

Tongxi Waterway - The winding journey

Dawang New City, Hunan, China

PURPOSE AND SCOPE OF PROJECT

Next to the Xiang River, the 3 mile long and 150 feet wide Tonxi Waterway carves through mountains to connect cities and lakes in Dawang New City. Based on a thorough analysis of the site topography and adjacent land uses, the design team proposed eight zones along the waterway with diverse landscape character and programmatic uses, ranging from a 25 meter deep canyon forest to flat wetland grass walks inspired by local rice fields, to meadows on gently sloped terrain. The design of the waterway connects communities and filters water. A layered system of three trails –mountain walk, wetland walk and sky walk - weave through at different elevations and give visitors a variety of experiences. Public facilities, including entrance plazas, parking lots, tea houses, restrooms, pavillions and seating are carefully located along the trail. The design of both landscapes and new amenities take inspiration from local customs and materials. To enhance the Pedestrian trails, boat taxi, tea house, waterfalls, retail village, sky walks, and wetlands are interwoven into a green and blue tapestry.

ROLE OF LANDSCAPE ARCHITECT

The landscape architect acted as the design lead for the master planning and landscape design of the project, which is currently moving towards construction. Together with the civil engineer, hydrologic engineer and water quality scientist the landscape architect conducted a comprehensive study of the region and developed a design proposal grounded in the conditions of the site.

SIGNIFICANCE

By restoring cultural, social and ecological networks in the region, Tongxi Waterway merges urban developments with the surrounding natural systems and deepens the connection with the regions past. It has the potential to enhance public health, establish vital habitat, restore local culture, and create enjoyable public spaces for residents and visitors. By linking bustling urban centers with lower density areas and recreational natural settings, the linear park is the perfect route for families and visitors to commute, exercise, recreate and relax.

SPECIAL FACTORS

Landform-based Design: The project turns the challenge of steep grade changes and narrow passages into a setting for a diverse and rich landscape experience along eight distinct zones.

Diverse Trail System: The three-layered trail systems offers visitors varying vantage points and encourage discoveries along the way, resonating with the context of wetlands, mountains, and forest.

Sustainable and Resilient Concepts: By integrating a series of water treatment systems into the landscape design – such as waterfalls to re-oxygenating water and wetlands to filter water, Tongxi Waterway has the potential to become a safe recreational waterway where water quality is not an issue or health hazard.

Cultural Restoration: The project strives to connect and enhance local culture and landscape. Trellis structures are constructed from local brick and stucco, and their circular windows echo local building traditions. The roof profile and material of the visitor's center take inspiration from the surrounding mountains. Inspired by rice field patterns, the wetland gardens with mosaic texture create colorful and playful landscape through different seasons. The planting scheme is dominated by native trees including Gingko, Metasequoia, Willow and Chinese Tallow tree, groundcover and shrubs including native meadow grasses, and a variety of water plants which help to maintain water quality for recreation use.