

Project Title: Changsha Island

Project Location: Changsha, Hunan Province, China

Sub-Category: Planning & Analysis

Image Summary



Image: 01_Changsha Island
Plan view and Perspective of Changsha Island



Image: 02_Existing Conditions & Challenges
The island is shaped by the forces of the river current. The East edge has suffered significant erosion due to a high velocity current. The current on the West side is much slower which has allowed for a wetland edge to develop.

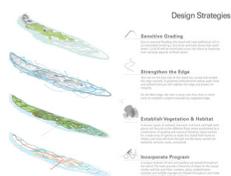


Image: 03_Design Strategies
Design Strategies are made that will guide the development of the island in a sustainable and community oriented way.

- Sensitive Grading
- Strengthen the Edge
- Establish Vegetation & Habitat
- Incorporate Program

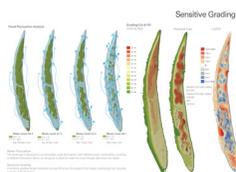


Image: 04_Sensitive Grading
Flood studies were done to illustrate water fluctuation to determine plant communities and areas that would need additional soil. Berms are designed to allow for water to move through and across the island. Additional GIS cut & fill studies were conducted to understand the impacts of grading options and ensure the best grading strategy that minimizes cut & fill in order to maximize river carrying capacity during flood season.

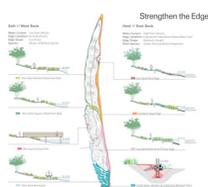


Image: 05_Strengthen the Edge
To combat the forces of the Xiang River, a buffer of wetland terraces that provide both habitat and filtration opportunities will be established along the edges. Engineered embankments below water level will be used on the East side to maintain the edge against the strong current while a more curvilinear “natural” edge will be used on the West side.

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Image: 06_ Strengthen the Edge

Aerial of meandering forest landform with terraced wetland edges and section of island forest and berms.



Image: 07_ Establish Vegetation & Habitat

A diverse native plant palette is planned that will restore the ecology of the island. Although it is only a speck in the giant Xiang River, Changsha Island is a positive step in advocating restoration, open space integration, and maintaining a natural edge on river islands in the area.

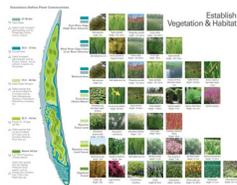


Image: 08_ Establish Vegetation & Habitat

The planting design is sensitive to fluctuating water levels, local soil types, habitat diversity, and aesthetic landscape value.

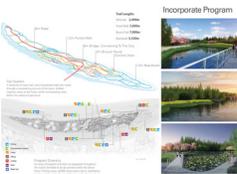


Image: 09_ Incorporate Program

A hierarchy of road, trail, and a boardwalk leads the visitor through a meandering journey of discovery where an array of program activities are peppered throughout the dense forest and wetland edges. Fishing areas, wildlife observation decks, meditation gardens, trails, wetlands, amphitheater and cafe are among the many options visitors have to explore on the island.



Image: 10_ Construction Progress

Evidence of forest, trails, edge stabilization, and flood resistant berming is shown in these construction progress images.