Improvement Scheme of Wetland Protection and Ecological Landscape in Minjiang River Estuary

International Announcement of Tender

According to the relevant documents of Changle District Government of Fuzhou City, the open tendering for the "Development Plan of Wetland Protection and Ecological Landscape in Minjiang River Estuary & Protection Improvement Scheme of Key Sections" (hereinafter referred to as "the Tendering") is launched globally. The relevant matters are hereby announced as follows:

I. Overview of Project

1.1 Background

General Secretary Xi Jinping attaches great importance to the protection of wetlands. As early as when he worked in Fujian Province, he emphasized the importance of wetland protection in the process of building an ecological province. Thanks to his personal concern and promotion, the Wetland Nature Reserve of Minjiang River Estuary was established, and witnessed a leap from of being established as a county-level one, promoted to provincial-level, and elevated to national level in 10 years.

On April 29, 2002, the provincial leaders commented in the Special Report of "Experts Calling for Urgent Conservation of Wetland Resources in Minjiang River Estuary" that: "Wetland protection is an important element of ecological protection. In order to build an ecological province, we must pay attention to the protection of wetlands."

The 20-year Practice of Wetland Protection in Minjiang River Estuary & Publicity Week of 2022 Fujian Wetland Protection was launched on April 29, 2022.

1.2 Adhere to the international vision, give full play to its unique advantages, and make every effort to promote the declaration of Minjiang River Estuary Wetland as an internationally important wetland and world natural heritage

Fuzhou thoroughly studied and implemented Xi Jinping's ecological civilization thought, carried out the important guiding spirit of minjiang Estuary wetland protection, adhered to the international vision, gave full play to its unique advantages, and made full efforts to promote the declaration of Minjiang Estuary wetland as a World Natural Heritage, so as to create a model of Wetland protection in China.

According to the concept that "mountains, rivers, forests, fields, lakes, grass and sand are a community of life", Fuzhou city will make systematic planning and overall promotion, and actively explore the "Fuzhou mode" of wetland protection. Through careful research and planning on the sustainable protection and utilization of wetlands, scientific implementation of wetland ecological restoration projects, accelerate the declaration of internationally important wetlands and natural heritage. We will optimize institutional Settings, deepen cooperation and exchanges with relevant research institutions at home and abroad, actively carry out research on wetland biodiversity protection, and strengthen ecological environment advantages. We will accelerate the improvement of wetland quality, and continue to improve the

wetland and surrounding environment landscape by carrying out the action of ″Protecting river, loving water and cleaning home″, so as to further polish the wetland brand of Minjiang Estuary. By scientifically framing the boundary between protection and development, we will broaden our thinking and conduct in-depth research to develop wetland tourism related industries, enhance the attraction and influence of wetlands, and let the common people share the achievements of ecological civilization construction.

According to the international important wetland and the goal and positioning of the world natural heritage, for scientific support minjiang estuary wetland ecosystem ShanShuiLinTian HuCao sand (sea) integration of ecological restoration, especially for the global professional technical team, public solicitation ″minjiang estuary wetland protection and ecological landscape plan″, through the way of international bidding, Access to the best planning solutions with the wisdom of multidisciplinary experts around the world.

II. Objectives and Content of Scheme and Design

1. Objectives of plan

(1) Benchmarking of first-class quality and international vision

The declaration of "internationally important wetlands and World Natural Heritage" was benchmarked. Based on the international vision, the conservation of the Minjiang River Estuary Wetland is viewed from the perspective of Fujian Province, and the general idea of high standard conservation, restoration and rational utilization of the Minjiang River Estuary Wetlands is proposed. The positioning, characteristics and significance of the Minjiang River Estuary Wetlands in the global, East Asian, national, Minjiang River basin and different levels of biodiversity conservation in the Minjiang River Estuary will be taken into account to create a global model for wetland ecological protection and restoration, and to make the wetlands a model of human habitat in harmony with nature. The focus will be the assessment of the value of the world natural heritage, habitat restoration and enhancement strategies, the creation of ecological product systems, and the sustainable use of resources.

(2) Accurate positioning and outstanding characteristics

By analyzing the competition between internationally important wetlands and world natural heritage at home and abroad and the coastal wetland parks in the region, and combining the analysis of geography, climate and land conditions in the planning area, we propose the direction of differentiated development of the Minjiang River Estuary Wetlands, clearly positioning and showing the characteristics, and obtains competitive unique biodiversity, scenic features, sightseeing routes and ecological products on the basis of realizing the multiple goals of ecological protection and restoration, scientific research, foreign exchange and cooperation, popular science education and recreation.

(3) Integrated plan of land and sea for synergetic development

According to the concept of "Mountains, water, forests, fields and lakes are a community of life", we should have an integrated plan of land, sea and air and the upstream and downstream of the basin, carry out systematic protection and comprehensive restoration, highlight the integrity of the ecological system, and create a global model of wetland ecological protection and restoration; give full play to the spillover effect of the estuary wetlands, and comprehensive consideration of the functions and positioning of the wetlands, optimize the spatial layout of the "ecology - production - life" of the wetland area, realize the complementary advantages and integration with

the surrounding resources, create a synergetic development of the estuary wetlands by land and sea, and build an international wetland brand to support the construction of modern international city in Fuzhou.

(4) Orderly and flexible development by stages.

Wetland protection and restoration and rational utilization is a long-term project, which should have reasonable stages and flexible development room. According to the essence of "3820", the protection and development of minjiang estuary wetland should be promoted gradually and continuously. Focus on the analysis of the minjiang River estuary wetland planning, connecting the construction time sequence of different areas, determine the phased construction plan, comprehensively consider ecological conservation, traffic, landscape, industrial development, capital and other factors, reasonably delimit the key upgrading area, and formulate a detailed planning scheme for the ecological landscape upgrading of the key area in the near future.

(5) Integrated construction and research, and sustainable development

International wetlands and world natural heritage not only have extremely high ecological value, but also have extremely high scientific research value. Focusing on the synergetic development of wetland biodiversity protection and industry, closely connecting with the national development strategy, we plan the key research direction and content of Minjiang River Estuary wetland from the aspects of biodiversity monitoring and protection, bird protection and migratory bird research, treatment technology of Spartina alterniflora Loisel, mangrove protection and restoration, and establish and improve the integration mechanism of construction and research; introduce the concept of sustainable operation and development for planning and design, and encourage social capital to participate in ecological protection, restoration and development, so that Minjiang River Estuary wetland will have healthy and benign operation and sustainable development.

2. Content of plan

The content of the international program solicitation consists of three parts:

(1) Special research

From the perspective of "Wuyishan National Park-Minjiang River-Estuary Wetland- Taiwan Strait" and "East Asia-Australia Migratory Route", this research studies the unique universal value of Minjiang River Estuary Wetland.

(2) Conceptual master plan of wetland protection(2022-2040)

The conceptual plan for the protection, restoration and rational use of the wetlands is proposed with the scope of Fuzhou's nomination for the World Heritage List as the main target.

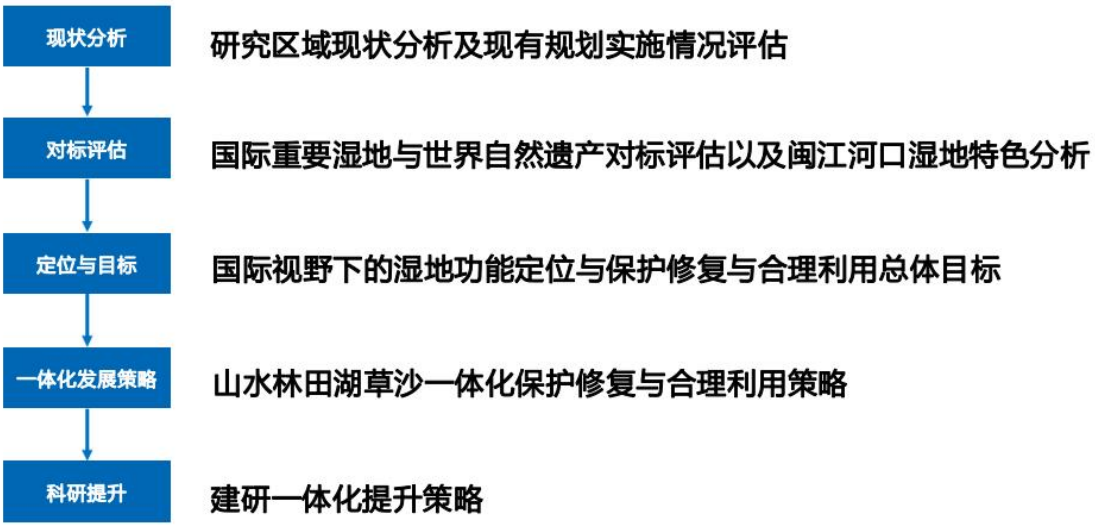
(3) Ecological landscape enhancement planning for key sections(2022-2025)

Taking the Minjiang River Estuary Wetland National Nature Reserve, the Minjiang River Estuary National Wetland Park and the associated impact areas of mountains, forests, fields, lakes and grasses as the targets, the ecological landscape of the important areas will be optimized around activities such as science popularization, scientific research and ecological tourism.

1) Scope of research

The research focuses on the assessment of ecological environment status, concise characteristic value, overall strategy of protection, restoration and rational utilization of Minjiang River Estuary wetlands, and supports the establishment of internationally important wetlands and the declaration of world natural heritage. The research should include but not be limited to three scales: "East Asia Australasia Migration Belt", "Wuyishan National Park-Minjiang River-Minjiang River Estuary Wetland-Taiwan Strait-Taiwan", Minjiang River Estuary Wetland-Chentanggang Basin-Erliuxi Basin, so as to guide the conceptual master plan of the declaration scope and the ecological landscape optimization scheme of key sections.

1）研究框架



1) Research framework	
Analysis of current status	Analysis of the current status of the research area and assessment of the implementation of existing plans
Benchmarking assessment	Benchmarking and evaluation of internationally important wetlands and world natural heritage, and analysis of the characteristics of the Minjiang River Estuary Wetlands
Positioning and target	Positioning of wetland functions in the international perspective with the overall goal of conservation, restoration and rational utilization
Integrated development strategy	Strategy for the integrated protection, restoration and rational use of landscape, forest, lake, grass and sand
Scientific research enhancement	Strategy for the integration of construction and research enhancement

2) Content of research

(1) Analysis of the current status of the research area and assessment of the implementation of existing plans

Based on remote sensing technology and field observation, the basic data of the research area have been collected extensively, and the present status and development trend of Minjiang River Estuary wetland in terms of geographical location, natural resources, ecological environment, economy, society and cultural heritage have been analyzed. The uniqueness of Minjiang River Estuary wetland ecosystem (including but not limited to biogeographic division, species types and migration routes, habitat types, natural resource endowment, ecosystem integrity, economic development and cultural heritage) is analyzed, and the wetland protection elements are comprehensively sorted out. We have evaluated the implementation of the main planning achievements that have been compiled, including but not limited to: Improvement Scheme of Wetland Protection and Ecological Landscape in Minjiang River Estuary (2020-2024), Detailed

Landscape Planning and Design of Fujian Changle Minjiang River Estuary National Wetland Park, Implementation Plan for the Excellent Demonstration Project of Basin Synergetic Protection and Comprehensive Management of Invasive Species in the Minjiang River Estuary Wetland, etc., to benchmark internationally important wetlands and world natural heritage, and sort out the planning implementation results and existing problems.

(2) Benchmarking and evaluation of internationally important wetlands and world natural heritage, and analysis of the characteristics of the Minjiang River Estuary Wetlands

Referring to the Convention on Wetlands of International Importance Especially as Waterfowl Habitat, and the Convention Concerning the Protection of the World Cultural and Natural Heritage, and combining with the analysis of the current status of the planning area, the relevant standards and requirements of internationally important wetlands and world natural heritage are listed, and the outstanding cases of internationally important wetlands and world natural heritage at home and abroad are analyzed with examples. Combined with the natural resource endowment and ecological background of Minjiang River Estuary Wetland, the differentiated characteristics of Minjiang River Estuary Wetland are analyzed from different angles, the world natural heritage value of Minjiang River Estuary Wetland is excavated and refined, and the standards and deficiencies of Minjiang River Estuary Wetland are summarized.

(3) Positioning of wetland functions in the international perspective with the overall goal of conservation, restoration and rational utilization

Based on an international perspective, we analyze the unique value and influence of Minjiang River Estuary Wetland in different levels of biodiversity protection from different scales, such as the world, East Asia (East Asia-Australian migratory birds), the whole country (southeast coast-Taiwan), Minjiang River Basin (Wuyishan-Minjiang River Estuary Ecological Corridor) and Minjiang River Estuary (Lianjiang Aojiang Estuary-Donghu Wetland Park). By analyzing the competition between internationally important wetlands at home and abroad and the world natural heritage, as well as the local wetland park and ocean park, combined with the analysis of the geographical, climatic and site conditions of the planned area, we put forward the differentiated development direction of Minjiang River Estuary wetlands, clearly define its position and show its characteristics, and propose the overall goal of conservation, restoration and rational utilization of Minjiang River Estuary wetlands from the aspects of biodiversity protection, space optimization, landscape shaping, carbon sequestration and sink enhancement, and the realization of ecological product value, so as to support the declaration of internationally important wetlands and world natural heritage of Minjiang River Estuary wetlands.

(4) Strategy for the integrated protection, restoration and rational use of landscape, forest, lake, grass and sand

Based on overall analysis and study of research scope, we focus on sorting out the relationship between Minjiang River Estuary Wetland and Chentanggang River Basin, Erliuxi River Basin, Langqi Island, Binhai New Town, urban and rural development axis, traffic trunk line, traffic hub and surrounding open space, taking into account the relationship between upstream and downstream ecological environment of the basin as a whole, and put forward suggestions for optimizing the layout of wetland "ecology - production - life" space. At the same time, we have introduced the concept of biodiversity protection into other public open spaces in the area, and propose feasible strategies for integrated protection, restoration and rational utilization of mountains, rivers, forests, lakes, grass and sand, focusing on habitat conservation, ecological restoration, land use adjustment, ecological product system building, world natural heritage value mining and refining, and strive to build Minjiang River Estuary Wetland into a global demonstration area for biodiversity protection and an important benchmark for ecological product value realization.

(5) Strategy for the integration of construction and research enhancement

We fully tap the ecological value and scientific research value of the Minjiang River Estuary Wetland, closely link it with the national development strategy, and plan the key scientific research direction of the Minjiang River Estuary Wetland from the aspects of biodiversity monitoring and protection, bird protection and waiting bird migration, peak carbon dioxide emissions and carbon neutralization, treatment technology of Spartina alterniflora Loisel, mangrove protection and restoration, and realization of ecological product value, etc., and propose scientific research topics to support the establishment of important wetlands in wetlands international of Minjiang River Estuary and the application of world natural heritage.

3. Conceptual master plan

1) Planning scope

We have benchmarked the internationally important wetlands and applied for world natural heritage, and the scope of the conceptual master plan is the nominated sites of the declared heritage "Land-Sea Biogeogeographic Zoning Transition Zone of Fujian Minjiang River Estuary Wetland", with a total area of 240 square kilometers.

2 expansion areas are added: Lianjiang Aojiang Estuary Wetland and Donghu Wetland Park in Binhai New Town, with a total area of 23 square kilometers, in order to fully reflect the integrity and diversity of Minjiang River Estuary wetland ecosystem!

Name of the nominated heritage site: Fujian Minjiang River Estuary Wetland: Land-Sea Biogeogeographic Zoning Transition Zone.

Latitude and longitude, or UTM coordinates

Overall scope: 25 48' 51.38 "- 26 04' 33.40" N, 119 35' 51.33 "- 119 47' 59.75" E.

It includes the whole or part of the following natural reserve area:

(1) Fujian Changle Minjiang River Estuary National Wetland Park: 26°01'01.05" - 26°02'44.97"N, 119°36'21.68" - 119°39'09.88"E

(2) Fujian Minjiang River Estuary Wetland National Nature Reserve: 26°01'07.8" - 26°03'39.3"N, 119°36'27.8" - 119°41' 15.1 "E

(3) Fujian Mawei Minjiang River Estuary Wetland Provincial Nature Reserve: 26°02' 52.11 "- 26°04'17.36"N, 119°35'51.33" - 119°41'04.99"E

(4) Fujian Changle Sea Clam Resource Proliferation Protection Area: 25°48'51.38" - 26°04'33.40"N, 119°36'29.88" - 119°47'59.75"E

2) Content of plan

Taking the scope of Fuzhou's nomination to the World Natural Heritage Tentative List as the main object, we put forward the conceptual planning of protection, restoration and rational utilization.

The plan includes but is not limited to

(1) Wetland protection zoning

(2) Overall layout optimization proposal of wetland protection and restoration and rational use

(3) Wetland ecotourism planning

(4) Special planning of wetland protection and restoration

(5) Special planning of wetland interpretation and display

(6) Synergetic plan of community participation and rational use

(7) Special planning of road and traffic

(8) Special planning of wetland management

(9) Key project scope zoning.

(10) Phased action goals (3 years, 8 years, 20 years).

(1) Heritage protection zoning

Based on the assessment of the current status of the wetlands and the "Master Plan of Fujian Minjiang River Estuary Wetland National Nature Reserve" (2016-2025), "Improvement Scheme of Wetland Protection and Ecological Landscape in Minjiang River Estuary" and other related plans, as well as special research, we have determined the heritage area and buffer area of Minjiang River Estuary Wetland, demarcated clear regional boundaries, and put forward protection regulations; put forward control requirements for activities in different regions by taking biodiversity as the core protection object according to the distribution characteristics of wetlands, so as to continue the outstanding universal value of Minjiang River Estuary wetlands; On the premise of giving priority to conservation, we would fully consider the demands of urban and rural development, build necessary public facilities, develop tourist routes, etc. without destroying ecological functions, so as to realize the multiple goals of wetland heritage resources protection, heritage display and tourism experience, and heritage protection and social development on the basis of ensuring the authenticity and integrity of wetlands.

(2) Overall layout optimization proposal of wetland protection and restoration and rational use

Relying on Fuzhou's unique shouldow coastal and geomorphological conditions and landscape spatial pattern, we will adhere to land and sea planning, closely follow the functional orientation of Minjiang River Estuary Wetland, the premise of Minjiang River Estuary Wetland National Nature Reserve, Minjiang River Estuary National Wetland Park and related superior planning, and cooperate with surrounding areas according to the requirements of ecological conservation, sightseeing, regional characteristics and site conditions; put forward suggestions on the overall layout optimization of grass and sand protection, restoration and rational use of space in Minjiang River Estuary wetland for the multiple goals of ecological protection and restoration, scientific research, foreign exchange and cooperation, agricultural production, popular science education, recreation and entertainment on the premise of giving full play to its background advantages, and create a unique internationally important wetland and world heritage.

(3) Wetland ecotourism planning

We will introduce the concept of sustainable operation and development for planning and design, rely on the excellent ecological environment of Minjiang River Estuary Wetland, plan and develop wetland eco-tourism activities and routes on the premise of not exceeding the ecological carrying capacity of wetland, and build a world-class tourism destination with synergetic ecological protection and restoration and rational utilization, so as to achieve self-sufficient and sustainable development. In addition, we will comprehensively consider the surrounding areas such as Wenshang Village and Erliu Village, and further connect the beautiful bay of Binhai New Town to the south and the riverside belt of Minjiang River to the west, so as to link the tourism resources of the surrounding areas, put forward ideas for the tourism development of Minjiang River Estuary, and finally realize the general objective of "Fuzhou on the Sea" tourism construction.

(4) Special planning of wetland protection and restoration

With the investigation and evaluation of the ecological background of topography, hydrometeorology, soil geology, and animal and plant resources within the scope of research, we will have a comprehensive ecological evaluation to clarify the existing ecological problems in the

Minjiang River Estuary Wetland. On this basis, we will adhere to the concept that "Mountains, water, forests, fields and lakes are a community of life" and coordinate the requirements of land ocean, upstream and downstream river basins, onshore and offshore, and diverse habitats; put forward the ecological protection and restoration scheme of Minjiang River Estuary Wetland (not limited to wetland nature reserve and wetland park, with the peripheral area as the preliminary extension area), give full play to the ecological benefits of wetland, create a wetland ecosystem with local characteristics, and protect and improve the biodiversity of wetland ecosystem.

(5) Special planning of wetland interpretation and display

The Minjiang River Estuary Wetland maintains rich and unique biodiversity, and has become the foundation for all kinds of migratory birds from East Asia-Australasia, large marine animals migrating offshore in the northwest Pacific Ocean and the traditional fishing-agriculture communities around it. Our planning should establish the core value of the Minjiang River Estuary Wetland, and put forward the corresponding value explanation and exhibition theme, so as to show the scientific, aesthetic and ecological value of the Minjiang River Estuary Wetland in many ways and dimensions, such as ecological products, eco-tourism, eco-education and eco-experience, so that the public can recognize the outstanding value of the world natural heritage more comprehensively and intuitively, and further promote the whole society to participate in, pay attention to and protect the world natural heritage.

(6) Synergetic plan of community participation and rational use

To examine the protection and utilization of Minjiang River Estuary Wetland from the perspective of sustainable development, we put "community" into heritage protection and management. Our planning should take the participation of stakeholders with the community as one of the core measures to protect the outstanding universal value of the world heritage. By ensuring that the community is clear about the state of the world heritage and understands its connotation, strengthening the community promotion strategy and ensuring that the community knows the benefits brought by the world heritage, the community in and around the world heritage can take an active part in the sustainable protection of the world heritage, give full play to the social value of the world heritage, and make wetlands and communities closely connected，In particular, we should strengthen the integrated development with the surrounding countryside; coordinate the development of local social and economic industries, and promote wetland protection and sustainable and rational utilization.

In addition, we should put forward some suggestions on optimizing the spatial layout of "ecology - production - life" of wetlands in our planning, introduce the concept of biodiversity into other public open spaces in this area, and form a unique international wetland with rich biodiversity and synergetic development of "ecology - production - life" spaces, so that the protection and development of Minjiang River Estuary Wetland will seek common development with Changle District and Fuzhou City, and build Minjiang River Estuary Wetland into a world-class tourist destination.

4. The detailed planning scope of key lots

1) Planning scope

Scope: Fujian Minjiang River Estuary Wetland National Nature Reserve with a total area of about 3128 hectares, Fujian Changle Minjiang River Estuary National Wetland Park with an area of about 246 hectares, and the associated impact area of mountain, water, forest, field, lake and grass with about 1000 hectares. The total area is about 4370 hectares.And the main roads along the affected areas of the expressway entrances and exits, fuzhou main urban area and Binhai New City

2) Content of plan

General requirements

On the premise of the achievement requirements of "Protection, Restoration and Rational Utilization Planning of Minjiang River Estuary Wetland", and focusing on Minjiang River Estuary Wetland Park and its peripheral areas, Evaluate the environmental landscape of the existing key areas and put forward the implementation plan to improve the ecological environment and landscape environmental quality.

Adjust measures to local conditions, optimize the functional layout, optimize the traffic organization, from the characteristics of the landscape node layout, public service facilities, tour route planning, portal building and other aspects of the wetland park landscape improvement plan; We should focus on the improvement of ecological landscape and the construction of high-level scientific research, popular science, tourism and other service facilities. The construction should not only conform to the ecological and functional, but also highlight the aesthetic, integrated into the environment landmark buildings and facilities, so as to support the construction of important popular science exhibition sites and tourist destinations.The scope of protection and optimization scheme for key sections includes, but is not limited to:

(1) The optimization design scheme of the visitor center (including other important supporting service buildings that need to be built) and the surrounding landscape;

(2) According to the surrounding planning, optimize the external traffic organization and improve the landscape along the main roads (including high-speed exits and routes from the main urban areas to the wetland);

(3) Landscape improvement plan for the main gateway area of wetland park and reserve;

(4) The plan of organizing and optimizing the tourist visiting and scientific expedition routes and improving the landscape along the routes;

(5) Suggestions for the optimization of diverse habitats;

(6) Mainly visit the suggestions on improving the ecological landscape of mountains, rivers, forests, fields, lakes, grass and sand around the route, including improving the villages along the route and integrating the service function of estuary wetland tourism.Design of key sections

In order to protect and improve the overall environmental quality of Minjiang River Estuary Wetland, our planning should be based on preliminary research, functional orientation, protection and restoration and rational utilization strategies, etc., so as to define the scope of key sections for protection and improvement, improve infrastructure, optimize landscape features, restore landscape ecology, upgrade the quality of tourist routes, and better realize the recreational, aesthetic, ecological and scientific research values of wetlands. The design unit can supplement the above contents.

(1) Optimal design scheme of tourist center and its surrounding landscape

Tourist center is an important service facility of Minjiang River Estuary Wetland and one of the important components of Wetland Park, which should have two different attributes: landscape and view. Our planning should discuss the main problems existing in the existing tourist centers, consider factors such as natural conditions, topography, landscape features, regional features, functional requirements, etc. On the basis of the existing building forms and functions, we should consider the aesthetic, practical and operable renovation scheme, and put forward the optimized design scheme for the building facade, building interior space and surrounding landscape.

(2) Optimization of basic supporting facilities such as comprehensive service and the management area in the park

Optimize the internal and external traffic organization, improve the comprehensive service and

management area of the park and other basic supporting facilities .

Optimize the traffic organization inside and outside the park, distinguish between external arrivals and internal visits, reasonably plan the connection mode, and systematically improve the layout of entrances and exits, parking lots, scenic spot identification system and supporting service buildings. Protection areas and tourist areas should set up differentiated traffic systems, reasonably layout of tourist road design and traffic organization, reasonably set up tourist volume and scenic spot capacity demand. Put forward the renovation and upgrading scheme for the existing service buildings, and put forward the design scheme for other planned supporting service buildings, while integrating the construction concept of smart wetland.

(3) Landscape optimization scheme along the tourist visiting route and scientific research route

We will plan the tourist route and scientific research route, as well as the level, type, length and capacity of the tour route, etc., according to the factors such as landscape characteristics and tour modes. Tour routes should be convenient, safe and selective, so that tourists and scientific research personnel can enjoy more landscapes and their essences in the shortest possible time, and have convenient and clear contact with the main tour facilities to avoid repeated tours. We will also focus on the leisure facilities, structures and service facilities along the tourist visiting route and the scientific research route, and define the form, size and materials of the facilities.

(4) Quality improvement of Minjiang River Estuary National Wetland Park

According to the principle of "ecological priority, scientific restoration, moderate development and rational utilization", we will upgrade the existing wetland park area as a whole, fully tap the cultural connotations of wetlands, farming and fishery, and build the park into a national coastal wetland park integrating wetland protection, scientific research monitoring, publicity and education, wetland sightseeing, leisure and vacation, as a complementary function of Minjiang River Estuary Wetland National Nature Reserve.

(5) Suggestions on habitat construction optimization

According to the superior planning and the promotion of this conservation planning, we have defined the habitats that should be restored, and put forward specific measures for habitat construction based on the ecological habits and living habits of different wildlife, wetland types, wetland functions, utilization intensity and other factors, including fire prevention facilities construction, wildlife protection publicity and system construction, habitat restoration and reconstruction, monitoring and control of harmful organisms, monitoring of wildlife epidemic diseases, etc., so as to increase the species and quantity of wildlife in the wetland park and enrich the biodiversity of the wetland park.

Quality improvement of external traffic entrances and important routes

In connection with the implementation of the superior planning and related special planning, we will combine the Minjiang River Estuary Wetland with the important traffic routes of the airport, the main urban area and Binhai New Town, and put forward ideas and opinions on the improvement of the landscape features along the route, so as to make it match the features and functions of the wetland. The improvement contents include the landscape, service facilities, landscape sketches and greening of the roads and both sides. At the same time, we will combine the construction of beautiful countryside and the land use planning along the route, make overall consideration of tourism management planning, guide the setting of tourism-related products such as cultural leisure vacation, eco-tourism agriculture, fishery, etc., and build a traffic corridor and urban-rural vitality belt connecting the Minjiang River Estuary Wetland with the surrounding tourism resources, so as to drive the overall development of the surrounding areas and realize sustainable ecological protection and synergetic development of the regional economy.

Feature requirements:

It is necessary to study, evaluate and propose planning and design schemes for the landscape environment of key areas in different seasons and periods from the ground, air and water. It is necessary to integrate the features and features of wetland park from an international perspective, put forward the landscape design suitable to it, and form a distinctive and iconic landscape node.

III. Scope and Content of International Tender

Stage of conceptual planning

To complete the conceptual scheme of Development Plan of Wetland Protection and Ecological Landscape in Minjiang River Estuary & Protection Improvement Scheme of Key Sections

Stage of plan deepening

With the assistance of Fuzhou Planning & Design Research Institute Group Co., Ltd., the bid winner should integrate other schemes, and optimize the Development Plan of Wetland Protection and Ecological Landscape in Minjiang River Estuary & Protection Improvement Scheme of Key Sections

IV. Type of Bid Invitation

This bidding invitation includes two stages: qualification shortlisting and scheme selection.

(I) **Qualification shortlisting:** We will recruit outstanding design units at home and abroad through public registration, and determine the shortlist through qualification and concept proposal selection, and allow joint bidding. Bidders need to provide relevant certification materials that can show the design strength of the team, including qualification level, chief designer and team members, performance certificates, etc., and put forward a brief idea of planning. The prequalification includes but is not limited to the following:

(1) Understanding of the project, key problem solving, working ideas and planning concepts;

(2) A description of the technical route, development goal and development strategy of the project;

(3) A general idea of the project and the general spatial structure;

(4) A description or local design of the future spatial characteristics of the project;

(5) Team organization and division of labor, time node plan, etc;

(6) Case studies with reference value and their relevant analysis of the content associated with this project;

(7) The contents and practices that can be learned from the design unit's past design projects.

Finally, 5 bidders will be selected by the experts to enter the next stage of proposal selection. If the number of bidding units or shortlisted bidding units does not meet the requirements, the organizer reserves the right to terminate the bidding.

(II) Stage of scheme selection

The shortlisted bidding units are required to submit the design results in accordance with the Design Specification of Development Plan of Wetland Protection and Ecological Landscape in Minjiang River Estuary & Protection Improvement Scheme of Key Sections. The organizer will organize experts to recommend the scheme selection and ranking, report it to the municipal government to study and determine the ranking, and entrust the first selected design unit to carry out the follow-up scheme integration and deepening tasks. The scheme should deepen and absorb the advantages of each bidding scheme, and refine and integrate into a holistic and original design scheme according to the opinions of the municipal government, headquarters, expert review and

other parties, so as to guide the planning and implementation.

V. Requirements of bidding

(I) This bidding adopts the method of public registration, and both domestic and foreign design units can sign up for it. The consortium is allowed to sign up, and the number of consortium members is not more than 3. Registration of natural persons and combinations of natural persons will not be accepted. All parties should not form a consortium to participate in the bidding in their own name or with other bidders.

(II) The institutions or consortia that sign up for the program should have Grade A in forestry survey planning and design, Grade A in landscape architecture, Grade A in urban planning or Grade A in architectural design (foreign institutions have corresponding achievements). The lead unit must have the first-class national wetland planning and design achievements at home and abroad, and the project leader of the design team must have the achievements of the project leader or technical leader of the national wetland park planning and design.

(III) The bidding units are encouraged to cooperate with different fields and integrate teams with different experiences in ecological protection, planning and design, landscape design, architectural design, etc.

(IV) Bidding units with the following conditions are preferred:

(1) Experience in planning and designing national wetland reserves or parks;

(2) Experience in applying for world natural heritage or natural and cultural heritage projects;

(3) The bidding unit with academicians or masters at home and abroad who have undertaken similar projects as the chief designer;

(4) The chief designer of the project who has won international or domestic awards in related industries.

VI. Requirements for Achievements

6.1 Special report

To collect relevant basic information of the research area extensively, benchmark the relevant requirements of internationally important wetlands and world natural heritage declaration, and combine on-site investigation, remote sensing technology and on-site observation to form a special research report, the main contents of which include but are not limited to:

(1) Related research progress at home and abroad;

(2) Analysis of the current situation of the research field;

(3) Implementation evaluation of the existing plan;

(4) Benchmark evaluation of internationally important wetlands and world natural heritage;

(5) Relevant cases and characteristics analysis of Minjiang River Estuary Wetland;

(6) Overall goal of wetland function positioning, protection, restoration and rational utilization from the international perspective;

(7) Integrated protection, restoration and rational utilization strategy of landscape, forest, lake, grass and sand;

(8) Promotion strategy of integration of construction and research;

(9) Conclusions and suggestions;

(10) Reference

6.2 Conceptual Master Plan for Wetland Protection in Minjiang River Estuary

(1) Instructions:

The main contents include, but are not limited to: general principles, location analysis and current situation analysis; evaluation of the implementation of the existing plan; benchmarking evaluation of international wetlands and world natural heritage declaration and analysis of wetland characteristics; heritage assessment, wetland function positioning analysis, protection, restoration and rational utilization strategy; suggestions on the synergetic development of "ecology - production - life" in wetland and surrounding related areas; general layout of wetland protection, restoration and rational utilization; Special project of ecological protection and restoration; landscape promotion project; organize special transportation projects; eco-tourism planning; scope of key sections and protection and optimization scheme; construction sequence; investment estimation, etc.

(2) Maps and drawings:

The graphics and texts are required to be clear, complete and standard, which can clearly express the design intent and content. The drawings are complete and accurate in size, and the scale must be marked. The specifications of similar drawings should be as uniform as possible. The text description and annotation of the document should be written in simplified Chinese. The drawings include but not limited to:

(1) Location analysis map

(2) Status analysis chart (including natural conditions, social conditions, land use status, road traffic status, etc.)

(3) General layout of protection, restoration and rational utilization.

(4) Division of heritage protection

(5) Ecological protection and restoration plan

(6) Heritage protection measures

(7) Traffic organization optimization diagram of the area

(8) Eco-tourism planning map

(9) Pet-name ruby associated regional "ecology - production - life" space synergetic development planning map

6.3 Ecological landscape enhancement planning for key sections

On the basis of the overall planning, the design unit should put forward upgrading plans and optimization suggestions for the gateway landscape, traffic lines, landscape nodes, landscape sight lines and key facilities in key sections. The planning results should meet the depth requirements of constructive detailed planning, including current situation analysis, resource evaluation, strategy and objectives, zoning, structure and layout, general planning, special planning, etc. Put forward clear control requirements and design guidelines, and put forward the scope of wetland protection and design ideas.

6.4 Protection and optimization scheme for key sections

(1) Instructions:

(1) Topography, water bodies, roads, present buildings (structures) and present vegetation distribution in key sections.

(2) Explanation of the design concept, design conception, functional zoning and landscape zoning;

(3) Vertical design, garden road design and traffic analysis, planting design, architecture and

sketch design, structural design, water supply and drainage design, various professional engineering planning and pipe network synthesis, land balance table, main technical and economic indicators, investment estimation, etc.

(2) Maps and drawings:

A) General plan

B) Functional zoning map

C) Vertical design drawings

D) Garden road design and traffic analysis diagram E) plant layout plan

F) Design drawings of major scenic spots

G) Design drawings of main buildings and structures (including the location, function, form, control size, renderings, etc.).

H) Water supply and drainage, electrical design drawings

I) Other special design drawings

6.5 Form of results

1. Paper documents: The above drawings should be bound into a book according in A3 specifications, and no less than 12 sets of final achievements should be submitted.

2. Electronic documents: all design results should be made into electronic documents, and the text documents should be in doc format of Microsoft Word; graphic files are dwg format files of Auto CAD, and picture files such as computer renderings should be JPG and PDF formats. 2 sets of above electronic documents should be submitted.

3. Multimedia automatic report file: 2 sets of multimedia automatic report files reflecting the design idea are provided, which are suitable for the report. The format is avi, and the scheme of key nodes is demonstrated by three-dimensional animation, and the demonstration time is controlled within 15 minutes. The presentation must be accompanied by background music and explanations in Mandarin Chinese.

VII. Fee Setting

In this bidding activity, the design fee (tax inclusive) will be paid to the five bidders who are qualified and participate in the scheme review:

The 1st place: The winning bidder will be qualified for the project scheme design contract. After the integration and optimization of the project scheme are completed, the total scheme design preparation cost will be RMB 3.1 million.

The 2nd place: get the compensation fee of RMB 800,000;

The 3rd place: get the compensation fee of RMB 500,000;

The 4th place and the fifth place: the compensation fee is RMB 400,000 each.

The bidding units that are not shortlisted in the qualification comparison stage will not receive compensation.

Note: The design fee and compensation fee of this project will not be adjusted due to the organizer's adjustment of urban planning or scheme design scale, and the bidder should fully respond. All expenses (including travel and accommodation expenses) incurred by the bidding unit to participate in this bidding should be borne by itself.

VIII. Schedule

This bidding is divided into two stages: qualification shortlisting and scheme selection. The specific schedule is as follows:

Date	Mater
Stage I Qualification shortlisting	
May 12, 2022	Announcement of Solicitation
17:30PM, May 17, 2022	Accept registration and issue relevant materials for prequalification
17:30PM, May 27, 2022	Deadline for submission of prequalification materials
May 28, 2022	Hold a prequalification meeting, announce the prequalification results, and send invitations to shortlisted design firms
Stage II Scheme preparation and review	
June 1, 2022	Hold project press conference, site visit, q&A, etc
17:30PM，July 20, 2022,	The deadline for submission of the design institution's planning scheme
July 21, 2022	Hold a planning review meeting
July 25, 2022	Publish the solution review results
8 August 2022	Submit the optimization planning results at the scheme stage

IX. Registration Method

(1) The bidding unit downloads the registration form (the attachment of the registration form can be found in Http://www.chinabidding.com.cn/index.html, Http://bulletin.cebpubservice.com/, http://www.planning.org.cn/, https://www.fzztb.com/, and https://Ggzyfw.fujian.gov.cn/, http://www.ccgp.gov.cn/. You can fill it out and send it to e-mail fjscczb@163.com. After receiving the application form, the organizer will reply to the prequalification documents by email. The deadline for registration is: 17:30, May 27, 2022. Late or non-compliant registration information will not be accepted.

The summary of the application documents of prequalification application documents should be sent to the mailbox fjscczb@163.com in excel format before 17:30 on June 2, 2022.

(II) The prequalification application documents should be made in strict accordance with the relevant requirements, and the prequalification application documents submitted include: On-site submission and express mail.

1. **The power of attorney of the legal representative** is required when submitting on site. If it is in the form of a consortium, **a power of attorney from the legal representative of the design unit led by the consortium** is required.

2. When submitting by express mail, please reserve enough express transportation time, **which is subject to the delivery time of materials**. Tenderers **should do a good job in express package,**

for example, using cartons or foam boxes for package. The consequences caused by data damage and loss in the mailing process should be borne by the bidding unit itself.

(III) Time and place of submitting prequalification application documents: The bidder should submit the written documents of prequalification application documents to the following designated place before 17:30 on May 25th, 2022. The application documents for prequalification should be submitted to the address: 17/F, Building 3, Huaxiong Building, No.1 Liangcuo Road, Gulou District, Fuzhou City, Fujian Province. The time for receiving prequalification application documents is from 09: 00 to 17: 30 Beijing time on weekdays, and the prequalification application documents submitted late will not be accepted.

(IV) Notice of prequalification results: within 3 working days after the list of shortlisted bidders is determined, the selection results of shortlisted bidders will be published in the form of announcement.

(V) Contact person and contact information: Mr. Lin 1885506059402, Mr. Lin 0591-; Consultation time: 08: 30-12: 00 am and 14: 30-17: 30 pm (Beijing time) on weekdays. E-mail：fjscczb@163.com

X. Prequalification Documents

The prequalification application documents are composed of two parts: the application documents and the concept proposal, which must be separately compiled.

(I) The content requirements of the registration documents

A4 size (210mm×297mm), 1 original and 7 copies, no more than 40 single pages (double-sided printing, page number only up to 80, page limit excluding front cover, back cover, title page and catalogue), bound.

(1) Application form for international bidding project of Minjiang River Estuary Wetland Protection and Ecological Landscape Enhancement Scheme

(2) Bid Statement

(3) Consortium Agreement

(4) Qualification certificates such as business license or valid organization registration documents.

(5) Identity certificate and power of attorney of the legal representative

(6) Basic information and brief introduction of the bidding unit

(7) Summary table of project team personnel list

(8)Resume Form of Project Chief Designer

(9) Resume form of project team members

(10) Summary of similar project experience

(11) Other materials.

For details, please refer to the format of prequalification application documents in the bidding documents.

(II) The conceptual proposal is made in A3 horizontal layout design text, with 1 original and 7 copies, and single-sided color printing, with no more than 30 pages (excluding the front and back cover). The contents include but not limited:

(1) Understanding of the project, key problem solving, working ideas and planning and design concepts;

(2) Description of the technical route, development goal and development strategy of the project;

(3) The overall idea and overall spatial structure of the project;

(4) Description or partial design of the future space features of the project;

(5) Team organization and division of labor, time node plan, etc.; (6) Relevant analysis of cases with reference value and related contents of this project;

(7) The contents and practices that can be used for reference in the past design projects of the tendering units.

Notes

(1) Prequalification documents should be signed by the legal representative of the bidding unit or its authorized representative, and stamped with the official seal (or electronic seal) and seal. If signed by the latter, a "power of attorney from the legal representative" should be provided.

(2) The original and all copies of a full set of prequalification documents should be printed, written or copied with indelible ink or ink, and signed by the legal representative or his authorized representative, and stamped with the official seal (or electronic seal) of the tendering unit. The prequalification documents should be free from alteration and interlining, unless these changes are made according to the instructions of the documents, or to correct the errors caused by the tendering units that must be modified. In case of any change, the authorized representative should sign the certificate or affix the correction seal to the modified part.

(3) All the qualification standard certificates in the prequalification documents must be stamped with the official seal (or electronic seal) of the bidding unit within the validity period. Otherwise, the prequalification documents will be regarded as invalid bids in compliance inspection. If bidding for a consortium, the prequalification application documents of all members of the consortium should be stamped with their respective official seals (or electronic seals) and sewing seals.

(4) Prequalification application documents should be cataloged and numbered.

(5) The language of the application materials for prequalification documents must be mainly Chinese, and English or other foreign languages must be used, and both Chinese and English formats must be provided. In case of any inconsistency between Chinese and English, Chinese should prevail.

(6) If the prequalification documents are not filled in according to the format specified in the guidelines and the prequalification documents are illegible, the bid will be invalid.

XI. Platform of Announcement

The official announcement will be published in China's procurement and bidding network http://www.chinabidding.com.cn/index.html, China's public bidding service platform http://bulletin.cebpubservice.com/, Urban Planning Society of China http://www.planning.org.cn/, Fuzhou Electroni Tendering Exchange Platform for Construction Project https://www.fzztb.com/, Fujian Province Public Resource Trading Electronic Public Service Platform https://ggzyfw.fujian.gov.cn/ and Chinese Government Procurement Website http://www.ccgp.gov.cn/, China's government procurement network. In case of any inconsistency between Chinese and English in this announcement, the Chinese version should prevail.

Sponsored by:

Fuzhou Changle District People's Government

The tenderer:

Fujian Minjiang Estuary Wetland National Nature Reserve Management Office

Organized by:

Fujian Chengcheng Bidding Agent Co., Ltd