

# REBIRTH - Baotou Steel Tailings Dam Environmental Modification



Country / City .....

CHINA

University / School .....

Inner Mongolia Normal University / International Modern Design Art College

Academic year .....

2017-2018

Title of the project .....

Rebirth - Baotou Steel Tailings Dam Environmental Modification

Authors .....

Han Yulong , Zhao Jiaqi





# PERFORMATIVE NATURE

Barcelona International Landscape Architecture Biennial

September 2018 **Barcelona**

SCHOOL PRIZE

X International Landscape Architecture Biennial

Master d'Arquitectura del Paisatge -DUOT - UPC

ETISAB- Escola Tècnica Superior

d'Arquitectura de Barcelona

Avenida Diagonal, 649 piso 5

08028 Barcelona-Spain

## TECHNICAL DOSSIER

Title of the project	Rebirth - Baotou Steel Tailings Dam Environmental Modification
Authors	Han Yulong , Zhao Jiaqi
Title of the course	Bachelor of Environmental Design (Landscape Design)
Academic year	2017-2018
Teaching Staff	Li Mo
Department/Section/Program of belonging	International Modern Design Art College (IMDAC)
University/School	Inner Mongolia Normal University

Written statement, short description of the project in English, no more than 250 words

**Base description:** The base is flat and occupies an area of about 500hp. It is now a demolition site and a waste factory. The base is adjacent to the Baotou Iron & Steel Group in the east, neighboring villages in the west and north, and Baotou West Station in the south. It is 12km from the city and 10km from the nearest tributary of the Yellow River.

In this case, the landscape of the base was transformed in a natural form, and water treatment measures were used as the basis for the construction of natural restoration and the phased transformation of the landscape. In turn, the rebirth of water, the rebirth of vegetation, and the rebirth of human habitat.

Set up wetland landscapes based on tailings dams, dredging ponds, sedimentation ponds, and medium waters. It is divided into a water treatment display area, a wetland conservation area, and a wetland ecological function display area centered on an ecological shelter forest system, an Asakusa wetland system, and an ecological water purification system.

For further information

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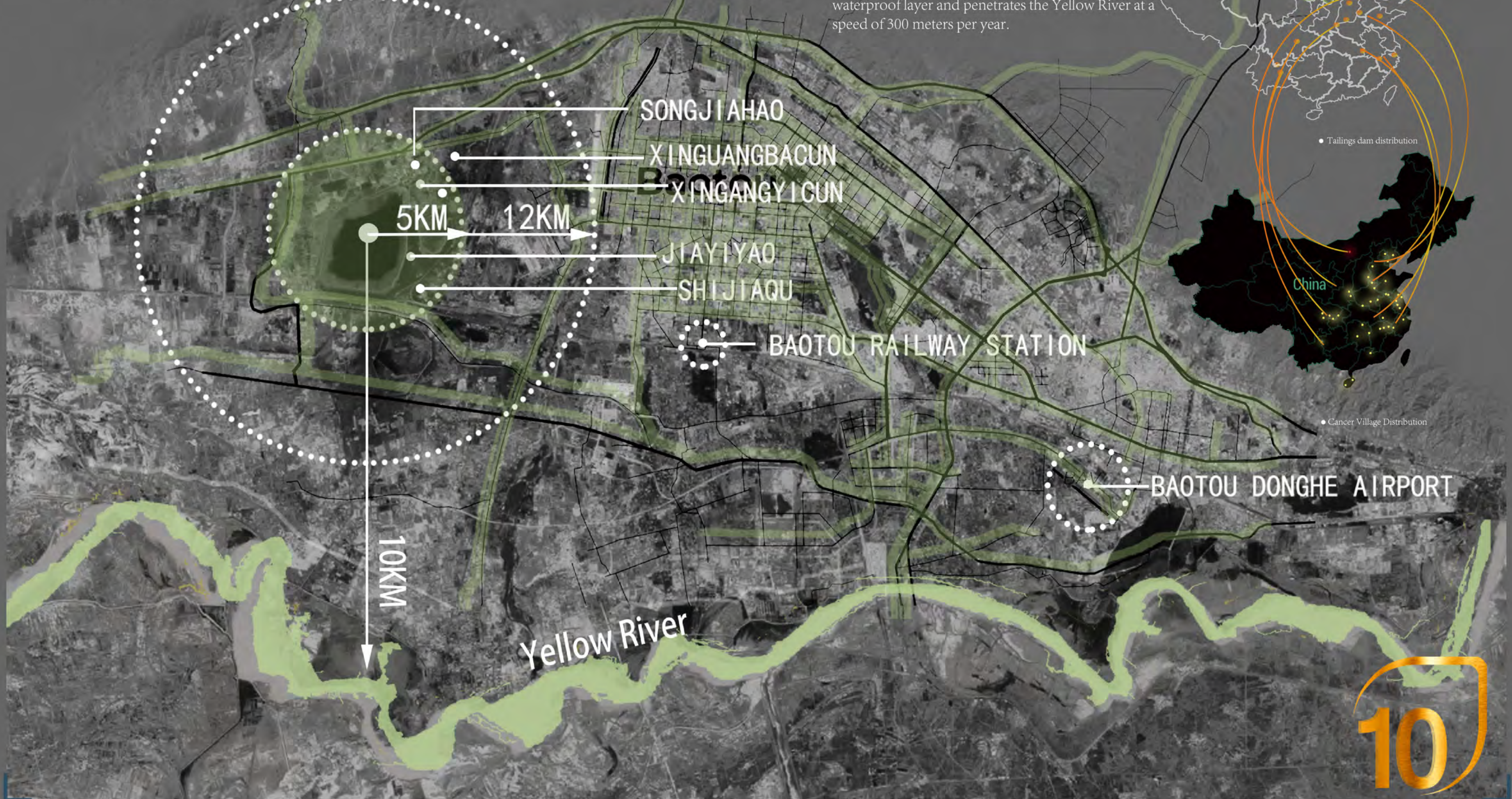
Consult the web page <http://landscape.coac.net/>

# REBIRTH — Baotou Steel Rare Earth Tailings Dam Environmental Modification

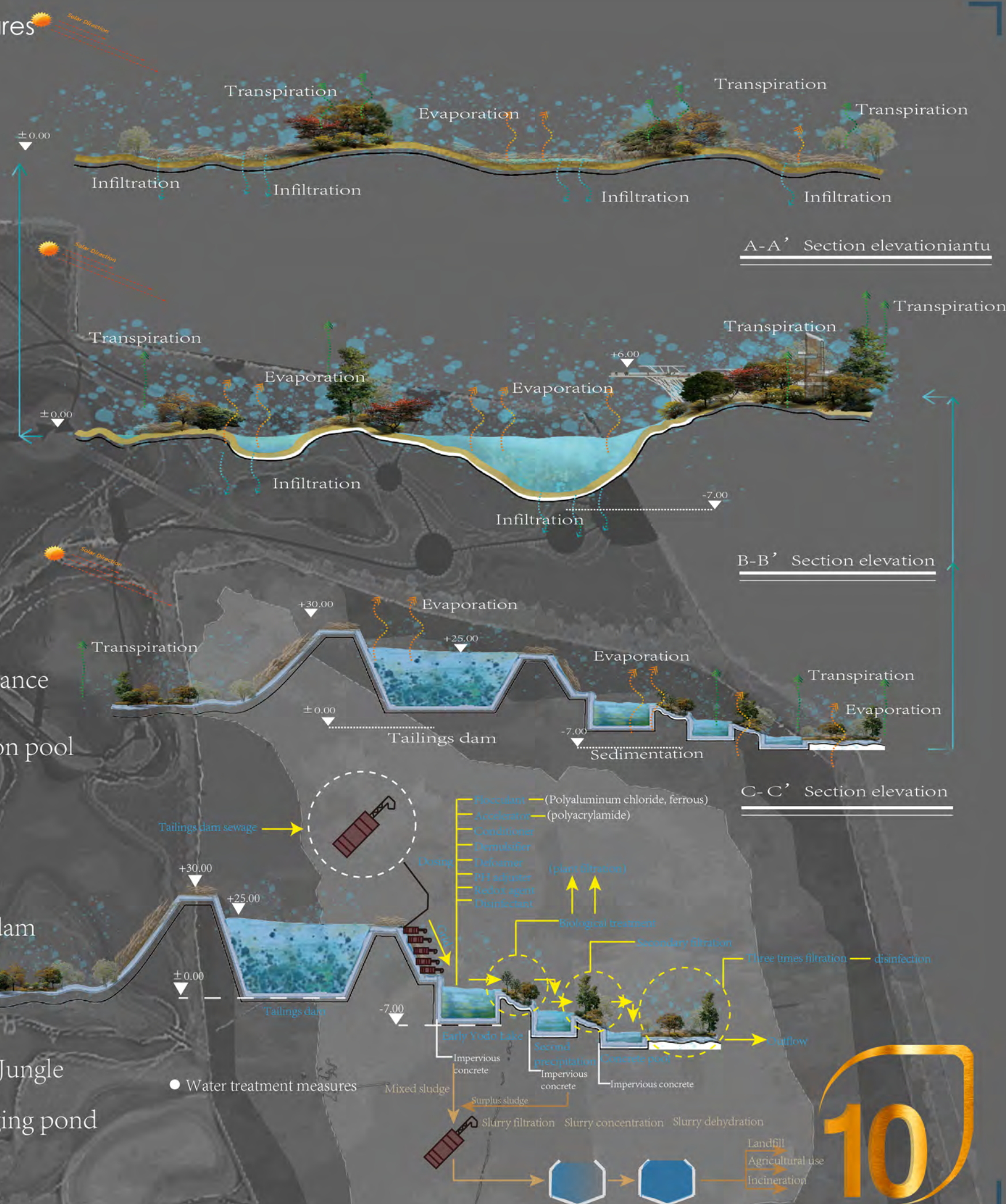
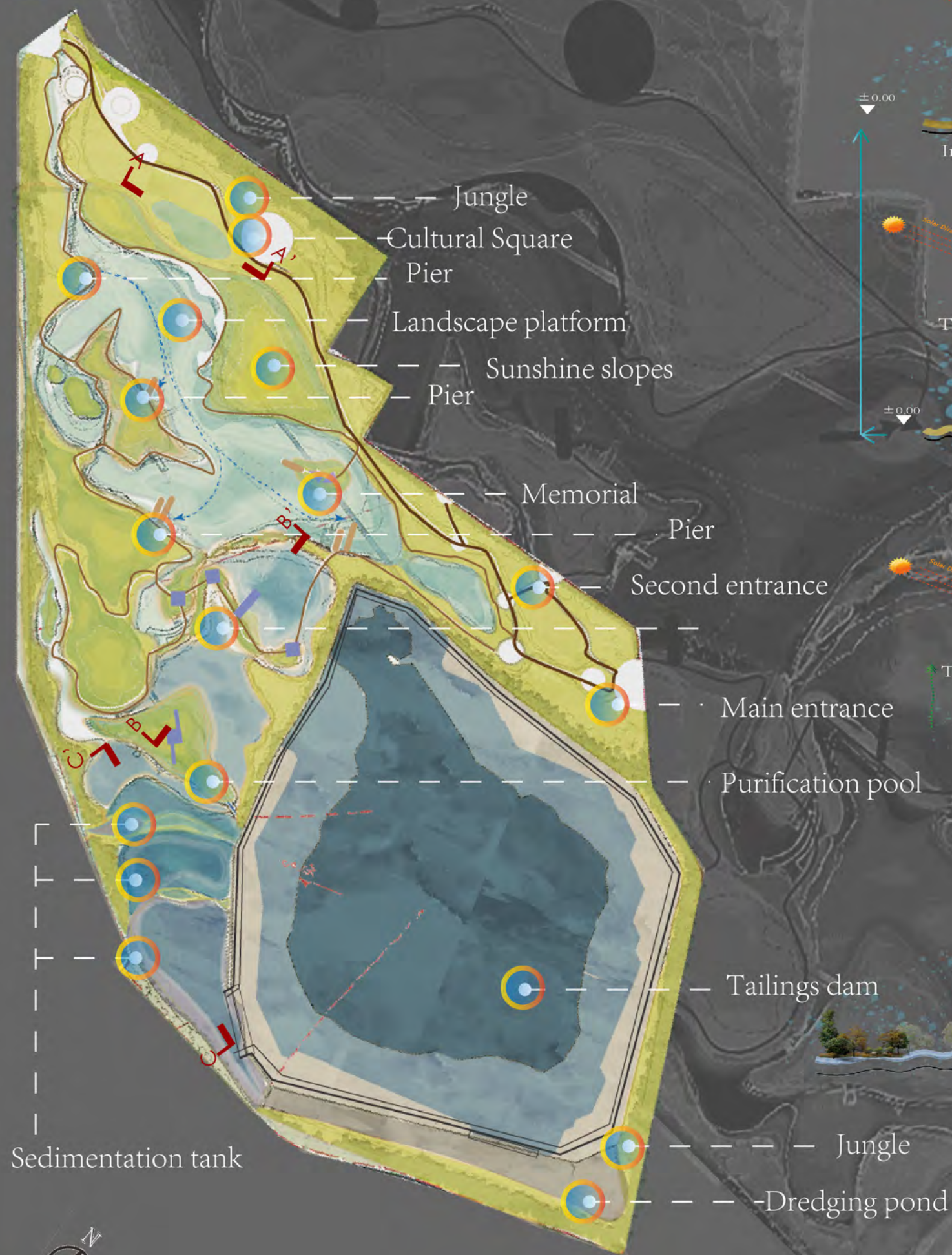
## Location Background Analysis and Its Influence on Surrounding Areas



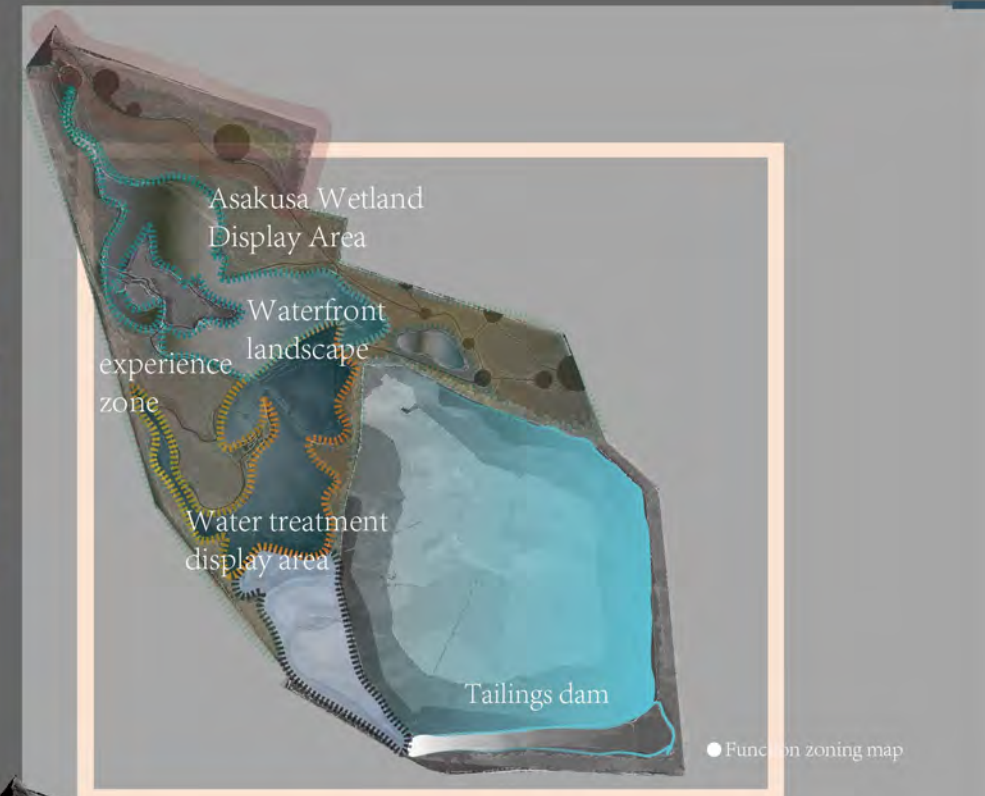
• The base is located in Kundulun District, Baotou City, Inner Mongolia Autonomous Region. It is 12km away from downtown Baotou, 8km from the city boundary and 10km from the nearest tributary of the Yellow River. The tailings dam's water can't come in only, it depends on natural evaporation. At a rate of 0.9 meters per year. The tailings dam has no underground waterproof layer and penetrates the Yellow River at a speed of 300 meters per year.



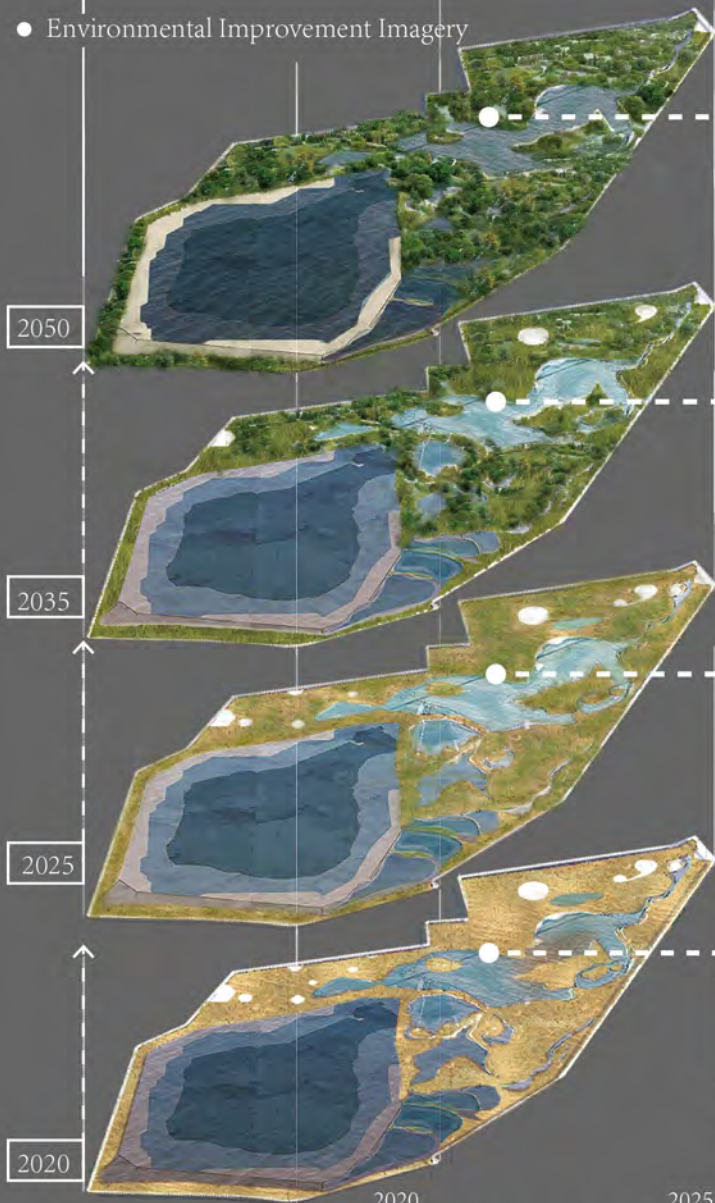
General Plane, sectional elevation and governance measures



Planar analysis and staging image renderings



Environmental Improvement Imagery



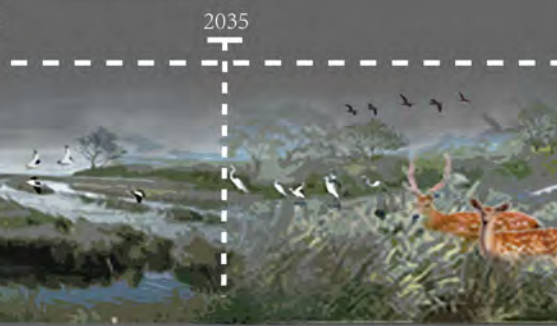
We have a 30-year plan  
 2020 - 2025 water purification  
 2025 - 2035 Soil Remediation  
 2035-2050 Vegetation Rebirth  
 People can enter here after 2050 to watch.



In 2020, the wetland is still desolate and the water purification rate is 1%.



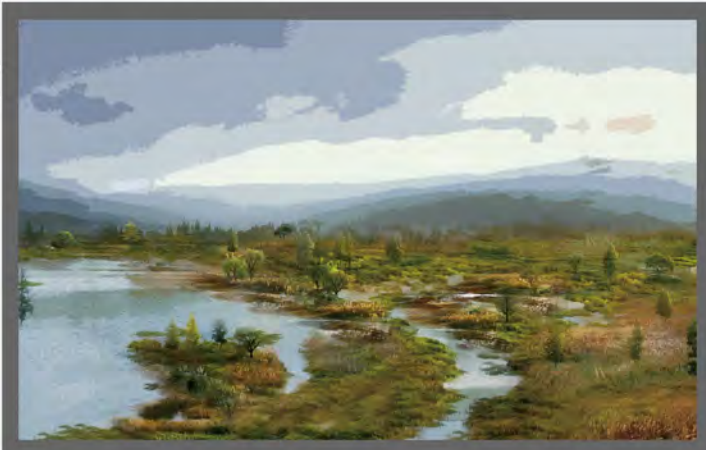
In 2025, the wetland gradually gained vitality, the vegetation coverage rate reached 30%, and the water purification rate reached 40%.



In 2035, the coverage of wetland vegetation reached 50%, and the water purification rate reached 70%.



In 2050, the vegetation coverage rate is 90%, and the water purification rate is 95%, which is biologically biological diversity. People can enter the Asakusa Wetland area for viewing and playing.



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