

Urban Transformation of Old West Gate (Laoximen) Phase I, Changde, China

Yanhong Tang, Yuezhong Chen, Vince Abercrombie

Ecoland Planning and Design

Abstract

Together with a canal water system cleaning effort, the project transformed 6.4 acres of a forgotten old town littered with structurally unsafe buildings into a culturally-rich urban green space and popular waterfront district in Changde, Hunan Province, China. Laoximen (meaning Old West Gate) sets a precedent and benchmark for urban renewal, reclaiming a historic canal and the adjacent streets for new use. The project promotes the timely principles of urban regeneration, adaptive re-use, historic preservation, and ecological sustainability, whilst avoiding the current practice in China of demolition and radical reconstruction.

After 100 years of tumultuous history, including WWII and the Cultural Revolution, the project's goal was to rejuvenate the site as a modern metropolis, maintaining links with its history through design and preservation of on-site materials. Innovation and preservation come together to establish an urban core and waterfront corridor for people, plants and wildlife. In addition to providing valuable open space, Laoximen has become an economic generator for the neighborhood, attracting investment toward new retail, commercial, and residential development.

Context & Scope

The Laoximen (meaning Old West Gate) was once the center of Changde and is a historic landmark. Changde, with an urban population of 1.2 million (2010), is a rapidly growing city in the Hunan Province in south-central China. A city moat surrounding the entire town can be dated back approximately two-thousand years. The construction of Laoximen probably dates to the Ming dynasty; 15th Century maps show the west gate in the same location. Over the years, many generations of vibrant culture and mercantile activity flourished in Laoximen, but the traditional buildings were flattened during World War II and gradually replaced with residential buildings after 1949. During the Cultural Revolution, remaining historic items were further destroyed under the political rhetoric of “out with the old and in with the new”. The area deteriorated, many buildings became unsafe, and conditions, unhealthy. During the 1980s, most of the historic canal was covered over and the only trace of the old glory days was a historic well. In 2013 the developer and the city agreed to initiate renovation of the urban district. This included the cleaning and purification of the canal water which is integral to the city's water system. The new landscape development included the rebuilding of 2.6 hectares (6.4 acres) of streetscape and waterscape in order to create a new city core with a reimagining of its historic heritage. (Fig. 1)



Fig. 1: Laoximen Phase I as part of an overall water system rehabilitation scheme, revitalizing derelict commercial and residential district and providing a ribbon of the green space.

Challenges and Objectives

As part of the extensive revitalization of the Changde city, an opportunity was seized to rediscover a neglected historic area. The designers recognized the site's turbulent past and saw it as reflective and symbolic of China's modern history. The objective was to restore and reimagine the historic site with contemporary design and building techniques married with traditional architectural aesthetics. The site needed to accommodate contemporary function and purpose while also reconnecting it to its origins.

Design Approach

The design approach for this redevelopment differs greatly from the development concept hegemony prevalent in China, and hopefully sets a precedent for design concepts moving forward. The old rhetoric resulted in the destruction of 'outdated' areas, and imposition of new designs on old frameworks. Even in 'restoration' projects, the trend has been for a 'fresh look' with new materials. The concept for Laoximen was to restore and revitalize as much of the old site as possible and thread that history through the contemporary design. Jack Ahern (1999) described similar revitalization projects that acted as an influence on this design direction. The site's derelict condition required extensive and varied techniques of remediation and recovery; construction debris and degraded canals rendered much of the site barren, hypoxic, and unsafe. Post-Cultural Revolution buildings were erected without urban planning or safety regulations, over historic stone slabs and pavers which were usually deemed useless. Recognizing their significance, the landscape architects asked the demolition team to salvage old stone, beams and tiles for

reuse in the new design; the idea being to create a woven fabric combining the past and present into a new cityscape (Fig.2) .



Fig. 2. Master Plan and Phase I Site Plan

Even before its concealment below concrete slabs, the neglected canal had become a sewage drain; unsanitary, derelict and forgotten. Since the project started in 2013, the landscape architect collaborated closely with ecologists, water treatment scientists, architects and engineers in order to ‘daylight’ the old canal and celebrate it in the new greenway. Previous projects have described how greenways can be part of innovative restoration of cultural and historical resources (Fabris and Ilieva 2010).

Calabash Pond Amphitheater

The central feature of the redevelopment is an amphitheater known as Calabash Court, named after the bottle gourd fruit for its rounded shape, and after an adjacent street. The calabash holds a place of great significance in Chinese culture. The court’s design brings together old-style design concepts and contemporary structures; most notably, the form of the roofing surrounding the amphitheater. The roof design arises from an almost lost architectural tradition, whereby rain water is directed from four sloping roofs towards the middle of a courtyard to form a pond. Water in Chinese culture represents fortune, so the roofs were disposed to collect and direct fortune into the home. In this contemporary design, water is a focal point, linking the space with the historic auspiciousness of water.

The amphitheater within the court and the stage located opposite, draw people down to the water’s edge. A stepping waterfall and roughhewn stone steps characterize the amphitheater. The stone waterfall and plants deliberately juxtaposed against a modern cement water feature to thread together the area’s ancient and modern design aesthetic. Colored lighting, designed to withstand submersion in the rare event of a

flood, attracts nightlife and provides safety for evening access. The Canal Walk connects the court on either side leading people in and out of the space (Fig. 3).



Fig. 3: The grading, elevation, levee, and planting were designed to withstand the storms and flooding common to the area. The amphitheatre and planting can endure full submersion in the event of a flood.

Walkways and Paving Stones

One of the achievements was to establish a traffic free zone around the historical center and keep the inner area for pedestrians only. As the historical center of Changde was losing its vitality, the design team convinced the developer and the city officials to revise the traffic system, including designating the waterfront for pedestrians. This is important in the densely populated Changde where rapid industrial development in the last 20 years has led to the infringement of pedestrian space to meet vehicular needs. Now, with the inner street along the water corridor closed to traffic, a more intimate, peaceful and safe setting has been created, where people can get close to the water and away from the hustle and bustle of the surrounding streets.

The paving pattern and stones used in the site are a significant feature of the design. The rough-hewn stones, smooth cement, and cobble stones used together give visual texture as well as combining modern and traditional aesthetics. This is clearly illustrated around the well, the only remaining historical element to have survived World War II. A sunken area has been specially designed for its preservation and to draw attention to its importance. The well's traditional hexagonal shape is extended into the surrounding steps, which incorporate old stone slabs retrieved from the demolition site. Careful preservation has made the

well a focal point on the waterfront; the design a subtle statement and reframing of the way the Chinese engage with their history.

Reclaimed Waterfront and Sustainability

Preservation and innovation come together to establish an urban corridor for habitation. The housing development in the 1980s left the waterways a system of disconnected canals. The recent urban reform has turned these into a new meandering water course, with a series of free-flowing rivulets, streams, ponds, and marshland that will support the re-establishment of the indigenous ecology. The newly constructed watercourse improves the quality of the canal water and makes it suitable for ecological restoration and recreational use, simulating the erstwhile function of the canal.

The original stones creating the canal banks were restored and stabilized. The riparian planting provides a green buffer and aquatic habitat, aiding the removal of contaminants from canal and storm water. Wildlife habitat structures such as logs and perch trees are placed along the water's edge to encourage local species of amphibian, birds, fishes, and insects. Native vegetation supports the re-establishment of diverse plant communities along the water corridor. The plant selection also creates a unique sense of place, connecting an urban space with its historic ecology.

Laoximen is a new urban green spine in Changde. The eco-corridor now serves as the spine of Changde City's open space system, creating and connecting a variety of areas. Extending over two miles, the corridor merges seamlessly with the adjacent urban fabric, creating a relationship between the greenway and surrounding city. By restoring the ecological network in Laoximen, the waterway creates vital habitat for native flora and fauna, enhances public health, and creates a beautiful and enjoyable public space for local and neighboring communities. The reuse of old and existing materials as well as the cleaning and restoration of a public waterway raises the bar for future phase of district and of sustainable development in China.

References

Ahern, Jack. *A Guide to the Landscape Architecture of Boston*. 1999. Hubbard Educational Trust, Cambridge.

Fabris, Luca Maria Francesco, and Ilieva, Rositsa Todorova. 2010: Greenways in an emerging city context: a utopia or a chance for innovation In 3rd Fábos International Greenway and Landscape Planning Conference Proceedings. Budapest, Hungary. July 8-10, 2010., pp. 88.