

Wuhan Bridgehead CBD Wuhan, China

Wuhan's very being is tied to its riverfront. For centuries, the confluence of the Yangtze and Han Rivers has served as a generator of commerce and driven growth in the historic towns of Wuchang, Hanyang and Hankou, which today form the modern City of Wuhan. These rivers continue to play a major part in the life of the city and drive prosperity forward into the 21st century.

SERVICES

Architecture Master Planniing Urban Design

CLIENT

Wuhan Land Use and Urban Spatial Planning and Research Center (WLSP)

FUNCTION

Mixed-use

AWARDS

The Chicago Athenaeum, Green Good Design Award, Green Urban Planning, 2017 Wuhan is the capital of Hubei Province and a strategic center of commerce in China due to its central location and multi-modal transportation network. Major economic sectors include iron, steel and automotive manufacturing, financial services, information technology and higher education. Emergent R&D sectors include biological engineering, pharmaceutical and new materials production. Yet, despite success, Wuhan does not have an internationally-recognized central business district given the centuries-old growth pattern of the city. As Wuhan continues to prosper, it is important to establish a global address for corporate office attraction that is complemented with high quality residential neighborhoods, retail, entertainment and recreational amenities.

The Wuhan Land Use and Urban Spatial Planning and Research Center (WLSP) engaged AS+GG to prepare a growth plan for 90 hectares of land accessed by the Second Ring Road and recently completed Erqi Bridge. This area will be known as the Wuhan Bridgehead Central Business District. The district will be served by three Metro lines and an innovative Bus Rapid Transit network with pedestrian access from the Erqi Bridge that links the east and west halves of the city.

Flooding is a major issue in Wuhan so this district will be developed in accord with Chinese "Sponge City" goals of managing stormwater on site. In contrast to the Sponge City baseline of 60% on-site management, the AS+GG plan is designed to manage 90% of stormwater on site while returning 10% of naturally-filtered and cleansed stormwater to the Yangtze River Basin. This is achieved through a series of stormwater capture and reuse strategies at the building and parcel levels, in addition to the implementation of new techniques for stormwater capture and reuse on public streets and open spaces.

In order to develop a plan that is comprehensive in its environmental and livability performance, AS+GG developed a parametric design model as a tool to test and optimize plan scenarios throughout the design process. This tool addresses land use and population, transit access, parks and open space distribution, together with performance metrics for energy, water, waste, and carbon reduction. The result of ongoing firm research and new product development, this model is intended to serve the client by providing a tool for the implementation and management of the district with real-time ability to update and respond to projects as they are built over time.

Major goals:

- Establish a World-Class Corporate Business District
- Maximize Value of Riverfront Location
- Locate Highest Density Adjacent To Public Transit
- Create a Memorable Skyline from Land, Rail, and Water
- Manage 90% of Stormwater On Site
- Connect People to the Yangtze Riverfront
- Increase Green Space and Balance Biodiversity
- Reduce Energy and Water Demand
- Reduce Embodied Carbon and Emissions















