

A Green Garden with Boundless Sharing: Landscape planning of Baijia Lake Silicon Alley, Jiangning District, Nanjing, China

Project Statement

In the Action Plan for Promoting High-quality Development of High-tech Parks issued by Nanjing City, the urban "silicon alley" plan was proposed for the first time. Baijia Lake Silicon Lane breaks the "dotted and fragmented renewal mode of industrial land" and relocates the large-scale old industrial zone with overall planning and one-game development, which is the first attempt and mode innovation of similar areas in Nanjing.

Through the overall development and construction path of the whole process of "overall planning + regional planning + key design + implementation", the public space resources of the park are sorted out. Based on the concept of "unbounded sharing, green fun Silicon Lane", and considering the living mode, working mode and ecological mode as a whole, we build a shared park integrating wisdom and creativity, experience the green and natural ecological block, and feel the vitality of life and culture.

Project Narrative

Background and Problems

Jiangning Baijia Lake Silicon Lane is located in the east of Tonghuai Street, south of Qinhuai Road, west of Qinhuai River and north of Shengtai Road, covering an area of about 2.3 square kilometers. It is adjacent to the South high-speed Railway Station in the north and Baijia Lake Business Circle in the south, with multiple subway stations distributed around it, and has superior green space resources. The current public space system is weak, the overall style is not distinctive, the supporting system is not perfect, the public life is lacking, and the quality of the slow travel system is in urgent need of improvement.

Project Difficulty

One is too much attention to car traffic. The second is to emphasize the control of lines, while ignoring the creation of space. Third, the diversified management departments, separate politics led to chaotic appearance. Fourth, engineering thinking, no artistic effect. Fifth, amateurs guide professionals, and unprofessional decisions affect the final image.

Planning Strategy

Sorting out the park's public space resources. Based on the concept of "unbounded sharing, green fun and silicon alley", and considering the overall work mode, ecological mode and life mode, the planning strategy of innovation, green and vitality is put forward.

Strategy1: No Boundaries • Common Innovation

Activation Boundary : The interior and exterior space of the street red line should be coordinated, and the retreat line and public space should be guided according to the street type and building business type in the planning stage.

In the design stage, the implementable space should be sorted out, the design intention of enterprises should be solicited, the interface of road red line and enterprise land ownership should be designed and reconstructed, and the boundary barrier should be activated.

Unbounded Sharing :The overall control through the recent detailed plan, the coordination area concept plan, long-term guidelines, truly realize the design intention and rolling development process, the enterprise public space and municipal road interface "unbounded sharing" .

Complete Street : The concept of complete street is emphasized, and elements contained in the U-shaped interface such as building facades, sidewalks, riding lanes, motor vehicles, bus lanes and municipal pipelines are coordinated, coordinated and designed.

Block renewal: The overall renewal mechanism of the public space in Silicon Alley is based on the block, with less investment and quick effect, which is more conducive to ensuring the unity and coordination of the overall construction style and has a good effect on the improvement of the overall brand image of the park.

Project Narrative

Strategy 2: Get Close To Green • Get Involved With Nature

Blue and green space pattern : Construct a complete blue and green spatial pattern of the area. In combination with the blue and green space resources in the area, Baijia Lake, Qinhuai River, Yangjiawei and other large urban green Spaces are arranged as a whole, and three landscape corridors are built in the area to integrate into the urban ecological green network.

Public space improvement strategy : Combined with the district renewal plan and implementation, four public space improvement strategies are proposed. Green increase quality, legal release, optimize and adjust green space layout, achieve 300 meters to reach, 500 meters to see green.

Strategy 3: Community With Temperature•Inject Vitality

Characteristic space structure : reconstruct the overall characteristic public space structure and theme. On the basis of sorting out the public space, finally put forward the park public space structure of "strong core tracing axis, one ring nine parks". "Smart Silicon Core" shapes the public vitality engine of the area, serves a variety of people, and provides flexible and rich urban services.

Dynamic place : According to different land types and people's needs in the area, rich and diverse functional Spaces such as community pocket park, street garden, waterfront leisure and fitness facilities are designed to activate the street and form a dynamic place with temperature.

Integrated design : Refining the characteristic symbols of Silicon Alley's scientific and technological innovation, integrated overall design of urban furniture, visual guidance, lamps and lanterns, sculptures, green planting and other special projects in the area.

Art street : Inject more interactive art elements into the urban space, create an urban space with cultural taste, and strengthen the overall landscape image and cultural brand output of Silicon Alley Park.

Economic, Social and Ecological Benefits

Economic benefits : Baijia Lake Silicon Alley has been transformed from an old industrial zone into a fashionable innovation park after the upgrading and renovation. The convenience of life, innovation of industrial development and employment attraction have been significantly improved. The key design area of Silicon Alley has served more than 300 scientific and technological enterprises and cultivated 10 high-tech enterprises. The enterprises in the park have paid more than 100 million yuan in taxes for two consecutive years, becoming the demonstration core park of Baijia Lake Silicon Alley.

Social benefit : The public space renovation of Baijia Lake Silicon Lane is the exploration of urban construction of innovative open park community in Jiangning Park. Currently, Dongcun Road, Shengli Road, Yilhuai Street, Qinhuai Road and Shuanglong Avenue have been completed and are open to the public, greatly improving the environmental quality and walking experience of the park.

Project Background

Heart of Innovation in Jiangning District

SITE

Nanjing, China

Jiangning District

THE CURRENT COVERAGE RATE OF BUILT-UP AREAS IS **45.54%**

THE COVERAGE RATE OF PARKS OVER RESIDENTIAL AREAS IS **66.19%**

CURRENT SURROUNDING GREEN SPACES IN JIANGNING DISTRICT

- **5** URBAN GREENING AREA
- **52** COMMUNITY PARK
- **11** COMPREHENSIVE PARK
- **32** POCKET PARK

Nanjing South Railway Station

To Nanjing

Waterfront Ecological Corridor

Silicon Lane

To Dongshan

Civic Center

Slow Traffic System

Cultural Center

Convention and exhibition center

Sanchuan Art Museum

To Niushou Mountain

Jiulong Lake Park

Shuanglong Development Axis

To University Town



SITE

- **STUDY AREA: 2.68HA**
- **PLANNING AREA: 1.6KM²**

BAIJIAHU SILICON LANE IS LOCATED IN JIANGNING DISTRICT, NANJING, ADJACENT TO NANJING SOUTH STATION TO THE NORTH AND THE BAIJIAHU BUSINESS DISTRICT TO THE SOUTH. MULTIPLE SUBWAY STATIONS ARE DISTRIBUTED AROUND IT.

Site Status

- **PARK CLOSURE:** the large parks and communities dependent on the city and park, the degree of production and finance of the people park is not high, and the value of the park is insufficient
- **LACK OF PUBLIC LIFE:** the area is dominated by commercial businesses along the street, and nearly 50% of the land is enclosed by walls
- **INADEQUATE SLOW TRAVEL SYSTEM:** lack of independent bike lanes
- **LACK OF OVERALL CHARACTER**



Lack of functional space for activities around the venue

The surrounding area of the park is closed, with weak connectivity to the outside

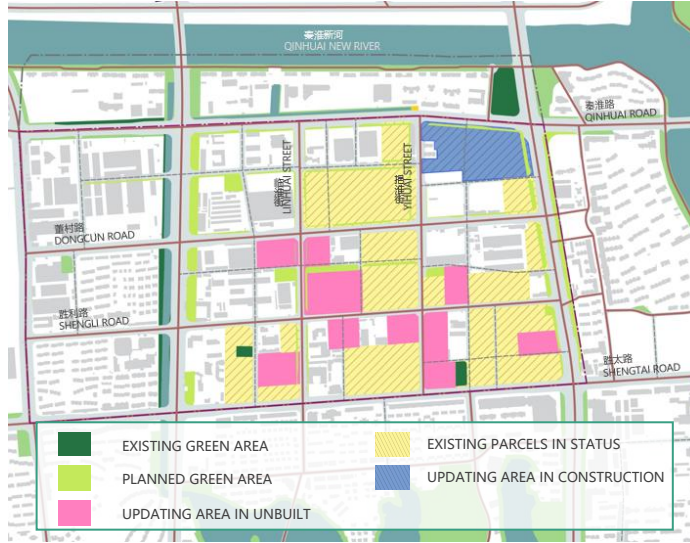
Innovation Industry Agglomeration

PLANNING INFORMATION SUMMARY IN STUDY AREA

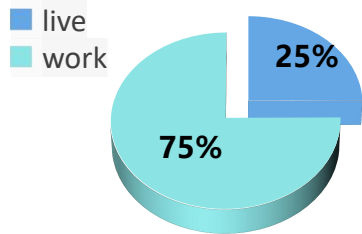


At present, the units within the study area's park are constantly being updated, and the industrial content is also constantly upgrading. More and more new enterprises and high-tech industrial parks are being established here.

Therefore, the demand of the surrounding population has shifted from residents to white-collar staff.

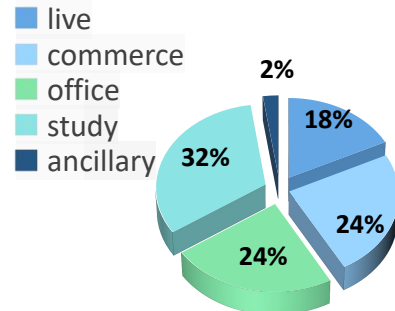


POPULATION RATIO



The proportion of office staff exceeds that of residents

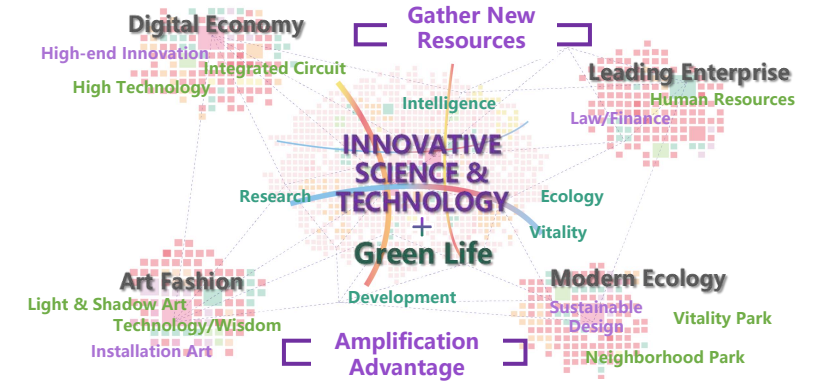
BUILDING DEVELOPMENT



Business and office account for over half of the total

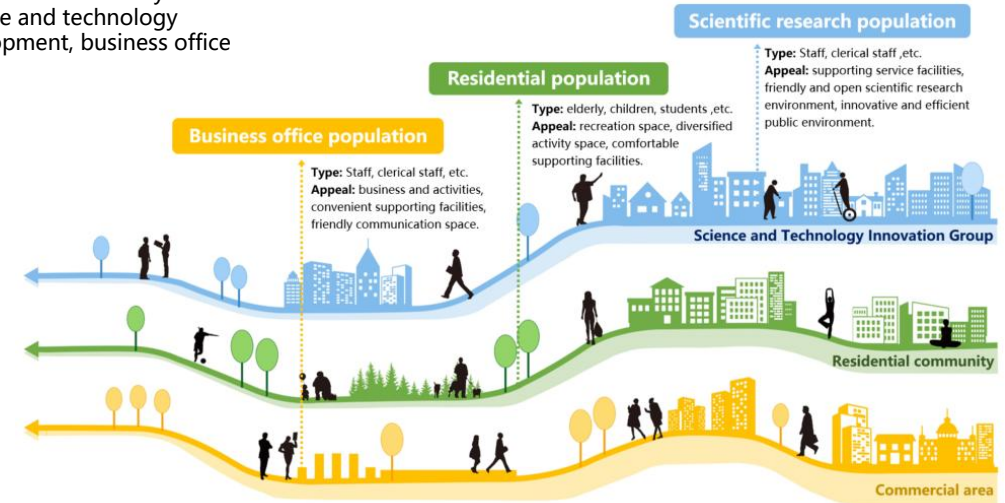
INDUSTRY TYPE OF SITE

DIGITAL TECHNOLOGY
+
BIOMEDICINE
+
ARTS & CULTURE
+
ARTIFICIAL INTELLIGENCE

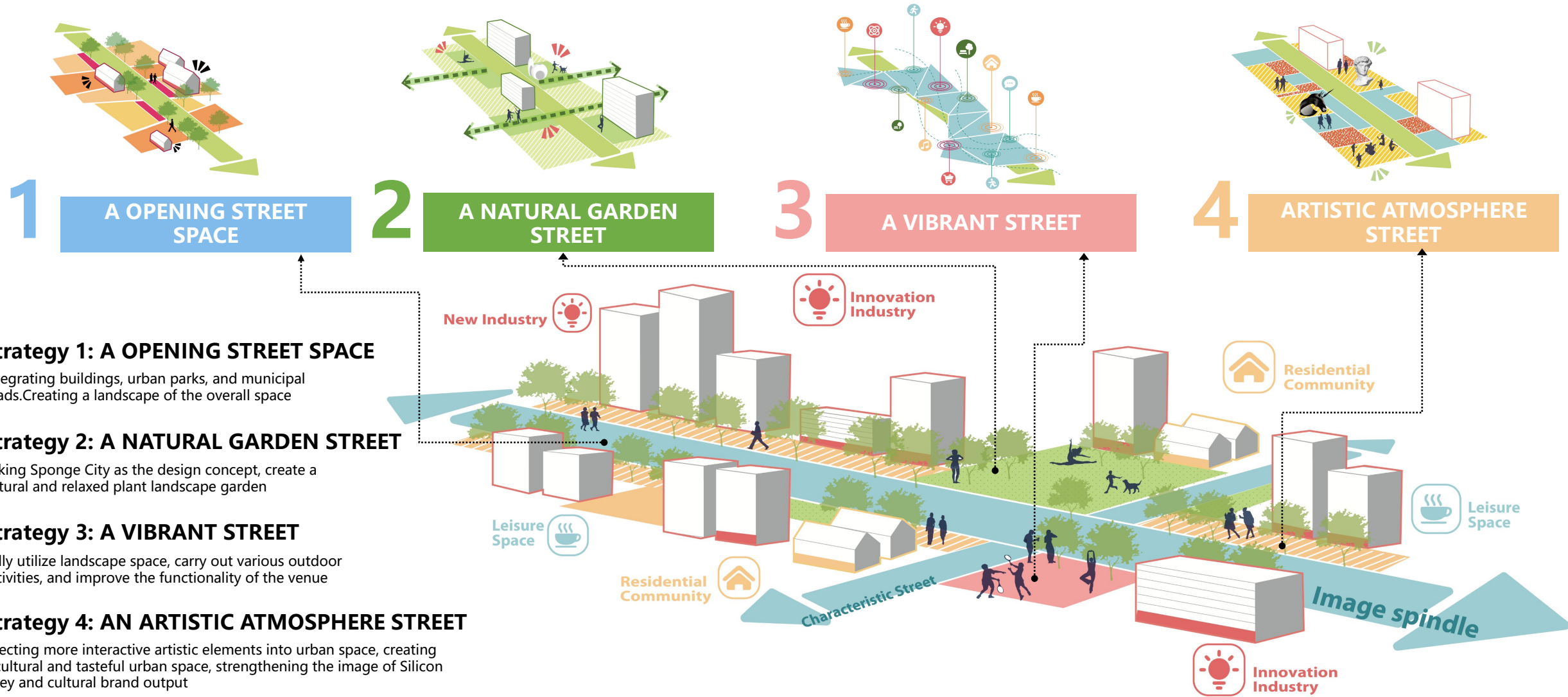


FUTURE LEADING INDUSTRY TYPES

The population of the area is mainly composed of science and technology research and development, business office and residential life.



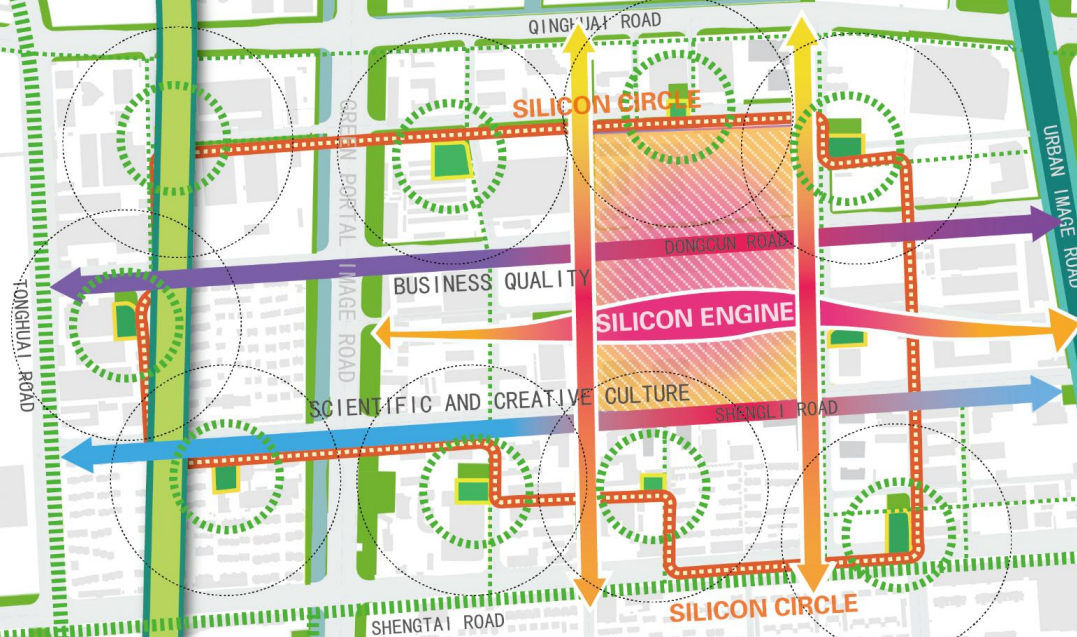
Planning Strategy



Master Plan

SOUTH NEW CITY CORE

QINGHUA NEW RIVER



1+4 VIBRANT STREET SPACE

ENJOY THE TECHNOLOGICAL ATMOSPHERE OF SILICON LANE AND CREATE A MULTI-FUNCTIONAL STREET GREEN SPACE

3 FEATURED MAIN AXIS

FORMING THREE DISTINCTIVE LANDSCAPE AXES, URBAN IMAGE, ECOLOGICAL NATURE&CREATIVE INTELLIGENCE

9 CHARACTERISTIC PARKS

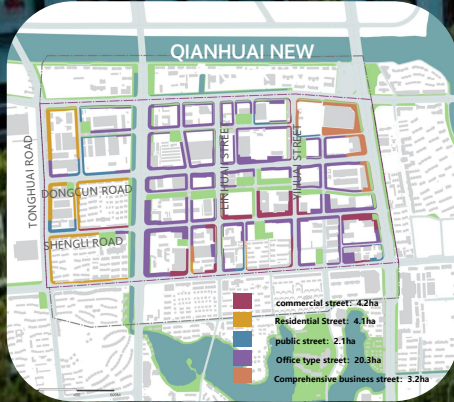
A FLOWING AND CIRCULAR PATH, INTERWOVEN WITH VEGETATION AND LANDSCAPE, ALLOWS PEOPLE TO ENJOY AN IMMERSIVE WALKING EXPERIENCE AND STIMULATE CREATIVE VITALITY.

STUDY AREA	2.68HA
PLANNING AREA	1.6KM ²
PUBLIC SPACE	58.86HA

Strategy 1: A OPENING STREET SPACE



OPEN THE CURRENT FENCE & RELEASE STREET SPACE



CONTROL BUILDING SETBACK & RELEASE STREET SPACE



Coordinate the interior and exterior spaces of the red line of the street, and guide the withdrawal of the line and public spaces during the planning phase based on the street type and building format. In the design stage, the feasible space is sorted out, the design intention of the enterprise is solicited, and the interface between the road red line and the enterprise land ownership is designed and reconstructed to activate boundary barriers. Realizing the design intent and the "unbounded sharing" of enterprise public space and municipal road interfaces during the rolling development process

Strategy 1: A OPENING STREET SPACE



THE BLOCK OF SILICON ALLEY



OPENING STREET



REST FACILITIES



INNOVATION BLOCK

Solicit the design wishes of enterprises, design and reconstruct the interface of road red line and enterprise land ownership, and activate the boundary barrier.

Strategy 2: A NATURAL GARDEN STREET



Create an innovative community park group, integrate into the city's blue and green framework and park system. The blind area should be covered first, the blue and green patches should be integrated, the shape should be integrated, and the index of the truly capable area should be connected with the rolling renewal block, and the three-level open public space system should be pre-controlled.

HI 您好
硅巷
BAI JIA HU
江宁HI 嗨
HELLO
百家湖
SILICO
ALLEY

Strategy 2: A NATURAL GARDEN STREET



QINHUAI RIVER WATERFRONT



GARDEN STREET



STREET VIEW OF QINHUAI ROAD



THE DETAILS OF PEDESTRANTS

Create comfortable and beautiful green landscape, set up community pocket parks, street gardens, waterfront leisure and fitness facilities, etc., to form a green district in the study area.

Strategy 3: A VIBRANT STREET



Vitality sharing, providing a pocket park used by a diverse group of people, shaping the area's public vitality engine, serving a diverse group of people, and providing flexible and rich urban services. Inject artistic elements, create artistic atmosphere block, enrich People's Daily activities and experience.

Strategy 3: A VIBRANT STREET



ACTIVE WATER INTERACTIONAL SCULPTURE



COMMUNITY LEISURE



ENTERTAINMENT SPACE

The rich and diverse functional space activates the street to form a dynamic place with temperature. Inject more artistic elements into the urban space and create a dynamic urban space.

Strategy 4: AN ARTISTIC ATMOSPHERE STREET



SCIENCE AND TECHNOLOGY LANDMARK



ART LANDSCAPE SCULPTURE



THE CORNER LANDSCAPE INSTALLATION

Inject more interactive technology elements into the urban space, create a cultural urban space, and strengthen the overall landscape image and cultural brand output of Silicon Alley Park.

Strategy 4: AN ARTISTIC ATMOSPHERE STREET



INTELLIGENT TRANSPORTATION



WISDOM ZEBRA CROSSING



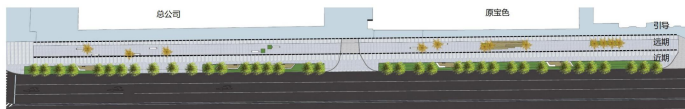
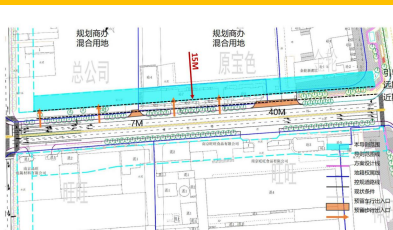
INTELLIGENT BUS STATION

Non-motor vehicle information guide signs, characteristic luminous zebra crossings, cycling lines, intelligent light poles and intelligent bus stations are introduced at intersections to strengthen the concept of intelligent road management.

1.Developing and updating public spaces

2.The path of development and construction with full-process management.

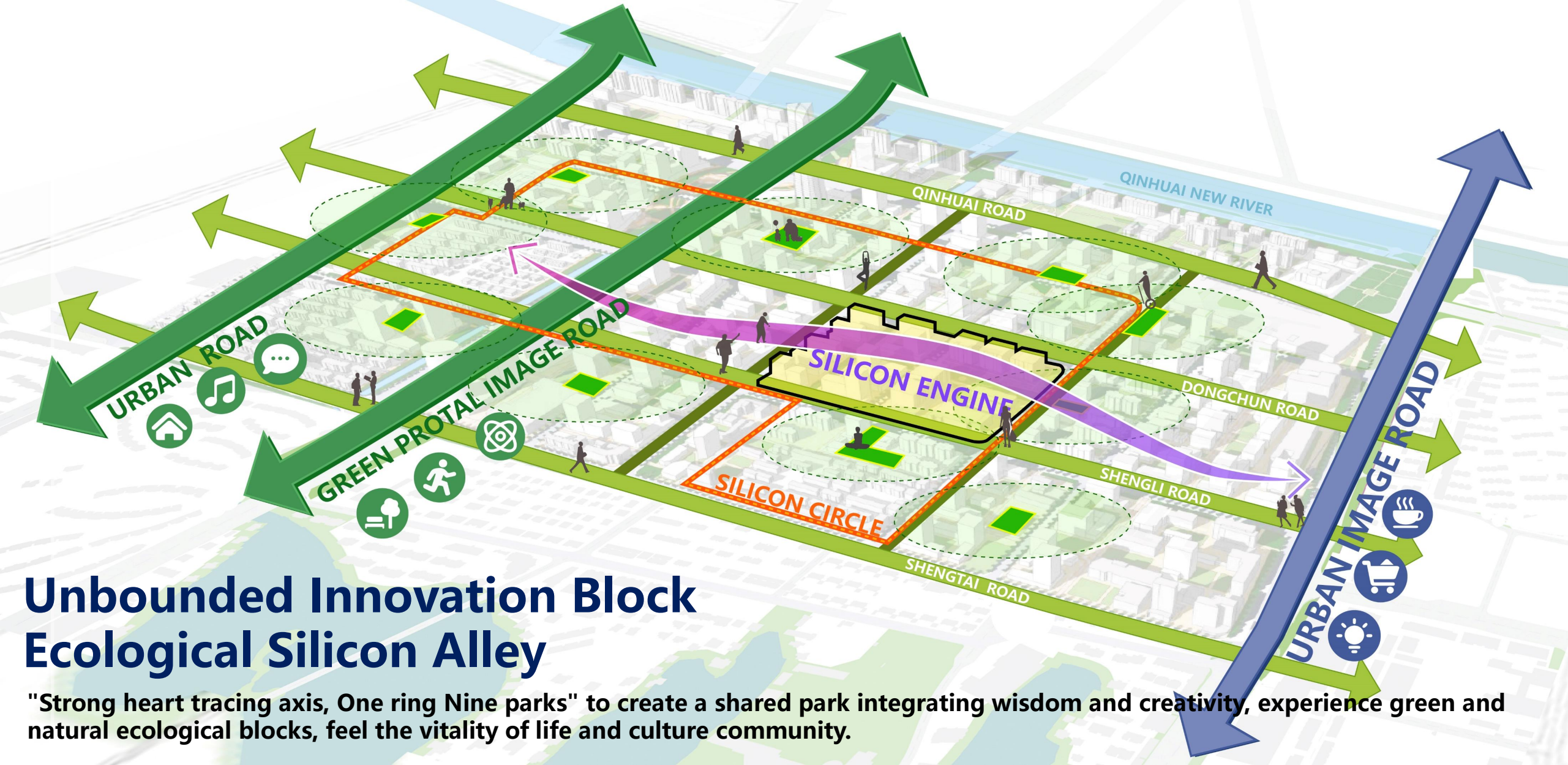
In order to achieve the best design results, a consensus has been reached with the architectural design during the scheme stage to reserve areas for future greening needs. Maximize the restoration of landscape design solutions



An aerial photograph of a large-scale construction project, likely a stadium or arena. The central feature is a large, circular or semi-circular excavation area where the foundation and lower structure are being built. A prominent wooden truss roof system is visible, consisting of numerous interconnected wooden beams forming a complex lattice. The ground within the excavation is mostly dirt and construction debris. Several yellow construction vehicles, including excavators and trucks, are visible on the site. A red line is drawn across the right side of the image, and a yellow highlight marks a specific area on the right edge, possibly indicating a boundary or a specific zone of interest. The surrounding area includes existing buildings, some with blue roofs, and a paved road with parked cars.

An aerial photograph showing the completed plaza and building. The building has a modern, geometric facade with a grid of diamond-shaped windows. The plaza features a large, dark, oval-shaped water feature in the center, surrounded by a paved area with a pattern of light and dark tiles. Several young trees are planted in the foreground, and a few people are visible walking on the plaza. An inset image in the top right corner shows a close-up of the building's facade and the water feature.

- Completed venue



Unbounded Innovation Block Ecological Silicon Alley

"Strong heart tracing axis, One ring Nine parks" to create a shared park integrating wisdom and creativity, experience green and natural ecological blocks, feel the vitality of life and culture community.