

THE TRANSITIONAL CITY: A RESEARCH MANIFESTO AND DESIGN TOOKLIT

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WENZHOU, ZHEJIANG, CHINA

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INTRODUCTION: THE RISE AND DEVELOPMENT HISTORY OF WENZHOU

Wenzhou is located in the middle of China's golden coastline, in the southeast of Zhejiang Province, surrounded by mountains on three sides and the East Sea on the east. Named "Wenzhou" because of its warm climate. Wenzhou was turned into a foreign treaty port in the Southern Song Dynasty. In 1985, The State Council issued an official reply to the list of 14 coastal open cities, calling for wenzhou to be built into an important industrial, foreign trade and port city along the southeast coast of China. Later, with the rapid development of Wenzhou's economy, Wenzhou readjusted its urban positioning according to its own needs, transforming "foreign trade" into "commerce", and later adding "tourist city".



FUTURE INTERNATIONAL LIGHT INDUSTRY CITY



"ONE PORT, THREE CITIES" STRATEGY

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1. The construction of coastal port, convenient to construct transport hub port and sentiment the flourishing commercial port, capital of active financial port, efficient and fast information port, open more channel of internal and external connection, and expand the vast economic hinterland, make wenzhou regional flow, logistics, cash flow, information flow hub.
2. Build offensive light industrial cities.In accordance with the requirements of taking a new road of industrialization and building an advanced manufacturing base in Our province, wenzhou will be built into an important production base, distribution base and innovation base of light industrial products in the world by promoting industrialization and informatization with industrialization.
3. Build the most dynamic open city.We should keep reforming and innovating, strive to be one step ahead in ideology, outdo others in developing private economy, outdo others in establishing market economy operation mechanism, and outdo others in opening up, so that Wenzhou will become an innovative and dynamic city with dynamic mechanism, abundant business opportunities and high return on investment.
4. Build a famous coastal landscape cultural city.With the goal of building a modern metropolis, we should do a good job in urban construction and vigorously promote urbanization, so as to realize wenzhou's urban development from "Oujiang Era" to "East China Sea Era", and from a riverside city to a coastal city.At the same time, make full use of wenzhou's rich landscape resources and profound historical and cultural accumulation, do well in "mountains, seas, rivers, rivers and islands" article, do well in the construction of ecological city and famous historical and cultural city, and strive to create a good natural ecological environment and cultural environment, so that Wenzhou will become a place suitable for living, business and entrepreneurship.



▲ On June 18, 1979, the second session of the fifth National People's Congress was held, which started the restoration and reconstruction of democracy and legal system after the "Cultural Revolution". Wenzhou residents took to the streets to celebrate the good news. The picture shows the parade through the entrance of Wuma Street



▲ People line up for the transition at the Jiangxin ferry Terminal in 1986, with the "Democracy" ship heading to Shanghai in the distance



▲ Jiangxin Pier in 1979. Ferries are wooden boats



▲ Black and white photos for the autumn of 1982, in the jiangxin Island west tower tower, sun Shouzhuang by repairing tower scaffolding, climbed to the top of the west tower, took the former Wenzhou city

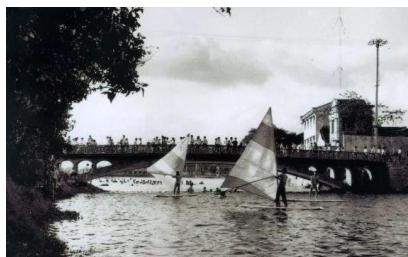
▲ Color photos for July 2012, old photographer Zheng Gaohua in a similar Angle to the city of Wenzhou, at the time of the south bank of the Oujiang River has high-rise buildings, was a scene of prosperity



▲ 1982 Feixia Bridge, because of narrow bridge deck, pedestrians can only walk cart



▲ Pica Street (1992)



▲ Jiushan River (1984)



▲ Hualutang River (1985)



▲ Zhongshan Bridge (1975)



▲ Zhongshan Bridge (2014)



▲ Little Nan Tan Qian (1996)



▲ Little Nan Tan Qian (2007)



▲ In 1987, Xiaonan Road crowded, many people from the bridge railing through



▲ The Night view of the Xiaonan Intersection in 2007



▲ Lower Lupu in 1991 is still farmland contiguous



▲ Lower Lupu Residential District in 2014

Photographer: Sun Shouzhuang

Born in 1936, member of China Photography Artists Association, member of Zhejiang Photographers Association, former vice president of Wenzhou photographers Association, was employed as a reporter of Wenzhou bureau of Press of China Construction News.

ROADS BEAR WITNESS TO URBAN CHANGE



The road in the city, like the fate of the palm, tells the imprint of time. It is also a harbinger of urban change. Located in southern Zhejiang, Wenzhou, surrounded by mountains on three sides and facing the sea, has been plagued by traffic problems.

After the founding of the People's Republic of China, wenzhou's highway construction entered its first period of rapid development. Key routes such as Hangzhou-Wenzhou and Wenzhou-Li highways were successively reopened to traffic, and rural highways with plow roads as the focus were developed unprecedently. Since the reform and opening up, Wenzhou has mobilized social forces to build highway traffic, and highway construction has entered a new round of rapid development. In the 21st century, through the construction of "six projects", "five highway" and "five ten thousand" beautiful highway projects, the city's highways began to enter the era of rapid traffic network, has achieved the city to each county "two hours traffic circle", the province's "four hours traffic circle" target.

From December 1978 to the end of 2015, wenzhou's total highway mileage reached 14,684 kilometers. From narrow lanes and gravel roads to concrete or asphalt highways to modern expressways, generations of Wenzhounese have braved the wind and rain to forge ahead and transform the natural cutting into a smooth road. The development of Wenzhou's transportation industry also carries the expectation and dream of wenzhou's leapfrog development.



▲ Oujiang Three Bridge (East Ou Bridge)



▲ Feiyun River Bridge



▲ The Aojiang Bridge



▲ Wenzhou section of Yongtaiwen Expressway



▲ Ryanshui to Wencheng section of Longliwen Expressway

MAPS WITNESS THE CHANGES OF CITIES



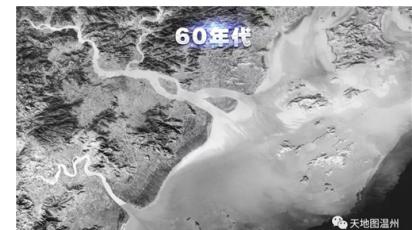
Wenzhou is the pioneer area of reform and opening up and the birthplace of market economy.

From these old maps of Wenzhou, we can see the great changes brought about by its economic development. From the maps published after 2003, we can see that the urban spatial layout of Wenzhou has gradually opened up, forming a group urban development trend of eastward, across the river and across the sea, and the urban pattern has moved from the "Oujiang Era" to the "East China Sea Era". Highways, high-speed railways, international airports, ports, rail transit... Wenzhou began to become a national comprehensive transportation hub city.

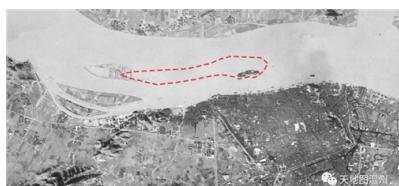
Adhere to the strategy of "August" as the master plan, wenzhou overall situation, to repeat history of innovation, through the construction of high standard, beautiful wenzhou city look brand-new, livable appropriate industry appropriate features appeared, the function of central city, the quality and image is undergoing profound changes, a collection of natural beauty, economy, urban and rural beauty and life beauty, beauty of humanities in the integration of "five new" wenzhou be vividly portrayed.

1960s

In the 1960s, wenzhou's central urban area was only a small piece. The area is about 18 to the east to feixia Road area, west to West road to Jiushanhу area, south to Maanchi Road area, north to the oujiang river coast area. At that time, Jiangxin Island was a tiny place.



▲ Image map of Wenzhou in the 1960s



▲ Video map of Jiangxin Island in the 1960s
(The red dotted line indicates the current area of Jiangxin Island)

1970s

By the 1970s, the size of wenzhou's central city had changed little on the map, but Jiangxin Island had changed dramatically. In 1974, the municipal government set up the "Jiangxin Island Expansion Project Headquarters" to clean up the waterway and transform the tidal flats. Originally only 60 mu of Jiangxin Island expanded to 1000 mu. Among them, small Feihong, potted landscape garden, Flower and Willow pavilion, youth activity center, Gongqing Lake, Lover's Island, children's amusement park and comprehensive amusement park have been built, forming a pattern of "there is a river in the river, an island in the island and a garden in the garden".



▲ Image map of Wenzhou in the 1970s



▲ Video map of Jiangxin Island in the 1970s
(The red dotted line indicates the current area of Jiangxin Island)

1980s

15 In the 1980s, the pattern of Lucheng, Longwan and Ouhai began to take shape. In 1981, Wenzhou was merged and the original urban area was renamed urban Area of Wenzhou. In 1984, it was renamed Lucheng Area. On September 12, 1981, ouhai County was established; On 2nd, 1984, Longwan District was established.



▲ Image map of Wenzhou in 1984 (boundary line just a hint)

1990s

In the late 1990s, this was the fastest period of urban construction development in the history of Wenzhou. The central urban area of Wenzhou began to transform the old city and develop new areas, and urban construction and society and economy developed rapidly simultaneously. Many of the exposed yellow earth can be seen on the image map, and construction is in full swing.

On July 12, 1990, Wenzhou Yongqiang Airport (renamed Wenzhou Longwan International Airport in 2013) was built for navigation, which also ended the embarrassing situation of "leaving Wenzhou by water". In January 1996, Wenzhou Airport Avenue was completed and opened to traffic. Later, the Jinwen Railway, Wenzhou railway station, Wenzhou Bridge and a large number of other urban infrastructure has also been completed. On March 9, 1992, ouhai county was changed into a district, wenzhou three district pattern was formally formed. In the same year, Wenzhou Economic and Technological Development Zone, the first state-

level development zone in south Zhejiang and north Fujian, was established.

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▲ Image map of Wenzhou in 1996 (boundary line just a hint)

The 21st century

In the 21st century, the concept of urban built-up areas became popular. In the past 10 years from 2010 to 2018, the urban built-up area in the central urban area of Wenzhou increased by about 75.6 square kilometers, which is equivalent to the area of 6 Qidu Islands and 108 Jiangxin islets.



▲ Schematic diagram of urban built-up area of Wenzhou Central City in 2010



▲ Schematic diagram of urban built-up area of Wenzhou Central City in 2016

The urban development of Wenzhou has been carrying out the development direction of "eastward expansion, westward expansion, south connectivity, north connectivity, and middle promotion", and "focusing on eastward expansion" has laid down the current urban pattern. In the past 10 years, the urban built-up area of wenzhou's central city expanded by about 33 kilometers.



OVERVIEW OF FACTORS IN URBAN PLANNING

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Cities, with the extension of the road and expansion; The industry grew with the development of transportation. When we look behind a road and focus on the logistics, people and capital flow, you will find that this road is not only a road to travel, but also a correct road to a better future of life.



FUTURE INTERNATIONAL PORT CITY



OVERALL PLANNING OF WENZHOU CITY

1. DESIGNATED FUNCTION OF CITY

Wenzhou is a famous national historical and cultural city, an important commercial city and regional central city along the southeast coast.

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2. CITY SIZE

It is planned that the population of the central urban area of Wenzhou shall not exceed 3.5 million in 2020. The scale of urban construction land in the central urban area of Wenzhou will be 300 square kilometers in 2020.

3. SPATIAL LAYOUT OF THE CITY

•Urban population and urbanization level

By the end of 2020, wenzhou's total population is expected to be between 9.8 million and 10.5 million, with an urbanization level of about 70%.

•Urban spatial structure

To build a network urban system spatial structure with "one principal, two subsidiary, three poles and many points" and to strengthen the agglomeration and integration of central cities at all levels."One master" means to take Wenrui Plain as the main center of the city.The "two vice-cities" refer to the two conglomerations of Yueqing and Pingcang as the two sub-centers in the north and south of the city.The "three poles" refer to the three poles of growth that drive the urbanization, tourism and cultural industries in mountainous areas, namely yongjia, Wencheng and Taishun counties."Multi-point" refers to a number of other small cities (towns) supporting the urbanization development of the whole city, providing equal public services and employment for surrounding towns and villages.

4. MUNICIPAL COMPREHENSIVE TRANSPORTATION

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•Highway system

It is planned to construct the expressway system of "two longitudinal, two horizontal, two connecting and one winding": "Two longitudinal" are the shenzhou-Hai Expressway and Yongtaizhou-Taizhou-Wenzhou expressway, "two horizontal" are the Wen-Li expressway, the East extension, the Longlizhou-Wenzhou expressway and the Taishun expressway, "Two connecting" are the Zhuyong expressway and the South connecting expressway, and "one winding" is the Wenzhou circum-city expressway. Plan to reserve the north even high-speed and outer ring west line.

The layout of the "three vertical and two horizontal" ordinary national road network and the "four vertical and four horizontal" provincial road network.

•Railway

Wenzhou railway network is made up of Yongtaizhou-Wenzhou Railway, Wenzhou-Fuzhou Railway, Hangzhou-Wenzhou high-speed Railway, Jinzhou-Wenzhou Railway, Xinjinzhou-Wenzhou-Wenzhou Railway, Wenzhou-Wenzhou-Wenzhou Railway, Wenzhou-Wenzhou-Wenzhou Railway, And Yueqingwan Port railway extension, as well as planned and reserved coastal high-speed railway. Wenzhou railway network will be built into one of the hubs of East China railway network.

•City orbit

Three urban tracks are planned and laid out. Plan Line S1 and Line S2, and reserve line S3.

•Civil Aviation

We will expand Longwan International Airport to be a 4E national civil aviation airport, improve the domestic air route network, and actively open up international air routes. Long-term construction into a large international airport, general aviation base airport.

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5.PORT AND INLAND RIVER NAVIGATION

Wenzhou port will be built into a major port in China's coastal areas with complete functions to realize the strategic transfer of Wenzhou port from the estuary port to the offshore deep water port. It is planned to form the overall layout of "one port and seven areas" with Yueqing Bay Port area, Zhuangyuan 'ao Port area and Da Xiaomendao Port area as the core hub port area, and Oujiang, Rui 'an, Pingyang and Cangnan port areas as the supplement.

With the focus on connecting the port areas and rivers of Wenzhou Port, and connecting the main river routes into a network, a mutually accessible transport network for external shipping and inland river shipping will be formed.

6.MUNICIPAL HISTORICAL AND CULTURAL PROTECTION

•Protection of the overall landscape pattern

Relying on wenzhou "west pingshan, east linhai, sanjiang, wetland" natural landscape features, protect traditional villages and towns and the growth and the relationship between the natural landscape environment, including the city of wenzhou, ruian city history and oujiang and feiyun river and the relationship between wen ruitang river, always fine rock head town, in maple town, historic and cultural town village and the relationship between the traditional villages and, yandang mountain of naxi river nowadays, rui AnLin possessors town, cangnan gold villages and towns and Lin

possessors wetland, cangnan of wetland, the relationship between the city of David, the city, castle, water village, such as the ancient military defense remains and the relationship of river shorelines. We should protect yongjia culture, Langqiao culture, Wenzhou traditional handicraft culture, she culture and other minority cultures to form the natural landscape pattern on which their development depends. Strengthen the coordinated protection of the cultural heritage of nanxi River-Yandang Mountain and Wenruitang River.

- Historical and cultural heritage protection

Protection of historical and cultural cities: including one national historical and cultural city, namely Wenzhou historical and cultural city; There are two provincial-level historical and cultural cities, namely Shui On Historical and cultural City and Pingyang historical and cultural city.

Protection of famous historical and cultural towns, villages, blocks and traditional villages: there are 5 famous historical and cultural towns and villages in China, 9 traditional Chinese villages, and 25 provincial historical and cultural blocks, towns and villages. There are 6 famous historical and cultural towns and villages at the municipal level, and 14 famous historical and cultural towns and villages at the county (district) level.

7. SPATIAL LAYOUT OF CENTRAL CITY

- Development direction and spatial structure

The development direction of the city is determined as east extension, west excellence, south connection, north connection and middle promotion, and gradually develops from "riverside city" to "coastal city", forming the urban form of riverside agglomeration, coastal expansion and surrounding mountains.

The urban spatial structure is "four pieces with two axes and two centers". "Double axis" refers to the urban extension axis along the Oujiang River and the coastal functional link axis. "Double heart" refers to the central compound center and the eastern compound center respectively. "Four slices" means that the central urban area is divided into four functional areas with different focuses and characteristics according to the development characteristics, which are divided into the western, middle, eastern and Oujiangkou slices, with one sub-center for the western and Oujiangkou slices without the municipal central area.

- Function layout

West: Lucheng District and Ouhai District Cuiwei Mountain - West part of Niushan. Relying on regional transportation, we should make rational use of low-efficiency land and hillside land resources to promote the transformation and development of traditional industries and industrial upgrading.

Middle film: West of Maozhuling in Longwan District, East of Cuiwei Mountain and Niushan Mountain in Lucheng District and Ouhai District and Oubei District. Relying on the existing urban service base, we will excavate superior natural and cultural resources and carry historical culture and high-end urban service functions.

East area: includes the east part of Maozhuling in Longwan District and the reclamation area. Relying on the international airport and regional channels, the city will make use of the precious new land resources, develop scientific and technological innovation, new industries and new service industries, and cultivate the international function of Wenzhou.

Oujiang Mouth piece: mainly for the dong Tou area. Relying on seaports and making use of island resources, the port industry and leisure tourism, which are mainly based on Marine economy, will be developed.

- Urban traffic

Urban track: Three urban tracks are planned and laid out, namely M1 line, M2 line and M3 line.

Urban skeleton road: Nine expressways are planned for "ring + radiation + contact line" to connect service groups with fast motorized contact, connect external traffic trunk lines, expressway entrances and exits and main comprehensive transportation hubs, and serve external fast distribution and distribution. Plan to reserve the south road around the island expressway. The trunk road connects the main traffic distribution centers, serves the land distribution and traffic connection of the area, and forms a backbone trunk road network with good connectivity between sections. The western and middle slices are planned to be "five longitudinal and five horizontal" skeleton trunk roads, while the eastern and Oujiang estuary slices are planned to be "five longitudinal and four horizontal skeleton trunk roads".

- Green space system

The urban green space system relies on the natural landscape environment and takes the mountain outside the city as the important green background to protect the mountain peaks and mountain forests such as Baiyun Mountain, Daluo Mountain, Dazhangshan Mountain, and Dajianyan top. In combination with the waterfront green belt, the urban green space system framework consisting of "fan-shaped" and "fish-bone" is constructed within the city. Structural green space should not be interrupted in the next planning and should be guaranteed to be of reasonable width.

- Four city line

Urban green line: the area of urban green line with a total area of 1545 hectares will be delimited as municipal comprehensive parks, special parks and major protected green areas along railways, expressways and expressways.Ecological green space refers to urban green line management.

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Urban blue line: delimit the urban blue line area of the main river system with a total area of 302 hectares.The blue lines of tributaries and flood drainage systems are specified by special planning and lower level urban and rural planning, allowing local adjustment under the premise of assessing the impact of flood drainage, landscape, etc.The blue line includes the river channel, the drainage channel and the surrounding green belt.

City Purple Line: The city Purple line is composed of four historical and cultural blocks, including Wuma - Mochi Historical and cultural block, Chengxi Street historical and cultural block, Qingnianfang historical and cultural Block, And Shomen historical and cultural Block, as well as the protection scope of historical buildings located outside the above block.The land within the scope of urban Purple Line should be strictly managed in accordance with the Urban Purple Line Management Measures.If the purple line conflicts with the green line, blue line and yellow line, the purple line management and control requirements are given priority.

City yellow line: draw, wenzhou longwan international airport south station and other large railway track for terminal, xiamen city and urban rail depot, large bus station, city water, urban sewage treatment plant, waste dump (factory), garbage incineration power plant, 500 kv substation and other major infrastructure of urban yellow line range, with a total area of 3031 hectares.The scope of other yellow lines shall be specified by special plans and urban and rural plans at the lower levels.

- Urban characteristics

We will strengthen planning, guidance and control over the height, volume and style of buildings in important areas, do a good job in overall urban design, and highlight the characteristics of Wenzhou as a coastal city that connects the Yangtze River to the Sea, has a dense water network, embraces mountain cities, and integrates land and sea.

- Old city renewal

The specialized wholesale markets of industrial storage and production materials and part of the administrative land in the old city were moved out and replaced with residential land, transportation, greening and other supporting facilities.In principle, no new large commercial facilities will be built in the historic district.The grade and capacity of public service facilities in the old city should be improved to enhance the level of public service.All mountains need to strengthen vegetation construction, set up hiking trails at the foot of the surrounding mountains, avoid surrounding other land properties, especially high-rise buildings, so as to integrate the mountain opening with the street space.We will guide the transformation of villages into urban communities, accelerate the change of the "semi-urbanization" status, improve the quality of urbanization, and improve the urban environment, urban landscape and overall image.





DIFFER FROM THE STANDARD INDUSTRY AND URBANIZATION MODE OF URBAN DEVELOPMENT CHANISM

- The non-agricultural process of peasants driven by rural industrialization.
- The decentralized associated industrial cluster organization form of industrial spatial distribution: developed public inquiry credit and urban financial innovation.
- Sufficient social funds to participate in the urban public goals and services to provide the model.
- Professional market outside the system and Wenzhou manufacturing small goods sales network.
- The transnational operation of private enterprises under the globalization and the opening up of Wenzhou city.



CASE STUDIES

There are many problems in the rapid development of modernization in Wenzhou, some of which are common problems and some of which are typical cases of Wenzhou. My personal research on wenzhou urban architecture and urban layout includes the governance of wenruitang River, site analysis of sanyang wetland, construction waste accumulation caused by large-scale demolition near Chashan, and the research on the intersection of the old two towns with population growth and economic connection.



DEVELOPING CITY TO BE GOVERNED



OVERALL CASE FOR ANALYSIS

1. THE GOVERNANCE OF WENRUITANG RIVER

The management of the Wenruitang River has been a problem, and the government is very concerned about it. There is also a need to clean up the buildings along the river and the overall environment, and some measures that are harmful to the environment need to be regulated.

2. SITE ANALYSIS OF SANYANG WETLAND

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Sanyang Wetland is the lung of Wenzhou city, which is the habitat of many rare birds with crisscrossing rivers and luxuriant vegetation. The government has invested large sums of money in its restoration and protection of precious plants and animals.

3. CONSTRUCTION WASTE ACCUMULATION CAUSED BY LARGE-SCALE DEMOLITION

The demolition left a lot of construction waste, hill like construction waste affected the urban beauty, the regional environment to be repaired.

4. RESEARCH ON THE INTERSECTION OF TWO TOWNS

In the old days, Wenzhou was relatively scattered and most areas were located in suburban areas. With the development of urbanization, these areas were gradually connected.

THE SEWAGE TREATMENT OF WENRUITANG RIVER AND THE REGULATION WORK ALONG ITS BANKS

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As the largest coastal plain river network in Wenzhou, Wenruitang River is also the gathering place of population, economy and pollution in Wenzhou. It has comprehensive functions such as flood control and drainage, farmland irrigation, water transportation, aquaculture, ecological environment protection and landscape tourism, and is called "Mother River" by wenzhou people.

Since reform and opening up, the local social and economic rapid development and urban construction, but at the same time, wen ruitang river system become lukewarm state city one of the largest and most main pollution distribution, creating many wen ruitang river water environment problems, outstanding performance in water quality and bottom sediment pollution, the aggradations of the channel, river, ecological degradation and deterioration of landscape, etc., these problems seriously restrict the social and economic development of the region and the improvement of residents' quality of life. The water system pollution of Wenruitang River is typical and representative in the eastern coastal areas of China.



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Improvement work along both banks of Wenruitang River: Create a beautiful Tanghe lighting up the name card of the city

Zhang Geng, deputy Secretary of CPC Municipal Committee and mayor of Wenruitang River, pointed out in the research and deployment of improvement work along both sides of Wenruitang River that it is necessary to promote the overall planning of renovation projects along both sides of Wenruitang River, spare no effort to provide high-quality products, regardless of the cost of the environment, create a high-level landscape along both sides of Tanghe River, let this city name card really beautiful, bright.

Wenruitang River along the banks is the city's efforts to create "two lines and three pieces" one of the five bright city cards. The second plenary session of the 12th Municipal Committee of the CPC proposed to basically complete the wenruitang River "one ring and three lines" landscape enhancement and lighting project within the year, to fully display the charm of the Tang River.

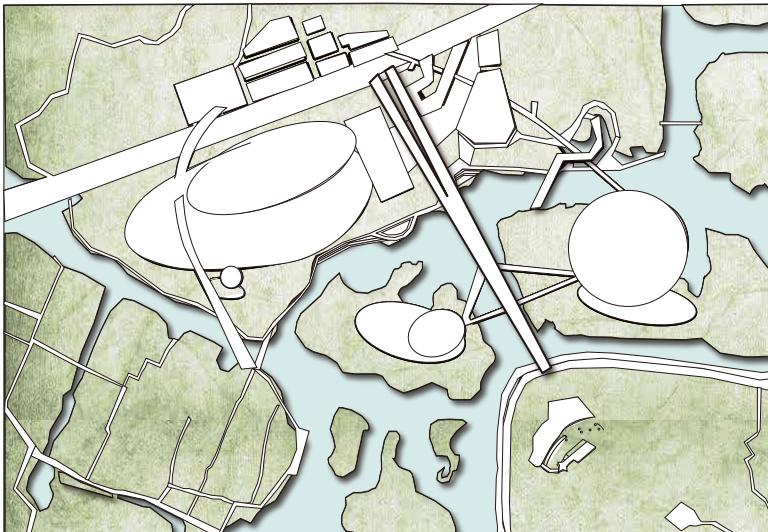
This year, according to the crucial action plan, the city plans to implement green way through construction, green renovation, ecological restoration, landscape construction, river clock in broadening the and so on five big project a total of 26, the task is well versed in green road, 10.35 kilometers along the river, improve afforestation along 7.3 km, 12.5 km river dredging and brighten river 7.7 km, river course 30 Bridges, clock in broadening the complete channel 1, three built Bridges.

Zhang Pointed out that speeding up the improvement along the Wenruitang River and fully displaying the charm of Wenruitang River are the inevitable requirements for Wenzhou to build an excellent urban ecology, which is related to the people's sense of gain in "great demolition and integration" and "great construction and great beauty".It is necessary to reverse the timing sequence and wall chart operations, focus on the key points and conquer the difficulties, promote the improvement work along the Wenruitang River as a whole, and achieve the annual targets with both quality and quantity guaranteed.

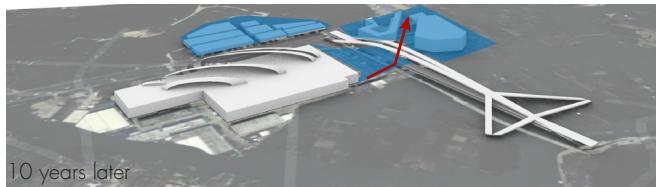
Zhang Geng stressed that the overall planning and coordination should be strengthened, focusing on the restoration of revetment, the connection of green road along the river and the improvement of the landscape along the river, so as to create a "Tanghe water Park" with clean water, green bank and beautiful scenery.We should unswervingly promote the "big demolition, big integration" and "big construction, big beauty", and speed up the demolition of illegal buildings and dilapidated houses that affect the image and function along the banks of the Tanghe River, so as to make room for the creation of landscape.We should make the best use of the situation to solve problems, adopt flexible and circuitous measures to ensure that the project can achieve the expected goals, based on the criterion of "whether the improvement can be achieved".Lucheng, Longwan, Ouhai and other construction units should strengthen the awareness of time node, work fast, pay close attention to implementation, create a good atmosphere of surpassing and surpassing, create the scenic belt along the Tanghe River with many bright spots, and jointly build the beautiful water town of Wenzhou.⁷

LAND BREATH: Connect to Activate the Breath

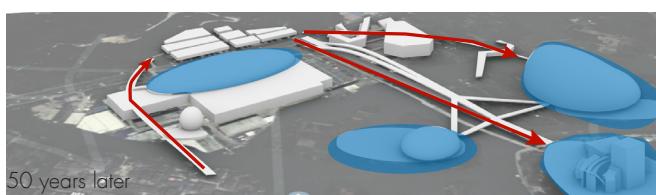
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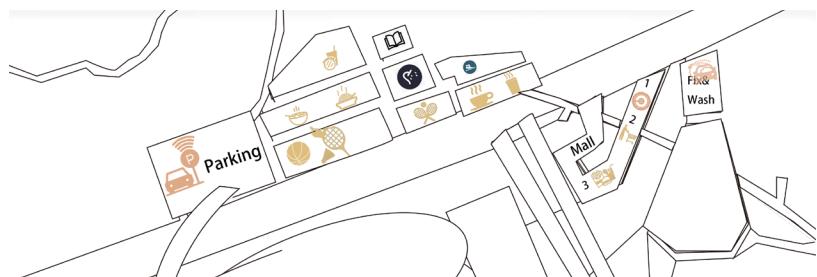
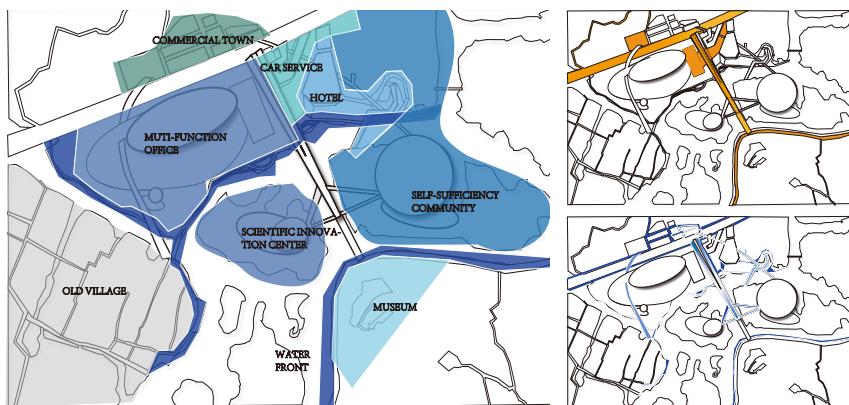
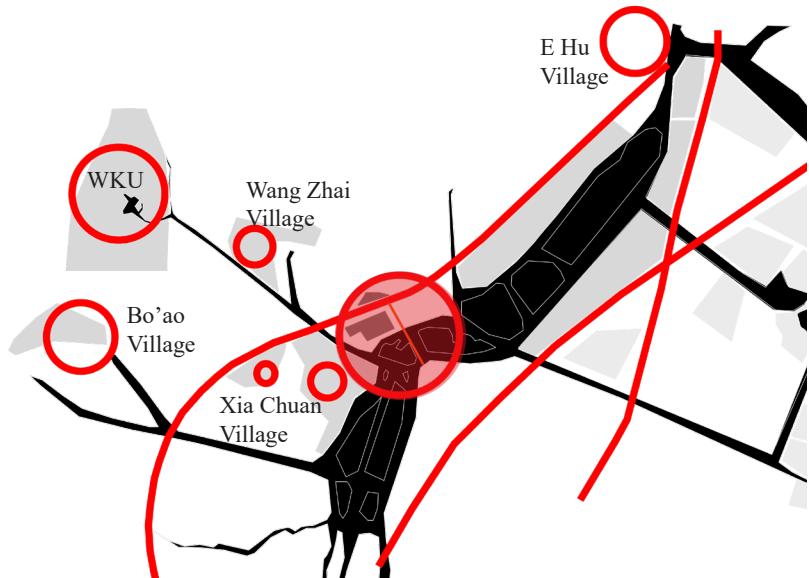


Hills rise and fall with breathing a natural flow of water. Life is activated and refreshed by metabolism. The juncture of Wen Rui River tries to take a breath but the artificial infrastructure suffocates it. The project is centered around the activation of public circulation, where ecological, social and financial activities are carried out and intertwined on the wetland. Without too much intervention to the natural landscape, the continuously mobility of technology and value chains activate the surroundings, result in the new breath.



In order to adapt to the process of removing of the factory, meanwhile cater to the cars and drivers' need, we plan to build a COMMERCIAL TOWN with entertainment and dining function, and a car service center with convenient diagonal passageway to replace the original entrance of the site.





SITE ANALYSIS OF SANYANG WETLAND

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Sanyang wetland has been opened baifa agricultural for several centuries. At present, the land area zhi accounts for 70.9% of the total dao area, and the water area Zhuan only accounts for 29.1% of the total SHU area. 47 percent of the land area is artificial mandarin orange, 15.2 percent is urban construction land, other agricultural land, abandoned land, reservoirs and so on account for 37.8 percent. More than 50% of the water area is provided with cages for fish farming.

The natural vegetation and biological species in the region are relatively single and the level of biodiversity is low. More than 150 species of higher plants were recorded in the whole year, 40% of which were cultivated species. Wild species were mainly grasses, compositae, labiate and polygonaceae, with little growth of wetland plants. More than 30 species of birds, more than 10 species of fish, and basically to the artificial free - range white carp, carp mainly. The species and quantity of other soil animals, benthic animals, insects and other biological groups are 10 ~ 30% of the natural wetland.

Regional environmental conditions in addition to the atmosphere, soil quality is good, the regional water environment quality was badly damaged, the overall water quality is worse V , indicators such as nitrogen, phosphorus, heavy metal exceeds bid badly. The main source of pollution is the inflow of water from the Wenruitang River, the domestic sewage of local residents and the discharge of production waste water from industrial enterprises.



Now sanyang wetland planning of the spatial structure, the principle of positioning has been clear, starting area construction has also achieved initial results. The next step is to give priority to protection, uphold the requirements of sustainable development, and fully display the characteristics of "quiet", "quiet" and "elegant". We should give priority to ecology, give play to the functions of green heart, green kidney and green lung, and create a splendid work of urban ecological construction. We should adhere to the priority of characteristics, highlight the morphological characteristics of "one rong, one pavilion, one bridge and one shop", the ecological characteristics of developed river network system, and the characteristics of nostalgia of Ou Orange township. We should properly implant "wetland + culture", "wetland + creativity", "wetland + leisure", "wetland + wedding" and other functions, and fully show its uniqueness and uniqueness.

We should adhere to the priority of standards, further improve standards and pay close attention to quality, so as to create a good demonstration of modern wetland construction, which is in line with other wetlands in the city, and an important part of the city's comprehensive competitiveness in the future. We should give priority to benefit, always give priority to ecological benefit, develop circular economy to reduce cost, build wetland economy supporting sustainable development, realize the unity of social benefit and economic benefit, and drive the central city to improve function and enhance energy level.

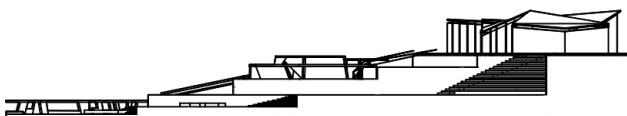
H-Gallery

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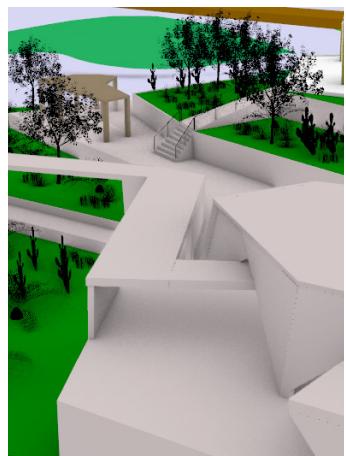
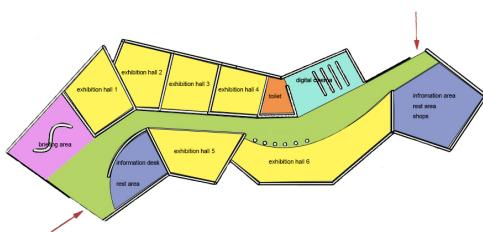
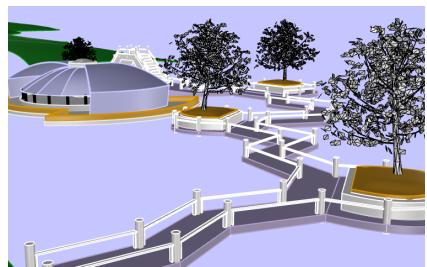
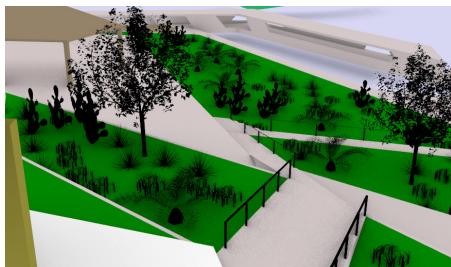
The H-Gallery (Hall Gallery) Project in Sanyang Wetland is intended to create a panoramic viewpoint on top of the artificial terraces. The whole project includes main gallery, small exhibition halls, terraces and the corridor on the water. The project belief is to create an enduringly functional gallery by:

- Reclaiming the terrain to be a part of architecture design
- Having alternative circulation patterns for the public
- Incorporating outdoor sculpture-like architecture within landscape





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CONSTRUCTION WASTE ACCUMULATION CAUSED BY LARGE-SCALE DEMOLITION

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Hazards of construction waste include:
Occupying land and reducing soil quality;
Influence air quality, easy to produce dust pollution;
Pollution of water bodies;
Destroy the city appearance and deteriorate the urban environment;
There is a safety hazard.



The generation of construction waste is characterized by stages, concentration and regionality. By the end of 2015, China's urban area had reached 63.898 million mu. Calculated by 1.5 billion yuan, it covers an area of more than 300,000 mu a year. If construction waste is always buried and piled up, China's urban land will be covered by construction waste in about 200 years.

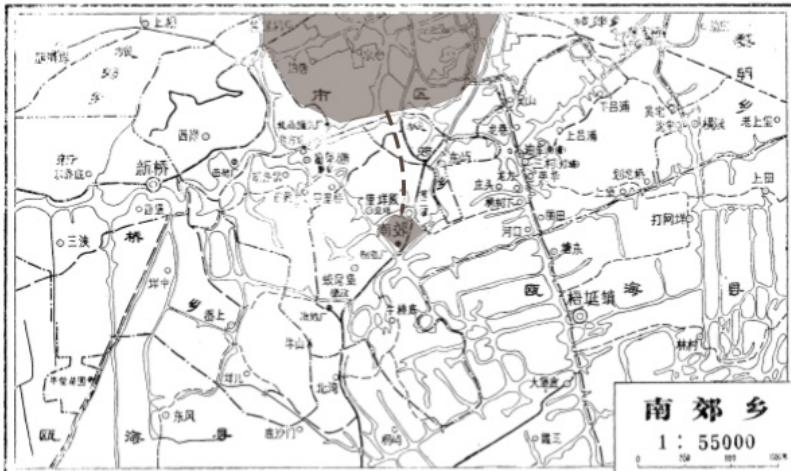
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Solve the problem of construction waste: first of all should have a sober understanding, construction waste is urbanization problems must be solved to a certain stage, the second, which require the participation of the whole society, government, planning, design, construction, operations, demolition workers have to consider, and the social public also want to correct understanding and active support, third, need scientific way, to do well the construction waste management must pay special attention to resource utilization, fourth, correctly handle the reduction, recycling, harmless.

RESEARCH ON THE INTERSECTION OF TWO TOWNS

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This area used to be called the Southern suburbs, and now the new buildings coexist with the old ones, with a fairly typical local character.





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Ten kilometers away from the southern suburbs is the location of the municipal government. As the middle area between the city center and neighboring towns, many problems or characteristics in the process of urban modernization are reflected: large-scale demand for residential housing, environmental governance problems and traffic problems caused by population growth and economic circulation. On one side is the appearance of backward villages, and on the other is the urban demand of modern urbanization, both of which are reflected in this area.





WENZHOU URBAN DESIGN TOOLKIT

Rules of architecture that must be observed in the overall urban planning shall be followed.



TOWARDS AN OPEN AND INCLUSIVE CITY



TOOLKIT FOR ARCHITECTURE

1. IMPLEMENT GREEN CONSTRUCTION.

Green building is a new construction concept advocated by Wenzhou city in recent years. The most effective way to reduce the construction waste caused by demolition and new construction is to implement green construction, which will make the main roads hardened, flat and clean. Rebar in construction area is placed neatly, processing shed, operation shed, cutting shed division is clear. The most easy dust mixing station, cement warehouse set compartment, compartment similar to the closed "room". Sand piles and stones are neatly placed and covered with a safety net, which can effectively prevent dust pollution.

2. CREATE A "SPONGY BODY" FOR THE CITY

Sponge city refers to the urban development mode through strengthening urban planning and construction management, giving full play to the rainwater absorption, infiltration storage and slow release function of ecological systems such as buildings, roads, green space and water system, effectively controlling rainwater runoff, and realizing natural accumulation, natural infiltration and natural purification. Sponge city involves water ecology, water environment, water safety and other aspects.

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Wenzhou should focus on improving the urban water environment, optimizing the construction of urban parks and green space, improving the drainage of urban roads and squares, and promoting the control and utilization of rainwater in buildings and residential areas to promote the construction of sponge cities.

Specific include: protecting the existing wetland, it is strictly prohibited to landfill at river drainage, conditional area to restore the river increase the rate of the surface of the landfill, speed up the river through the backbone, to city "beheaded river", avoid simply in river regulation section bending straightening, hardening of the channel, should reshape the natural bend river line, restore natural deep pools shoals and flood land for non-spot savings and ease the ability, the implementation of ecological restoration, create a variety of biological survival environment;The existing roads can divert rainwater runoff to nearby rivers, wetlands, potholes, sunken green space and other rainwater storage Spaces by means of kerb stone modification, grass planting ditch and overflow port, so as to realize rainwater infiltration, stagnation, storage and drainage after net.Pervious pavement is preferred in city squares, urban slow-moving systems, public parking lots and non-motorized vehicle passages.Government offices, schools, hospitals, cultural and sports venues, transportation venues and commercial complexes and other large public building projects should take the lead in promoting the construction of cavernous bodies, reducing the non-pervious hard pavement area, and supporting the construction of landscape pools and low-lying reservoirs with peak shaving and storage functions if possible.

3.THE PURSUIT OF A BETTER LIFE AS A GOAL, BEAUTIFUL LIVABLE ENVIRONMENT AS BACKGROUND COLOR

Architectural design should focus on people's yearning for a better life, highlight the main axis of high-quality life, and construct new urban functional units with sense of belonging, comfort and future.At the same time, residents should jointly manage community affairs, take the maintenance of the surrounding environment and public security as their own responsibilities, and effectively promote the modernization of community governance system and governance capacity.

4.USE SPATIAL COMPOSITION AND SPATIAL ANNOTATION.

With the rapid expansion of urban layout, the pressure and limitations of urban planning and design are gradually highlighted, and the key points of urban planning should be marked. In the process of building bay area cities, attention should be paid to the construction of infrastructure. Only with superior location conditions and perfect transportation facilities can it provide a good foundation for its development.

For example, in November 2010, the Oujiangkou Industrial cluster was approved by the provincial government as a provincial industrial cluster. This bay area city with a planned area of 130 square kilometers is very different from the traditional city and functional area of Wenzhou in terms of spatial function layout. Along the middle of the planned area, through the creation of water corridor and green landscape system, it forms the urban public activity axis, the industrial development corridor is laid out in the north, and the commercial and residential and public service facilities in the south are mainly built to form a life service corridor, namely, an open spatial framework integrating "north production, middle ecology and south life". Only by rational use of space combination and space labeling, the urban layout concept of Wenzhou can conform to the trend of The Times.

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5.PAY ATTENTION TO BALANCED DEVELOPMENT BETWEEN URBAN AND RURAL AREAS

We should strengthen the planning and construction management of urban villages and the fringe areas of urban and rural areas. In the construction of urban infrastructure and public service facilities, we should give overall consideration to providing services to surrounding rural areas. In light of the conditions in different urban areas, we will focus on developing county towns and key towns

with good basic conditions and great development potential. We will strengthen planning and guidance for the commercial construction land of townships, towns and rural collectives, and promote urban-rural integration, joint construction and sharing of infrastructure.

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