

# migrational fields

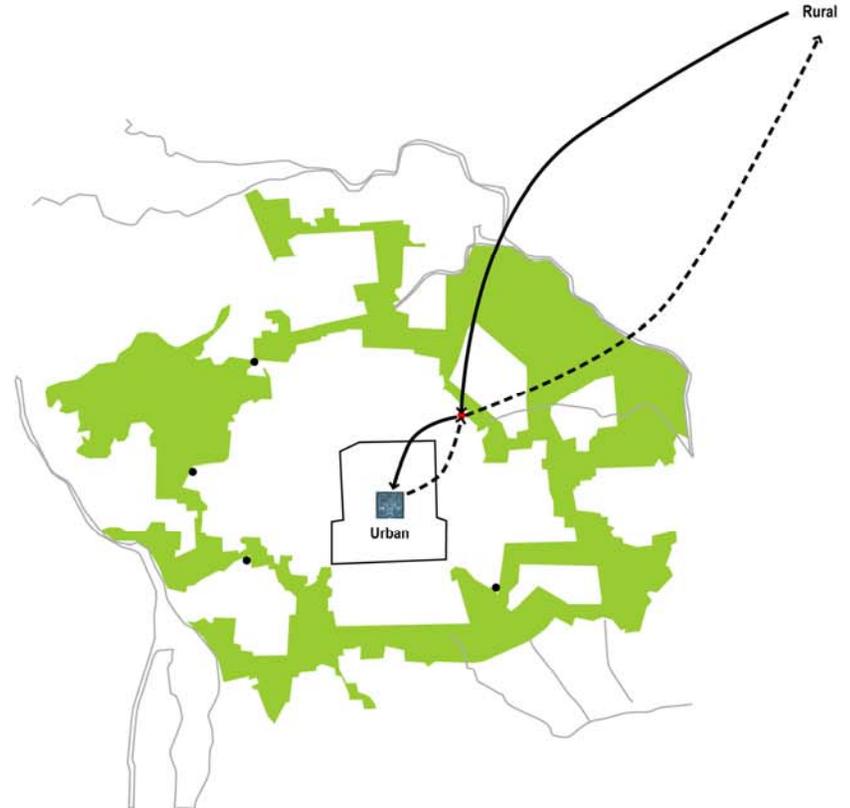
11.307 beijing urban design studio  
neeraj bhatia, marissa cheng, jiang yang, liu peng, and liz nguyen

# 1 : the urban-rural threshold

The proposal for the site is to create an exchange between the rural workers and urban inhabitants by creating a new village centered on new forms of high density agricultural production. Sustainable farming of food, energy, clean water and air is proposed along the greenbelt creating a productive space that bleeds into the site. New forms of farming and education provide a venue for migrant workers to increase their skill set allowing for urbanization and exchange.

# [1] transform urban and rural lifestyles.

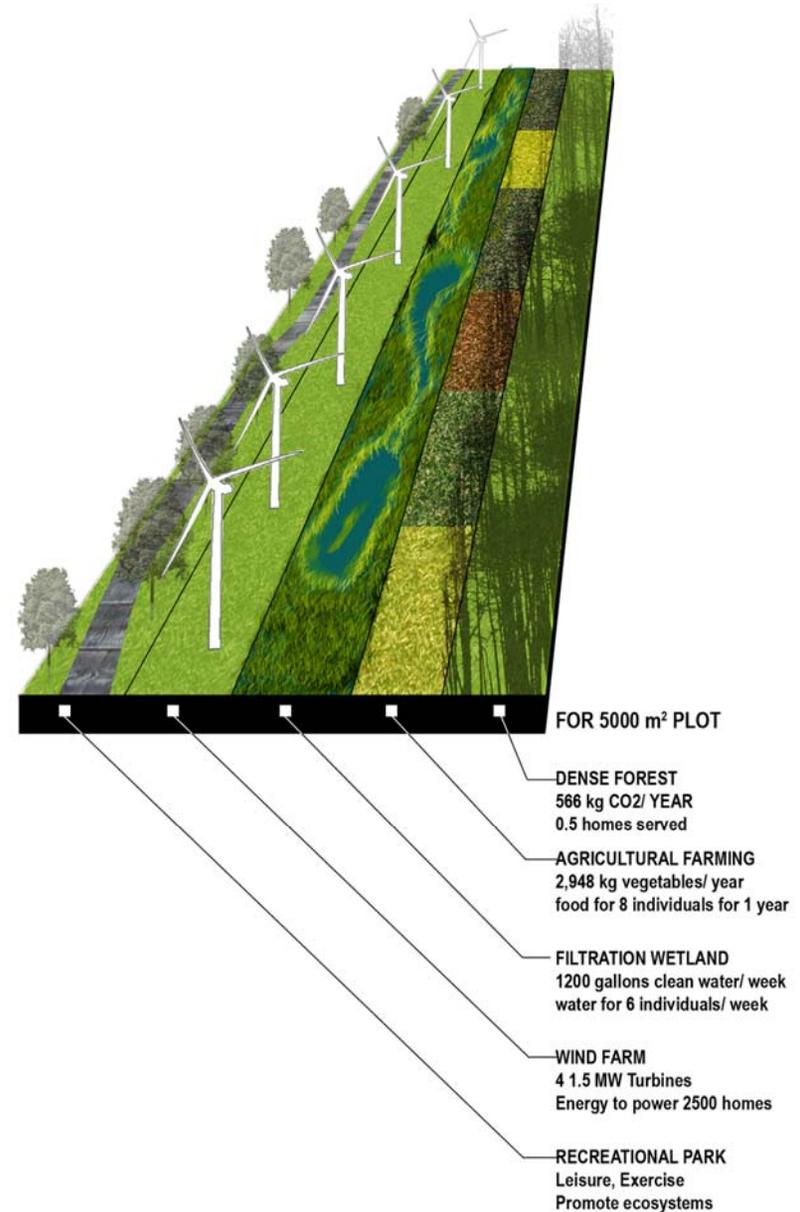
The site acts as an incubator for the integration of urban and rural lifestyles. It provides a forum for city residents (i.e., artists, sociologists, ecologists, historians, etc.) and migrant workers to share aspects of their lifestyles (economic and social), creating a hybrid between rural and urban forms of living and working.



## [2] sustainable infrastructure.

The site is part of a larger system of sustainable infrastructure tied to the greenbelt, which has the potential to be a productive space – providing areas to farm food, clean water, clean air, and energy. The site draws on the greenbelt, as well as the canal system, the wetland, and the housing typology, to maximize its that potential. Agricultural farming will be integrated into the housing typology, providing space that residents can use to produce goods for the market.

the urban-rural threshold / natural



### [3] station as collector and distributor.

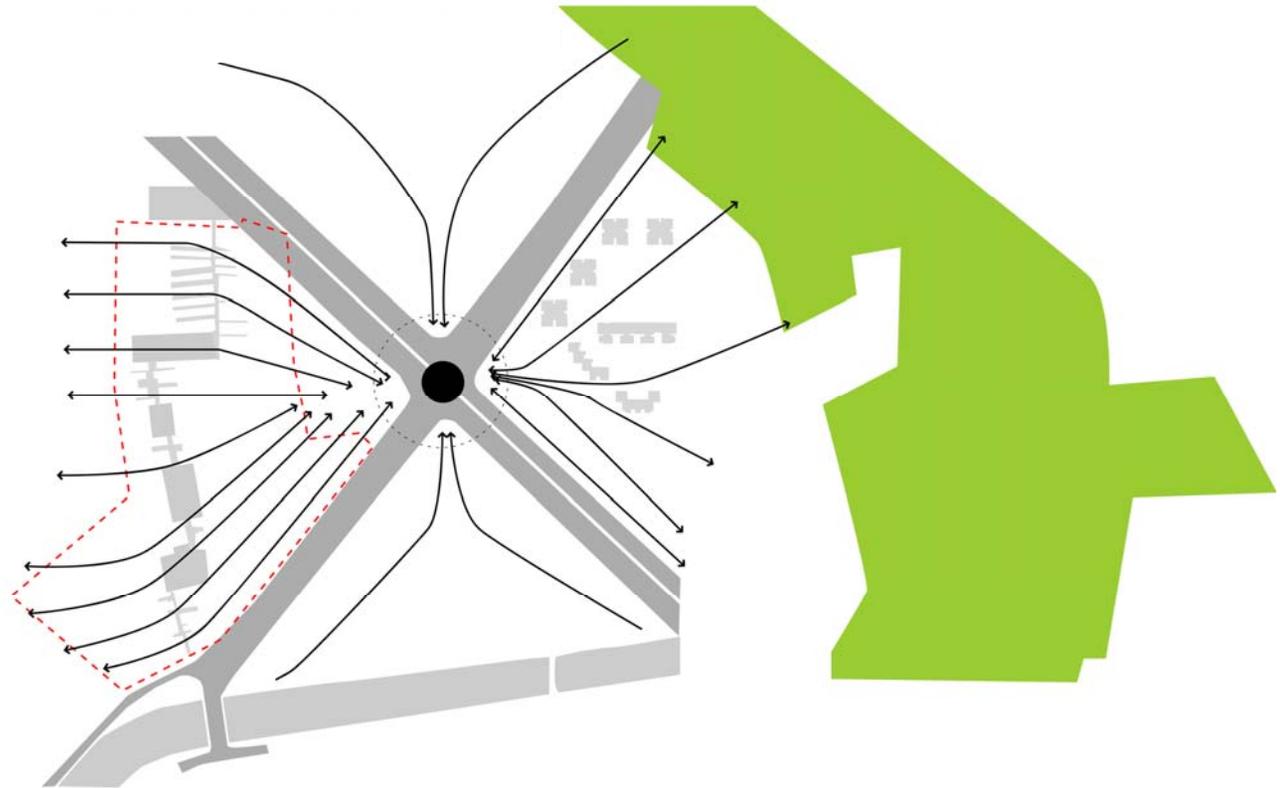
The station is an essential exchange point, drawing and distributing traffic to and from the road and subway systems, parks, water, historic axis, and local community. A market area mediates the space between the station and housing. The training and learning center, located above the station, provides an active mixing point with a regional reach.

#### programs within the station

- market (food and crafts in summer, crafts and light industrial products in winter)
- processing area
- transport hub for goods distribution
- restaurants
- farm equipment manufacturing
- training school/high-tech farm lab (located above the station)
- productive workshops

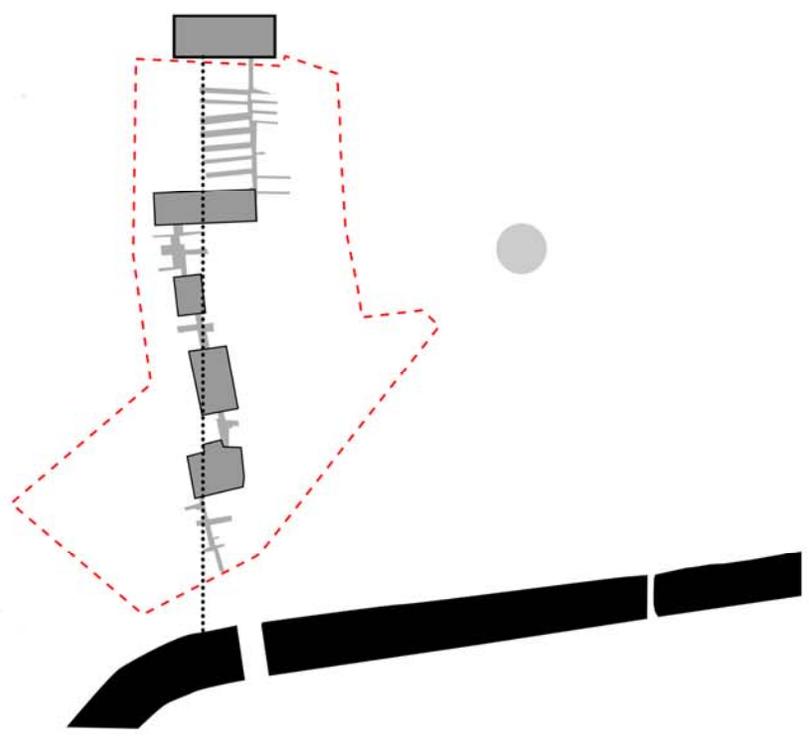
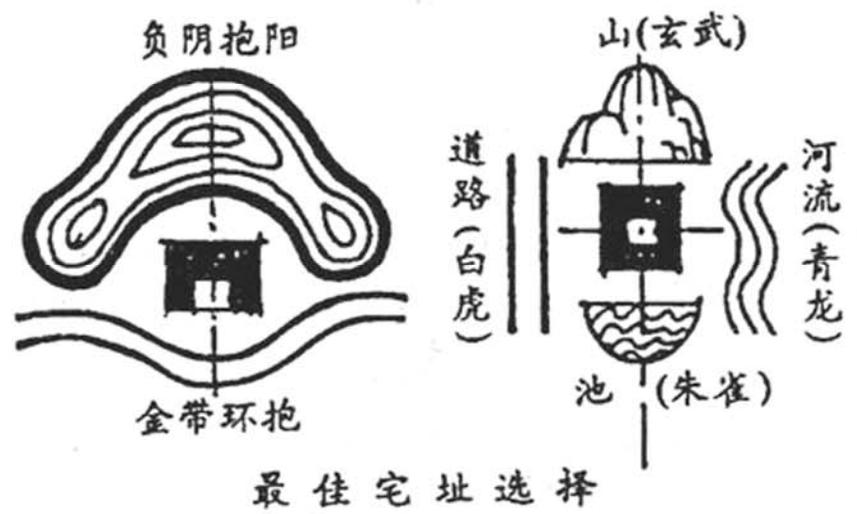
#### programs in winter

- arts/crafts
- woodworking shop
- printing press
- high-tech agriculture
- internet businesses



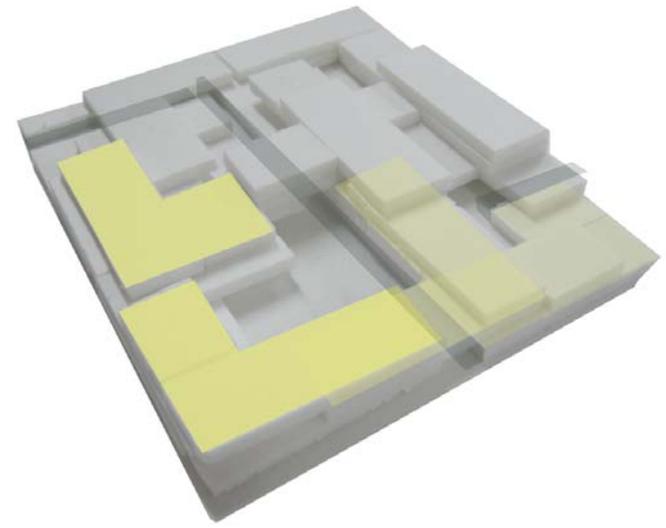
# [4] redefine the axis.

Formerly, a north-south axis linked temples within the site and aligned with the Temple of the Sun. The “excavating” of this axis re-establishes a local public way that becomes the central armature for the local community, containing local libraries, schools, a community center and local-scale shops.



## [5] reinterpretation of the low-rise, high density housing typology.

The site's existing housing will be replaced with low-rise and high-rise housing, integrated into the grain of the existing housing and organized into linear "ribbons." The housing typology allows for flexibility and growth, while providing variability. Sustainable infrastructures, such as photovoltaics and farmland, are integrated into each unit. Higher density is achieved through the stacking of layers, producing built up areas that begin to resemble China's mountainous landscape.



# [6] phasing and renewal.

## a. phasing of people entering and leaving the site:

The bulk of the people entering the site will migrate legally from rural areas. This site offers an alternative route for the urbanization of rural families. After a process of “urbanizing” which consists of business education, light manufacturing and selling of goods, the economic activities of the city become available to the now legalized migrant worker.

## b. phasing of the land – fallow land vs. cultivated land

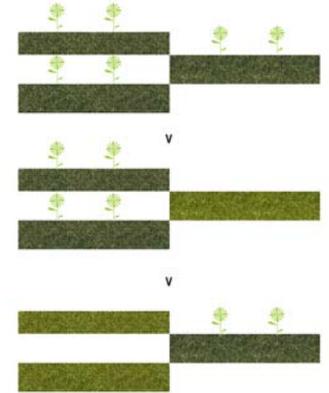
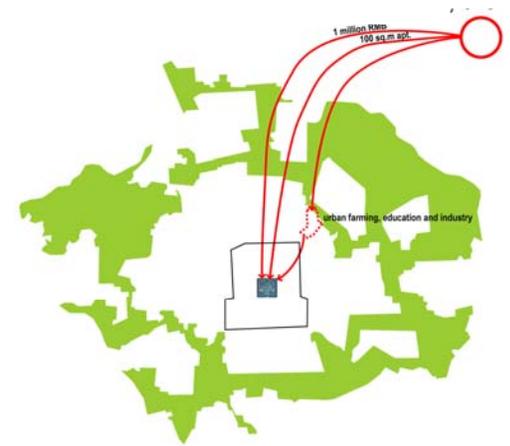
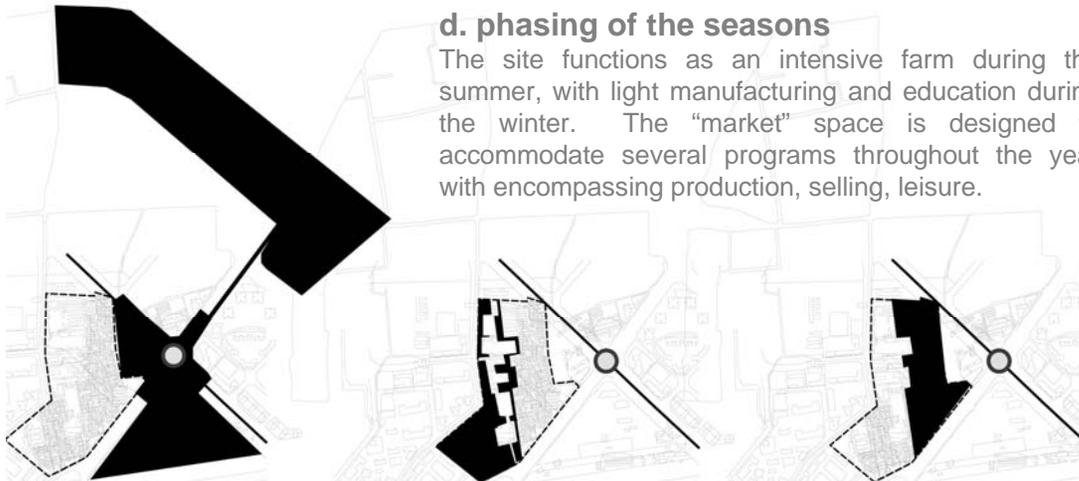
The land will be phased to allow for continuous production throughout the year. Shared plots will allow for fallow plots to regenerate without the use of inorganic fertilizers. Furthermore, high-tech farming and greenhouses will be used to allow for agricultural production during the winter.

## c. phasing of construction

- 1 : Train station (incl. market, training center, and restaurants), wetlands, forest, windmills, and temporary housing for displaced residents. Create all “green” connections.
- 2 : High-density western edge housing and start of north-south axis, including public programs.
- 3 : Farming housing: begin at the north-south axis and work towards the station. Build the transport dock on southern edge of north-south axis.
- 4 : After urbanization is complete and migration ceases, the entire site could be converted to an education system – i.e., studying ecology, farm camp, high-tech farming center.

## d. phasing of the seasons

The site functions as an intensive farm during the summer, with light manufacturing and education during the winter. The “market” space is designed to accommodate several programs throughout the year with encompassing production, selling, leisure.

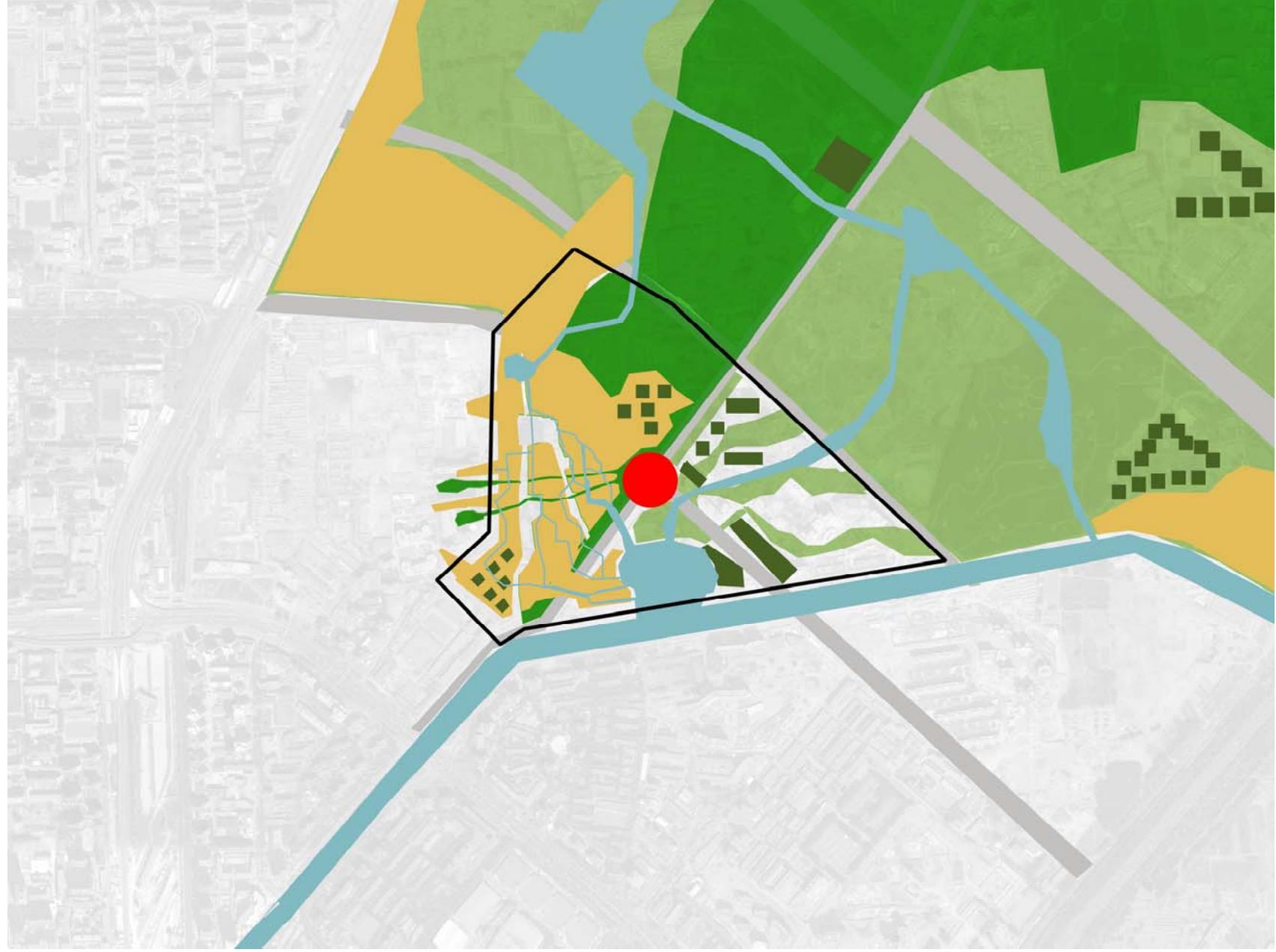


## 2 : site context

The site between the Sun Palace transport station, the greenbelt and the Bahe River serves as threshold between urban and rural life. The old rice paddy proportions, creating a plan of ribbons cut transversely by irrigation canals, determined the physical form of the village. Today, this form is still evident in the housing dimensions and the irrigation canals now serve as primary streets.







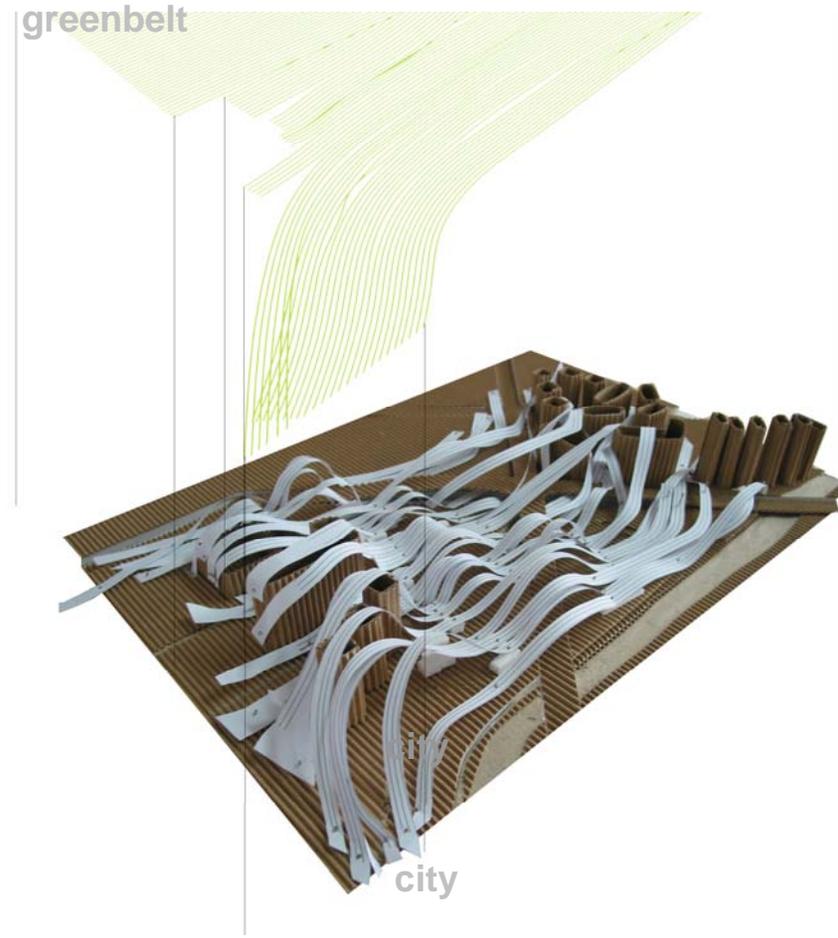
## 3 : site plan

The proposal for the site is to create an exchange between the rural workers and urban inhabitants by creating a new village centered on new forms of high density agricultural production. Sustainable farming of food, energy, clean water and air, is proposed along the greenbelt creating a productive space that bleeds into the site. New forms of farming and education provide a venue for migrant workers to increase their skill set allowing for urbanization and exchange.



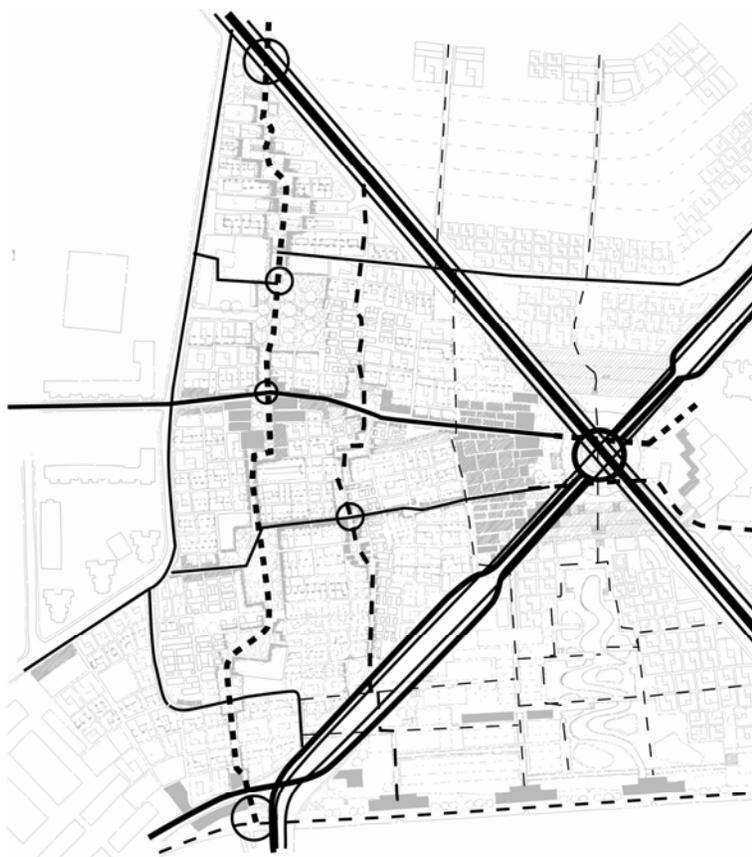
## site plan / topography

The physical form of the project begins by striating the site with ribbons taken from the rice paddy dimensions. These small-scale ribbons connect into the regional framework of the greenbelt and twist to merge into the new city grid of ring roads and megablocks.

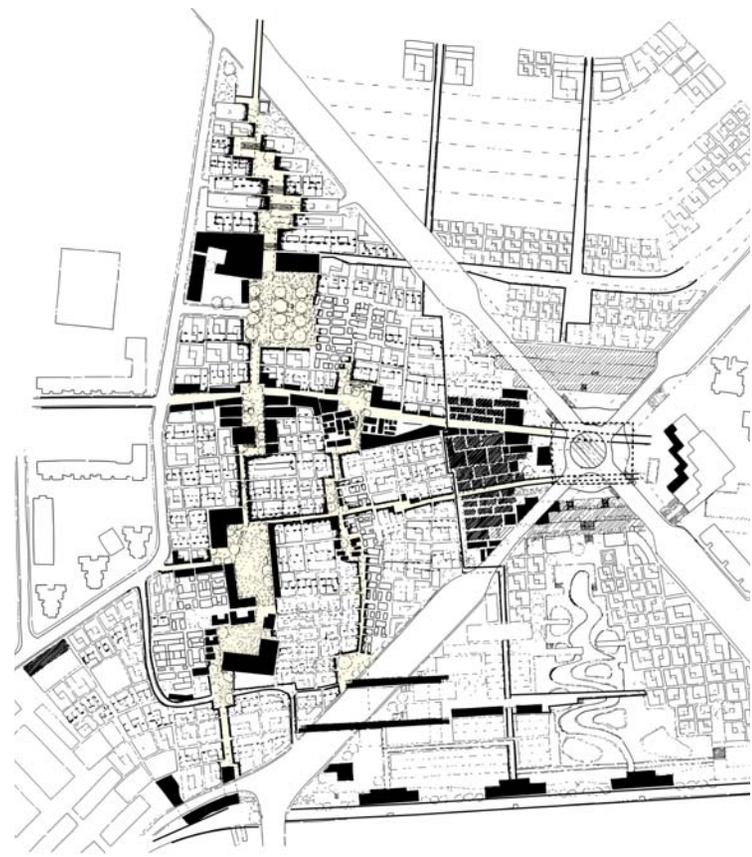




# site plan / circulation + public structure

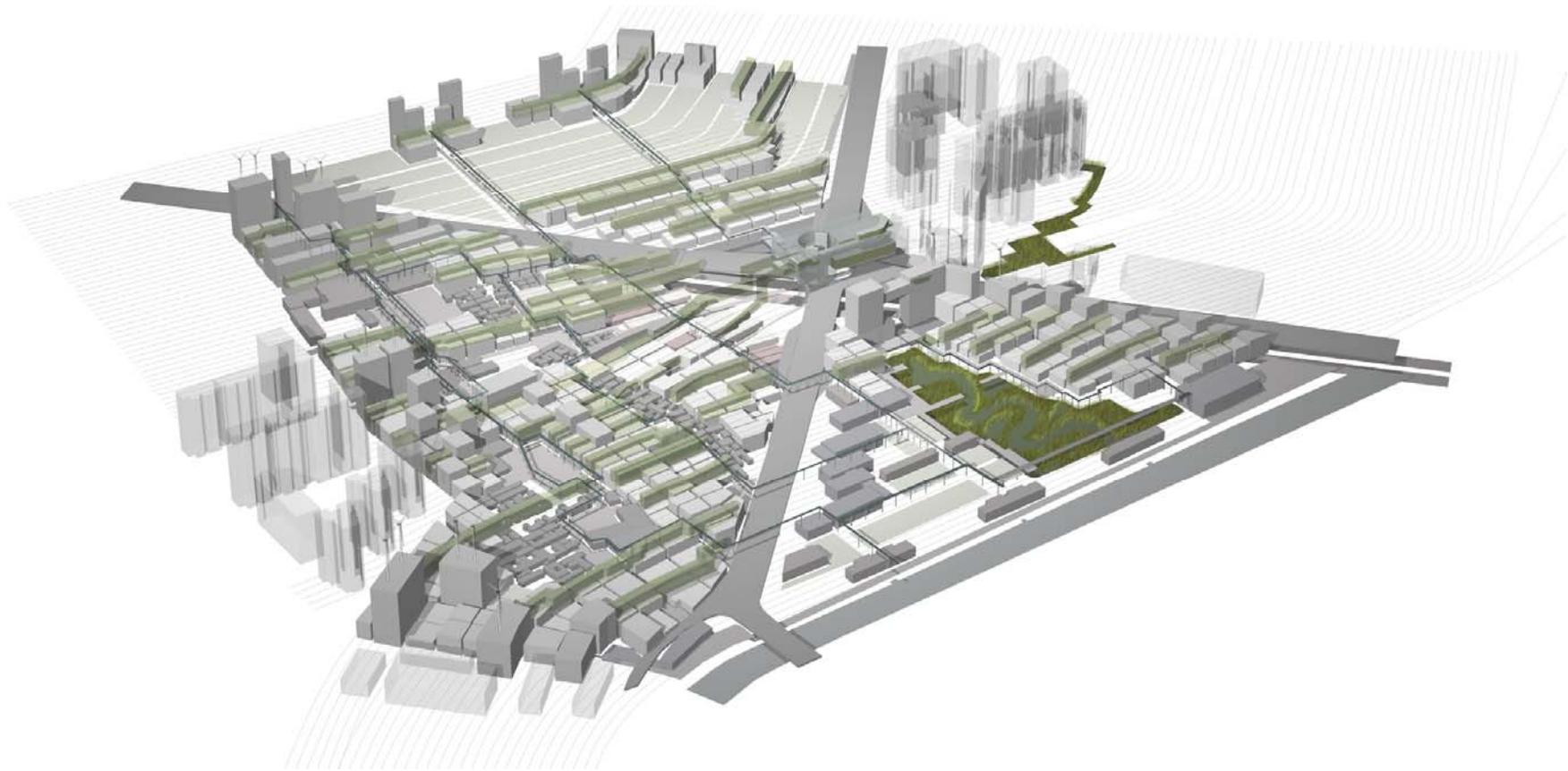


- PEDESTRIAN
- CAR
- BUS & BIKE
- SUBWAY

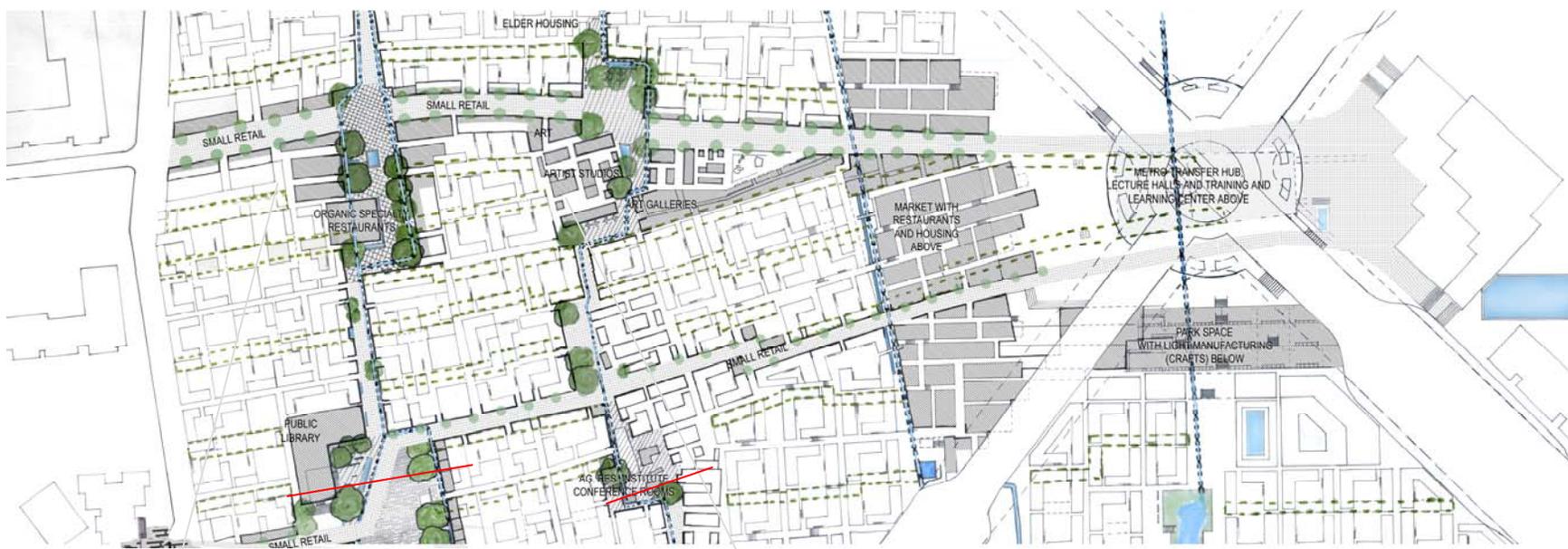


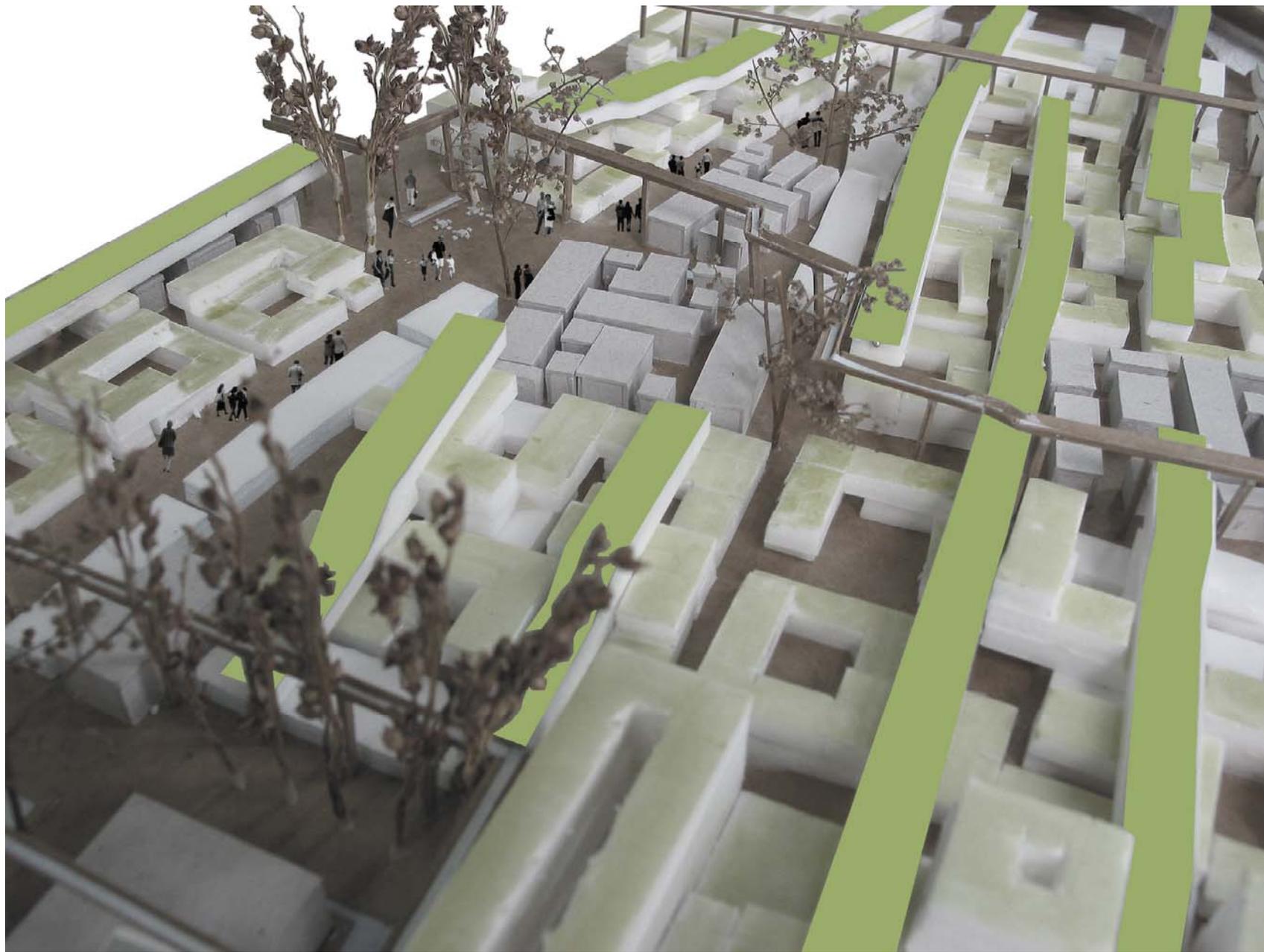
## site plan / organizational systems

The ribbon framework is cut transversely by elevated irrigation canals that organize a series of vertical streets and plazas into a public structure of major and minor axes. Existing buildings are given new public functions and fit into this hierarchical framework.







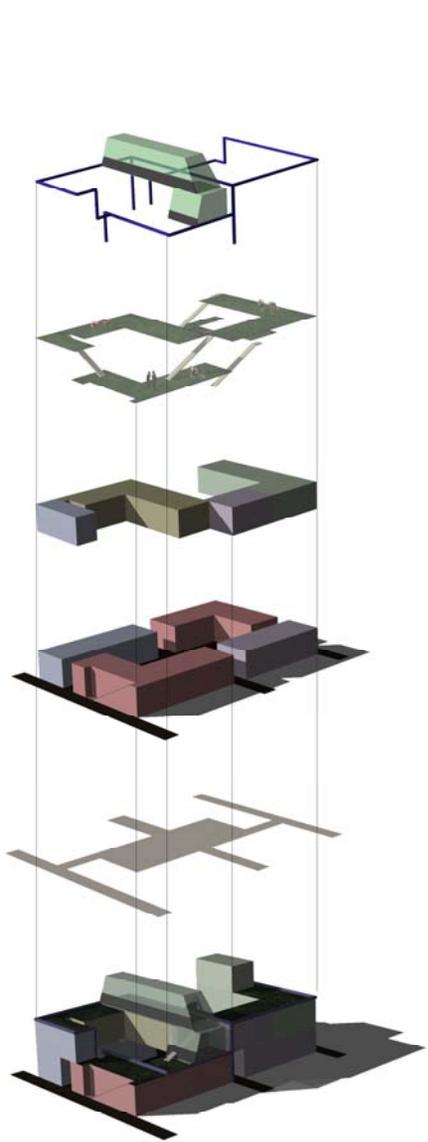




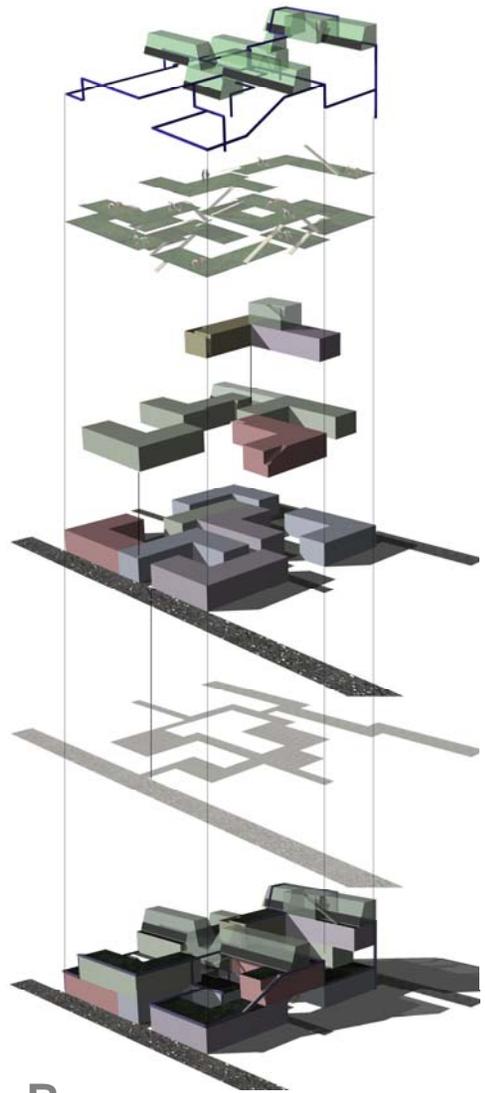
## 4 : housing typology

The housing typology integrates rooftop farming, greenhouse (high-tech) farming, photovoltaic (energy) farming and living quarters around traditional courts. Three unique housing typologies are proposed to fit into these ribbons and create a series of conditions through valleys and hills – reminiscent of the terraced farms in rural China.

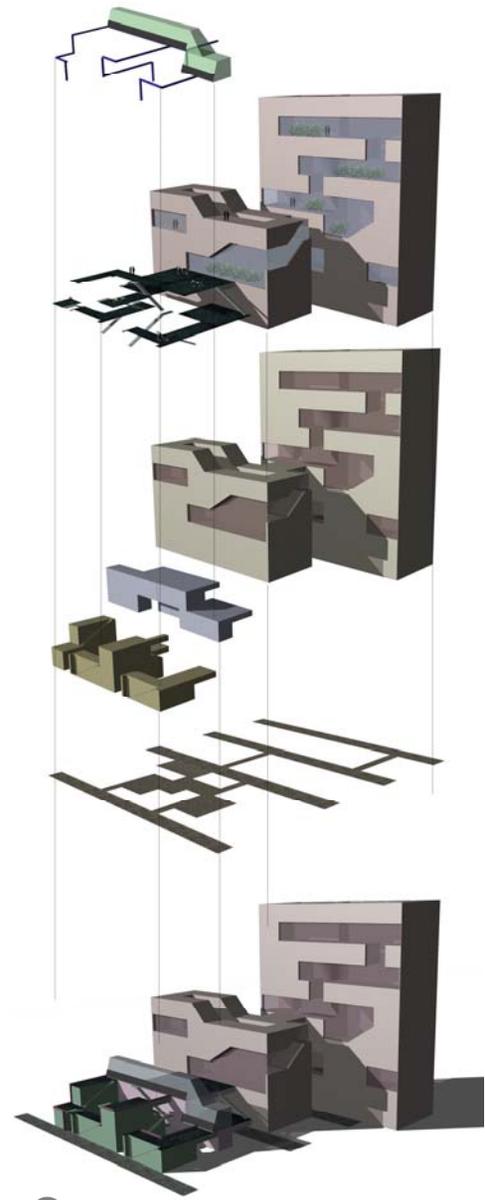
# housing typology / three densities



A

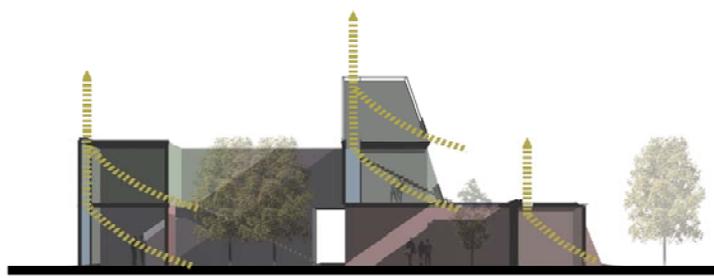


B

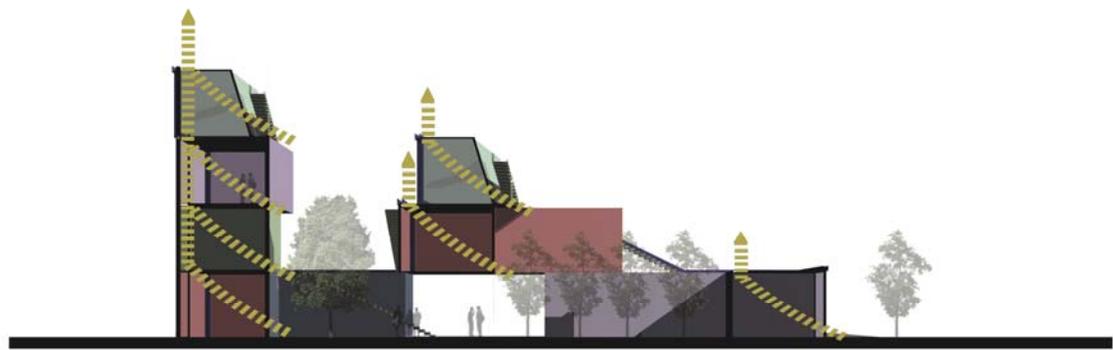


C

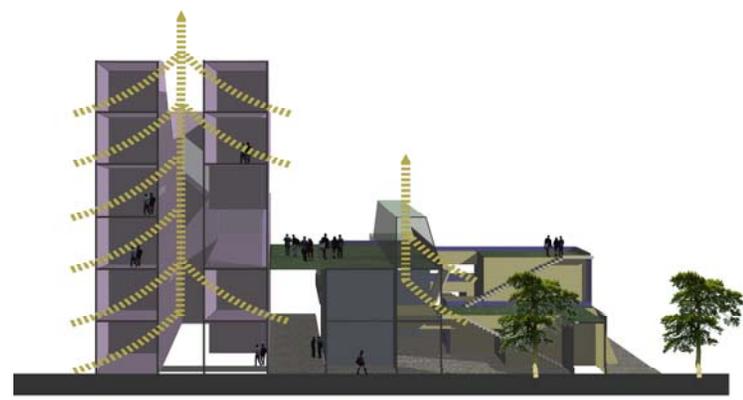
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A



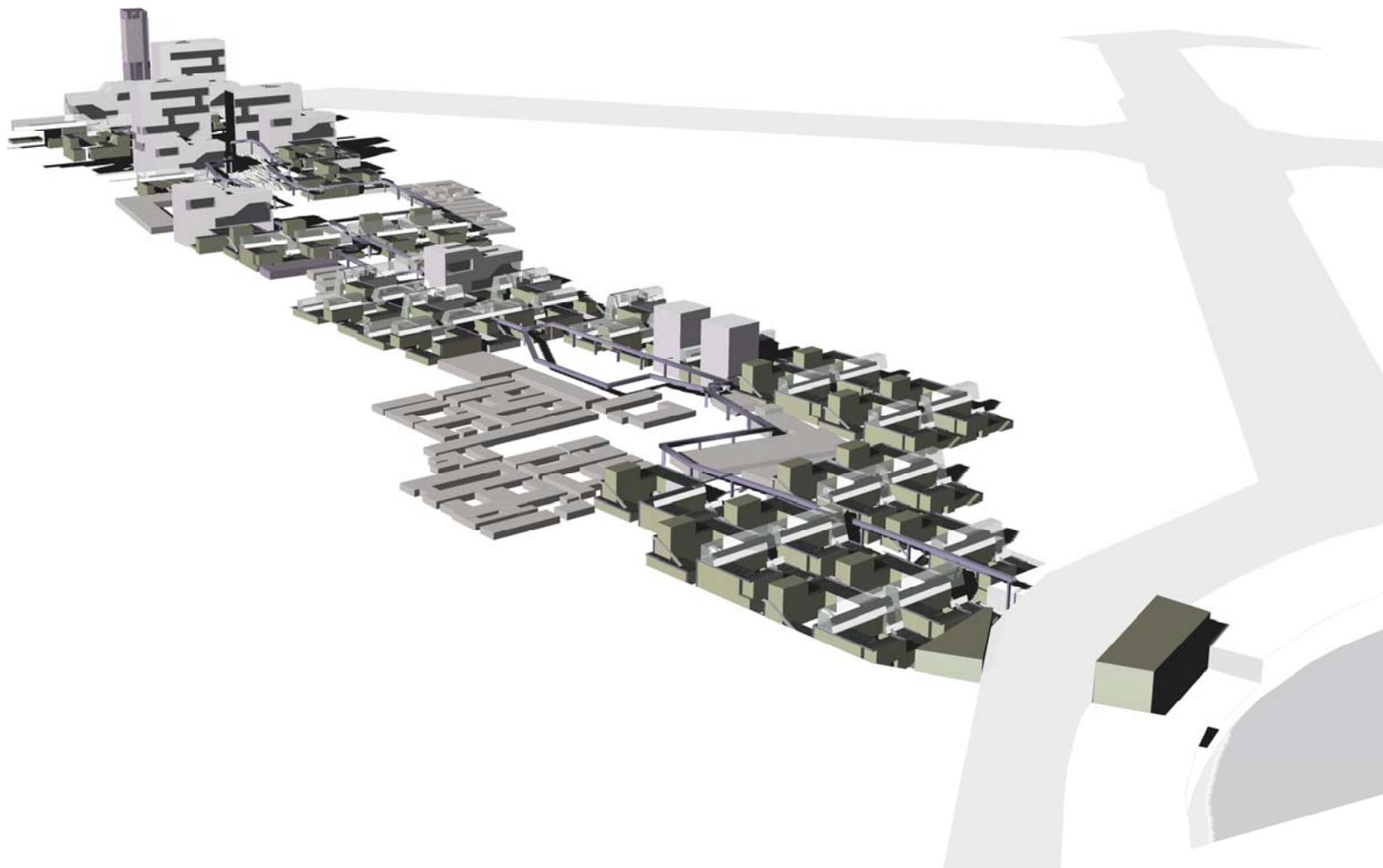
B



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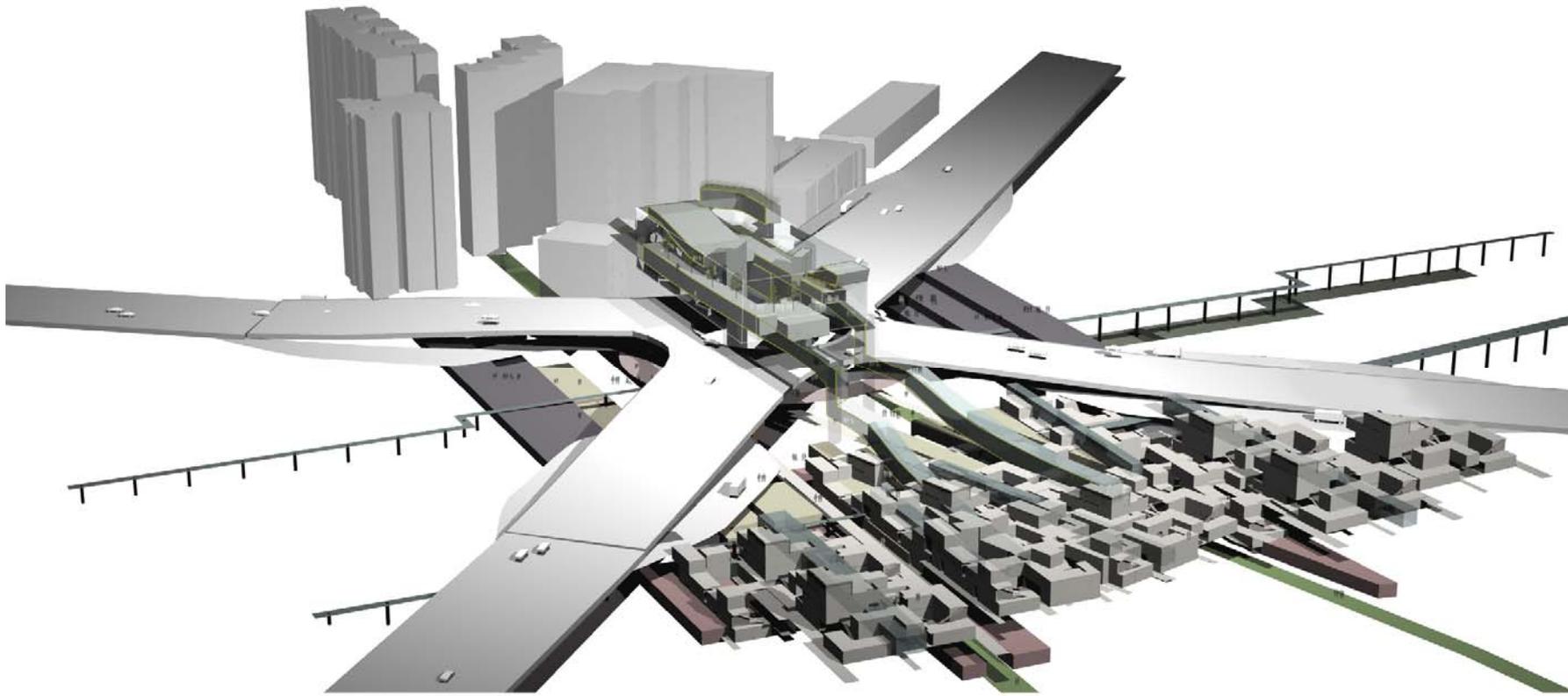
## 5 : axis

The excavation of the historic north-south axis and the repurposing of several existing buildings along it re-establishes a public way that becomes the central armature for the local community, containing a library, school, health care facilities, shops and restaurants. A series of fountains emphasize the aesthetic and productive value of water along the main axis, distributed from a high-rise water tower at the top of the axis to the rooftop farms via the aqueduct.



## 6 : transport station

The station is an essential civic-scale exchange point, drawing and distributing traffic to and from the road and subway systems, parks, water, historic axis, and local community. A market area linked to light industry mediates the space between the station and housing. The educational center and greenhouse located above the station create a regional marker and densify activity at the transport hub. The roads are lifted to allow the fabric and key layers of the project to flow through the station. This allows light and activity to occur in close proximity to the train platforms, embedding the station into the community.



transport station / activated hub

