

TWELVE HOURS • TWENTY-FOUR SOLAR TERMS

——Beijing Bell Tower Bay Streetscape Design

PROJECT STATEMENT

The project is located in the Bell and Drum Towers area at the northern end of the old city of Beijing. With the application of the central axis of the old city for World Cultural Heritage status as the backdrop, the project aims to renovate and enhance the public spaces in the Bell and Drum Towers area. The design deeply explores the traditional concept of time and space embodied in the Bell and Drum Towers, taking "the Twelve Earthly Branches and the Twenty-Four Solar Terms" as the thematic clue. It strives to enhance the spatial quality of the hutong through the expansion of pedestrian spaces, the reorganization and activation of street interfaces. Additionally, it aims to improve the ecological quality of the hutong through greening enhancements and rainwater management. By employing landscape storytelling and cultural empowerment, the project highlights the unique characteristics of the site, ultimately achieving a balance between the commemorative and daily use of the public spaces in the Bell and Drum Towers area.

PROJECT NARRATIVE AND CONTENTS

PROJECT BACKGROUND

The project is located in the Bell and Drum Tower area at the northern end of the central axis of Beijing's old town, which is also the starting point of the Beijing Cultural Exploration Route themed "Appreciating the Grandeur of Beijing along the Central Axis." The central axis of Beijing, originating in the Yuan Dynasty and taking shape in the Ming Dynasty, features a city layout with a prominent central axis and symmetrical wings, which is the most distinctive characteristic of Beijing's urban landscape. From the Bell and Drum Tower at the northern end to Yongding Gate at the southern end, the central axis of Beijing spans several urban landmarks, covering a total length of 7.8 kilometers, making it the longest and most intact ancient urban central axis in the world. It can be said that the central axis of Beijing is not only a spatial axis but also a cultural axis. In recent years, Beijing has actively promoted the application of the central axis for World Cultural Heritage status, and in 2020, the "Three-Year Action Plan for the Protection of the Application of the Central Axis of Beijing for World Cultural Heritage" was officially issued. The project aligns with the comprehensive environmental improvement task proposed in Article 27 of the Plan, focusing on enhancing the public space around the Bell and Drum Tower to support the application for World Cultural Heritage status and the revitalization of Beijing's old city.

The Bell and Drum Tower in Beijing is not only an important landmark building on the central axis but also a timekeeping center in ancient times, closely related to the daily lives of the people in the city. The drum was used for commands, and the bell for transmitting sound. In ancient times, people followed the sound of the morning bell and evening drum, working at sunrise and resting at sunset. Meanwhile, in traditional Chinese calendar systems, the twelve hours of the day correspond to the twenty-four solar terms, influencing the daily lives of thousands of households. They are not only a guide for agricultural activities but also a time indicator for people's daily lives. The hours and solar terms are a crystallization of the wisdom of the ancients and a reflection of traditional worldviews. Therefore, the design takes "the twelve hours and twenty-four solar terms" as a clue, integrating traditional time culture into the site.

STATUS AND DESIGN DESCRIPTION

In the past renovation process of the Bell and Drum Tower area, in order to ensure the neatness of the square and block out the chaotic residential houses at that time, almost continuous walls were built outside the alley streets. The space between the walls and buildings is now filled with debris and garbage. In addition, the plazas and street spaces on both sides of the Bell Tower are occupied by motor vehicle parking, seriously affecting the use of public space around the Bell and Drum Tower. The design proposes to demolish the existing outer walls, gaining approximately 1,600 square meters of public space, and relocating the parking area, gaining approximately 1,900 square meters of public space, totaling approximately 3,500 square meters.

Addressing issues such as negative space, poor ecological environment, and lack of prominent cultural characteristics in the current site, three major strategies are proposed: spatial enhancement, ecological guidance, and cultural empowerment. At the spatial level, demolishing walls, relocating parking, releasing pedestrian and plaza spaces, and integrating with the renovation of street-facing buildings to implant commercial service formats, stimulating spatial vitality; at the ecological level, retaining existing large trees, adding corner greening, setting up rainwater gardens, and enhancing the ecological environment; at the cultural level, combining the design theme of "the twelve hours and twenty-four solar terms," forming distinctive site nodes through design paving, structures, and artistic installations, highlighting the characteristics of the Bell and Drum Tower site.

According to the chronological order, the design creates a total of twelve nodes, each corresponding to one hour and two solar terms. The main design elements of each node include seasonal-related featured gratings or cultural installations, paving, unified logo signage, and plant landscapes. Taking the Weishi Plaza as an example, the plaza interface is formed through greening and gratings. The Weishi corresponds to the solar terms of Great Heat and Autumn Begins, so gratings with lotus and maple leaf patterns representing the characteristics of these solar terms are designed, which not only showcase cultural characteristics but also block out visible external facilities such as air conditioners and meter boxes on the exposed building exterior walls due to the demolition of the walls, achieving a beautiful and unified street facade. The design retains existing large trees and designs rainwater gardens at the boundaries of the walls, achieving rainwater management while also corresponding to the rainy solar term characteristics between summer and autumn. In terms of paving, cicada patterns are designed and embedded in the tiles, adding interest.

PROJECT SIGNIFICANCE

The design aims to achieve the spatial improvement of hutong by expanding pedestrian spaces, tidying up and activating street interfaces, improve the ecological quality of hutong through greening enhancement and rainwater management, highlight the site characteristics through landscape narrative and cultural empowerment, and ultimately achieve the unity of memorial and daily use of the public space in the Bell and Drum Towers area.

Location Analysis

The project is located in the Bell and Drum Tower area at the northern end of the central axis of Beijing's old city.



Historical Development

In recent years, Beijing has actively promoted the application of the central axis for World Cultural Heritage status. The Bell and Drum Tower area has vigorously carried out public space renovation by combining population decongestion and building replacement.



Comparison of the 18th Century

Location And Background

Historical Overview

1870s, when Bell and Drum Tower Square was a depression.

In 1909, the streets have been hardened.

In 1925, the clock tower bell was removed and the clock tower was converted into a movie theater.

In 1933, there were opening of the civilian market on the square.

Now, the Bell and Drum Tower area has become a fitness activity site for the neighboring residents.

In the 1890s, the streets were still dirt roads, not yet paved with modern hardening or electrified.

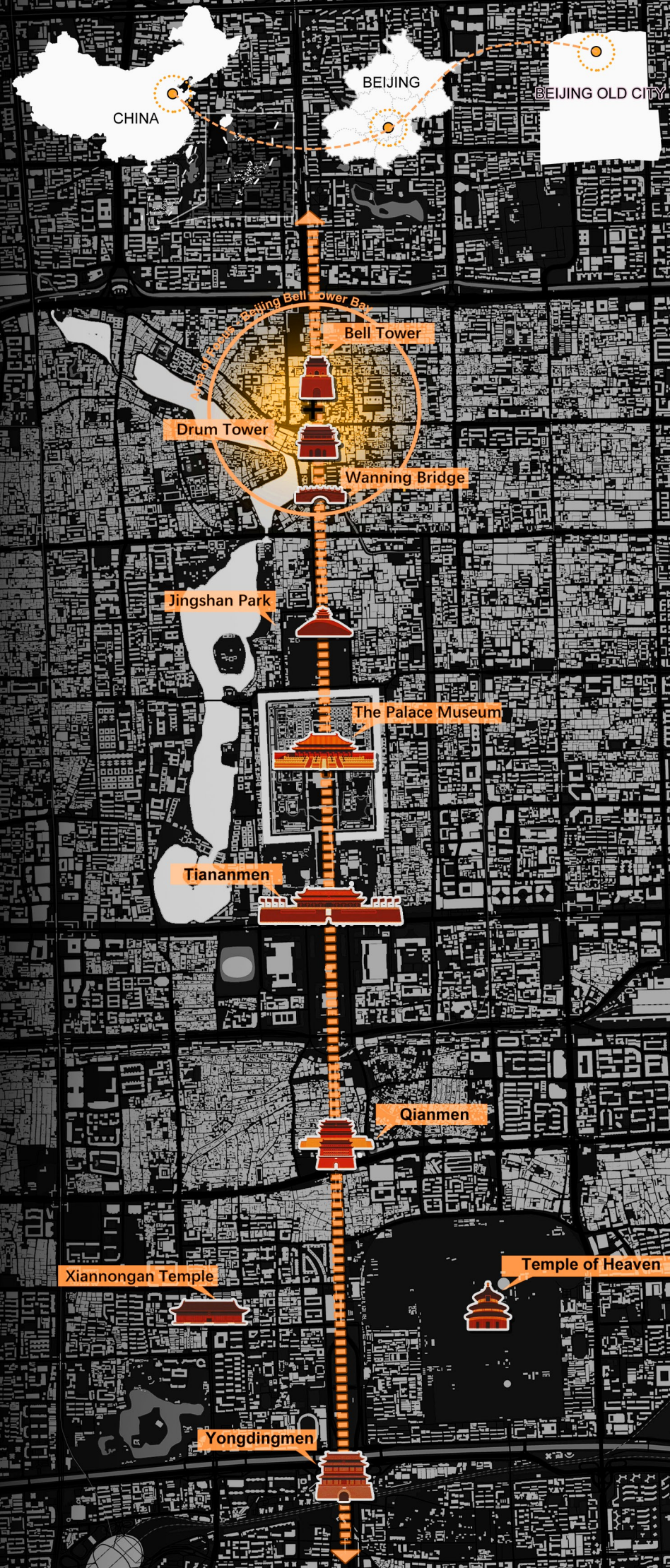
In 1927, south of the Drum Tower, the Drum Tower Street streetcar was already in operation.

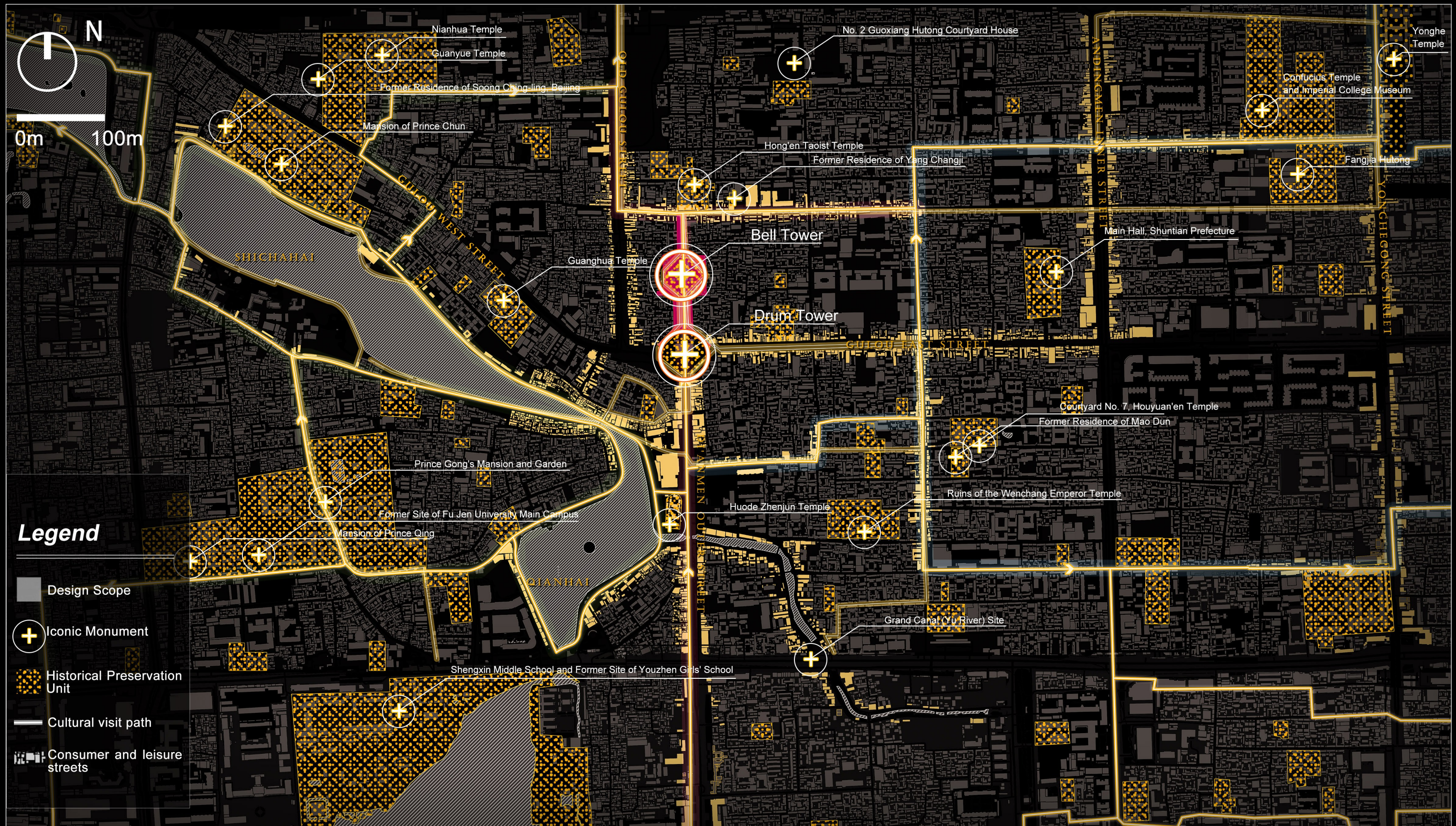
In 1999, it was transformed into a cultural plaza, which also served as a bus station and rickshaw departure point.

Bell and Drum Tower Memory

The last years of the Qing dynasty	Republican Period - Early New China	Early new China - 1990	1999-2014	2010-present
The Bell and Drum Tower was previously presented as a vacant lot, and all of the hutong spaces were still land and not hardened.	In 1925, the Gulou Public Education Center was opened. Later, a movie theater was opened under the bell tower. In 1933, a "popular market" was opened on the square.	1952-1961 Dongcheng District hosted cultural activities. The Drum Tower was repaired in 1984. In 1986 the Cultural Relics Depository was established and opened on May 1, 1987.	In 1999, the area between the Bell and Drum Towers became a cultural square, boosting tourism. At the century's turn, it also served as a bus station and the starting point for rickshaw tours of old Beijing's hutong culture.	In 2011, the Bell and Drum Tower Plaza was restored for public use. In 2017, efforts began to declare Beijing's Central Axis a World Heritage Site. From 2021 to 2022, the area saw population decanting and renovations.

The Context of History





The Commemorative and The Everyday

The Bell and Drum Towers are landmark buildings on the central axis of Beijing's old city and traditional timekeeping centers, closely related to the daily lives of the common people. They are also significant nodes on Beijing's famous cultural exploration routes.



Design Theme

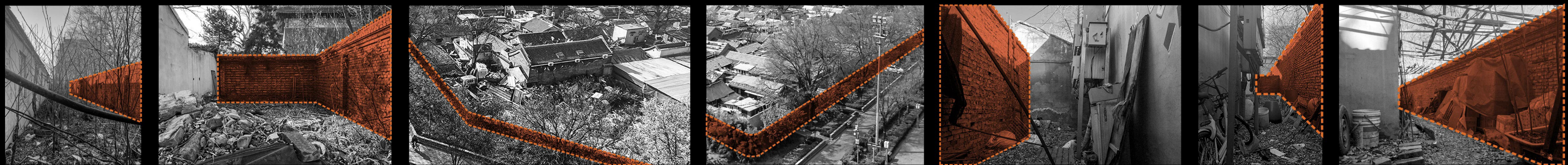
As traditional timekeeping structures, the sounds of the morning bell and evening drum correspond to the Twelve Hourly Divisions of the Day and the Twenty-Four Solar Terms in traditional China, reflecting a traditional Chinese worldview. Therefore, the design takes "Twelve Hourly Divisions of the Day · Twenty-Four Solar Terms" as the clue, integrating timekeeping culture into the site.



▲ Current situation Parking occupies square

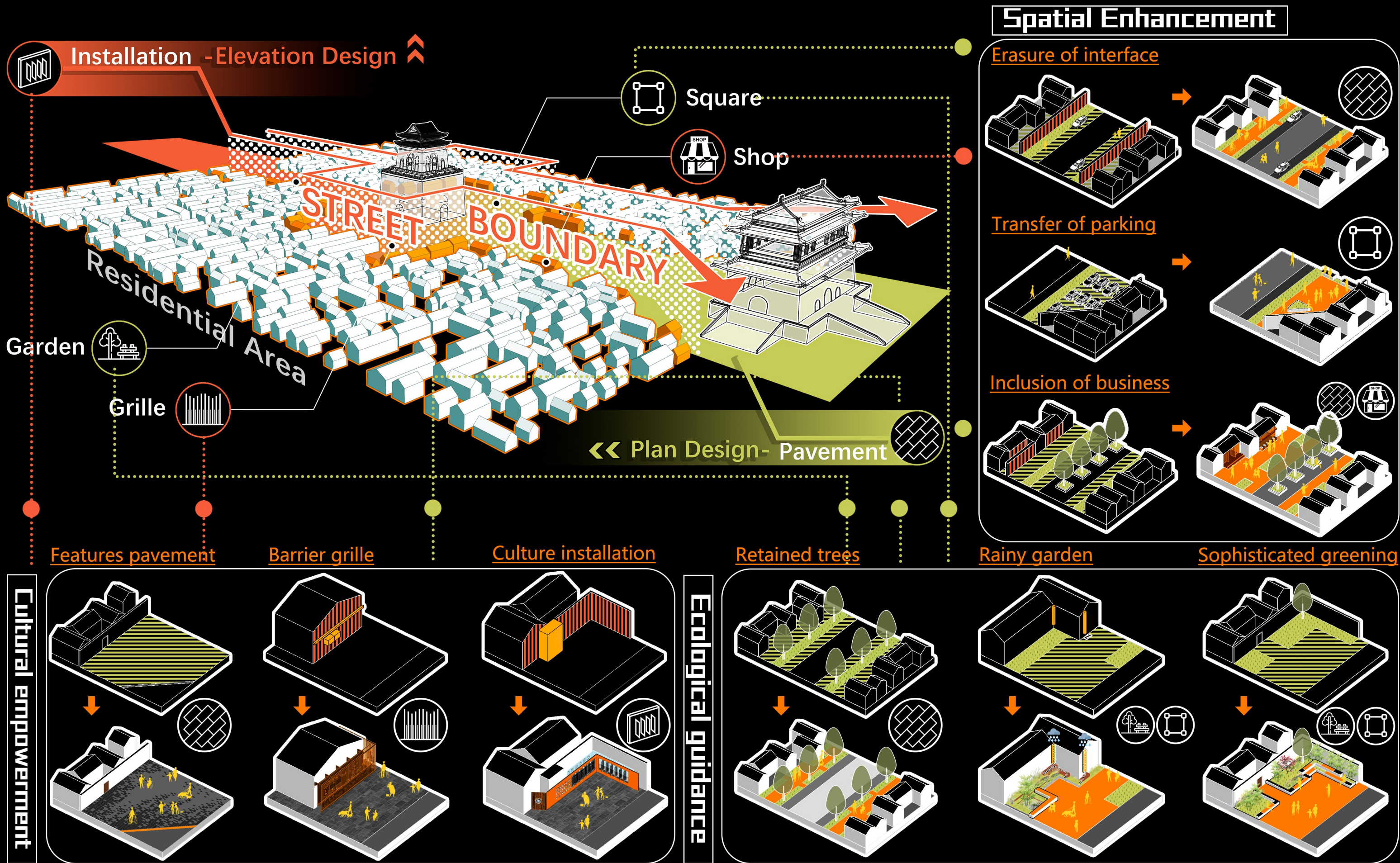
Transfer parking frees up space:
1900 m²
Removing the boundary wall frees up space:
1600 m²
Total design plot area:
3500 m²

▼ There is a lot of negative space between the boundary wall and the building



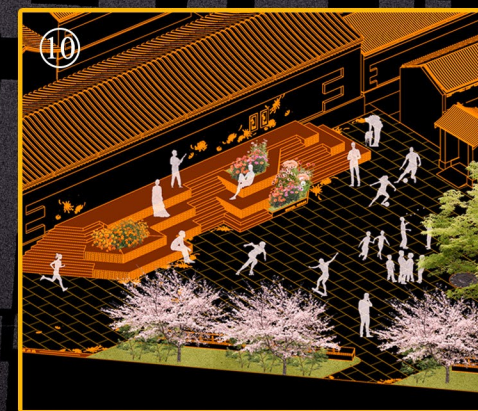
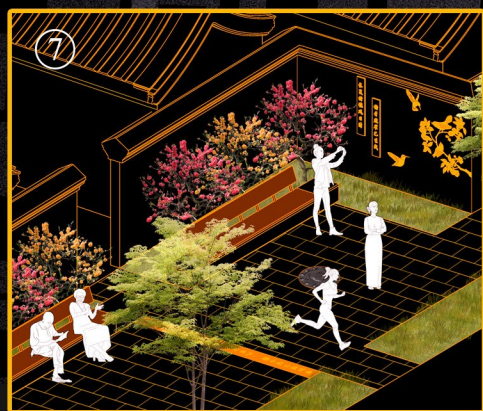
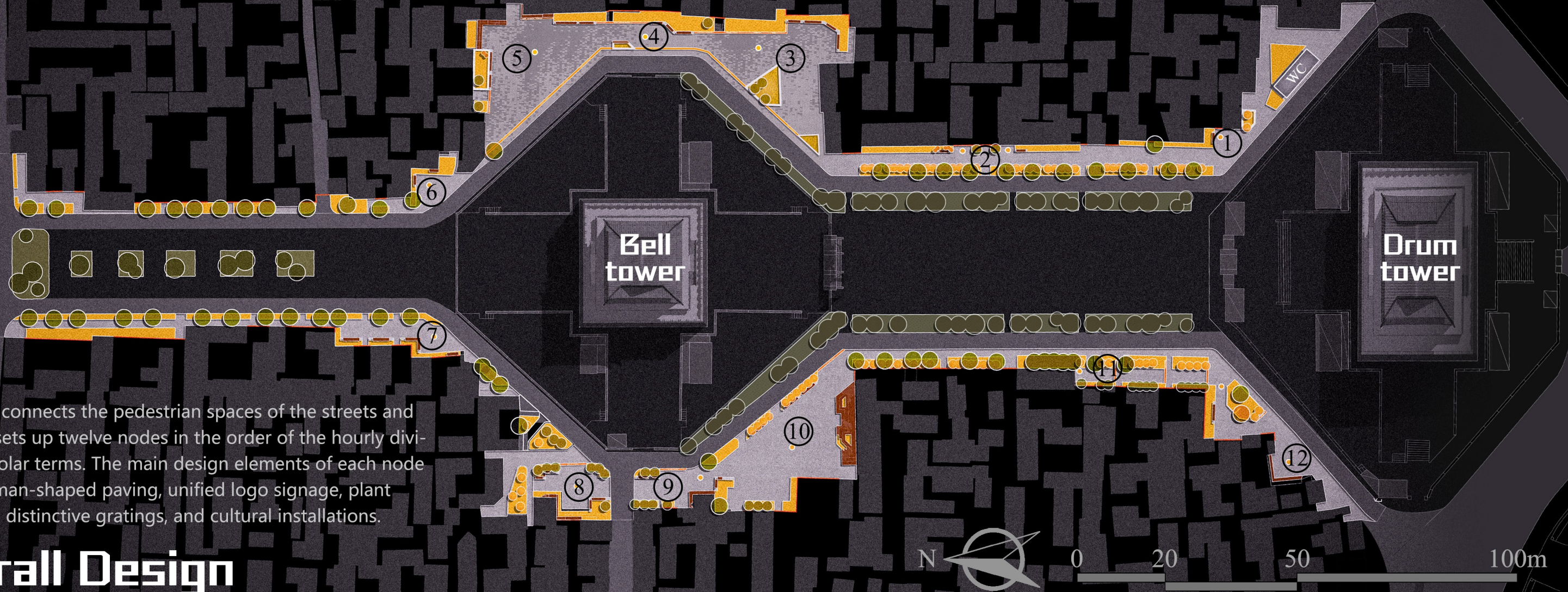
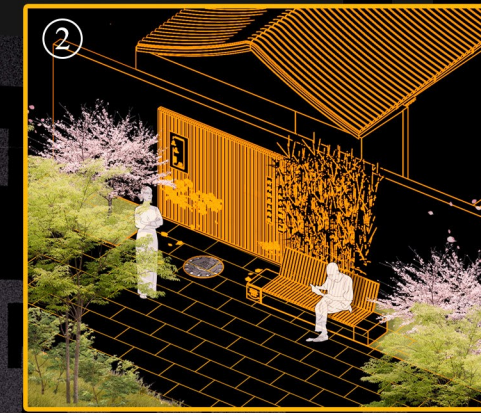
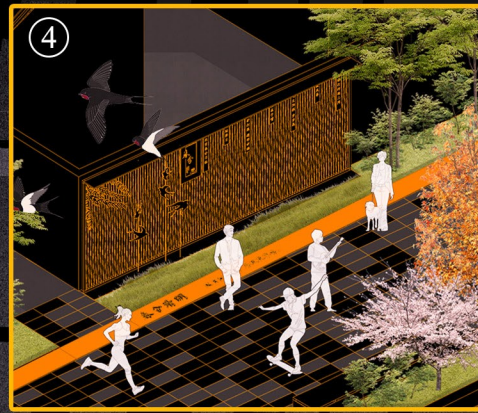
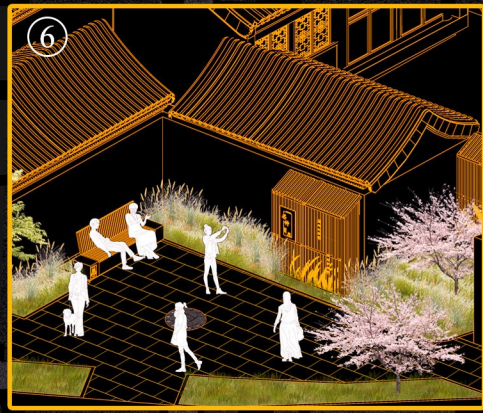
There is a large amount of negative space between the outer walls of the alley streets and the building courtyard walls. Disorganized parking occupies valuable street and square space in the old city. The design involves removing the outer walls and relocating parking functions, releasing approximately 3,500 square meters of public space.

Current Site Conditions



The spatial improvement of the hutong is achieved through the expansion of pedestrian space, the organization and activation of street interfaces. The ecological quality of the hutong is enhanced through greening improvements and rainwater management. The site characteristics are highlighted through landscape storytelling and cultural empowerment.

Design Strategy



Yinshi, Maoshi and Chenshi Square

The design involves removing walls, organizing street interfaces, adding service functions, and stimulating the vitality of street spaces. The rippled gratings and paving metaphorically represent the watery characteristics of the solar term, creating a spring atmosphere combined with plant configurations.



Current photos



Life scene



Daily exercise

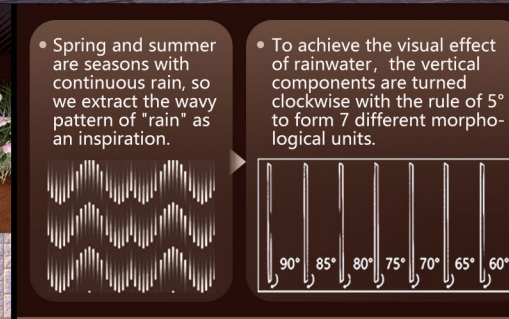


Tourist experience

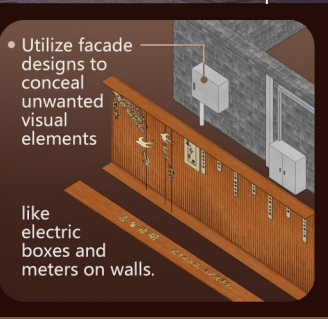
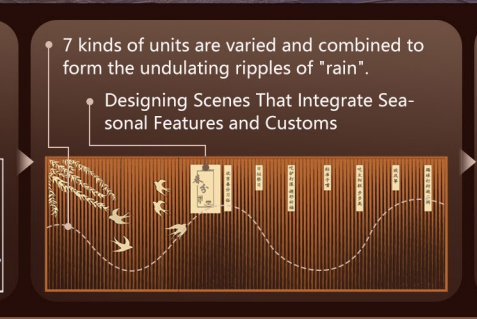
Cultural imprint



Seasonal poetry



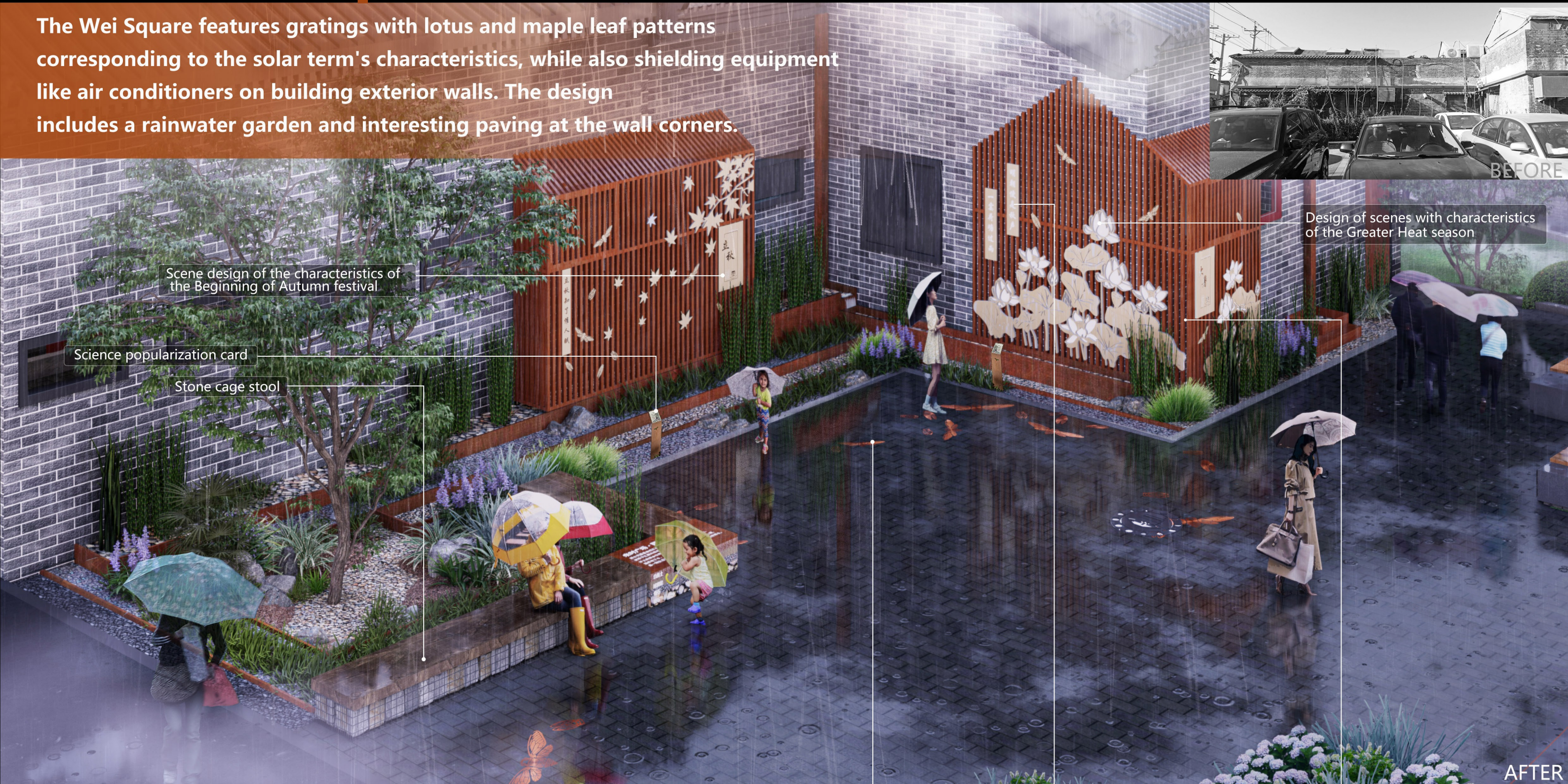
Wall installation



Wall installation

Weishi Square · Greater Heat and Beginning of Autumn

The Wei Square features gratings with lotus and maple leaf patterns corresponding to the solar term's characteristics, while also shielding equipment like air conditioners on building exterior walls. The design includes a rainwater garden and interesting paving at the wall corners.

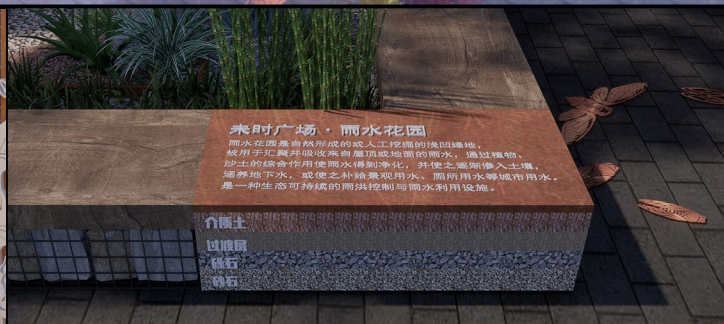


Design of scenes with characteristics of the Greater Heat season

AFTER



Rainwater collection



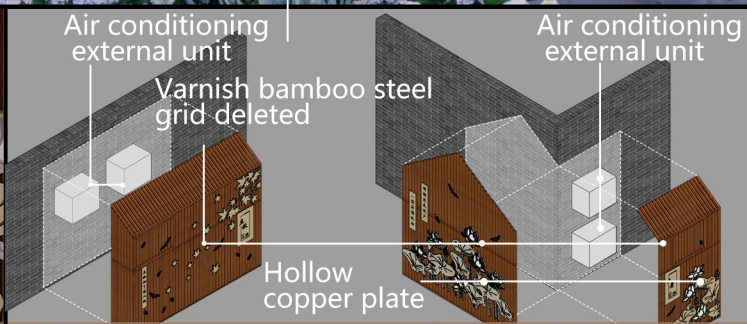
Sponge knowledge popularization



Distinctive Sculpture



Seasonal poetry



Cultural landscape wall installation

Life scene

Cultural imprint

Air conditioning external unit

Varnish bamboo steel grid deleted

Hollow copper plate

Air conditioning external unit

Shenshi Square · The End of Heat and White Dew

The originally disorganized parking lot is cleared and transformed into a coherent and comfortable street space.

The gratings form an interesting spatial interface for the square, with the upper part fixed with wild geese symbols moving with the wind, metaphorically representing the migratory scene of geese flying south during this solar term.



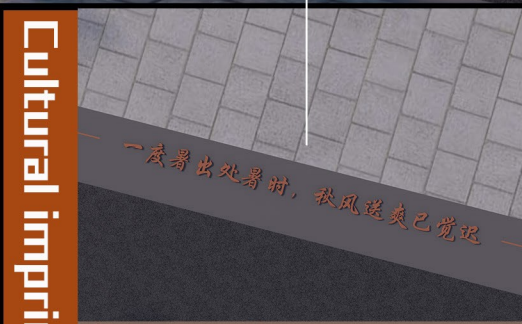
AFTER



Leisure under the forest



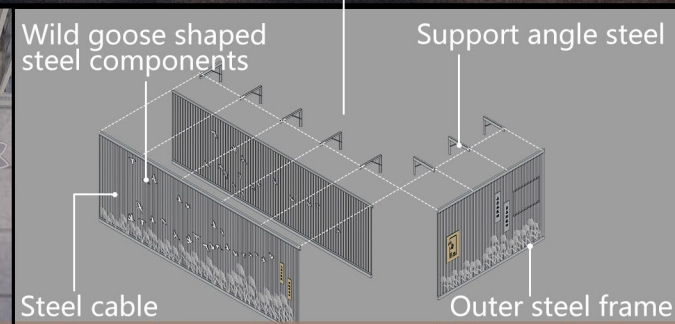
Morning exercise and fitness



Seasonal poetry



Distinctive sculpture



Cultural landscape wall installation

Entrance and Exit Plaza · Slight Snow and Great Snow

At the entrance and exit of the Bell Tower Bay Plaza, the original dilapidated ornamental green space is removed to form an entrance and exit plaza. A cultural interactive installation is set up in the concave area to showcase the traditional concept of "Twelve Hourly Divisions of the Day · Twenty-Four Solar Terms."



Solar term folk rotation sign

The theme exhibition of "24 solar terms - 12 hours"

The twelve Chinese zodiac signs

BEFORE

AFTER



Folk interactive experience



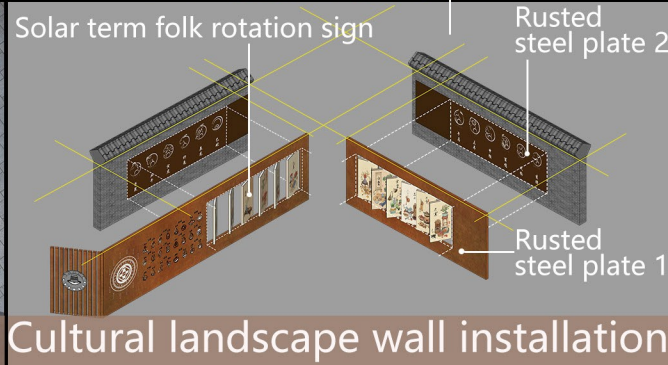
Concept overview



Distinctive sculpture



Seasonal poetry



Cultural landscape wall installation

Solar term folk rotation sign

Rusted steel plate 2

Rusted steel plate 1

Cultural imprint

Life scene

Xu Shi Street • First Frost and Beginning of Winter

The design renovates the street-facing buildings revealed after the demolition of walls, incorporating commercial service functions, outdoor displays, and folk exhibition walls with distinctive solar term themes along the building exterior walls, forming an open and coherent street interface.



Outdoor rest and refreshment break

Characteristics of the Beginning of Winter

AFTER

Life scene



Casual tea drinking



Viewing the Bell Tower from a distance



Seasonal poetry



Wall installation

Cultural imprint