., 2001)

Fernand Braudel² in his "Grammaire des civilisations" expressed himself along this line as early as 1987, speaking about Chinese development; he wrote of an extraordinary inner force by Chinese people that he described like something more than nationalism: a nationalism related to Chinese civilization, an ancient reality but at the same time strongly alive. (Braudel, 1987).

Ancestral worship, very distinctive notion of the family, social relationships like *guanxi* (the network of personal connections), Confucian values and so on. These are all things that come from the period of the civilization-state. In other words, China, unlike the Western states and most countries in the world, is shaped by its sense of civilization.

¹ Martin Jacques is a British columnist for *The Guardian*, senior Fellow at the Department of Politics and International Studies, Cambridge University, and a visiting Professor at Tsinghua University, Beijing

² Fernand Braudel (24 August 1902 – 27 November 1985) was a French historian and a leader of the Annales School

Martin Jacques's thought of China as a civilization relates to the idea of Chinese unity as historic and political value: from the historic point of view, he gives the example of Europe which collapsed leading to the fragmentation of the Holy Roman Empire and he compared it to China, that, over the same time period, went in exactly the opposite direction, holding a huge civilization together.

From the political point of view, Jacques underlines the relationship between the state and society; Chinese state has more authority amongst the Chinese in comparison with any Western state.

The reasons are the followings: firstly, the state in China is perceived as the representative, the embodiment and the guardian of Chinese civilization. It has a kind of spiritual role.

Secondly, whereas in Europe and North America, the state's power is continuously challenged, for 1000 years the power of the Chinese state has not had serious rivals. The Chinese view the state as the patriarch of the family and it is embedded in the society. The state is everywhere in China, it has leading firms, like Lenovo,

that depend in many ways on state patronage, for example economic targets are set by the state. State authority flows into lots of other areas which we are familiar with, i.e. the one-child policy or people relocation.

As the Chinese Communist Party concluded its 19th National Congress, President Xi Jinping introduced the People's Republic of China in a new era.

During previous two eras, China was characterized by Mao Zedong's totalitarianism and then by Deng Xiaoping's "reform and opening." In this new era, the Chinese Communist Party is confident of its "Socialism with Chinese Characteristics" developmental model.

Xi has closed the book on Deng's strategy of "hide your capacities, bide your time." Instead, he now feels China should open itself to the world.

During 19th National Chinese Communist Party Congress, Xi Jinping demonstrated incredible confidence when he outlined his vision for China: according to him, Chinese state will have the strength to become *"a modern, advanced and beautiful country. In other words, the world's leading power, second to none."*

(October 26, 2017, Steve Tsang, Washington Post)



Aly Song/Reuters, A gigantic poster with a portrait of Xi is displayed along a street in Shanghai. Oct. 24.

“Xi’s Chinese Dream continues the CCP’s tradition of providing the people a rosy and attractive future dream”, **this is what Zheng Wang⁴ wrote in an article named “The Chinese Dream From Mao to Xi” (2013).**

He underlines the continuity proposed by Chinese leaders over the years and their substantial research of harmony in the country: Mao’s greatest desire was the realization of socialism and communism and the creation of an ideal society without oppression and inequality, Deng Xiaoping spoke about “invigoration of China”, in 1989, Jiang Zemin proposed “great rejuvenation of the Chinese nation” and, taking Confucian-based-concept, Hu Jintao promoted the creation of an “harmonious society”. But “despite the propaganda campaign of a harmonious society, Hu’s era witnessed a striking rise of tensions of all levels, including ethnic tensions between Han Chinese and minorities in Tibet and Xinjiang, and worsening relations with Asian neighbors over territorial disputes. This reality turned the harmonious society narrative into a joke. Xi’s Chinese Dream narrative is therefore like old wine in a new bottle with the dream’s name supplanting Mao’s realization of socialism and communism, Deng’s invigoration of China, Jiang’s national rejuvenation and Hu’s harmonious society. With the rising complaints and unrest from the grassroots level about social inequality, Xi Jinping and the Party have also made special efforts to connect the Chinese Dream with the Chinese public.” (Wang, 2013)

On the contrary, Xué Xinran⁵ contested strongly Chinese development in the article “Why China won’t conquer the world” issued 02 Oct 2011 by The Telegraph. Speaking about the contradiction of her native country, at the time of the article (7 years ago), she compared Chinese state with a “roaring lion” in unstoppable rise: she said that Western market was full of Chinese business men, 10 % Chinese GDP growth was slowing, due to the global economic crisis, but still standing on 6-7 %, and that, Yuan, Chinese currency, would probably overtake US dollars as the principal currency within a decade.

She even added that where she lived, in Soho, London, some schools were offering Mandarin “lessons to children as young as three and The Daily Telegraph was reporting “a rush on Mandarin-speaking nannies by high-achieving parents looking to invest in their children’s future”.

But she was not still convinced that China could rule the world and she explained why; she spoke about a business-maker nation of exhausted workers with profound disparities between people who live in it: from taxi drivers that work 15 hours a day and struggle to maintain their childrens in public schools to the generation of “super-rich” one-child-policy children that wear designers brands and fly first class to Hong Kong just for a one day shopping (October 2011, Xué Xinran, The Telegraph).



ChinaFotoPress via Getty Images, Chinese new rich

⁴ Dr. Zheng Wang is the Director of the Center for Peace and Conflict Studies (CPCS) and a Professor at the School of Diplomacy and International Relations at Seton Hall University. Dr. Wang is currently a Fellow at New America’s International Security Program, a Global Fellow at the Kissinger Institute on China and the United States of the Woodrow Wilson International Center for Scholars, and a member of the National Committee on United States-China Relations (NCUSCR). He is also a nonresidential Senior Fellow at The China Center for the South China Sea Studies in Nanjing University, China.

⁵ Xué Xinran, British-Chinese journalist, author, speaker, and advocate for women’s issues who became popular as radio personality in China with a call-in program named “Words on the Night Breeze” from 1989 to 1997.

³ Xuefei Ren is an associate Professor of Sociology and Global Urban Studies, Michigan State University

Xueifei Ren³, author of the book “Urban China”(2013) addresses to the same topic with the concept of “Inequality”.

According to her book, the current capitalistic economic system created an urban system that has produced new forms of inequality, both social and spatial. Chinese cities are the results of a fast process of economic restructuring, changing welfare regime and large-scale urban renewal.

China and chinese cities are places of sharp contrast: the economic growth has lifted hundreds of million chinese out of poverty, raising the country to “the league of middle-income countries” but an urban underclass of the unemployed, the working poor, and migrants has emerged. “Urban restructuring has further exacerbated social stratification. As a small number of developers, investors, and professionals in the real-estate sector have become extremely wealthy [...], a

large number of residents have lost their homes and been relocated to the urban periphery”.

Chinese urban society is becoming more unequal and the gap between the rich and the poor continues to widen leading to a society of urban consumption where consumer citizenship ultimately rests upon the ability to pay and the sense of communities built for people is disappearing. (Ren,Xueifei, 2013).



<http://en.szwbtz.com.cn/archives/110.html>; the gap within rich and poor people in China is enlarging

Ces barbares, écartant le bois, et la brique et la terre, bâtissent dans le roc afin de bâtir éternel !

Ils vénèrent des tombeaux dont la gloire est d'exister encore ; des ponts renommés d'être vieux et des temples de pierre trop dure dont pas une assise ne joue.

Ils vantent que leur ciment durcit avec les soleils ; les lunes meurent en polissant leurs dalles ; rien ne disjoint la durée dont ils s'affublent ces ignorants, ces barbares !

Vous ! fils de Han, dont la sagesse atteint dix mille années et dix mille dix milliers d'années, gardez-vous de cette méprise.

Rien d'immobile n'échappe aux dents affamées des âges. La durée n'est point le sort du solide. L'immuable n'habite pas vos murs, mais en vous, hommes lents, hommes continuels.

Si le temps ne s'attaque à l'oeuvre, c'est l'ouvrier qu'il mord. Qu'on le rassasie : ces troncs pleins de sève, ces couleurs vivantes, ces ors que la pluie lave et que le soleil éteint.

Fondez sur le sable. Mouillez copieusement votre argile. Montez les bois pour le sacrifice ; bientôt le sable cédera, l'argile gonflera, le double toit criblera le sol de ses écailles :

Toute l'offrande est agréée !

Or, si vous devez subir la pierre insolente et le bronze orgueilleux, que la pierre et que le bronze subissent les contours du bois périssable et simulent son effort caduc :

Point de révolte : honorons les âges dans leurs chutes successives et le temps dans sa voracité
Victor Segalen, Aux dix mille années (1912).

004

China urbanizes

between preservation and consumerism

According to the studies “Mapping China’s middle class” (2016) by consulting firm McKinsey & Company and “How China’s middle class will save the world (of consumerism)” (2016) by Stansberry Churchouse Research, 76 percent of China’s urban population will be considered middle class by 2022.

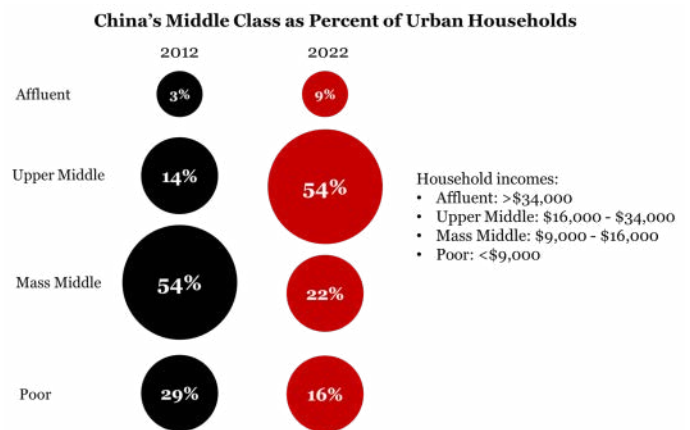
This is even more surprising because, in 2000, just 4 percent of the urban population was considered within this class.

McKinsey enquiry explains that “in 2012, 54 percent of China’s urban households were considered “mass middle” class, meaning they earned between US\$9,000 and US\$16,000 per year but by 2022 [...] 54 percent will be classified as “upper middle” class – meaning they earn between US\$16,000 and US\$34,000 a year”.

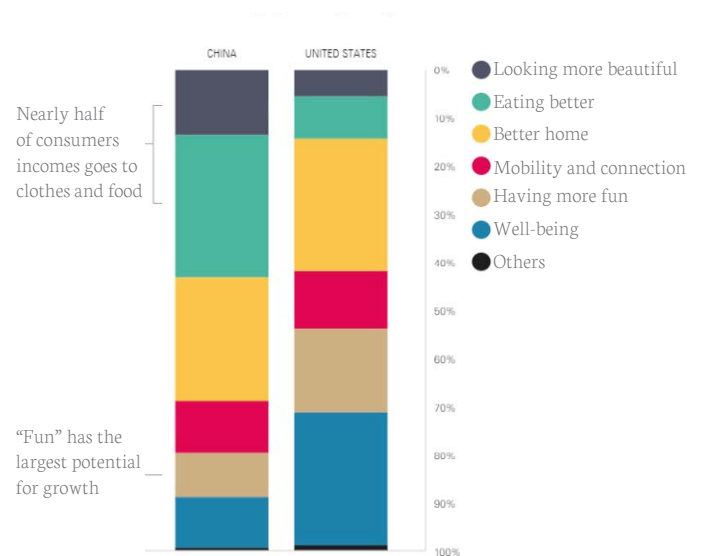
China had an urban population of 730 million people in 2015. So even if that figure doesn’t change (and it will only grow), by 2022 over 550 million people in China will be considered middle class.

That would make China’s middle class alone big enough to be the third-most populous country in the world.”

Another enquiry by Goldman Sachs (2013) explains exhaustively how this class of consumers thinks and desires: they want to be good looking, eat, live and move better, having more fun, being healthier and affording some luxuries. Half of their incomes is spent in the care of themselves and in the food but the entertainment is the one that could be developed the most. (2013, Goldman Sachs Global Investment Research)



McKinsey & Company; middle class statistics



Source: Euromonitor, CEIC, Goldman Sachs Global Investment Research; middle class desires

Seven Consumer Desires

Chinese consumer spending can be broken down into seven categories

The seven consumers desires



Source: 2013 figures from China NBS, CNPolitics, Goldman Sachs Global Investment Research, US Bureau of Labor Statistics, US Department of Defense, realaboration by the author

In terms of urban development, the skyrocketing growth of Chinese middle class is becoming a problem to solve for the Chinese government.

The demand for rapid modernization and developing facilities by the affluent class is changing China, in particular, its historic patrimony.

The question of what should be protected and how is arising in China; professor Ng Mee Kam² expressed her concerns about Chinese situation in the article *“Tales from Two Chinese Cities: The Dragon’s Awakening to Conservation in Face of Growth?”* by the Planning Theory and Practice review released in 2009; she asked if the rapid modernization could be integrated with the preservation of cultural heritage and if the new China of skyscrapers and ultra-modern bridges and subways could coexist with China’s traditional culture or this will lead to *“just a nostalgic twist of an increasingly consumptive orientated society, turning history into a commodity to suit the taste of the affluent classes”* (Ng, 2009, 269)

Would this be a natural and authentic continuation of history or, as professor Lisa Bixenstine Safford³ writes in 2013 in the article *“Cultural Heritage Preservation in Modern China: Problems, Perspectives, and Potentials”* (Journal for Asian Studies and Liberal Art “AsiaNetworkExchange”) will Chinese cities be gentrified and be a part of a *“disneyfication process of artifacts”* (Bixenstine Safford, L. 2013, p.2)

In addition, Bixenstine Safford argues that in China the question of cultural heritage has significantly less importance than in western countries, where the general trend is to preserve as much as possible: *“the U.S., which seems to preserve and memorialize nearly everything, is but 300 years old, while China has 5,000 years of history to contend with”* (Bixenstine Safford, L. 2013, p.2).

Professor Giulio Verдини⁴ added more examples to this discourse: in a 2017 article of “Built Heritage” review, he spoke about the *“transformation of Chinese cities, with large-scale demolition of inner-city historic areas and relocation of local*

people” with the consequent transformation of them *“into theme parks in the service of a global consumerist elite”*

(Verдини, G., 2017, Built Heritage, Vol.3, pag 73, 76).

Chinese cities and, in particular, the existing built environment and its communities are deeply involved in the urbanisation process, with the result that local cultures are being drastically adapted, transformed and sometimes forcibly moved elsewhere in order to create basically open air shopping malls; this is leading to the worrying phenomenon of mass tourism monofunctionalism of historic Chinese city center. (Verдини, G. Huang, F, 2017)

In addition, as Martínez⁵ illustrates, for the renovated spaces to be occupied by new rich residents (able to afford the rising cost of the areas), it is often necessary the forceful displacing of the original inhabitants:

“Heritage authenticity is thus located not only in aesthetic or environmental aspects, but also includes the exercise and defense of the rights of the community, be they social, cultural or economic” (González Martínez 2016).

Cultural heritage’s debate in China has led to the creation of documents like the “Principles for the Conservation of Heritage Sites in China” (2015), which has been created with the final aim of acting as a reference for urban conservation in China and rule the transformation of historic districts into possible new projects but the principles haven’t been observed yet.

Gentrification is, indeed, becoming more and more a problem in Chinese communities which are being expropriated of their spaces in order to profit of heritage values for economic profit. (Martinez, 2016)

Preservation of cultural heritages has grown in importance in China: in the *“13th five-years plan for economic and social development of the people’s republic of China”* sorted out by Chinese party in 2016, preservation of tangible and intangible heritage is explicitly cited as one of the strategies to develop the country.

² Department vice-chairman director, urban studies programme associate director, institute of future cities associate director, Hong Kong institute of Asian Pacific studies

³ history and art professor, Art Department chair and Director of the new Center for Global Interaction at Hiram College. While her expertise is in Western art, Renaissance and Modern, she has received numerous grants from NEH, Fulbright-Hays, AACU, and ASIANetwork to travel and learn in Japan, China, Korea, Vietnam, and India, forming the foundation for four courses, including study abroad, on Asian art and culture.

⁴ Senior Lecturer in Planning at the University of Westminster, Course Leader of the BA Designing Cities and International Coordinator of the Department of Urban Planning and Transport. He has spent six years in China as Lecturer and then Associate Professor in Urban Planning and Design at Xi’an Jiaotong-Liverpool University (XJTLU)

⁵ Associate Professor at Tongji University/ Executive Editor of Built Heritage journal

However, it is necessary to point out that the debate about heritage has a long tradition in China.

In an article published for the first time in the “*Bulletin of the Society for research in Chinese Architecture*” in 1944, Liang Sicheng⁶ wrote that: “Historical landmarks that have stood majestically for hundreds of years, city blocks full of special artistic local colour have been sacrificed in the name of improvement.”

The preservation of China's architectural heritage today can help revive Chinese architecture in the future, a more important task [...]How to express characteristically Chinese style and meaning while simultaneously using materials and methods of a new science, that is truly a problem.

Until now, the cityscape of China was usually altered by ignorant craftsmen, who have typically abandoned indigenous styles and structures, regardless of their historical and artistic value, to create a ridiculous architecture that is neither Chinese nor Western. So what are the possible ways to express the Chinese spirit on architecture?

To extract the essential Chinese character of old architecture, we need to improve our understanding of its structural system and composition. Many compositions, whether as large as a city or town or as small as a house or garden, are responses to Chinese life or thought. We have our traditional customs and taste: our family organization, our living standard, work, and recreation, as well as cooking, sewing, interior décor of calligraphy and painting, outdoor gardens and plantings, [...] We need to create an architecture that is appropriate for us.”

(Sicheng L, “Why Study Chinese Architecture? in *Journal of the Society of Architectural Historians*, vol. 73, No. 1, 2014, pag. 11)

This is, in my opinion, the real point Chinese or European architects working in China have to deal with: imagining a new Chinese architecture which does not deny its past traditions in the rush of modernization.



Photo by Rossel Villareal, Camila, life community

⁶ Liang Sicheng (20 April 1901 -9 January 1972)

was a Chinese architect and scholar active from 1930s to 1950s. He is often considered as the father of modern Chinese architecture; he spent his whole life studying how to preserve the characteristics of Chinese patrimony and culture.



Suzhou
city



Photo by Holland,Benjamin: view of old town Suzhou

001

Introduction to Suzhou city

“Arriving at each new city, the traveler finds again a past of his that he did not know he had: the foreignness of what you no longer are or no longer possess lies in wait for you in foreign, unpossessed places”.

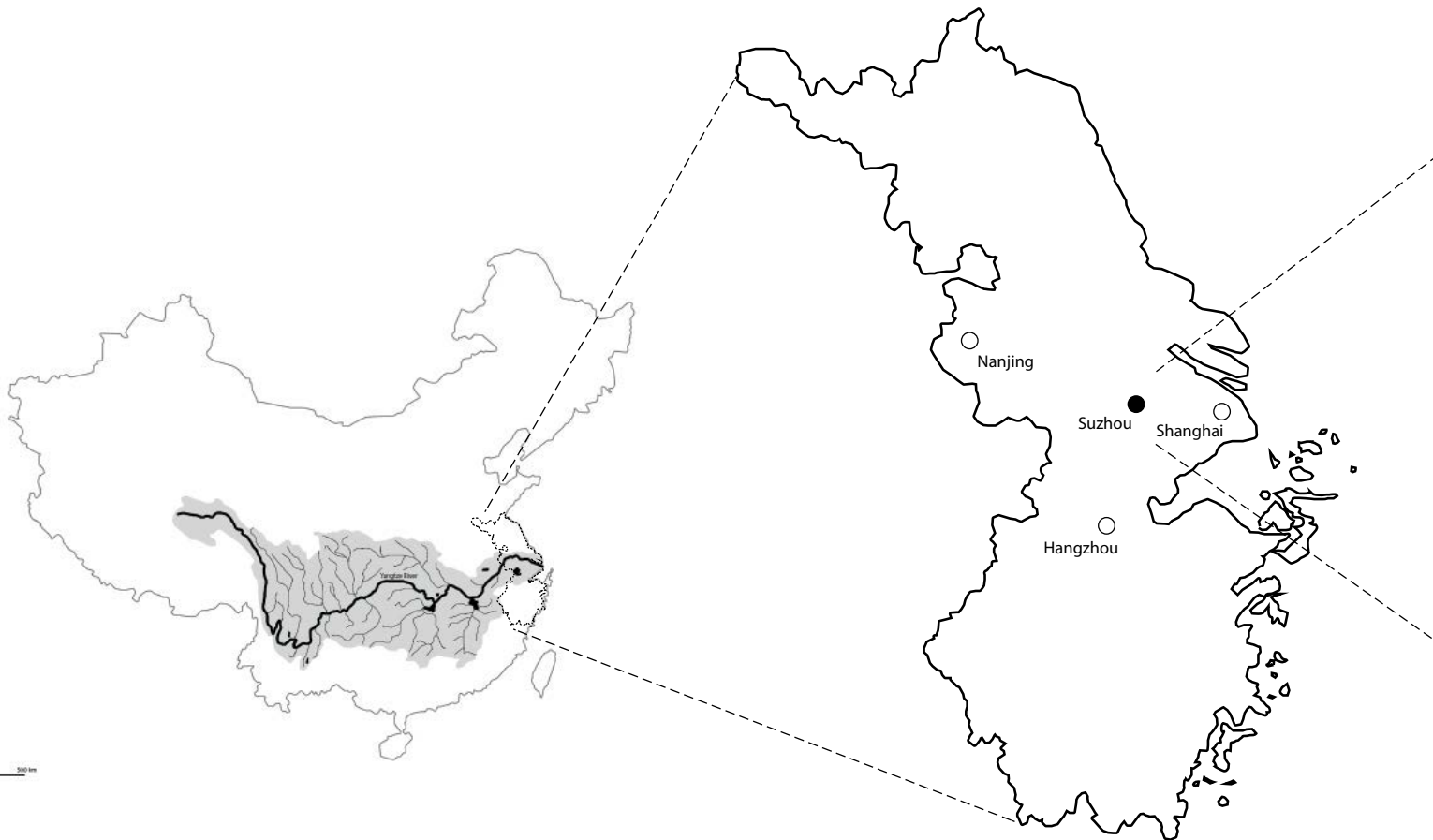
Italo Calvino, *Invisible Cities*

Yangtze River Delta

The Yangtze River Delta or YRD is a triangular-shaped metropolitan region that includes the Wu language area, Shanghai, the southern Jiangsu province, and the northern Zhejiang province of China.

The area is located in the heart of the Jiangnan region (literally, “south of the river”), where the Yangtze River pours into the East China Sea.

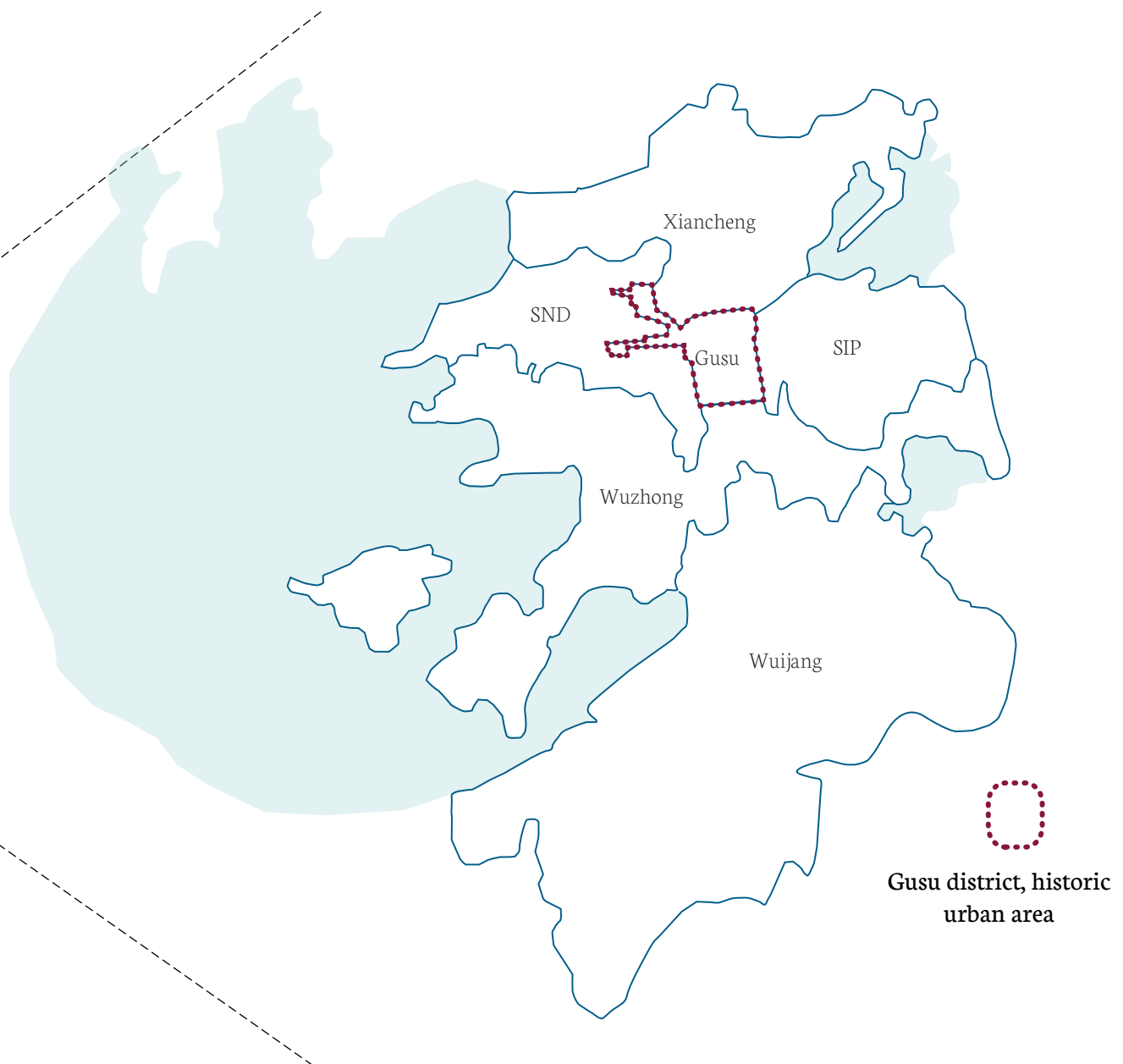
The urban agglomeration in the area has given rise to what may be the largest concentration of adjacent metropolitan areas in the world. It covers an area of 99,600 square kilometers (38,500 square meters) and is home to over 115 million people since 2013, of which it is estimated, 83 million live in cities. in the Yangtze River Delta regions abundant wheat, cotton, hemp and tea are produced.



Scheme by the author, Suzhou, Jiangsu province, central eastern China

Suzhou City

The administrative subdivision of Suzhou it was therefore adapted to reflect the changes urban conditions and today consists of five urban districts (urban district) and four contee (county). The urban districts are Gusu, Suzhou Industrial Park (SIP), Suzhou New District (SND), Xiangcheng, Wuzhong, Wujiang. The six districts form a polycentric urban structure and now strongly integrated where reside more than 4.5 million inhabitants while the whole prefecture (Prefecture-level city) counts more than 10.



ASCENT, DECLINE, ASCENT

Suzhou long lasting history started in 525 B.C.E during the Wu dynasty.

Named the capital of the state of Wu, Suzhou was built under the direction of Wu Zixu (伍子胥, 526 - 484 BCE), nominated chief minister by King Helü.

Stewart Johnston, in the article: "The Ancient City of Suzhou: Town Planning in the Sung Dynasty" (1983)

wrote: "Suzhou is one of the oldest Chinese cities, founded in 525BC when Wu Tsu-hsu(Wu Zixu), a high official of the Chou (Wu) dynasty, was commanded to build a capital city which resembled heaven and earth. Like heaven, the city was to have eight water gates and like earth, eight footgates. [...] When completed the Chou(Wu) city consisted of three enclosures, an outer city, 47Li(25.7km) in circumference;a sacred city and a smaller enclosure of 9 Li (4.83km) in circumference".

The gates were used for both road and water traffic; they are located asymmetrically along the walls of the old town because of the topography of the city: for example, Changmen gate is situated in north-west part of the old town.

The city did not really develop until the establishment of Sui dynasty (581 to 618AD), and the extension of the Grand Canal (an authentic water highway which con

nects Beijing and Hangzhou crossing almost all the country from north to south) below the Yangtze to facilitate the transportation of goods from the south east China coast to Luoyang, the Sui capital. (Johnston, 1983)

The complex and dense canal system developed during the Song period (1127-1276), integrated itself harmoniously with the urban plot of the city. For this reason the historical urban core is still called 'double chessboard', in which one can see the parallel system of arteries roads and waterways that make up the plot adjust to center grid. In the last two centuries canals, due to building construction and development pressure, were filled up, diverted and occupied. The total length of canals has passed from the 82 km during Song dynasty (960-1276), to the 57 km during Qing dynasty (1644-1911) and lastly, following city development, 35 km in modern times.

However, looking at maps of old town Suzhou, one can see how the canals influenced the shape of the ancient city: they created, indeed, rectangular-shaped areas in which dwellings were distributed following water orientation.(Johnston, 1983)



Canals during Song dynasty



Canals during Qing dynasty



Canals in modern times

Yiwen Wang Dept. of Urban Planning and Design;Xi'an Jiaotong-Liverpool University



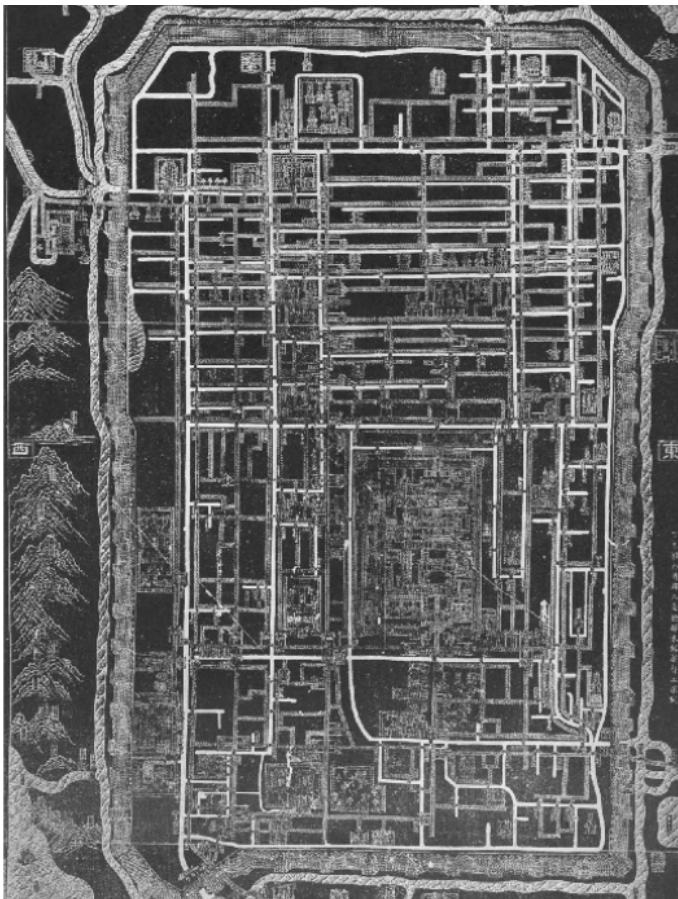
Photo by the author, Yipu garden: rocks, water, vegetation and architecture harmoniously mixed together

During the Song dynasty, the city prospered but also a dramatic event happened: in 1129, Suzhou was occupied by the army of the Northern Song and the city was almost razed to the ground. The city with its walls was repaired gradually and the repair works were completed in 1229. The map of Pingjiang, conserved in Suzhou, was drawn at the completion of the city reconstruction. During the Ming (1368-1644) and Qing period (1644-1911), it remained the central metropolis dominating that region: a larger numbers of persons in the growing population could engage in secondary production and in distribution. The production of luxury goods and the rapid growth of textile industries were typical of the Suzhou area.

By the sixteenth century, Suzhou had emerged as the economic and cultural center of China's richest, most urbanized and most advanced region.

In the eighteenth century, rich local imperial merchants and officials started building private gardens: these gardens with their mixture of natural element (vegetation, rocks and water) and man-related features (buildings) are recognized as a masterpiece in their kind and for this inserted in the list of the world heritage of humanity UNESCO (Henderson, R., 2012).

This condition remained unaltered the 1860s when the Taiping Rebellion and Japanese invasion brought Suzhou prominence to a disastrous end and its leading role was overtaken by Shanghai. (Xu, Y., 2000)



Pingjiang stele: Map of Song dynasty Suzhou, 1229, engraved by Lu Ting and Zhang Yucheng.



US. air force aerial reconnaissance photo of Suzhou, 1945. Source: Photograph RG 373, Can On 23143, Exp TV-104, Apr 28, 1945, Department of Defense of the Navy, Photograph Record Group 373, National archives at College Park, College Park, MD

In contrast to the Western cities, the walls of the city though dominant in the urban landscape, never represented a true gap between city and countryside: in the urban and territorial structure the openness of roads to trade and dissemination of suburban business centers recreate a different hierarchy.

This explains the substantial difference between the forms of Western and Oriental urban civilization. (Verdini-Huang, 2017)

Unlike the Chinese imperial cities, the Suzhou architectural character is not monumental, but it derives from the wealth of the private homes which often recalls the rural vernacular forms (Xu, 2000).

The strong similarities between districts in the historical center and the rural villages which, together with rice fields and fish ponds, constitute a characterizing feature of the city and, generally speaking, the rural landscape peculiar to the south part of the Yangtze river delta region.

As said before, the decline of river transport and development railway at the end of the nineteenth century, with the consequent exclusion of Suzhou from route of commercial traffic has weighted on the decay of the city too and the contextual rise of Shanghai as a port for exchanges with the West, moved permanently the axis of financial interests and commercial towards the coast (He, 2007).

The economic reforms initiated by Deng Xiaoping in 1978, China started towards a gradual opening to the system Western capitalist, as seen in the first chapters. The city of Suzhou, has been hit by a tumultuous economic development and its urban area has passed from about 28 km² in 1980 to 329 km² in 2010, an increase of 11.5 times. (Wang, Shen and Chung, 2015)

The development of several new industrial and urban zones around the old centre, thus preserving the historic city from extensive restructuring (under pressure from very active local architects), can be considered a rare – if not unique – event in China. Some of these development zones are among the most important in China: Suzhou Industrial Park (SIP), Suzhou New District (SND), Kunshan ETDZ, Wujiang Economic Devel-

opment Area, Zhangjiagang Tariff-Free District.

Now, after three decades of relentless development, Suzhou can be considered one of the richest city in China. The city of Suzhou candidates itself as a touristic and cultural pole and investing in creative culture (nomination in 2014 as Unesco “arts and crafts city”) could be the winning strategy, even if some collateral effects need to be considered: the ancient city center of Suzhou is jeopardized by the dangerous phenomena of mass tourism and mono-functionalism which are making it very similar to its western counterpart, Venezia (Suzhou is considered since Marco Polo’s times as “the Venezia of the east”), following the idea of the city strongly separated in two distinctive parts: the center for tourism and free time and the industrial parks for innovations and modernity. (Verdini-Huang, 2017)

The peculiarity of Suzhou city history does not lie just in its very early beginning and economic and cultural development but it can be found in the concept of the city as physical entity that had existed continuously for nearly two and a half millennia.

In particular, the form of the city has remained basically unchanged from its creation to modern history.

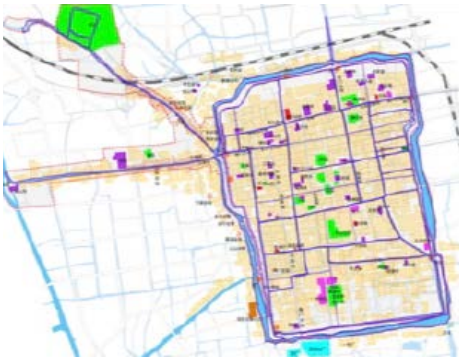
In his book “the Chinese city in Space and Time”, Xu Yinong⁷ writes that: “As a famous capital and prestigious city, [it] assembles the cultural relics. At its beginning, [Wu] Zixu, following the forms manifested in Heaven and the processes taking place on Earth, constructed the city walls and dug the city moats for [the capital of] Wu. [Whereas it] was meant to strengthen [the state] at that time, [the form of the city] then became the fixed institution [in its urban transformation] from antiquity to the present time.” (XU, Y., 2000, pag.56).

The area inside the walls, what is now known as Gusu district, has kept indeed the same form that the city had at the time of its creation: a walled town of 14 km² with the latitudinal length slightly over 4,5 km and the longitudinal of 3,5 km. (Jhonston,1983)

The physical and symbolic entity of the walls and their relationship with the development of the northwest area of the city center, Changmen district, has particularly influenced the design project.

⁸ PhD (Edinburgh); MArch (Tsinghua); BArch (Tsinghua)

Professor Yinong Xu was educated at Tsinghua University, China, and the University of Edinburgh, the United Kingdom. He had taught Chinese architecture and urbanism at Brown University for two years before his employment at the University of New South Wales, where he has concentrated on teaching architectural history and theory, architectural design and architectural communications



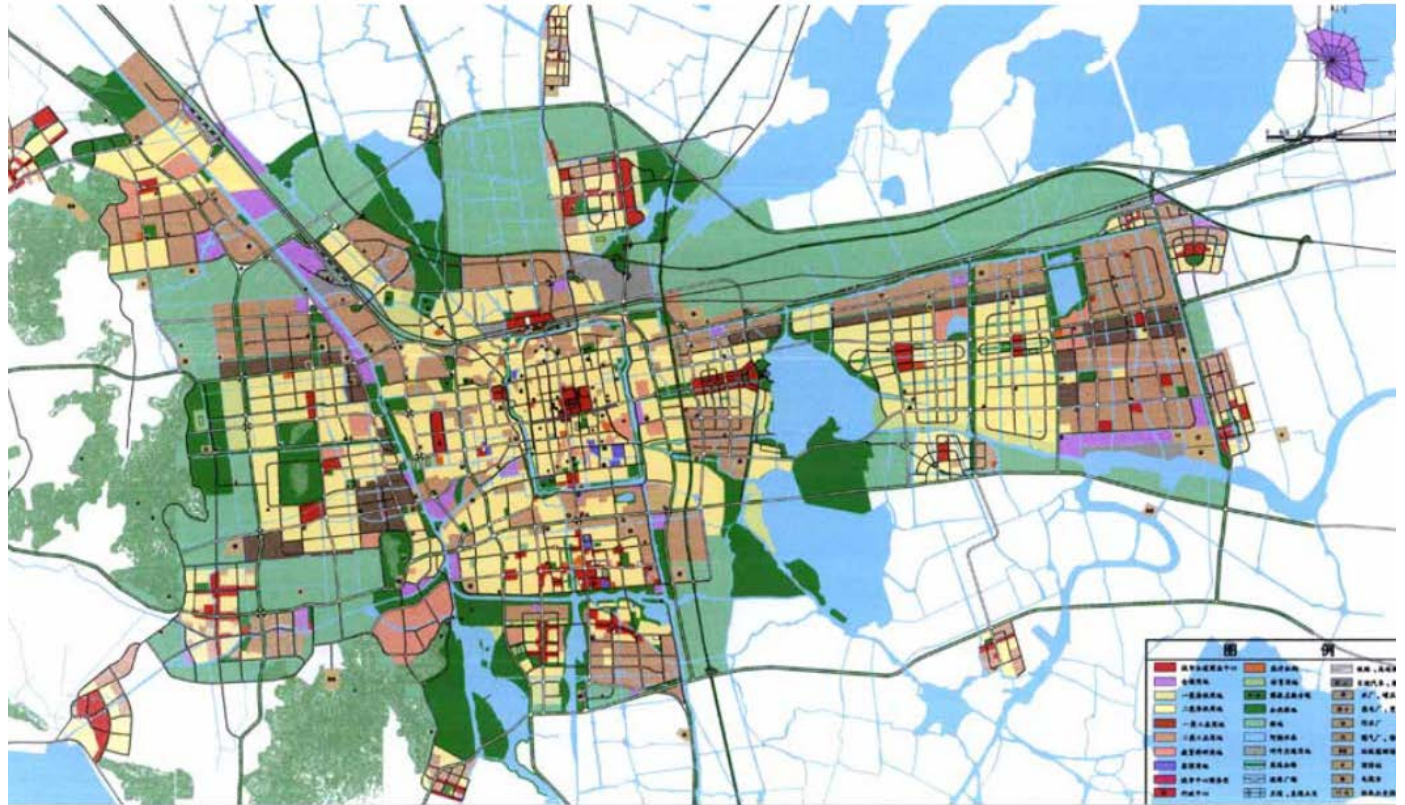
Suzhou in the 20 mid century



Suzhou after 1949



Suzhou in 1986



Suzhou masterplan 1996-2010

Urbanization in Suzhou; Yiwen Wang Dept. of Urban Planning and Design; Xi'an Jiaotong-Liverpool University



http://english.suzhou.gov.cn/fw/tzfw/ldk-fq/szgxq/201611/t20161114_816726.shtml
SND; Suzhou new district



Photo by the author; old town Suzhou, Suzhou museum by I.M.Pei



Yiwen Wang Dept. of Urban Planning and Design; Xi'an Jiaotong-Liverpool University
SIP; Suzhou industrial Park

002

Changmen district

阊door community

“On the northwest stood Changmen Gate, the Gate of Heaven, so named to permit the celestial winds to enter the city.”

Koss, Stephen. Beautiful Su: A Social and Cultural History of Suzhou, China



“At the north-western side, Changmen District is a historical community of a mix of commercial and residential character where more shop-houses are maintained. The hierarchy of space in these districts from public, semi-private, to private holds a coherent atmosphere within the local community. Their neighborhoods reveal the humanistic and lively sense that is generally lacking in other urban settlements”, this is what Hong kong university professor Chang Ping Hung wrote about Changmen district in 1995 in his thesis “A strategy of memory: Suzhou, China”.

In 2000, Xu Yinong added other information in his book “The chinese City in Space and Time”; he argues that Changmen was the real business district of the city:
“Packed with traders, the street is flanked by splendid two-story shops catering to a much wider range of business. Firebreak walls were regularly used for separating shops or residential buildings from each other, this area being densely occupied with timber structures.” and, seven years before, in 1993, Michael Marmé in his book “Heaven on Earth: The Rise of Suzhou, 1127-1550” spoke about the district of Changmen as the representation of Suzhou prosperity during Ming and Qing dynasties. Tang Yin (1470-1523), a famous poet and one of what were known as the “Four Painters of the Ming,” describes the area around Chang Gate in his poem “Changmen jishi”:
*Paradise in this world is Wuzhong [i.e., Suzhou],
Wherein most remarkable is [the area around] Chang Gate.
Thousands of emerald green sleeves are seen round and about the mansions, Millions of gold pieces are flowing along the canals running in east-west directions.
Have the merchants and businessmen ever taken a break throughout the whole night, Who come from the four quarters [of the world] with utterly different dialects?”* (Xu, Y., 2000).

Changmen district was so important for the city of Suzhou that the necessity of protecting it with other walls was once debated; worried about the attacks by Japanese pirates, Cao Zishou (magistrate of Suzhou county in 1559) wrote: “From Xu Gate and Chang Gate sprawling

westward are houses that become as closely lined up like the teeth of a comb as those within the city walls. Most residents in this area are sojourners. A few years ago when the pirates came, advisers [to the local government] suggested building another wall outside the city [in the west suburbs]; it would be a partial one so that [its two ends] would be attached to the great city walls. But in the end it was not carried out at all”.

Because of the high expense that such a project would have incurred, it was no longer necessary and the city maintained its form.

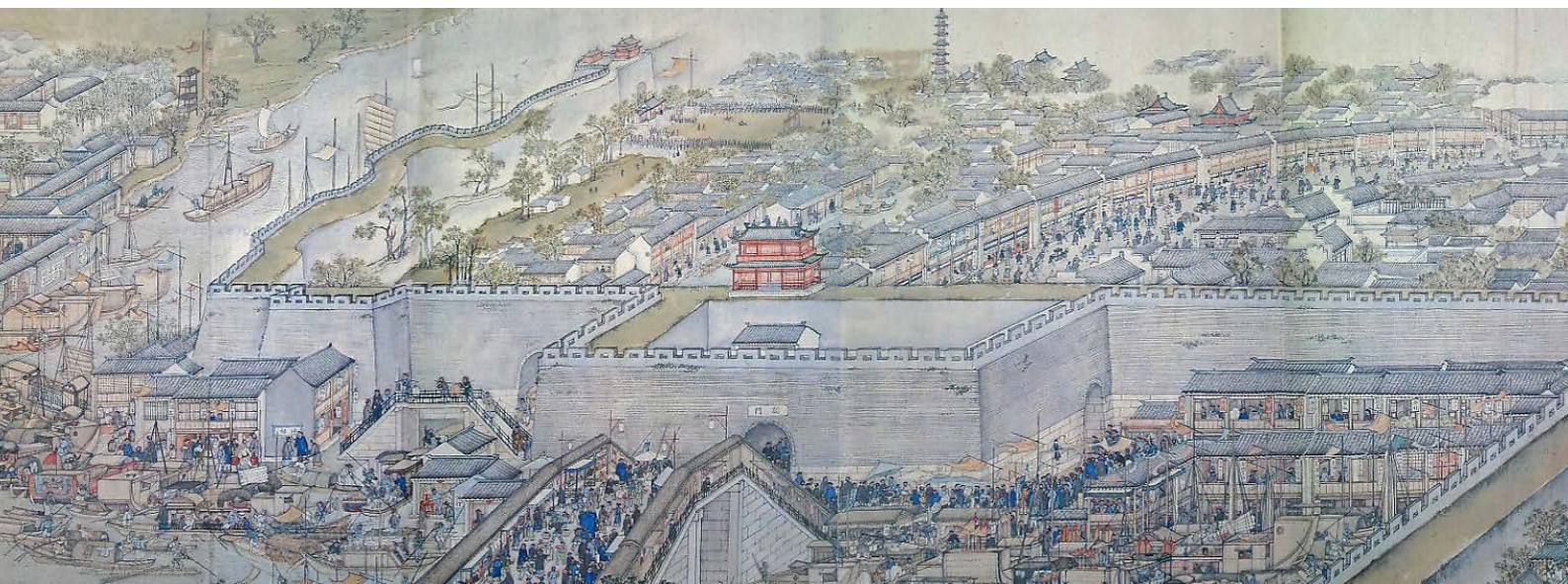
It is indeed important to note a really interesting notion in the development and protection of Changmen district; although the necessity to protect it for its strategic significance as business center, the idea to rebuild westwards the defensive walls never came into the mind of the officials. The profound respect they had for the physical form of the city, seen as a fixed and symbolic institution was so strong they could even think to change it.

The lack of a defensive wall did not stop the continuous economic centrality of the area outside Chang Gate during Qing period. (Xu, Y., 2000)

From 1860 to 1863, during the Taiping Rebellion (1850–64), Suzhou was occupied by the Taiping leader Li Xiucheng: the whole city of Suzhou suffered devastation and the district of Changmen was plundered and destroyed. After the Taiping uprising (1851–1865) the city was rebuilt but its commercial power was then challenged by developing Shanghai (<https://www.britannica.com/place/Suzhou>).

Changmen remained an important suburb for the city full of people and commerce. (Carroll, P., 2006)

The most characterising element of the north-west suburb, Changmen gate, destroyed during the Taiping uprising has been reconstructed in 2006. Another gate



Prosperous Suzhou by Xu Yang, 1759.

was built in 1931 under the name of Jinmen gate in order to improve road traffic.
http://www.suzhouprivatetour.com/attractions/show/jinmen_gate.htm
 Nowadays, the district is home for a community of 9843 people (the percentage of old people over 60 years old is 23%, 2278 people). The area is rich in cultural heritage, there are classical gardens like the World Cultural Heritage “Yi Pu garden” and the bustling commercial street Xizhongshi once named

Changmen street, full of life and lined with shops, restaurant, tea houses and residential buildings. The neighborhood community is a known for its spirit of civilized life and different activities are set up: open air dance team, ping-pong team, calligraphy, painting and a reading club. The community has been rated as “Excellent Home for Retired Workers” by Suzhou Municipal Administration. (Suzhou Public Security Bureau).



<https://www.flickr.com/photos/meckleychina/176985864>,
 Changmen gate reconstruction in 2006

http://www.suzhouprivatetour.com/attractions/show/jinmen_gate.htm



Drawing by the author, Xizhongshi, once named Changmen street



Design
tools



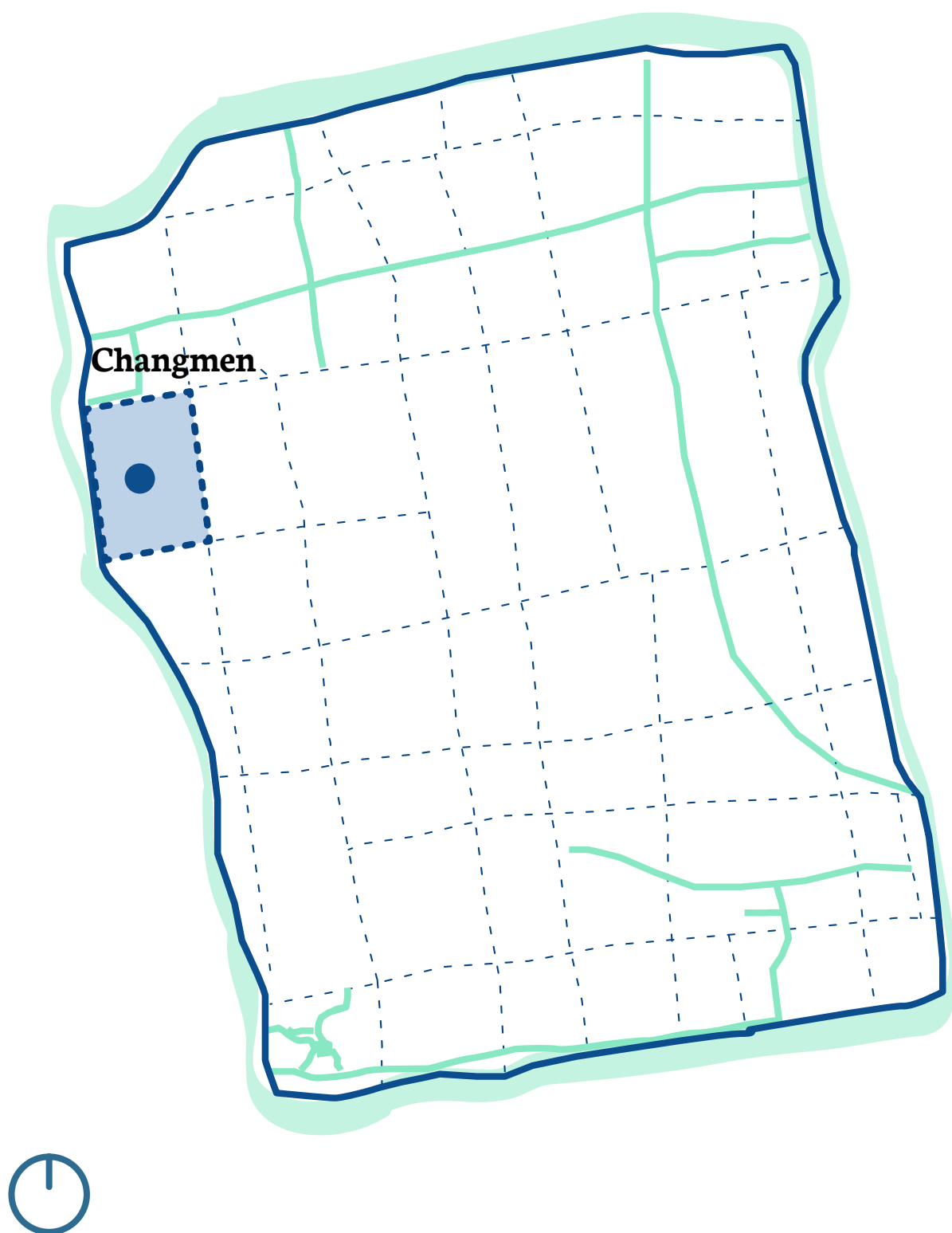
Photo by the author, view of Suzhou canals

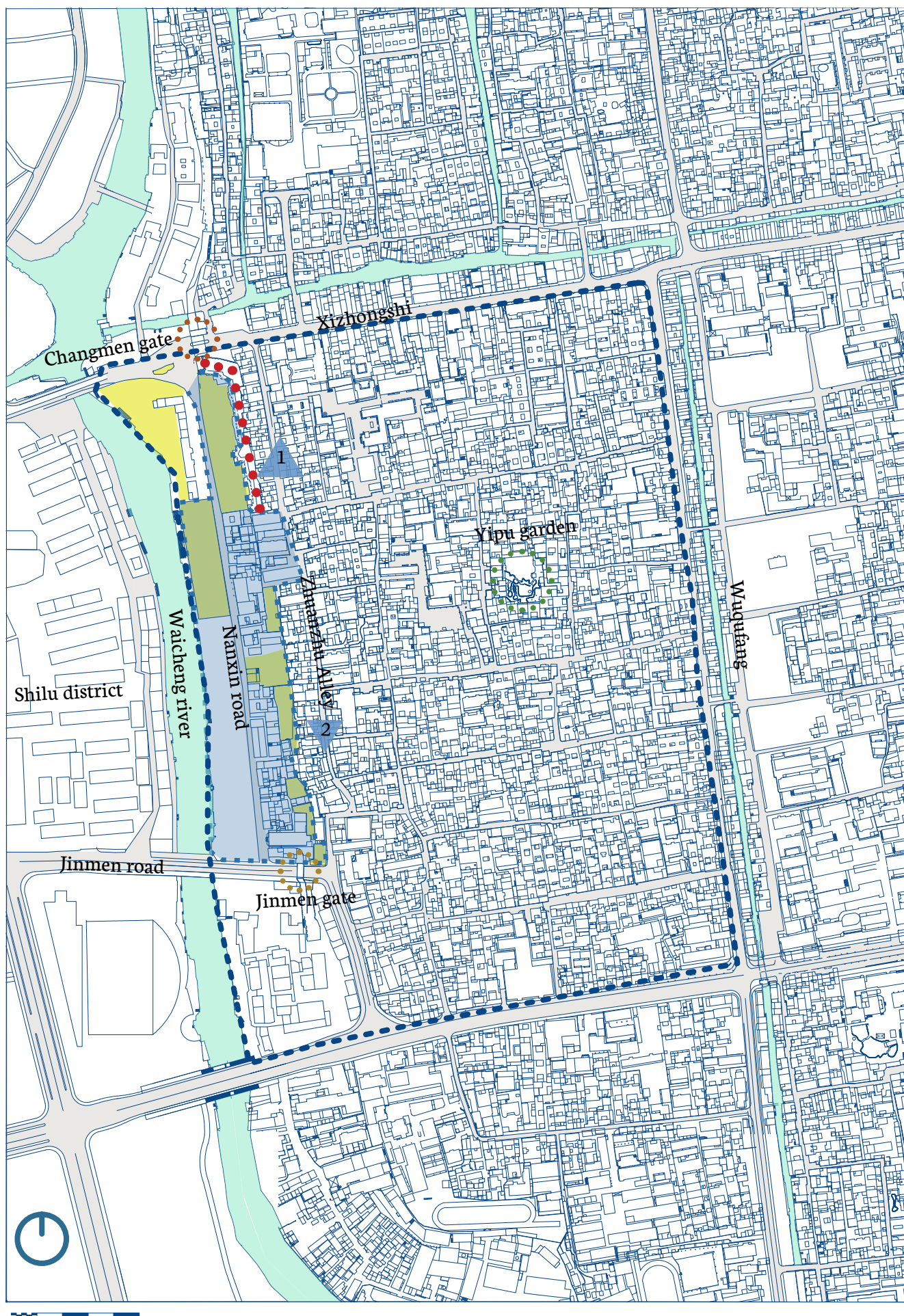
000

Project area

“On the northwest stood Changmen Gate, the Gate of Heaven, so named to permit the celestial winds to enter the city.”

Koss, Stephen. Beautiful Su: A Social and Cultural History of Suzhou, China





The project area is situated in the district of Changmen, on the north west side of old town Suzhou.

More specifically, it is set along Nanxin road, immediately south of 2006 rebuilt Changmen gate and the important commercial area of Xizongshi, packed between Waicheng river (on the west side) Zhuanzhu alley (on the east side). Jinmen gate and Jinmen road represent the south boundaries of the site project.

The total north-south length of the project site is 458 meters, 105 meters on the west-east axis.

The total area is 34800 m²: it is composed by the empty riverfront, now used as a parking lot, on the west side (12000 m²) and the area on the east side (22800 m²) of

The area between Nanxin road and Zhuanzhu alley, occupied by traditional and non traditional buildings

(from Qing dynasty, Republic of China period and modern times) is now a building site.

This area has been chosen by the Suzhou municipality as one of the "blank blocks" (PCC's 13th five-years plan) to be converted and regenerated for the development of the city. A project including new construction and restoration of traditional building and the ancient city walls will be implemented by Suzhou authorities.

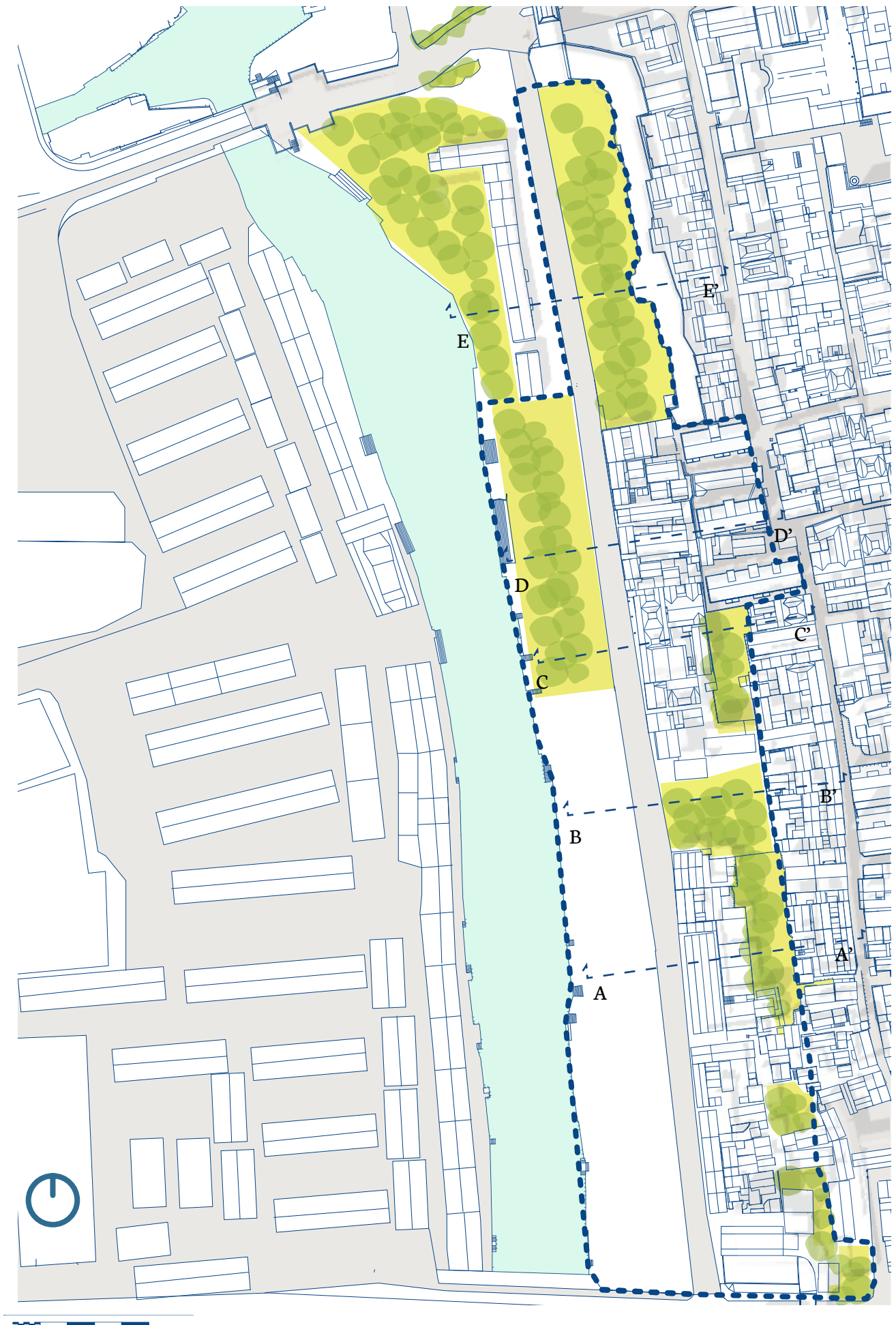
Suzhou urban planning bureau (SZPB) project will be explained in the next chapter.



Drawing by the author, non traditional buildings



Drawing by the author, view of Zhuanzhu alley, traditional buildings



Drawing by the author, project area, 1:2000



Drawing by the author, cross sections showing the different conditions and mixture of traditional and non traditional buildings found in the project area.

001

SZPB project for Changmen district

“On the northwest stood Changmen Gate, the Gate of Heaven, so named to permit the celestial winds to enter the city.”

Koss, Stephen. Beautiful Su: A Social and Cultural History of Suzhou, China

During the workshop, we were told that the Suzhou Urban planning bureau(SZPB) had already presented a masterplan in which a strategic plan of cultural promotion was illustrated:

this plan was about the protection of both tangible and intangible patrimony of Changmen district and it would be developed through different actions; the most important was reintroducing the strong commercial connotation of the district.

In 2015, Suzhou urban planning bureau presented a masterplan, in which it is shown that the project concept would follow the idea given by the scroll painting *Prosperous Suzhou* (painted by Xu Yang during his trip with emperor Qianlong, Ming dynasty in 1759): the handscroll depicts the bustling urban life of ancient Suzhou and the district of Changmen itself is represented in the twelve meters long painting.

In the painting, one can see the expansion of Changmen outside the walls, a true waterfront situated between the fortifications and the moat that encircled old town Suzhou.

Nanxin road building site was already open during the workshop and the project is going on.



Photo by Dumitrache, Larisa: view of Nanxin road

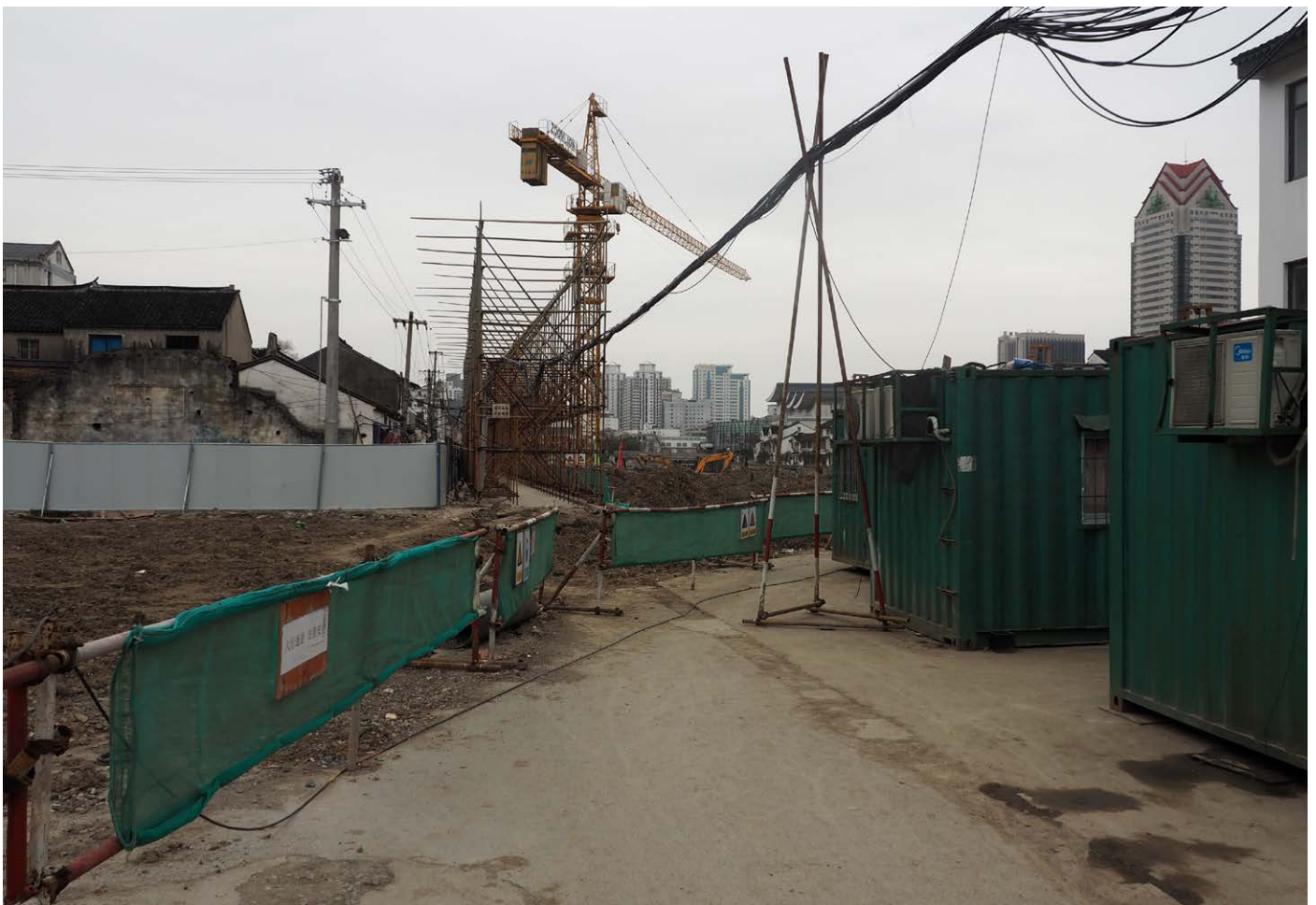
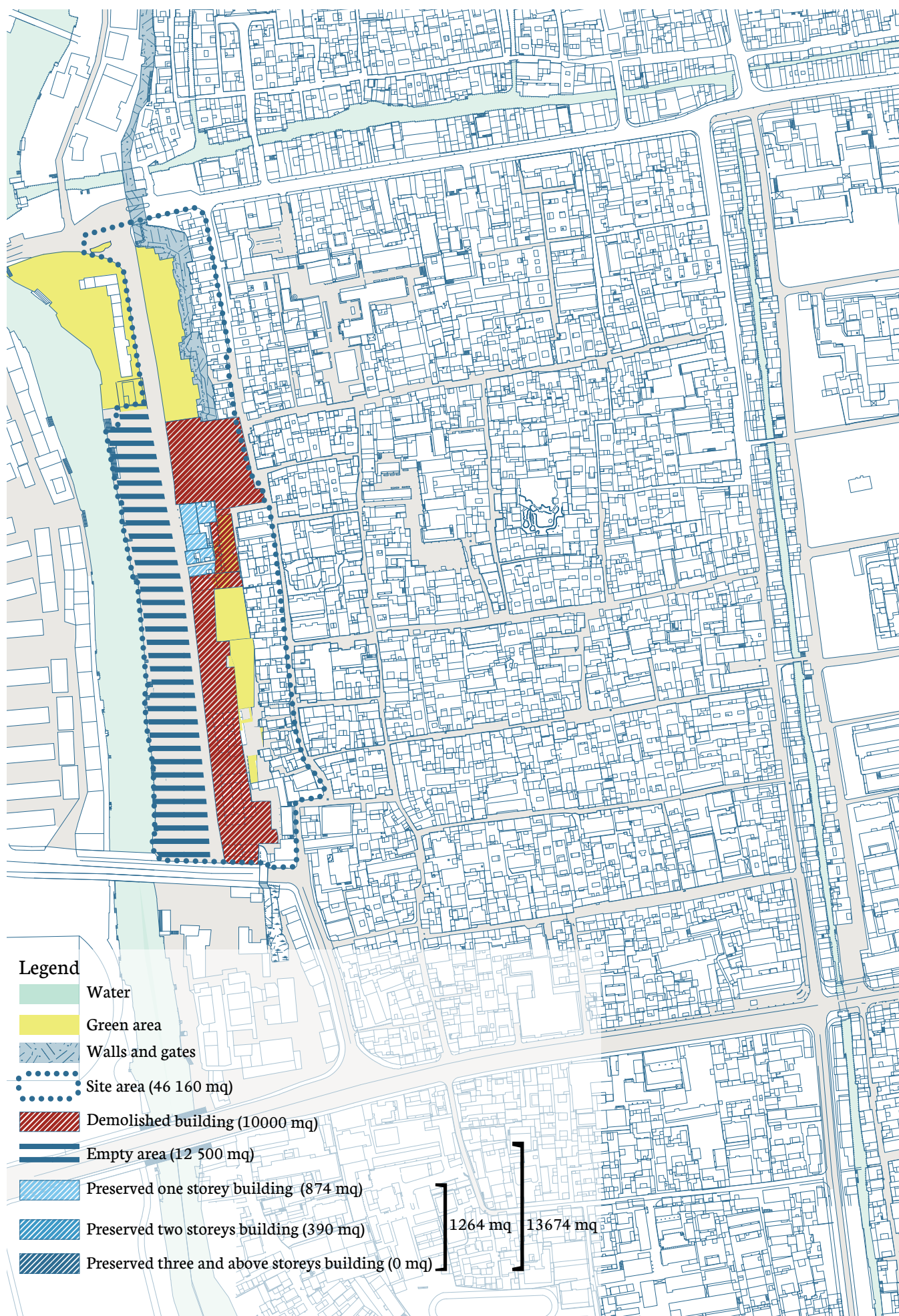
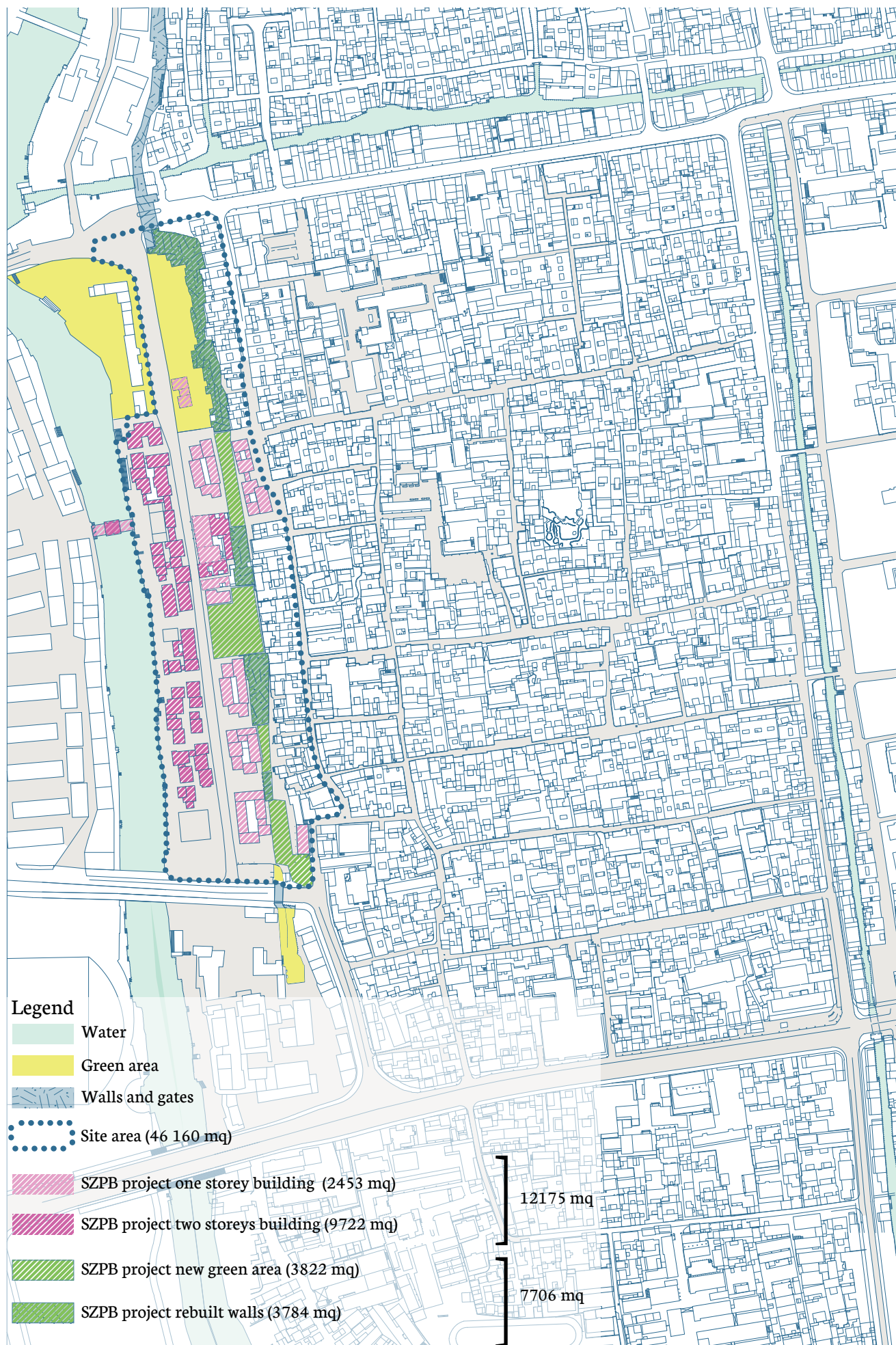


Photo by Grimaldi D'esdra, Melchior: view of Nanxin road building site



Prosperous Suzhou by Xu Yang, 1759. In the blue rectangle, Changmen gate and Changmen street.







<http://www.jianzhubang.com/weixin/10551>, view of SZPB project 总平面图



0楼



<http://www.jianzhubang.com/weixin/10551>, view of SZPB project



<http://www.jianzhubang.com/weixin/10551>, view of SZPB project

Suzhou Nanxin road renovation project



<http://www.jianzhubang.com/weixin/10551>, view of SZPB project



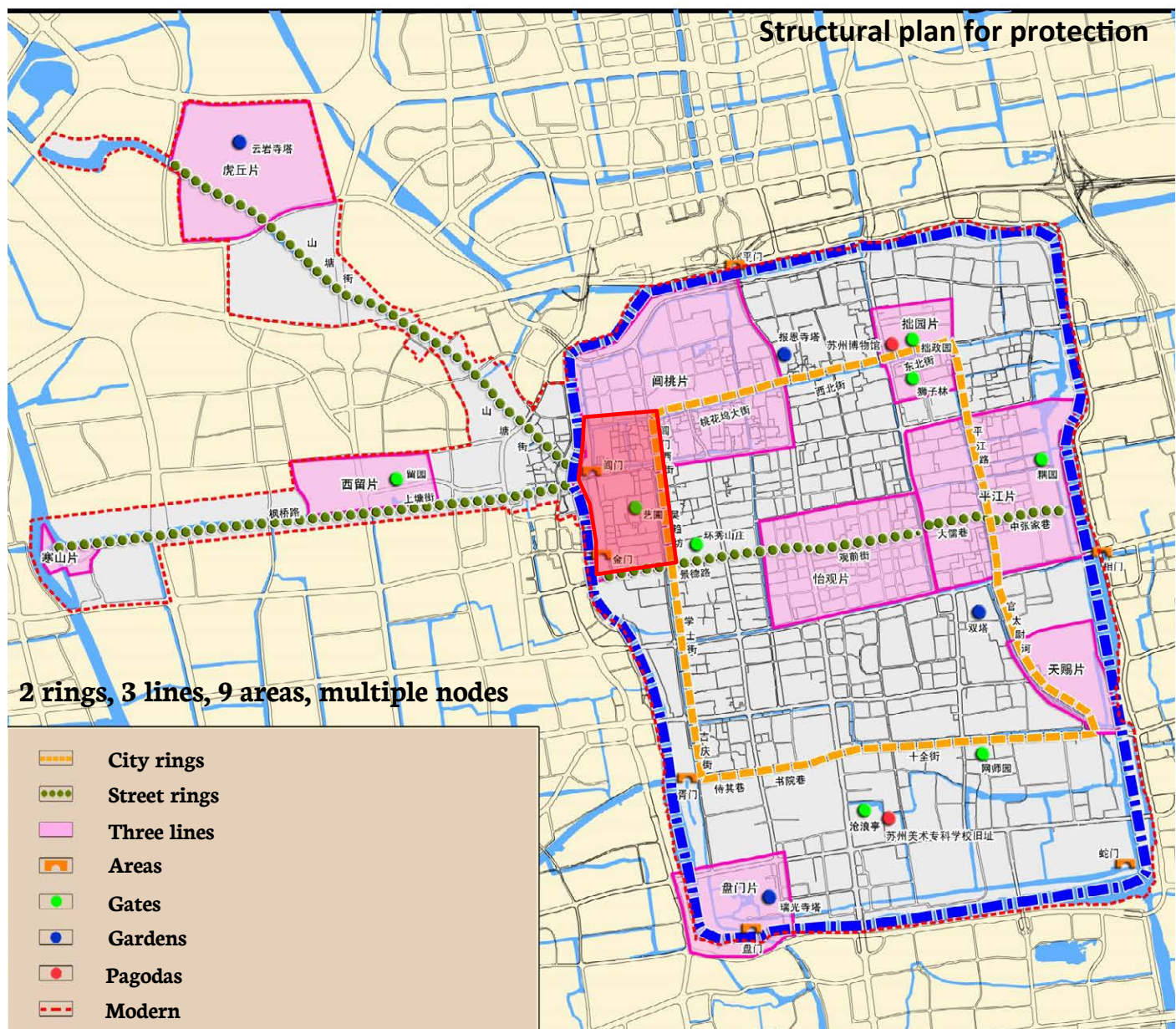
<http://www.jianzhubang.com/weixin/10551>, view of SZPB project

SZPB project in Nanxin road will not be an isolated case but the whole district of Changmen will be involved. Suzhou's municipality. In accordance with the requirements of the new "Suzhou Historical and Cultural City Protection Plan (2013-2030)", Suzhou will build a "two-ring, three-line, nine-areas, multi-nodal" protection plan for the historical city center.

In 2017, the city government planned to inject over 40 billion Yuan into the Gusu district in order to improve the area of old town Suzhou from social, environmental and urban point of view. SZPB is planning to provide basic infrastructures, opening up public spaces, acquire property rights from residents which are willing to sell, reconstruct and refurbish the endangered old structures. The plan will include demolition of illegal or non traditional constructions and a better use of "blanc blocks". (Lei Sun, SZPB)

Changmen historical and cultural district belongs to the "nine areas" of this strategic plan; in order to regenerate the district, several actions will be implemented:

historical canals will be restored or cleaned and waterway transportations will be reintroduced as touristic attraction, historical streets will be restored with their ancient characteristics, traffic control and public transport will be improved and slow mobility will be introduced. (Yiwen Wang, Dept. of Urban Planning and Design Xi'an Jiaotong-Liverpool University)





Traditional Buildings

- Buildings to be Maintained
- Buildings to be Repaired
- Buildings to be Renovated

Nontraditional Buildings

- Buildings to be Preserved
- Buildings to be Renovated
- Newly Constructed Buildings

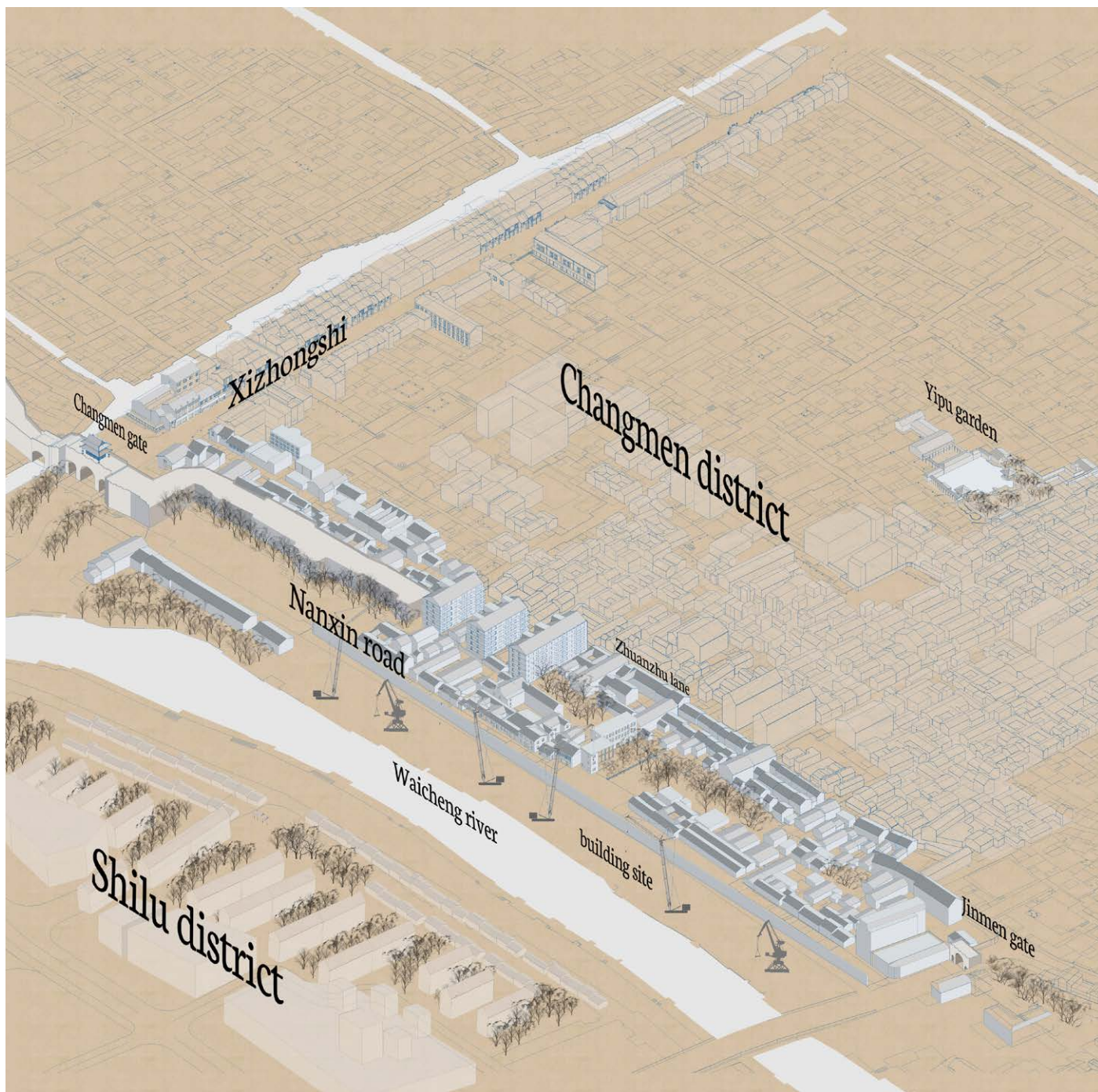
Historical Relics

- Control Protection Buildings & Registered Historical Relics
- City Wall

- Perimeter of the Protected Zone of Cultural Heritage
- Perimeter of the Protected Historical Zone
- Perimeter of the Protected District

Note: The buildings should be classified into the above types by the historical relics department according to specific conditions.

SZPB, Changmen historical and Cultural City Protection Plan (2013- 2030)



Drawing by the author, Site area, existing conditions



Drawing by the author, Suzhou urban planning

002

The concept:

Walls reconstruction for symbolic cyclical
architecture

城

As said before, the walls of Suzhou are a relevant feature of the city.

Suzhou's first fortification was created five centuries before Christ for two reasons: the first one was to protect his new capital from enemy attacks and the second, maybe more important, was to establish the power of the state as a strong entity. According to this idea, Xu Yinong wrote: "the city walls appear to some extent to have been as much of symbolic meaning in the affirmation of the power of the state and of the centrality of the king." (XU, Y., 2000, pag. 78).

By Chinese people, Wall are indeed considered as a sort of protection against the demon and every kind of dangers in order to prevent the city from chaos. Emphasising this notion, Yinong wrote that, in Chinese cities, the walls with the gates were the first thing to be erected and only after the spacial order inside tended to be fixed. (XU, Y. 2000)

As mentioned in the chapter about Suzhou's introduction, during the Southern Song dynasty, Suzhou was attacked by the Northern Song and, differently from other Chinese cities which have been destroyed, it was rebuilt in the same place.

In 1973 "A millennium of Chinese urban history: form, time, and space concepts in Soochow" essay, Professor Frederik Mote⁹ wrote: "The walls and other features of Soochow as seen both in the map of 1229 and the aerial photograph of 1945 are the same walls, gates, inner and outer moats.[...]Any slight changes that might have been made in the walls themselves between 1229 and 1945 seem scarcely to have affected the layout of streets, canals, bridges, and major temples and government buildings.

Actual land use changes may have occurred, but within an enduring shell of physical forms, and a continuing pattern of open and occupied space. [...]The city walls enclosing that space, like most other material components of the city, have existed in their present form and with their present functions, for a millennium or longer. In the remarkable continuity of Soochow as a city, the impermanence of the city's individual parts and the stability of its form and physical presence, as well as the pervasiveness of its past in the minds of the living, are typical of Chinese cities, and of Chinese civilization."

Mote introduces also another aspects about the walls of "Sochoow" (this was the English transliteration for Western people that were not able to pronounce Suzhou properly n.d.r): he argued that in Imperial China there was a distinctive urban-rural relationship and the role of the city walls in society was more of a symbolic than pragmatic one. He said that: "The city in China, compared with the pre-industrial city of Europe, was a very open institution" (Mote, F., 1973, pag. 54).

There was no difference in social status between rural and cities residents. It was normal for people who lived outside the city to work inside the walls perimeter, the daily movement in and out of the cities was constant. "Cities ignored their walls as barriers except in rare crisis situations, and wore them as badges of office, as it were, in their daily existence. There was no clear-cut space utilization pattern isolating the urban and the rural sectors of Chinese society." (Mote, F., 1973, pag. 54)

The extension of the city in space can be identified in the economic life of the society. As organizational nodes, cities were composed by a networks of marketing distribution and financial systems. In the case of Soochow, the commercial and banking concentration was outside the city, in the suburbs to the west of the city walls, extending some distance along the Grand Canal: the district of Changmen. (Mote, F., 1973)

These two principles of Chinese architecture and civilization will guide the concept behind my project: Chinese culture belief in a cyclical history and the Chinese perception of walled fortifications as symbolic element rather than pragmatic one.

I will propose a new infrastructure based on the ancient path of walls: inhabited walls for Changmen district in historical center of Suzhou.

This will be a counter-proposal to SZPB project; a Chinese architecture designed following Chinese principles but seen through the eyes and the academic education of an European architect.

The walls will be a flexible, permeable and sustainable space: new materials will be used in order to make the

⁹ Frederick Wade "Fritz" Mote (June 2, 1922 – February 10, 2005), was an American Sinologist and a professor of History at Princeton University for nearly 50 years. His research and teaching interests focused on China during the Ming Dynasty and the Yuan Dynasty. In collaboration with Denis C. Twitchett and John K. Fairbank he helped create The Cambridge History of China, a monumental (though still incomplete) history of China.

inhabited walls openly modern and not a mere copy of the past and, by consequence a fake, as the new shopping district designed by the SZPB.

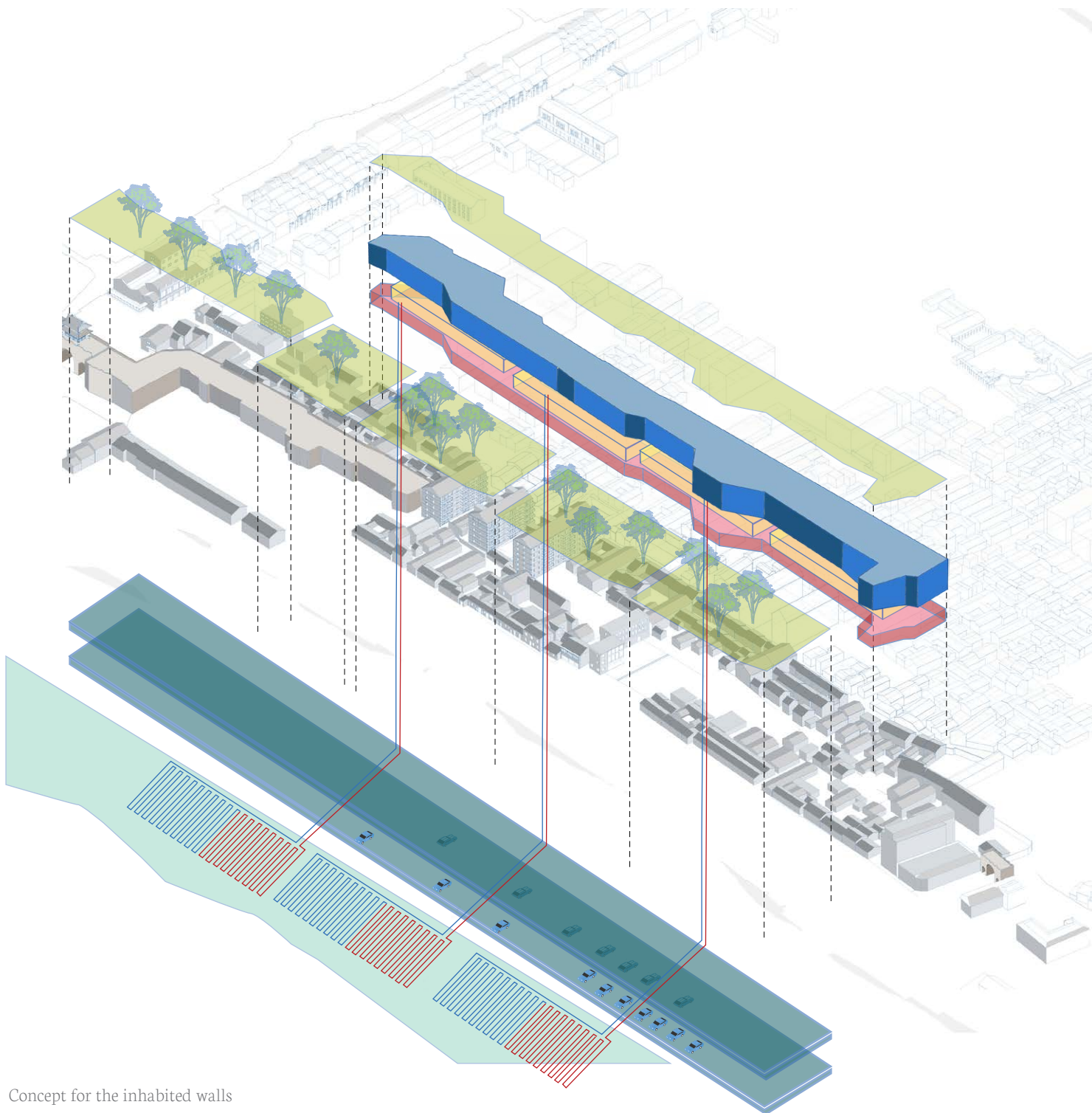
The traditional buildings in good conditions facing Nanxin road will be restored as well and they will create a unique design project with the inhabited walls.

From a pragmatic point of view, the walls will propose useful functions to attract middle-class in the city center in a permanent way and functions for the already existing community. In this way, I will try to remediate the dangerous phenomena of mass tourism and mono-functionalism as well.

The space left on the west side of the walls, will be transformed in a green pedestrian waterfront, a new park for tourists and people of Changmen community:

the park will also penetrate through pocket gardens inside the walls arriving on the rooftop where a green walkway will be positioned.

Finally, under the structure, a geothermal plant using ground water from the river will be placed and under the green area on the waterfront, there will be place for parking lot for 80 cars.

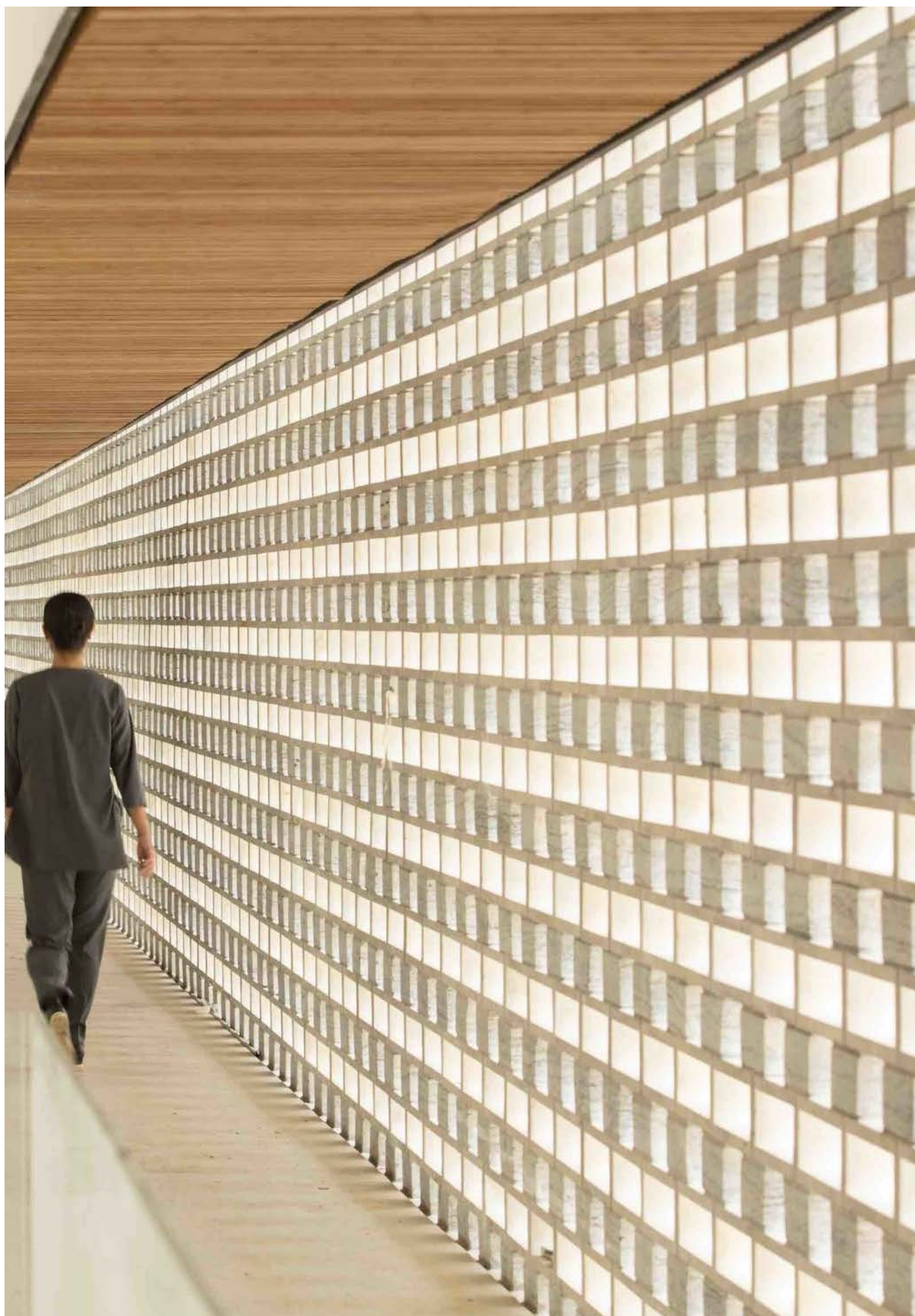


Concept for the inhabited walls

003

Craftsmanship and recycled materials

Several approaches in chinese architecture



Courtesy of Alila Yangshuo, brickworks façade for Alila Yanghuo hotel by vectorarchitects

The most important feature of the inhabited walls will be the façade of the new infrastructure.

In particular, the use of the materials and craftsmanship applied to architecture will represent the key issue to manage.

I analysed the works of three Chinese architecture firms which are providing a meaningful contribution in this research field:

Jiakun architects by Liu Jiakun, Amateur Architecture Studio by Wang Shu and vectorarchitects by Gong Dong.

Liu Jiakun and Wang Shu can be considered part of the same generation of architects which started producing experimental architecture in 1990s while Gong Dong interventions can be dated to the beginnings of 2000s. However, these three firms share the same guiding principles: the use of recycled materials, the experience of craftsmen and local people directly involved in the architectural process and the relationship of the materials with the context.

Craftsmanship and the use of recycled materials have a strong relationship in the works of Liu Jiakun, Wang Shu e Gong Dong.

The analysis will start with a project by Liu Jiakun: the "rebirth brick".

The concept of rebirth bricks originated after the Wenchuan earthquake of 2008, in Sichuan province. Waste materials from the earthquake were used to create the bricks: materials were broken down and mixed together with wheat straw.

Immediately after the earthquake, Jiakun and people from Sichuan made the bricks by hand, because this method was the best way to deal with the emergency during the earthquake. They used handmade machines to make recycled bricks.

These machines were an adaptation of the manual machines used in the country for the building process of fly ash bricks.

The constructive process had strong adaptability and was based on peasants' skills: people living in the disaster area could make various kinds of bricks which were used to build their own houses.

Now the recycled bricks have entered in a mass production and there are plants which are manufacturing the many types of bricks. Bricks can be used as paving bricks, facing bricks and many other kinds of products.

A further use of this "simple" technology (Williams, A., the architectural review, 2017) has been proposed by Jiakun: in the demolition of modern cities, the presence of ruins will be difficult to handle.

These ruins will provide a steady stream of raw mate-

rials for the industrialization of recycled bricks which could be widely used in rural and urban public buildings as cheap, environmentally friendly and suitable for every conditions materials.

(http://www.jiakun.com/index.php/Home/Index/pjct_details.html?id=5)



http://www.jiakun.com/index.php/Home/Index/pjct_details.html?id=5, different types of "rebirth brick"



http://www.jiakun.com/index.php/Home/Index/pjct_details.html?id=5, constructive process of the "rebirth brick"



http://www.jiakun.com/index.php/Home/Index/pjct_details.html?id=5, peasants' houses made out rebirth brick

The approach to recycled materials by Wang Shu of Amateur architecture studio is more radical than Ji-akun's ideas.

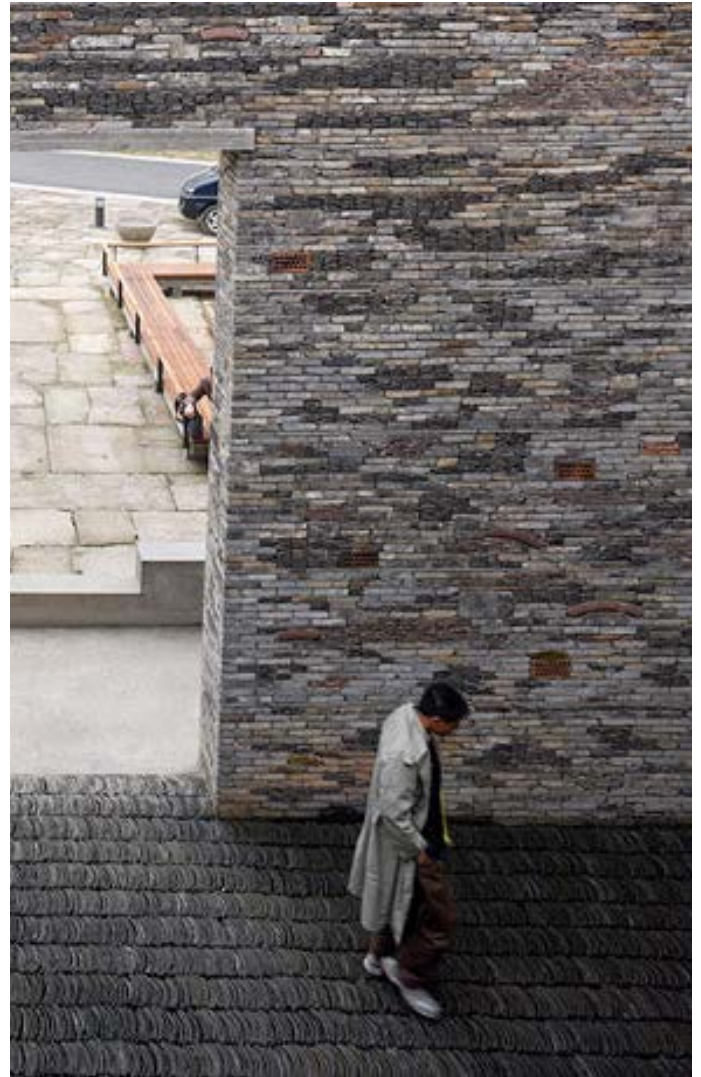
Wang's major projects, are situated in Ningbo and Hangzhou: the Xiangshan Campus of the China Academy of Art in Hangzhou finished in 2007 and the Ningbo Historic Museum, completed in 2008.

His works are strongly related to the phenomenon of mass-demolition of traditional buildings in China. In designing the Xiangshan Campus of the China Academy of Art in Hangzhou (where he is born), Shu reused recovered materials covering the campus buildings with more than two million tiles from demolished traditional houses.

His concern about mass-demolition and Chinese desire of innovation is even more evident in the Ningbo History Museum. This is literally a collage of reused materials from demolished houses. The ruinous character of the new building's facade reads like a psychological portrait of the country's demolition mania; it is a sign of collective memory that determines a good part of its success with the public. :

Crafts contemplation has always characterised the philosophy of Wang Shu: *"Everywhere you can see, they don't care about the materials", Wang said in an interview. "They just want new buildings, they just want new things. I think the material is not just about materials. Inside it has the people's experience, memory — many things inside. So I think it's for an architect to do something about it."*

(<https://www.nytimes.com/2012/02/28/arts/design/pritzker-prize-awarded-to-wang-shu-chinese-architect.html>)



<https://www.archdaily.com/20523/new-academy-of-art-in-hangzhou-wang-shu-amateur-architecture>, use of different materials in Hangzhou academy



https://www.archdaily.com/211962/wang-shus-work-2012-pritzker-prize/page15a_ningbo_history_museum, different recovered materials are used in the Ningbo historic museum.

The principles of craftsmanship, involvement of local people in the constructive process and the use of recycled materials can be seen also in the works of the younger architect Gong Dong, founder of vectorarchitects.

In the project of Alila Yangshou, an old sugar mill built in 1960s transformed in a luxury hotel, the mixture of these three principle is clearly visible.

Much of the sugar mill's original brickwork and old structures were preserved and restored and to create new wall sections, Gong Dong created hollowed-out brickwork taking inspiration by the sugar blocks produced in China in the 1920s.

Dong designed a special machine to produce the customized hollow bricks, which are made of concrete. Five craftsmen worked for more than six months to

hand-make each of the new 60,000 hollowed bricks that were used to create sections of the hotel's exterior and interior walls. In addition, red volcanic rock that was discovered during the construction process was ground and mixed into the floors and throughout the walls, adding red hues to the space.

In this project the use of the light and the relationship with the surrounding environment were important as well: the town of Yangshuo near Guilin is known for its limestone hills, caves, and tunnels. This topography of hills and caves guided the design of the passageways and rooms in which lights and shadows create evocative images. (<https://www.dwell.com/article/a-chinese-sugar-mill-from-the-1960s-becomes-a-cave-inspired-hotel-f0a2f88b>)



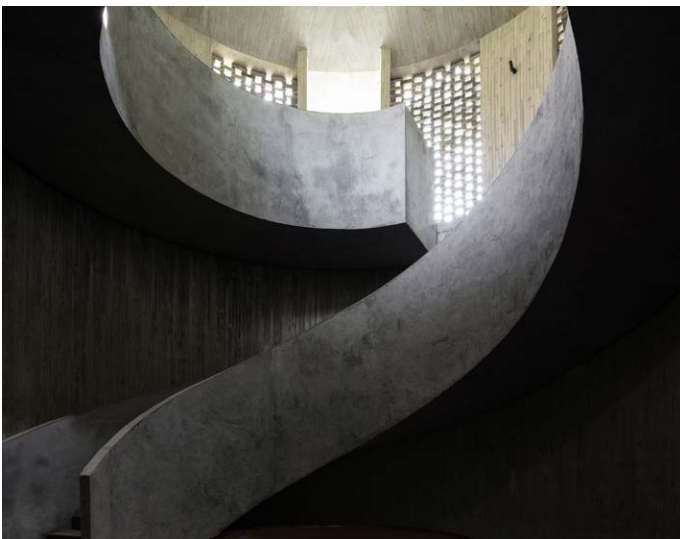
<https://www.dezeen.com/2017/12/06/vector-architects-alila-yangshuo-hotel-disused-sugar-mill-architecture-china/>, view of Alila Yangshou



<https://www.dezeen.com/2017/12/06/vector-architects-alila-yangshuo-hotel-disused-sugar-mill-architecture-china/>, the monolithic façade of Alila Yangshou becomes ephemeral at night



<https://www.dezeen.com/2017/12/06/vector-architects-alila-yangshuo-hotel-disused-sugar-mill-architecture-china/>, hollowed-out brickworks



<https://www.dezeen.com/2017/12/06/vector-architects-alila-yangshuo-hotel-disused-sugar-mill-architecture-china/>, the relationship with natural element



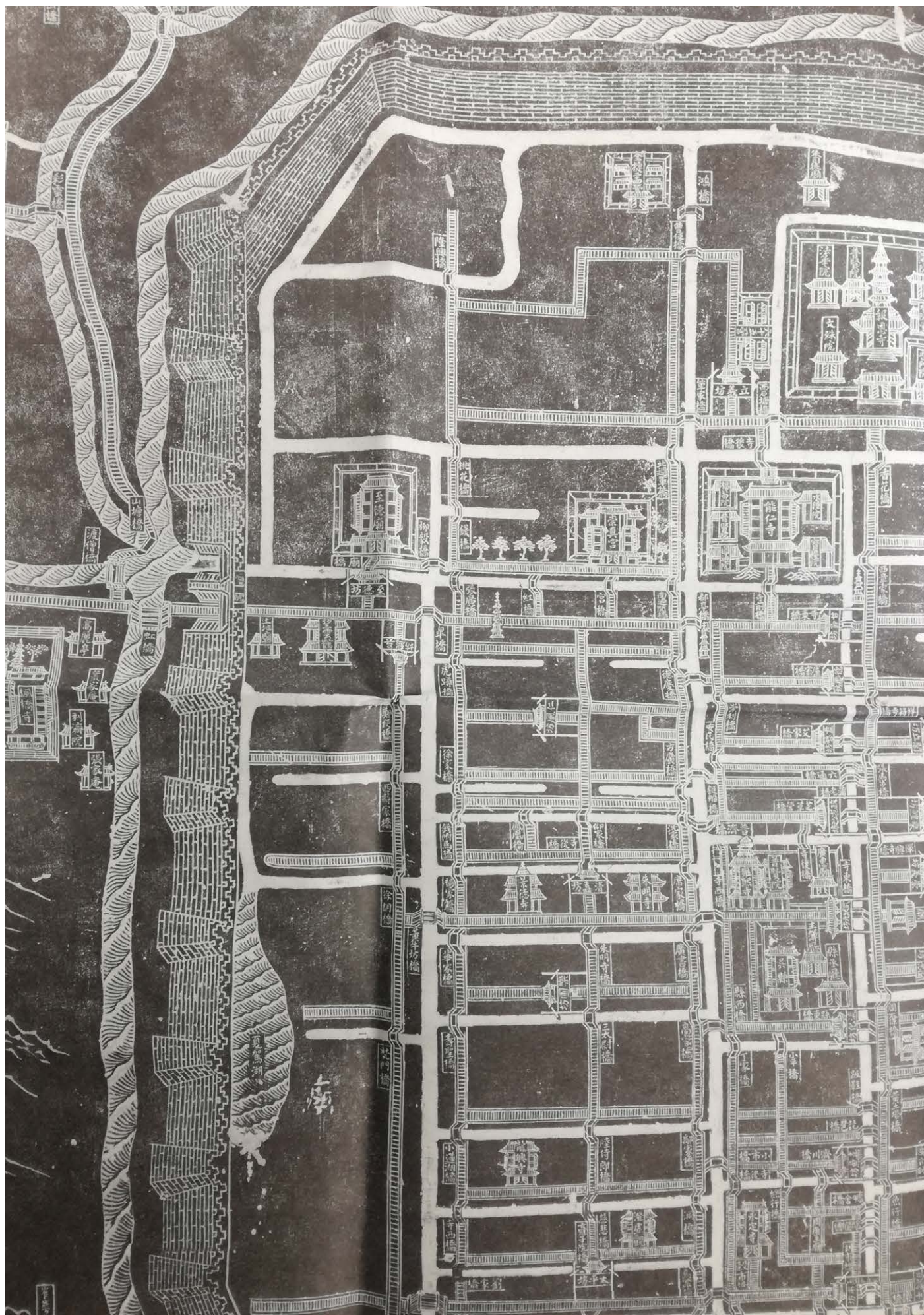
<https://www.dezeen.com/2017/12/06/vector-architects-alila-yangshuo-hotel-disused-sugar-mill-architecture-china/>, dramatic use of lights, shadows and surrounding environment

The principles set out by Jiakun, Shu and Dong have been used as inspiration for the design project in order to create the best combination to design the façade of the inhabited walls.

In particular, I had the possibility to attend a conference by Gong Dong in Turin and his approach to architecture really fascinated me. His work had a strong influence on the design project.



Design
proposal



Pingjiang stele: Map of Song dynasty Suzhou, 1229, engraved by Lu Ting and Zhang Yucheng, focus on Changmen walls.

001

Wall

reconstruction

a flexible and sustainable infrastructure

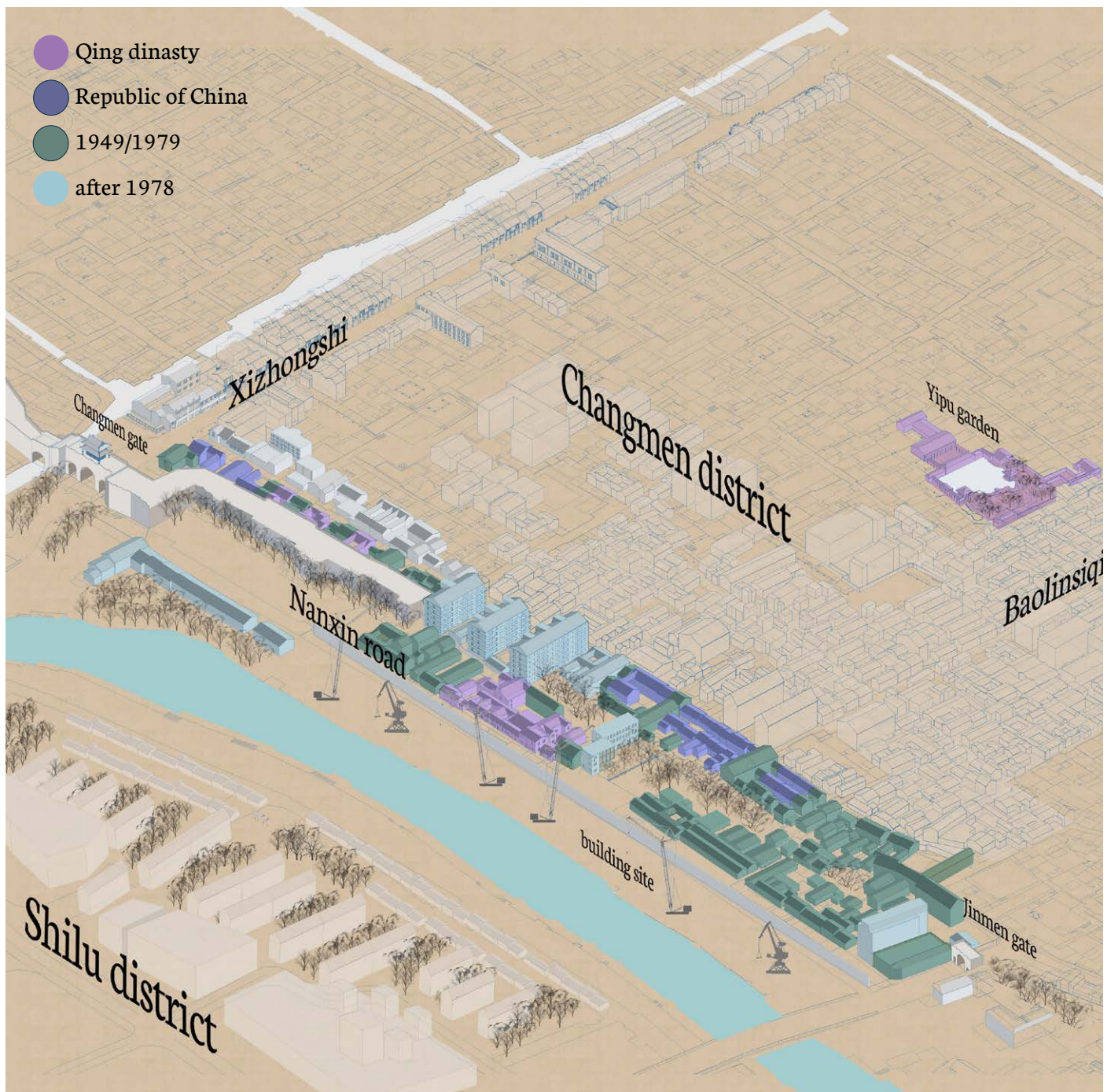
The design proposal will be focused on the reconstruction of the walls as future infrastructure for the city of Suzhou and, in particular, for the community of Changmen.

The inhabited walls will be a programmatic project; The new infrastructure will be flexible following the necessity of the community and the strategic plan issued by the municipality of Suzhou.

Flexibility of internal spaces will be the main feature of the new infrastructure; this approach will differ from-developers methodology.

Chinese projects are often compartmentalized and mono-functional: this practice helps the developers with the management of new constructions in the short term but it does not ensure long-term use. Chinese cities are constantly changing and the needs of the communities living in urban areas change as well.

The adaptability of the inhabited walls will constitute a great value for the overall project since the infrastructure will not have fixed functions but it will be changeable and it could be able to meet all the demands of the city.

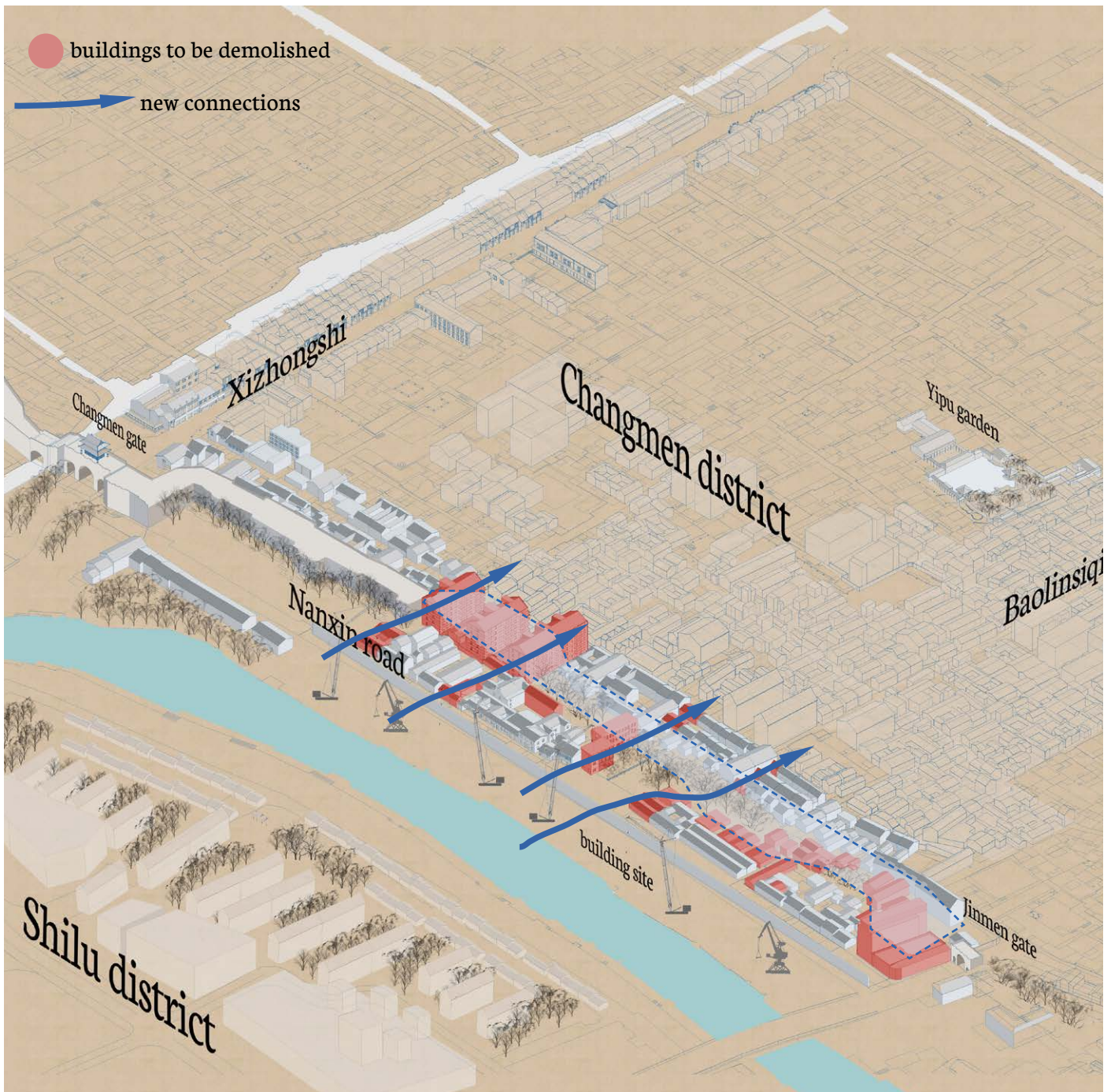


Drawing by the author, rielaboration of SZPB analysis showing the historical era of the buildings.

Following the analysis already done by the SZPB(maps made by the SZPB can be found in the appendix) , site analysis about the historical period of the buildings was made in order to understand which buildings would be maintained and restored. All the buildings which have been declared as traditional and considered in good quality by the SZPB have been maintained.

Consequently, the choice of the buildings to demolish followed the SZPB analysis: non traditional buildings as superfetations and buildings from the 1980s as poorly made social residential buildings and factories built with cheap materials will be eliminated.

Furthermore, it needs to be added that a “careful” demolition of the traditional buildings will be carried out in order to clear space for the inhabited walls and create new connection with Changmen district.



Drawing by the author, analysis of the buildings to be demolished

This strategy is drastically different from that of SZPB project which planned a massive demolition as already said in pp 52-53.

No further analysis was made because of the paucity of informations about the buildings in the site area (Nanxin road is still a building site and it is inaccessible) and because the design project was more oriented on the reconstruction of the walls.



Photo by Baidu maps. Rielaboration by the author. Non traditional buildings to be demolished



Photo by Baidu maps. Rielaboration by the author. Traditional buildings to be demolished



Photo by Rossel Villareal, Camila. Rielaboration by the author. Non traditional buildings to be demolished

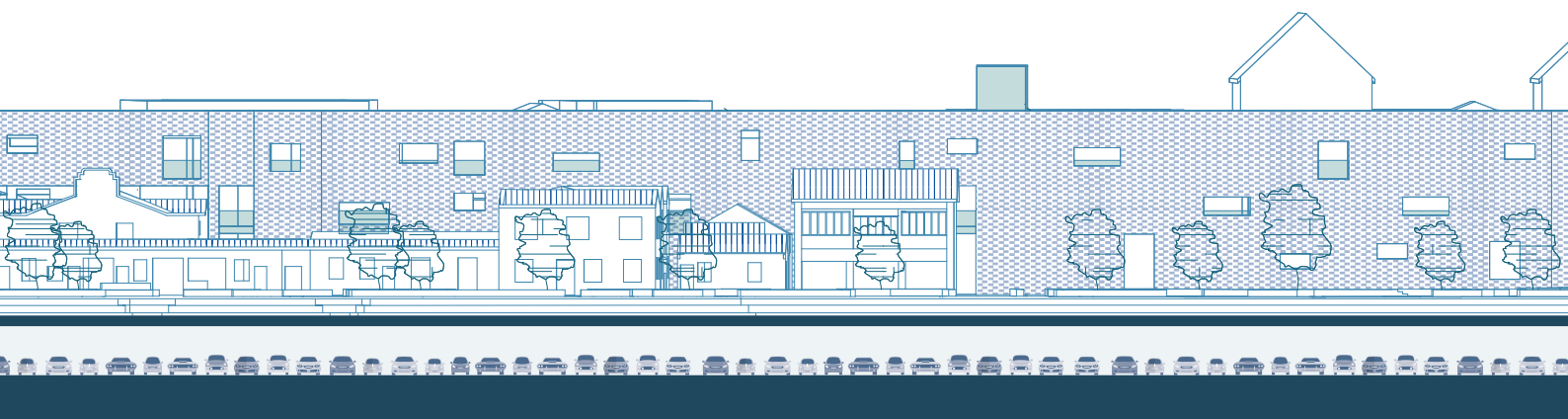


Photo by Baidu maps. Rielaboration by the author. Non traditional buildings to be demolished

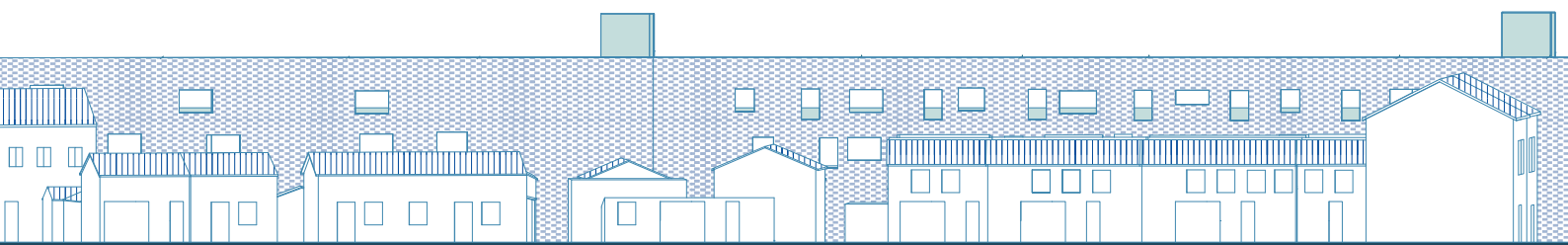


Drawing by the author, intervention plan, 1:1000

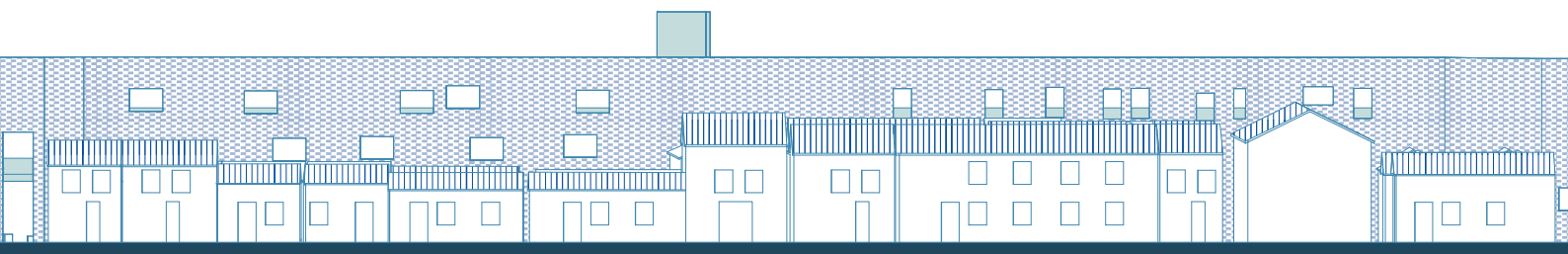
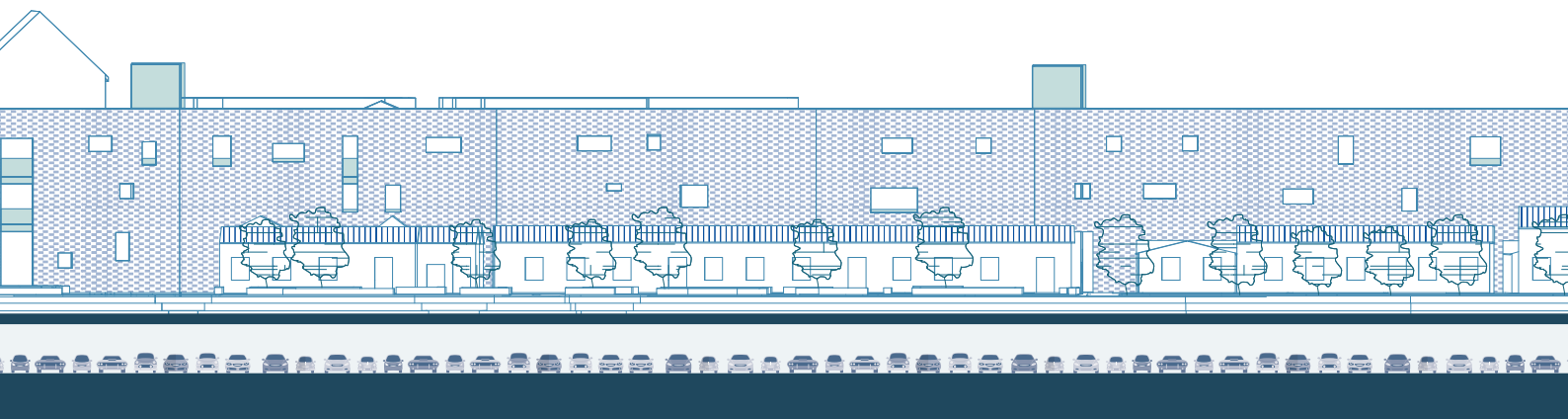


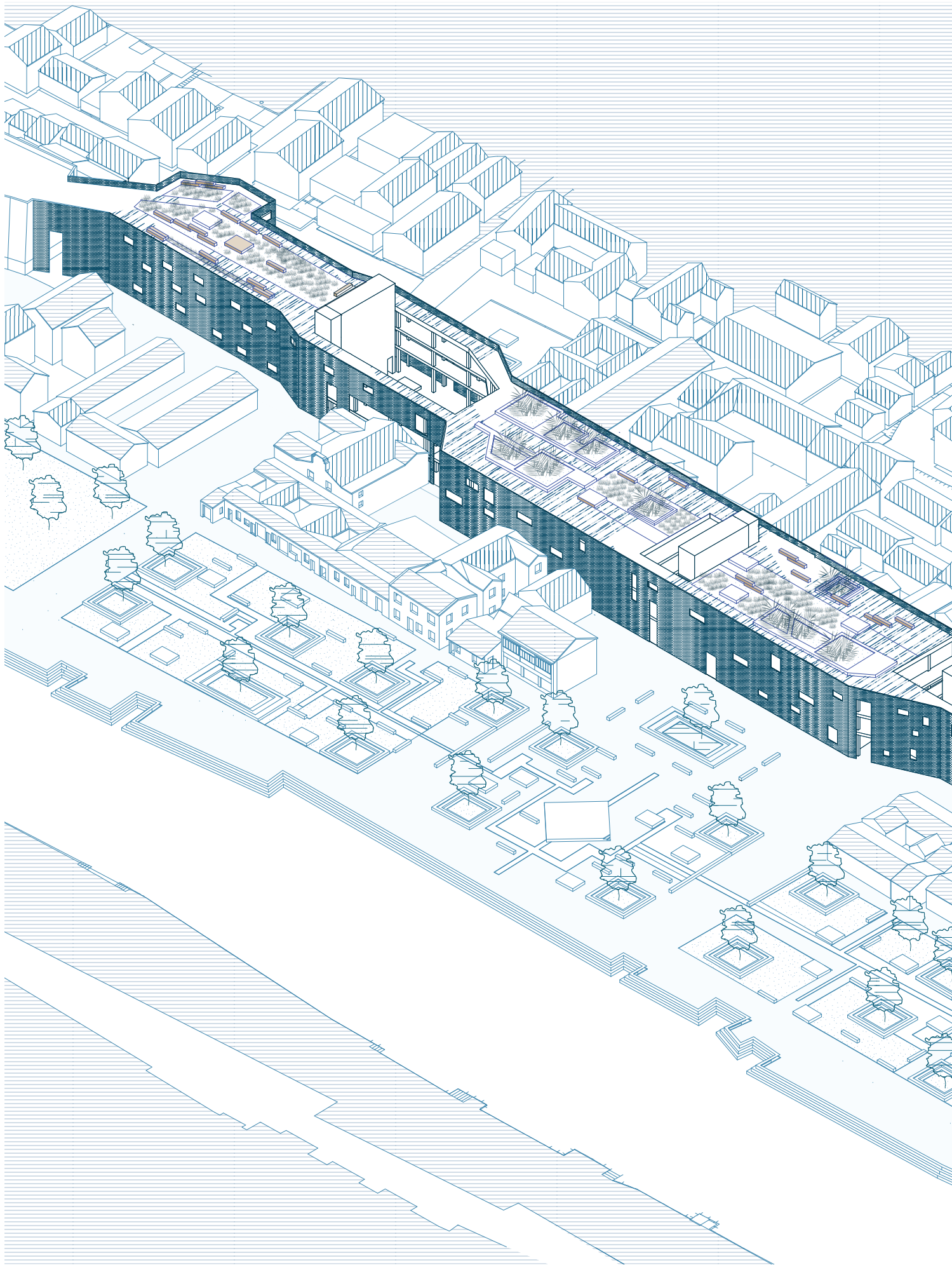


Drawing by the author, Elevation 1:500 , view from the waterfront

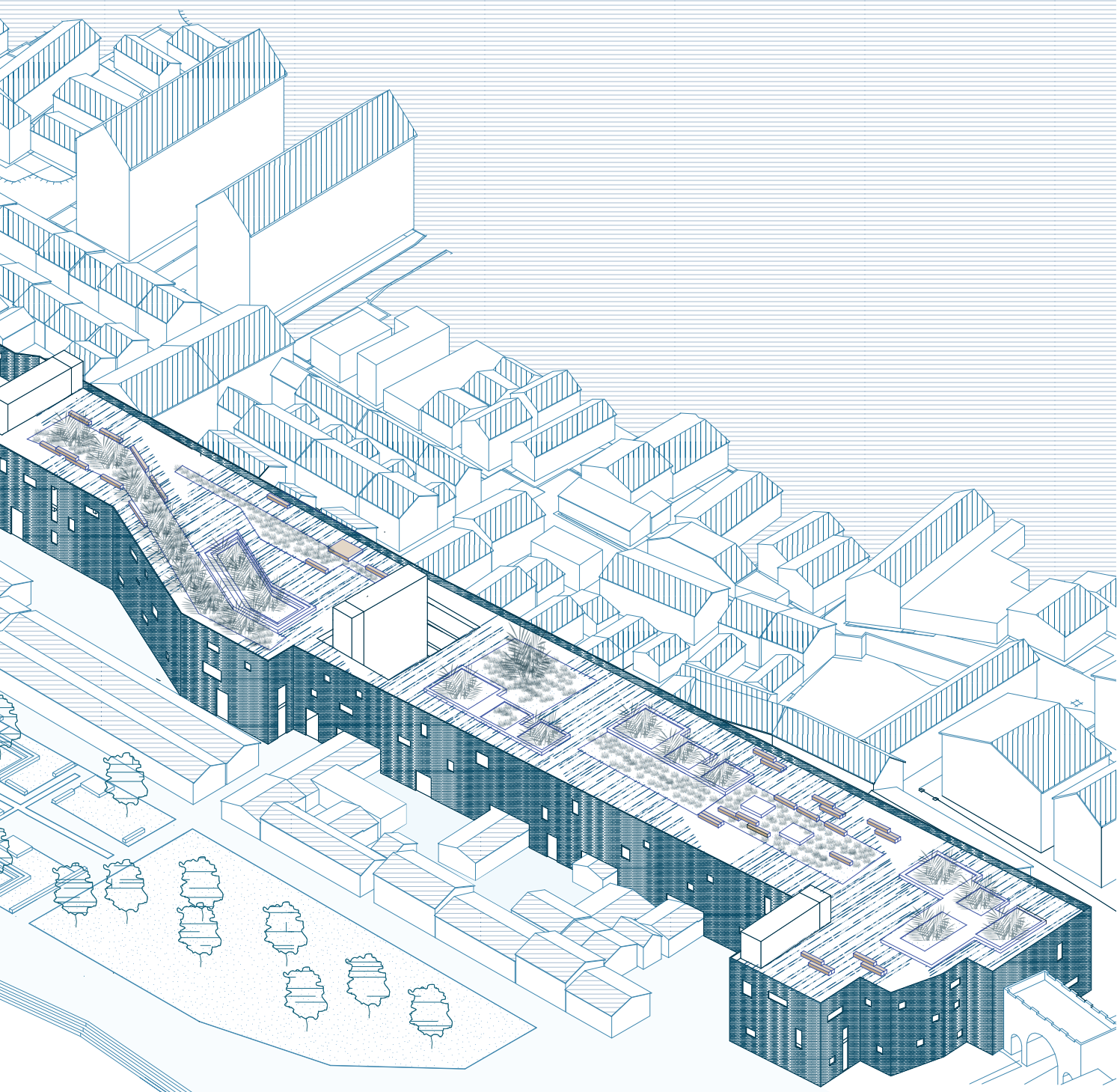


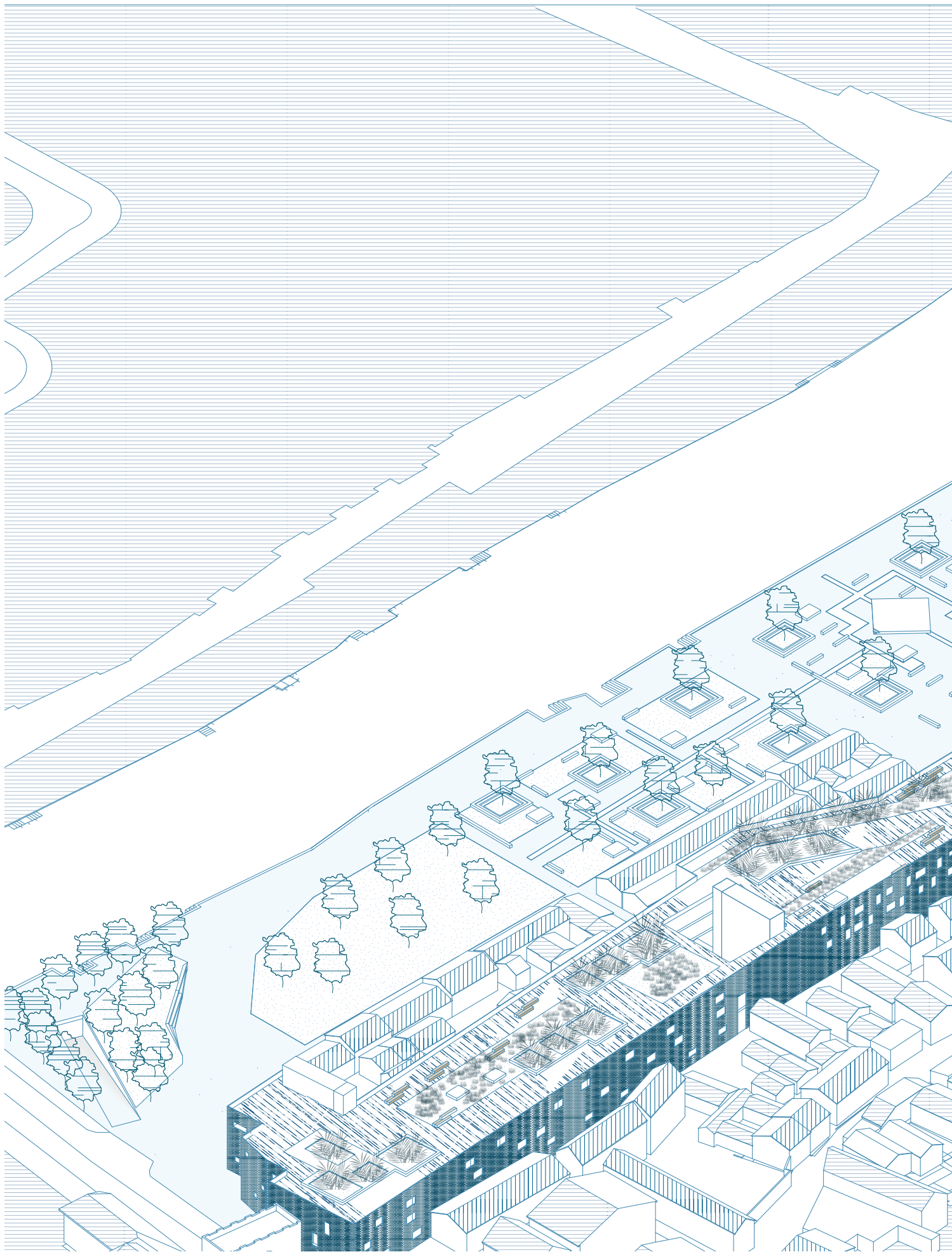
Drawing by the author, Elevation 1:500 , view from Changmen district



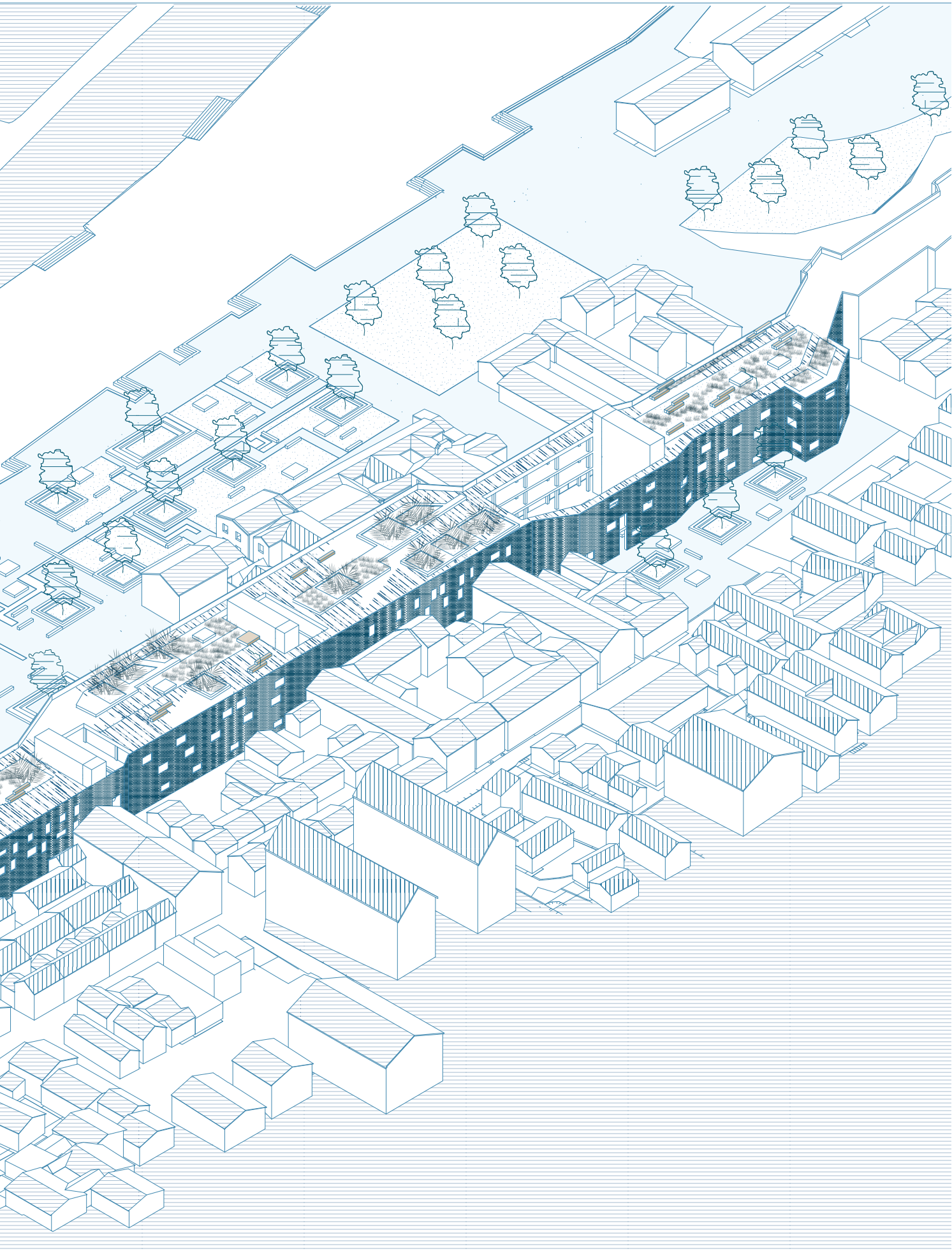


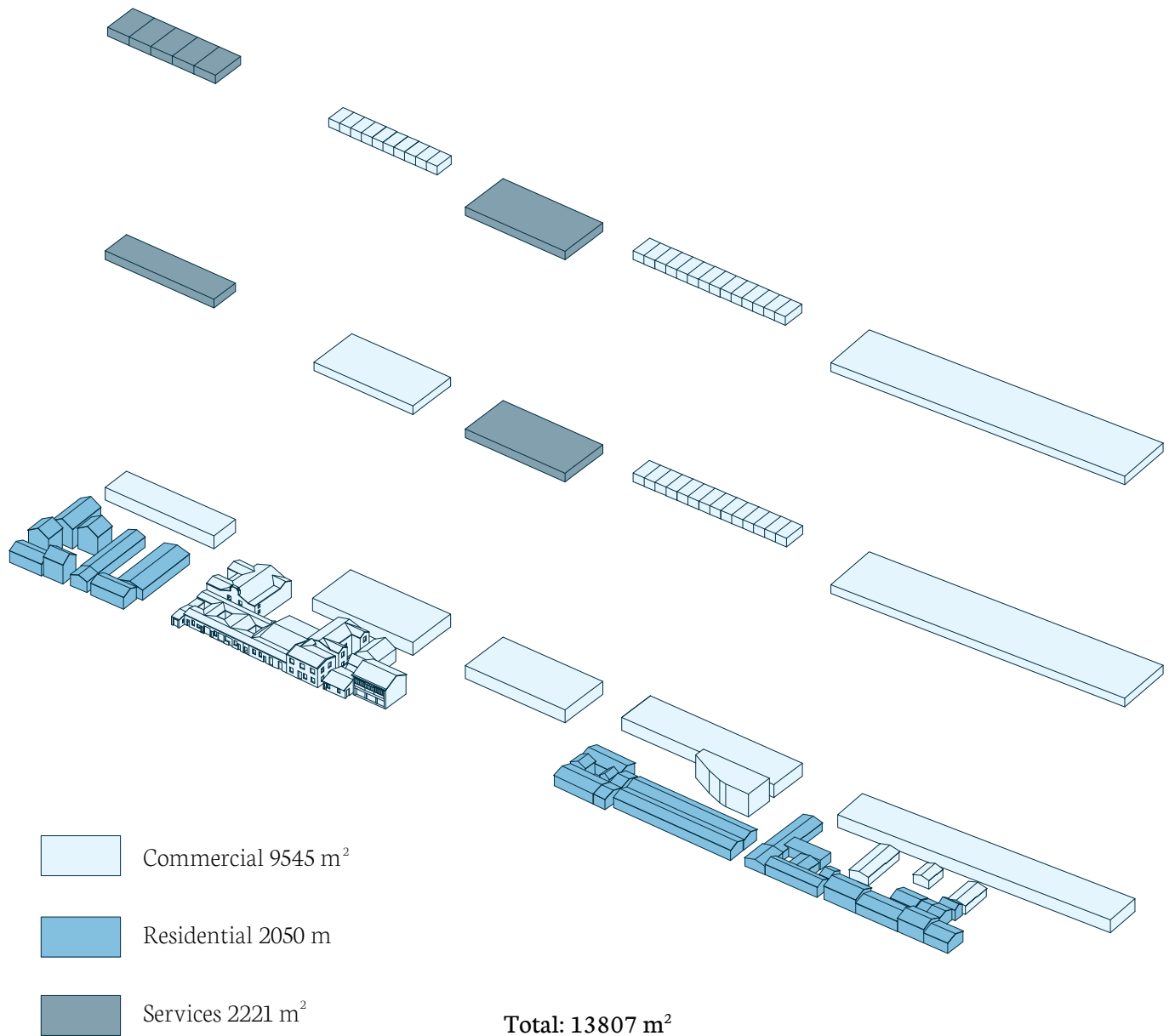
Drawing by the author, Axonometry, view from the waterfront





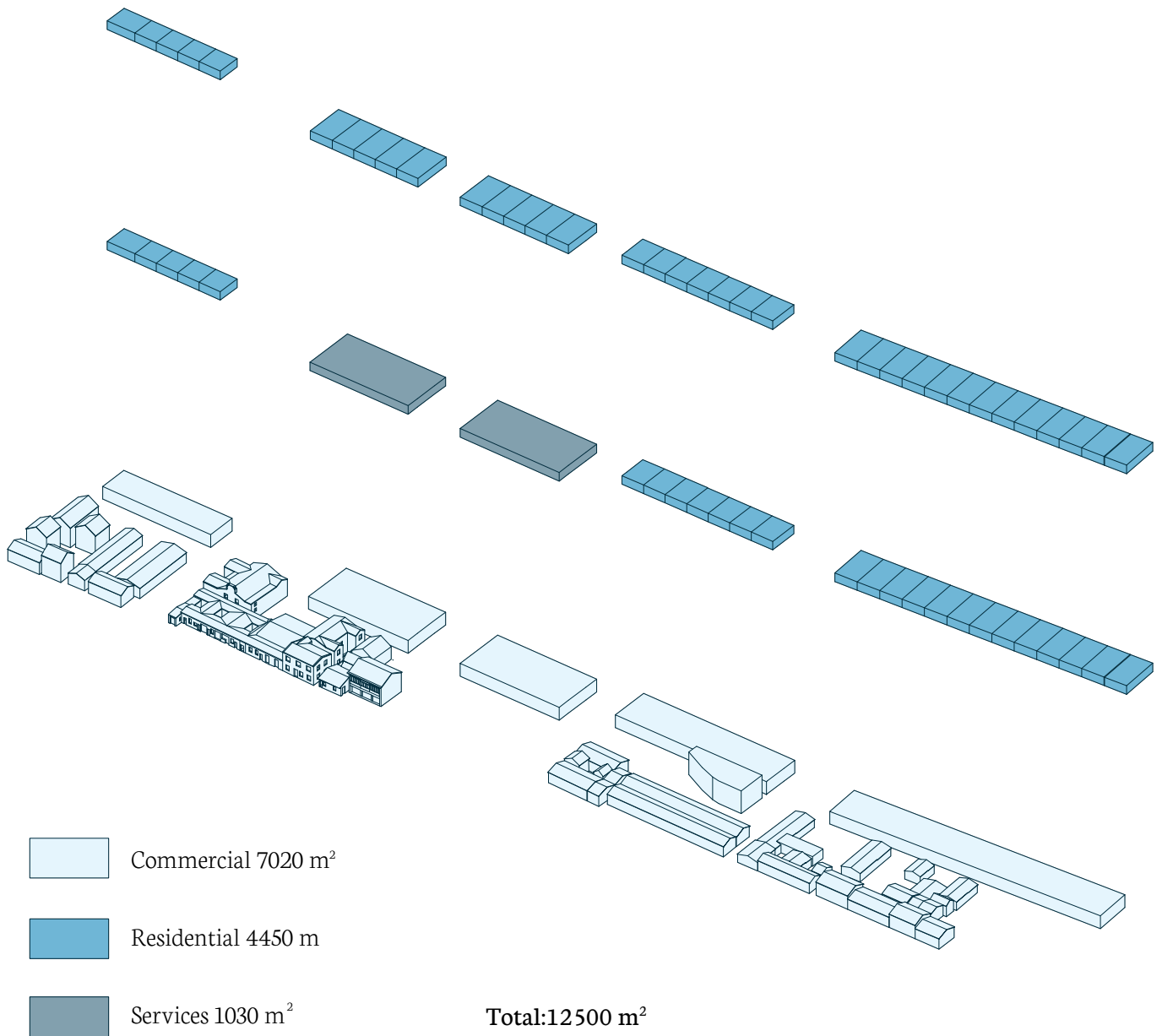
Drawing by the author, Axonometry, view from Changmen district





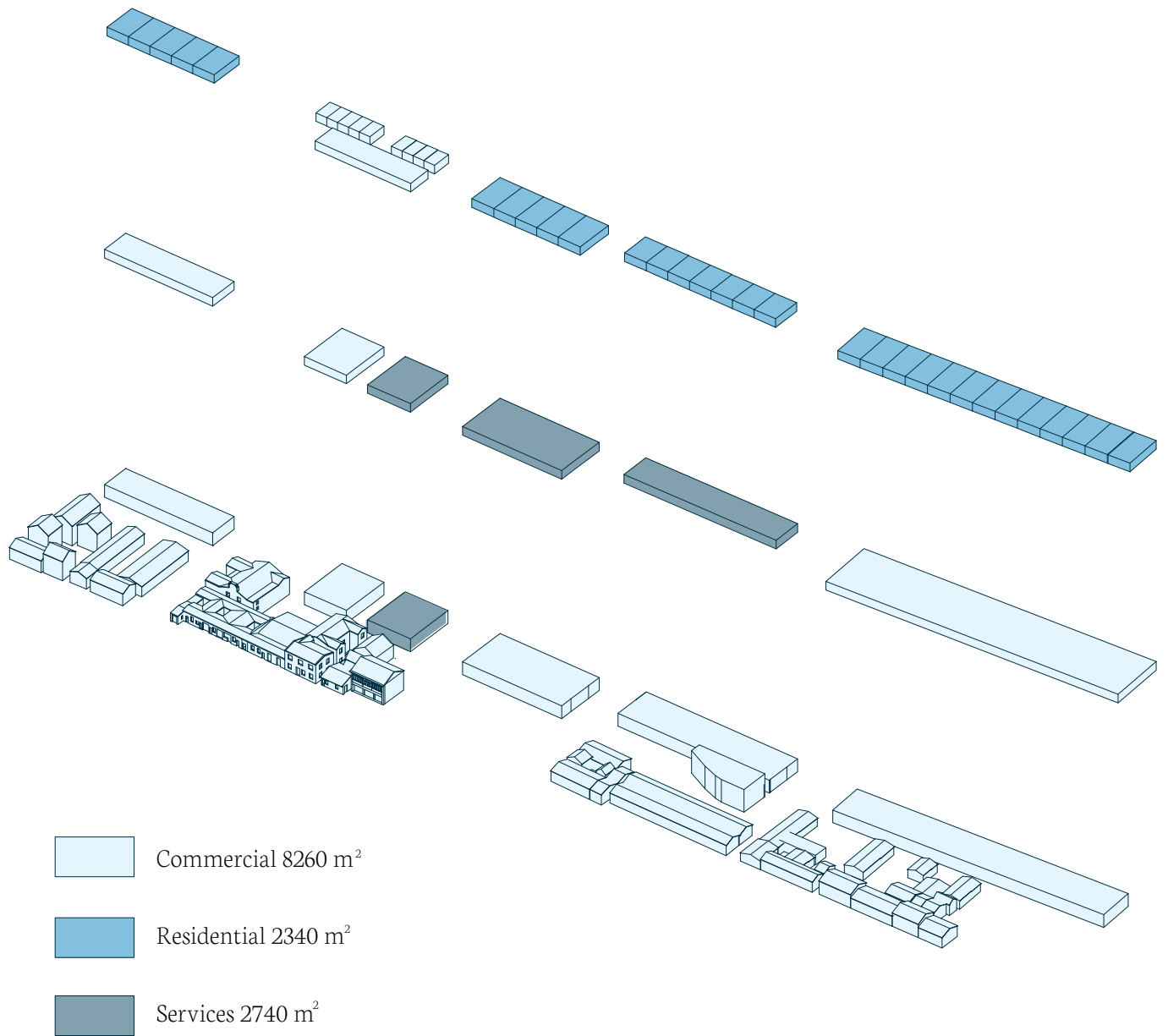
Drawing by the author, axonometric diagram, first option

The first option for the inner spaces of the inhabited walls is predominantly commercial. 70% of the space will be occupied by commercial area while residential area and services will be respectively 16% and 14% of the total. This layout is the closest to the idea of the Suzhou planning bureau project: it prefigures the development of a strongly characterised commercial area. All the restored buildings with the exception of a residence by the Qing dynasty and few buildings directly connected with new infrastructure will maintain their original function as residential buildings. The services for the community will be set in the walls.



Drawing by the author, axonometric diagram, second option

The second option will have a more residential connotation: the residential area is increased up to 35% while commercial areas decrease to 56%. The remaining space, only the 8% will be for the community services. This layout could be considered to ease urban pressure problem and to accommodate new residents which will arrive in the city. Commercial areas will occupy the whole ground floor and there will be two floors of residences with 1000 m² positioned on the first floor.



Drawing by the author, axonometric diagram, third option

The third option is the most varied and balanced: 62% of commercial areas, 18% of residential areas and 20% of services for the community. As in the second layout, the ground floor has a strong commercial connotation. The services for the community are positioned on the ground floor (only 520 m²) and the remaining part is on the first floor. Residential areas are set on the second floor.

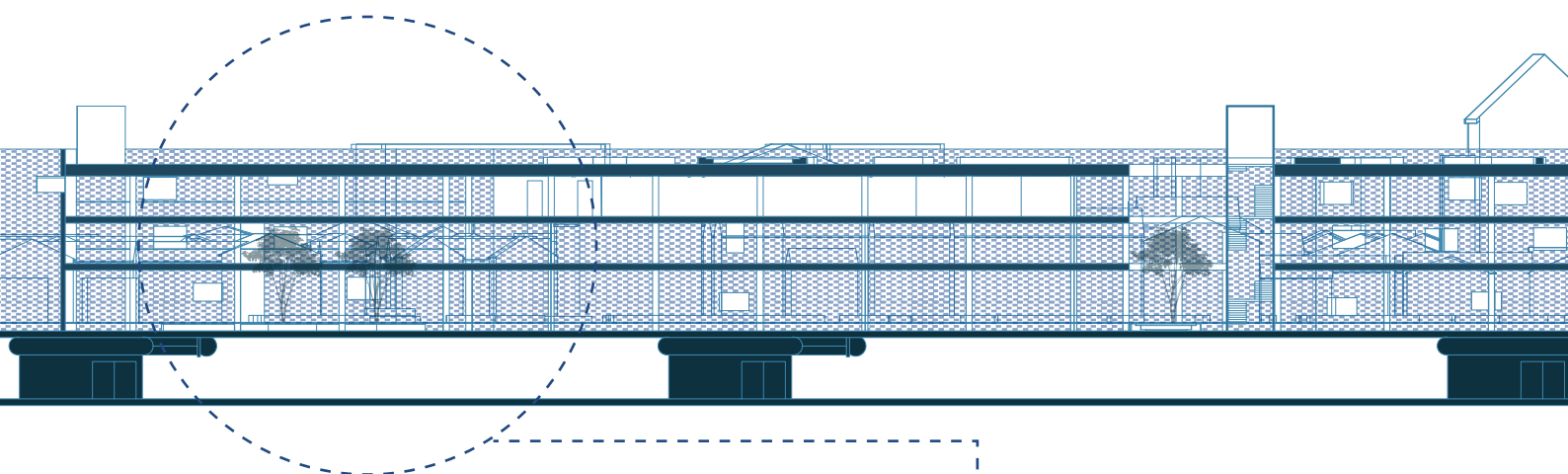
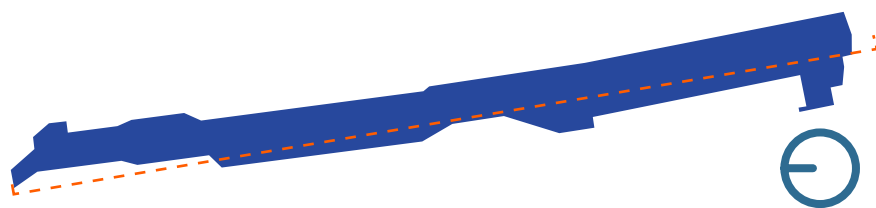
These are just three examples of the possible infrastructure variations: the first one can represent a link with the project issued by the municipality but the strong commercial connotation could lead to the phenomenon of mono-functionalism.

Transforming the area in a 14000 m² shopping mall is not a proper way of preserving and developing the ancient district of Changmen.

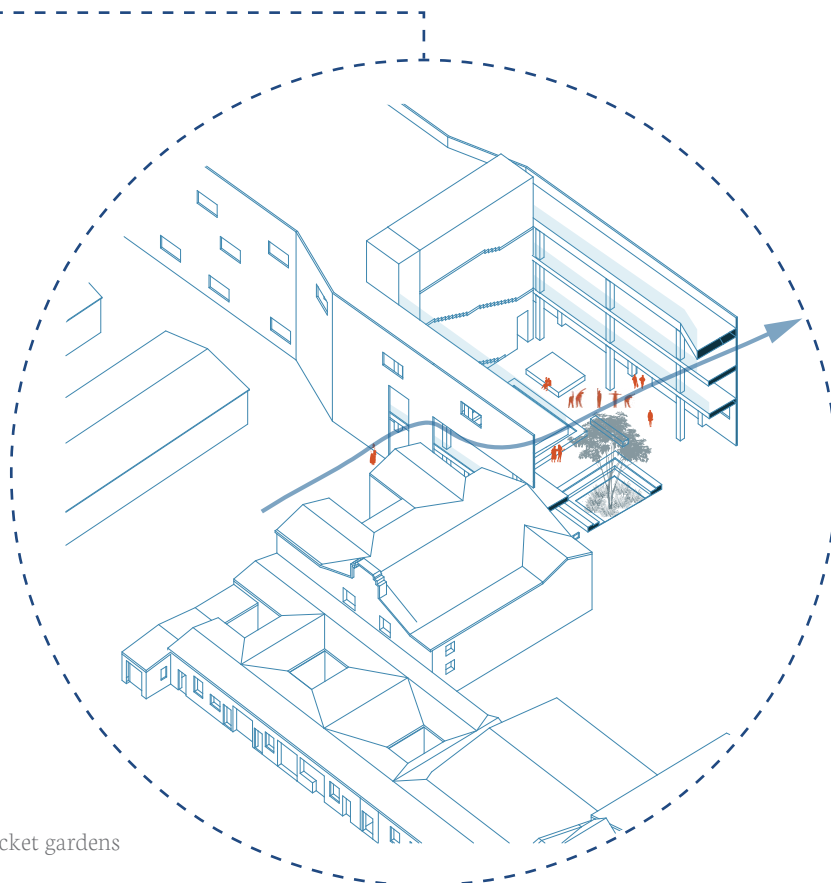
The second layout is characterised by the presence of almost 5000 m² of possible new residences. This solution could provide space for the people coming to the city and, in particular, to the district of Changmen.

The small percentage of community services could represent an obstacle for the creation and development of a strong community.

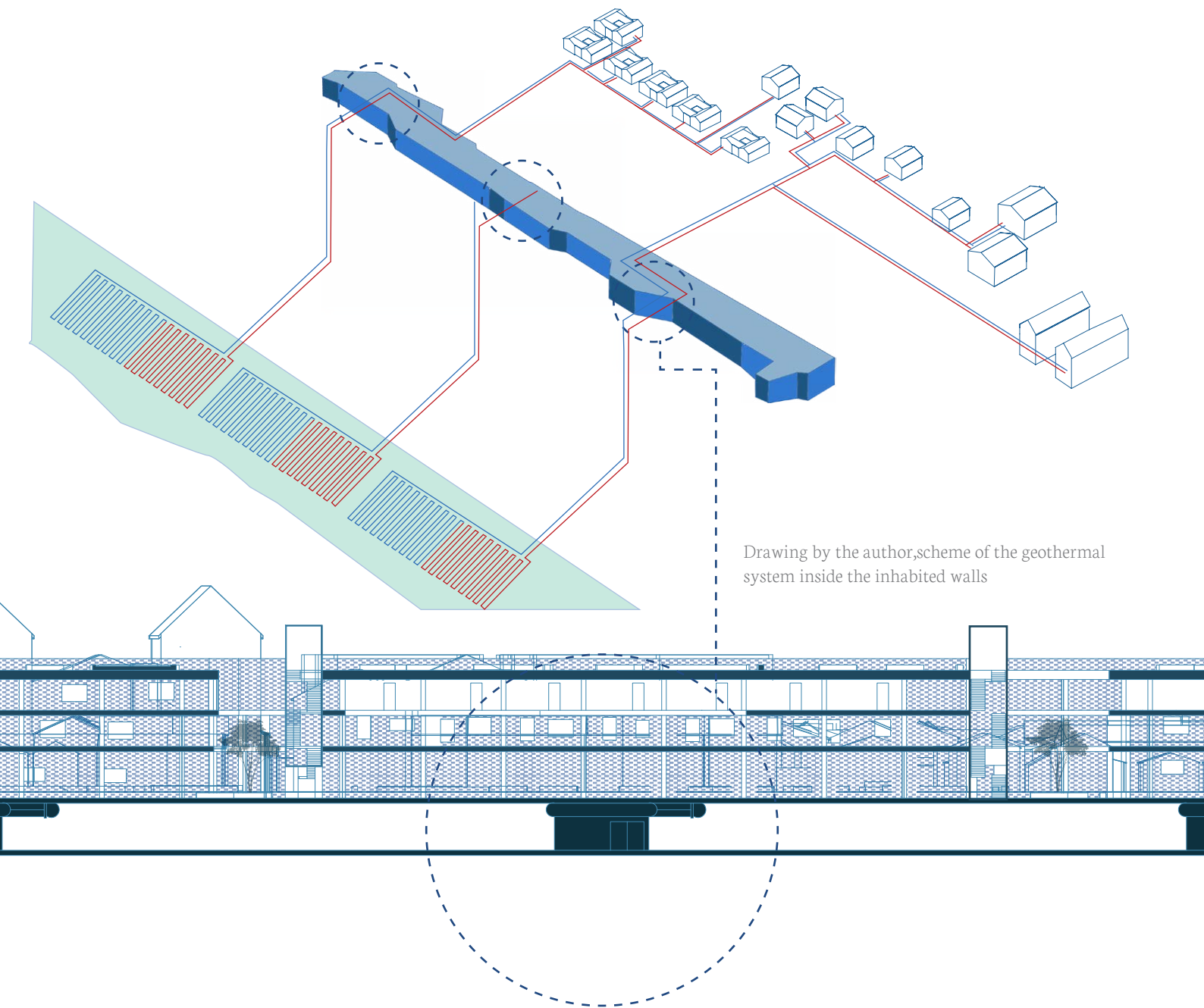
The third solution, the most balanced one, will be developed in the next pages in order to show how the structure could work in a possible future.



Drawing by the author,cross section_1:500



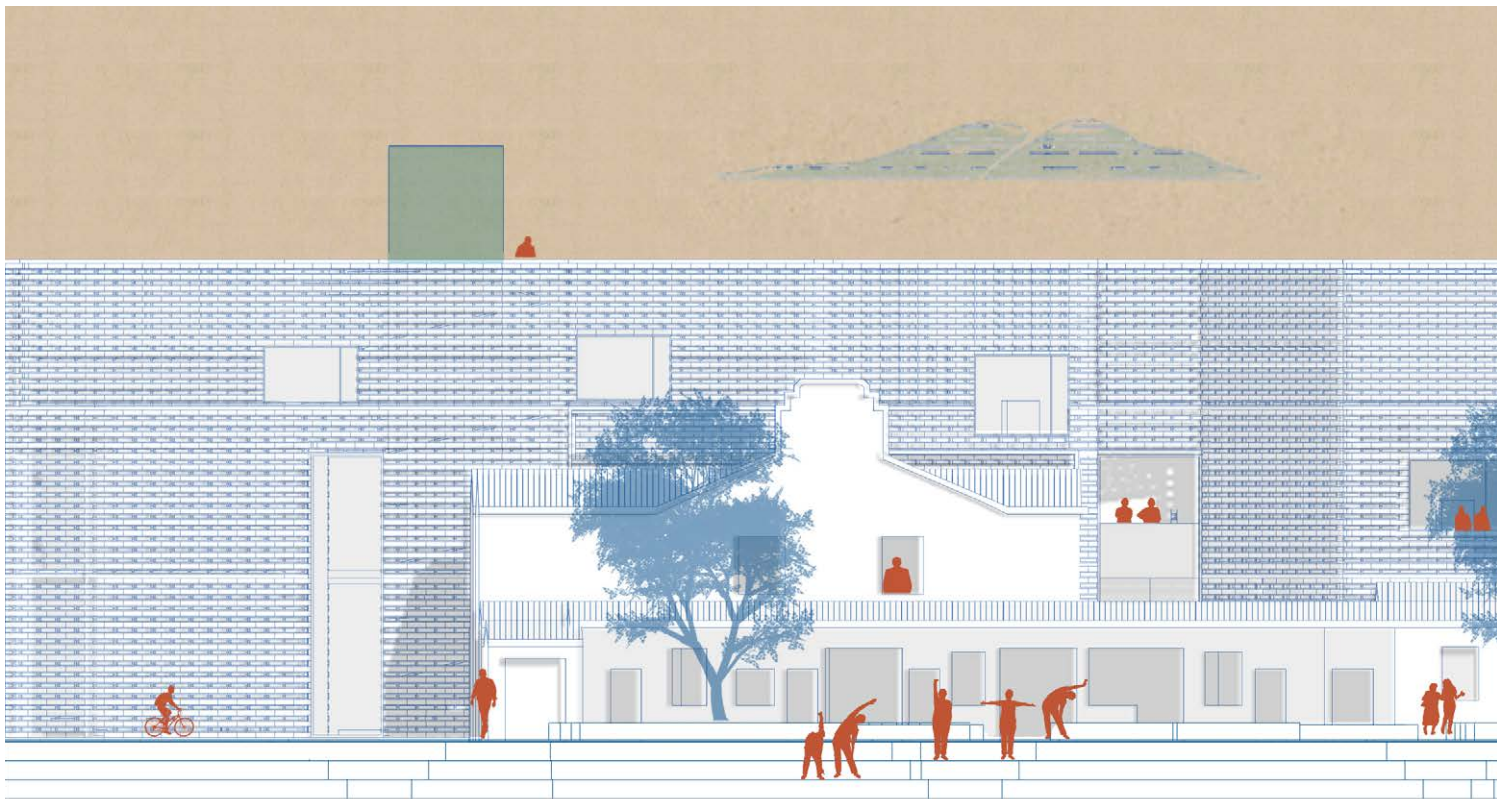
Drawing by the author,scheme of the pocket gardens



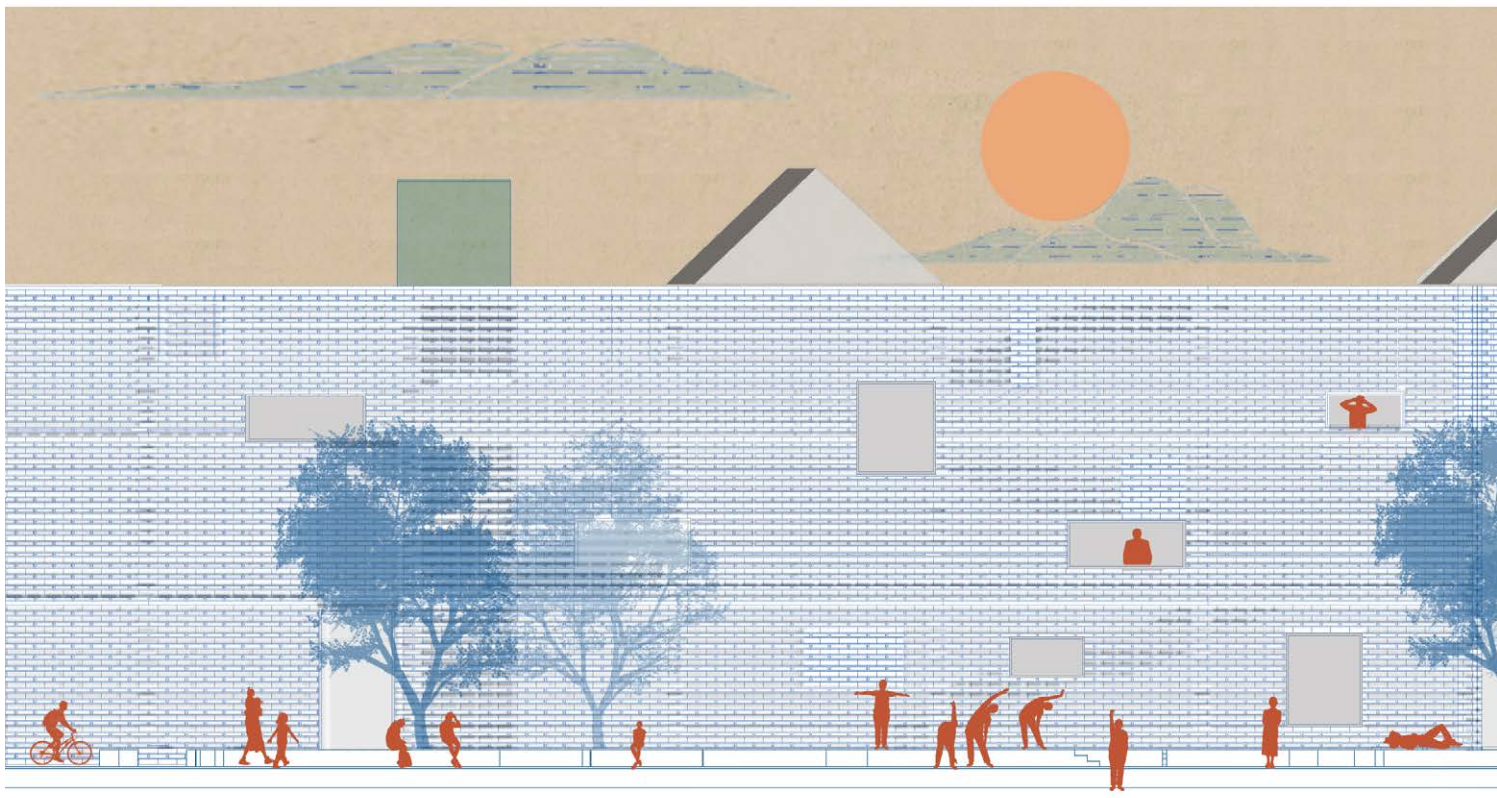
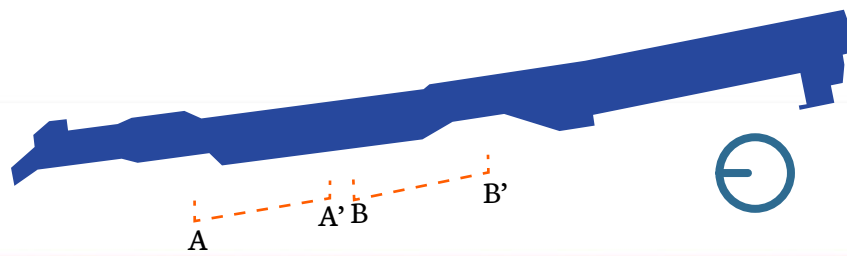
Drawing by the author, scheme of the geothermal system inside the inhabited walls

Permeability and sustainability:
 permeability through the pocket gardens inside the walls and sustainability through geothermal.
 The energy stored in the form of heat beneath the surface of solid earth.

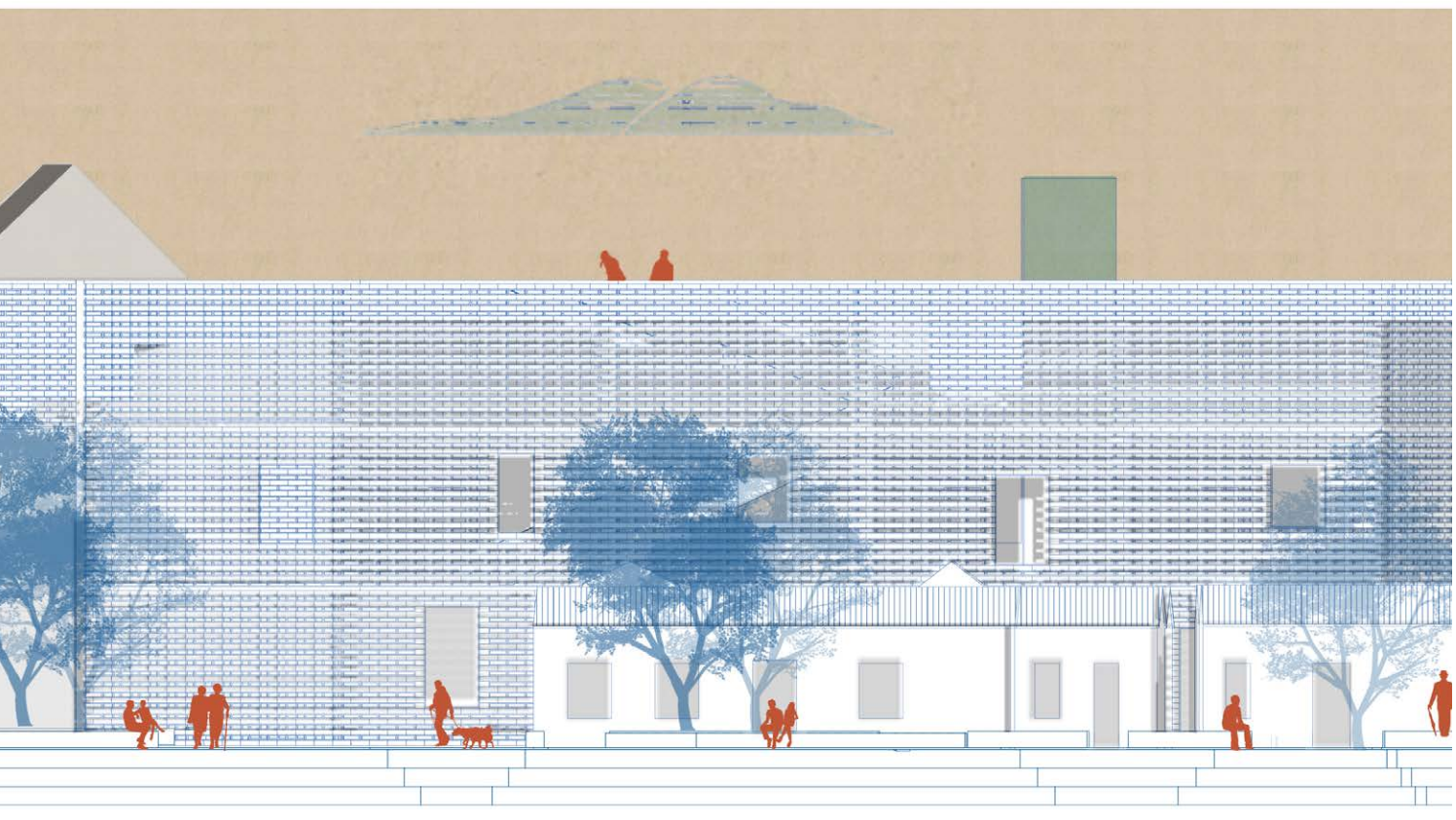
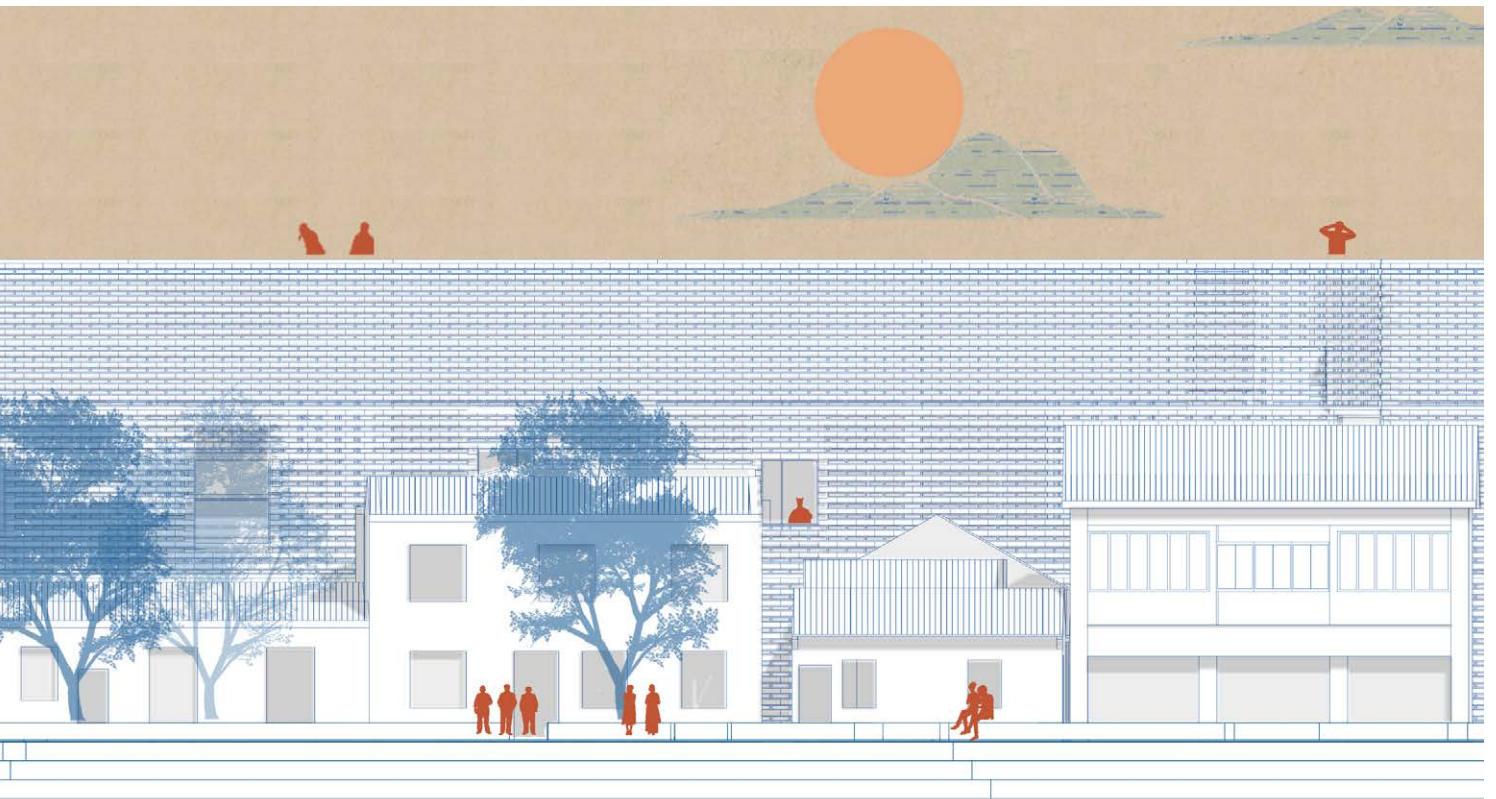
Geothermal district heating could be a good solution to provide stable, sustainable, secure, renewable, and carbon neutral heating, cooling and hot water to homes, businesses and manufacturers as well as municipal buildings like hospitals and schools. Switching to this renewable resource reduces the need to import and burn fossil fuels reducing carbon emissions and making town and cities cleaner and healthier. In the project will be used surface water ponds which will use the body of water as the heat sink. Heat escapes the water through surface evaporation, so the process is closely connected to pond temperature. In winter, when the pond could be frozen, heat transfer is dominated by contact between the loops, the bottom water and the soil surface at the bottom of the pond.

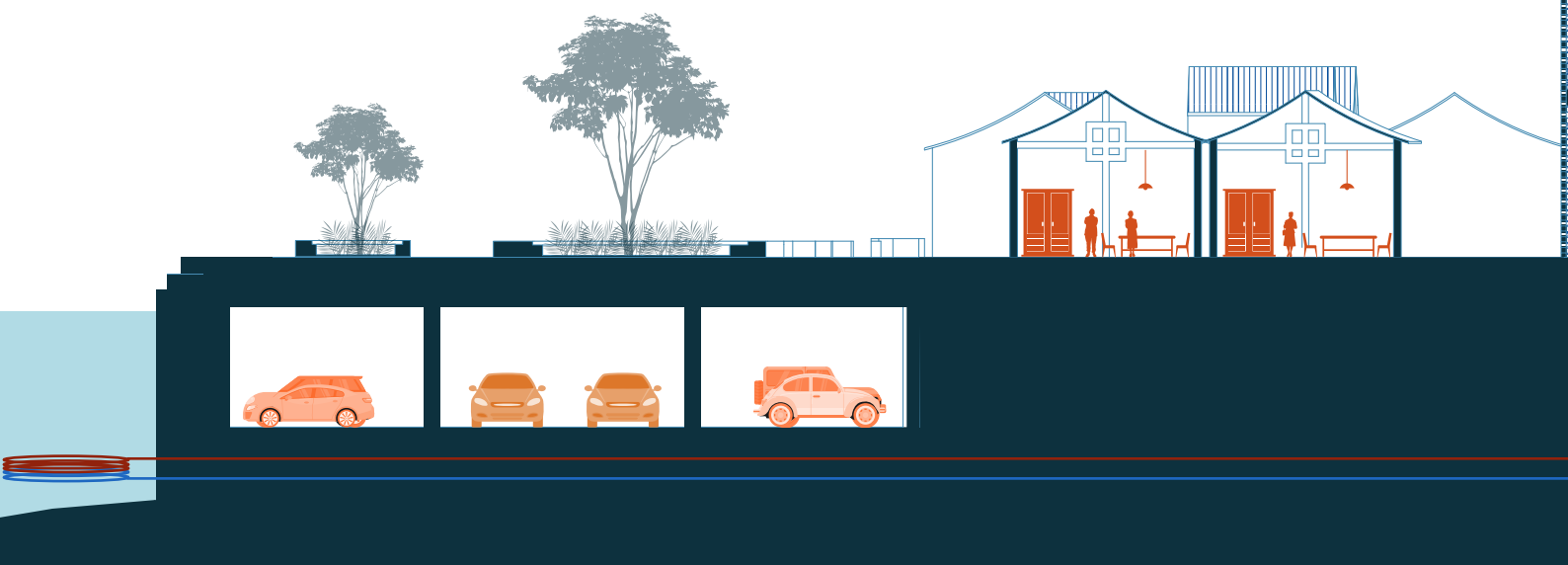


Drawing by the author,elevation AA' 1:200 . Relationship between the inhabited walls, traditional restored buildings, and the new public park on the waterfront.



Drawing by the author,elevation L200 . Relationship between the inhabited walls, traditional restored buildings, and the new public park on the waterfront.



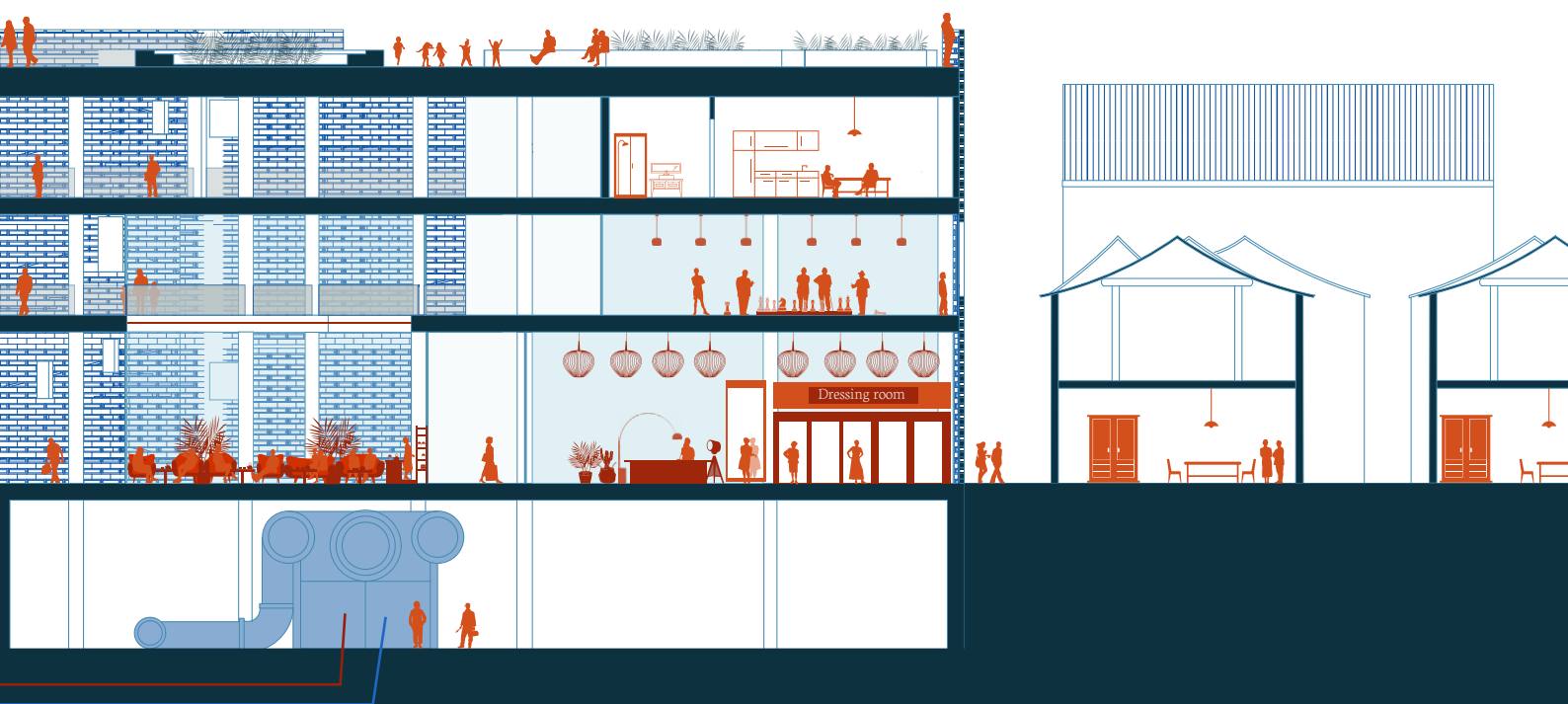


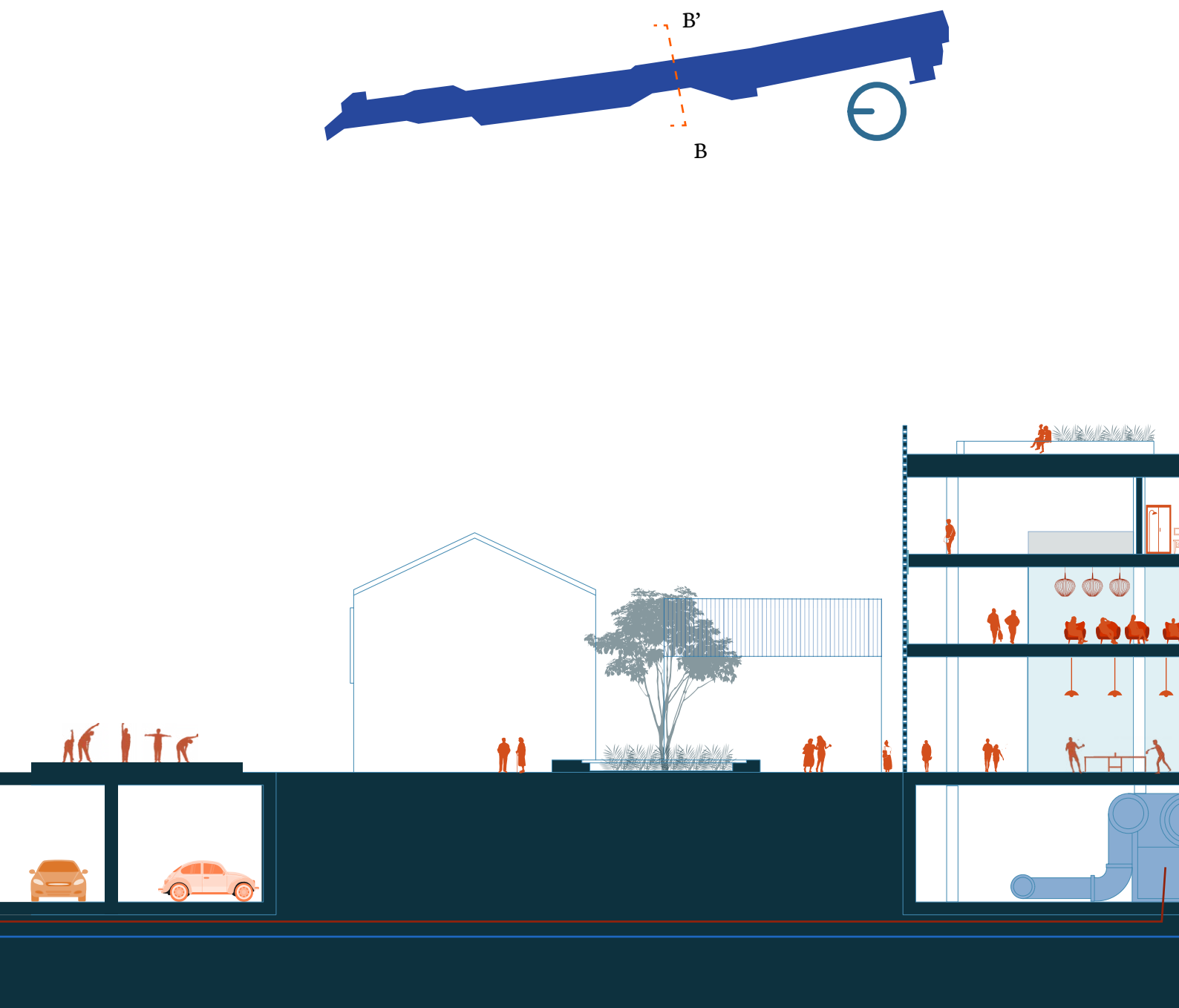
Drawing by the author, cross section A A' 1.200 .



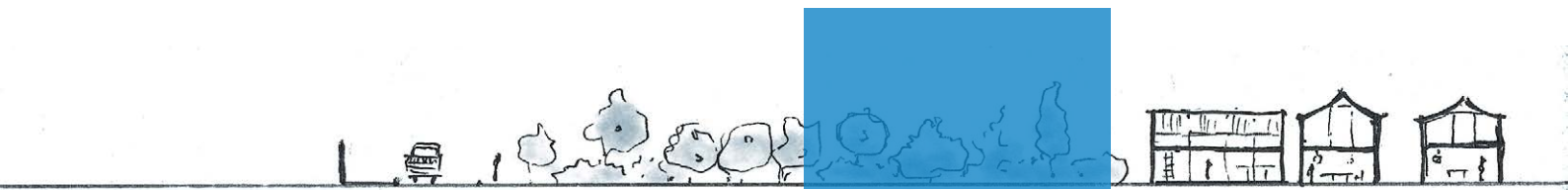
A A'

Drawing by the author, cross sections showing the different conditions and mixture of traditional and non traditional buildings found in the project area.



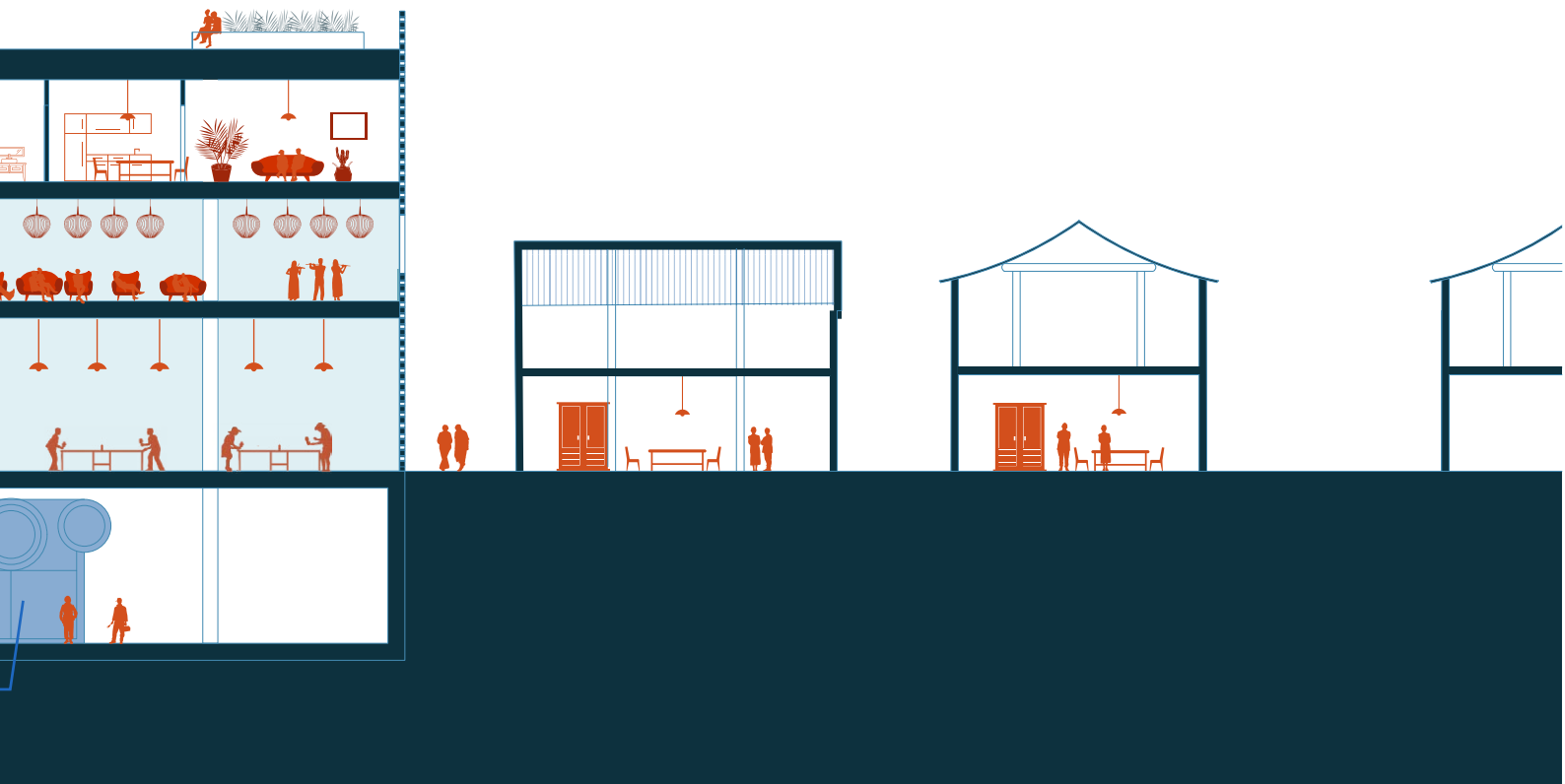


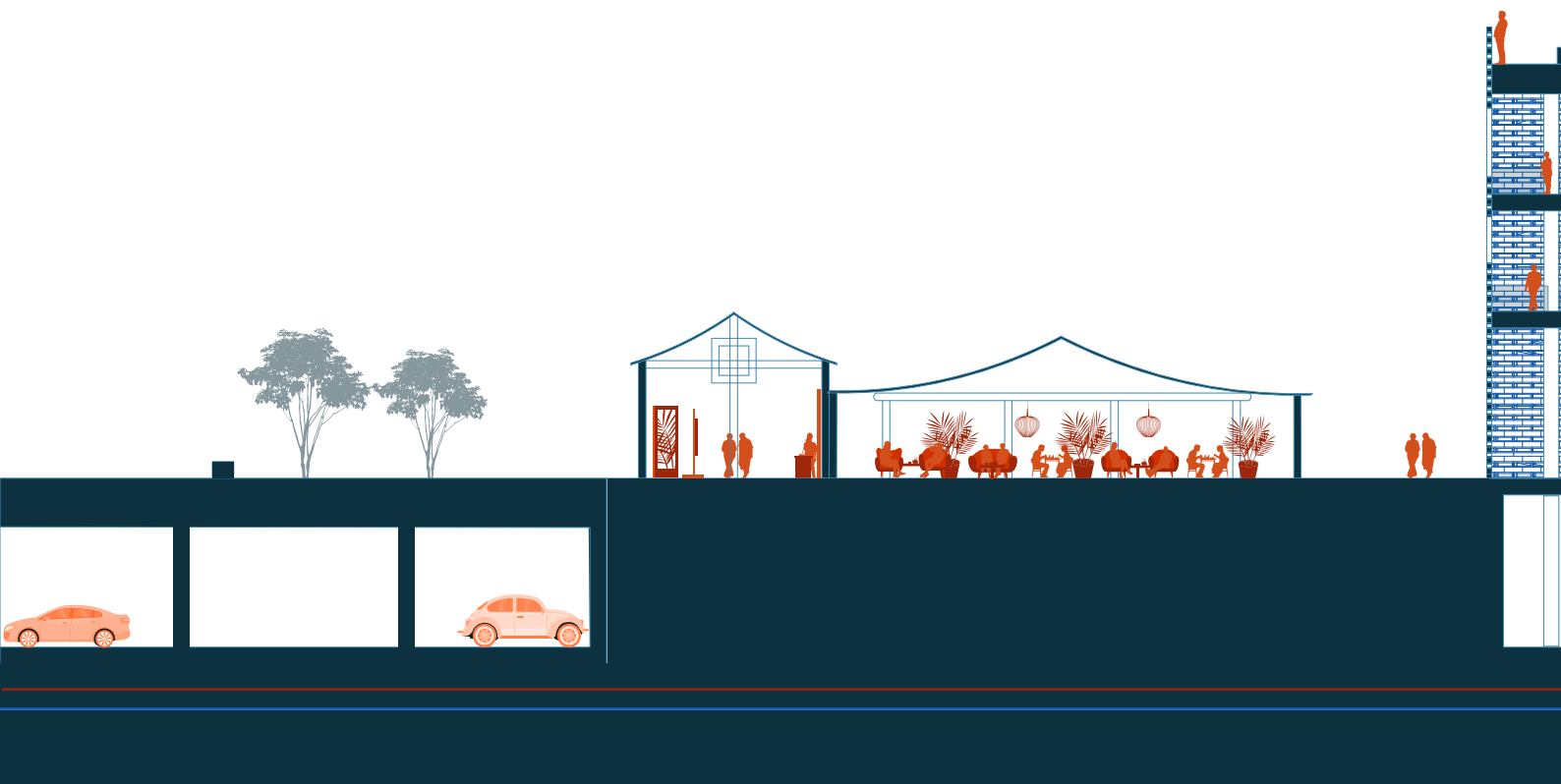
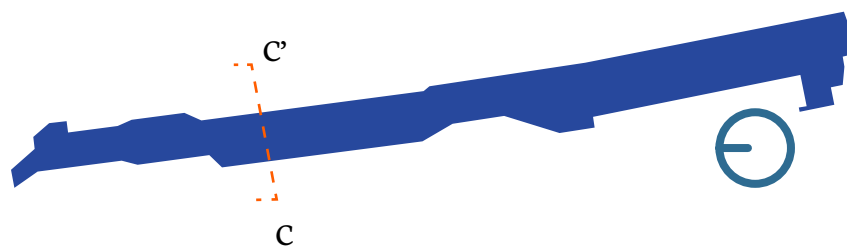
Drawing by the author, cross section BB' 1.200 .



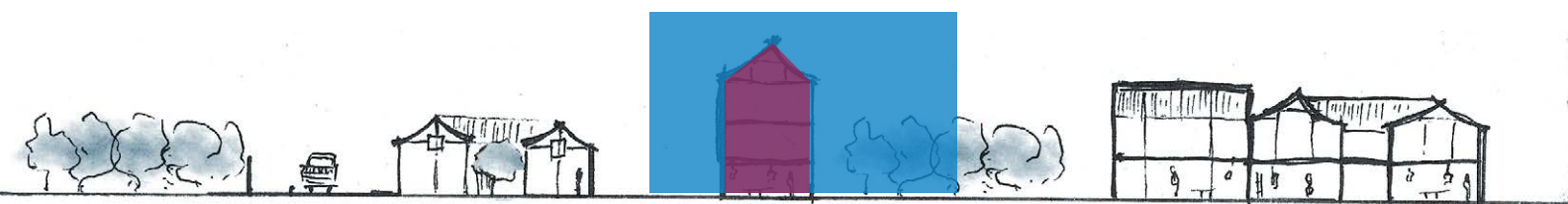
B B'

Drawing by the author, cross sections showing the different conditions and mixture of traditional and non traditional buildings found in the project area.



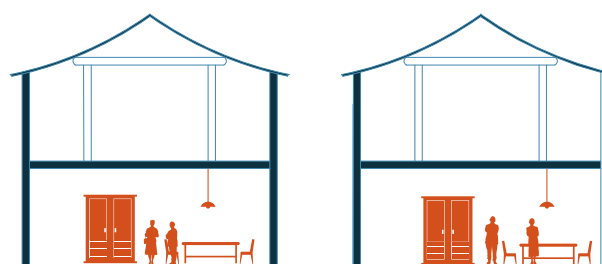
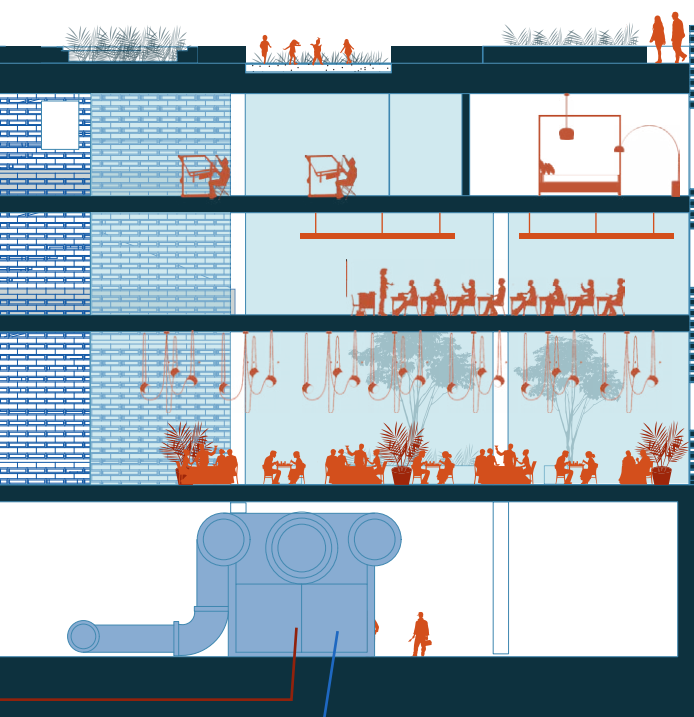


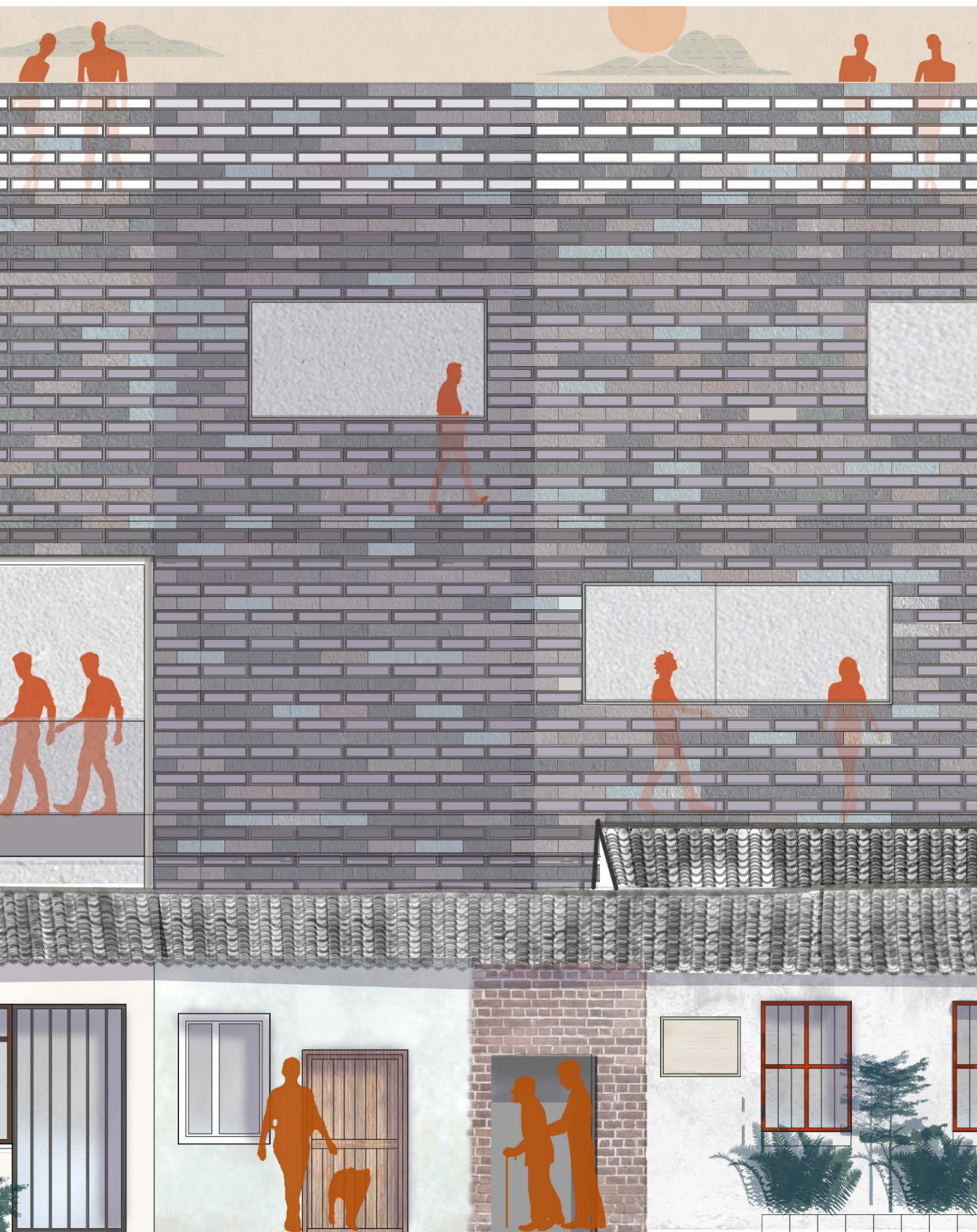
Drawing by the author, cross section CC' 1.200 .



C C'

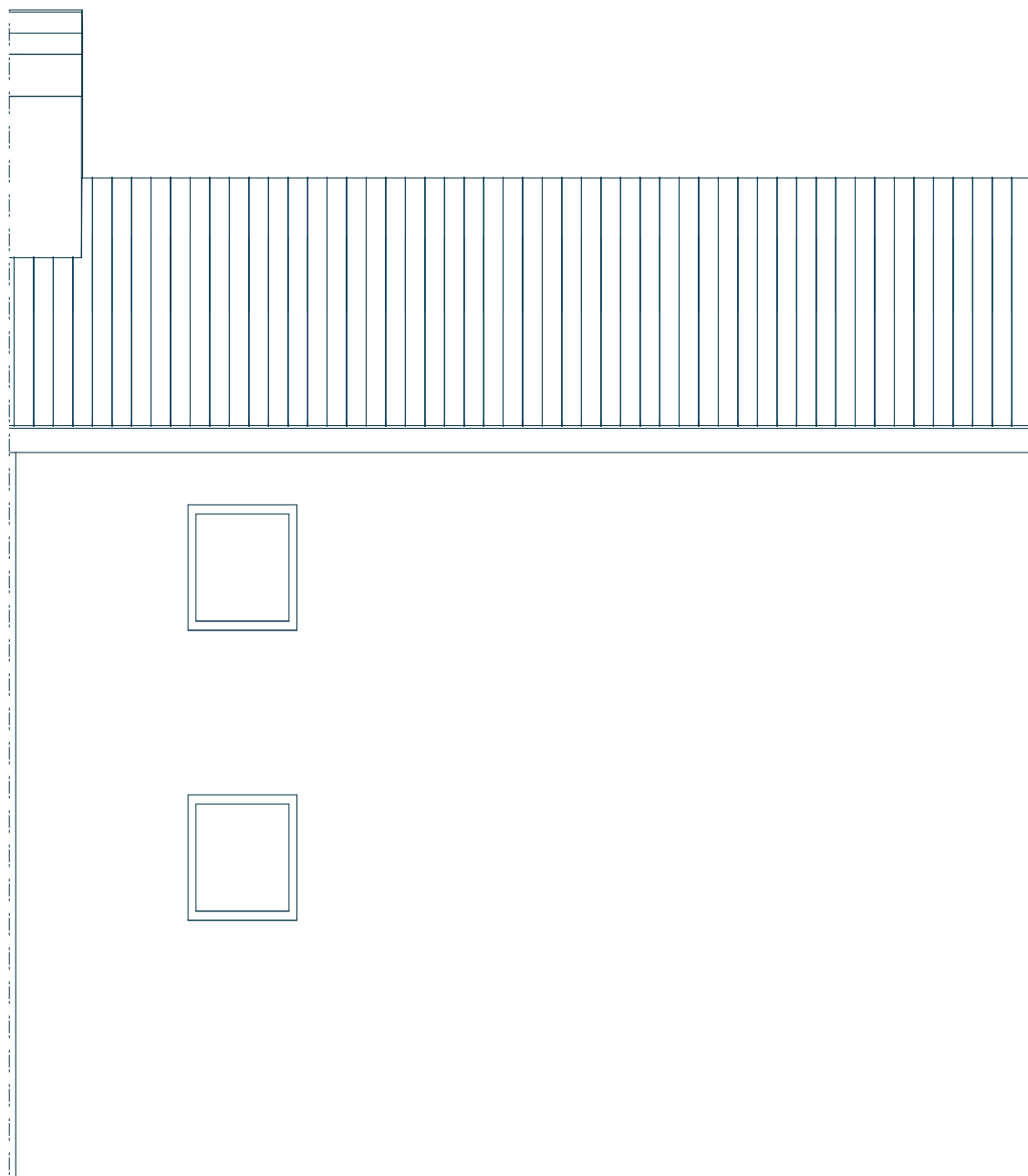
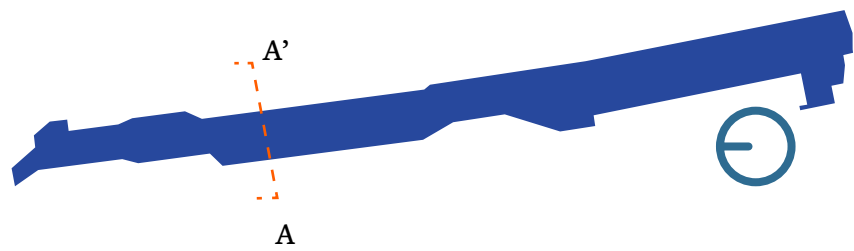
Drawing by the author, cross sections showing the different conditions and mixture of traditional and non traditional buildings found in the project area.

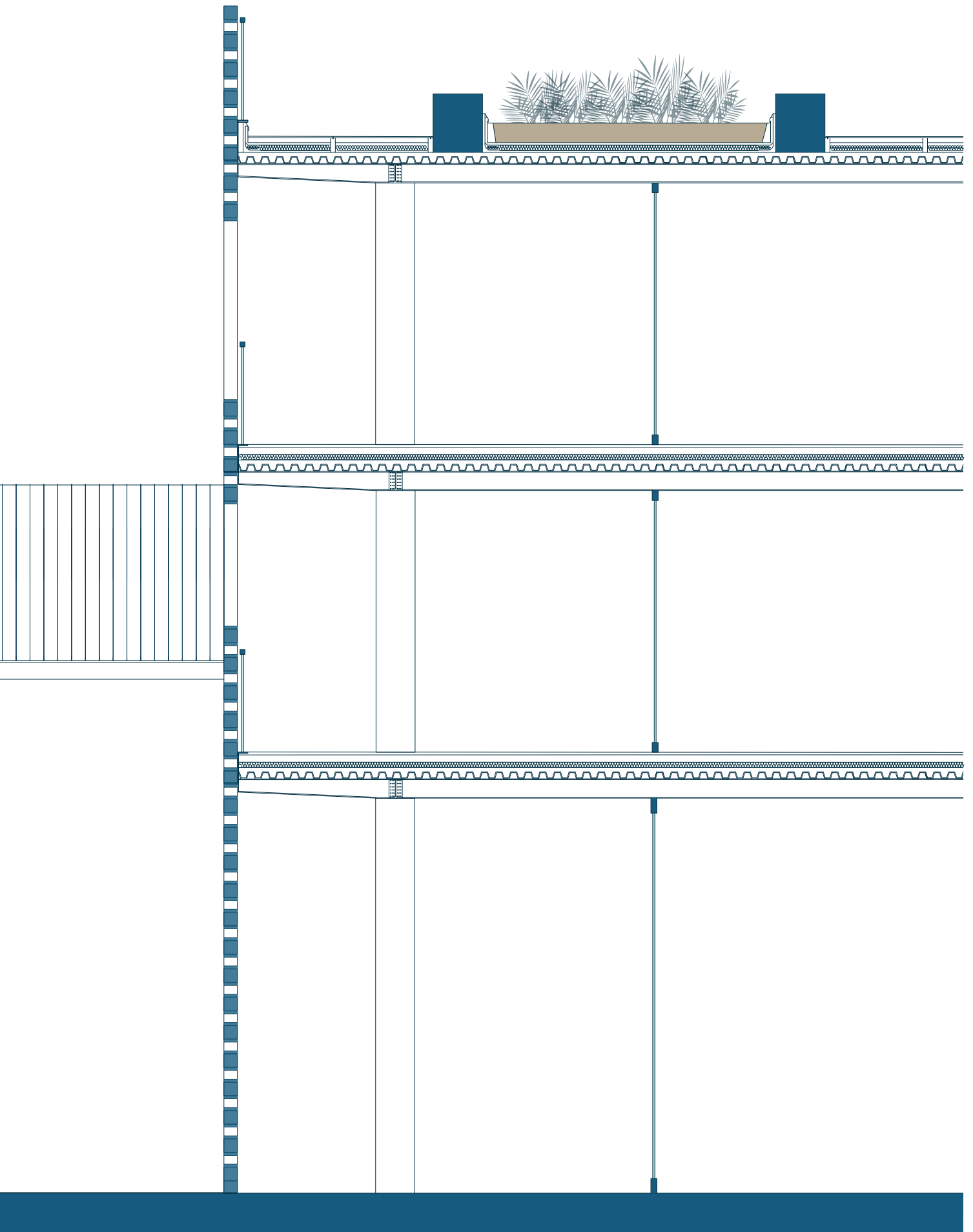




Drawing by the author, elevation 1:50 .









Conclusion



Photo by the author, how will be the future of Changmen community?

Chinese urban society is growing really fast supported by the extraordinary development of Chinese economy. The current economic system created an urban system that has produced new forms of inequality, both social and spatial.

Chinese cities are the results of a fast process of economic restructuring, changing welfare regime and large-scale urban renewal.

This huge development is leading to the creation of a society becoming more unequal and the gap between the rich and the poor continues to widen, leading to a society of urban consumption where consumer citizenship ultimately rests upon the ability to pay and the sense of communities built for people is disappearing. Chinese cities are, indeed, not just the tangible product of the contrast between traditional dwellings and modern buildings (sometimes considered “bizarre” by the Chinese themselves).

This conflict between modernity and local identities is manifested particularly in the historic centers considered often as obstacles to modernization.

In this context, my design project is set up and developed.

I had to comprehend how Chinese culture deals with the concept of memory and, in particular with “cyclical memory” which influences directly every aspects concerning preservation. It has been not an easy task and during the development of my design project I had to “force” my “European approach” to a more suitable way of thinking about the built environment, its demolition and conservation.

The idea to recreate the walls of Changmen as a new infrastructure is strictly related to all these aspects; it was a modern way to intervene but relating to the ancient history of the city.

The inhabited walls evokes the memory of the ancient monuments, but their function is completely brand new: giving a new life to the neighborhood, to avoid both the perpetration of degradation in such a delicate situation and the process of disneyfication that is undergoing in China: the creation of fake monofunctional cities for tourists without a soul or a memory.

In questioning Chinese stakeholders and developers method, I also had to investigate the reasons behind that kind of procedures and how the preservation of Chinese historical city centers is centered on the maximum profit disregarding the communities living in it. My design project develops a programmatic approach which tries to avoid this behaviour and answers to both commercial and community needs.

The ruined walls of the area will be restored in order to create and give the space to a new infrastructure which will be flexible, sustainable and permeable.

The new infrastructure obtained in this range not only meet the needs of the urban plan questioned, but generate new ones that I then destined to the community in particular regarding the ground floor.

While the functions could vary and change within the various spaces, the skin of the building will always remain the same.

The continuity of the façade indeed allowed me to create a highly permeable structure both physically and in perception as users approach the building.

My effort was not to totally disrupt the urban fabric even knowing that what I was going to insert is a volume that was demolished centuries ago in an area that has subsequently stratified.

The lack of information and the impossibility due to the presence of a construction site in progress have made it impossible for me to comprehend the entire area and led me to carry on some assumptions.

These abstractions, however, can be considered part of the programmatic method, because what I would like to convey with my work is a different design line, which could be implemented around all the Gusu district, which is extremely varied in building types and case studies.

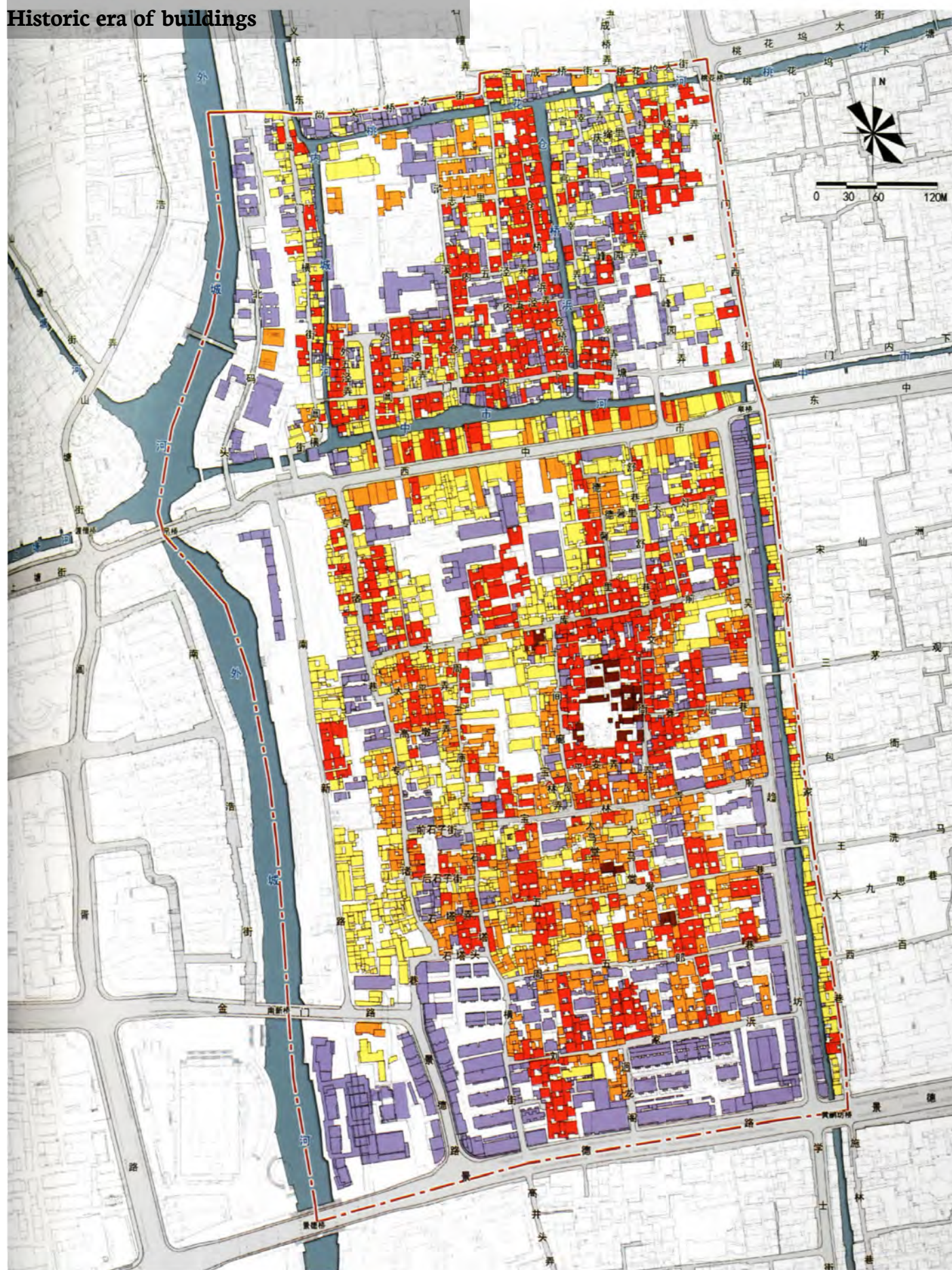
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Appendix

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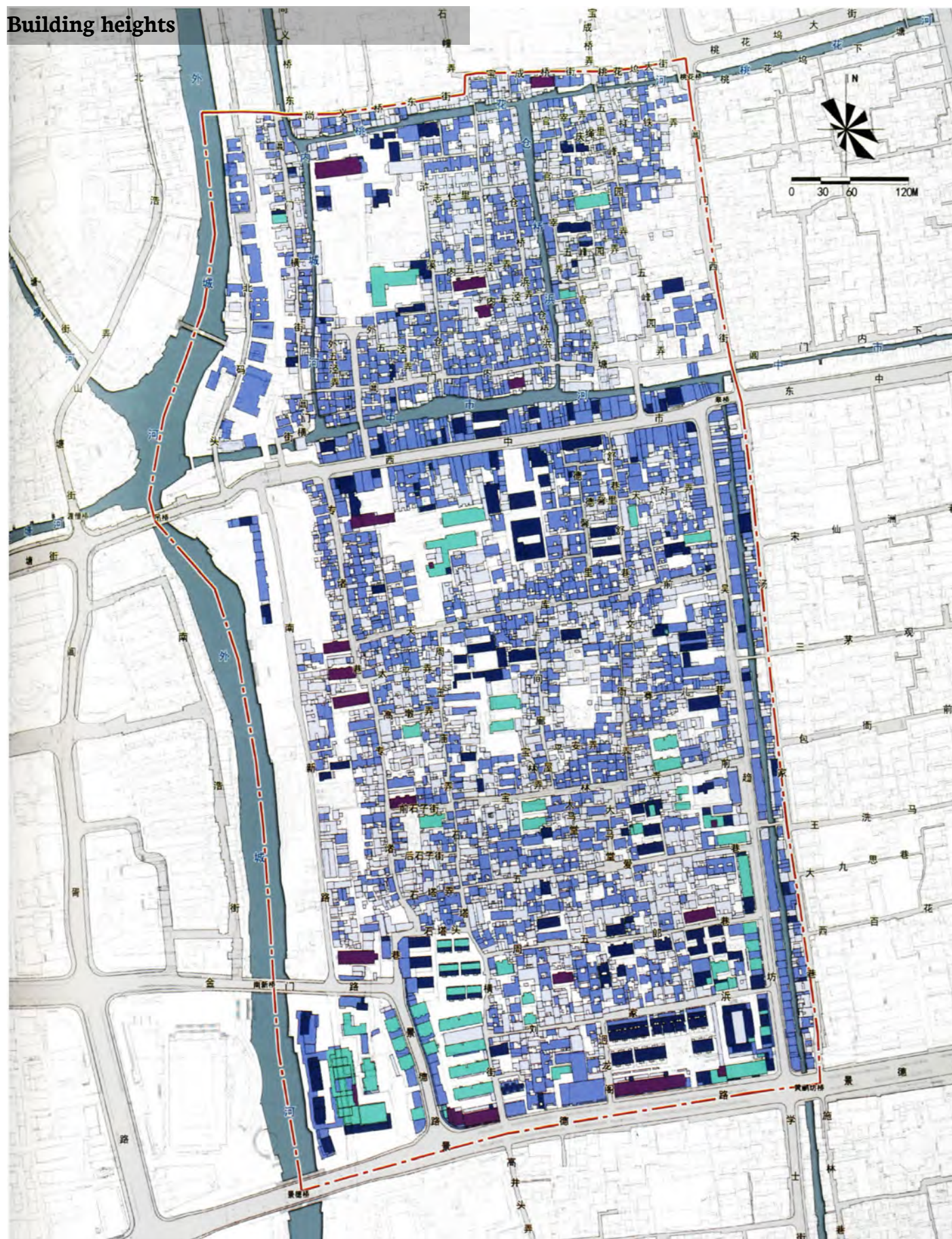
- | | | | |
|---|---|---|-------------------------------------|
|  | National Historical Relic Protection Site (1) |  | Registered Historical Relics (24) |
|  | Provincial Historical Relic Protection Site (2) |  | Other Traditional Buildings |
|  | Municipal Historical Relic Protection Site (7) |  | Nontraditional Buildings |
|  | Control Protected Buildings (18) |  | Perimeter of the Protected District |

Historic era of buildings



- Buildings of Ming Dynasty (0.93%)
- Buildings of Qing Dynasty (22.91%)
- Buildings of Republic of China (15.01%)
- Buildings From 1949-1979 (25.99%)
- Buildings After 1979 (35.17%)
- Perimeter of the Protected District

Building heights



- 1-Floor Building
- 2-Floor Building
- 3-Floor Building
- 4-Floor Building
- 5-Floor and Above Building
- Perimeter of the Protected District

Conservation quality - traditional



Good Quality (2.45%)

Medium Quality (42.02%)

Bad Quality (25.44%)

Very Bad Quality (1.31%)

Nontraditional Buildings (28.77%)

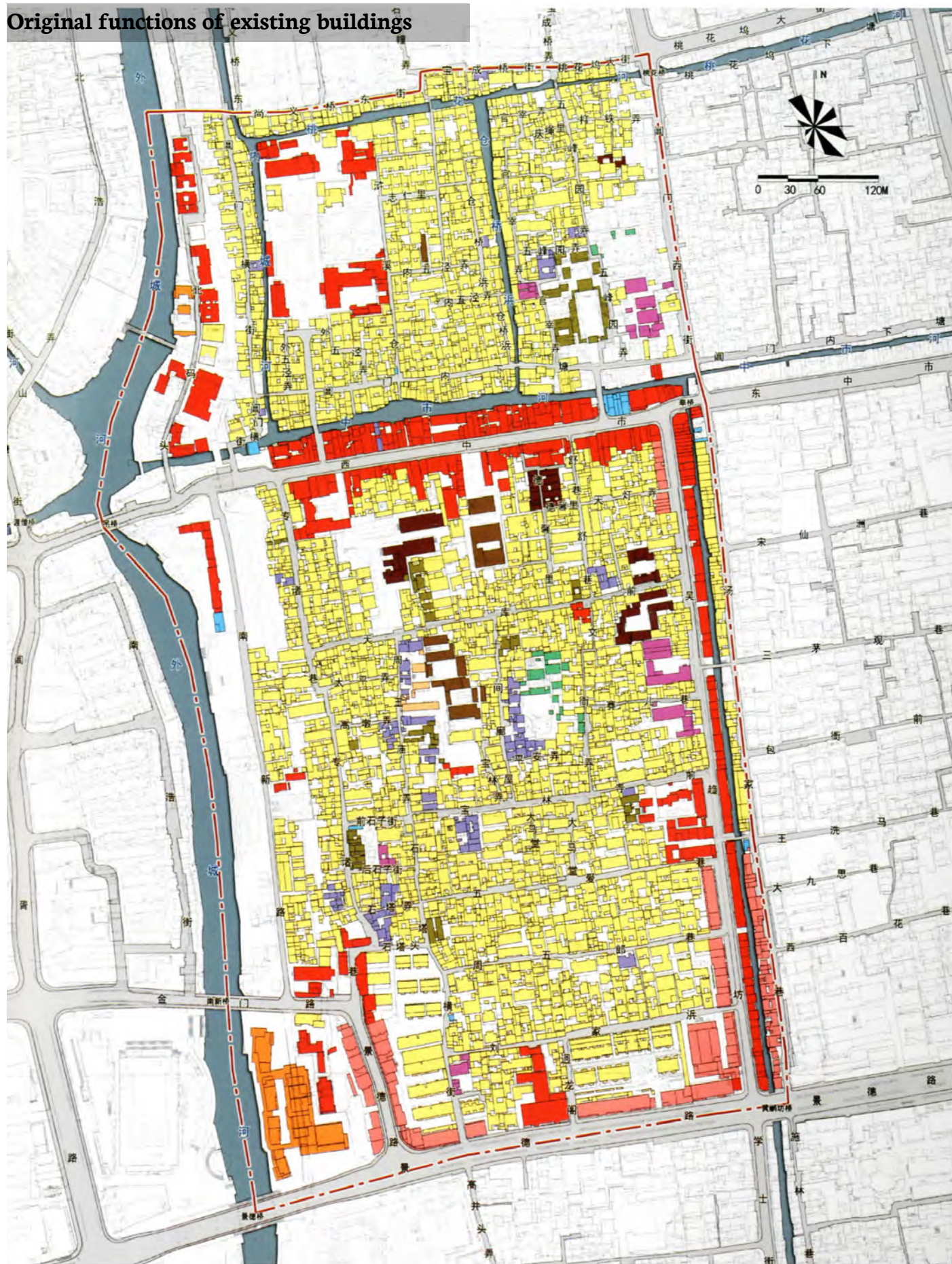
Perimeter of the Protected District

Conservation quality - nontraditional



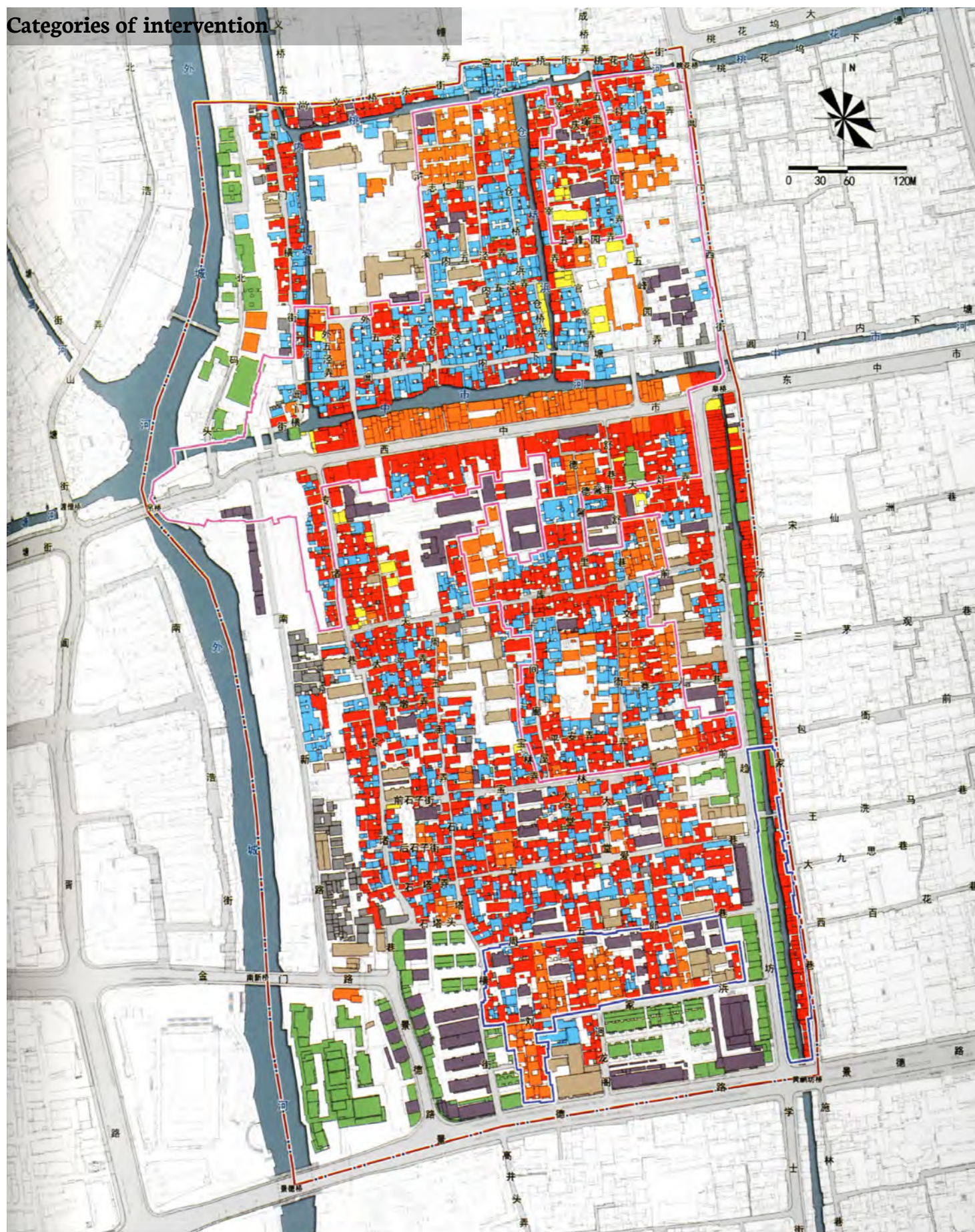
- Good Quality (27.19%)
- Bad Quality (1.59%)
- Traditional Building (71.23%)
- Perimeter of the Protected District

Original functions of existing buildings



- | | | | |
|--|---|---|--|
| Residential Buildings | Public Service Buildings | Religious Buildings | Perimeter of the Protected District |
| Commercial Buildings | Educational Facilities | Private Gardens | |
| Office Buildings | Commercial & Residential Mixed | Industrial Buildings | |
| Cultural Buildings | Guild Buildings | Municipal Administration Buildings | |

Categories of intervention



Traditional Buildings

- Buildings to be Maintained (1.09%)
- Buildings to be Repaired (35.86%)
- Buildings to be Renovated (19.02%)
- Buildings that could be Demolished (3.72%)

Nontraditional Buildings

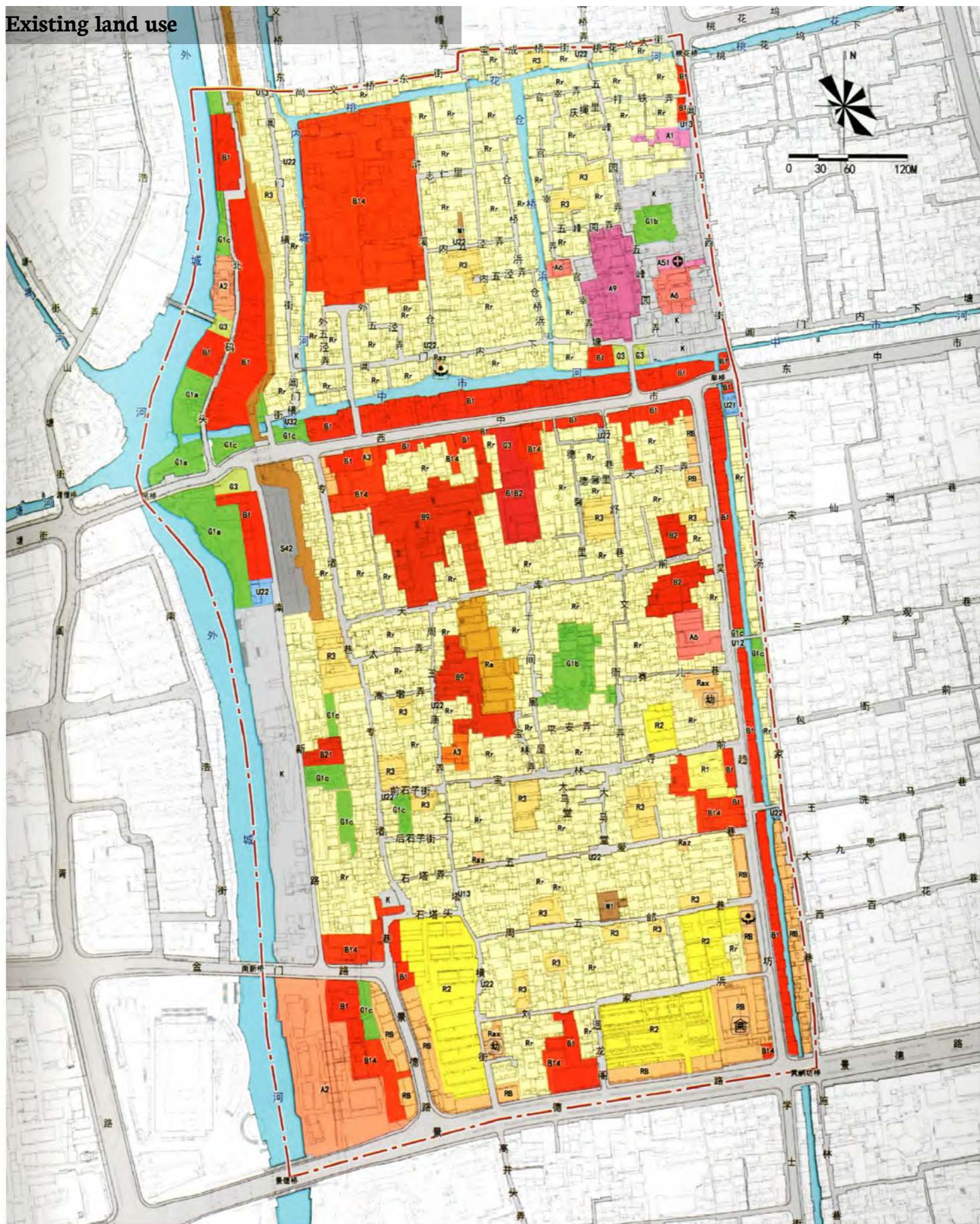
- Buildings to be Preserved (10.83%)
- Buildings to be Renovated (10.37%)
- Buildings that could be Demolished (7.56%)

Historical Relics

- Control Protection Buildings & Registered Historical Relics (11.55%)







- Perimeter of the Protected Zone of Cultural Heritage
- Perimeter of the Protected Historical Zone
- Perimeter of the Protected District

Existing land use

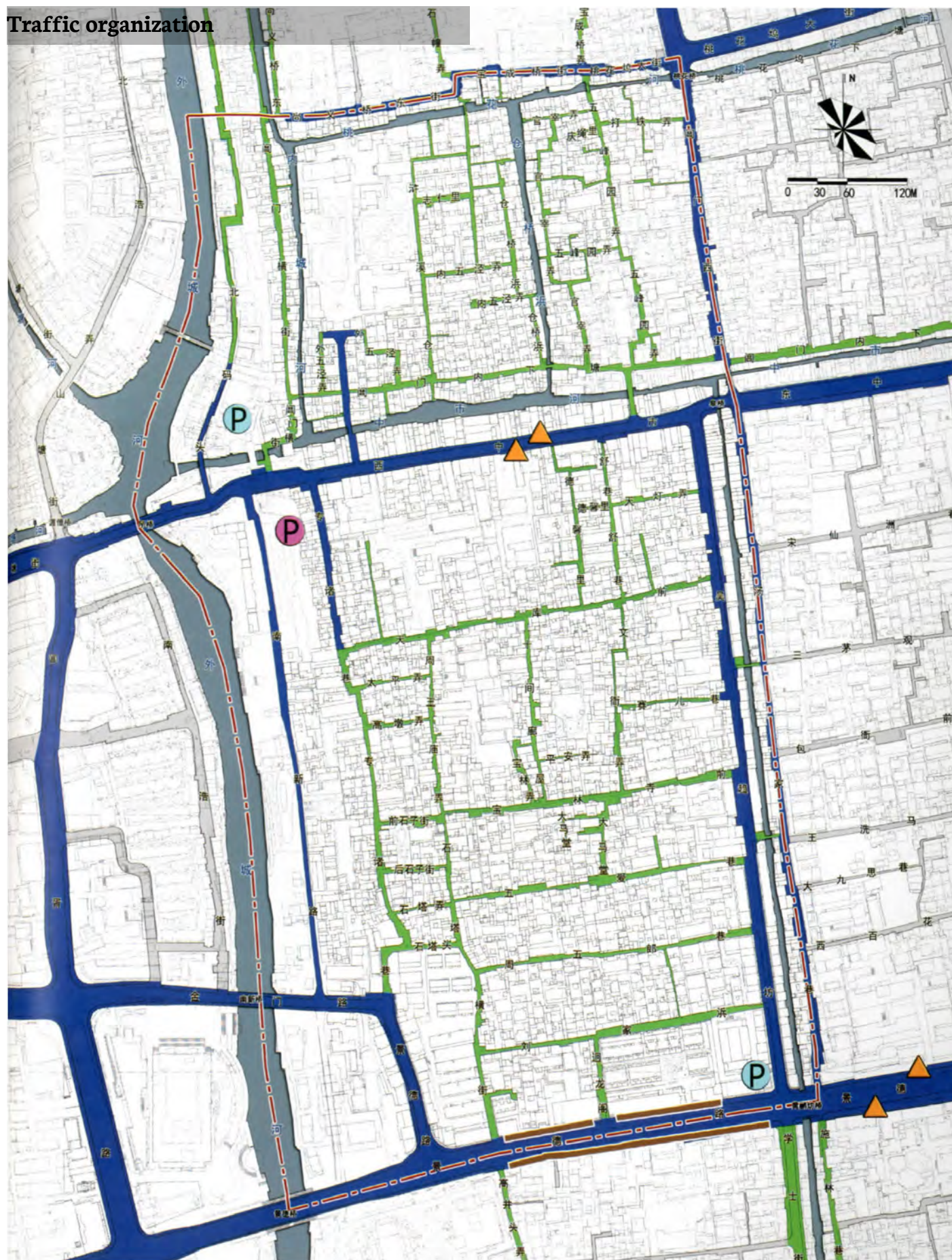


Rr	Traditional Residences	Rax	Community Center Facilities Area	A3	Education & Research Facilities Area	B1	Commercial Facilities Area	B9	Other Service Facilities Area	U13	Gas Supply Facilities Area	G1b	Special Parks Area		City Wall
R1	Residential Area Class 1	Ra	Other Residential Area	A51	Medical Facilities Area	B14	Hotel Facilities Area	M1	Industrial Area Class 1	U21	Pump & Sewage Treatment Facilities Area	G1c	Green Spaces Area		Perimeter of the Protected District
R2	Residential Area Class 2	RB	Residential & Commercial Mixed Used Area	A6	Social Welfare Facilities Area	B1B2	Commercial & Office Mixed Used Area		City Roads Area	U22	Environmental Sanitation Facilities Area	G3	Plaza Area		
R3	Residential Area Class 3	A1	Administration Facilities Area	A7	Cultural Relic and Historical Site Area	B2	Financial, Media & Service Facilities Area	S42	Social Parking Area	U32	Flood Control Area	K	Reserved Area		
Rax	Nursery and Kindergarten	A2	Cultural Facilities Area	A9	Religion Facilities Area	B21	Financial & Insurance	U12	Power Supply Facilities Area	G1a	General Parks Area		Water Zone		

This map illustrates the existing road network in the study area, categorized by hierarchy. Major roads are shown in red, including the Ring Road (外环线) and the Expressway (外环线). Secondary roads are shown in orange, and tertiary roads are shown in purple. The map also displays the Yellow River (黄河) and the Jin River (金河). A scale bar indicates distances from 0 to 120 meters, and a north arrow is present in the top right corner.

- | | | | |
|---|-------------------------|---|-------------------------------------|
|  | Secondary Arterial Road |  | Lane |
|  | Branch Road |  | Perimeter of the Protected District |
|  | Street | | |
|  | Alley | | |

Traffic organization



- | | |
|-------------------------------|-------------------------------------|
| Car Mobility | Underground Public Parking Lots |
| Pedestrian and Cycle Mobility | Parking along the Street |
| Bus Stops | Perimeter of the Protected District |
| Ground Public Parking Lots | |

Perimeters of protection












江门历史文化街区保护范围：18.66公顷

江门历史文化街区建设控制地带：34.94公顷

吴趋坊-汤家巷历史地段保护范围：0.87公顷










刘家浜历史地段保护范围：2.15公顷

Map labels include: 江门古遗址 (Jiamen Ancient Site), 江门古庙 (Jiamen Ancient Temple), 江门古教堂 (Jiamen Ancient Church), 江门古民居 (Jiamen Ancient Residences), 江门古公共建筑 (Jiamen Ancient Public Buildings), 江门古街巷 (Jiamen Ancient Streets and Alleys), 江门古桥梁 (Jiamen Ancient Bridges), 江门古码头 (Jiamen Ancient Wharves), 江门古城墙 (Jiamen Ancient City Wall), 江门古河道 (Jiamen Ancient River), 江门古水井 (Jiamen Ancient Wells), 江门古坟墓 (Jiamen Ancient Graves), 江门古碑刻 (Jiamen Ancient Inscriptions), 江门古石刻 (Jiamen Ancient Stone Carvings), 江门古书画 (Jiamen Ancient Paintings and Calligraphy), 江门古书籍 (Jiamen Ancient Books), 江门古档案 (Jiamen Ancient Archives), 江门古地图 (Jiamen Ancient Maps), 江门古照片 (Jiamen Ancient Photos), 江门古实物 (Jiamen Ancient Objects), 江门古遗址 (Jiamen Ancient Site), 江门古庙 (Jiamen Ancient Temple), 江门古教堂 (Jiamen Ancient Church), 江门古民居 (Jiamen Ancient Residences), 江门古公共建筑 (Jiamen Ancient Public Buildings), 江门古街巷 (Jiamen Ancient Streets and Alleys), 江门古桥梁 (Jiamen Ancient Bridges), 江门古码头 (Jiamen Ancient Wharves), 江门古城墙 (Jiamen Ancient City Wall), 江门古河道 (Jiamen Ancient River), 江门古水井 (Jiamen Ancient Wells), 江门古坟墓 (Jiamen Ancient Graves), 江门古碑刻 (Jiamen Ancient Inscriptions), 江门古石刻 (Jiamen Ancient Stone Carvings), 江门古书画 (Jiamen Ancient Paintings and Calligraphy), 江门古书籍 (Jiamen Ancient Books), 江门古档案 (Jiamen Ancient Archives), 江门古地图 (Jiamen Ancient Maps), 江门古照片 (Jiamen Ancient Photos), 江门古实物 (Jiamen Ancient Objects).

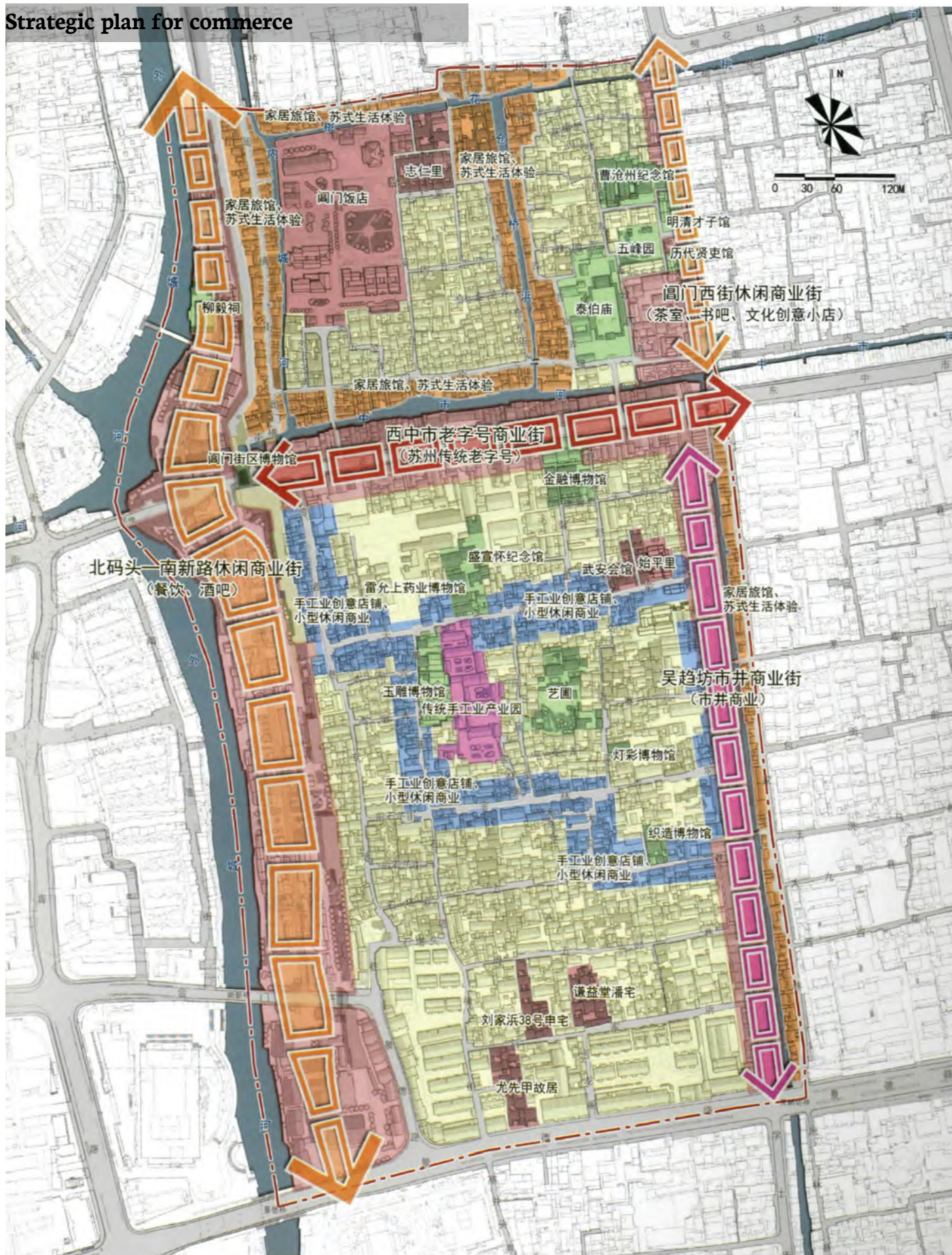
- | | | | | | |
|---|---|---|---|---|---|
|  | National Historical Relic Protection Site |  | Registered Historical Relics |  | Perimeter of the Protected Historical Zone |
|  | Provincial Historical Relic Protection Site |  | Other Traditional Buildings |  | The Construction Control Zone of the Historical Buildings and Sites |
|  | Municipal Historical Relic Protection Site |  | The Construction Control Zone of Historic Relic Protection Site and Control Protected Buildings |  | Perimeter of the Protected District |
|  | Control Protection Buildings |  | Perimeter of the Protected Zone of Cultural Heritage | | |












Height control plan



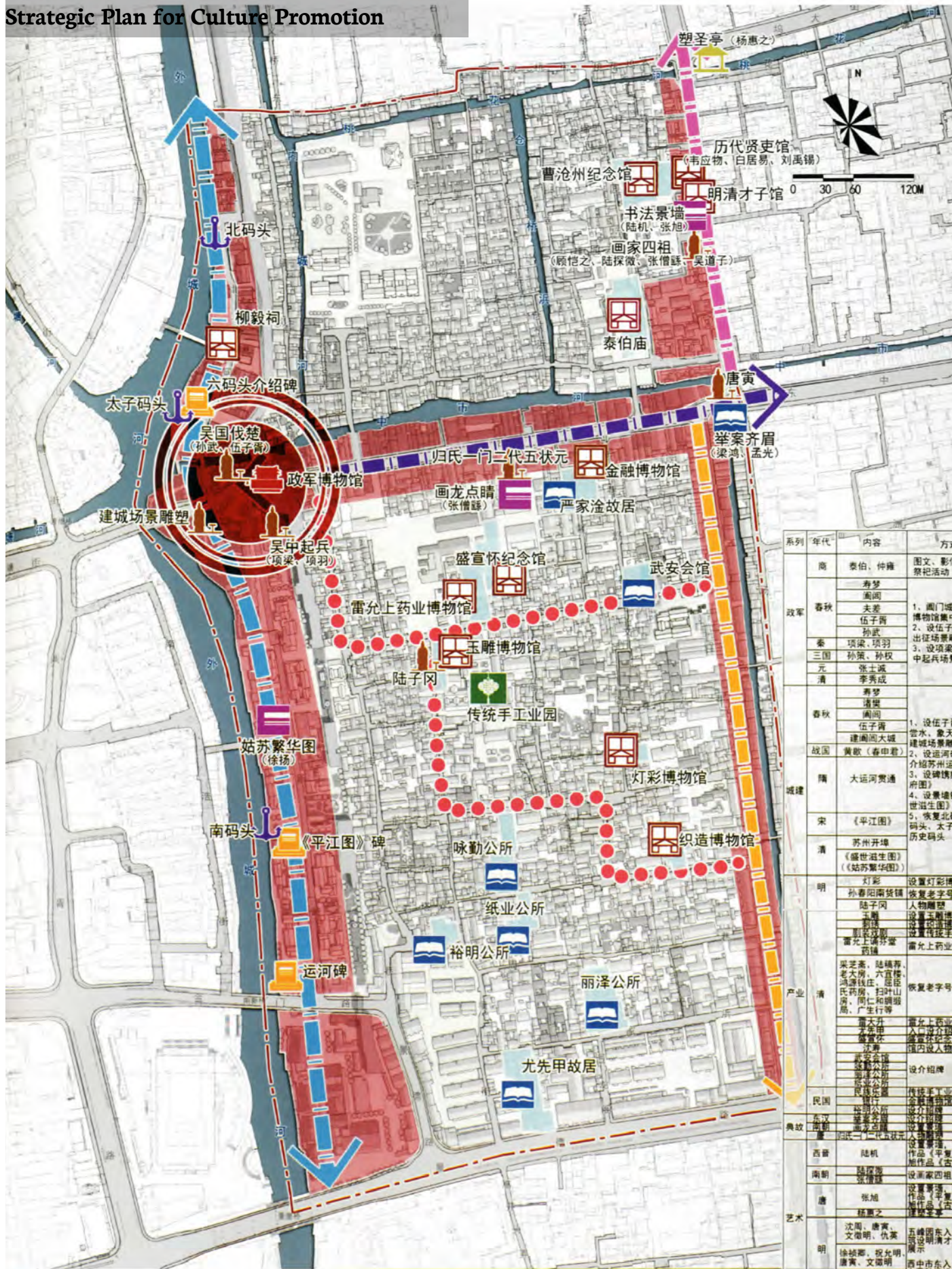
- | | | | |
|--|--|---|---|
| <p> The renovation of traditional residences and private houses should maintain the original storeys. The gutter's height of 1-floor building should not exceed 2.8m, the ridge's height should be within 5.8m; The gutter's height of 2-floor building should not exceed 5.8m, the ridge's height should be within 8.8m; If the original building's height exceed the height limit, its renovation can maintain the height; Other newly constructed or renovated buildings should have gutter's height within 5.8m, the ridge's height within 8.8m.</p> | <p> The renovation of traditional residences and private houses should maintain the original storeys. The gutter's height of 1-floor building should not exceed 2.8m, the ridge's height should be within 5.8m; The gutter's height of 2-floor building should not exceed 5.8m, the ridge's height should be within 8.8m; If the original building's height exceed the height limit, its renovation can maintain the height; Other newly constructed or renovated buildings should have gutter's height within 9m, the ridge's height within 12m.</p> | <p> The gutter's height of newly constructed and renovated buildings along the waterfront should not exceed 5.8m, the ridge's height should be within 8.8m</p> <p> Maintain the Original Height</p> <p> City wall and Historical Remains</p> | <p> Perimeter of the Protected Zone of Cultural Heritage</p> <p> Perimeter of the Protected Historical Zone</p> <p> The Construction Control Zone of the Historical Buildings and Sites</p> <p> Perimeter of the Protected District</p> |
|--|--|---|---|

Strategic plan for commerce



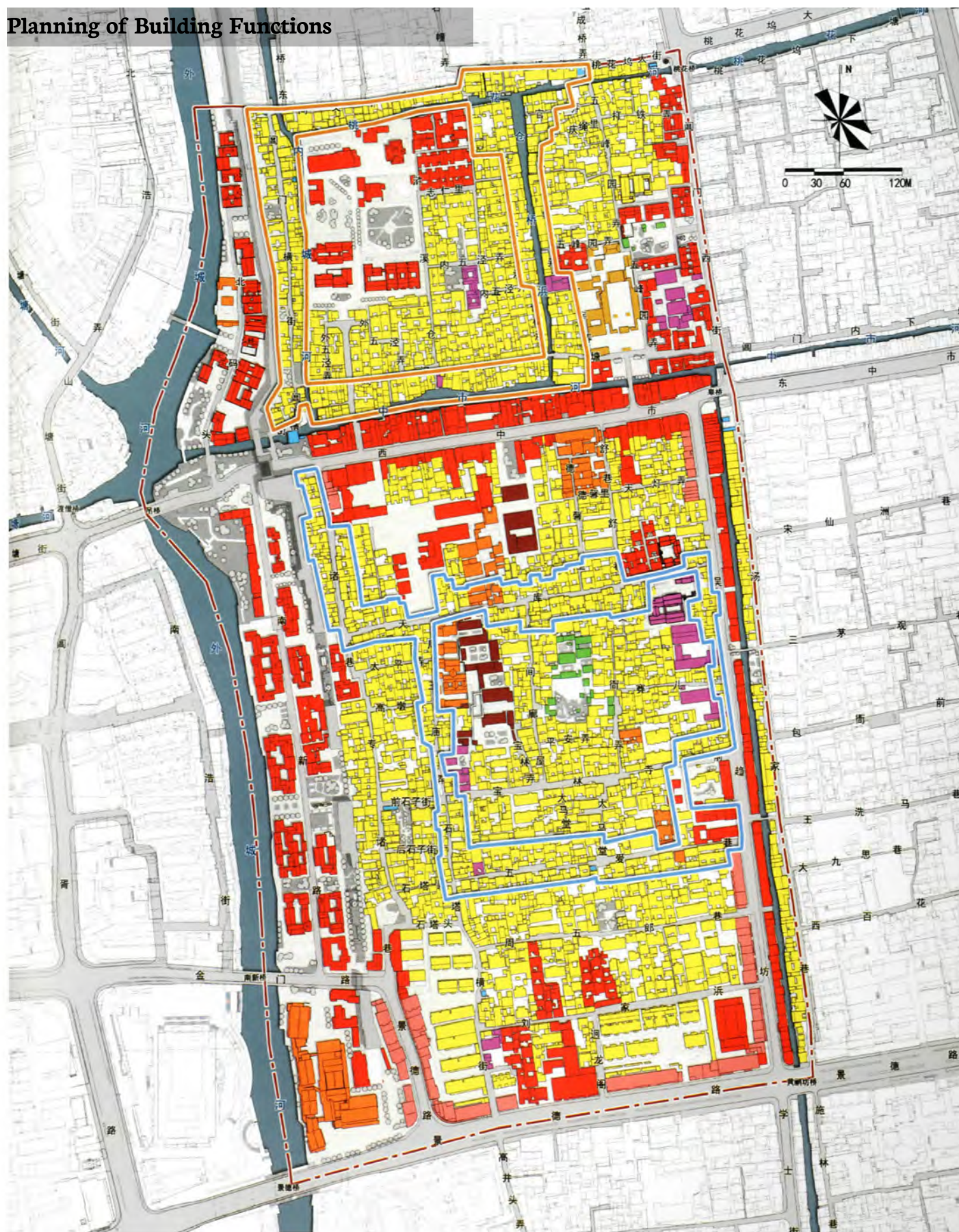
- | | | | | | |
|---|--|---|--|---|---|
|  | Businesses with Characteristic Features |  | Main Tourist Spots |  | Commercial Streets with Historical Brands |
|  | Hotels with Characteristic Features |  | Traditional Handicraft Industrial Park |  | Commercial Streets with Markets |
|  | Residence Hotels Characterized by Suzhou Lifestyle |  | Residential Areas |  | Perimeter of the Protected District |
|  | Handicraft Stores, Small Recreational Activities |  | Recreational Commercial Streets | | |

Strategic Plan for Culture Promotion



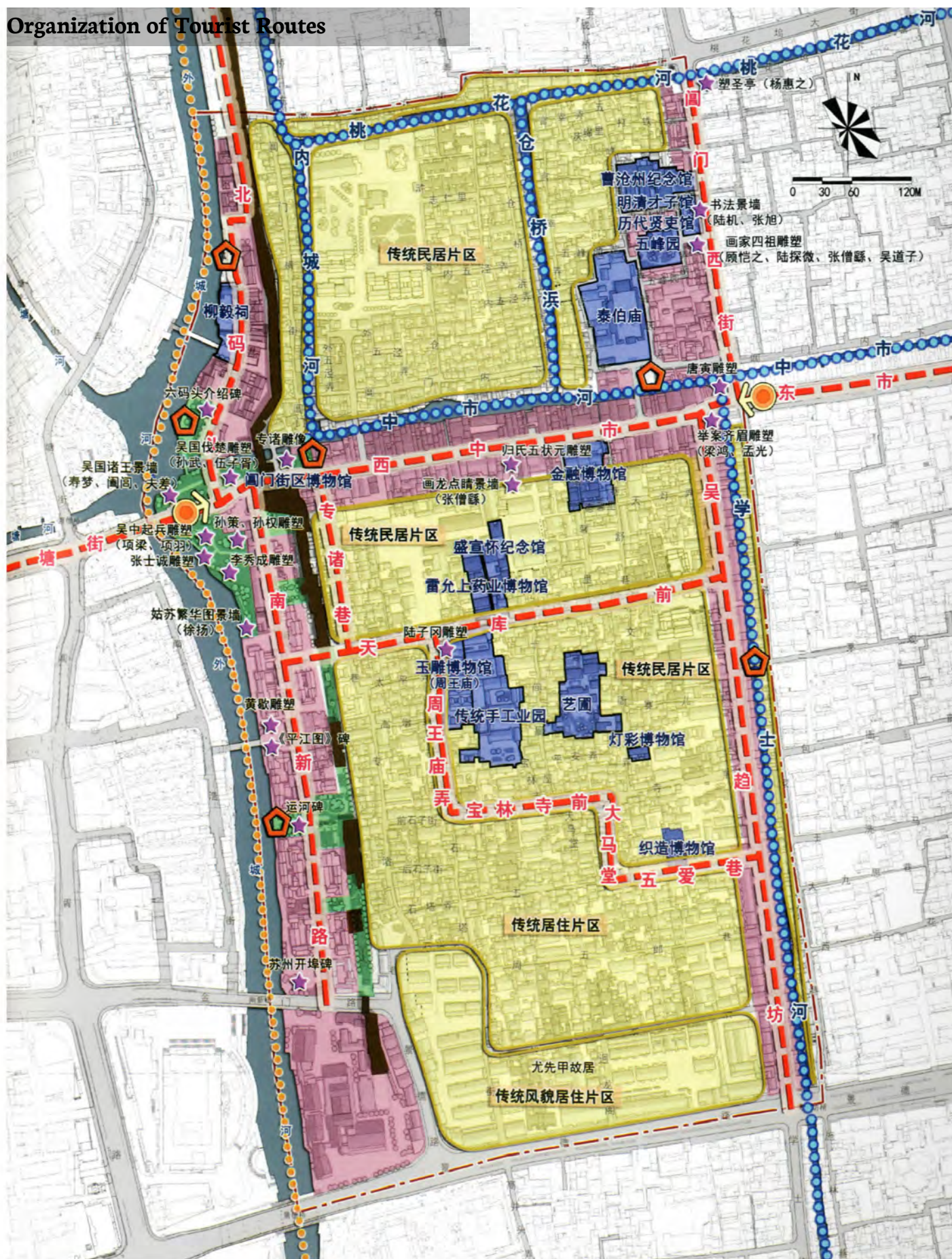
- | | | | | | | | |
|--|-------------------------------|--|-------------------------------------|--|-------------------------|--|-------------------------|
| | Political and Military Center | | Market Axis | | Sculptures, Decorations | | City Gate Tower |
| | City Wall Axis | | Handicraft and Creative Streets | | Monuments | | Boat Piers |
| | Legend Axis | | Commercial Streets | | Flower Walls | | Information Plates |
| | Art Axis | | Perimeter of the Protected District | | Pavilions | | Handicraft District |
| | | | | | | | Museums, Memorial Halls |

Planning of Building Functions



- | | | |
|-----------------------|------------------------------------|---|
| Residential Buildings | Public Service Buildings | Residence Hotel Characterized by Suzhou Lifestyle |
| Commercial Buildings | Commercial & Residential Mixed | Handicraft Stores, Small Recreational Activities |
| Office Buildings | Gardens | Perimeter of the Protected District |
| Cultural Buildings | Municipal Administration Buildings | |

Organization of Tourist Routes



- | | | | | | |
|--|---------------------------------|--|---|--|-------------------------------------|
| | Main Access of Tourists | | Tourist Water Bus on the River Outside the City | | Residential Areas |
| | Main Tourist Route on Land | | Sculptures | | City Wall and Historic Relic Parks |
| | Main Tourist Route on the River | | Main Tourist Spots | | Perimeter of the Protected District |
| | Boat Stop | | Characteristic Commercial Streets | | |

Building types and preservation guidelines

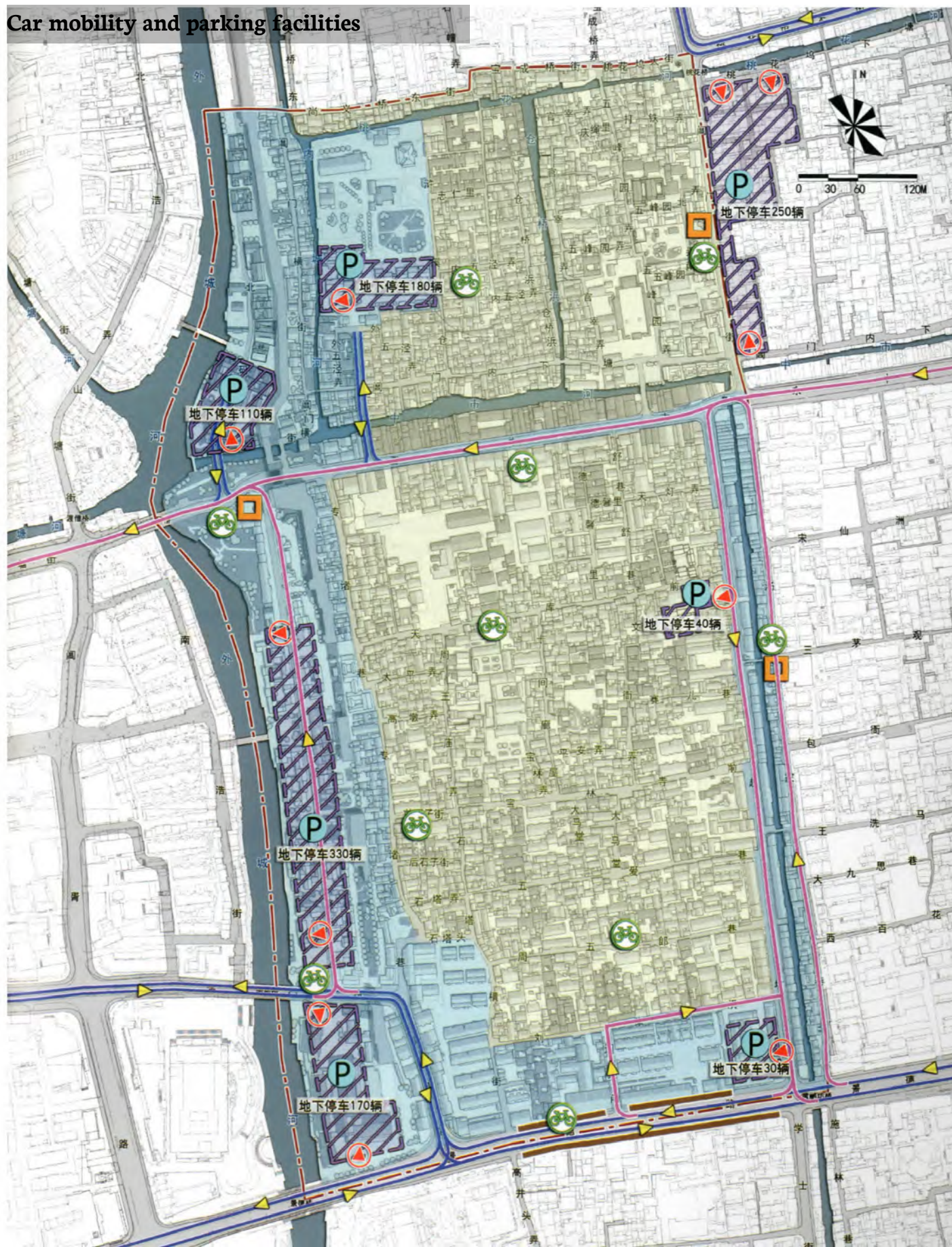


- Traditional Residential Buildings (with Functional Changes)
- Traditional Residential Buildings (Middle, Smaller Size Household)
- Traditional Residential Buildings (Larger Size Household)
- Preserve or Rebuild with a Traditional Language

- - - Perimeter of the Protected District

Note: The traditional residential buildings should be better off changed into residential houses of one unit or buildings with other functions.

Car mobility and parking facilities



- | | | |
|---|-------------------------------------|-------------------------------------|
| Underground Public Parking Lots | Tourist Tricycle Parking Lots | Off-limits Areas for Motor Vehicles |
| Access to Underground Public Parking Lots | One-Way Streets | Perimeter of the Protected District |
| Parking along the Street | Two-Way Streets | |
| Public Bicycle Parking Lots | Restricted Areas for Motor Vehicles | |

Pedestrian and cycle mobility



- | | | |
|-------------------------------|-----------------------------|-------------------------------------|
| Resident Low Speed Roads | Characteristic Hotels | Tourist Tricycle Parking Lots |
| Tourist Low Speed Roads | Residence Hotels | River Course |
| Walking Roads Around the City | Main Access of Tourists | Perimeter of the Protected District |
| Tourist Spots | Public Bicycle Parking Lots | |



- | | | |
|--------------------|---------------------------------|-------------------------------------|
| Regular Bus Stop | Tourist Bus Routes | 200m Radius of Tourist Bus Stop |
| Tourist Bus Stop | Taxi Routes | 300m Radius of Tourist Bus Stop |
| Taxi Stations | 200m Radius of Regular Bus Stop | Projected Subway Line |
| Regular Bus Routes | 300m Radius of Regular Bus Stop | Perimeter of the Protected District |

Note: The 200m Radius of Regular and Tourist Bus Stops covers 50% of the area; the 300m Radius of that covers 85% of the area.

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