Planning and Design of New Rural Characteristic Landscape under the Background of Rural Revitalization

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Abstract. With the increasingly serious urbanization in rural construction, in order to maintain the original style of the countryside, through the field investigation and data analysis of Xinzhou District in Wuhan City, this paper studies the design status of local rural landscape. It takes the landscape design of Qubeihu village in Xinzhou District of Wuhan City as an example, follows the goal of green ecology and people-oriented sustainable development, and combines with the folk culture characteristics of Qubeihu village. It is integrated into the ecology, production and life, so as to realize the comprehensive sublimation of economy, culture and ecology of Qubeihu characteristic rural area.

1. Introduction
General Secretary Xi Jinping put forward the strategy of Rural Revitalization in the Nineteen Major Reports of the Party on October 18, 2017. In September 2018, the CPC Central Committee and the State Council issued the strategic plan for Rural Revitalization (2018-2022 years). This design is guided by general Secretary Xi Jinping's important exposition on the work of agriculture, rural areas and farmers, and makes phased planning for the implementation of the Rural Revitalization Strategy. In order to thoroughly implement the new rural landscape planning, Qubeihu village, Xinzhou District, Wuhan City, combined with the decision-making and deployment of "agriculture, rural areas and farmers", carried out the characteristic rural landscape design of the site, realized the organic combination of new rural production, new rural life and new rural ecology, grasped the rural landscape prototype, followed the rural topography, continued the rural cultural characteristics, and realized the sustainable development of the new rural, so as to promote the overall progress of ecological environment of Qubeihu village.

2. General situation of Qubeihu village in Xinzhou
2.1. Site overview
The design plot is for the reconstruction of new rural land. The base covers an area of 97666.38 square meters, with a total construction area of 12042.24 square meters. The building covers an area without height difference, and the drainage slope is 3%. Xinzhou’s tourism landscape resources are not many, but it has its own characteristics. In Xinzhou, there are Yangluo Xianglushan cultural site in the south, Daoguanhe scenic spot in the north, Baoen temple, Zixia temple, Jiangjun mountain, Kogtan bridge and other 18 places of interest. Wenjin academy is as famous as Bailu academy, Donglin Academy and...
Yuelu Academy in history. It is also known as China's four major academies. In 2002, it was listed as a cultural relic protection unit in Hubei Province. Formatting author names

The list of authors should be indented 25 mm to match the abstract. The style for the names is initials then surname, with a comma after all but the last two names, which are separated by ‘and’. Initials should not have full stops—for example A J Smith and not A. J. Smith. First names in full may be used if desired. If an author has additional information to appear as a footnote, such as a permanent address or to indicate that they are the corresponding author, the footnote should be entered after the surname.

- Building status: there are 24 buildings in the base, all of which are residential buildings.
- Road status: the base has two main roads about 8 meters wide, three secondary roads, nine residential roads, each road about 6 meters wide. The design should consider the problems of the internal lane and urban road of the base.
- Flow analysis: the main population in the base is the middle-aged and the elderly, and a small number of children.

2.2. Cultural overview
Xinzhou District, Wuhan City, the most worthwhile to visit is the Daoguan River scenic spot in Xinzhou District, where the scenery is beautiful, picturesque mountains and rivers. Especially after the rain, the mountain fog is hazy. Qubeihu village, the north end of Xinchong Town, is adjacent to Chengguan, with a land area of 2.2 square kilometers, 1556 mu of cultivated land and 300 mu of breeding area. Although it is close to Qubeihu lake and Xiaochong Xiaogang, it is commonly known as "Hanbaozi" and "Shuidaizi".

3. Analysis of the existing problems in Qubeihu village of Xinzhou

3.1. Village appearance
With the continuous development of the society, the village construction mostly follows the urban construction mode, and a large number of layout modes are similar. There is neither the form beauty of single building, nor the combination beauty of cluster building. Finally, the village space form without characteristics and the rigid single visual effect are formed. Qubeihu village is located at the edge of Wenjin Avenue. The village units close to the road are not provided with village infrastructure, and the pollution caused by vehicle noise and exhaust on the road has not been properly treated.

3.2. facilities
There is no green space design inside the base, and the planting form is single, which can not increase people’s space experience, and there are no parking spaces for motor vehicles and non motor vehicles. The surrounding environment of the water area is disordered, and weeds grow in front of the house.

3.3. Ecological environment
The overall greening degree of the village is general, so it is necessary to further green the flower beds in front of each household and improve the road greening.

3.4. Weak consciousness
Through field research, we can see that a large number of villagers do not have a strong awareness of the importance of landscape design, and their awareness is still in a fuzzy state. This will lead to villagers’ unconscious protection of folk characteristics, and landscape architects’ blind design for local culture.

4. Overall planning and design ideas

4.1. Planning objectives
The goal of this design is to create a new carrier for the development of "agriculture, rural areas and farmers", cultivate professional farmers, increase farmers' income, promote agricultural efficiency, and finally achieve "excellent ecology, beautiful village, special industry, rich farmers, strong collective and good rural style". The landscape design of Qubeihu village in Xinzhou District of Wuhan City adheres to the principle of balancing land development, providing villagers with a better living environment and enhancing residents’ living happiness under the general index of not affecting land use. Sections should be numbered with a dot following the number and then separated by a single space:

4.2. Planning principles

- Adhere to the people-oriented, improve the characteristic industry. We should promote characteristic agriculture with advantages and potential, and optimize the industrial structure. Based on the local cultural characteristics, the characteristic industry of Qubeihu village is constructed.

- Protect the ecological environment and highlight the characteristic landscape. Fully excavate the long historical and cultural connotation and abundant natural resources of Qubei lake, including objective and subjective non-material culture, carry on the inheritance and innovation to the cultural characteristics of Qubei lake, extract its essence from the dross, and construct the rural village with cultural characteristics.

- Respect the wishes of the villagers and guide them to create together. Respect the dominant position of the villagers, protect the villagers’ planning will, and avoid forced demolition. To investigate the local villagers and sort out their opinions and suggestions, so as to form the characteristic rural construction jointly built by the villagers.

4.3. Design ideas

Based on the flower festival of Qubeihu village, combined with the natural geographical advantages of Qubei lake, taking the culture accumulated in "Confucius Temple" as the theme, through the construction of catering, entertainment, planting, agriculture and the output of cultural products, the culture of Qubeihu village is introduced to create a new countryside with "Qhuashuiyun" characteristics, which is characterized by leisurely rural life, exclusive pastoral leisure and cultural experience of Qubeihu village. Because the name of the area where the plot is located is "Qubei Lake", there are Qubei lake and HuaZhao Festival. Taking these two design inspiration as the source, the theme image takes flower culture and water culture as the theme, which are respectively Xiyuan, Shuiyuan and Huayuan. With indirect hard pavement as the main part, the winding water flowing cup shuttles through the woods, and the gurgling sound of spring lingers in them. All of these can create a quiet atmosphere of the venue and highlight the cultural characteristics of the theme.

5. Construction method of characteristic landscape

5.1. Space planning and landscape design

From the functional distinction, the main activity square, green area, Baihua garden, picking garden, Qushui Liuqi Pavilion and cycling greenway around the lake are formed. Taking the road as the main landscape vein, the new rural layout of water field flower village is formed, so as to improve the overall ecological environment of Qubeihu Village. At the same time, combined with the water system, the important nodes are more abundant, such as the landscape pool at the entrance and the landscape fountain at the sub square (as shown in Figure 1). Combined with the local Huazhao Festival, the flower garden is mainly planted with flowers. The lively and bright colors contrast with the other two areas to set off the different atmosphere and the unique geographical location of Qubei lake. The local cultural history is excavated to give it new functions and new meanings. For example, the Qushui River wine cup Pavilion is just like the people are interleaving and drinking in Wang Xizhi’s the Orchid Pavilion.
5.2. Landscape design of public space

In order to improve the landscape of public places, we should create the art of the main activity square, combine the architectural style with the surrounding environment in a simple way, and show the new characteristic rural landscape. The use of arc-shaped landscape gallery can not only provide leisure and entertainment places for the villagers, but also increase the diversity of the main square, and ingeniously combine with local materials to more vividly display the cultural characteristics of Qubeihu village (as shown in Figure 2). Qubeihu Village has also set up a recreation square, with the arc-shaped landscape pool as the center. Local materials are used to provide a spacious square for the villagers living here, create an outdoor stage with the characteristics of Qubei lake, train the villagers to become dancers and singers, and show the unique cultural characteristics of Qubei lake.

5.3. Infrastructure design

The current situation of Qubei lake has no perfect drainage system, so the rainwater and domestic sewage can not be discharged nearby, which causes certain pollution to the water resources in the village and has certain adverse effects on the villagers living here. In view of the present situation, the treatment method is the centralized sewage pipe network discharge, and the rainwater is discharged into the nearby ditch and ecological garden. The power pipeline in the village should be laid along the planned reserved road as far as possible. The communication facilities in the village shall be laid along the road as far as possible, and the lines shall be laid overhead. The main landscape belt is laid with underground buried lines. Garbage collection points and two public toilets are set up in the village. Garbage cans are generally placed on both sides of the road, with a general spacing of 80m ~ 100m. Its shape should have village characteristics.

5.4. Green landscape design

The villagers are encouraged to plant green plants such as flowers and trees in or around their front courtyard and backyard, and set up bonsai to add green ornament to the village. Ornamental plants such as Osmanthus fragrans, jasmine, Ginkgo biloba, Cinnamomum camphora, red maple, etc., are planted along the village road, so that the village has vegetation blooming all year round and the fragrance of flowers overflows. In order to increase the richness and diversity of rural garden, Ligustrum lucidum, Manila grass, Hydrangea rubra, perennial grass and so on were selected in the ground cover and shrub. There are four principles for plant configuration in Qubeihu village: firstly, more local tree species should be selected to highlight the regional characteristics; secondly, ecological protection principle should be adopted to retain the original trees and reasonably match shrubs and ground cover plants; thirdly, landscape artistic principle should be adopted to make use of the cloud crown line of plants as the basis, stagger and interweave as the criterion, and color matching as the auxiliary; fourthly, economic adaptability principle should be adopted to make good-looking plants. Considering the cost of production, we can choose fruit trees that are both ornamental and practical, such as peach, pear, grape, pomegranate, etc.
6. Conclusion
Under the background of the new era, the new rural landscape design is facing great challenges and opportunities. From the new rural reconstruction of Qubeihu village in Xinzhou District of Wuhan City, we can draw the following conclusions: in the process of building characteristic villages, through the questionnaire survey of villagers, we should pay attention to the participation of villagers, focus on people, and enhance the sense of ownership of villagers; we must pay attention to the protection of village culture, and highlight local characteristics; we also need pay attention to the construction of landscape architecture, and improve the quality of life of villagers. In the process of participating in the field projects, problems such as waste treatment, sewage treatment, landscape vegetation and imperfect infrastructure were found. Generally speaking, the new rural characteristic landscape design needs to solve the basic problems of the new rural construction according to local conditions, which is also the key problem of our new rural characteristic landscape design.

References
[1] Zhang Wei, Su Qi. Construction of characteristic rural landscape under the background of Rural Revitalization Strategy: a case study of Xiaojiaxiang, Shuangtang village, Fenghuang Town, Zhangjiagang [J]. Design, 2020,33 (16): 148-151.
[2] Zhao Dongyan. Research on landscape design of rural areas with regional culture characteristics - Taking Houwei village in Pukou District as an example [J]. Green building materials, 2020 (05): 250-252.
[3] Deng Hui, Zhu Ning, Qin yuan. Landscape design of New Countryside Based on landscape prototype -- Taking the landscape design of Sishe village in front of Yangshan in Wuxi as an example [J]. Beautiful & Times (Urban Edition), 2019 (11): 49-51.
[4] Li Cheng, Qi zhewei, Yan Yu, Kang Xiao. Landscape planning and design of rural rehabilitation: a case study of Beishicao village in Tai’an City [J]. Journal of Shandong Construction University, 2020,35 (04): 86-93.
[5] Fan Wenwen, Chen Dongtian, Tan Xiaolei, Zhang Han, Xing Zhiying. Integration and expression of experience design in rural landscape planning and Design: a case study of Daheyu village in Tai’an [J]. Journal of Shandong Agricultural University (NATURAL SCIENCE EDITION), 2020,51 (03): 577-581.