





前言

The Beijing Urban Design Studio: 20 Years of International Collaboration marks the 20th anniversary of the pioneering joint program between the MIT School of Architecture + Planning and Tsinghua University School of Architecture in Beijing. Close to 400 students and faculty have taken part in the studio since 1985, making it one of the most significant and enduring academic exchange programs between the US and China.

The goal of the Beijing Urban Design Studio is to foster international understanding of urban issues by undertaking joint city design, architecture and planning projects involving important, often controversial sites in Beijing. Conducted every other summer on the Tsinghua University campus, and including study across China, the Beijing Urban Design Studio involves a total immersion in place and process.

Work in the studio is accomplished in interdisciplinary teams combining skills in urban design, architecture, land use planning, transportation, and real estate development. Tsinghua University students help with understanding social issues and language. The Beijing City Planning Institute, responsible for strategic planning in the city, serves as the client.

As illustrated in the drawings and photographs of the students, the face of Beijing has changed dramatically over the past twenty years, from an ancient capital of hutongs and courtyard homes to a global city about to host the Olympic games. Throughout this transition the studio has kept its focus on the design of homes and neighborhoods for Beijing's teeming population, providing alternative, more livable models to the sterile modern towers that have come to dominate the landscape.

The Beijing studio is led by Professors Dennis Frenchman and Jan Wampler, who have been involved in the program since 1987 and 1992 respectively, and Professors Zhang Jie, and Shan Jun of Tsinghua University. The studio was founded in 1985 by former MIT Professor Gary Hack and Professors Wu Liangyong and Zhu Zixuan of Tsinghua University. Other MIT faculty who have participated include John de Monchaux and Chris Zegras and former faculty Paul Lukez, and Ric Richardson.

This exhibition organized by the School of Architecture, Tsinghua University, for the City of Beijing Planning Exhibition Center Curated for the Wolk Gallery by:
Dennis Frenchman, Professor of the Practice of Urban Design Jan Wampler, Professor of Architecture
Gary Van Zante, Curator of Architecture and Design, MIT Museum Laura Knott, Curatorial Assistant, MIT Museum Jianxiang Huang

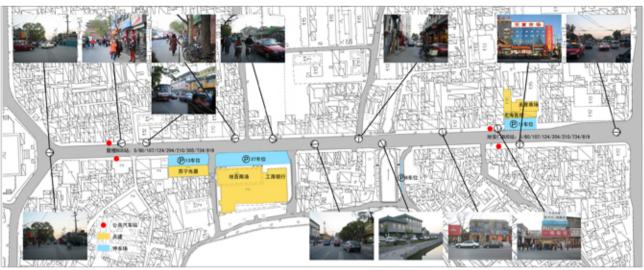
Exhibition designed by Stéphanie Williams

Special thanks to:

Adèle Naudé Santos, Dean, School of Architecture + Planning
Yung Ho Chang, Head, Department of Architecture
Lawrence J. Vale, Head, Department of Urban Studies and Planning
Jing Wen, Wu Liangyang and students of the Beijing Urban Design Studio
The Paul Sun Fund
Godfrey Yeh Foundation through the Asian Cultural Council of New York
MISTI China Program
Tsinghua University School of Architecture

## Tsinghua-MIT Beijing Joint Urban Design Studio 1985 Renewal Project in Shishahai Area

清华-麻省理工城市设计教学课程 1985 什剎海地区



地安门大街交通现状 Traffic in Dianmen Street



沿街立面与商业形态 Elevation and Retail



### THE SITE

Shishahai

The Shishahai ("Lake of the Ten Monasteries") district is part of a larger activity area for the common people. Traditionally, it provided the commoner's counterpart to the imperial domain located directly to the southeast. Green
spaces and a magnificent string of three man-made lakes are surrounded by beautiful but often congested feudal
courtyard houses, in close proximity to cultural and historical landmarks. The three lakes were planned in an organic and naturalistic fashion – in conscious contradistinction to the city's gravely formal north-south axis.

This historical axis is still visible and felt today, extending from the Drum and Bell Towers on the north, to the
Temple of Heaven compound on the south, with the Imperial Palace at its heart. If this axis reflects Confucian
principles, it is the playful organization of the lakes and parks that mirrors the Taoist element of Chinese thought
and social principles: the controlled, eternal, unchanging, versus the light, quirky, playful and irrational.

Shishahai is a viable community. During the Yuan Dynasty (1266-1387) its Drum Tower street and Silver Ingot
bridge were the busiest area of the capital, and today it is still an important commercial subcenter. It is also a vital
residential area, exclusive in some parts, in others crowded and often squalld but generally prized for its amenities and conveniences. Planning strategies have marked it to become a recreational, cultural, and tourism center
of far greater importance than it is currently. Traffic congestion, housing conditions and uncontrolled encroachment of some small enterprises are the most important immediate targets for improvements.

### 地段介绍

什刹海(十座寺庙的海)地区在历史上是一个普通市民活动的地区。 这与东南面的皇家园林形成强烈对比。这一地区以其大量绿地、树木 、三个巨大的人工湖环绕许多优美但又拥护的四合院。成为一个充满 文化和历史气氛的地区。 三个湖面的规划是有机而自然的。有意与城市庄严规整的南北轴线形

三个湖面的规划是有机而自然的。有意与城市庄严规整的南北轴线形成鲜明的对比。这一条历史的中轴线一北起钟鼓楼一直延伸到南面的一坛建筑群,至今仍非常显著,如果说这四强烈的轴线应除了孔可克制的。永恒的、永恒的、永恒的、灵活的、非理性的之间的对比。什刹海是一个充满生命力的社区(1266-1387)。鼓楼大街和银锭桥一带是旧时首都最繁忙的地区。今天这里仍是市区一个重要的商外中心。什么将海地区还是一个人口稠密的居民区,除了一部分地区外外,这里居住条件简展,但却方便并充满情趣,最近规划部门已决定大大加强该地区的爱展,使其成为一个真正的旅游文化中心。其中,首先要解决的问题是改变这里的交通条件和住房条件,以及湖岸一些小单位的乱建乱占等等问题。

## Tsinghua-MIT Beijing Joint Urban Design Studio 1985 Renewal Project in Shishahai Area

### 清华-麻省理工城市设计教学课程 1985 什刹海地区



#### Proposed Redevelopment of Dianmen Street

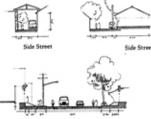
Much of the through traffic will be diverted to a new relief street constructed to the east. Cycling will be eliminated from the main roadway, as in other major shopping streets in Beijing. Bus lay-bys will smooth the traffic flow. The east side of the street will be selectively redeveloped with new mixed-use structures for shopping on grade and housing above. As the area to the east is redeveloped, a new high-density, low-rise courtyard prototype will be employed.

#### 地安门大街改造方案

该大街上的穿越交通将由东面建成的 (正在施工)新街引开。同时、自行 本也将限制在地安门大街上,加上的 新道路的通行能力。在地安门大街上 高道路台通径的边行能力。在地安门大街大 高道路台重发展商业混合的建筑形式。 而大街面面和临湖一带。新的健底形 密度的合院住宅将作为主要的建筑形



刻面A Section A



剖面B Section B

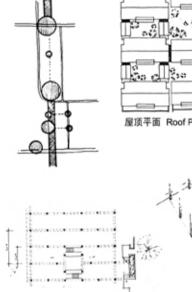
### 地安门大街的现状

 Dianmen Street - Existing Conditions

Congestion and traffic conflicts among pedestrians, cyclists, drivers and buses make the street an inhospitable shopping environment. There is no place to park bicycles away from traffic. A number of fine historical buildings are hidden away behind commercial facades. Although they are only a block away, there are few connections between the lakes and Diammen Street.



地安门大街规划方案详图 Master Plan of Proposed Living/Shopping Street



结构平面 Plan of Structure



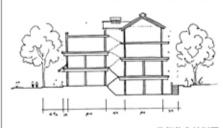
住宅典型剖面 Typical Section of Housing



地安门大街改造后景观A Perspective A



地安门大街改造后景观B Perspective B

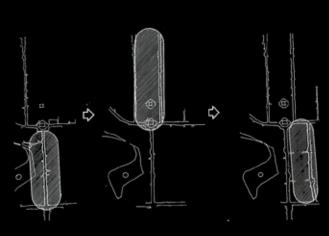


临街住宅轴侧图 Axon of Housing Edge

### Phasing Scheme

Traffic relief will be gained in three stages. First, Diannen Street will be improved to iron out the conflicts in traffic. Then a new relief road northward will be created east of the Bell and Drum Towers and the axis will be extended. Finally, a new relief road to Diannen Street will be created and the area between it and the current street largely redeveloped.

### 方案实施的阶段性



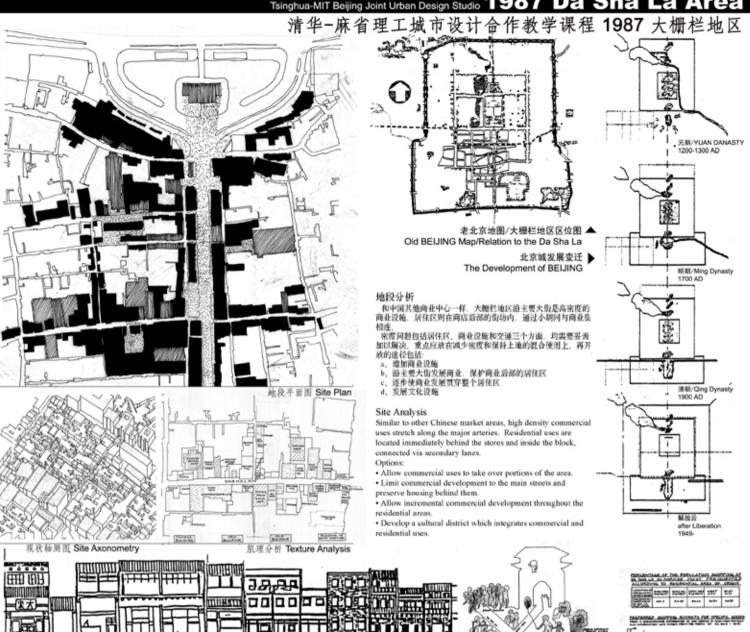
The area for future extension of the Beijing axis northward and the zone of the ring road where new development should be carefully controlled.

Contrasts in the texture of the city before (top) and after (bottom) creation of a new pedestrian link

随着北中轴的延伸。新的可 供开发的地区示意。对这一 地区的新的开发应进行适当 的控制

在步行系统改善前(上图) 和改善后(下图)城市街站 结构的变化。





Elevation along Street

透视图 Perspective



Da Sha La's location is at the termination of Qian Men Street, or Gate Street, which serves as the central axis to the Forbidden City, providing a focus for the area. Specialty shops serving a regional market, theatres, and close proximity to important cultural attractions are added factors which make the Da Sha La area a meeting point for the city of Beijing.

During the Jin Dynasty (1150-1234), the Forbidden City was located to the southwest of its current position. In the Yuan Dynasty (1271-1368), it was moved to its present location. The Da Sha La district came into being as the circulation route between the Jin and Yuan Dynasty centers. The Da Sha La area became the most important market center in Beijing in the Ming Dynasty (1368-1644), when the expansion of the city walls destroyed the canal serving as a transit route to the Dianmen Street market area north of the Forbidden City. In the latter part of the Qing Dynasty (1644-1911), the main railway stations were built near the district, increasing its activity. After liberation, retail shopping decreased on Qian Men and Da Sha La Streets, although access was improved with the construction of a subway station.

Through all the historic changes to the area, Da Sha La has preserved its mixed-use nature. Today, the addition of large public stores on the main arteries, the recent encouragement of the private sector, and the expansion of the consumer market has brought uncontrolled development of shops on secondary streets and alleys. The intensity of commercial uses make this a popular, but congested area. Heavy pedestrian crowding and conflicts between pedestrians and vehicular traffic occur at many intersections. Open space is minimal for both residents and shoppers.

### 地段介绍

人流分析 People Analysis

大標栏商业街位于前门大街中部。与城市中心轴线垂直。鳞次栉比 的商店、戏院历史悠久、富有特色,该商业街与前门商业街一起, 形成北京城三大重要商业中心之一。

NAME OF TAXABLE PARTY.

商业构成 Shopping Analysis

在金代(1150-1234),繁禁城在现在位置的西南部,到元代 (1271-1368). 才迁到今址。明代(1368-1644). 由于繁禁城城 墙外移,切断了杭州通向鼓楼商业区(元代最大商业中心)的运河 ,此时南来的货物大都云集前门、大栅栏一带。从此、这一代的商业活动开始繁忙,逐步形成北京城重要的商业中心。清末时期,楼两侧东西火车站的建立,更加促进了这一地区的商业活动,同时,地铁的落成,使这一地区交通更加方便。尽管如此,解放以后前门大街和大栅栏的零售商业仍有所减少。

直到今日,虽然大栅栏经历了一些变化,但始终保持了土地综合 使用的性质。商业的扩展也是本地区居住生活环境日益下降,居住 条件几乎是全北京最糟。







汽车、行人、自行车行驶在曲折狭窄的道路上引 起拥堵:

住宅密度大且破旧; 传统的低层建筑中的新建筑体量过大。

### 外部可利用条件:

便利的外部交通线路: 湖淀娱乐区

有很多待开发的史迹

9 ままを行くのとなる。 与钟、競楼有良好的视觉联系: 烟袋斜街与小桥构成的近人尺度空间与全域严整 的格网形成对比。

居民的邻里意识较强。

#### MAJOR PROBLEMS

- · Traffic congestion resulting from the mixture of automobiles, bicycles, and pedestrians on narrow, irregular streets
- Congested, poor quality housing
   Insertion of oversized modern buildings into the traditional one-story fabric

#### OPPORTUNITIES OFFERED BY THE AREA

- · Ready access from major transportation routes
- · Recreation in the lake area
- · Historic landmarks now hidden · Views to the lake, Drum and Bell Towers



1987 烟袋斜街地区

景观及历史遗迹 Views and Historical Landmarks

### 地段特点:

URBAN TISSUE

PIPE STREET

作为新的地标的入口牌坊起到限制机动车交通的作用: 后街布置有公共浴室和小旅馆,可以避免占用烟袋斜街: 邻里单位保持传统民居特点。 允许布置一些较高的建筑。作为对现有建筑视线不好的补偿。 考虑通过南北的通道为鼓楼创造新的景观。

### 考虑降低侧肉的高度 URBAN CHARACTER

- · Entrance gates as new landmarks restrict vehicular traffic
- · Access to bathhouse/inn by back street to avoid the use of Pipe Street
- The neighborhood keeps its prime residential character
- Allows some higher buildings to compensate for existing density without visual disturbances
- Create new views through proposed north-south pathway
- · Reduce height of chimney





地段平面 Site Plan

建筑分析 Building Analysis

## 地段介绍

历史上这个地区一直与湖有着紧密地联系。在元朝(1271-1368)时 这里是一个码头区,供通过大运河运来的南方的货物装卸。随着明 代和清代湖区的重复干涸与填充,早期的岸线演变成烟袋斜街,形 成一条跨越湖区的运输线。

地安门大街两侧为湖区商业区,有较多新建筑;

在湖岸边的林荫区和南侧能看到开阔湖面景观的地区建设成休息 中心:

一层的居住、小商业和服务混合的建筑与日俱增:

烟袋斜街以北是密集的布局无规则的一层四合院:

烟袋斜街以西是较大、较开敞的四合院。



### THE SITE

Historically, the area has always been closely related to the lakes. During the Yuan Dynasty (1271-1368) it was a port area where goods brought from the south on the grand canal were unloaded. With the repeated filling of the lakes during the Ming (1368-1644) and Qing (1644-1911) Dynasties, the early shoreline became Pipe Street, and a transportation link across the lakes was created.

### Land use and built fabric in the area include:

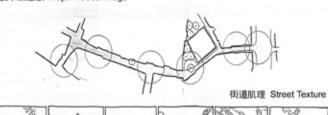
- Active regional commercial uses in modern buildings along broad Dianmen Street.
- · Growing recreation and entertainment uses along the tree-lined lakeshore, particularly at the southern tip of the area with its open views across the lake.
- A mixture of residential, neighborhood retail, and service uses in one-story buildings with incremental additions that spill into Pipe Street.
- · Dense, haphazardly infilled one-story courtyard housing north of Pipe Street.
- · Larger, more open courtyard housing to the west of Pipe Street.

### 1987 PIPE STRE Tsinghua-MIT Beijing Joint Urban Design Studio



### 1987 烟袋斜街地区

重要节点意象 Major Nodes Image



### DESIGN BRIEF

方案说明

1. Construct a new bridge: low in profile, and harmonious in design with the Silver Bar Bridge.

1. 在银锭桥下游建一座风格相仿的全锭桥 2、在烟袋斜街、小石碑街设交通管制。自行

车推行, 汽车夜间运货以改善居住去购物环境

2. Restrict traffic on Pipe Street and Little Stone Street: require bicyles to be walked, and restrict commercial deliveries to late night hours to improve the residential and

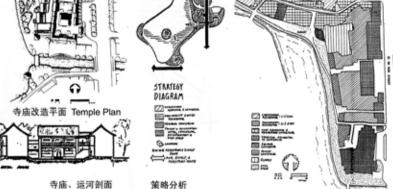
### 方案二 Proposal Two

#### 旅游、娱乐节点的主要设计要点:

- 庙宇在外观上完全恢复,而内部进行改造以适应管线、设备、改造成酒店、会议中心和小型博 物馆
- 重新开放历史上大运河的终点,在南岸建寺庙的围墙。北岸则是供游船停靠的码头。 沿运河和湖的岸边布置新的开放空间。

#### Main features of the tourist and recreation node:

- 1. Exterior restoration and adaptive reuse of the temple as an income-generating hotel, conference center, and small museum.
- 2. Reopening the historic terminus of the Grand Canal, with a screen wall for the temple on the south bank and a boating facility on the north bank.
- 3. Creating new open spaces along the canal and lake shore

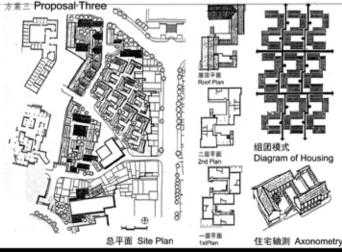




Section of the Canal and Temple

Strategy Diagram





### 方案说明

第一阶段: 疏通交通拥挤地段, 改善概染斜街以及邻近民居的建筑质量,

第二阶段: 在东北角设新展住区。区内建筑以2-3户的四合院为主。80%房间而南,容积率1.1。这里将安置原有的60户 和因建设旅馆拆迁的20户居民。

第三阶段:建设市场并改善测滨区环境。市场将容纳目前烟袋斜街大部分的商店、从而使烟袋斜街基本以居住建筑为 主。原有的学校将被改造成住宅。需要拆迁的总共140户当地居民将被安置在那里。

Phase one: Implement the traffic plan, renovate Pipe Street and adjacent courtyard houses.

Phase two: Build new housing. The housing would have a courtyard for every two or three families and provide southern exposure for 80 of the rooms, which house the 60 families on this site and 20 families from the hotel site

Phase three: Construct the market place and improve the waterfront. The market place would absorb most of the current shops along Pipe Street, making the street primarily residential. Overall, 140 families would be relocated to new housing or the renovated school building.





### DESIGN DESCRIPTION

In the three proposals, the first one is aimed at the traffic problem in this area, and the others try to deal with the competing needs of residents and tourists.

The first proposal: As documented by our survey, the primary social realities of the area are residential overcrowding and physical deterioration of housing, and the needs, wishes, and attitudes of the residents concerning their neighborhood. The major physical reality of the area is the traffic congestion on Pipe Street, Little Stone Street, and the Silver Bar Bridge. The historical reality of the area is the long tradition of Pipe Street as a commercial street, a role that has gradually increased over the past six years. Given these social, physical, and historical realities, the policies proposed for addressing change are gradual renovation and public

The second proposal seeks to resolve conflicts between neighborhood and tourist-recreational uses through physical separation. Major tourist development would be concentrated at the south of the district and along the lake shore, offering direct access from Dianmen Street, proximity to existing recreational uses and a proposed theater, and little direct impact on the Pipe Street neighborhood. Residential and neighborhood commercial uses around Pipe Street would be protected and incrementally rehabilitated.

The third proposal seeks to fulfill two main objectives of the District government: to build a state-owned hotel to bring income for renovation, and to make use of a six-million-Yuan fund administered by the Tourist Office to restore Pipe Street. The proposal would relocate all current residents within the neighborhood, upgrade existing housing conditions, and provide new public social spaces.

### 方案介绍

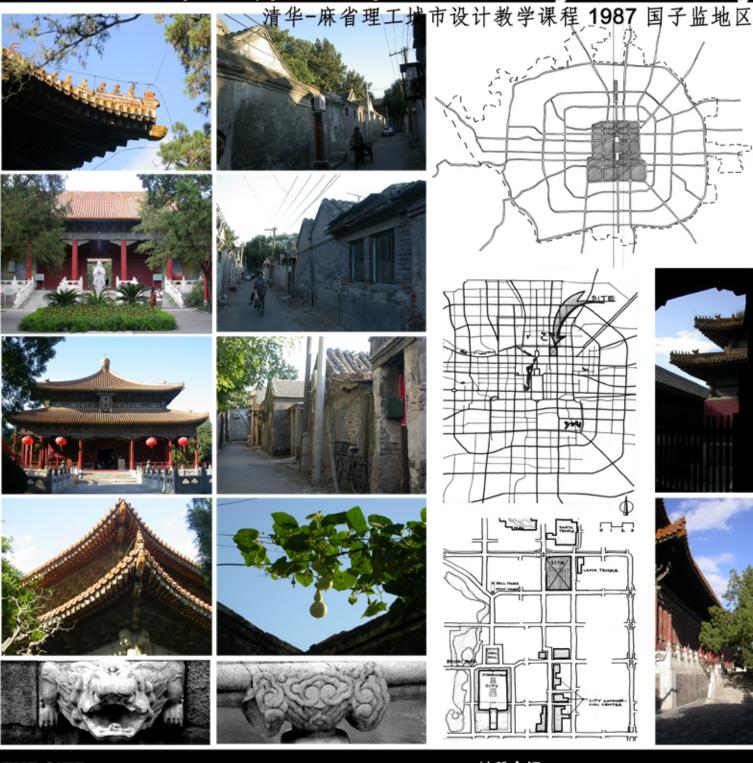
这个设计中,第一个方案主要考虑区内交通问题,另外两个试图解 决居住与旅游、娱乐的矛盾。

·方案:构思考虑远近期的现实性。确定近期措施应更细致深 入。该区基本的社会状况; 住房拥挤, 质量低劣; 主要环境状况; 烟袋斜街、小石碑街及银锭桥的交通拥挤混乱。基本历史现状: 烟 袋斜街长期作为商业街。由以上分析得出下列构思: 1、在银锭桥下 游建一座风格相仿的金锭桥。2、在烟袋斜街、小石碑街设交通管制 ,自行车推行,汽车夜间运货以改善居住去购物环境。

第二方案: 试图解决旅游与娱乐的冲突、使之尽量分离。主要旅游集中在南侧湖滨。该区紧邻地安门大街,并靠近游泳场及规划中的剧院。对烟袋斜街的直接影响极小。保护烟袋斜街上的居住特点 并增加其商业、保持亲切的尺度。

第三方案试图满足政府方面的两个要求: 1、新建一个宾馆, 增加收入以促进更新。2、利用六百万元资金,整修烟袋斜街。方案中, 在临近区域安置现有居民,更新现存的住宅状况,并提供公共空间

## Tsinghua-MIT Beijing Joint Urban Design Studio 1987 Royal Academy



### THE SITE







INNER GATE

The Royal Academy site is located in the northeast sector of the old city at the edge of the inner city wall, which was replaced by a modern high capacity ring road in the 1980's. Three cultural institutions – the Lama Temple or Yong He Kong, the Royal Academy (once the capital library), and the Temple of Confucius (once the capital museum) – are located in the area, along with a hospital and several smaller enterprises. A dense web of courtyard housing, overcrowded and in need of repair, establishes the context in which the residents live. Issues in the Royal Academy site revolve around neighborhood revitalization, the resolution of land use conflicts, and access to the cultural institutions: How can higher quality housing be provided to the residents while maintaining a balance between institutional presence and historic meaning? How much housing can be conserved and what form should new housing take? conserved and what form should new housing take?

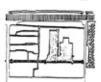
### 地段介绍

国子监地段在北京旧城东北角,紧靠原来的城墙。80年代城墙已被拆除。在原址上建造了一条现代化的交通环路。本地段内有三个大场市选,瘫和宫、国子监、孔庙(当时国子监为首都图书馆,孔庙为首都博物馆,现均已迁址),此外,当时地段内有一家医院和一些小工厂。四合院住宅连成一个稠密的网状结构。确定了居民们的生活模式。但是,四合院住宅内人口过分拥挤,建筑也已年久失修。国子监地段面临的主要问题是如何赋予传统居住区以新的活力,如何使文物古迹更好的向公众开放,如何才能在保持支物古述玩境,原有住宅有多少是值提保留的。新的住宅应是什么彩式等笔间题。 值得保留的,新的住宅应是什么形式等等问题



### 华-麻省理工城市设计教学课程 1987 国子监地区





- I. R.A. / CONFUCIAN TEMPLE
- LAMA TEMPLE ARCHIARY
- R.A. STREET
- R.A. SYREET RED WALLS / GREEN TILE / YELLOW TILE STREET PATTERN ring road Trees in ra street
- 4. STONE TABLETS TEMPLE OF EARTH
- QUETNESS OF RA. 57 GUETNESS OF RA.:
  FENE JIA LANE
  WU DIO YER LANE
  THE CANAL
  SUBMIT BUTTANICE
  HEHORIES OF PAST

MEMORIES OF PAST CHADS IN COURTYARD

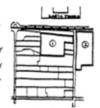




- PRESERVE R.A. AND LANA TEMPLE PRESERVE / RESULD / RESTORE / RESERVE DE CONTYNED HOUSES PRESERVE R.A. STREET
- PROVIDE MORE RECREATIONAL SPACES
- AND WIDEN STREETS 5. CONTROL MEN BUILDING HEMMT

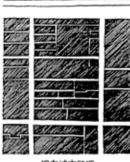
FROM YOUR OBSERVATION , WHERE DO CHILDREN , OLD PEOPLE, AND ADJUSS SPEND MOST OF THEIR LEISURE TIME ?

- INCOMPATIBLE FORTS ON EITHER SIDE OF SECOND RING ROAD REMOVE AIDUSTRIES
- LACK OF CULTURAL / CONTRAINTY
- REBUILD GARDEN ON THE MORTH DE SECOND RING ROAD PROVE TRATEIC & STREETSLAP

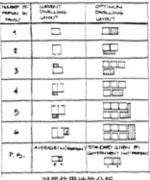


历史发展 元-清-现代

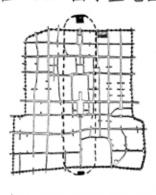
History Yuan-Qing-Now

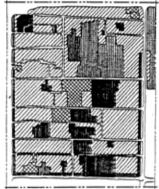


现有城市肌理 Existing Urban Context



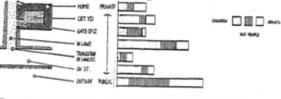






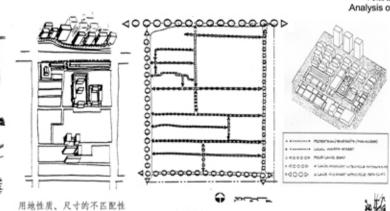
地段区位 Location

用地规划 Land Use Planning



A DESTROMARE WAS CIRCULATED WITH FOUR HAIN GUESTIONS IN THE ROYAL ACADEMY AREA BACH OF THE FIVE AEMI-BORHOOD COMMITTEES RECEIVED TEN QUESTIONAIRES TO DISTRIBUTE ATOMS THEIR CONSTITUENTS. THERE WERE THIRTY RESPONDANTS

问卷调查分析 Survey and Analysis











### DESIGN DESCRIPTION

The Royal Academy site is part of the northern edge of the old city of Beijing, east of the central axis. It is bounded on the west by the An Ding Gate. The area retains much of its traditional character and form, but faces strong redevelopment pressures. Traditional courtyard housing is being replaced by walk-up apartments. The character of the remaining courtyard housing was diminished when victims of the Tong Shan earthquake were permitted to build "temporary" sheds in the courtyards. These sheds have since become permanent additions. Industrial and commercial developments have encroached on historical monuments and degrade the housing environment. The central design issue is to reconcile the need to modernize transportation and housing without destroying the area's historical character and significance.

Based on the site analysis the following design strategies are proposed:

- Buildings and features of historical value should be restored to their original qualities.
- Traffic should be rationalized within and around the site, while preserving existing street patterns.
- The residential character of the site should be strengthened and other uses should be better distributed.
- 4. The process through which the land use plan can be realized is shown. This strategy enables the flexible relocation of families from crowded housing into new or renovated dwellings without displacement from the site. This plan is general and conceptual rather than specific to a precise time horizon.
- Improving the quality of housing and the site environment and eliminating overcrowding are common goals of the four housing prototypes for Royal Academy. This may be achieved by increasing the living space per person
- to current municipal standards, increasing privacy, and improving sanitary conditions.

  6. This study provides a typology for preservation zones in the Royal Academy Area. The objective is to enhance the existing activities of the courtyard house and raise living standards while restoring its traditional form.

### 方案介绍

国子监位于北京旧城的东北隅,街区西侧是安定门内大街。街区内保 现代化交通和居住的要求。

- 1、历史继承性:国子监街区应主要满足居住要求,同时也考虑一些 古迹和事业单位的功能要求和历史环境。
- 2、道路交通:街区内外的交通要进行合理的组织,并保护现有的街 非格局.
- 3、用地规划:强调街区的居住环境特点,其他用地应尽量分散。
   4、分期建设规划:提出用地规划得以实现的具体过程,以及达到最终目标的实施步骤。指导思想是在避免居民外迁的前提下,使住房拥 挤的居民迁入新型住宅中。
- 住宅设计: 五种住宅设计的共同目标是改善居住条件和环境, 缓 解住房的拥挤状况,主要包括提高人均居住面积、加强住户的私密性 改善卫生设施水平
- 6、探讨保护传统四合院的方式,既要加强四合院内的社会交往活动
  - 保持传统格局, 又要提高居住标准,

## Tsinghua-MIT Beijing Joint Urban Design Studio 1992 Longfusi, Dewai Street, Xiangshan

## 清华-麻省理工城市设计教学课程 1992 隆福寺、德外大街、香山地区

穩胜[]外 在八达岭长城沿高連路进京,顶在二环路上的底景便是德 胜门。德胜门里有两条小马路。一条去后海。一条去后梅。 在田时这里十分热闹。是更场和游玩的好去处。至今日。这 里已被划定为历史文化保护区。德胜门外原为一条狭窄的小 信。拥挤的道路两旁是拥挤的大片平房。 自曲折折的小胡同 是种其中。连接着同样狭窄和曲折的小院。新千年来输之际 这里发生了变化。打通了三环与二环的连接线。修建直通长 城的快速路使这里跑底失去了原有的尺度。高架桥在城门楼 加阳级各了王兰岭港岛北县区 两侧绕行. 无法说清是好是坏

#### Deshengmenwai

From Badaling Great Wall we enter Beijing along the expressway. Desheng gate is on the second ring road and there are two roads beside it, one to Houhai and the other to Changqiao. In the past, this area was very busy and it was a nice place for shopping and amusement. Up to the present, Desheng gate has defined the historical cultural protection district. Originally, Deshengmenwai was a narrow street with crowded bungalows along two sides, crooked hutongs and narrow courtyards. The approach of the new millenium brought much change to this area - the third ring road was connected to the second ring road; the construction of the new expressway to the Great Wall caused the original scale of this area to be lost; the trestle was set around the city gate as if putting a gaudy necklace on an old lady. It is hard to say whether it is better or not.







Longfasti
Longfasti is on the west of the Xiai North Street. It was built in
1425 A.D. and was received in 1731 A.D. Longfasti is the only
raised Baddhart and Laran strengt from the Bring Dynasty. Is
the Qing Dynasty it became a Laran Temple exclusively.
Longfast used to be one of the regigning temples, and the bigge
temple fair of the old Beijing city which was called "Dongmison". It strated many people to the temple fait, including
robbies, ferreigners of Donglissomiroking Diplomatic Mission
Area, common citizens, and peasant Bring cuside the city.
New Lonefast is the new commercial area of Beijing.

(1870日) 隆福寺座落在东四北大街西。始建于明代宗景泰 三年(1425年),清雍正九年(1731年)重修、隆福 寺在明代是京城唯一的唇(喇嘛)、禅(和雨)同驻 的寺院,清代成为完全的喇嘛庙。

的寺院,清代成为完全的喇嘛店, 歷稿寺曾是朝廷的春火院之一,成为京师著名的大庙 会。因座落在东城,与护国寺相对,俗称宋庙。,清 代,旧历每月逢一、二、九、十开庙。1930年政用短 历一、二、九、十开庙。每逢庙会。人流如潮,附市 瓦布丛即衣民都未赴庙会。在这里可以买到各式各样 的土特产品,可以吃到多种北京地方风味小吃,可以 看到北京的民间成曲。 《北京村枝词》中说,当年庙 会全盛时期。一日能消官万核。 现在隆橋寺是北京的新商业区。







### 香山公園

位于京西北郊西山香炉峰下。金、元、明、清历代帝王都在此营造海宫别苑。 成为各朝皇亲国底游坛寄居之所。山间林密、景色宜人、金代始建行宫和春山寺。 清乾隆年间大兴土木、增建了华丽的静宜园。后经历英法联军和八国联军的助难。 现有名胜景点大佬分为二部分。北嵩有昭庙、琉璃塔、见心斋、眼睛朝和新建的登山家道。中路有英蓉锦、玉华山庄、多云亭、西山晴雪等。南路春春玉绣、园风亭、半山亭、香山寺遗址、双清别题等。这里是春日實花。夏路疆暮 秋霞红叶、寒 冬精雪的好去处、被称为香山的园中之园。香山公园北侧还有停丽无比的碧云寺、 500罗汉和奉命先行者孙中山纪念堂。

### Xianoshan (Fraorant Hills) Park

Situated at the foot of Xianglu (Incense Burner) peak in Xishan Hills, northwest of urban Beijing, this was the recreational area of the Jin, Yuan, Ming and Qing emperors. Scenic spots in the park include Zhaomiao Temple, Glazed Pagoda, Jianxin Chamber, Spectacles Lake and the newly built cableway in the north, Lotus Hall, Yuhua Villa, Cloudy Pavilion and the Stele of Western Hills Shimmering in Hall, Yuhua Villa, Cloudy Pavilion and the Stele of Western Hills Shimmering in Snow in the middle, and Senyuhu (Jade Tablets), Langfeng Pavilion, Halfway Pavilion, Site of Xiangshan Temple and Twin Pools Villa in the south. Xiangshan Park is an ideal place for viewing flowers in spring, escaping the city's heat in summer, enjoying autunn colors, and walking in snowy winter. To the north of the park is the magnificent Biyum (Azure Clouds) Temple which houses the five Hundred Arhats Hall and Dr. Sun Yat-sen Memorial Hall.

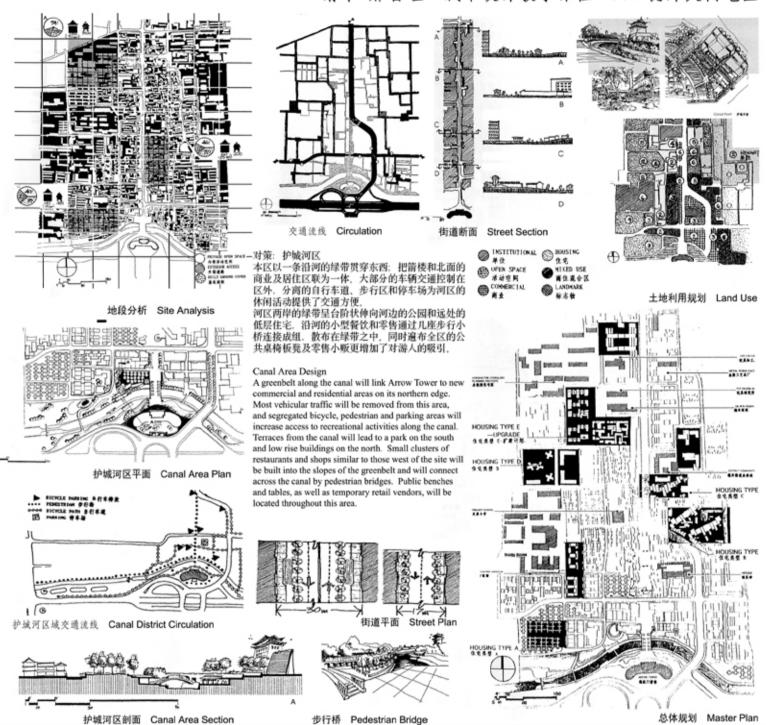






## Tsinghua-MIT Beijing Joint Urban Design Studio 1992 Dewai Street Area

### 清华-麻省理工城市设计教学课程 1992 德外大街地区



### SITE ANALYSIS

The Dewal area covers 43 hectares along Deshengmenwal Street between Beljing's second and third ring roads. Deshengmenwai is a 9m wide, congested commercial road used primarily by buses and cyclists. Residential spaces, many of which are in traditional courtyard housing blocks, front on narrow alleyways. The area contains many civic, social and institutional buildings and is anchored by the Arrow Tower. Area problems include:

- Traffic congestion
- · Dilapidated, crowded housing conditions
- Limited access to Arrow Tower due to poor traffic management strategies
- · A change in grade elevation of three meters between the east and west sectors divided by Deshengmenwai Street

### CONCEPT PLAN

Beijing's Planning Department has three goals for this site: increase residential and commercial floor space, improve traffic circulation, and preserve Arrow Tower as a national landmark. It suggests that a 70m expressway and district commercial space be built on the site. We fear that an expressway will fragment the neighborhood, and propose as an alternative:

- Build a 30m road for increased vehicular and bicycle traffic
- Increase the population and residential FARs by constructing mixed density housing
- Expand commercial activities by creating a central commercial core
   Redevelop the area around Arrow Tower to increase green space and improve pedestrian access to it
- Maintain existing community fabric with targeted preservation

### 地段分析

占地43公顷的德外地区位于二、三环路之间的德胜门外大街两旁。 外大街目前是一条9米宽的商业街。居住空间大多是传统合院。此外 有许多个人、集体和国营的各种单位,其中箭楼是主要的标志。 現状问题包括:

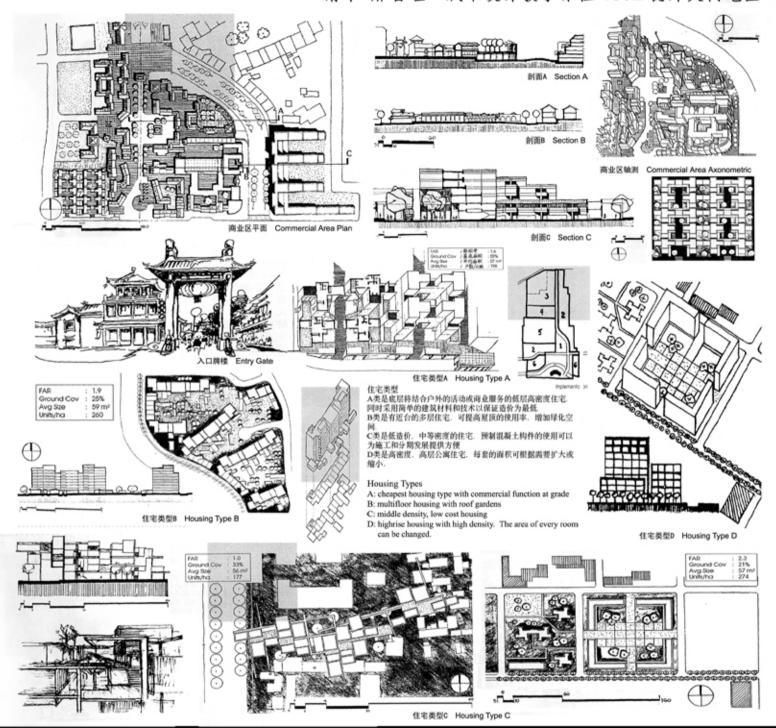
- ? 交通拥挤
- ? 破旧拥挤的住宅状况
- ?由于交通管理的不当造成箭楼可达性差 ?以德外大街划分的东西两区存在着3米的高差

### 地段分析对策: 规划意向

北京市規划局对该地段提出三个目标: 扩大居住和商业面积; 提高交通能力, 保护国家文物德胜门前楼。他们主张在这里建设70米宽的快速干道和地区级商业中心。因为我们担心快速干道将会破坏邻里的整体感, 因此提出以下不同意见: ? 为增加的车辆及自行车交通将大街拓宽到30米 ? 通过建造各种密度的住宅来提高住区容积率和整体人口数 ? 通过建造集中的商业核心来扩展商业活动 ? 重新开发箭楼周围的地区以增加绿地和通往德胜门箭楼的便捷性

## Tsinghua-MIT Beijing Joint Urban Design Studio 1992 Dewai Street Area

### 清华-麻省理工城市设计教学课程 1992 德外大街地区



### COMMERCIAL AREA DESIGN

Large commercial uses mixed with neighborhood retail will be located in buildings along the northern half of Deshengmenwai. Local retail activity will be provided near housing easily reached by bicycle, bus, or foot.

Most commercial buildings on the southern half of the site will contain retail, restaurants and services on the first floor with residential or office space above. The densest concentration of commercial activity will be on streets running parallel to Deshengmenwai (both east and west). Included will be a department store, enclosed mall, tea house, Young Pioneer Palace (youth center) and space for small offices.

Flexible building designs will enable uses to be either commercial or residential as market demands dictate.

### HOUSING STRATEGY

Built residential space in the area will be tripled through construction of four housing types: high-density, low-rise mixed-use structures; rehabilitated courtyard housing; mid-rise models; and high-rise structures. Emphasized design objectives for the area are:

- Increase the size of living spaces
- Improve infrastructure services
- Meet sunlight standards
- Improve the quality of and access to residential green spaces
- Meet market demand by allowing for development of residential and/or commercial uses in individual build-

Diversity of housing will be encouraged through use of a rich array of building materials, textures, and styles.

### 对策:商业区

大型商业及零售将布置在德外大街的北段,本地的商业活动则尽 量靠近住宅区以保证交通的便捷。 本区南部主要是底商住宅或底商办公形式的商业建筑。而最密集

的商业活动则布置在与原德外大街平行的东西街道上,其中包括一个 百货商店、超级市场、茶馆、青少年宫、和其他小型办公。 此外,随着市场需求的变化,该区灵活的建筑设计还能随时满足

商业或居住等多种使用功能。

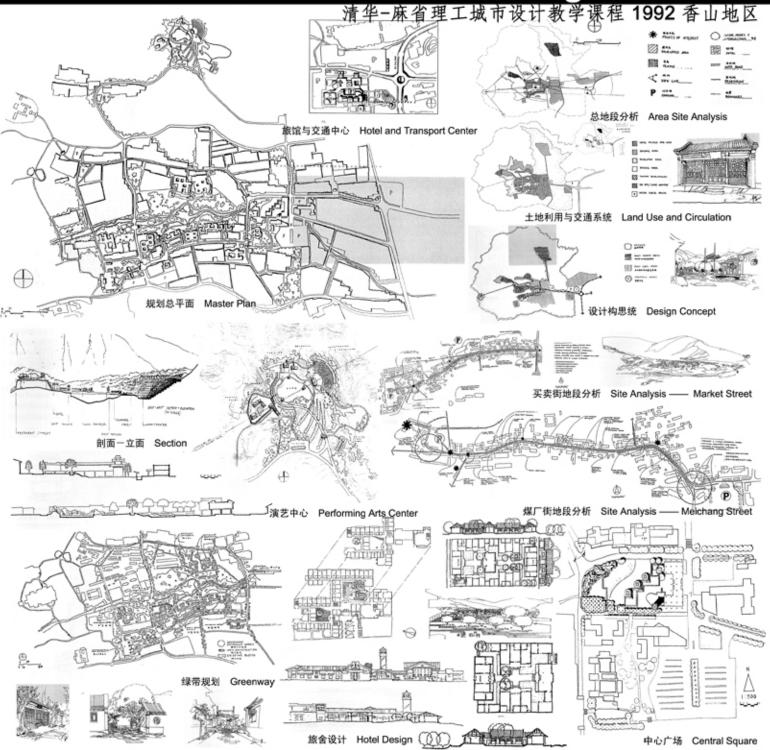
### 对策:住宅

为了将该区的住宅容积率提高三倍,本激化采用了以下四种住宅 类型: 低层高密度混合住宅、经过改造的四合院住宅、新型多层住宅 和高层住宅,在设计这些类型的时,我们强调了以下几点:

- 增加居住面积
- 完善基础设施服务满足基本的日照要求
- 無定基本的互際要求
   提高住宅绿化的质量及使用率
   在个别建筑中鼓励商业和住宅的多功能使用

此外,我们也希望通过建筑材料、肌理和风格的不同来丰富住宅 类型。

Tsinghua-MIT Beijing Joint Urban Design Studio 1992 Xiangshana Area



### DESIGN DESCRIPTION

Fragrant Hill is one of the most scenic spots near Beijing, attracting vistors to the natural beauty of the hills, the botanical gardens, the Biyun and Sleeping Buddha Temples, and its many cultural relics, tombs and historic sites. Fragrant Hill contains one of the five imperial gardens, along with the nearby Old and New Summer Palaces, and Jade Springs. Begun over 800 years ago, large parts of the site were destroyed during the 19th century invasions, and rebuilt in this ancient form. However, an air of antiquity remains amidst the natural reserve. Today, the town of Fragrant Hill is flooded by a seasonal influx of visitors – up to 100,000 on an autumn weekend – who come to view the red leaves, and the spring peach and cherry blossoms. Limited commerce, local industry and agriculture comprise the off-season economy.

### Site Analysis

- - A lack of a marketing strategy to capture visitors in the off season
     Perception of the site as remote and lacking in visitor services, hotels, restaurants, and diverse merchandise
     The Fragrant Hills Hotel is perceived as isolated, poorly managed and too small for conferences
     The Central Square and entrances to the park and temple lack definition and a sense of arrival

- Meichang Street lacks a cohesive design approach
   Traffic problems include inadequate roads, parking shortages, and conflicts between pedestrians and vehicles

- Create a cohesive image for Fragrant Hills that will inform design efforts and marketing
- Improve access, arrival, orientation, and sense of place
- · Extend the park into the community via a central greenway that ends at the tourist core
- Create green corridors along the commercial streets and roadways
- Extend the tourist season by developing a performing arts center and providing winter conference facilities

### 规划意向

香山是北京附近最著名的景点之一,以其山岳的自然美景、植物园、碧云寺和卧佛寺以及众多文化遗迹、古墓和历史景点取引着旅游者。 碧山与附近的园明园、颐和园、玉泉山等组成五大皇家园林。大约 800年前,大部分景点毁坏于19世纪中军的入侵,后又以古代形式重建。如今古迹风貌依然保存于大自然之中。今天,香山镇季节性地涌入旅游者——秋季周末有高达100000之多的游人来观赏红叶。还有春季的桃花节和樱桃沟的花卉。淡季则主要靠有限的商业、地区工业和农业为经济来源。 地段问题包括:

- 缺乏在淡季吸引游客的市场战略地区偏远且缺乏旅游设施、旅馆、餐馆和丰富多样的商品对香山饭店的意见:孤立、管理不善、规模不能满足召开会议
- 通往公园和寺庙的中心广场和人口缺乏确定性和到达感 煤场街缺乏具有内聚力的设计
- 交通问题包括缺乏道路、停车场,以及步行和车行交叉的矛盾
  - 为香山创造设计、教育意义和市场为一体的具有内聚力的形象

  - 为首出的超级计、教育显义和印场为一体的具有内景力的 改进到达和进入该地方式。方位感和地域感 通过终止于旅游中心区的绿带,将公园延伸至社区 沿商业街和公路种植"绿色走廊" 通过发展表演艺术中心和提供冬季会议设施延长旅游季节

清华-麻省理工城市设计教学课程 1995 白米斜街



### THE SITE

White Rice Street Area is located in the Shishahai district of Beijing, immediately north of the Forbidden City and Beihai Park. The neighborhood is bounded by the Front Sea, one of three famous lakes in Shishahai, and two major thoroughfares: Di'anmen-Wai Street, and Di'anmen-Xi Street, while White Rice Oblique Street provides a diagonal link between these two major routes.

This was historically part of the bustling market complex which served the northern part of the city. The comfortable courtyard houses characterized the area. Most of this area, similar to other districts in the historical area in Beijing, has been transformed into a dense matrix of single story dwellings linked by a network of small alleys, with just a few traditional courtyards remaining.

As seen in recent plans to redevelop this area, the White Rice Oblique Street Area embodies the drastic conflicts between the modern city construction and the traditional civilization. Widening of the Di'anmen-Wai Street and the Di'anmen-Xi Street will remove virtually all the existing commercial buildings along the streets at the edges of the neighborhood as well as many homes. Some parts will become mixed use, combining commercial and office development, which has an uncertain effect on the conservation of historical buildings. This area attracts the strong attention of developers, which threatens the stability of the local mid- and low-income residents. The central question faced by the studio is how to balance the market force of high land value with historic preservation and maintenance of a moderate income neighborhood.

More than thirty students from all over the world joined this project. After four weeks of hard work, they submitted six schemes, each with its own character. Some of them concentrate on the improvement of living conditions for local people. Others are interested in the development of tourism or commercial activities and submit many fantastic suggestions oriented to drawing investment into the area. But an important principle shared by all of the six schemes is to show respect for the history, the context, the traditional civilization and the local people.

### 地段介绍

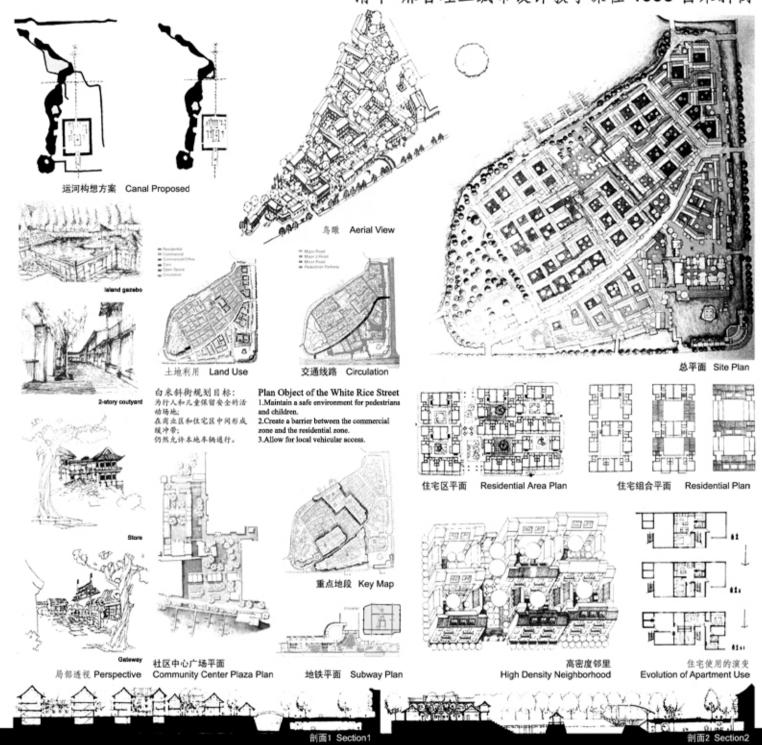
白米斜街地区南面紧邻紫禁城和北海公园,西面以什刹海三大名海 之一的前海为界,东面和南面分别以两条城市主干道——地安门外 大街和地安门西大街——为界,形成一块以白米斜街为对角线联系 的三角区域。

的二州区域。 该区域得名于其传统商业繁盛。历史上曾是为北京域北部商业服务 的市场群的一部分。传统舒适的四合院成为该地区的特色建筑形式 。在经历了中国历史上几次重大事件之后,该地区与北京旧城的大 多数地区相似,仅存少数传统四合院,而大部分地区变成由胡同网 连接的高密度矩阵式排列的单层住宅群。

是按约司商及保产以8分对非法区企料。 近年来对白米斜街地区改造计划使得该地区集中体现了现代化城市 建设和传统城市文明之间的各种矛盾冲突。即将拓宽的地安门外大 街和地安门西大街,必然导致沿路两侧商业建筑以及部分居民的迁 移。部分用地被开发成新型商业办公建筑会对一些重要历史建筑的 保护造成影响。开发商的虎视眈眈更是对该地区的原住中低收入居 民的生活构成了威胁。因此,如何平衡地区土地价值猛烈增长所承 受的市场压力与保护历史和中低收入群体的传统社区生活之间的关 系,成为此次研修班面临的核心问题。

三十多名来自世界各地的同学共同参与了此次研修。经过四周的努力工作,共提出六种不同的改造方案。有些方案侧重于改善现有居民近期居住条件,有些方案鼓励发展旅游和商业以吸引投资,并提出具有想象力的建议。六种方案的统一原则是对历史的尊重,对环境的尊重,对传统文化的尊重和对当地人民的尊重。

清华-麻省理工城市设计教学课程 1995 白米斜街



### PROJECT: THE THIRD ISLAND OF SHISHAHAI

The number "three" has great importance in Chinese design, the most notable examples being the Three Great Halls of the Forbidden City and the three-tiered Temple of Heaven in Tiantan Park. The third island plan honors this design strategy by creating the third major island in Beijing's lake region, and by forming this island with three canals.

The Third Island Plan meets many of the goals of Beijing's Master Plan. The introduction of water will make the commercial portion and the residential portion of the site more attractive. The design focused on the public space of the site. The park in the southwestern corner of the site will be preserved, and a new set of public buildings will be erected for the entertainment of the residents. A neighborhood park is located along the middle canal. A historically significant courtyard house is converted as a public elementary school and an adult center for the arts. The area along the river and lake is suitable for tea houses, as well as a dock. Informal vendors and street performers remain to add life to this commercial area.

Neaten the traffic circulation. Preserve the current widths of the two main streets, Di'anmen-Wai Street and Di'anmen-Xi. A subway stop is located at the intersection of the two streets. White Rice Street is planned as a quiet gradient street for the local residents.

The area consists of a mixture of preserved structures as well as new buildings, all in the courtyard form. Building height starts at one story along the canals and steps up to three stories along White Rice Street.

Two new housing types have been developed following the form of the traditional Chinese courtyard house in order to preserve the social and architectural characteristics of the neighborhood.

### 方案:什刹海第三岛

"三"这个数字在中国传统设计中有重要地位。最有名的例子要数 故宫三道城墙和天坛桁年殿的三重宝顶。"第三岛"方案通过在北京绿化水系中创造第三个主要的岛屿以及环岛的三条运河来体现这 一设计意图。

梳理地区交通戏路。保留地安门外大街和地安门西大街的现状尺度 ,并在其交叉口处设一个主要地铁站,将白米斜街作为一条安静的 步行街。

商业区由保留建筑以及按四合院形式新建的建筑组成。从运河边沿 白米斜街高度逐步由一层增至三层。

对居住区现有住宅进行改造设计,提供两种住宅选型, 都采用传统四 合院形式,以期在习俗和建筑文脉中保留传统邻里特色。

## 清华-麻省理工城市设计教学课程 1995 白米斜街



Function Analysis

1)商业: 地安门外大街扩宽后沿街新建筑辟为零售和办公用房, 沿地安门西大街临时建筑布置

人流不大的本百四; 2)水滨: 前海新建服存和水桥,提供更丰富的公共空间。 3)住宅: 新住宅基于传统四合院的原型并满足跟代生活高泉。方案根据原有肌理更新。 4)工艺学校和工厂: 修整凡座現状建筑,改册于工业和培训中心。

5)河道: 将水系引入作为交通系統的一部分, 为居民和旅游者增添新的情趣

#### Solutions

- 1. Commercial: Retail and office uses are placed in new buildings that line the widened Di'anmen-Wai Street. Less intensive retail occupies well organized temporary structures along Di'anmen-Xi
- 2. Waterfront: A new waterfront on Qian Hai provides an expanded opportunity for public space.
- 3. Housing: New housing based on traditional courtyard prototypes es modern needs.
- 4. Craft Factory and School: Several existing structures have been renovated to serve as a production and learning center.
- 5. Canal: A waterway has been introduced to the site as a partial nent of the public circulation system and as an additional layer of experience for residents and visitors.



局部诱视 Images of the Future: Sketches Representing Public Open Spaces along the Waterfront and the Community Spaces



Circulation

### 交通组织

保持该区亲切的肌理特征、提供小 型消防车特殊交叉口。人们步行或 块发展更新不相互牵制; 地块界 者借助某些特殊交通工具通往各处 限据现状仔细推敲,保持原有尺

### Circulation:

In order to preserve the intimate character of the site's fabric, special nodes for custom designed, smallscale emergency vehicles have been provided. From these points full cess can be made on foot or with other specially designed apparatus.



将用地划分成小块分批改造。各 度。

### Staging:

No one increment of development or redevelopment needs precede an-other. Areas to be developed are to be determined following existing parcel lines, kept small, and allowed to proceed when most convenient without disrupting the



Land Use

各类用地相互交融。住宅与商业 融合、公共设施镶嵌于居住肌理

### Land Use:

Land uses are integrated to a large degree. Residential is mixed with commercial zones, while public uses are embedded in the residential fabric. The commercial uses are differentiated by a regional focus along major streets and a local emphasis inside the site



本方案意在为本地投形成健全的邻里,同时以新的公共设施 得其纳入整个北京城丰富的公 共空间网络。

Entrance of the Market

City and District Context: The new public facilities of this scheme further integrate the site into Beijing's rich network of public places while it is strengthened within as a healthy



商业区剖面2 Commercial Area Section 2



总平面图 Site Plan







### 住字图解

规划尽量保持现状肌理和建筑,为了既保持现状住宅密度与四合院尺度,又保 证合理的采先通风条件,必须迁出部分住宅,并把一些住宅加到二至三层,同 时引入厨房卫生间设施。

### Housing

The existing fabric and buildings are preserved wherever possible. However, in order to retain the existing density of housing while providing good size courtyards that allow appropriate light and ventilation, some existing houses must be removed and

nverted to two or three story structures with toilet and kitchen facilities.



商业区平面 Commercial Plan

### PROJECT: THE WORKING NEIGHBORHOOD

There are many pressures on the Shishahai project site that threaten its physical and social character. Primarily, this threat comes from anticipated redevelopment such as street widening and subsequent commercial intensification and residential gentrification. Conversely, there is a similar danger in reactionary preservationism which fails to recognize the needs and opportunities of the site. "The Working Neighborhood" scheme seeks to responsibly address these two opposing approaches, balancing new development with preservation, while enhancing the quality of the environment for residents and visitors.

To create a sustainable neighborhood through the preservation and development of Chinese culture, craft making, and architecture.

### Object:

- Preserve old houses for public use
- 2. Establish connections to lakes and neighborhoods
- 3. Articulate the waterfront as a district-wide public amenity
- Phase development in small, discreet increments
   Provide a stable economic base for the area residents.

### 方案:安其居,乐其俗

许多外在的力量威胁着什刹海地区的物质环境和社会特征。主要压力来自旧城改造的要求,如街道拓宽、商业活动加强、居民的贵族 化等等。若采用相反的途径,以保护主义处理旧区也同样危险,这 就对地区的需求和潜力缺乏足够的认识。本方案力图寻求-这两种趋向的有效途径,在保护与发展中寻找平衡,并尽量提高居 住游憩的环境质量。

规划目标: 保护和弘扬中华民族传统文化、工艺美术和建筑艺术,将本区创建 成一个可持续发展的自我运行机制。

- 规划途径: 1. 保护质量较好的传统住宅井辟为公用。
- 建立居住部分与前海的联系。 滨湖地带辟为地区性共享的游憩空间
- 分小片逐步开发、保持原有城市肌理 5. 为居民提供稳定的经济来源。



## 清华-麻省理工城市设计教学课程 1995 白米斜街



地段分析 Site Analysis

发展战略分析 Development Diagram



收入分析 Income Distribution Diagram

什刺海地区人文环境由不同阶层人们的各种情趣 The texture of the Shishahai district is formed by different layers of human energy and 行的海地区人又外先为个司法从入口的 组成,蜿蜒的部门,幽深的庭院和丰富的室外空 间中,真实反映了人们的不同愿望,为都市邻里 spirit, which navigate throughout its winding hutongs, sound courtyard houses and oble open spaces. This area truly reflects human aspirations. It contains a wealth of 再生提供了丰富的物质和精神资源。 physical and human elements ripe for neighborhood regeneration.



Proposed Circulation 交通模式建议

	Manager: fation is recasts	Construction	Diser Deserve	-	
Low Docume	310	30	85	0.65	
Ngs. Income	12	4	5	21	
MASS+ Income	81	4	40	125	
Current number of households: 650					

交通權式: 政府计划在地段周围扩宽两条主 要的道路、我们建议作为城市中 轴线的地安门外大街应标宽不超 計50束. 东西向的地会门西北街 拓宽不超过40米,从而保护地投

**以理。白来斜斜传为二级道路保** 

限制机动车接近水边。

Lot Avea	Floor Area	# Cit House- holds	Floor Area Ratio	Foor Area House-holds
927m2	601m <sup>2</sup>	10	0.65	вом?ни
424m <sup>2</sup>	405m <sup>2</sup>	7	0.96	зан <sup>2</sup> нн
206m <sup>2</sup>	462n <sup>2</sup>	3	1.36	154m <sup>2</sup> /HH
950m <sup>2</sup>	168×2	17	1.00	San-Teer
516m <sup>2</sup>	1030m <sup>2</sup>	16	2	вом?ни
	424m <sup>2</sup> 336m <sup>2</sup> 950m <sup>2</sup>	Area 927m <sup>2</sup> 601m <sup>2</sup> 424m <sup>2</sup> 405m <sup>2</sup> 306m <sup>2</sup> 462m <sup>2</sup> 950m <sup>2</sup> 988m <sup>2</sup>	Area House- solar 2 501m <sup>2</sup> 10 404m <sup>2</sup> 405m <sup>2</sup> 7 306m <sup>2</sup> 462m <sup>2</sup> 3 950m <sup>2</sup> 168m <sup>2</sup> 17	Ares         House-holds         Ares           923m2         501m2         19         0.65           424m2         425m2         7         0.96           300m2         445m2         3         1.36           960m2         986m2         17         1.00

#### Circulation Patterns.

传统四合院中缺少必要的基本服务 设施 (厨房、溶厕、上下水) , 从 而影响了本地区的居住质量。因此 我们试图完成以下两项工作: 对现 有房屋结构修缮; 加建新住宅。

Community Rehabilitation Most of traditional courtyards lack basic infrastructure: piped water,

situation negatively affects the quality of life of the district. Therefore,

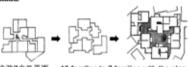
imminent and necessary step will take place in the following stages

rehabilitation of existing structures and infill of new residential structures

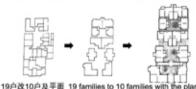
proper sewage treatm

社区修缮

The government plans to widen the two major roads which rate our study area. We recommend that Di'anmen-Wai Street, the major North-South axis of the whole city, be widen to no more than 50 meters, and that Di'anmen-Xi Street, the East-west axis, be widened to no more than 40 meters. White Rice Oblique Street will remain as a local secondary road, while rular access to the waterfront will be lin



10户改7户及平面



FHI.

規划平面 Site Plan

加建房与原有院落关系 New Infill and Original Courtyard Houses





维缮房屋 Rehabilitated Courtyard Houses



混合型住区平面 中高收入住宅平面 Plan of High and Middle Income Housing



低收入住宅岛職 Low Income Housing



混合型住区 Mixed Use Residential



公共开放空间

社区再生: 社区的社会结构必须得到保护、居 民应继续收益于周围的城市服务, 诸如好的工作, 健康保障, 学校, 幼儿园等。并通过加强居民的收益 来最大限度促进社会发展。

Community Regeneration: The social fabric of this district should be maintained so as to allow the residents to continue benefiting from the proximity of their surrounding urban services, such as good jobs, health services, schools, child care, etc. In addition, the advantages enjoyed by the residents of the district also should be reinforced in order to maximize the social development of the district.

### PROJECT: NEIGHBORHOOD REGENERATION

Nowadays in China it is common that government urban development efforts result in the relocation of thousands of downtown residents to the periphery of the main city center. The rationale behind this phenomenon is that most of the old residential neighborhoods in the center of urban areas offer not only crowded living conditions and lack of services to their residents, but are underutilized from an economic point of view. Most residents, however, have lived in these areas for three or four generations. In spite of their relatively unfavorable living conditions, the quality of their neighborhoods' sound framework of courtyard houses and strong social ties is a much better alternative than the living environment they usually find in the high rise residential schemes provided by the government. The relocation of these residents, however, is common in today's China, where the current government development strategies center around economic development goals, and ignore the social and cultural assets provided by existing neighborhoods

This proposal provides an alternate development strategy based on the needs of the main users of the site. The strategy aims to retain the residents of the district and provides the framework for their social, cultural, and personal development.

Reinforce existing community Retain as many residents as possible Improve existing living conditions Provide gradual transformation of community Retain and improve existing fabric Provide private services to each household Retain and enhance the local character



### 方案:社区再生

现今中国,当政府致力于都市发展时,常常导致大量城内居民被迫 现今中国,当取前双刀于都市及原则,吊吊守双大量城内店民级足 过高城市中心。由于城市中心的居住区大多十分拥挤,基础设施缺乏。因而这种现象就经济角度而言,是合理的。但是大部分居民已 在那里居住了三代以上,尽管他们的居住条件很差,但四合院中良 好的邻里及社会关系要比政府为他们提供的高层住宅好得多。居民 安置问题在当今中国已十分普遍。而政府的发展战略更多地以经济 为中心,忽略了现存社区的文化价值。 本方案从当地居民的需求出发,提出另一种发展战略,目的在于保

留这一地区的居民, 并为他们提供社会、文化和个人发展的前景。 我们提供一种可选择的、更关心人的方法, 逐步改善地区物质环境 , 并为居民自身发展提供条件。



强化现有社区 尽可能保留当地居民 改善现有社区居住条件 提供逐步发展模式 保存并改进现有地区肌理 提供每户私用的服务设施 保护及强化地区特色

清华-麻省理工城市设计教学课程 1995 白米斜街米斜街



Network of New Courtyard Houses



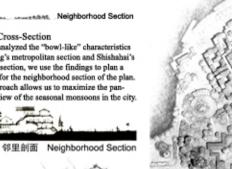
分析北京首都的剖面和什刹海地 区剖面的"碗形"特征,得其远 用于规划战略上,形成规划的街 坊剖面,保证最大限度展示"三 海"的全貌,并有效利用城市自 然通风。

Neighborhood Plan



Urban Cross-Section

Having analyzed the "bowl-like" characteristics of Beijing's metropolitan section and Shishahai's regional section, we use the findings to plan a strategy for the neighborhood section of the plan. This approach allows us to maximize the pan oramic view of the seasonal monsoons in the city.





平面图 Site Plan







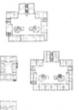
住宅理想图示与调整平面

Ideal Diagram and Adjusted Plan



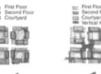
邻里剖面

Conceptual Section











THE CHILD

1、2层住宅原型

Prototypes 1&2

3、4层住宅原型 Prototypes 3&4

四合院演变过程

Process of Transformation



其干现状 Upon Completion

新的房屋加建 New Physical Infills



新住宅型态 设计四种四合院以适应不同收入家 庭的多级需求,并做了进一步修订 以适应不同地投情况。

局部轴测图 Detailed Axonometric 垂直胡同

通过在商业建筑上部进台建造四合 通过任用业处从上即也已处现一口 院的方式,创造了垂直交通系统, 以"垂直胡同"这一概念作为半公 共空间的坚向连接。通过台阶符院 落与小巷相连, 创造了邻里基本模



Vertical Hutong

### New Housing Prototypes

Four types of courtyard houses were designed to achieve a variety of building forms in a mixed-income setting. We made further modifications to fit the prototypes to specific sites. We devised a vertical access system by terracing the courtyard houses over the commercial block. The "Vertical Hutong" is intended to fuse the cross-sectional relationship between the semi-public spaces. These circulation paths link the courtyards and alleys with staircases to created a matrix within the neighborhood.



内部商业空间 Commercial Space Interior







公共空间结构 Public Space Framework

### PROJECT: WORKING WITH URBAN MORPHOLOGY

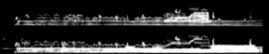
The design attempts to explore the organic growth pattern of traditional Chinese courtyard houses within the Shishahai district. By investigating the notion of physical infills made by the residents, which one might call an "accumulative phenomenon," we introduced new housing prototypes to complement and maintain the morphological development of the site.

Shishahai's geographical and historical position within the old Imperial City make it a highly desirable living environment: a collection of ancient courtyard houses owned by Chinese officials, a string of lakes known as the Three Seas and a series of lake-front promenades. These assets gave rise to the intensification of the residential and commercial area. Layers upon layers of infills were made to the physical structures, each time creating new idiosyncratic additions to the original footprint of the courtyard house. Subsequently, these infills created a series of narrow twisting alleys known as hutongs. As development pressure to turn the area into a middle-class neighborhood continues, Shishahai will witness the demise of such a unique urban morphology.

We suggest that the temporal growth pattern of the district should be appreciated and celebrated as the inherent quality of the neighborhood. By applying a network of new building fabric to the existing built form, we highlight the importance of relating China's modernization effort to its strong architectural tradition

### Object:

Integrate the neighborhood Maintain the community as a mixed-used one Uniformity and diversity of the buildings New life for courtyard houses



垂直剖面 Vertical Section

### 方案:城市形态的有机发展

本方案试图在什刹海地区探索中国传统四合院的有机发展模式。通 过可能被称为"积累现象"的调查即居民自然填充加建现象,提出 了新的住宅模式已完善和维持该地段的形象发展。

建议:保持和发展现有模式以维护街区特征的连续性,通过增加新 的建筑肌理逐渐加强现代化与建筑传统间的联系。

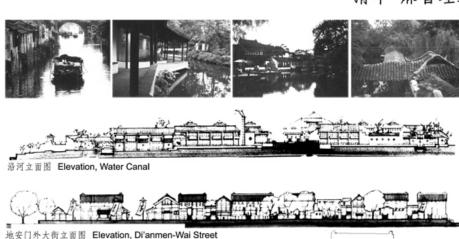
继承街坊一体化——力求维持地区地方特色,并通过发展高密度住 宅以提高居住回迁率。

维持社区阶层多样性——通过为不同收入家庭提供不同类型住宅。 确保该地区在复杂使用情况下的繁荣。

建筑的多样性与同一性——设计力图通过为四合院和胡同的发展模式提供基本形式和构想来加强地段内街坊的完整性。

创造四合院的新生-一试图将四合院作为中国历史有价值的实体找 回井恢复其地位。

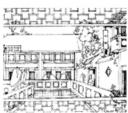
清华-麻省理工城市设计教学课程 1995 白米斜街



地安门西大街立面图 Elevation, Di'anmen-Xi Street

#### 公共开放空间设计:

- 水道: 寓意古述河的窄长水道,在空间视觉上 联系远河两岸不同用地:小块袋状开放空地为居 民提供活动场地,运河两岸的散步道创造纪念性 生活体验.
- 2. 运河综合区的公共广场: 公共广场营造文化 庆典主体;
- 3. 滨湖区: 保留自然环境和人行道尺度,严格拉
- 4. 周边街道: 形成不同标高的人行道,用精致的 细部设计处理沿街商业空间;



商业内部透视 View of Shops



Vehicular traffic is heavily regulated.

Public and Open Space:

rable walking experience.

visitors and shoppers.

for

1. The canal provides important physical connections between the different

The lake-front area keeps the natural environment and pedestrian scales

institutional, commercial, and residential uses alongside it. Pockets of open space pro-

2. The public plaza in the Grand Canal complex creates a festive and cultural theme

vide a public place. The pedestrian path along the canal also creates a vivid and memo-

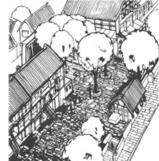




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Residential Development

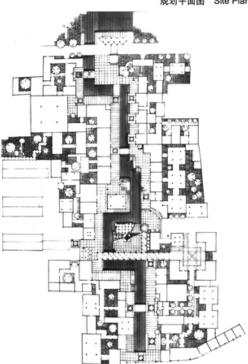




局部透视图 Perspectives



规划平面图 Site Plan



商业区平面图 Plan of the Commercial Area

### A CELEBRATION OF CHINESE FOLK CULTURE

居住平面改造

The Floating History project supports new institutional and commercial development which revolves around ancient Chinese folk culture and history. The scheme celebrates the rich culture of ancient China by reviving the history of the Grand Canal and preserving the art of making folk crafts. The folk culture theme, reflected in different layers - urban form, types of land use, and the built environment, are woven together to make an attractive place for visitors, artisans and residents.

Intense development pressures are threatening to transform the physical environment of Shishahai area. The purpose of this design development proposal is to provide an alternative to large-scale urban renewal which would destroy the area's charming residential character and thriving micro-enterprises. Additionally, the aim of this proposal is to improve the aesthetic quality of the area's urban form through sensitive community-oriented development while ameliorating its social and economic impacts.

We applied the irregular geometry of a hutong in the design of the paths, open spaces, and physical structures. This geometry creates an interlocking pattern which unifies complementary uses. It also provides a vivid and memorable walking experience and encourages exploration. Organic renewal is used to preserve the integrity of the site's residential character.

The development strategies: a nonprofit Chinese Folk Culture Institute and a private developer will jointly undertake the Floating History & Living Museum project. Revenues will be retained by the Institute to pay for operating and maintenance expenses, which will make the Institute financially self-sufficient.

### 方案:中国民俗文化庆典

"源"方案籍展现古代大运河历史以及保存民俗工艺技术来颂扬中 国丰富的历史,从多层面展现民俗文化主题,使该地区成为吸引游 客、民间艺人及居民的地方。

在亟需发展的压力下,什刹海地区的物质环境正面临转变。本设计 方案的目的是为城市大规模更新提供一种方式。避免破坏该地区迷 人的居住区个性和繁荣的小型企业群。此外通过面向社区的灵活发 展提高该地区城市环境的美学质量。

以"胡同"的几何特征来设计道路、开放空间和建筑。这种几何特 征创造出多样统一的、互相交织的空间形式,提供生动的令人回忆

鼓励在地段中心位置进行一系列的民俗开发项目,通过中国传统建 筑形式唤起人们对中国传统历史的记忆。以有机更新来保持完整的 社区结构和住宅肌理,从而完成居住区的开发。

开发策略:此项方案的开发由非盈利事业机构和私人开发商同时开 发。通过盈利项目收入支付非盈利机构的管理费用,从而保证什刻 海地区的公共设施管理自给自足。

### 清华-麻省理工城市设计教学课程 1998 白塔寺地区













### Public Framework of Places and Paths

The unique whole that is the White Pagoda neighborhood is a beautiful fabric. The streets in the neighborhood serve multiple functions according to the degree of their public nature, from regional (or most public), down to a local (or least public), depending on whether the street has attractions or qualities that promote gathering.

Perhaps the most important issue of the White Pagoda neighborhood is the influence of the Pagoda itself on the public nature of the community. In a way, the Pagoda acts as a tent pole supporting the canopy of security and community under which the residents of the neighborhood live.





### Housing and Living Patterns

The area is home to a variety of land uses, the majority being residential in nature. This dense, low-lying fabric is composed mainly of old courtyard houses that date back to the Qing dynasty. The winding hutongs, or alleys, that twist and turn throughout the neighborhood are indicative of the gradual development of these courtvards, which have resulted in the organic urban form that we

In response to a severe housing shortage, the courtyards have been gradually divided and modified to accommodate multiple families. In general, the living conditions are unsatisfactory.

### Commerce and Tourism

The current marketplace has existed since 1980. Its birth and growth drove the nearby government-run market out of business. In the Yuan Dynasty, this marketplace site was home to a lively market connected with the pagoda. The cruciform pattern of the two streets that make up the market is thought to come from the existence of a temple during the Ming Dynasty.

Today, there is a tense relationship between the residents and the marketplace. In using road space for selling, a host of conflicts and problems arise: fire rescue is difficult, truffic congestion is heavy, the streets are noisy, and there is a threat to resident security. Most people agree, however, that the market is convenient. The market is an especially important one in that it is the only day market in the area and other markets are at least a kilometer away. In addition, most of these are morning markets and are slated for removal due to new development

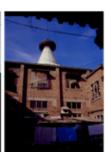
The two major streets that define the south and west boundaries of the area are home to a diversity of businesses, 76% of which cater predominantly to local residents. Excluding the marketplace, the area is home to 120 permanent businesses (80 along the major roads) and over a dozen street vendors. The diversity of businesses is supported by the residents











#### 公共场所与通道

该街区内道路具有多种功能,既提供交通服务又是公共活动的场所。有些是区域 该价区内迫路共省乡村功能, 机提供交通服务又是公共活动的场所。省些走区域 性公共道路,有些则是地区性的。街道的宽度与其公共性程度没有直接联系, 嚴 重要的是要者这个街道是否具有吸引人们的内容。 白路寺特区最受重视的是白路 本身时该社区公共生活的影响。 寺周围的街区历来以后台布景的地位服务于寺内 的宗教性活动。 白塔就象中柱一样支撑起社区庇护的穹帐,使居民们安居其中。

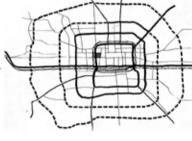
#### 层住与生活模式

该地股含有各类性质的土地使用。最主要的是居住。低密的邻里区主要由老式清 代四合院构成。这些蜿蜒的胡同成小道回旋由折贯通整个街区,暗示着这些四合 院落瀬次的发展过程,并形成我们今天所见到的有机城市形态。 由于严重的住房短疑,这里的四合院已逐渐被分割改造来容纳更多的住户,总

的来说该街区的生活条件不能让人满意。

现有的自由市场始于1980年。它的出现和扩展挤垮了附近的国营市场。在元代。 它是白塔寺庙会市场所在地。其形状据说与明代位于市场北面的另一座寺庙有关, 这座寺庙的两个大门是现有两市场街的起始点。两街交会于中间的一口水井。 该自由市场与现在的居民生活有些矛盾冲突。将道路空间用作销售空间带来消 拥挤、嘈杂、 居民安全等 一系列问题。但大多数人认为市场在这里很方便。

它是这地区仅有的目 市,距离最近的市场 至少在一公里之外 且多为平市。 发雲拳, 它们不久也, 会被陆续拆除。 地段西南边界的两条 街道是各类商服约集 中地。76%的商店为本 地居民服务,不包含 自由市场, 这一地段 有120家商店及十几个 摊位。这些分门到类 的商服业为这里的居 民提供服务.



### THE SITE

The White Pagoda Temple had a very important relationship with the Imperial City. Built in 1271, the White Pagoda, a 52.3 meter-high stupa, is the oldest and largest Tibetan-style stupa in China. When built, it became a tourist destination. Historically, the area around the White Pagoda was a nexus for cultural celebration, festive marketplaces, religious activity, community events, and visitor gatherings. The Pagoda itself has undergone changes in its 700 year history. Many courtyard houses exist in the area. The result is the predominance of "temporary" buildings clustered in once open courtyards and a population density of 25 people per 100

The neighborhood north of the temple is organized around roads running north-south, while the parts to the east and west of the temple are organized in an east-west direction. This pattern continues on the other side of Zhao Deng Yu Street. Primary roads carry all major forms of traffic: bus, automobile, bicycle and pedestrian. Two primary access roads form the eastern and southern edges of the site. Secondary roads provide movement through the neighborhood at a more moderate pace. The existing circulation and texture of the neighborhood allows for informal, built insertions into the street and deviations in street width; these characteristics create unique and memorable places which contribute to the social life of the neighborhood.

Conversations with the residents of the White Pagoda neighborhood showed there are no easy answers to the problems they face. Many residents know their immediate neighbors but not many were very friendly with them. The physical fabric of the neighborhood is dense, but the social fabric is quite loose.

In summary, the lack of green space, the loose social structure and importance of the neighborhood committees, and the strong desire of many residents to remain in the neighborhood despite cramped, poor living conditions, are three issues that are a good starting point to address the entire community and its needs. Behind each face is a lifetime of stories, and no agency or company should completely erase the community and its stories.

### 地段介绍

白塔寺及其邻近地区与繁禁城有着重要的联系。白塔寺建于1271年( 日治守及其邻近地区与累原城有有量要的联系。日治守及于1271年 过代), 搭高52、3米,是中国现存最早最大的藏式佛塔。建成后即成 为人们拜祖祭奠的重要场所。这里有节日聚会,小市以及一月一次的 大集。在其700年的历史中,白塔也几经变迁。这一地区现存有许多 四合院。曾经是单门独户的四合院现往着多至二十户人家。院内到处 是临时建筑,人口密度达每百平米25人。

白塔寺北部的街区均围绕南北向的道路分布而寺东西侧的街区则顺 东西向道路延展。一直到赵登禹路东、西。城市干道承载大量过境交通。包括公交、汽车、自行车及行人。两条城市干道形成该设计地段的东、南边界。次干道贯穿该街区,但车流量适中。 现有的街区肌理及结构将建筑物与街道有机地联系起来。街道宽度

亦可有所变化。这一特点形成独特的,令人回味的空间场所,丰富了 街区内的社会生活。

与白塔寺街区居民的访谈表明,对他们所面临的问题没有一个简单 的答案。多数人都知道他们的左邻右舍,但都没有很密切的关系。这 个街区的体型建构密实,社会建构却很疏松。

总之。三个方面——缺乏绿色空间,松散的社区结构和居委会的重要性,以及居民们不管条件多差均不想搬迁的强烈愿望——是分析整个社区及其需求的较好的着手处。每个面孔的后面都有一段人生故事。没有任何部门或开发公司能完全抹去这些故事与这个社区的联系。

### 清华-麻省理工城市设计教学课程 1998 白塔寺地区



方案章向 Proposal for Study Area



地段现状 Condition of Site Buildings



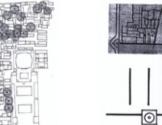
复原建筑 Restored Buildings



保留树木 Preserved Trees



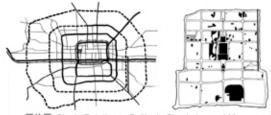
修复建筑 Rehabilitated Buildings



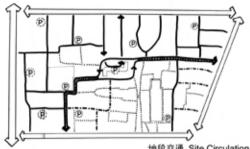
胡同形制 Traditional Hutong Pattern



新建筑 New Buildings



区位图 Site in Relation to Beijing's Circulation and Monuments



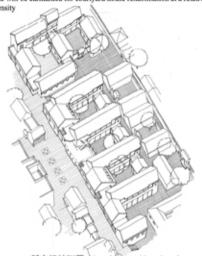
地段交通 Site Circulation

### 设计和开发程序

- 维持并加强本地区的城市机理
- 发展和复兴传统文化活动,服务于本街区居民和旅游者的需要,并 可作为地区经济发展的引擎
- 实现可操作的自己自尽
- 开发多样化的住宅。选择地段内部分地块以相对较低的密度。进行 传统四合院的整治

#### Design Priorities

- Maintain and enhance the local urban fabric
- 2. Develop and revive traditional cultural activities to serve the local population and tourism, and to operate as an economic engine for development
- Achieve operational self-sufficiency
- Develop a variety of housing, to achieve a mixed-income area portions of the site will be earmarked for courtyard house rehabilitation at a relative lower density



新市场轴测图 New Market Housing Axonometric

### PROJECT: BREATHING THROUGH HISTORY

The White Pagoda Temple neighborhood is currently experiencing tremendous real estate development pressure as Beijing and China transition into a market economy. Conventional plans for the redevelopment of this neighborhood do not fully take into consideration its unique qualities and particular needs. This proposal addresses vital economic development objectives and attempts to combine them with important community and addresses vital economic development objectives and disciplines to recommodate citywide cultural heritage goals, offering an integrated solution that allows the neighborhood to accommodate citywide financial and cultural resource priorities while at the same time improving buildings and infrastructure, and enabling residents to achieve a higher standard of living. By preserving the hutong pattern of the neighborhood and infusing it with new activity, we hope to accommodate a rapidly disappearing way of life within the constant growth and change dominant in today's Beijing.

The contextual orientation of the street pattern towards the White Pagoda is our guiding urban design principle. The traditional hutong pattern in the neighborhood evolved to give local residents direct access to the White Pagoda Temple. The life of the neighborhood and the life of the Temple are inextricably linked. The current organization and form of the neighborhood operates as a whole, making its boundaries, paths, nodes, and landmarks legible. It is essential to preserve this organization; the built fabric of the street pattern, and the kinds of interactions it allows, are crucial to the social life of the neighborhood.

The goal is to redefine the role of the White Pagoda Temple neighborhood in the city of Beijing, as well as to restore and reinvigorate religious, residential, commercial and tourist activity in the area. Recalling part of its past will breathe new life into a district vulnerable to large scale building projects. The reintroduction of religion to the area combined with the rhythm of the Temple Fair activity will revitalize the neighborhood as a self-sustaining district.

### 方案:与历史共呼吸

当中国和北京向市场经济过渡时,白塔寺地区正面临着房地产开发的 巨大压力。对该街区进行改造的原有方案并为考虑街区的个性特色和 特定需求。本方案致力于实质性的经济发展目标,并成功地将其与社 位在東京、中小東政ノノ大阪(Eの東京) 放映 17 (東京) 17 (東京) 17 (東京) 17 (東京) 18 (東京 量得以提高。通过保护街区的胡同系统,注入新的活力,并希望在今 天的北京,在一个正在持续的成长和变化的历史城市中。 迅速消失的生活方式提供生存空间。

以白塔为终点而形成的独具特色的街道型制是我们进行城市设计的 指导原则。这个街区的胡同起源、发展于为本地居民提供通向白塔的 边界道路。白塔寺自古以来就与其周边街区有着很密切的联系。街区 居民的生活和寺院的生活难分难解。现存的这种道路组织方式和街区 形式作为一个整体而存在。共同使它的边界、路径、结点和地标易于 识别。保护这种街道型制是最重要的:街道的建成肌理和它所容纳的 交互作用,对这一街区的社会生活具有积极作用。

本方案的目标是对白塔寺街区在北京市的角色进行重新定义。同时 在本街区内复兴宗教。商业和旅游活动。通过再现历史的片断而在街 区注入新的活力。重新引入宗教活动并复兴庙会,使白塔寺街区作为 一个完整的有机体而充满生机。

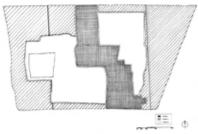
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用地分析 Land Use



公共空间策划 Open Space Programming



分期建设 Project Phasing

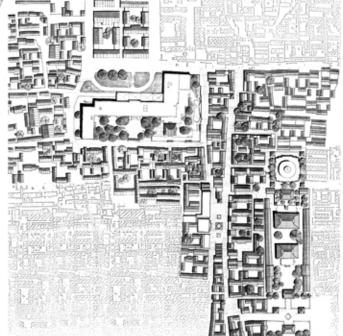
分期 ·期: 修堪白塔寺并恢复白塔寺庙会: 改建社区中心; 保护成整治在这两个结点周围的建筑;改善基础设施 二期:沿地投南侧、东侧和北侧建立新的多层住宅;地 投西侧沿二环路的地块,建立的商住混合高层住宅 三期:保护普选博物馆周围,旅馆南侧以及市场西侧等 地的四合院

### Phasing

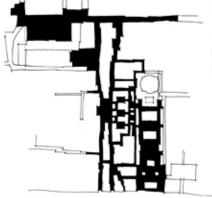
Restore the White Pagoda Temple and reintro-Phase I: duce the Temple Fair; rehabilitate and open the New Liberation Hotel and the Community Center; preserve or rehabilitate buildings located around these two nodes; improve infrastructure components

Phase II: Build new medium-rise residential structures on the southern, eastern and northern edges of the site; build new high-rise commercial or residential towers on the western edge

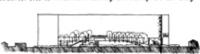
Phase III: Preserve the courtyard houses around the Lu Xun Museum and south of the New Liberation Hotel and rehabilitate them to their original condition



总平面 Proposed Site Plan



庙会期间活动 Market Activity on Temple Fair Day



剖面 Section Showing New Landscaped Area





剖立面 Section/Elevation of Hotel



旅馆入口层平面 Entry Floor Plan

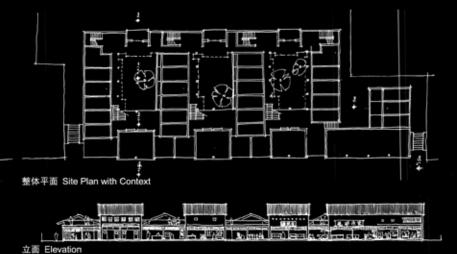


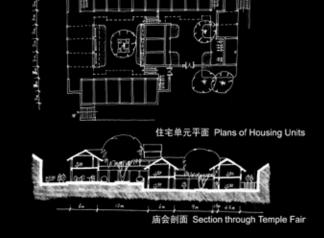
透视图 Perspective



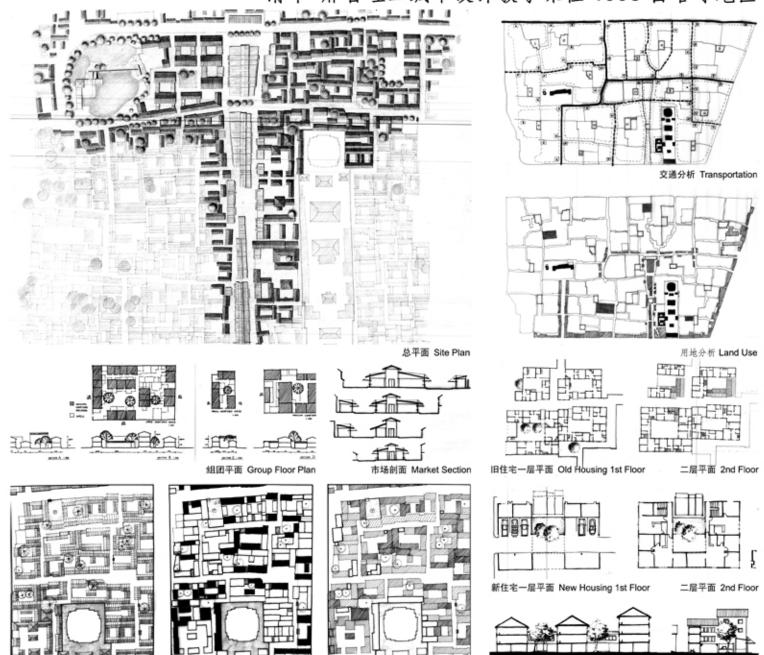








清华-麻省理工城市设计教学课程 1998 白塔寺地区



住宅肌理 Housing Fabric

### PROJECT: CO-EXISTENCE OF THE OLD AND NEW

Conservation and evolution - preserving the old and accommodating the new - are contradictiory. Our proposal tries to preserve an old way of living in courtyard houses along narrow and crooked hutongs. The irregularity and organic quality of the streets, courtyards and the hutongs are part of the environment that we are conserving. On the other hand, modern planning which advocates the rationality of straight wide streets and rectangular plots threatens the organic form of the courtyard houses which has evolved over time. Rejecting the two extreme alternatives of complete restoration and complete renewal, our group proposes sensitive rehabilitation and revitalization of the White Pagoda Area. Our vision for the area is to create a place that allows for change, evolution and modern living in old housing.

Respect the historical context and preserve the character of the courtyard housing without freezing development. Add new construction so it can be absorbed into the old fabric. Recognize the needs of a growing city and the shortage of housing and accommodate as many residents as possible on the site. Make improvements in the living conditions and the quality of life of the people. Preserve the pedestrian community while providing for cars and parking. Recognize the economic importance of tourism, restricting it to some parts of the site to reduce its negative impacts. See the local community as our primary clients and provide for community spaces and services.

In the city of Beijing, old courtyard housing has been remarkably untouched in large parts of the inner city. Commercialization and the acute housing shortage, however, threaten these parts and we fear soon there will be no older housing in them. Including several issues such as parking, height regulation, financial rationale, and staging, our design proposes an alternative to high rise development, to preserve the character of the area.

### 方案:新与旧的共生

剖面 Section

條护与友展——我们的方案试图保护原有的曲折胡同与院落形成的居住方式。有机生成的不规则的院落、胡同、树木都是我们保护的环境的一部分。从另一方面。现代城市漫划中笔直、宽阔的道路与大面积的地块划分会彻底破坏就成历史演变而成的肌理。 彻底的改造与完全复旧建设是两个极端。对于白塔寺地区我们建议实行谨慎的整治和振兴。为来这里应当是一处不断发展、演变的传统建筑形式的现代生活地区。 我们的方案试图保护原有的曲折胡同与院落形成的居

立面 Elevation

我们将遵从下面的设计原则:尊重历史文脉,保护院落建筑的特色 ,但不拒絕改造。在符合原有环境肌理的条件下允许加建;适应城市 发展的需要,使尽可能多的居民居留在地区内;改善居住条件,提高 居民生活水平;保留原有的社区步行环境。同时考虑小汽车的通行和 停放需要:利用旅游业促进地区经济发展。同时将旅游活动限制在一 定区域内,以减少旅游对居住环境的影响:将居民生活需求放在第一 优先考虑社区服务和公共活动空间。

北京旧城的四合院是几百年历史形成的独特的人文居住环境。但快速的城市发展以及人口增长带来的住房短缺使得这些保留有成片四合院的旧城区在不断被开发高鲸吞蚕食。我们试图从用地、交通、高度控制、经济可行性、分期建设、具体建筑(如市场和新旧建筑改造) 等方面寻找一种既能保护地区特色又能避免大规模改造弊端的方案。

### 清华-麻省理工城市设计教学课程 2000 东不压桥地区

历史上的北京城是围绕着一个明确的中 历文上的北京城及同院帮一个分词的干 轴线来进行规划的,其中一段就是从北 向南的地安门外大街。平行于中轴线的 主要大街与东西向大街将城市分隔成街



#### Circulation and Texture

As the central axis of Beijing, Dianmenwai Street originally served to organize the circulation patterns within the city. Primary avenues run nerallel to this north-south central axis, while east/were streets divide the city into blocks. Although Dianmenwai Street has remained the ckbone, recent urban development has resulted in some alteration of Beijing's traditional grid pattern through the Forbidden City. Several east-west axes, including Ping'an Street, have become major thoroughfares within the city. Dongbuyaqiao ("Two Bridges")
Neighborhood is served and defined by a variety of small local shops and neighborhood gathering spots. A hierarchy of streets in and arou the neighborhood ranges from Pine's Street to the south, which was recently widened to 40 meters, to one-meter-wide butones which serve the neighborhood's residents. The levels within this hierarchy can be defined by street width, type and volume of traffic, degree of public accessibility, and quality of street edge. At successively lower levels of the street hierarchy, the path serves fewer cars and more pedestrians and bicycles, and becomes more private in nature. Residents enter their homes by taking a series of progressively smaller and more private nathways until they reach their own courtyard.

te system of hutongs defines a fine-grained texture that links residential clusters, large and small commercial areas, and some institutional uses including a large middle school and construction firm located in the heart of the neighborhood. Movement through the neighborhood involves shifting very quickly from the more coarse grain commercial uses at the perimeter of the site, to a series of much smaller scale intricate spaces within the neighborhood.





最后到决自己的除策

### Public Space

The Two Bridges Neighborhood is appealing and interesting because of its hierarchy of private and public spaces. The majority of the neighborhood's public space is made up of the network of hutongs which play an important role in defining the sense of community. The hutong network is likely the oldest, most well-preserved aspect of the neighborhood. The critical components of this network are the wall and gates that form the edges of the roads and the progression of space from larger, public ways to narrower ones,

No formal public open space exists within the Two Bridges Neighborhood. There are no historic temples or other civic or cultural facilities ce. However, the area is situated close to the Qianhai Lakes and parks that serve residents of the neighborhood as well as the city as a whole. The partial restoration of the former canal into the site will strengthen the connection between the neighborhood and the lake system while introducing a new major public space. Beyond this, the two major streets, Dianmenwai and Ping'an provide significant public space at the edges of the neighborhood. Another opportunity may be provided by opening the school spaces at the heart of the orhood to greater community use when not used by the schoolchildren.



鸟瞰 Aerial View

### 公共空间

公共和私密空间的等级是东不压桥邻里引人入胜的原因。地段内的大多数公共 空间由胡同系统组成。这些胡同对确定社区的特性起到了关键作用。胡同系统 可能是地段中最古老的,保护展光好的部分,这个系统的特殊成分是形成道路 边界的院墙和院门以及从大的公共道路到小一些的道路的空间的延续。

区。尽管这条轴线还依然保持了城市的脊柱,但是现代的城市发展改变了传统的

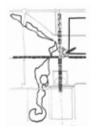
城市网络:以皇城为中心放射出五条环路,包括地设南侧平安大衡在内的几条东西向轴线已经开发成为城市中的主要干道。以西侧地安门外大街与南侧平安大街

为界,地段位于北京旧城的一个决定性的位置-营禁城的北侧,地段可以通过地 快,公车、汽车、自行车以及步行到达,环绕并深入到地段内部的街道层次很清

钦、公平、汽车、目行车以及少行到近、环境开源入到地投内听的价值层次保育 前,从南面新近拓宽为40米的平安大街到地投内仪宽1米的为居民服务的期间。 不同的层次可以通过附通宽度、展型、交通流量、企众可达程度以及附通边界建 旅的质量来区分。随着街道层次变低,汽车变少,行人和自行车渐多,空间也自 然变得更加私密。居民通过一系列尺度渐次减小且私密程度渐次增加的道路序列

借馀复杂的胡同系统形成了城市细密而生动的肌理,将住宅群落。 业区以及一些公共设施包括地段中心的一个中学和一家建筑公司并置一处。穿越 该邻里的过程是一种极其迅速的转换,即从地投周边的商业用地到内部一系列尺

尽管地投位于什利海和服务于地投内外居民的公园的附近东不压粹邻里并没有 正规的开放的公共空间,同时也没有历史庙宇或其它有特殊重要性的市民或文 在地位的有效的公共空间。同时已仅有加大地方从外电影的外球变量的中化域 化设施。对于导入较大的公共空间。在地段内部分地恢复以前的适河将加强什 剩水东与地段的联系。此外,两条主要的大街; 地安门外大衡和平安大场为地 投的城市边界提供了重要的公共空间。在学生不使用时向社区开放位于地投中 心的校园可能提供另外一个机会。





抽段业部部分恢复的运河河道 Restored Portion of Canal in the North of the Area

### THE SITE

The Two Bridges Neighborhood occupies a key location within Beijing adjacent to Dianmenwai Street, the historic central axis of the city. The neighborhood is bordered on the south by Ping'an Street, a major cross street, which follows the alignment of a former wall of the Forbidden City. The remaining edge of the neighborhood is defined by the former route of the Grand Canal, marked by an irregular set of parcels that form a rough curve connecting Dianmenwai and Ping'an Streets.

Historically, the Grand Canal linked Beijing with Hangzhou and cities to the south. The Canal terminated very near to the site in Qianhai Lake. Active for a millennium, this part of the canal fell into disuse in the Qing Dynasty, but remained a water channel until it was filled in the 1960s. The name of the neighborhood derives from two famous bridges that spanned the Canal on Dianmenwai and Ping'an Streets.

The Two Bridges Neighborhood has a long history as a significant commercial area in Beiling. In the Yuan Dynasty (13th -14th century), it was the city's primary market. By the beginning of the Qing Dynasty, almost four hundred years later, shipping docks were moved south. Along with the docks, theaters and entertainment also moved away from the area, removing most of the attractions upon which the commercial success of the district depended. The neighborhood regained some prominence in the 19th century as a location for traditional Chinese specialty shops, but major regional shopping was permanently displaced to the south and east of the Imperial Palace where it

The locational dynamics that influenced the development of the Two Bridges Neighborhood over its history continue to affect the neighborhood today. It retains a retail focus along the two principal streets, including several food markets and an array of specialty shops. The trace of the Canal can be seen in the layout of streets and buildings, and a portion of the Canal is being restored. This will establish a water connection between the neighborhood and Qianhai Lake passing under the 800 year old Dianmenwai Street bridge that continues to carry traffic.

### 地段介绍

东不压桥邻里地段毗邻作为北京中轴线的地安门外大街,处于旧城的 关键位置。地段南邻平安大街,这是一条城市主要干道,其原址曾是 旧皇城的城墙。地段的另一边界是曾是古运河河道,如今是一条由一 连串不规则地块所形成的蜿蜒胡同,连接地安门外大街和平安大街。

历史上,运河连接了北京和杭州以及其它一些南方城市,运河的修点 就在地段附近的后海。运河运行了上千年后在清朝被废弃,但作为水 道一直保持到本世纪60年代才被填平,地段的名称来自两座横跨运河 的桥,一座在地安门外大街上,另一座在平安大街上,现已不存

东不压桥邻里地段作为北京重要的商贸地区有着悠久的历史。 (13-14世紀) 这里是主要的市场。大约400年后的清朝。码头迁移到南城,戏楼等娱乐设施也被迁出,该地区赖以获得商业成功的吸引力消 了。19世纪,该地区由于传统特色商店而有所复苏,但其主要的地 域商业中心地位被皇城东部和南部至今仍在发展的地区永远取代了

区位变化影响着东不压桥地段的发展。历史上这样,今天依然如此。 沿着两条主要街道的商业保持了零售的模式,包括有几个葉市场和许 多特色小店。运河的痕迹从街道和房屋的布局还依稀可见,地段北部 运河河道的一部分正在进行修缮复原,复原后的水面将使本地段和前 海在800年的古桥下重新连接起来,这座桥至今仍有重要的交通作用。

### 清华-麻省理工城市设计教学课程 2000 东不压桥地区



四合院 Courtyard Homes



受保护的四合院 Preserved Courtvard House

#### Housing and Living Patterns

Partly-filled Courtyard Homes

Densely-filled Courtyard Homes: This housing consists of courtyard homes that have lost most of their traditional form. In such homes, additions and new elements extend far into the courtyard, so that the courtyard appears as a series of narrow alleys. Original buildings can be identified only by roofs and an entrance gate, as all walls have been covered with additions

Lane Houses: Similar to the densely-filled courtyard homes, the lane houses have gradually encroached upon the hutongs they border. These homes are mostly self-built structures made of salvaged materials. Modern Mid-rise Apartments: Although these homes are of modern construction and their floor plans are more regular, on the ground floor they possess many of the same features as the densely-filled courtyard and lane houses: dense living conditions, added self-built structures, piles of materials storage, and little open space.

#### 住房和居住类型

Densely-filled Courtyard Homes

与北京田城其它很多老衡坊相似,东不压禁地区的主要住房形式是"四合院"。如今,虽然 大多四合院都已变成"大杂院",这种历史建筑仍依稀可辨,除了沿主要街道的几幢现代多 层建版外,这个街区以单层住宅为主。本街区主要住宅类型分五类;

完整的四合院: 这美传统住宅一般由收入较高的人拥有和维护。有较为宽敞的生活空间, 不同的生活功能可以分室分区。

部分加建的四合院: 这一类型通常有几家住户,他们为了增加生活空间而在院中搭建临时性 材料自己添建。

密集加建的四合院: 这类住户类型已失去其许多传统的风貌。加建的部分几乎充满了整个院 子,只留下穿穿的夹道。我们只有从屋顶、入口。还看得到些许老房子的痕迹。

巷宅:与密集加建的四合院类似,巷宅渐渐侵蚀胡同空间。它们往往是利用旧有的建材自建 **性户往往是低收入阶层。** 

现代多层住宅: 虽然这些住房的历史不长,平面布局整寿划一,但是它们的首层与密集加建 的四合院及卷宅十分相近,拥挤的生活状况,搭建的临时房屋,建材储备此此皆是,空地少 得可怜.

东不压桥地段的内部及周边经营了很多种商业活动,服务范围从区域性 度的到本地性质的。宽阔平安大道将本地投和都市活动联系起来,南北 向的地安门外大街引入了更近人的地方活动。 地段内的零售服务业类 型有五种: 国际性的高级商业,小尺度的传统商业,饭店、地方一次 居和零散摊贩。地段内的工作地点也可分为五个类型:服务或销售、生 后和今取鄉城,施收內司上市地區之可分为五十安定:服分及明治、五 产、办公或职业、社区服务和非正式销售和服务。本地投內存在凡特形 式的居住、工作安排形式:沿街商店安排、于工艺生产设施和职业办公 地点。商业所有权有以下几种形式:私人所有的商业、政府经营的商业 、政府所有的商业、从本地街道或邻里店委会租賃空间的商业。

### Commerce and Employment

A great variety of commercial activities is conducted in and around the site, ranging from regional to local business. The wide and heavily-trafficked east-west Ping'an Street connects the site with metropolitan activities. North-south Dianmenwai Street connects to more intimate local activities. Retail businesses in the neighborhood can be org into five categories: upscale establishments catering to international tastes, small-scale traditional stores, restaurants, local convenience shops, and informal vendors. Workplaces in the neighborhood can also be categorized into five types: retail, manufacturing, office/professional, community service, and informal sales and service. Live/work arrangements exist in several forms throughout the neighborhood, including shop-front establishments, craft/production facilities, and office/professional situations. Business ownership in the area takes several forms: privately-owned businesses, government-run businesses, government-owned businesses, and businesses that rent space from the local Street or



多种形式的商业 Commercial Uses of Different Kinds

# 己有几百年历史的四合院 Courtvard House of Several Hundreds Years History

居民 Residents

The residents interviewed expressed both positive and negative feelings ab ost everyone interviewed cited the central and convenient location of the neighborhood within the city as its est asset. They highly valued the proximity to public transportation, work, shopping, and schools, as well as the lakes and parks. Many residents also appreciated the social network they have devel-over time. The complaints regarding the area spanned a wide range of issues: overcrowe ical structures, lack of privacy, and no governmental recognition or compensation for self-built additions and overnents. Residents of different income levels or age groups are not spatially segregated from one another in the neighborhood. Given the diversity of needs and wants represented among the groups of residents viewed for this project, proposals to redevelop the neighborhood should provide a variety of housing choices

市场 Market





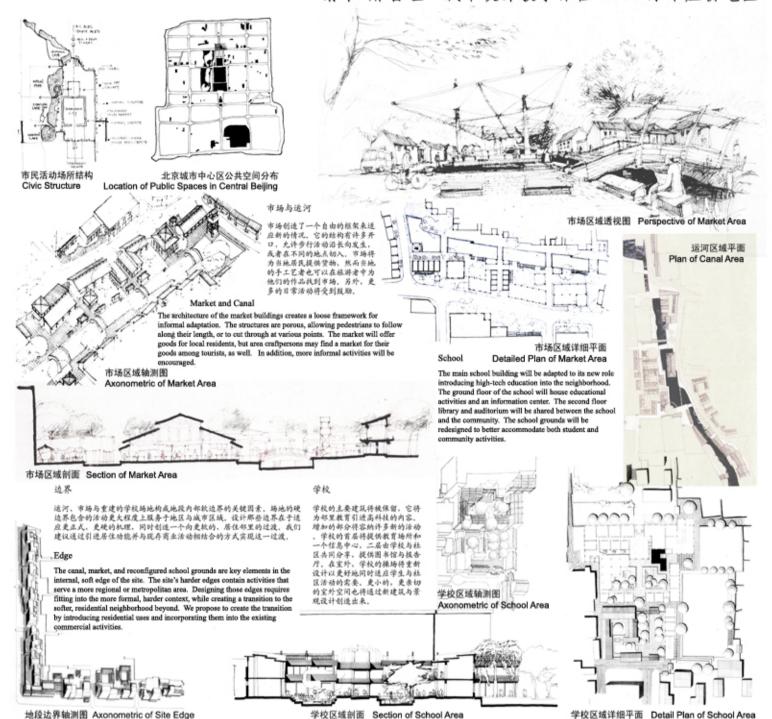






接受采访的居民对现在的个人和邻里居住环境既有满意的方面又有不满意的方面 《几乎每一个居民都提到这个地段的贵金位置,公共交通,工作单位,学校、 有什利海和公园的便捷距离是居民们所喜爱的,很多居民同样对这里长期形成的 有什利海和公园的使读班离是店民们所喜爱的。很多原民同科时这里长期形成的 皮和密性区人际关系称赞有加。不满意的方面也很多: 法提拥挤。这宅质量差,缺 近和密性。政府时自建住宅的忽视以及在拆迁补偿中的歧视态度。这个街区内不 同收入和平龄段的居民在空间上并沒有明显的隔离。居民们各种各样的需求与愿 望引导我们在方裳中为不同居民捉供多种不同的选择。

### 清华-麻省理工城市设计教学课程 2000 东不压桥地区



### PROJECT: CITY WITHIN A CITY

The Two Bridges Neighborhood was for many years shaped both physically and socially by the canal that connected it with a citywide network of waterways. We propose to create a new civic structure in the neighborhood and beyond in the form of a citywide pedestrian/bicycle loop, which follows the former circulation path of water through Beijing. The loop will function as an internal, soft edge, contrasting with the harder edge of the formal grid of streets, as well as a narrative path on which residents' daily functions are performed and where tourists and residents gently come together. Cultural activities from surrounding sites will be woven into the narrative.

The reintroduction of a canal is the key element of this plan. Not only will the canal reconnect the site to the context of the city as a whole, it will also provide a local amenity. More importantly, the canal will provide numerous new public spaces for use by local residents. Chief among these is the local market, which will be relocated to its historic location along the northern edge of the site. Here, the market will enliven the canal with

A school is currently located at the heart of the neighborhood. We propose to open the school to community activity, as part of a larger effort to use culture and technology in the site. We hope this area will help adapt the neighborhood to contemporary Chinese life.

The hutong network will be preserved, while behind its walls, new typologies of modernized housing will replace overburdened courtyard housing. Along the main roads, mixed-use buildings will offer high-end housing to attract young people back to this area, while the existing community occupies new homes within the hutongs.

### 方案:城中之城

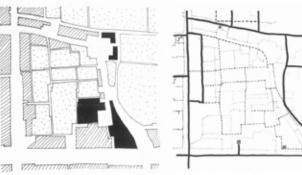
东不压桥邻里地区,多年来在空间和社会生活方面围绕着运河发展起来。这条运河与城市水系网络相连接。我们建议在邻里中与邻里之外以一个城市步行/自行车环路。创造一个新的城市结构。这一个环路将通循旧北京的水路交通系统。与严整的街道系统的硬边界不同,这条环路将用作一个内部的效边界。也是一条叙事性的道路,居民的日 常活动在此发生,旅游者与居民融洽相处。周围地区的文化活动将被

重新引入运河是这一方案的关键要素,运河不仅将地段与城市文脉作 为一个整体重新联系起来,它还将提供一个本地的休闲场所。然而, 更重要的是运河将为当地居民提供许多新的公共空间。其中最主要的 要算是当地的市场,它将被定位在它最初的地点,即地段的北边界。 沿河布置。市场将引发居民与旅游者的活动使运河充满朝气。

·所中学目前位于邻里的中心部位,我们建议开放学校为社区活动服 务,使之致力于以后地段的文化与技术提高,有助于使邻里居民适应 当代中国的生活方式

胡同网络将被保留,同时在围墙后面,新型的现代化住宅将代替超负 荷的四合院住宅。沿着主路,综合用途的建筑将提供多层住宅以吸引 年轻人回迁,同时现存的社区在胡同内部享用新的住房。

### 清华-麻省理工城市设计教学课程 2000 东不压桥地区



土地使用 Land Use

交通分析 Circulation



The Two Bridges neighborhood will be defined by the concepts of flow and exchange in keeping with the notion of the canal.



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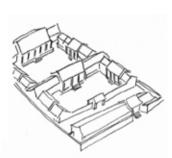
院落城市和邻里

院落邻里的隐喻引导了东不压桥地区形式的 在这个地段、除落形式是如此表达的 更正式的商业和都市尺度的外向边缘包围 着内部类性的更为内向的社区空间。从传统 意义上来讲,门标志着进入连续等级的空间 和私密性。图书馆和公共市场作为非正式的 门,标志着不同尺度活动和形式的过渡。

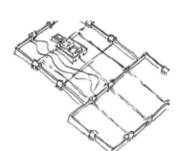
首层平面 Figure Ground Plan

城市印象 Urban Image

保护建筑 Buildings to be Preserved



四合院 Courtvard House



院落邻里 Courtyard Neighborhood

"境化"城市 Courtyard City

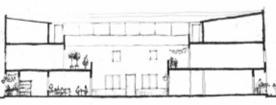
The Courtvard City and Neighborhood

The evolution of the form of the Two Bridges neighborhood is guided by the metaphor of the courtyard neighborhood. For this site, the courtyard form is manifested in more formal commercial and outward-oriented edges of metropolitan scale that shield the softer, more inward community spaces within. Gates traditionally mark entry into successive scales of space and privacy. The library and public market act as informal gates, signaling a transition to a different scale of activity

### Goods Market

The "Goods Market" node anchors the northwest corner of the site where the canal intersects the north-south axis. Dianmenwai Street, bringing this historic port market area back to prominence. The market acts as a gateway and transition point between the urban and district scale of the main street and the neighborhood within,





货物市场

货物市场位于地段西北角。 在这里送河与南北向轴线 -地安门外大街相交, 将这个古老码头市场重现 辉煌。这个市场不仅是地 段约入口,也是都市及区 域尺度的主要街道与内部

### PROJECT: THROUGH TWO MARKETS

One of the key planning and urban design challenges in Beijing's Two Bridges neighborhood, and possibly in all One of the key planning and urban design challenges in Beijing's two Bridges neighborhood, and possibly in all of contemporary China's cities, is the transition of scale – from the global to the metropolitan to the district to the neighborhood and from historic modesty to post-modern brashness. Beijing is currently a city of jarring juxtapositions of inappropriate monolithic glass towers overshadowing jumbles of low courtyard houses in labyrinthine hutongs. Little thought is given to transition between scales of activity or form, and little success achieved in blending tradition and modernity. Also absent is the equally important task of finding unifying design elements or programmatic themes that could weave together all of the increasingly divergent sectors to make each fragment part of a greater whole – Beijing – while allowing the uniqueness of the neighborhood to

We seek to integrate the old fabric and some preserved structures with new prototypes of live/work environments that are sensitive to and fit into this fabric, and provide opportunities for current residents and a diverse population to live and work in the area. The organization of activities in the site must be intertwined with the form of the hutong neighborhood, creating a new synthesis and sustainable solution. The two market nodes provide transition of scale and activities, while the canal and prototype main street edges provide unity.

The Two Bridges neighborhood will be defined by the concepts of flow and exchange in keeping with the notion of the canal: by the physical flow of tangible goods in the new public market center at the northwest; by the conceptual flow of knowledge in the information-based market, anchored by a library, at the southeast sector of the site; and by the flow of spaces through the labyrinthine hutongs and public spaces, all united to each other and to greater Beijing by the flow of water in the re-introduced Grand Canal.

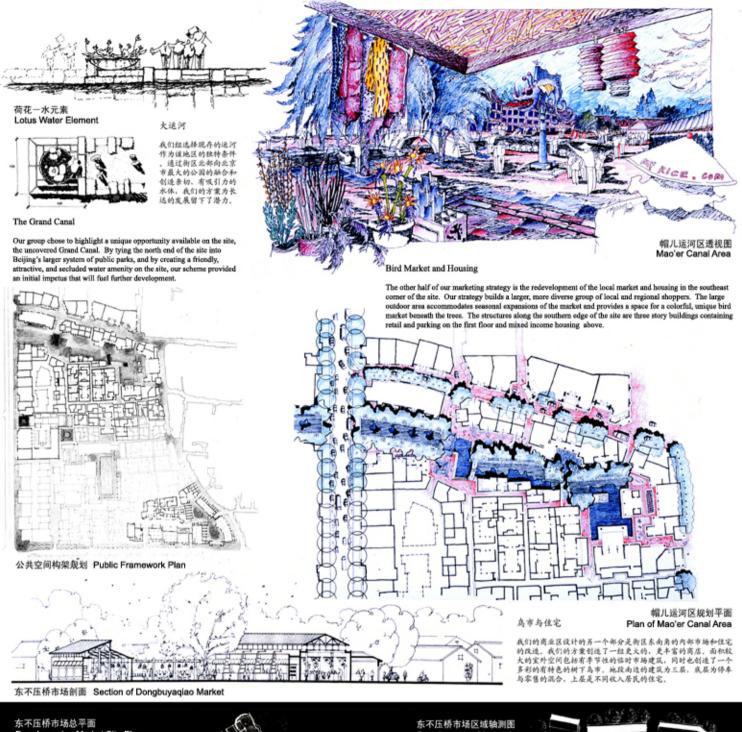
### 方案:穿越两个市场

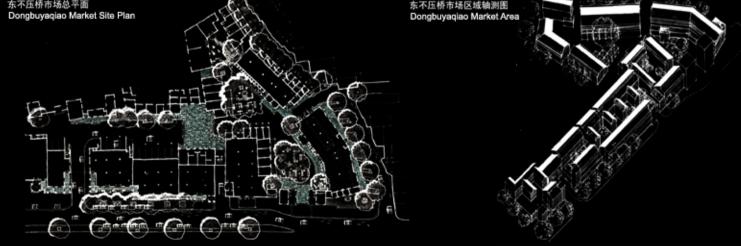
由于东不压桥地区地处北京城的黄金地段,重开发后的高房价、高租 金很与当代所有中国城市一样,北京东不压桥地段面临的主要规划和 城市设计挑战之一是尺度的过渡。从全球到都市到地区直至邻里,从 少,关于传统与现代的结合也很不成功。另一个同样重要的任务也很 欠缺,就是在保持邻里特色发扬光大的同时,找到统一的设计元素或 纲领性主题,使不断增加的多种成分交织在一起,使每一片段都成为 整体的一部分

我们试图将旧有肌理、保留建筑和新型的居住、工作环境相结合。这 种环境能够融入旧有肌理并具有敏感性,为现时居民和居住、工作在 此区域的多种人口提供机会。 改地段活动的组织必须与胡同邻里交织 在一起。 创造一种新的复合的可持续发展的解决方式。 两个市场节点 为尺度和活动提供了过渡:同时河道和主要街道典型提供了整体感

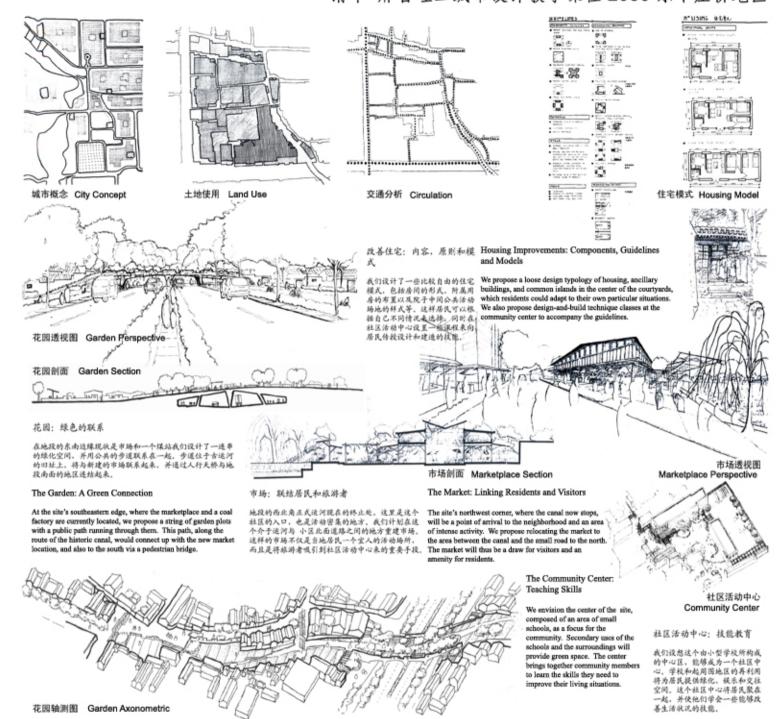
东不压桥地区将被流动和交换的概念所主宰,正和运河所隐含的意念 孫小凡但你还在何敬這時和父授的成志所主等。 相映: 首先,建立西北部的前的公共市场中心的食物和商品物质流动 .其次,利用地投东南侧的图书馆作为信息市场的知识的概念化流动 .最终,利用穿过迷宫般胡同和公共场所的空间的流动,所有这些通 过重新引入运河的流水相互结合起来,融入北京城市之中。

### 清华-麻省理工城市设计教学课程 2000 东不压桥地区





### 清华-麻省理工城市设计教学课程 2000 东不压桥地区



### PROJECT: CAPITALIZING EMPOWERMENT

The Mao'er Hutong neighborhood in Beijing is an area rich in culture, architecture, and a way of life well worth preserving. Preservation in this sense does not mean creating a working museum of Beijing's past. Rather, it implies an understanding of the area as a vital link between Beijing's past and its future, which must be inclusive and respectful of the present. More than the physical nature of the place, however, it is the people and their way of life that add the most to its meaning.

Our urban design plan addresses the neighborhood's growth and development in an organic, incremental manner. Rather than master plan the entire site, we use directed physical interventions as a catalyst for further residentdriven improvements to the neighborhood. We propose three major interventions, discussed further below: moving the market currently in the southeast corner of the site to its historic location near the lake, turning the market's current location into a greenway and community garden, and converting the large institutional spaces in the site's interior into a community center.

New pedestrian and bicycle scaled lanes will bring together currently disconnected parts of the site towards the center of the community. These changes, to be implemented immediately, will provide common spaces for residents to gather, learn, grow, sell and play. Perhaps more importantly, they will illustrate to residents that positive growth and development can happen in their neighborhood. At the same time, we propose a program of education directed towards teaching residents to make further changes. At the scale of the individual courtyard house, we propose a similar type of intervention: teaching skills on how to improve housing conditions and living space while providing models as to how such changes could take place.

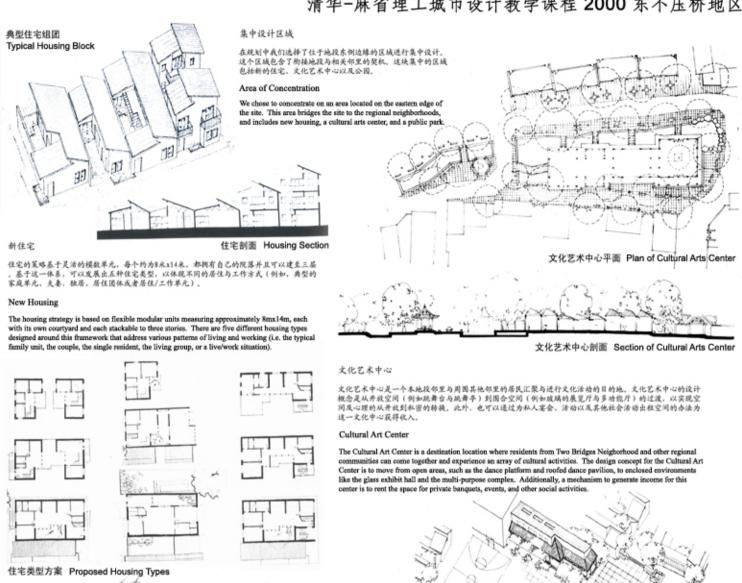
### 方案:激发潜能

帽儿胡同地区丰富的文化、建筑遗产和它们所容纳的生活方式。无不 具有很高的保护价值。保护并非创造一个老北京的生活博物馆,而是 将此地作为连接北京的过去与将来的重要地段来理解,而这必须以对 今天的全面考虑与尊重为基础。比物质空间环境更为重要的是当地的 居民以及他们的生活方式,因为它们体现了这一地段的真正含义。

这一城市设计方案着眼于一种有机的和渐进式的发展模式。我们并没 有对整个地段做总体规划,而是把一些精心设计的物质创新作为催化 剂插入杜区中,以之带动未来杜区邻里的自主式发展。我们插入了三 个这样的插件:把现存于地段东南角的市场移至历史上的原址,即接 近湖的地方:把现有的市场转化成一个绿色通道和社区公园:把位于 地段中心的中学转化成一个社区中心。

新开辟的步行和自行车道通向这个社区中心。把原来相互隔绝的部分 连结在一起。这些可以立即实施的变化为当地居民的学习、娱乐、买 要、聚集等活动提供一些公共空间。也许更重要的是。这些变化可以 使他们对社区未来的发展产生一种乐观积极的态度和美好的期望。同 时我们也提供一些教学计划,使居民掌握改善生活状况的技能。在四 合院这一尺度的范围内。我们也提供了一些相似的插件。使居民掌握 一些改善居住条件的技能,同时提供一些改建的模式

### 清华-麻省理工城市设计教学课程 2000 东不压桥地区





### 四季公园

四季公园是一个服务于本地社区的教育、娱乐与观赏空间。植物 、结构与空间的设计允许全单活动的多样性。主要区域包括一个 篮球场、一个果园(四周是野餐桌)、一个儿童游乐场、一个交 互的水空间、一个堆积單被以及一个技术培训中心。

### Four Seasons Park

sons Park is an educational, recreational and scenic amenity Four seasons runs is an educational, recreational and scenic amend for the local community. The design of plantings, structures and spaces allows for a multiplicity of activities year-round. The main areas of the park include a basketball court, an orchard bordered by picnic tables, a children's playground, an interactive water feature, sloping grass hill, and a skill development center









## Tsinghua-MIT Beijing Joint Urban Design Studio 2002 A Neighborhood Plan for Xi-Yuan

## 清华-麻省理工城市设计教学课程 2002 颐和园东宫门地区



#### 区域关系图

太诚保祉平业宣而业积, 随和 因东宫门旁边,处在顺和固和 圆明园的中间映带, 高意林匹 克公园不远,并且沿着北京的 绿化隔离带.



#### Beijing Context Map

Xi-Yuan lies at the entrance to the new Summer Palace in the suburbs of Beijing. It is situated between the old and new Summer Palaces, not far from the Olympic Park and along the planned greenbelt.

新的区域交通中心和商业开发点,包括新地铁线站 点、公交转换、上下班停车和集中的商业空间。 New regional transit hub and commercial development site. Includes station for new subway, regional

bus transfer, commuter parking and extensive

### 美健提议 Key Proposals

住宅规划: 新改造和新建设的住宅类定,能够减 少干扰现状居民并且提高生活标准。

ecial space. Housing plan. Prototypes created for rehabilitation and new construction that minimize disruption for current residents and improve living standards

重新设计的东宫门入口空间、世界级城客中心、以及

改善的旅游车停靠空间,

Redesigned gateway plaza in front of the Summ Palace. World-class visitor center and improved tour 线性溶水走廊和修建的湿地,从社区中穿过。

连接颐和因和圆明园。 Linear waterway/constructed wetlands. Weaves through the com munity, connecting the old and mmer Palaces

模型制作 Model Making usuu. This project will be a model for a new kind of reha-

bilitation scheme, one which combines comm preservation with ecology, cultural heritage, and image building - a new Chinese philosophy in a city building for the 21st century.

nity Preservation: Improving living st dards while preserving vital communities and the

City Building: Modernizing housing, improving infrastructure, expanding conservation, and protecting the environment

Cultural Tourism: Linking tourism to conservation and investing in host communities and the cultural

Olympics: Improving and greening the physical enent of the city. Showcasing the rich culture

and architecture of Beijing

本项目可以作为田区改造计划的新模式。一个将 社区保护结合生态、文化和建筑形式的模式。 个作为21世纪中国城市建设的新理念的模式 改善居住标准的同时保护社区生命 社区保护: 力和传统文化景观。

住房現代化,改善基础设施,扩大 城市建设: 保护范围以及保护环境。

将旅游同社区与文化文脉的保护与 投资联系起来

改善和绿化城市实体环境,展现北 京丰富的建筑和文化。





Vision



### 用物の交性型 Deposed Dar/Travit Step 用物数性機器 Deposed Schway

### PRINCIPLES

The Xi-Yuan neighborhood provides an opportunity to preserve the diversity and vitality of a neighborhood by retaining its existing character while improving living conditions and establishing a connection to the cultural fabric of the region.

### Heritage, Conservation, Cultural Identity

Preserve the image, form and integrity of culturally significant sites. Related elements of the surrounding area should be designed to reinforce and enhance the historic context.

### 2. Natural Systems and Open Space

Protect and restore natural watercourses and drainage, and integrate with regional systems wherever possible. Respect the traditional link between urban form and landscape in Chinese cities. Use such areas for recreation and other public benefits.

### 3. Regional and Local Transportation

Facilitate regional access to, and through, the area for residents, visitors, and shoppers. Ensure design will minimize negative impacts of traffic and parking on the neighborhood and historic sites.

### Neighborhood Character

Raise minimum living standards through development that is both environmentally and economically sustainable. Build on natural and historic patterns of form rather than introducing a new pattern.

### 5. Community Economic Development

Recognize the critical role of the neighborhood in cultural tourism and the opportunities and challenges of hosting a major landmark. Design a development program for the area that institutionalizes a mutually beneficial relationship between tourism and the community.

### 设计原则和导则

颐和园东宫门地区规划是保持一个社区多样性与活力的机遇,实现既保 持它的现状特征又改善居住条件,并且建立与区域文化则理的联系。

### 1. 历史遗产,保护和文化特性

保留具有文化独特性的地点的形象、形式和完整性,与此相关的周边区 域应在设计时加强和提高该地点历史文脉。

### 2. 自然系统和开放空间

保护和修复古洞道,并且尽可能的连接区域系统,尊重中国城市设计中 都市形式与景观设计的传统联系。将河道系统作为提供休闲空间和其他 的公共利益的区域。

### 3. 区域级和地区级交通系统

方便居民、游客和购物者活动空间与区域的交通连接,保证减少交通和 停车对社区和历史地段的负面影响。

### 4. 社区特征

通过开发提高生活水平,并且以环境和经济可持续性为基础。采用自然 的和历史的形式,而不是引入新的风格。

### 5. 社区经济开发

重新组织社区在文化旅游中的独特地位,抓住作为构成历史地标构成要 素之一的机遇与挑战。为地区设计一个开发系统,能够将旅游和社区之 间的互利关系制度化。

## Tsinghua-MIT Beijing Joint Urban Design Studio 2002 A Neighborhood Plan for Xi-Yuan

### 清华-麻省理工城市设计教学课程 2002 颐和园东官门地区



遗址公园 Heritage Park

### 诸县公园

面积, 3000 m<sup>2</sup> 目的,将旅游区与社区内的沿河漫 步道联系起来。

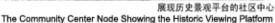
为潜址隙列馆以及社区滨水 走廊的对称入口提供了一个开放的 空间。南侧的停车场为公园南面和 东面的社区提供了缓冲。 公园北侧属于遗址陈列馆, 乱的

南部的停车场属于海淀区政府。

#### 湖畔公园

面积, 1500 m2 (公園), 1600 m2 (水面) 社区内最大的开放水城。 包括了室外公园, 学校, 排水系统, 东 用涂. 城有一个小型商业区。 归属、S学校、住宅、商业店面归社区所有。 水面由区政府负责管理。









湖畔公园 Wetland Node

Size: 1500 m2 (nark), 1600 m2 (water)

Purpose: Largest water/wetland node within the community Uses: Outdoor park, school, drainage system, small local commercial

Ownership: School, residential, and commercial frontage maintained by 归基,公共建筑以及室外的广场属于社区政府所有,Ownership: Public buildings and formal outdoor spaces owned nity. District Government is responsible for water mainten

Heritage Park Size. 3000 m<sup>3</sup>.

regional waterway.

Purnose. Connection between tourist attractions and

Uses, Outdoor spaces attached to heritage center and

edge as buffer for communities south and east. Ownership. Heritage center owns the northern edge. The

formal entrance to regional waterway. Park on southern

southern park is maintained by the District Government.

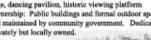
社区中心 Community Center க்கி. 1500 m<sup>2</sup>

自由市场到面

目标、社区居民的活动中心。 目标,并还否见可语物平心。 南達、可提供社区服务中心,管理办公设施、绿地。Uses: Community center, government office, green plaza, retail 幸售商业设施,娱乐场地,教育宣传基地。 edge, dancing pavilion, historic viewing platform

私營零售商业属于当地居民所有。

Section of the Regional Market





Section of the Wetland Node

我们方案的灵魂在于这个滨水走廊。这个系统的设计必 例如。 些问题都是设计者必须考虑并且解决的。我们的插图克

Regional Waterway

The backbone of our open space system is a linear waterway/constructed wetland. This wetland system should be a combination of aesthetic and ecologically functional design: recreational and visual amenities. habitat for plants and animals, stormwater collection and treatment. guidelines should be followed to

#### 自由市场

面积. 4800 m

为西苑地区提供商业服务。

2. 销售蔬菜、水果、小吃、水产品、肉蛋类、日用 小家电、服装等等。瀉水地区设置有情调的餐厅和 用途. 小商店,在居住区与市场之间的街道上可以提供零散空 间供流动小贩营业

人经营,水面部分交由滨水建筑的租界者维护管理。

Size: 1500 m<sup>2</sup>

Purpose: Focal point for neighborhood activities

and maintained by community government. Dedic privately but locally owned.



View of the Regional Market



颈综合者患景观的优美以及功能的合理:

闻的同时应该伴随着视觉的享受, 为动植物提供栖居的空间, 收集而水并加以处理, 使之回归施下水, 以上这 分说明了以上的设计意图。

### 西苑街心公园

娱乐休闲场地

提供健身设施, 运动操场, 乒乓球台

整仗业收入

water table recharge. Several design lustrate the intentions of our scheme

衍属, M市场的建筑由社区管理, 零售的店面包租给私

### Regional Market

Size: 4800 m2

se: Regional market

Uses: Market for vegetables, fruits, spices, seafood and meat as well as household goods, electronics, clothing and miscellaneous items. Restaurants and shops along waterway edge. Informal

Spaces on connecting streets for local vendors.

Ownership: Market building owned by community with stalls leased individually to vendors. Waterway maintained by occupants in exchange for use.

a state of the contract of 重新. 20000 m

水景花园, 小型餐厅, 舞场。 属, 由区政府管辖, 部分资金来自这里的

## Xi-vuan Park

Size: 20,000 m2

Purpose: Local/regional recreation area Uses: Exercise equipment, playground, ping pong, formal water garden, restaurant, dancing pavilion Ownership: Maintained by the District Government, partially

funded by restaurant revenue.



社区内的散布节点

面积. 25 m<sup>2</sup>-150 m<sup>2</sup>

为居住在节点周围的居民提供零散 的聚会空间,

包括林荫道。休闲座椅,有限的自 行车停放空间,以及与滨河走廊的联系。 归属,由社区所有。但零数分布的休闲空 间由居民就近维护和管理。

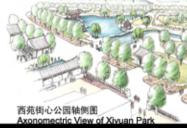


散布节点 Internal Nodes

### Internal Nodes

Size: 25 to 150 m2 Purpose: Informal gathering spaces within the community Uses: Greenery, seating, limited bicycle parking, perceivable

connection to regional waterway Ownership: Owned by the com maintained by adjacent residents.









Add v Mr. Ki

### PROJECT: OPEN SPACE

Our proposal focuses on developing Xi-Yuan as a model green, historic community by achieving the following goals:

Reestablish the historic hydrologic connection between the New and Old Summer Palaces. Preserve views to and from the New Summer Palace.

Preserve current community activity nodes.

Improve stormwater drainage and treatment, using environmentally low-impact techniques.

Develop water and green space, and public facilities as a local amenity and as a focus for community activities. Create a variety of open space experiences for various uses and users.

We focused on six open space and public facility elements along a linear waterway system backbone: heritage park, wetland node, community center, regional market, Xi-Yuan Park, and internal nodes. Our plan also includes street grading and paving, installation of utilities and rebuilding of public toilets.

Major infrastructure begins construction in Phase 1, followed by more cosmetic improvements in Phase 2. Only minor details will be left past the Olympics in 2008.

### 方案: 开放空间

我们的出发点是把颐和国东宫门地区建设成为一个历史性的绿色社区 , 为此提出了以下具体措施:

恢复圆明园与颐和园之间旧有的水系,从而恢复历史上昆明湖与福海

精心维护颐和园内外的景观

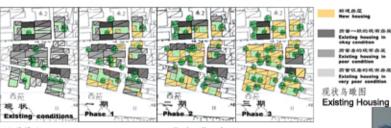
保持社区现有的充满活力的节点。 利用低冲击性的环保技术,改善雨水的排放和处理系统。

增加社区的绿地和水面,以及公共设施,使社区更为便利和舒适。 为各类居民提供多样化的室外活动空间,使他们各得其乐。

我们的设计集中在六个主要的开敞空间,它们沿着社区内的新河道呈 线性分布。遗址公园、湖畔公园、社区活动中心。自由市场。西苑地 区街心公园。以及社区内部的各个散布节点。我们的计划还包括街道 路面以及广场的地面铺装。还有各种便民设施的增加以及公共厕所的 彻底改善.

第一阶段,开始建造主体结构,然后在第二阶段做更多的表层的美化 ,另外,少数的次要细节将被留到2008年北京奥运会后完成。

### 清华-麻省理工城市设计教学课程 2002 颐和园东宫门地区



现状点瞬间 Existing Housing Form

居住与商业空间通过灵活组合。

充分适应各种规模的商业和居住需求, 如右图所 单元构成的柱梁结构以及可灵活布置的内部

隔墙,都保证了商业主能根据需要创造出足够的

灵活空间布置: 提供3 m x 3 m 的单元以灵活构成

建筑形态: 依据现状,保留前店后住的建筑布局

具有多样性的商业街。 容量: 提供约150个商业和居住单元。

发展策略

Project Development

三种类型的皮肤等。发展高枝膏、双环一发展 高的合作开发、以及个体发展。

在项目的整个实施过程中,地段内的建设将推行 Over the lifetime of the project, three related types of develop-

私密院落住宅间及内部商业建筑规划鸟瞰图 Proposed Private Open Space and Internal Commercial Prototypes

对于此类建筑主要采取保护措施,同时改善原建筑的房屋质量和居住环境,保护的时 集应为有重要建筑价值成历史价值。或质量状况良好的建筑。首要插施是提供卫生间 和厨房等必需的生活设施,而以后将持续进行包括加围墙体、改善入口环境、以及增 加海户层民的层位面积等工作。

改善房屋质量:在2012年之前保护并修复200-225座实保留的建筑 建筑形态:引入更为正式的建筑从而替换临时建筑(临时加建的厨房、储藏宝等)。 分布区域:分布在整个面花小区内,以维持现有邻里关系的机理。



花窗, 再现原始风貌。

1) 更换位于屋顶边缘的坏瓦 2) 清除水泥抹灰, 恢复砖墙原貌 3) 拆除填堵窗户的砖墙, 重新安装

Replace select tiles at edge

2. Uncover exposed brick by removing cement 3. Remove brick covering window and reshape

to original design.

**316** 

内部商业建筑

模式.

In this prototype, residential and commercial space is integrated into a flexible design to provide for sinesses and families of varying scales. As seen in the diagram above, post and beam construction and interchangeable internal walls allow business wners to create adequate operational space. Flexible space: Distribute units in blocks of 3 m<sup>2</sup> to facilitate diversity along the commercial streets. Capacity: Support up to 150 businesses and

Physical features: Permit residential units to exist in he rear of the prototype, as in current co

#### Preservation/Rehabilitation Internal Commercial

This prototype is dedicated to preserving and improving the existing housing stock. Preservation efforts should focus on buildings with architectural and/or historic significance. as well as buildings in good condition. Immediate efforts will focus on providing households with toilets and kitchens. Continual efforts will include reinforcing walls, improving access, and increasing living space per resident.

Improved housing: Preserve and rehabilitate 200-225 houses by 2012.

Physical features: Introduce more formalized architecture; informal (add-on kitchens storage, etc.) removed.

Location: Distribute throughout Xi-Yuan to maintain neighborhood fabric

### 临水层住区

此类建筑的设计重点在于结合大面积的滨水区发展可持续型建筑,为了节省能源消耗 在建筑物的南向屋顶和南立面上安装了太阳能光电板。

Waterway System

整体化设计:新区建设将充分考虑与水体、现在社区、以及顾和因的结合。 大众化佳房: 提供了150个适用于不同收入阶层的单元建筑体,包括可出租单元布差 年人住房

在建筑体中穿插布置小型停车场(服务于整个抽图) 分布区域:主要集中于小区南部的来开发地区



Ground Level Plan of Waterway Housing Development The keystone of this prototype is its sustainable architecture integrated within the large waterfront development sector. In order to reduce energy costs, photovoltaic structures will be ins within the roofs and south-facing exteriors.

临水居住区模型

Waterway Housing Model

Integration: Integrate new housing with the waterway, the existing community and the St Palace.

e: Provide 150 multi-income units that include rental units and elder housi Parking: Weave small scale parking lots (serving the entire community) into the architecture, Location: Distribute within the existing undeveloped land in the south of Xi-Yuan.

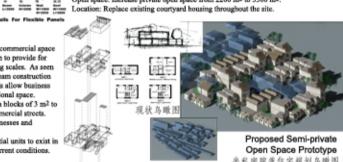
Physical Features. Maintain and enhance viewpoints from the waterfront for residents and visitors.

私密院菜住宝(四合院住宝)

在此类住宅中,每个家庭都拥有一个单独的(而不是共用的)院落空间,对于二 层建筑,屋顶平台则成为了它们的开放空间。这类住宅具有很强的灵活性,能先 分满足各类不同收入阶层和家庭的需求,而不用以插牲任何私有院落为代价。 更多的居住空间: 370个两层的建筑单体取代了560座单层建筑物, 开放空间: 私有的开放空间从2200m<sup>2</sup>增加到5500m<sup>2</sup>。 分布区域: 在整个地段内取代原有的院落式住宅。

#### Private Open Space

In this prototype, each household is provided an individual (rather than a shared) courtyard. In the two story buildings, open space is provided on the second floor. The prototype is flexible enough to accommodate a variety of income groups and family sizes without compromising each household's private open space. The figures above and at left illustrate possible floor plans, sections and massing. More livable space: Replace 560 single story units with 370 duplex units. Open space: Increase private open space from  $2200\ m^2$  to  $5500\ m^2$ . Location: Replace existing courtyard housing throughout the site.



半私密院荐住宅规划乌瞰图

Existing Housing Form

半私密院落住宅 (连排式住宅)

此类型住室中通过三种标准单元体的组合创造出了具有各不同高程的开放空间系 就。通过各个开放空间的相互错落通接以及多种单元体的镶嵌组合,形成了比原 连排式住宅模式更为亲密的社区结构。右边的图例展示了开放空间与建筑物的构

更多的居住空间:425个多层的建筑单元取代了600座单层建筑相 分布区域:主要分布于地段的东北区,并有少量渗透到其它地区,建筑形态:适当提高地段内南部区域的建筑物高度。

### Semi-Private Open Space

In this prototype a series of units is combined within a multi-level open space system. This system of interconnected open spaces and multi-unit housing stock creates a mor intimate community than the existing row house pattern. The diagram to the right explains how the open space integrates with the architecture

More livable space: Replace 600 single story units with 425 multi-level units Location: Distribute in the northeast sector and weave into other locations.

Physical features: Increase building heights towards the south of the neighborhood.

### PROJECT: HOUSING

This housing proposal is based on a series of flexible architectural prototypes that integrate a variety of family sizes and income groups. These prototypes capitalize on existing natural resources and prioritize additional open space and living space for each XI-Yuan resident.

### Prototypes?

Five prototypes were developed that integrate existing housing with new housing, respond to traditional Chinese architecture (without attempting to replicate it), and respect the existing street fabric. The five prototypes are: rehabilitation/preservation, private open space, semi-private open space, internal commercial, and waterway system.

### Implementation

The implementation plan for the housing proposal focuses on minimizing the impacts of redevelopment and keeping existing residents in the community. It includes an explanation of the three types of development proposed for the site, the minimum living standards, funding mechanisms, temporary housing strategies and a series of public involvement and self-help techniques to educate the community about the upcoming changes.

### 方案:住宅

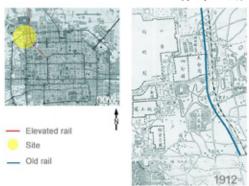
这个房屋计划旨在提出一系列灵活的房屋类型,能满足各个不同家庭 和收入阶层的需求。这些新的类型充分利用了当地各类的自然资源。 并力图为西苑的居民创造更多的公共开放活动空间,以及增加居住面

房屋类型:我们在原有当地住房的基础上结合中国传统建筑的特点( 而不仅仅是简单的复制). 并且考虑到对于现状街道机理的尊重,提出了下列五种房屋类型: 复原/保留建筑、私密院落住宅(四合院住宅 )、半私密院落住宅(连排式住宅)、内部商业建筑和临水居住区。 項目実施

这项房屋计划的实施计划主要关注于尽量减少社区更新过程中对当地 居民的影响。并且力求保留原有居民。计划包括了以下内容: 三类社 区发展模式、最低生活质量保障、资金来源机制、临时住房政策,以 -系列对社区居民进行相关专业知识教育的技能,帮助他们面对即 将来临的变化做好充分的准备。

## Tsinghua-MIT Beijing Joint Urban Design Studio 2004 Railway Corridor

## 清华-麻省理工城市设计教学课程 2004 轻轨13号线沿线地区



五道口地区历史地图 Site Map from 1912 to Now















北京市主要交通干线 Main Traffic Line



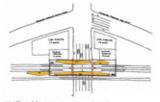
地段交通分析 Traffic Analysis



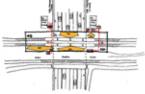
肌理 Texture







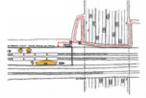
五道口站 Wudaokou Station



石板房

东主庄

知春路站 Zhichunlu Station



大钟寺站 Dazhongsi Station

### THE SITE

The focus area encompasses open land and neighborhoods on either side of the new elevated rail line leading from central Beijing through Haidian to the Olympic site. This is an historic rail corridor that currently has two subway stations and a rail station. The transit line rises above ground and is supported by large concrete structures. The connection between adjacent districts and spaces has been cut off, leaving large vacant and undefined spaces.

How can this infrastructure corridor be re-configured to create stronger links between the communities as well as serve as a generator of new uses, activities, and experiences?

From an urban design perspective, what binds these discrete yet loosely aggregated zones other than historic circumstances, economic survival, or chance?

The new transit line could provide a mechanism for developing new activities, new physical fabric and an improved urban experience for local inhabitants. To tackle the problem, the studio broke up into five groups, each with a mix of Tsinghua and MIT students from various degree programs. By sharing the information generated from four separate assignments (site analysis, strategic projections, developing form from section, and design synthesis), each group was able to advance its proposals through the collective efforts of the studio.

### 地段介绍

轻轨的建设给北京发展带来了新的机遇。首先,他改变着城市的时空结构,影响着城市的用地 布局。轻轨站就可以带动一个地区的地价的上升,吸引大量的经济活动,成为城市新的焦点。 第二,它改变着很多人的生活方式。郊区轻轨的便捷改变了城市人的时空观念、就业、居住、 购物等日常生活的组织也随之发生变化。第三,它形成了新的城市环境要素,提出了新的城市 设计课题。郊区轻轨贯穿城市中心和郊区,使人们更直接的感受城市"剖面",不同时代、不 同功能、不同阶层的地区,公共的或非公共的领域都被联系在一起,同时他又在城市中造成了 新的分割。

13号线西起地铁环线西直门站,向北途径五道口等站至西二旗,后向东经回龙观,经北苑站等 再向南到达东直门环线地铁站,形成全长40.9公里的北郊环线。其中西线很长一段是利用现状 铁路沿线用地建设的。沿途用地情况复杂。由于我国1950年代来逐步形成的二元城乡结构,北 京二环以外还存在一些乡村用地,13号线经过的大钟寺、五道口地区就是典型的城乡交接带遗 留地区,这些地区一般都是城市非正式经济活动集中的地区,集中了大量进城打工的农村流动 人口,成为"都市村庄"。艰涩混乱、环境差但是富有活力是这些地区的普遍特点。

在五道口地区,由于城市高压走廊平行原有铁路向北延伸,使得这一带的环境更为杂乱。高压 线下的临时建筑成为各种低租金经济活动的黄金地段。过去绝大多数临铁路一侧的城市环境都 比较消极。轻轨的建设不但对沿线的视觉环境整治、整合提出了迫在眉睫的需求,同时也对由 于地铁站所带动的周边地带开发、功能组织、跨线两侧的联系等等提出了前所未有的新课题。

空间理念 Idea of Space

### 功能结构分析

商业系统依托现状生长而成。以商业衡为主要形式,串联整个区域,并在互道口站、四环路 如春路站放大成的物中心。

办公系统治轻轨两侧生长,并在四环附近形成南北两个核心, 该办公系统与学生公寓紧密相 办公: 逃,为学生创造,组织社团活动提供方便,廉价场所, 文化模系:;利用旧的京包铁路作为文化设施组织的短带,文化设施有联系轻轨两侧的区构建筑和

张拉牒结构组成、沿铁路两线呈线性分布。

开放空间: 开放空间系统沿径轨线展开,向两侧渗透,与周边地块的院落空间相结合,形成整体, 并在四环路上的"甲板"处形成高潮。

**進路**:道路系統者重考處超執与道路的衔接以及短執两侧的联系,道路系統中增加多条东西相联系 通道。为限制机动车通行,该地区集中式地下停车场4处,其余区域以专行和自行车活动为主。

Commercial: The commercial system grows from current conditions. Street form penetrates the area, and becomes larger shopping centers at the main stations.



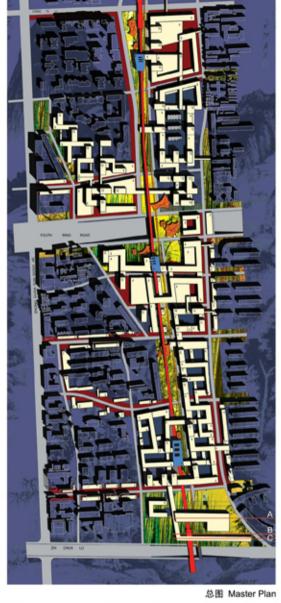
鸟瞰 Bird's Eye View

Office: The old railway is used as a band organizing the cul-tural establishment. The tent structure connects both sides of the rail Open space: The open space system grows along the rail and infiltrates into both sides; the 'deck' above the fourth ring ad is the climax. Traffic: The main

point of the road system is to connect th sides of the rail.



功能分析 Function





### PROJECT: CROSSING THE LINE

### Site characteristics:

- The site is a center of Haidian district, with dozens of colleges and universities around, including Tsinghua University and Beijing University.
   Light railway and the railway tracks between Beijing and Baotou are the most important spatial features of this area. The light railway stations Wudaokou Station and Zhichunlu
- Station provide easy access to the site.

  3. With many colleges and research centers around, the population living and working here is mainly students and researchers.
- 4. Though there are quite a few low-end restaurants in the area, they flourish due to student patronage.
- 5. Cheap residences are quite popular in this area, especially among students and service people.

### Strategy

Our design emphasizes service functions for students and researchers, to make this area become the center of college-related activities.

### Principles

- 1. Both parts of the rail develop as a whole
- Mixed land use
- 3. High density
- 4. Motor vehicle restriction

### 方案: 龙之舞

### 地区特征:

- 1. 海淀"学校区"中心。地区周边包括清华北大在内的数十所大专院校。位置接近几 何中心。
- 2. 轻轨与地铁、轻轨线与京包铁路是该地区最显著的空间特征要素。五道口站和知春 路站为到达该地区提供了良好的交通条件
- 学生人群。该地区集中了大量学校和研究所、办公楼,因而该区域活动的主要人群
- 是学生与研究人员。 4. 特色零售、饮食街。北航西侧的零售饮食一条街虽然属于中低档次饮食消费区,但 是因为学生的存在而极具生气。
- 5. 廉价居住。该地区由于学生、服务人员较多,存在着大量的廉价出租房屋以满足他 们的需要。

### 设计原则:

- 轻轨两侧区域作为整体发展。
- 混合土地利用与建筑使用。学生的"学习、生活、娱乐、工作混合"的行为模式决 定了该地区的土地利用与建筑的混合使用方式。 3. 高密度开发,良好的交通条件和周边众多高校使得该地区土地价格较高,与学生的
- 经济承受能力发生矛盾。高密度开发可以兼顾开发商的效益与学生的廉价需求,是解 决这一矛盾的有效手段。
- 4. 鼓励使用轻轨、公交、自行车和步行,限制机动车交通,同时京包铁路北京始发站 北移,地区仅留铁轨、作为历史见证。

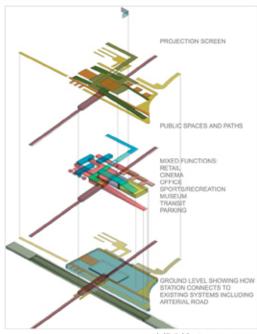
# Tsinghua-MIT Beijing Joint Urban Design Studio 2004 Railway Corridor清华-麻省理工城市设计教学课程 2004 轻轨13号线沿线地区







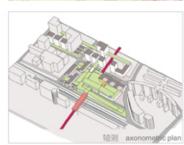
文化建筑模型 Models

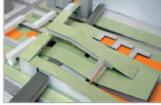












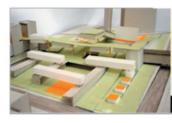


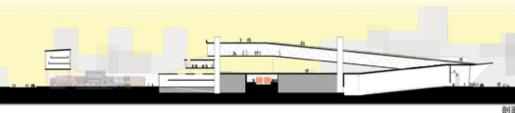
剖面A-A Section A-A





剖面B-B Section B-B





剖面C-C Section C-C



### Detailed Design Area

1. Area Selection: We chose the southernmost part as our detailed design area. With office buildings to the west, student residences to the east, a light rail station to the south and a street of restaurants to the north, the land use of this area is quite varied and complex. As a south gate, this area is most important for future development of the whole site, being both representative of the area and challenging. 2. Design concepts: the location and traffic conditions make the renovation of this area a necessity. The design tries to combine architecture and landscape to endow this area with some special characteristics, aiming mainly at leisure and recreational spaces for students and researchers. 3. Function: mixed use is representative in this area, including traffic transitions, retail, recreational spaces, cinemas, supermarkets, playgrounds museums and so on.

### 重点设计地段

区域选择:本案选择地块最南端为重点设计地段。 1. 区域远待: 本葉远洋地块放削端为重点设计地投。任 于该地段西邻办公区,东为大适会学生公寓区,南侧与 知春路轻轨站,地铁站(建设中)相连,北侧为饮食街 ,周边土地使用多样,情况复杂。轻轨从该地区中间穿 过,轻轨西侧为变电站,东侧为运动场,由于本地块位 于设计地段南部入口处,对于地段发展极为重要,且周 边用地情况复杂。因此选址极其代表性和挑战性。 边用地情况复杂。因此选址极其代表性和挑战性。 2、设计理念:良好的区位、交通条件使得该地段的政造 势在必行。设计试图将景观与建筑相结合、形成独特的 地区景观和设计地段入口标志,主要为学生、研究人员 提供依润、娱乐场所。设计再联系轻轨两侧方面作了积 被尝试,使用了各种空间模式,使得穿越轻轨变得使捷 ,并吸引人们在此停留,使该地区目前割裂、消极的空 间状态转变为整体、积极的空间。 3. 功能组织:混合使用是本地区的主要特征,包括交通 功场等。

High rise 密思维维

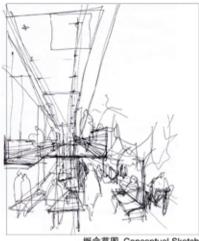
供的

6E EZ 40:40

Re-used existing

改造后的建筑

## 清华-麻省理工城市设计教学课程 2004 轻轨13号线沿线地区



概念草图 Conceptual Sketch



图书馆顶视图 Library Top View Plan



图书馆一层平面 Library Ground Floor Plan



地段周边活动 Activities around the Site

者虑到设计地段对于娱乐活动有较大需求,在游客和周边地区学生能够方便到达的五道 口轻轨站旁。我们设计了一个娱乐中心、以期为该地区提供更为丰富的娱乐生活。

New Laboratory Space is located in an area that was historically used for laboratory purposes. Adjacent to Tsinghua University and the growing High Technology cluster in Haidian, this flexible space can be used by students, professionals or start-up biotech



在地段内一处重要节点,我们将办公和零售加以混合 诚图以之作为沟通轻轨东西两侧高校学生、高科技 人员和不同收入除层层资的重要标梁。

人員如本的收入以及加入的主要分案。 我们在轻轨轨道之下设计了一个向东而两侧延伸的新 的图书馆。其中。除了提供固定的借阅服务之外,还 容納了书店、出版社和咖啡厅等辅助功能。 我们在该地段内还设计了一个大的广场,包含若干露

我们在推地改为这款计了一个人的)。场、巴尔力干燥 天的小市场、艺术家工作室和展廊,以及一些大规模 的展览空间,以图创造一个充满活力的公共空间。广 场的东侧是一个新的跨纳中心,为该地区的其他小商 店和市场提供了一个固定的销售场所。



模型顶视图 Model Top View

A mix of institutional and retail uses at a key intersection of our site attempts to bridge the east and west sides of the light rail and bring together the students from the surrounding universities, high tech workers and area residents of all income classes.

We place a new library under the light rail with extensions to the east and west, and create auxiliary uses in association with this such as book markets and stores, cafes, and publishing houses We also include a large plaza, spaces for vendors, artists' lofts and exhibition space in order to encourage the creation of a dynamic public space. A new mall develop could serve as a larger retail anchor for other small shops and markets. mic public space. A new mall development directly to the east

中国传统建筑车 拱结构系统的转化和

Inspiration for design process of library sections and plans comes from the traditional Chinese wood brackets.



为了与该地区现有的建筑特征相适应。我们 在设计中采用小尺度的建筑: 混合式的住宅 开发使高科技人员和为前者提供服务的低收 入人员都能够在该地区内获得适当的住房。

Smaller scale attempts to fit in with the low-rise character of this area: mixed income housing development ensures that both high tech workers as well as the lower income residents who provide services for



图书馆剖面B Library Section B

总图 Master Plan

#### PROJECT: URBAN CAMPUS

Whereas design process often develops as a fierce criticism of an existing condition, the thesis for this project grows out of the fascination with the incredible richness and mix of conditions already present on the site. The melon vendor, the business man, the high end resident of Leisure Garden complex, students, peasants, all coexist on the site and find ways to appropriate the space around the elevated railway.

Our aim in this project is twofold. First, we aspire to capture as many of the activities that are already present on the site as possible and to build upon them. Second, we attempt to bridge the gap between the low income east and the higher income west sides of the tracks by designing a campus of activities and spaces that invite the two to mix.

The central notion that guides our design is to preserve – whether physically or experientially – what is there, and then carefully intervene to achieve the desired dynamic quality of space.

The set of interventions is drawn into the urban texture by attraction points that anchor the site to its context.

Rather than being a negative space of what has been built, these created attraction nodes will connect the structure to the urban fabric. The focus of our intervention is the new library, situated halfway between Wudaokou structure to the urban fabric. and Zhichunlu stations, which is to serve both students from the surrounding universities and residents of the site as well as the broader surrounding area.

#### 方案:校园城市

以往的城市设计常常是以新设计对于城市现状的极端漠视和尖锐批判 以在的城市设计常常是以前设计对于城市设备的城墙深代和关键机并 为基础进行的,这个设计则完完全全地是从丰富多元的地段现状中生 长出来的。在我们的设计地区内,不同职业、不同收入阶层的人们。 包括水果商贩、零售商、高收入居民、学生,以及贫穷的打工仔们, 共同生活在一起,他们以各自的方式利用着轻轨周边及其下端架空的

边地区的学生和旅游者的"催化器" 我们的基本设计理念是:在物质与非物质两个层面尽可能地保存现状 在此基础上谨慎地加入新的设计元素,最终实现具有活力的宜人空

我们避免造成新旧环境的不和谐,力图使新加入的各类元素能 够有机地融入并增强原有的城市肌理。新插入的各个节点将使整个新 加入的结构自然地生长于地段之中,而其中的重点则是位于五道口和 知春路轻轨站之间的一个新的图书馆,它将为轻轨沿线各高校的学生 和周边居民提供服务。

5.3 2.3

30"

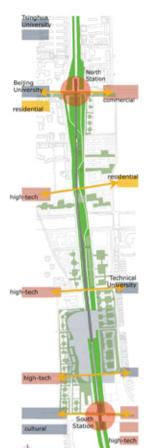
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### 清华-麻省理工城市设计教学课程 2004 轻轨13号线沿线地区



1)公共空间规划 地段内几乎所有的公共 空间都是私宗的-多住区现有公共空间并 不是经过专门规划设计 65.

1) Public Space Plan Most of the public spaces in our site are private - a lot of public spaces were not planned specially.

分洋珠文语 现有的快轨使得轻轨站 之间的大投距离没有通 谁宴科. 不可达性导致 铁轨沿线沦为混乱的后

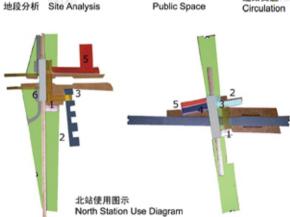
2) Circulation There is no passage through a long distance between two statis because of the rail. sibility makes the areas along the railway become messy backyards. 测主施利用 现有发展趋势问题在于热 襄子拆迁和新建大型高收 入住区、置换现有的居民 和商业活动。

3) Land Use The problem of developing is that people always fall over the emselves to tear down the original houses and build new residential blocks with huge scale for the high incomes, to replace the existing people and commercial activities

4)空间类型 地段远用新合院住宅类型创 造出一种赋有的律感的城市 肌理 将公共空间, 半公共空 细、私密空间有机地组织成 绿色动脉并融入城市空间。

4) Typology of Space New type of courtyard residential is used in our site to develop a rhythmical urban fabric, combining the public. semi-public and private spaces as a green artery into





公共空间

Transit Stop Program Key:

Typology

1. Public Amenities Daycare, Supermarket, Farmers' Market 2. Sports Facilities

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类型分析 🐺 🕻

Indoor/Outdoor Sports, Gymnasium

Post Office, Police Station, Emergency

Facilities (Fire Truck, Ambulance) 4. Congregation Facilities

Multipurpose Hall

5. Entertainment Center Bowling Center, Videogames Center, Cinema, Theatre

6. Parking

道路交通

南站使用图示 South Station Use Diagram

#### Master Plan Key:

- B. Graywater Swale C. Affordable Housing
- D. Elevated Tracks + Railroad
- F. Short-term Housing
- G. Boardwalk + Pedestrian Street + Affordable Housing H. Residenti
- tial + High Tech
- I. Mixed-Use Commercial with Market Docks and Boat Docks
- Mixed Use Galleries/Commercial + Housing
- K. Deep Lake
- L. Seasonal Lake
- M. Outdoor Gathering Space/Performance Space
- N. Existing Sports Complex
- opened for public use O. Zhichun Lu Station



-B

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#### PROJECT: THE GREEN STREET

The Green Street Plan - so called because it recognizes the street as a legitimate activity place while also providing alternative green spaces - extracts from the light rail a new vocabulary for open space. It invents a new development pattern that prioritizes public transportation, mixed income housing, vernacular architecture and land uses, and residual spaces, while improving north-south circulation and east-west connections. Finally, the scheme celebrates the light rail as a landmark synonymous with great public space.

#### Design Guidelines:

Public Space: Create a typology for the elevated light rail to read as an open public space rather than a backyard. Circulation: Improve east-west and north- south connections for pedestrians, bicycles, and vehicles.

Affordable Housing: Build affordable housing for students and for low-wage residents.

Mixed-Use Development: Prioritize mixed-use developments to accommodate existing uses and introduce cultural and outdoor activities. Provide spaces for informal markets and small scale business as income

generation for low-wage workers.

High Tech Corridor: Use the universities as catalysts for economic development by providing space for high tech commercial activity and research facilities.

Transit Stops: Create a programmatic typology for transportation stops that recognizes the stops as activity hubs for the community.

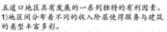
#### 方案:绿街

"绿街"方案将街道空间作为休闲娱乐场所并同时提供公共绿地,形 成独特的城市语汇并由此得名。我们提出一种新发展类型——以城市 交通为先导,尊重不同阶层聚居、地方建筑风貌与角落空间。通过解 决地段内东一西、南一北交通,方案使轻轨沿线成为地标性城市公共

#### 设计要点

- 1) 公共空间:创造一种轻轨沿线的建筑类型使之被解读为开放空间而 不是城市后街。
- 2) 交通解决: 促进行人、自行车与机动车的东西、南北向交通。 3) 廉价住宅:为低收入居民与学生提供住所。 4) 混合型街区发展:保留现有的混合土地利用类型,促进附近居民的
- 文化与户外活动: 为非正规市场提供空间, 保证低收入人群的生活来
- 5) 高科技走廊:利用周边校园的科技资源发展知识经济相关的产业园 ×
- 6) 中转枢纽: 在轻轨站附近创造新建筑类型使之成为周边社区活力中 ďΣ.

# Tsinghua-MIT Beijing Joint Urban Design Studio 2004 Railway Corridor 清华-麻省理工城市设计教学课程 2004 轻轨13号线沿线地区



2) 周边大学校园学生人群为商业提供了稳定的客

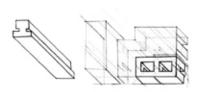
户流。

 新進生活丰富多彩。
 在这里轻轨为城市提供了一个潜在的带形公共 空间,形成标志性的建筑景观。 5)轻轨站成为人们活动的中心。

#### Factors in developing Wudaokou area:

- 1. The mixture of incomes in this area yields various kinds of service and architecture.
- 2. The college students from the surrounding campuses provide stable customers.
- The street life is lively.
- 4. The light rail provides a belt of potential
- public spaces to the city, making it a landmark.

  5. The station becomes the center of people's activities.



轴测图 Axonometric Projection

横剖面 Cross Section		
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Item	Existing Tower Typology	Derived Proposed Typology
1. Gross land area	54300 sq.m.	48000 sq.m.
2. Building base area	6100 sq.m.	22500 sq.m.
3. Green Space	10%	25%
4. Total built area	122000 sq.m.	85500 sq.m.
5. Built to plot area ratio	11.2%	46.88%
6. FAR	2.2	1-4 - 2.3
7. No. of units/ floor	100	375
8. Total no. of units	2000	1425
9 Maximum height	20 floors	3.5 floors



横剖面 Cross Sections

地段鸟瞰图 Bird's Eye View of The Site









透視 Perspectives

空间概念 Concept Of Space







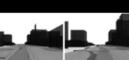


轻轨站草图 Station Sketch

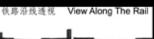














高密度住区













-麻省理工城市设计教学课程 2004 轻轨13号线沿线地



#### Focus Area

Focus areas are redensified to sustain development, retain user groups, intensify use, enhance real estate, provide public space/place and announce the space (as a prototype) adjacent to the guideway between two stations as a destination in itself, enabling true transit oriented development.





Section I



剖面II Section II

#### 中心区

提升中心区密度以维持发展、保持用户群、加强利用、提升房地产开发 、提供公共空间/场所并将两个轻轨车站之间紧邻导轨的空间(作为一种 原型)作为其自身实现真正TOD发展的目标公之于众。

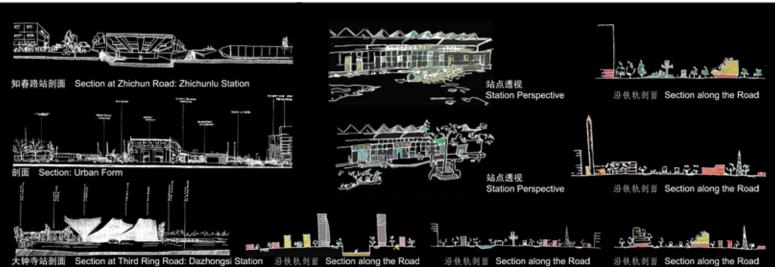


中心区模型 Models of Focus Area

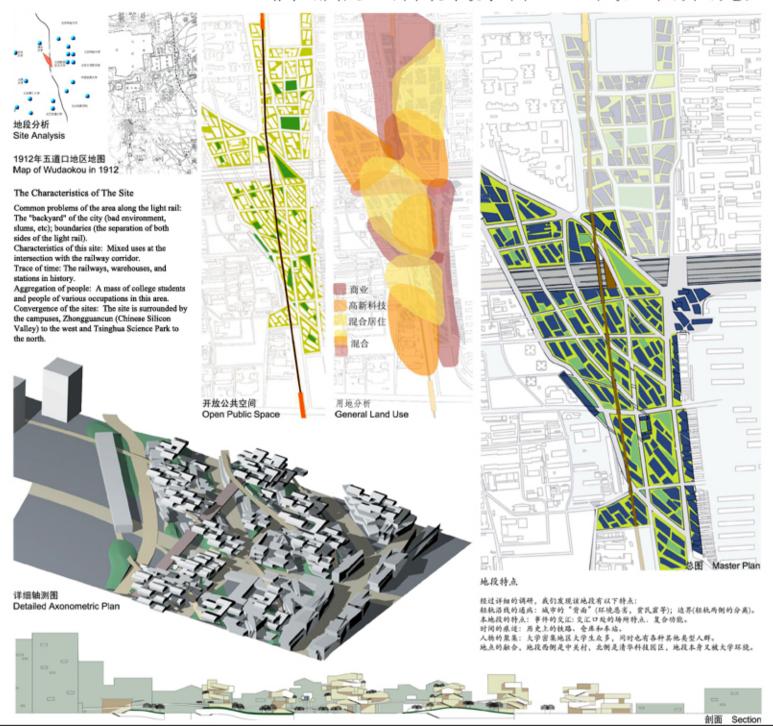




中心区模型 Models of Focus Area



### 清华-麻省理工城市设计教学课程 2004 轻轨13号线沿线地区



#### PROJECT: FOLLOW THE RAIL

We envision the area lying between Wudaokou and Zhichunlu Stations as a point of physical and social intersection. Formerly the site of two railroad alignments, the traces of history leave an interesting aberration within the regular grid of the city of Beijing. We seize the opportunity to develop a living cell embedded inside the educational and technological heart of China's capital city, binding together the formerly disjointed, disconnected

Our gestures to connect the site manifest themselves in a new architectural typology that is not only fitted to the unique conditions of the site, but also may serve as a model for similar places around the world. The plan is forward-thinking, projecting into the future a time when Beljing's northwest quadrant develops a full identity and its own sense of place, while exhibiting a flexibility to adapt to the ever-transforming winds of change.

#### Design Guidelines

- Place the existing rail line underground and relocate Tsinghuayuan station to Wudaokou station to improve lines of communication. Burying the rail line frees land for development, while anticipating rail technology upgrades for eventual high-speed connections to the northeast of China and the Korean peninsula.
- 2. Designate three core commercial areas on the site where retail, dining establishments, and various services concentrate, while allowing flexible space all over the site for more informal economic activities
- Construct a series of structures that effectively integrate the overhead rail infrastructure with the urban fabric.These buildings will include an articulation of public and private spaces on all levels via a system of structural layering. Such a system will make it possible to distribute upwards the activity and vitality of urban street life,
- activating the city in all three dimensions.

  4. "Follow the Rail": Develop a street grid that follows the unique contours of the surrounding fabric, while connecting the site with important areas in the vicinity.

#### 方案:且随RAIL行

"且随RAIL行"方案针对地段特有的历史和城市肌理以及轻轨沿线的 特点在以下几方面进行了尝试:

#### 消除边界。

利用历史上的铁路线路形成一条以自行车和行人为主导的林荫道,同时利用现有的著干道路形成从西北到东南的道路肌理,引导人流、自行车和机动车,消除因铁路和轻轨而形成的地区边界。同时有系统地 组织公共开放空间,并形成新的轻轨两侧地区的密切联系带,建筑和 步道与轻轨桥相穿插,使轻轨与地段融为一体。

不仅保留物质形态意义上的城市肌理,同时也保留人文意义上的城市 肌理琴煌人群共同使用同铱占浯偏形成丰富而多层次的行为模式,不 同文化交融形成的富有活力的地区文化。

在保留原有的多功能复合实用特点的同时,引入"层"的概念,不同 的功能不止在地面层融合,而且在不同高度上各种功能相结合同时加强不同高度不同功能空间之间的联系,尝试在实现建筑高密度的同时 使其间的联系便捷而富有趣味。

# Tsinghua-MIT Beijing Joint Urban Design Studio 2004 Railway Corridor 清华-麻省理工城市设计教学课程 2004 轻轨13号线沿线地区



分层住宅透视 Perspective of Layered Housing



住宅类型推演 Development of Housing Typology







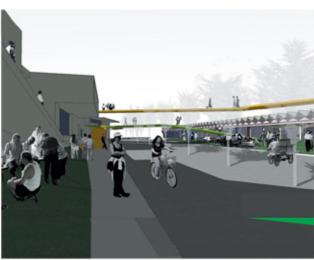
我们试着寻找一 和为人们提供需有生机与 活力的邻里空间的方式。 我们发现, 传统院落是一种很好的范例, 但它在高 密度的开发建设中并不适合。已有的方式是将其在 否。它有可力式是行兵在 坚向上直接叠加起来,但 结果却是原来作为公共空 昭本即足原本作为公会文 间的步道和院落現在不再 能让人停留,它们的作用 仅仅是交通。基于以上考 虑,我们将多层院落进行 错位,从而尝试着在上空 创造可变的和富有趣味的 院落空间。

#### Architectural Concept

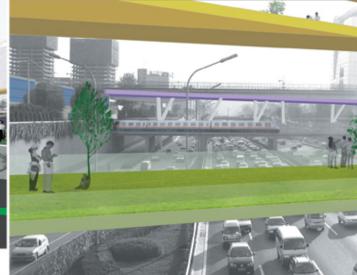
Housing: We tried to find a way to offer people a lively neighborhood. We found that the traditional courtyard house is not suitable for high density. Traditional additions to courtyard houses trade open space for pathways. Our solution was to twist the multilayered courtyard and try to create flexible and interesting courtyard space on the upper levels.



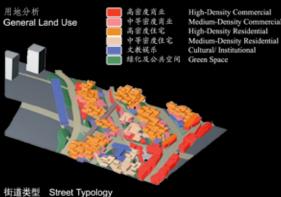
交通 Circulation Plan



仓库有选择地再利用 Warehouse Adaptive Reuse



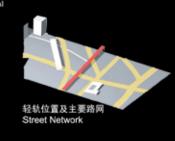
四环交叉口处分析图 Perspective of Fourth Ring Road Crossing



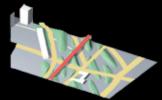




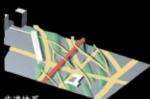




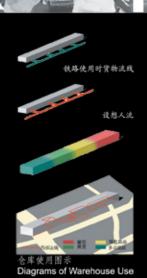




景观与公共空间 Landscape & Public Space



步道体系 Walkway System



In 2006, the studio focused on the issue of Beijing's vast migrant population, by preparing an urban design and development plan for the Sun Palace neighborhood in the rapidly growing area of northeast Beijing. Sun Palace is an urban village, a remnant of the agricultural past that now houses almost 5000 migrant workers and their families living in courtyard houses, many still owned by former farmers. Sun Palace residents work in construction and service industries but cannot afford conventional housing. Nearby a new subway stop is under construction, and high rise buildings press in.

The studio addressed whether this resource of affordable housing and traditional culture can be maintained and how to balance transit-oriented development at the subway with the needs of the neighborhood. To research these questions, students interacted with local residents, city officials and experts on transportation and real estate. They assessed strategic options for the neighborhood and proposed comprehensive plans for the design and development of Sun Palace. Proposals ranged from establishing the area as a regional logistics center to creating a living and working cultural oasis in Beijing.









## **TRANSLATION**

Horizontal: "Rising at the next level"

This is one line from a Tang poem, Deng'guan'que'lou, by Huanzhi Wang in 700 AD. It also means "going above to another floor".

Left: "Cross-national cooperation lasts for twenty years, through which MIT and Tsinghua seek prominent design and plan".

Right: "Dialogues link across the ocean eighty thousand li apart; American and Chinese colleagues carry out solutions bearing a global vision".

Calligraphy by Jing Wen