RIVERFRONT DIDACTIC DESIGN

THESIS FRAMEWORK & CASE STUDY

SITE SELECTION & SITE ANALYSIS

DESIGN CONCEPT
Urban Flooding to Didactic Design

The relationship between watershed and city is one of the topics that had been discussed over decades, other than the opportunities riverfront provides for great projects, the waterfront design also define the city space. Subsequently, the waterfront has changed from railway and industrial use to residential and recreational use. Today, stresses are emerging between integrated, mixed-use, fine-grained urban development and the needs of large-area programs.

More and more cities in China are now suffering from urban flooding issue, because the city is "ill" and the "unhealthy" relationship between watershed and city can not functioning well. The unhealthy relationship between watershed and cities in China are mostly caused by over development, rapid change of landform and lack of sustainable concern during early period of planning after the emerge of industry. New apartment and houses were built on the land that filled from lakes and rivers to fulfill the needs of population growth and city development.

"Unhealthy" situation is mostly caused by "unhealthy" decisions, the net effect of small decisions has great applibility to environmental problems. Due to the special design condition in China, planners and designers have to work with centralized government and follow the policy made by the national leadership. But the policy is still evloving through the big change of China, and the decision can be perfect. The value of decision should be effect by the awareness of significence of watershed, the understading of sustainability and knowledge of local environmental history.

Small decisions can make be difference, design is not just a way to solving problem and filling basic needs, it can also sending message. Didactic(educational) waterfront design can raise the public awareness of the significence of watershed to the city and how vulnerable we are without them.
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SITE SELECTION

Riverfront city
Disconnection
Community Identity
Sense of place
Rapid Urbanization
Post-industrial city
Large programming

SITE ANALYSIS

Community
+ Users
+ Street
+ Dike
+ River
- Population of 10,607,700 people as of 2015.
- National capital of a leftist Kuomintang (KMT) government on 1920s.
- Capital of Hubei province, China, and is the most populous city in Central China.
SITE SCOPE

0.4 miles
Concrete paving, misuse of vegetation, lack of management, heavy amount of users, litter on street, complex user group, heavy traffic
Shopping Street and Night life/ Orientation on the street, disconnect with river

Disconnect with water, noise, complex and heavy amount of user group litter, old community and hard to alter the existing land use, heavy traffic, limited universal accessibility, safety issue at night.
Riverfront Neighborhood Park: 5000 people/day, 10000 people/day in holidays.

Safety issue, dark in the night, pollution, damage of the dike, hard paving, limited place to fishing, no vegetation buffer, environmental unfriendly to some of the local species.
EXISTING USE/ACTIVITIES

- Structure: Water taxi station, in-dike stores
- Dike Shopping Street
- Physical Access to Water
- Riverfront Steps
- Trail
- Structure: Ferry station
- Public Square
- Physical Access to Water
- Tennis Court
- Neighborhood Park
- Public Square
- Existing Use/Activities
- Water Taxi Station
- Ferry Station
- Neighborhood Park
- Access to Water
Major Juncture of Nine Provinces
DESIGN CONCEPT

Heritage riverfront, didactic design, community identity, reconnection with river, finding harmony, sense of place

Trail head
On-dike walking trail
Heritage neighborhood park
Didactic riverfront trail
Historical On-Dike Trail & Riverfront Commercial Street

Moon Plaza

Traffic Calming Speed Bump

Outdoor Art

Playground

Water Taxi Station

"Fish Tail" Viewing Tower

Permable Pavers
HISTORICAL TRAIL DESIGN

On-dike Planters
- Seasonal Interest
- Sustainability
- Ground Lighting

“Fish Tail” Viewing Tower
- Vine Planter
- Stepway Lighting
- “Story Board” Elevated Viewshed

Colored Concrete Paver
- "Yunwen" Traditional Waving Texture
- Anti-Skid

Curving Fence
- Stainless Steel
- Lighting bars

Step Sitting Area

Street Trees

Wuhan Yangtze River Bridge
MOON PLAZA AND SUSTAINABLE PARKINGLOT PLAN VIEW
Conclusion

People are care about where they live, and they are appreciate the beauty of nature. Creating an effective strategy for the Wuchang Riverfront Park will be a challenge. This fast-growing city pattern lacks a neighborhood’s communication exchanges, reflecting more of the lifestyles of people in cities only at home or on the internet. This indeed is the major phenomenon of Wuhan; however, the children, elderly, and animals need more educational, quiet and open places to celebrate the culture and nature. Wuhan, as a development of a second-tier Chinese city, places a growing emphasis on the importance of urban educational areas.