



# 2.OBJECTIVE

The key objective is to realize the structural conservation, i.e. to maintain the natural and cultural ecological system, which is the presupposition to control the regeneration design. That means to preserve and rehabilitate the traditional water village's river and street systems, the textures of the groupings of houses, their proportionality and directional axes, and cultural conventions acting as some psychological hints of 'Feng Shui', etc..

The design strategy tries to resolve three key problems:

- 1) how to continue the historic topography; to maintain the land context and to preserve landmarks in the historic areas of the towns from remote to late past.
- 2) how to make the old spaces suitable for the contemporary requirements of people who live there.
- 3) how to form a new texture composed of both local vernacular features and today's modern life space.

# 3.METHODOLOGY

## Anthropological investigation and analysis

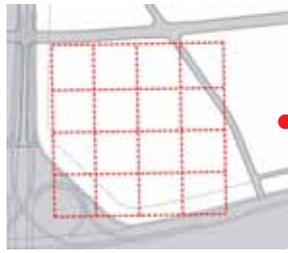
After three years of on-the-ground investigating of the Lai Clan descendents, members of the design team have become more than just guests in the community (from etic to emic). The researchers have performed many specific roles: listening to old stories, asking today's residents to draw images of the past, investigating old portraits and documents, researching even the most detailed aspects of their old buildings, and assessing the types and classes of buildings.



Vernacular investigation in the settlement

## Design of living functions and settings

Before the design plan can be put forth, it is necessary to plot the needs of residential spaces and future tourism, for example, the new function of pavilions and halls, and the ultimate use of space. Within the design plan it is not only necessary to pay attention to the uses of different types of residences, but also to address the relationships amongst households and neighbours as a function of the original inhabitants' lifestyle concepts.



The town planning structure without consideration of the topological context  
Design based on the topography analysis



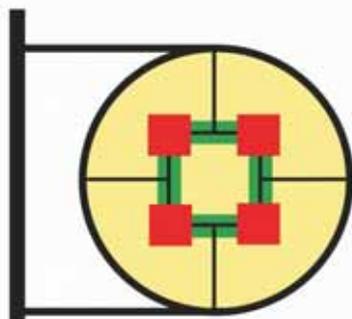
The historic structure of the settlement with the topological context



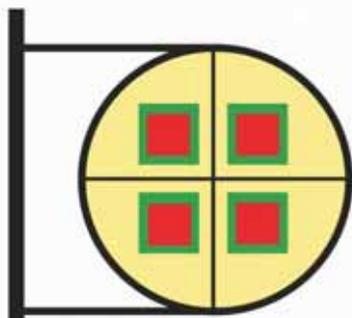
The final scheme of the Lai clan settlement regeneration planning

## Plugging design of new and old spaces

Design steps include the following: 1) Modification of the original road system, 2) Restoration of the original water-transport system and pedestrian walkways, 3) Refining the original clusters of houses, 4) Reconstruction of new vernacular buildings, and 5) Integration of old landscape with new.



Preservation Model A



Preservation Model B

- City Roads
- Old Buildings
- Landscape
- New Building Areas

Analysis of preservation models

MAINTAINING MAIN ROADS IN THE TOPOGRAPHICAL STRUCTURE



RENOVATING WATER AND PEDESTRIAN SYSTEM IN THE TOPOGRAPHICAL STRUCTURE



REHABILITATING TRADITIONAL VERNACULAR CLUSTER OF BUILDINGS



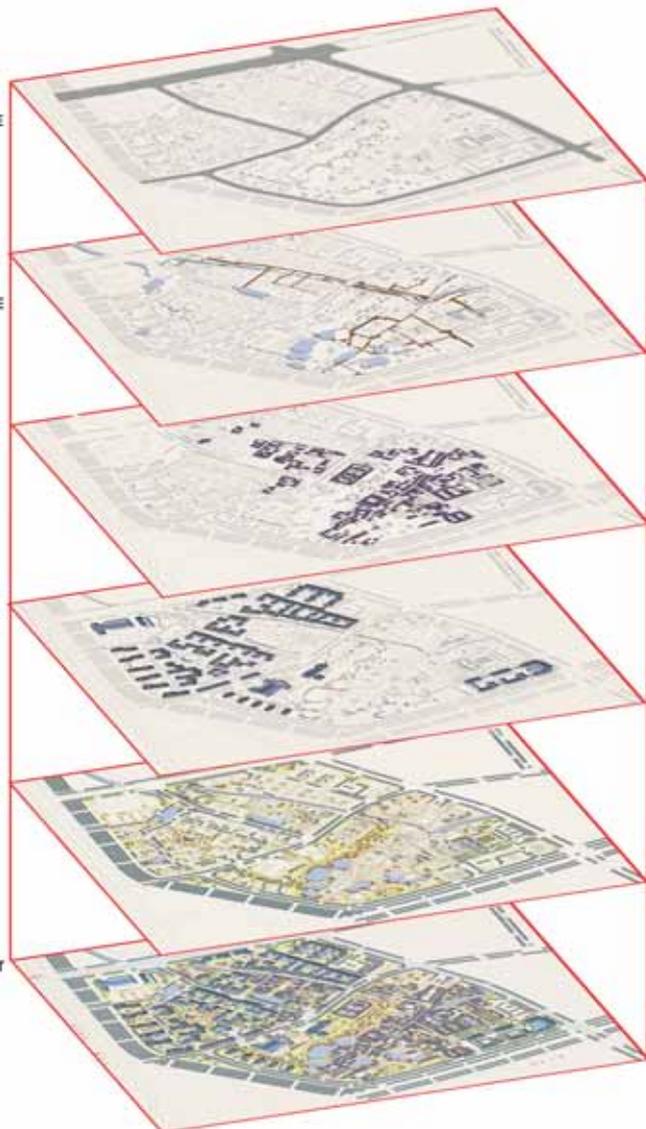
REBUILDING NEW VERNACULAR CLUSTER OF BUILDINGS CONCORDANT WITH OLD



INTEGRATING OLD LANDSCAPE SYSTEM WITH NEW



REGENERATED SETTLEMENT



Structural analysis of the settlement

# 4.FOCUS

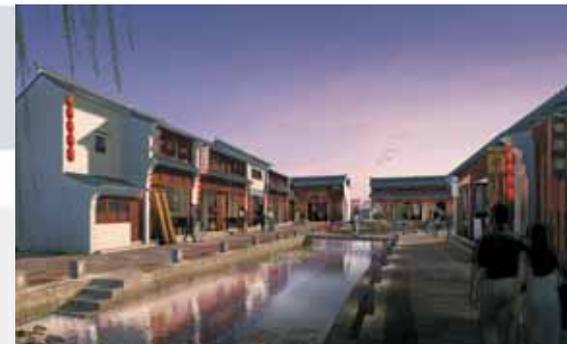
Within the characteristic local vernacular culture there are both original places and original styles, mature streets and plots of land, preserved and restored waterways, old streets and buildings (including interior spaces) which are all important. Within these categories we will select representatives that best fit the 'Jiu Ting Shi San Tang' style.



Tourist's route of settlement



Huai River Street before restoration



Huai river Street before and after restoration (part of east elevation)

Huai River Street after restoration

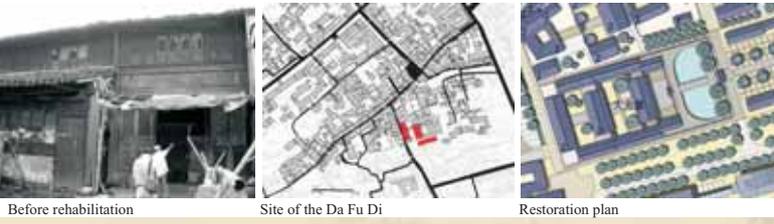


Ze Street before and after restoration (part of south elevation)

 Restored part

 Remained part

● **Da Fu Di**



Restoration of Da Fu Di

● **Guang Yu Tang**



Restoration of Guang Yu Tang

● **Hui Zong Tang**



Restoration of Hui Zong Tang

● **He Hua Chi**



Restoration of He Hua Chi

# 4.FOCUS

Beyond saving important traditional streets and houses, we will also select stereotypical buildings from the recent past that are still useful; as in public and industrial buildings. The Changhe Theatre, as a prime example of the 1950s-70s revolutionary modern style of public buildings, will be saved and upgraded as it is still useful as well as having value as a memorial of that age.



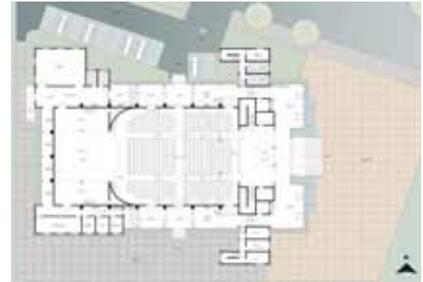
Traditional hollow wall



Analysis of passive use of earth energy



Original plan



Renewed plan



Original facade



Renewed facade



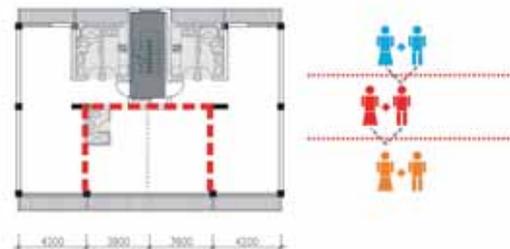
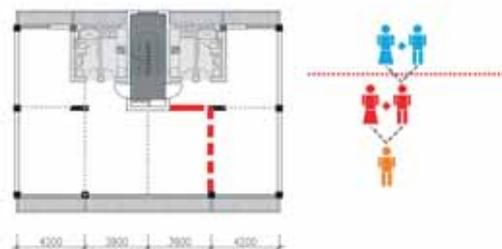
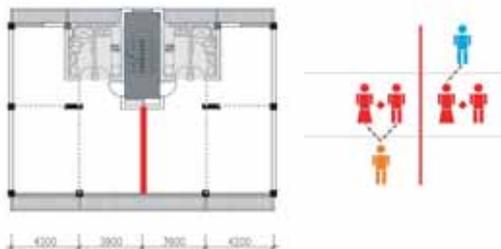
# 4.FOCUS

Within the topological structure and texture of the clan settlement's make-up, we have to meet some key issues when we 'plug in' new construction materials and modern structures, as we improve the environment, save costs and energy. For example, what will be the justification for the passive use of earth energy with the hollow walls, dredging rivers and repairing the waterways, when new building methods favour the use of different types of lightweight steel and concrete system in housing construction.



Local residents apartment

Residential space analysis of different local families



Roof analysis of the new vernacular houses



Design of the new vernacular houses



Town house of lightweight steel and concrete system



Design of the new vernacular houses

# 4.FOCUS

Since 2002 there have been three overall conceptual design schemes. The final scheme incorporates the first two concepts: 'differing old from new,' and 'creating new from old.'

Overall the focus of this design is to grasp the topological structure and lifestyle change of the clan settlement and re-enliven it, to integrate different types of cultural legacies as well as new and old design factors, and to weave an area's history into the progressive center of the new portion of Hangzhou.



Former scheme in 2002: Differing new from old (Left: Master plan Right: Bird view)

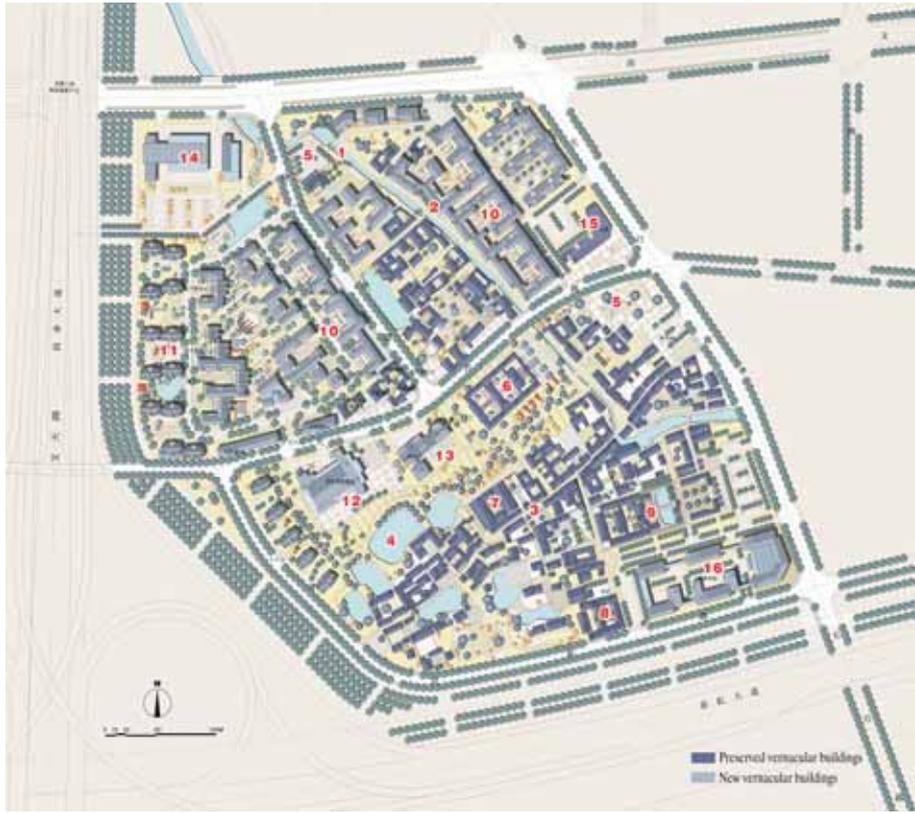
1. Changhe River
2. Huai River Street
3. Ze Street
4. Preserved Pond
5. Square
6. Hui Zong Tang ••Community Club
7. Guang Yu Tang
8. He Hua Chi
9. Da Fu Di
10. Town House
11. Apartment
12. Changhe Theater
13. Kindergarten
14. Bus Station
15. Tian Guan Apartment
16. Holiday Inn

## PARAMETER

GROSS PLOT AREA: 26.52 ha.  
 FLOOR AREA: 182633 m<sup>2</sup>  
 BUILDING AREA: 69384 m<sup>2</sup>  
 PRESERVED FLOOR AREA: 50177 m<sup>2</sup>  
 FAR: 0.69

PRESERVED AREA: 8.24 ha.  
 PLOT AREA: 43406 m<sup>2</sup>  
 FLOOR AREA: 37454 m<sup>2</sup>  
 PRESERVED FLOOR AREA: 37454 m<sup>2</sup>  
 FAR: 0.53

CONTROLLED AREA 18.28 ha.  
 PLOT AREA: 18.28 ha.  
 FLOOR AREA: 139227 m<sup>2</sup>  
 PRESERVED FLOOR AREA: 12723 m<sup>2</sup>  
 FAR•• 0.76



Final scheme: Creating new from old (master plan)

Final scheme: Creating new from old (bird view)

