

SMILE RETURN

An abandoned village suffered by airport noise reborn through low-impact design

Smiling Lion Cultural Village

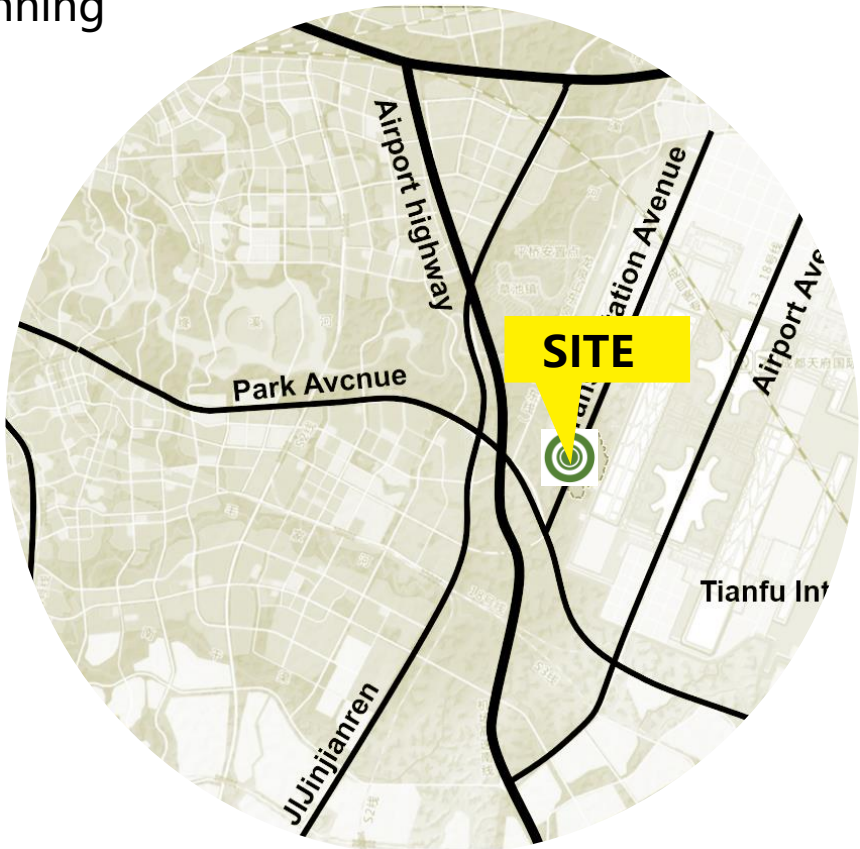




SMILE RETURN——AN ABANDONED VILLAGE SUFFERED BY AIRPORT NOISE REBORNED THROUGH LOW-IMPACT DESIGN

BACKGROUND

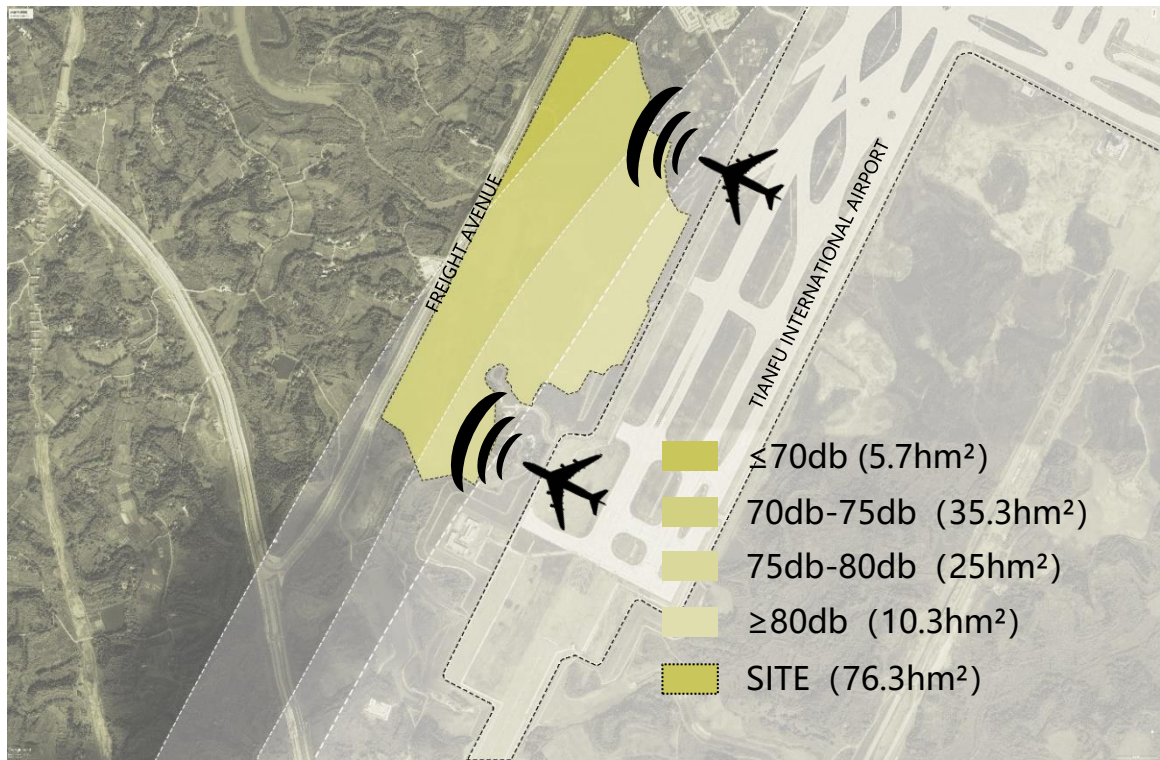
Smiling Lion Cultural Village is located on the west side of Tianfu International Airport of New Eastern District of Chengdu. The total planning area is about 1670,000 m² and the first phase of construction is about 385,000 m² (3 phases of construction in all) .



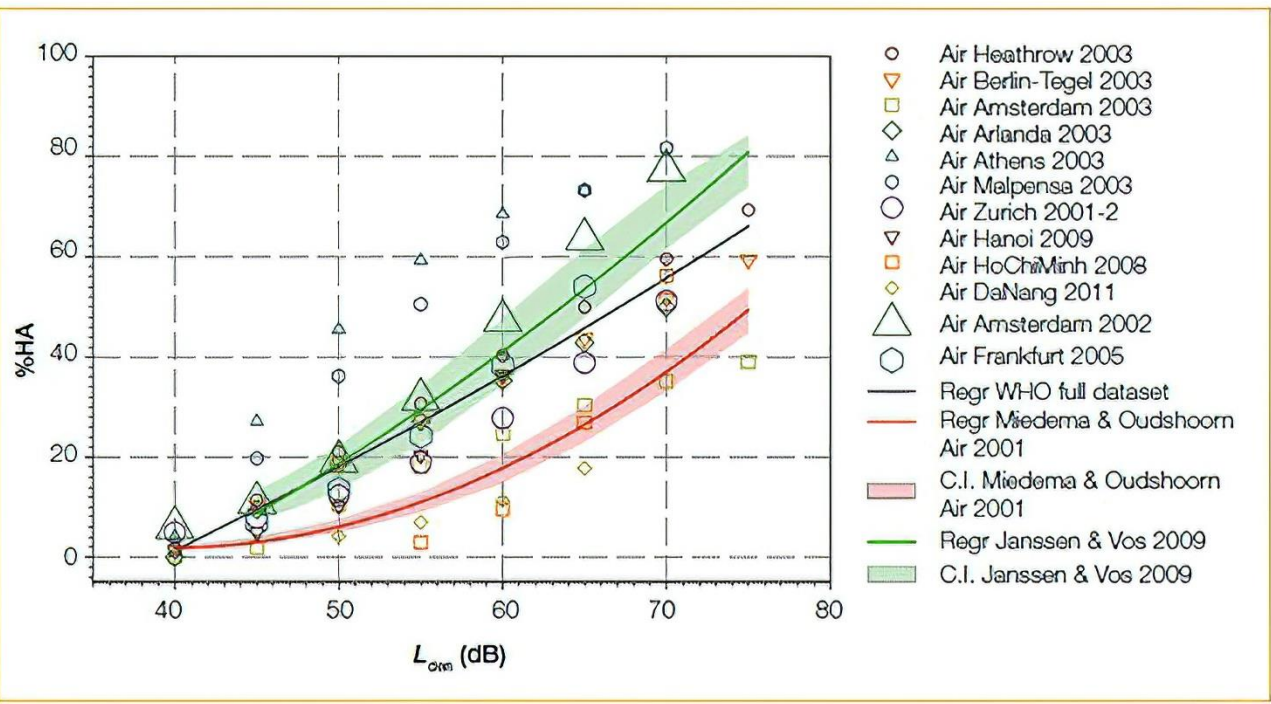
TRIPLE AWKWARD SITUATION

NOISE INFLUENCE

Due to the airport construction, the mountain and river need to be reformed to meet several requirements such as height limit and flood control.



The relationship between the volume of aircraft noise and irritability (From WHO)



Airport noise made the village no longer habitable, so villagers lost the land which they depended on and had to move far away from their homeland.



Question: how to coordinate the contradictions between the village group and the airport construction group?



TRIPLE AWKWARS SITUATION

UNKNOWN CULTURE

THE FORGOTTEN CULTURAL HERITAGE

The village was the old site of Pingquan County of Ancient Kingdom of Shu 1000 years ago. The name of "Pingquan" is due to the story of Bieling who solved the flood problem,so the place is also known as "Noah's Ark of Ancient Kingdom of Shu".

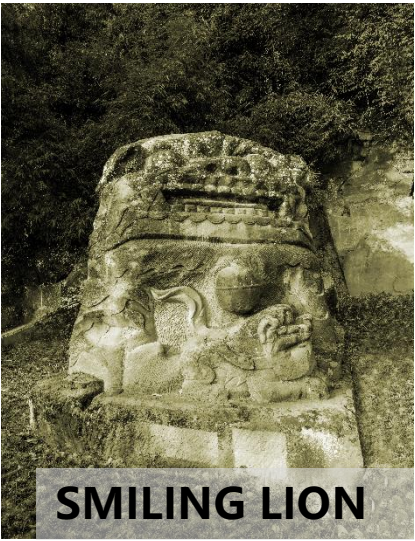
The area has a rich cultural heritage such as Three fish Stone Carving of Han Dynasty(202 B.C. -220 B.C.),the biggest stone lion sculpture in Asia and the ancient Painted stone grotto of Qing Dynasty (1636-1912) .

UNKNOWN HISTORICAL CELEBRITY

The area also has many beautiful stories that live on today. Wang Guipu, the first zhuangyuan of Tang Dynasty in Ancient China was born here. He wrote the poem of "White Horse Courtyard " to describe his reading scene becomes an important textual material to restore the physical environment. (Zhuanyuan: the top scorer of the official exam in ancient China.)



STONE GROTTO OF QING DYNASTY



SMILING LION



THREE FISH STONE CARVING



ZHUANGYUAN: WANGGUIPU



THE POEM

Question: how to better protect the cultural heritage and make the history wellkown again?

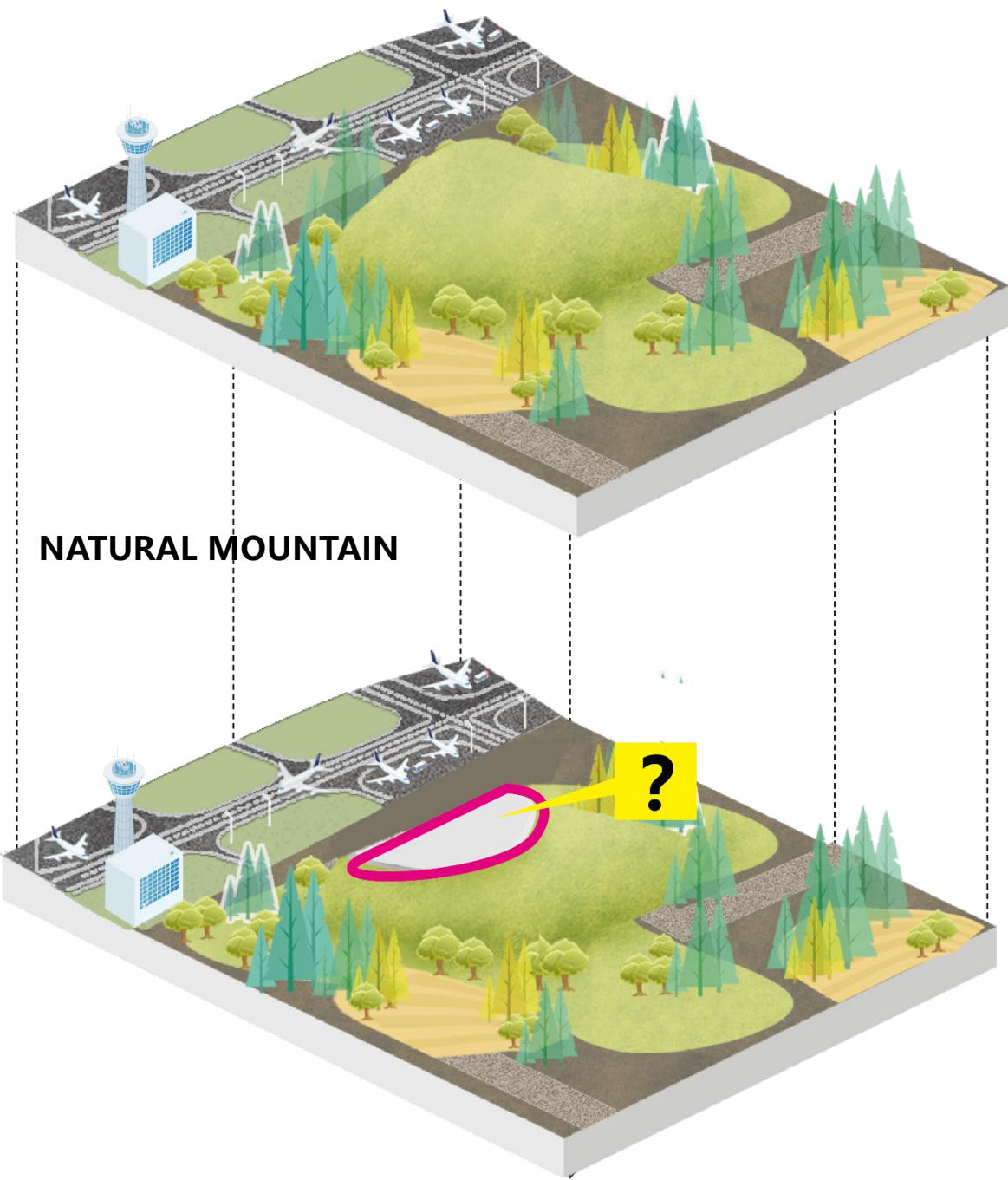


TRIPLE AWKWARS SITUATION

DEVELOPMENT RESTRICTION

BROKEN MOUNTAIN:

Part of the mountain must be cut in order to meet the aviation height limit.

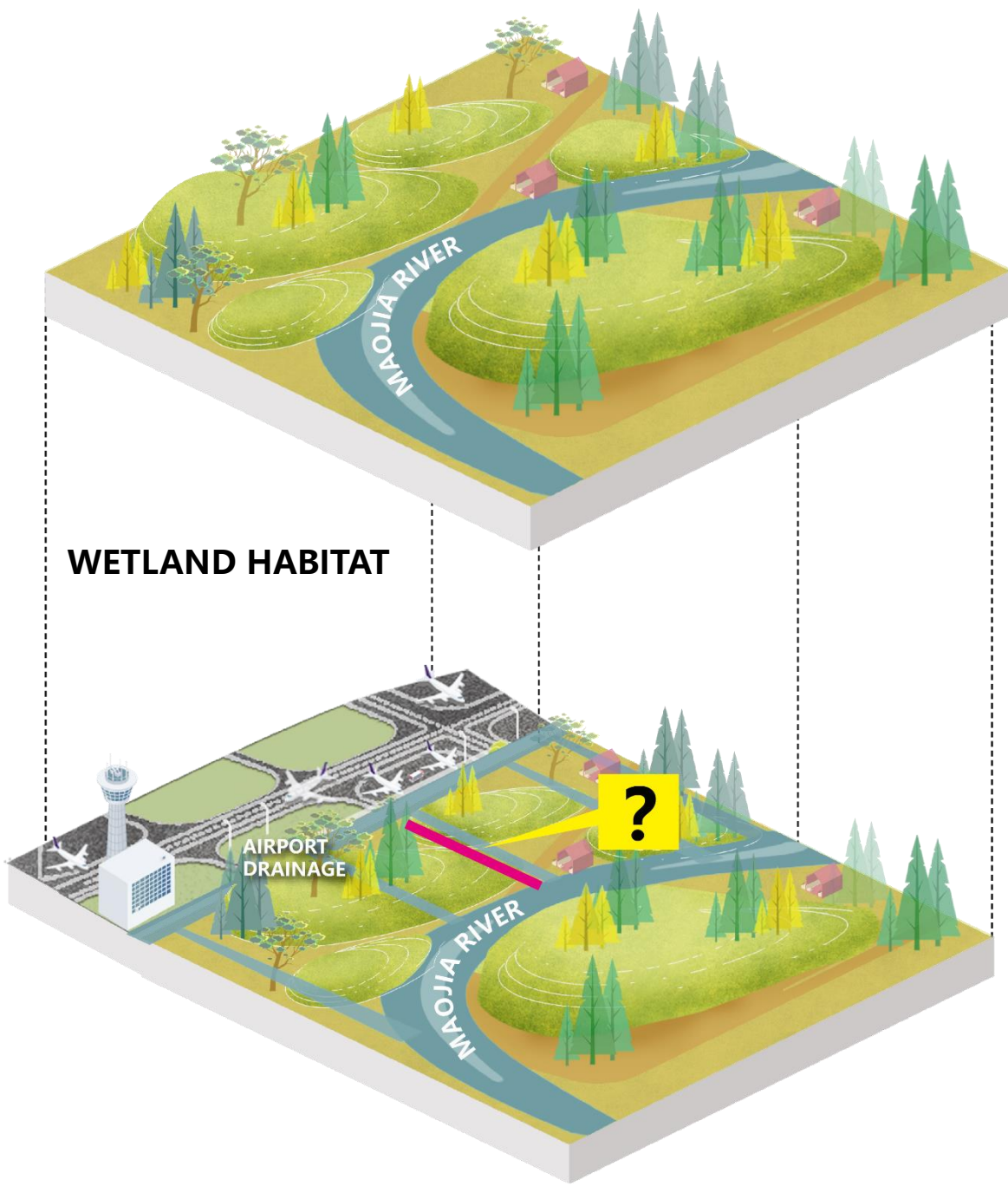


NATURAL MOUNTAIN

HOW TO MAKE USE OF THE BROKEN MOUNTAIN?

AIRPORT DRAINAGE:

Large amounts of flood water from the airport must be diverted through the village to the Maojia River

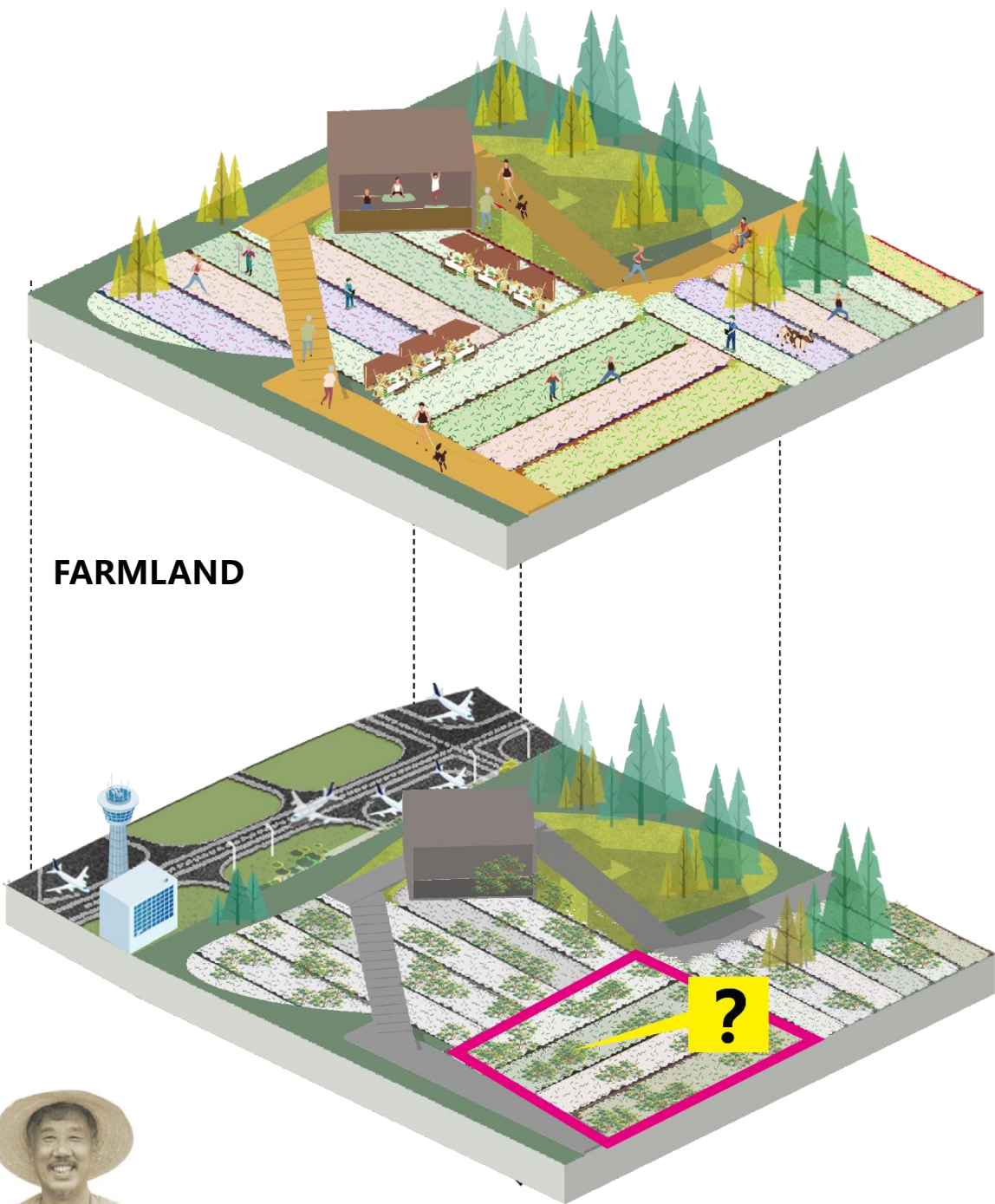


WETLAND HABITAT

HOW TO INTEGRATE AIRPORT FLOOD AND NATURAL WETLAND?

BARREN FARMLAND:

Large tracts of farmland are barren due to lack of cultivation because the villagers moved out.



FARMLAND

HOW TO MAKE USE OF THE BARREN FARMLAND?





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GOAL

NATURAL ECHO

Restore the ecology of mountains, rivers, forests, farmlands and villages
Build a beautiful countryside surrounded by mountains and river

CULTURAL ECHO

Pursuit the centuries-old historic culture
Activate the tourist market of Eastern New District

AIRPORT ECHO

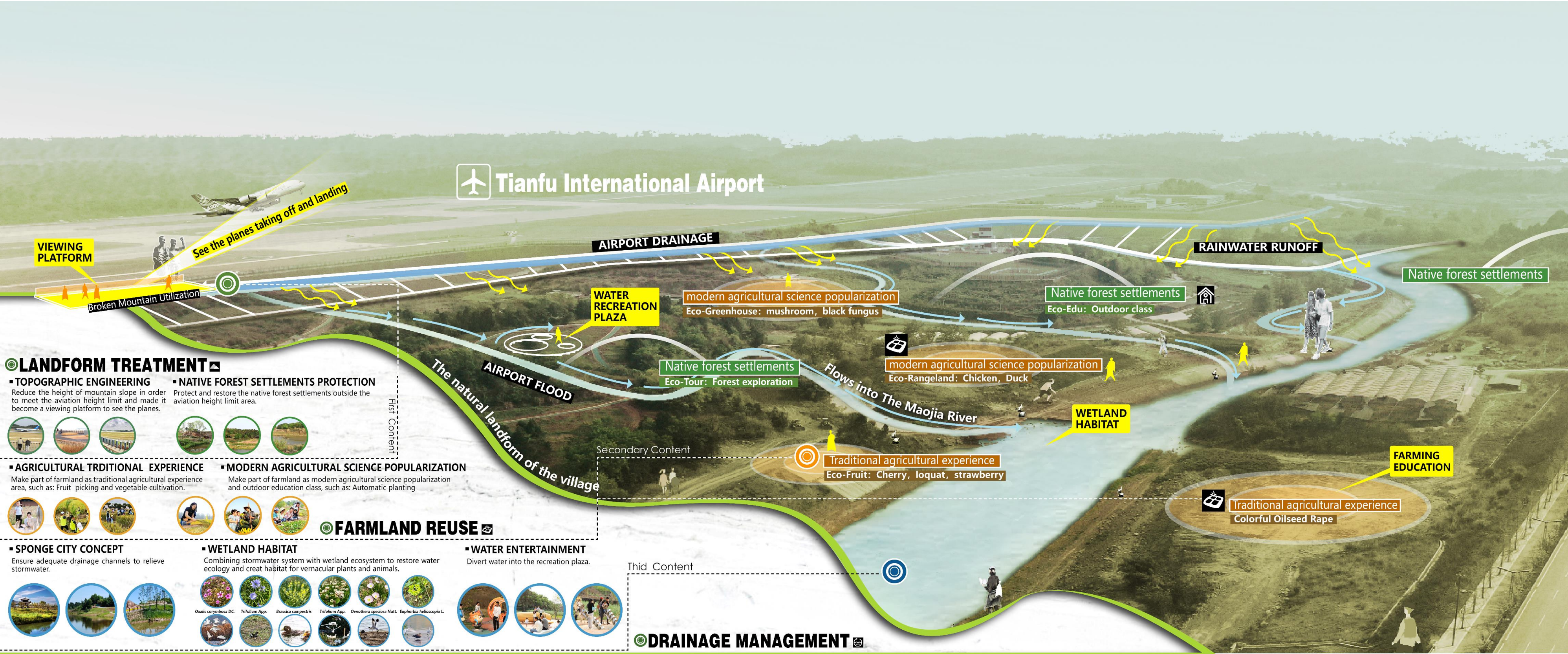
Construct charming viewing platform
Enhance the airport culture of Eastern New District

An Ecological Rural Village
A Historic Cultural Village
An Airport Tourism Village



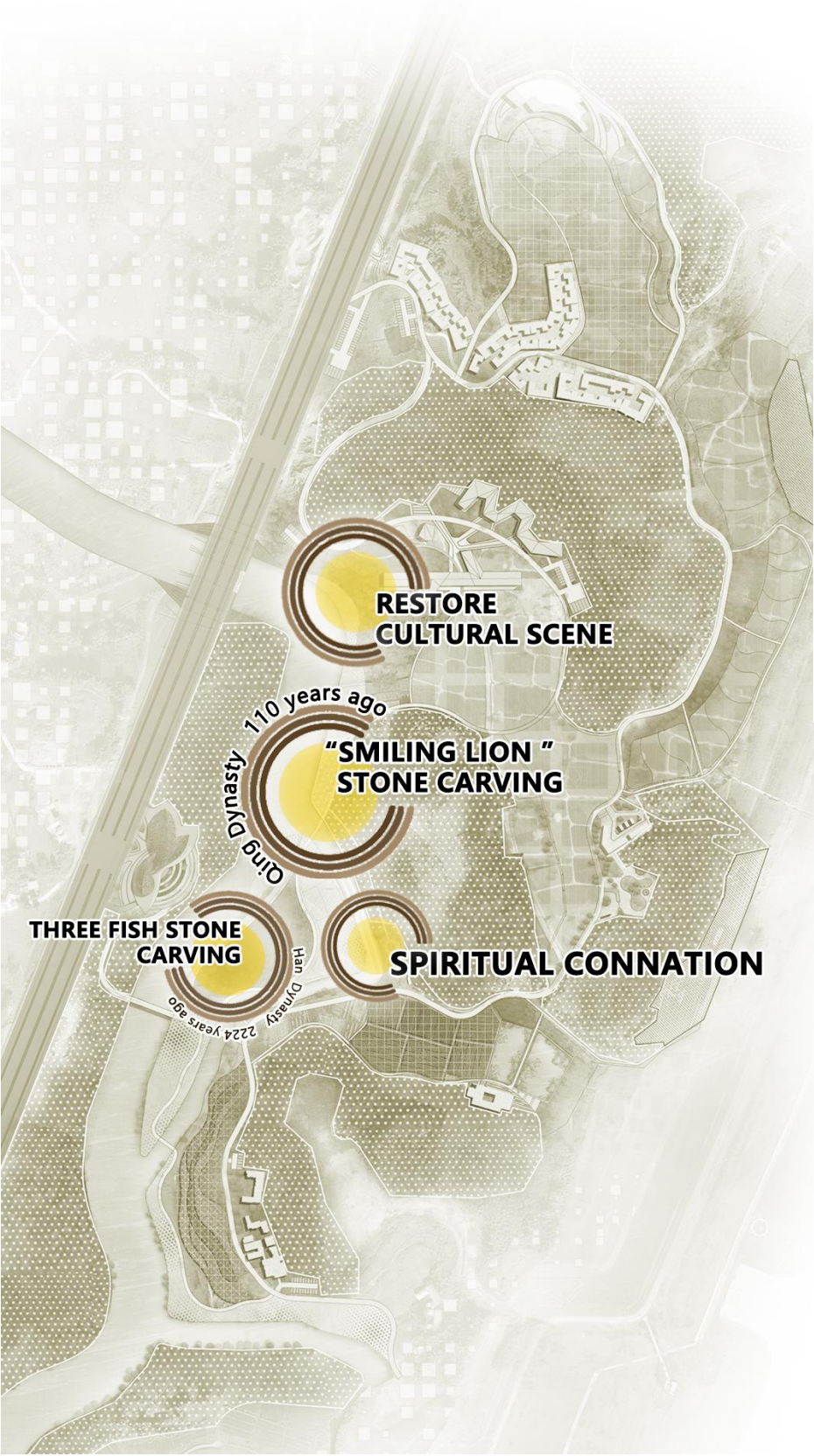
STRATEGY 1: ECOLOGICAL RESTORATION

Question: how to bring the abandoned village back to life ?





STRATEGY 2: CULTURAL REVITALIZATION



◎ PRESERVATION OF TANGIBLE CULTURAL HERITAGE

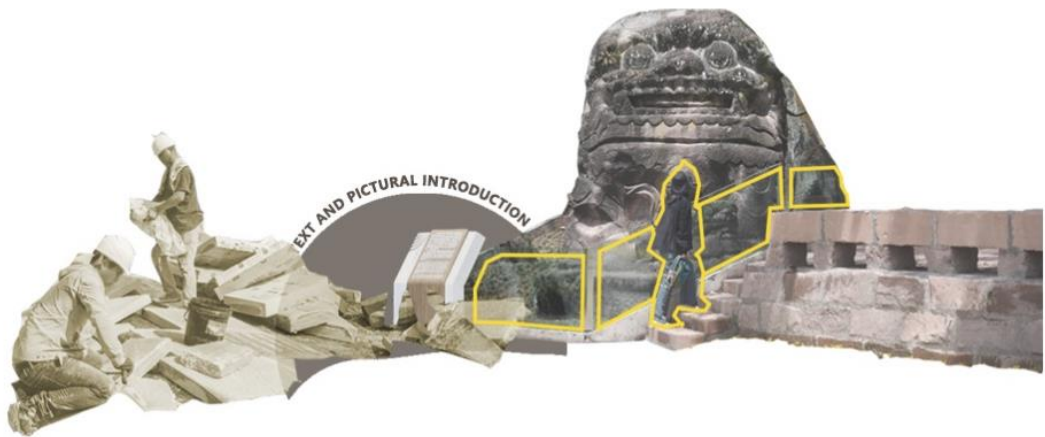
■ STEP1: ARTIFACTS CLEAN-UP

Professionals from the cultural protection department utilize modern technology to remove dirty things accumulated over years also add surface protection layer to better protect these artifacts.



■ STEP2: FENCE PROTECTION

Choose glass and stone fence to avoid direct contact by tourist. Add introduction boards to make the information easier for visitors to read.



■ STEP3: SUITABLE SHELTER

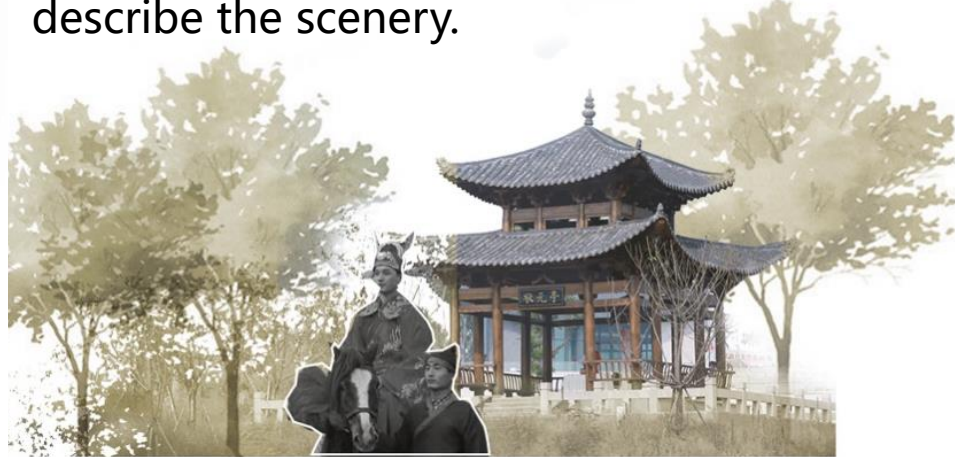
Demolish the dilapidated brick house and build a wooden pavilion to better protect the painted stone Grottoes from moisture and direct sunshine. Use 3D laser scanning to record the pictures.



◎ INHERITANCE OF INTANGIBLE CULTURAL HERITAGE

■ STEP 1: TEXTUAL RESEARCH

Find out the story happened here according to historical documents , It's the born place of Wang Guipu,the first Zhuanyuan in Jianzhou's history who wrote a poem to describe the scenery.



■ STEP 2: RESTORE THE STORY SCENE

Restore the scene of the story according to the historical documents and placed visitors to historical scenes to learn from ancestors also gain enlightenments.



■ STEP 3: SPIRITUAL CONNATION

Endow the place and guide visitors with spiritual connotation to make wishes for wonderful things.





STRATEGY 2: CULTURAL REVITALIZATION

◎ RESURGENT CULTURAL SCENE

■ BEFORE:

The three fish stone carving before renovation



Stone lions and Buddhist temples before renovation



■ AFTER:

Historical information reading



Blessing activity



Padlocking lucky locks



Wishing Fountain





STRATEGY 3: ECONOMIC REGENERATION

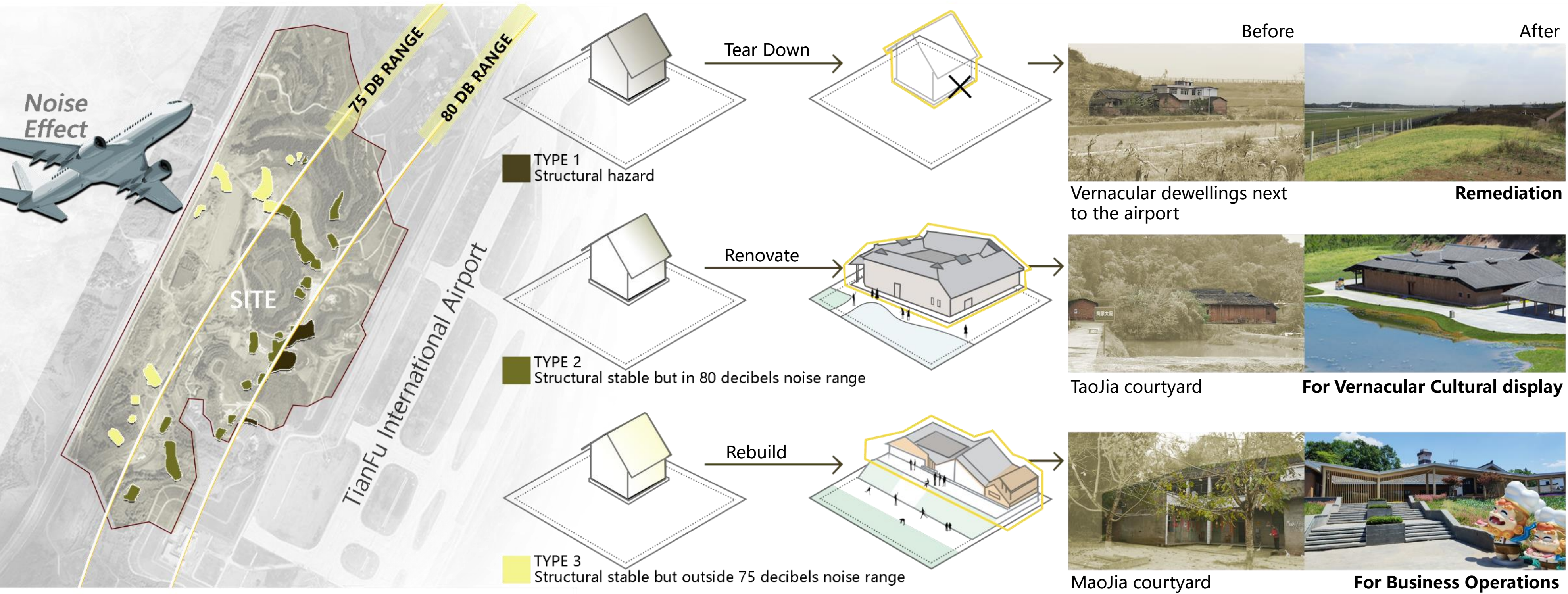
ADAPTIVE REUSE OF VERNACULAR DEWELLINGS

STEP 1: CLASSIFY

Classify the abandoned vernacular dwellings based on different status quo in order to better utilize them.

STEP 2: ADAPTIVE REUSE

Find a best way to reuse these abandoned dwellings in order to make new functions.





STRATEGY 3: ECONOMIC REGENERATION

RECREATION ACTIVITY PLANNING

Spring

Fruit & Vegetable Picking

Photography Class

Eco Restaurant

Summer

Fishing

Music Concert

Water plaza

Autumn

Blessing

Traditional Festival Mid-autumn

Airplane Watching

Winter

Family Education Activities

Creative Bazaar

Research Activities

Traditional Festival New Year

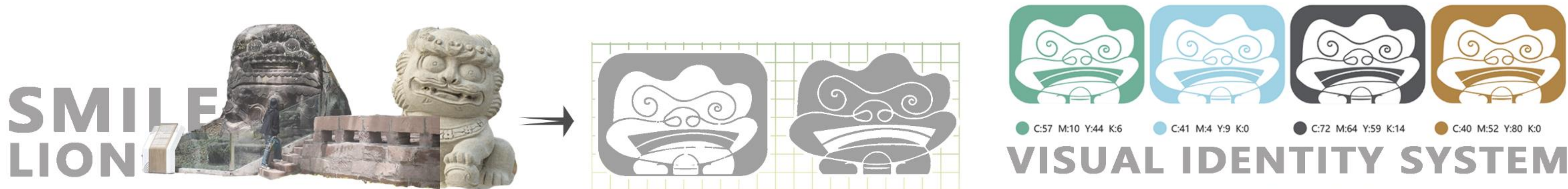


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STRATEGY 3: ECONOMIC REGENERATION

◎THE IP DESIGN

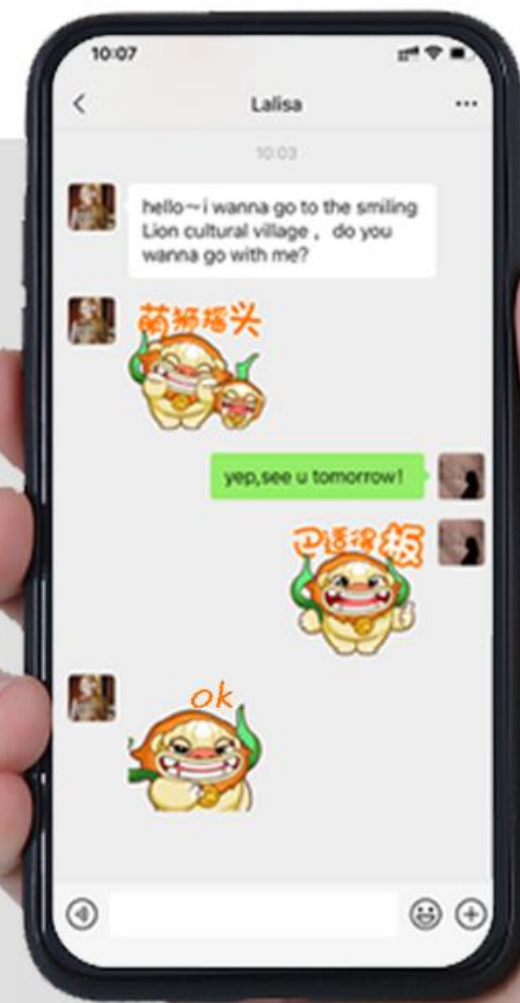
The “lovely smile” of the stone lion is the inspiration source to design creative cultural product in order to make more people know the special culture.



CREATIVE PRODUCTS



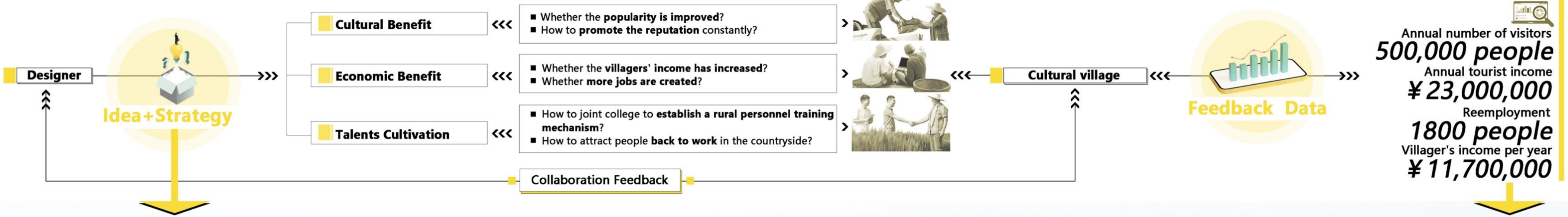
INTERNET MEMES





STRATEGY 3: ECONOMIC REGENERATION

◎ FEEDBACK TRACKING MECHANISM



1 ECOLOGICAL RESTORATION

The ecological design strategy not only solved the serious environmental problems caused by airport construction, but also realized the expression and transformation of ecological value.

2 CULTURAL REVITALIZAION

The cultural design strategy made the rural historical story and cultural heritage that was almost forgotten well protected and popular.

3 ECONOMIC REGENERATION

The economic design strategy made full use of local resources to develop rural tourism to meet tourism diversified needs also increased villagers' income constantly.

NATIVE ANIMALS RETURN
ECOLOGICAL VALUE RETURN

REPUTATION RETURN

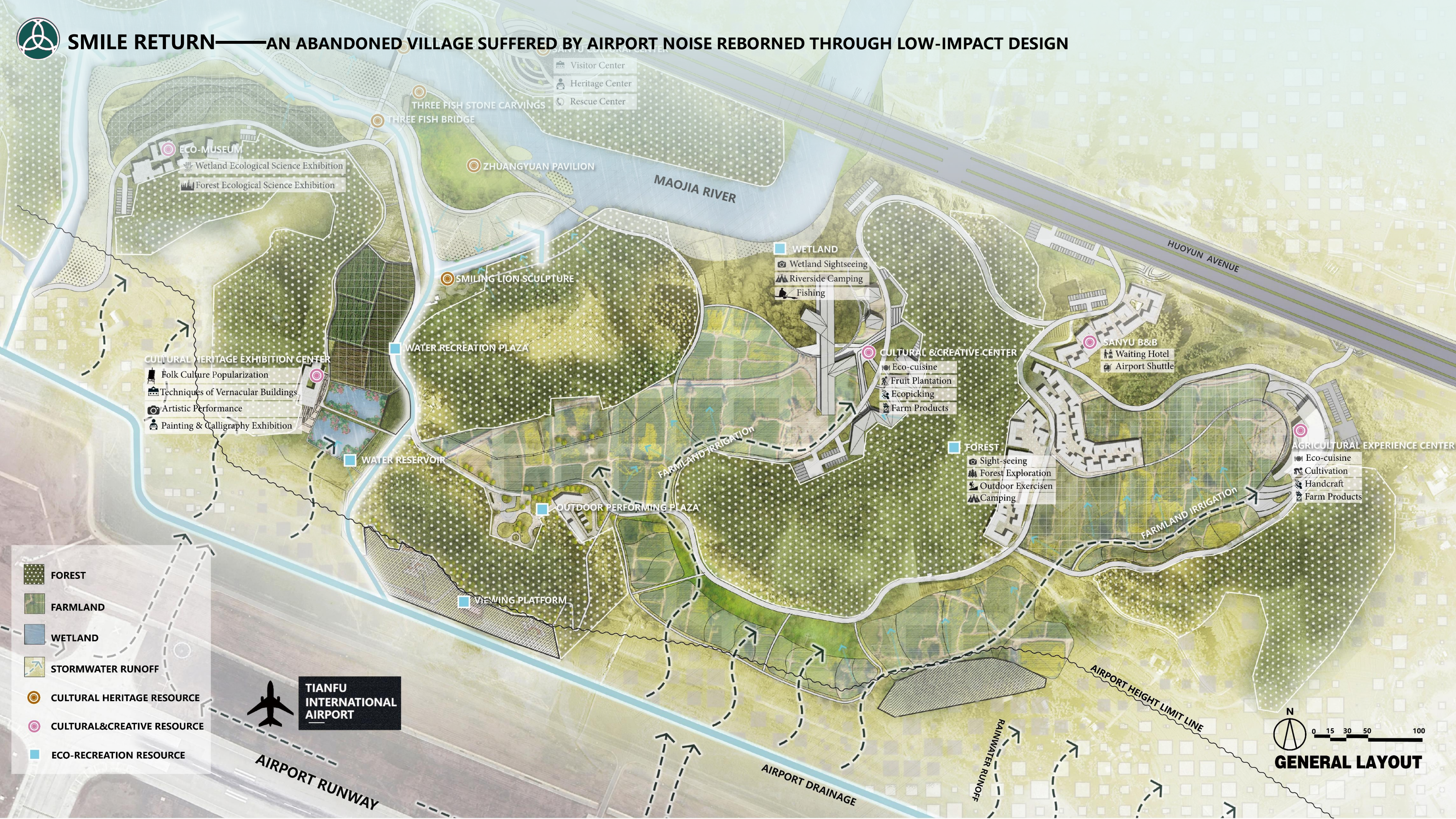
JOBS RETURN
INCOMES RETURN
VILLAGERS RETURN

SMILE RETURN





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Built Scene



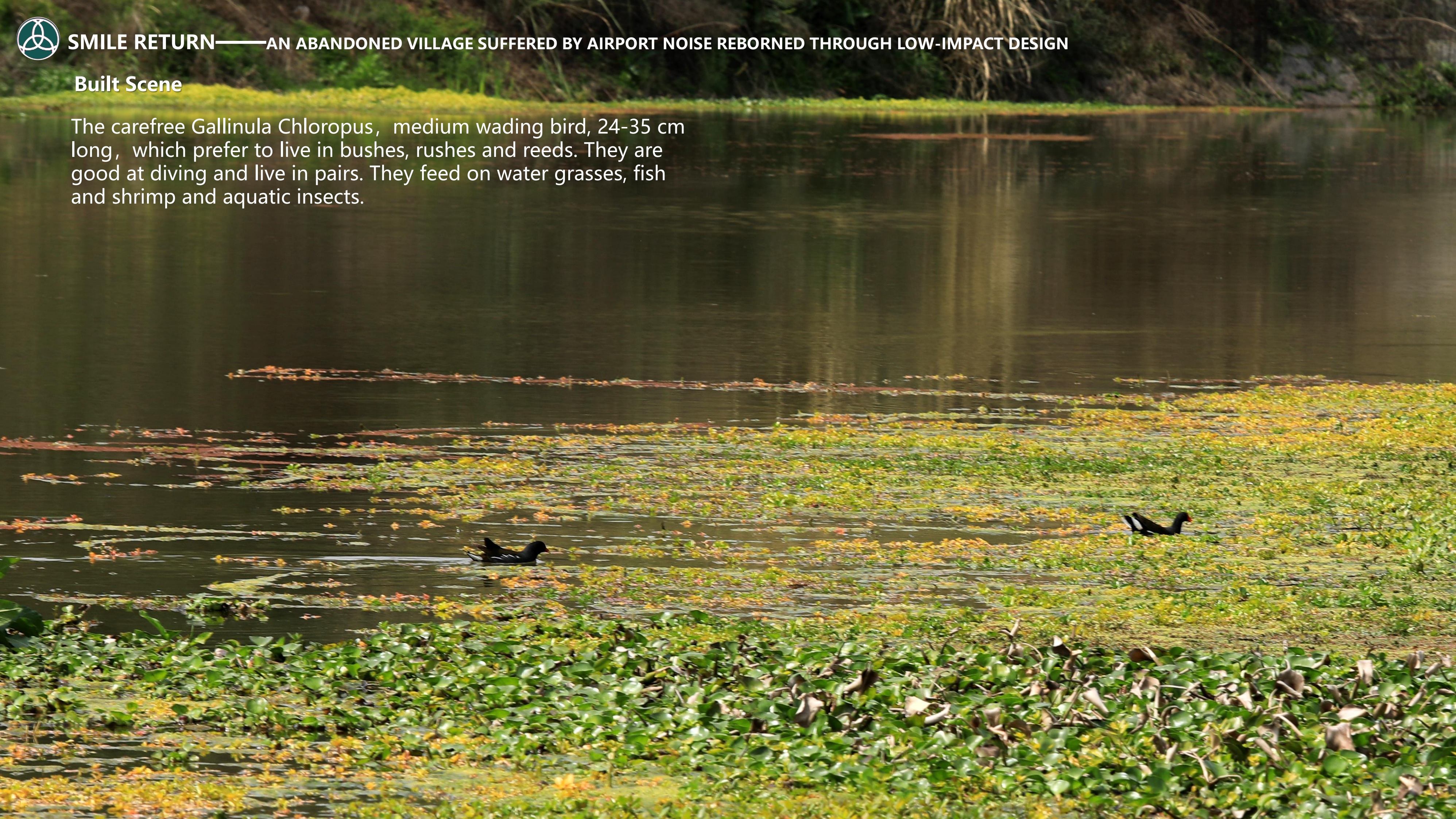
The Wetlands integrated the function of flood discharge. The weak design of grey facilities make the man-made landscape more integrated in the nature scene.



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Built Scene

The carefree *Gallinula Chloropus*, medium wading bird, 24-35 cm long, which prefer to live in bushes, rushes and reeds. They are good at diving and live in pairs. They feed on water grasses, fish and shrimp and aquatic insects.





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Built Scene

The Zhuangyuan Pavilion becomes the embellishments in the landscape.





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Built Scene

The wetland after ecological restoration becomes a perfect nature class, where the visitors can find many kinds of vernacular plants, insects and wild animals and enjoy the pleasure of nature exploration.





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Built Scene



The carving words on the stone means “a fish leaping over the dragon gate” , which will deliver good luck by Zhuangyuan Wang Guipu to the visitors who will pass any exam in the future.



Built Scene

Stone fences in harmony with the environment are added to protect the cultural heritage and introduction is used for visitors to read the historic information.





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Built Scene



The bridge capable of passing vehicles and pedestrians is creatively designed with stone lions as the inspiration source which intensified the characteristic cultural symbol of the place.





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Built Scene

The pavilion is built to commemorate Wang Guipu, the first Zhuangyuan borned and studied here.





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Built Scene

The ventilated shelter is built to better protect the ancient painted stone niche from moisture and direct sunlight.





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Built Scene

The barren slope was transformed to be a perfect viewing platform to see the planes taking off and landing.

The viewing platform becomes the most attractive destination in the village.





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Built Scene

The vernacular dwellings were repaired on the principle of restoring the old as before. Part of the rammed earth wall was preserved in order to Inherit the architectural characteristics. The water pound has the function of storing rainwater and flood.





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Built Scene

Stormwater is also used in landscape to provide tourists a chance to enjoy the pleasure brought by the water.

