

PORTFOLIO

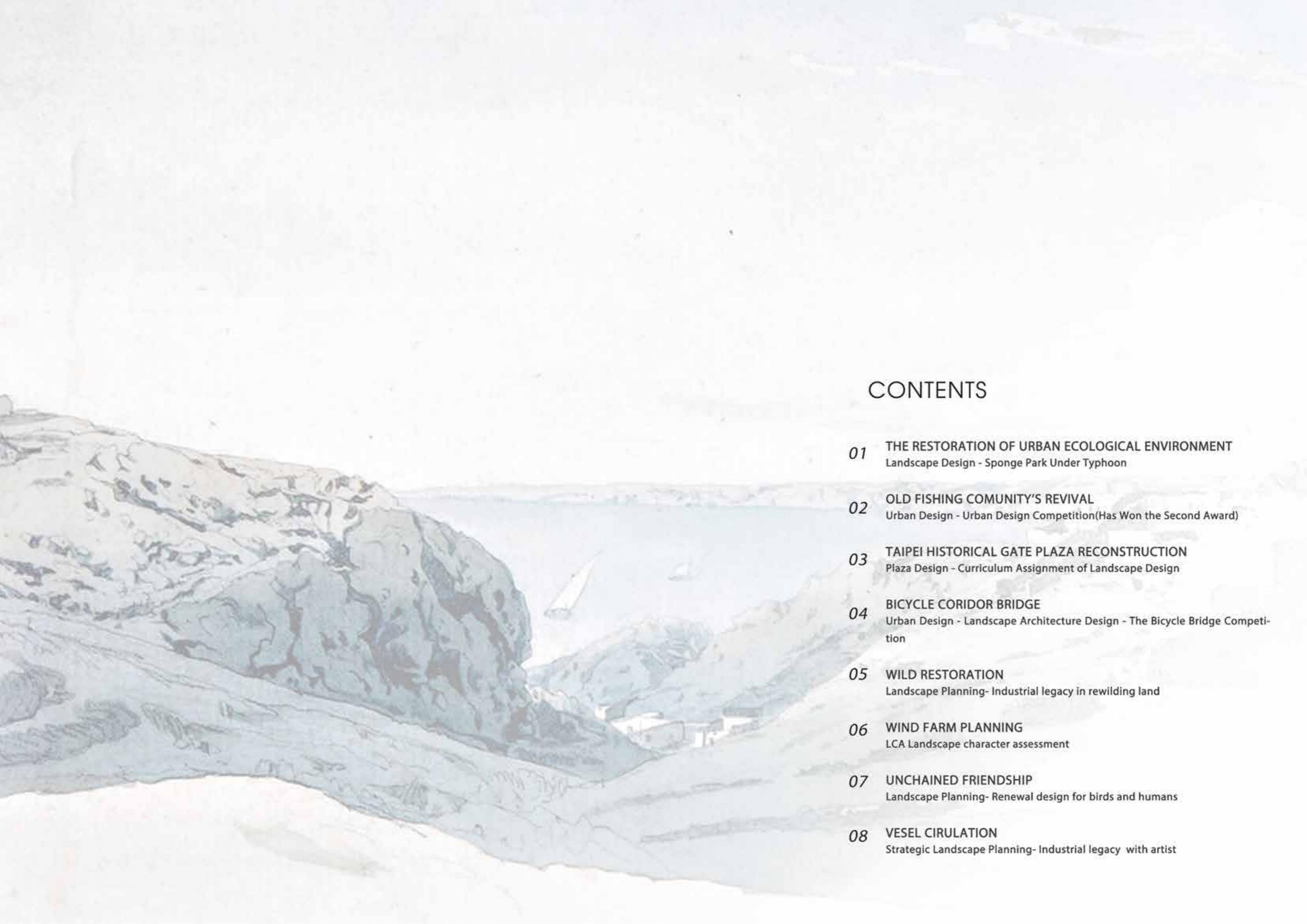
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Landscape Architecture . Urban designer



2012-2020 Selected works

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2017

THE RESTORATION OF URBAN ECOLOGICAL ENVIRONMENT

SPONGE PARK DESIGN UNDER TYPHOON

ACADEMIC / 2015 / CURRICULUM DESIGN

SITE | TAOYUAN COUNTRY, TAIWAN, CHINA

INSTRUCTOR | PROF. JIALIN ZHAO & YUFEN WANG

INDIVIDUAL

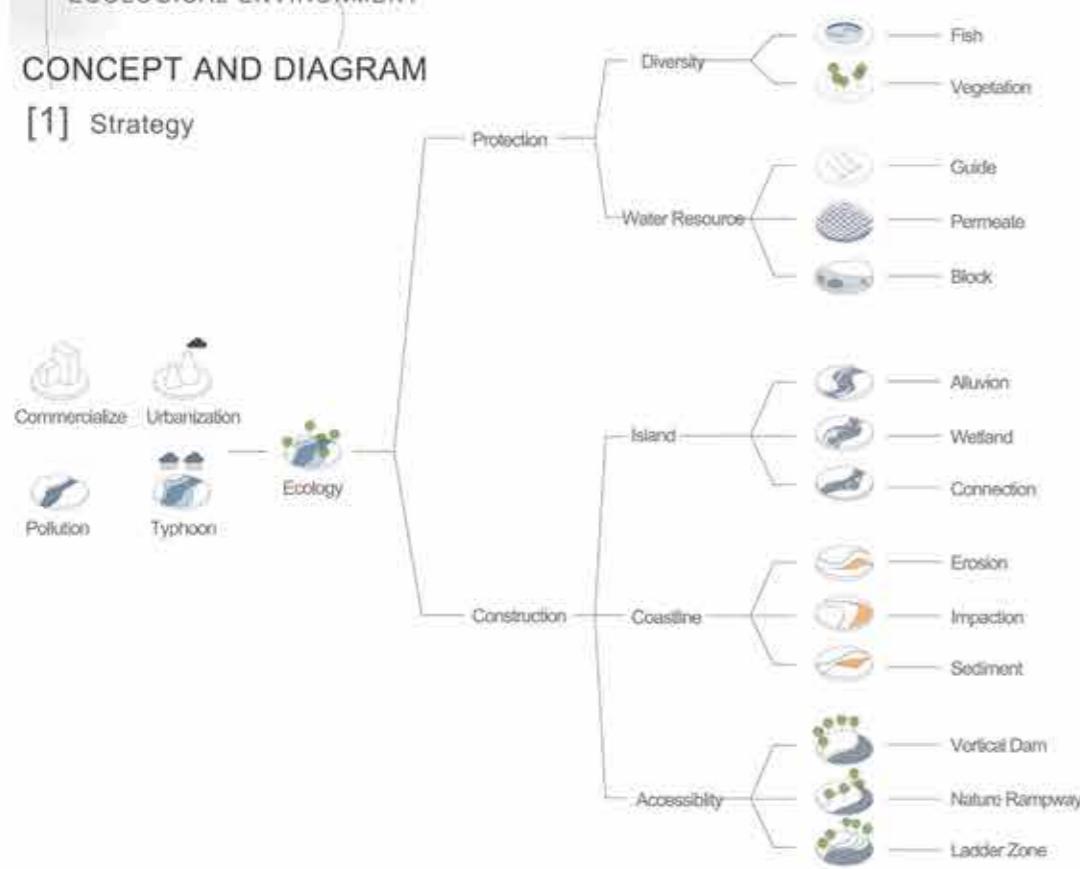


BACKGROUND

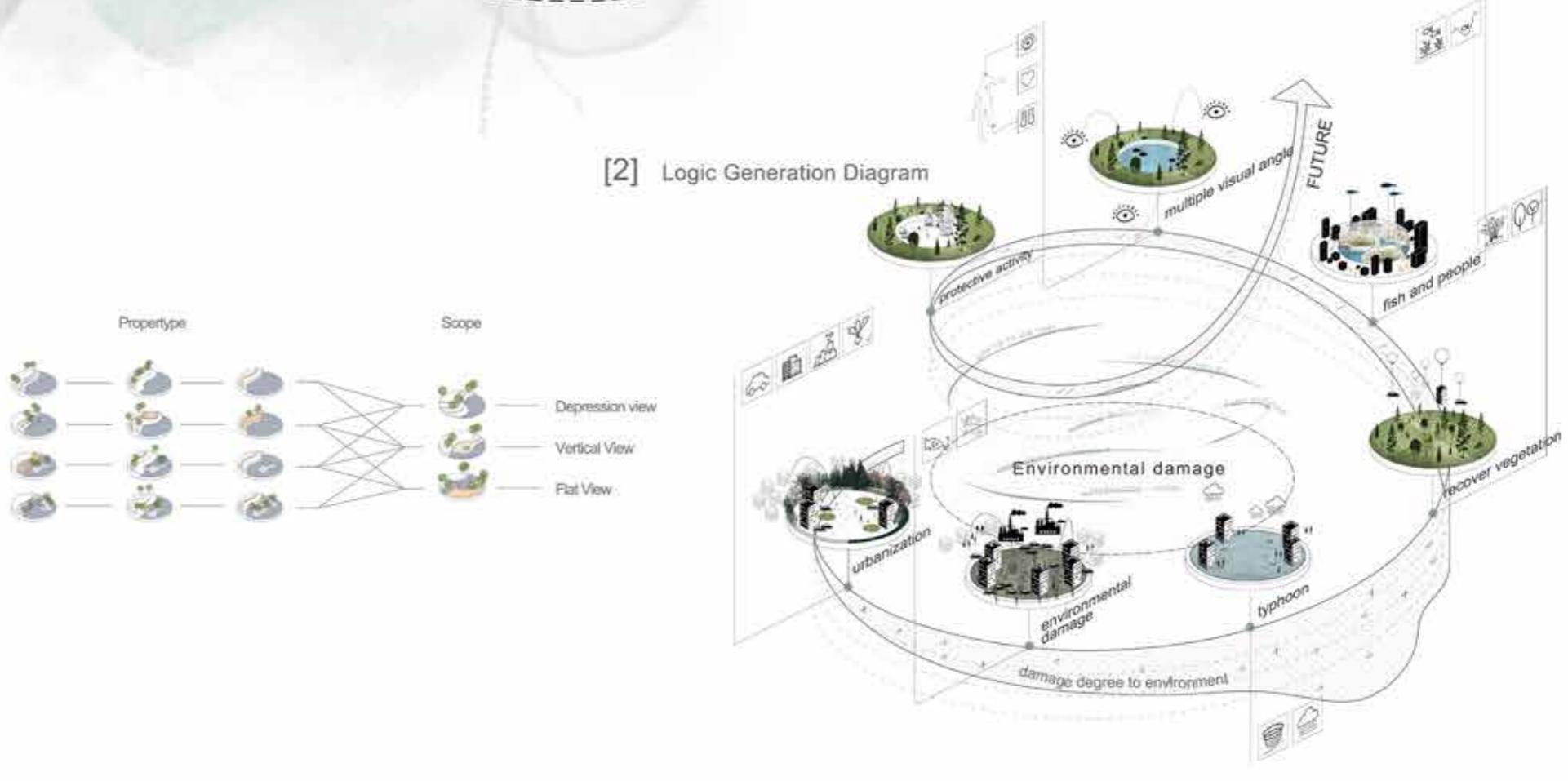


CONCEPT AND DIAGRAM

[1] Strategy

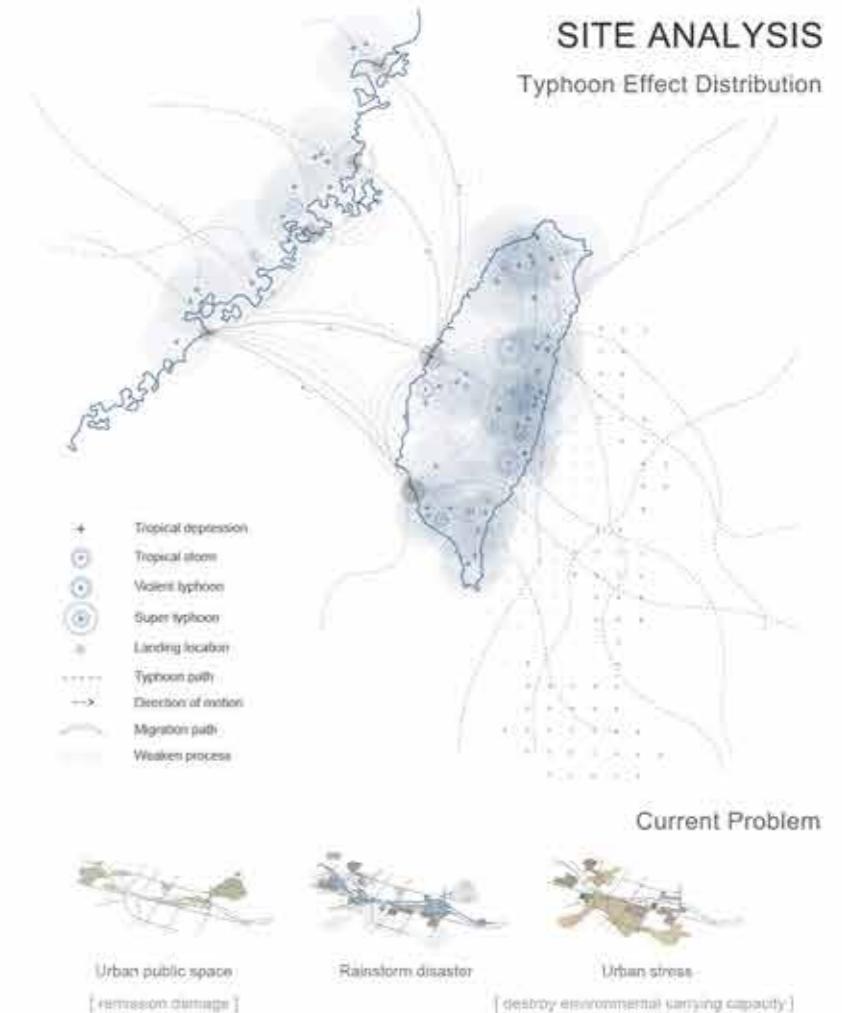


[2] Logic Generation Diagram



SITE ANALYSIS

Typhoon Effect Distribution





Restoration oasis park

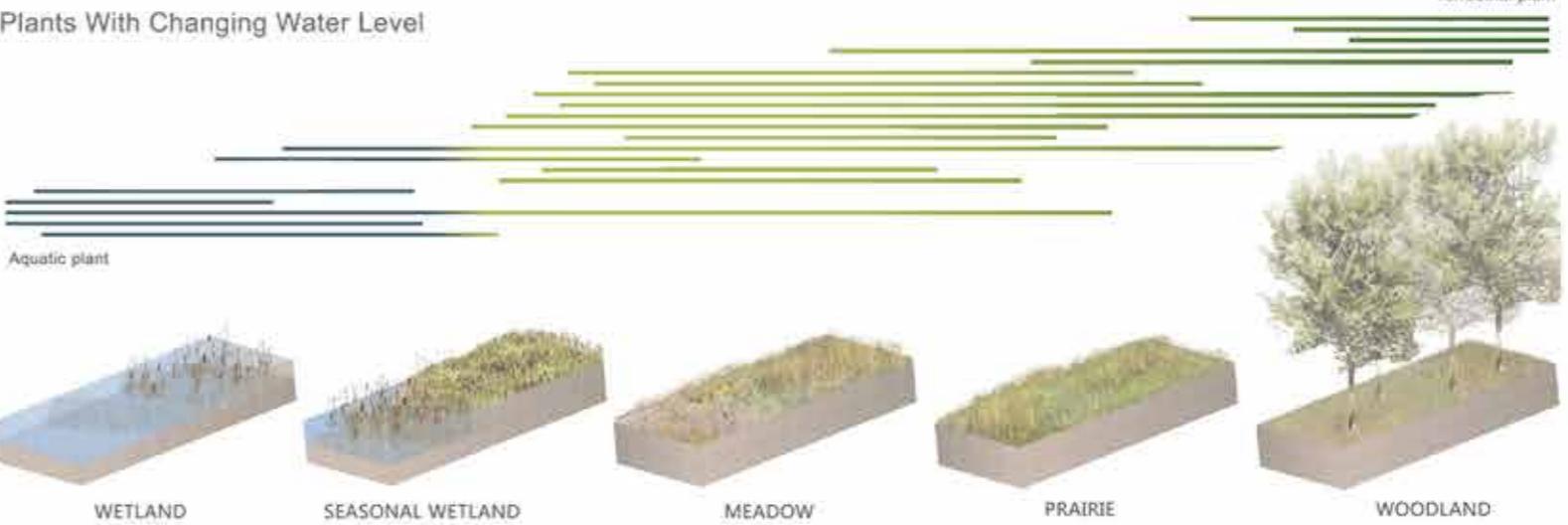
The Zhongli River, an important landscape of the city, which is surrounded by residential developments, industrial areas, commercial area and a variety of traffic lines. The industrial impact and urbanization development have been serious problems. Since this section of river is an essential place for transitioning from upstream farmland to downstream recreational park. There are acute problems with regard to the relationship between human and flood as the relative differences of water levels. Our design intends to establish a sustainable ecological corridor where human and biology could co-exist in perfect harmony even under typhoon, which respects the local environmental context.

This design was developed based on the analysis of the current situation of the site and careful research about controlling of different terrain and floating islands, so as to create different ecological environment around the lake. By modeling data of water level change in order to minimize flood impacts.

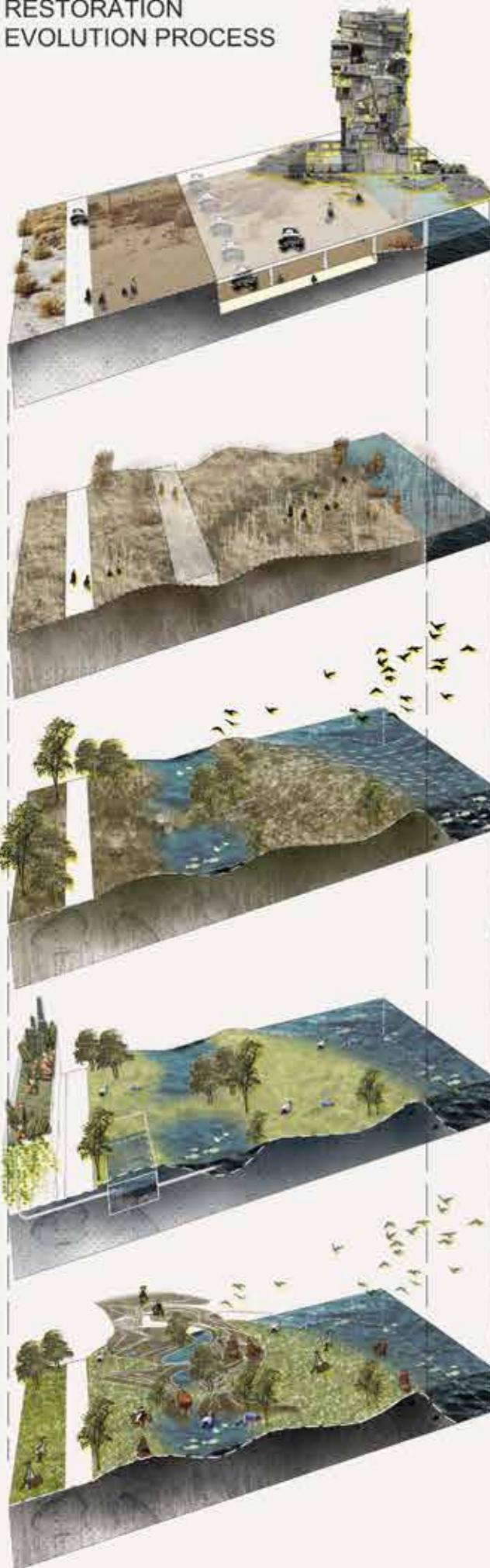
Additionally, based on analysis of the relationship between neighbourhood areas impact on water environmental carrying capacity. Four kinds of strategies to release the damage have been arises. The design of the drainage is the key part to direct the preliminary treated rainwater from neighbourhood to the park. Besides, basic management practices, we choose invisible trench to connect with underground reservoir of the river park, and cover it with cascading drainage system to filter water system.

So that based on the design, we gain two benefits. One for the interaction between human and biologies. With the integration restoration function, including enjoying the sight of plants and protection of habitat. Another is to improve the carrying capacity of urban rainstorm to avoid the occurrence of damage especially the typhoon multiple areas. It is intended to build an ecological corridor where harmonious relationship between people and nature would be put into full play.

Plants With Changing Water Level



RESTORATION EVOLUTION PROCESS



The 1st period:
Undeveloped land
[covered with buildings and roads under urbanization]

The 2nd period:
Restore the basic environment
[covered with Grass and Algae]

The 3rd period:
Add soil terrain substrate
[storage of precipitation can plant fast to build habitat]

The 4th period:
Arrangement of infrastructure
[water recycling facilities can improve hydrologic condition]

The 5th period:
Harmonious environment
[people activity and biologies co-exist in this area]



Therefore, this plan combines rainwater management of center park and community public space reconstruction together, trying to solve the environment problem. Because of the typicality of such City Center Waterfront Park like the Zhongli river park, it is also a discussion on the feasibility of the city park renovation and restoration in China for such thinking.

As the detail design of surrounding community drainage, we **construct a system for preliminary processing and collecting of rainwater**, and make the rainwater treatment facilities attached to the infrastructure optimizing community environment in order to **improve environment and add vibrancy**. Moreover, through the terrain guide and floating island, water blocking and dividing become more feasible. This means that different with other park, **this river bank presents a state of nature more originally, eliminating of urbanization intervention**. In other words, more suitable for biologies survival and establish a temporarily escape area for those people tired of urbanization.

So that based on the design, we gain two benefits. One for the **interaction between human and biologies**. Another is to **increase water capacity resisting the arrival of typhoons** and to reduce the impact of urbanization on this old community.





OLD FISHING COMMUNITY'S REVIVAL

REVITALIZATION OF OLD COMMUNITY INDUSTRY DESIGN

ACADEMIC / 2016 / URBAN DESIGN COMPETITION

REVISED TO INDIVIDUAL WORK IN AUG.2017

SITE | THE FISHING MARKET, XIAMEN, CHINA

INSTRUCTOR | PROF. XIANG LIN & PROF. MING XIAO

TEAM MEMBER | YIKAI CHEN

ROLE | CONCEPT DESIGN, THE AERIAL VIEW, PATTERN LANGUAGE

SITE INTRODUCTION

BACKGROUND

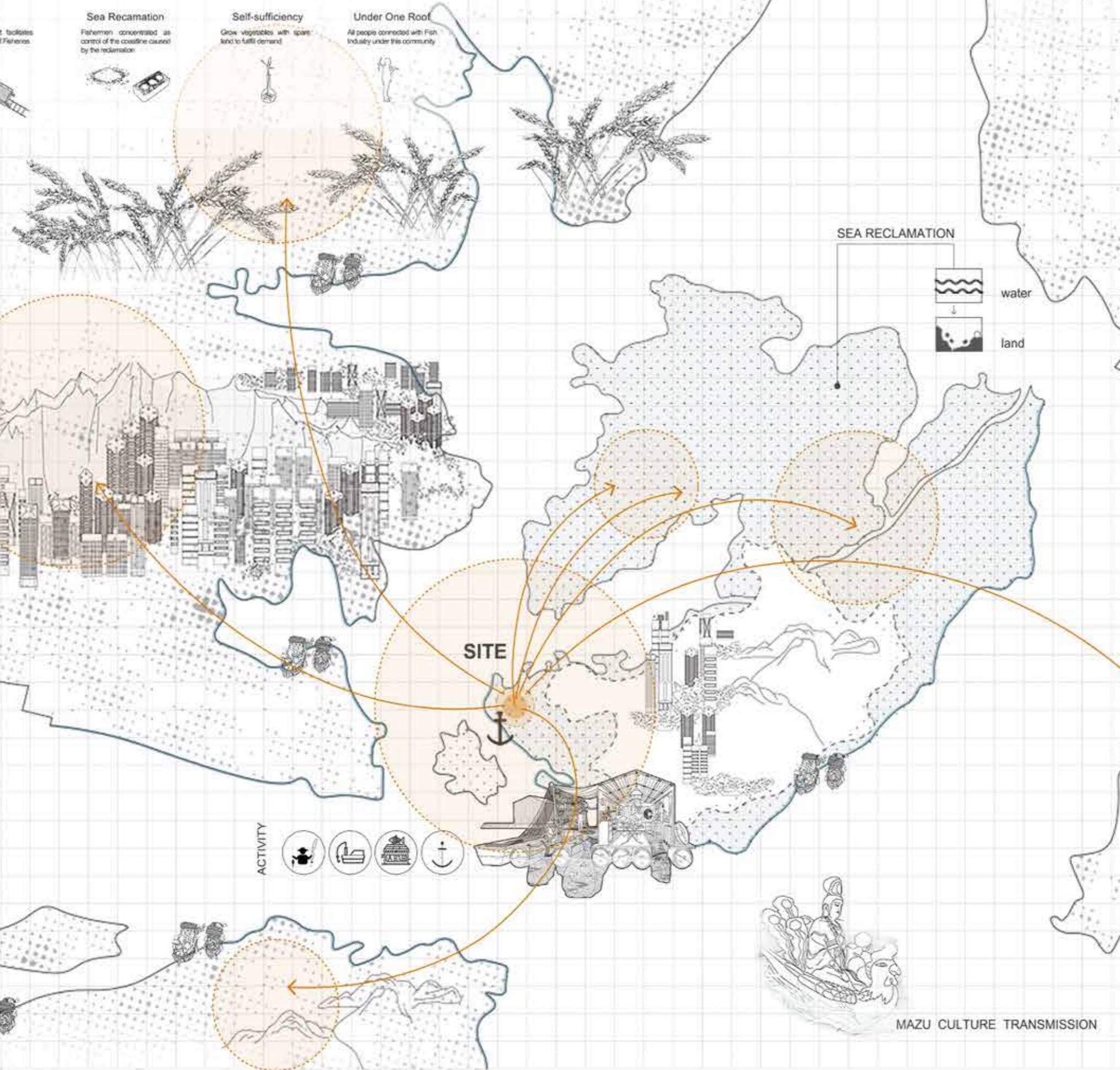
Common Belief
Characteristic Ancestral Hall culture distributed in community

BRT
Bus Rapid Transit facilitates the transportation of Fisheries

Sea Reclamation
Fishermen concentrated as control of the coastline caused by the reclamation

Self-sufficiency
Grow vegetables with spare land to fulfill demand

Under One Roof
All people connected with Fish Industry under this community



Principal Occupation

	Fishermen Employee (1050)
	The Seafood Industry Employee (2117)

Seafood Supply Area

	Urban Area
	Agricultural Area
	Stockbreeding Area

The base capture seafood in addition to the direct supply to the area outside the city, agricultural and pastoral areas; and other area residents came to the base in buying seafood products or wholesale, so seafood supply base area covering about 1/3 in Xiamen area.



There are a large number of fishermen in the site. After fishing, they sell seafood to the surrounding areas and form the largest traditional seafood market in Xiamen.

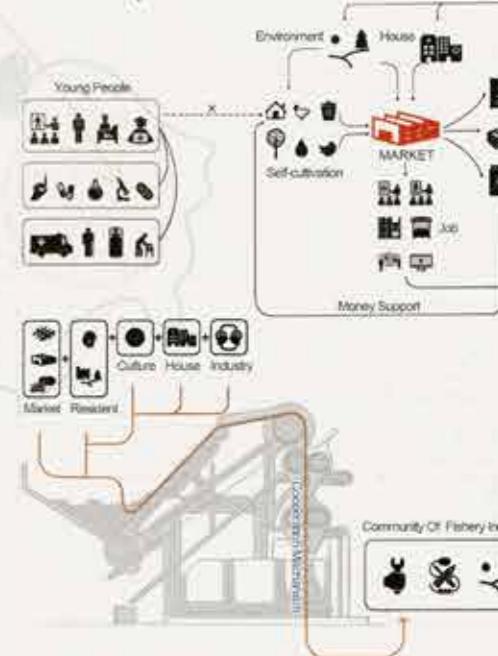
The history of the residents inside the base of almost all fishermen, they will harvest seafood, transported to the surrounding area by sea and road, and formed the largest seafood market .

Along with the city to speed up the process, although many fishermen have been transformed into the seafood industry chain practitioners (the seafood market sale, seafood processing, seafood products, tourism service) is still attached to the most important seafood market, which is an important source of their goods, also is their living place.

Fishery Coherent Element



Relationship



THE EXISTENCE ADVANTAGES AND DISADVANTAGES OF COMMUNITY

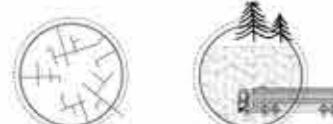
For this old community, which is market value oriented to achieve sustainable development. So that the importance of the market is without any doubt. All activities in this community seem to evolution and adjustment around the market. Therefore, for this community, as the special seafood culture characteristics, we will adopt different ways of space disposal. Not only for combining and integrating of public space, but also a simulation of living conditions for people to build the harmonious atmosphere in the future. Based on the analysis of current problem and the operational mechanism, we adopt a multiscalar vision of the city treatment.

This new perspective allows us to analyze different pixels of the city that coexist at different scales.

As a result, we obtain a connected network of MARKET that give us a transversal view of the interventions that are taking place in the whole territory.

DILEMMA

non-connected road green land shortage crowded community loss of young people



detrimental to residents' activity and the linkage development of industry

the lack of environment reduced the quality of life of the residents

densely populated population brings a lot of security risks, besides it reflects the development of industry scale

the young are not willing to stay there leading to the phenomenon that only live in the memory of the older generation

CHARACTERISTIC

Common sacrifices Ancestral hall

unobstructed transportation

related industrialization conversion

characteristic market form



benefit for interaction between residents by creating culture festival

easily transform the product to other places, and make related industry gathering

the transformation makes the population exchange between urban modules easier and more localized in the future

the greater carrying capacity, at the same time, to a large extent, the attraction of people

GULANGYU Scenic Spots



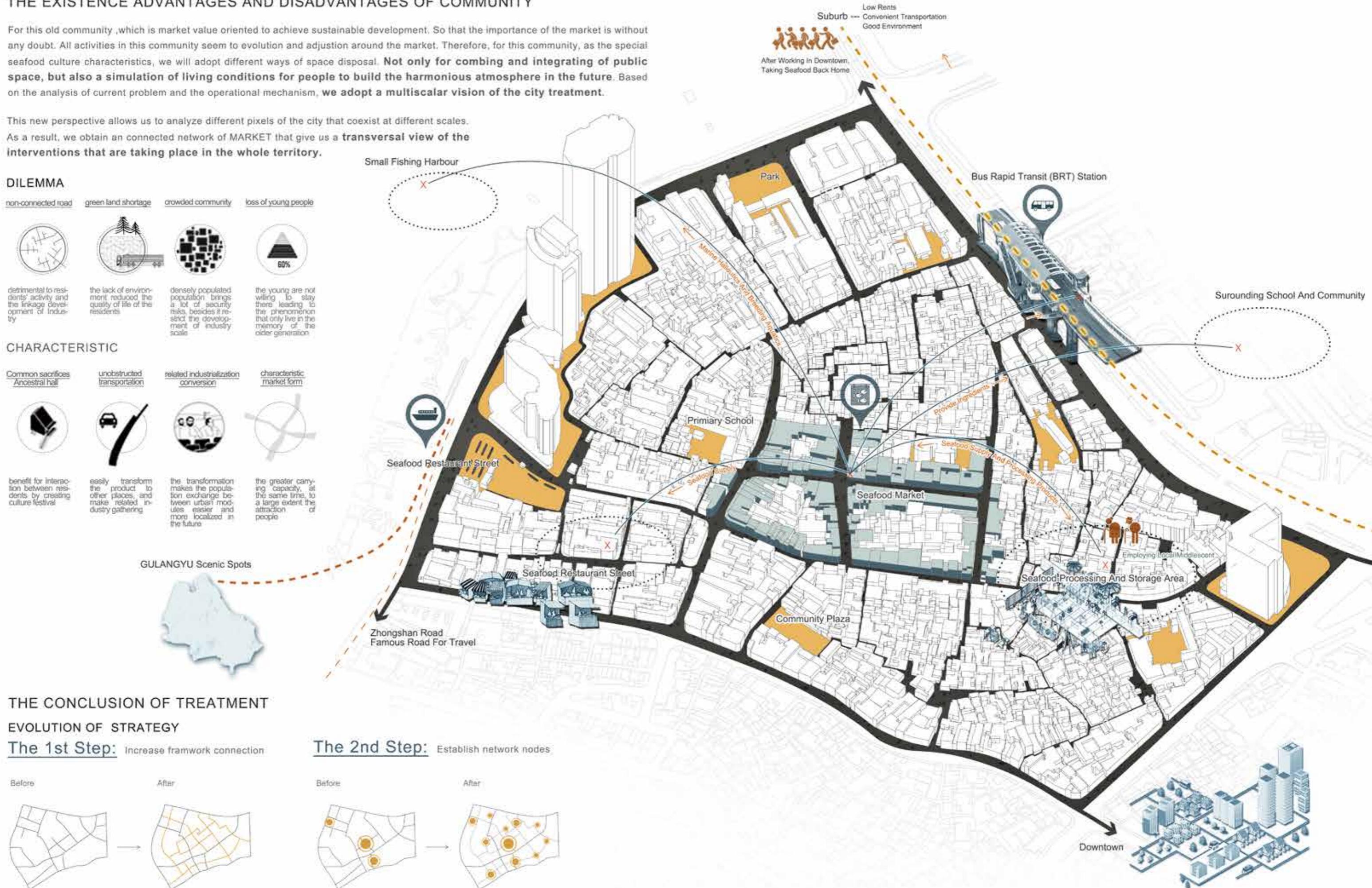
THE CONCLUSION OF TREATMENT

EVOLUTION OF STRATEGY

The 1st Step: Increase framework connection

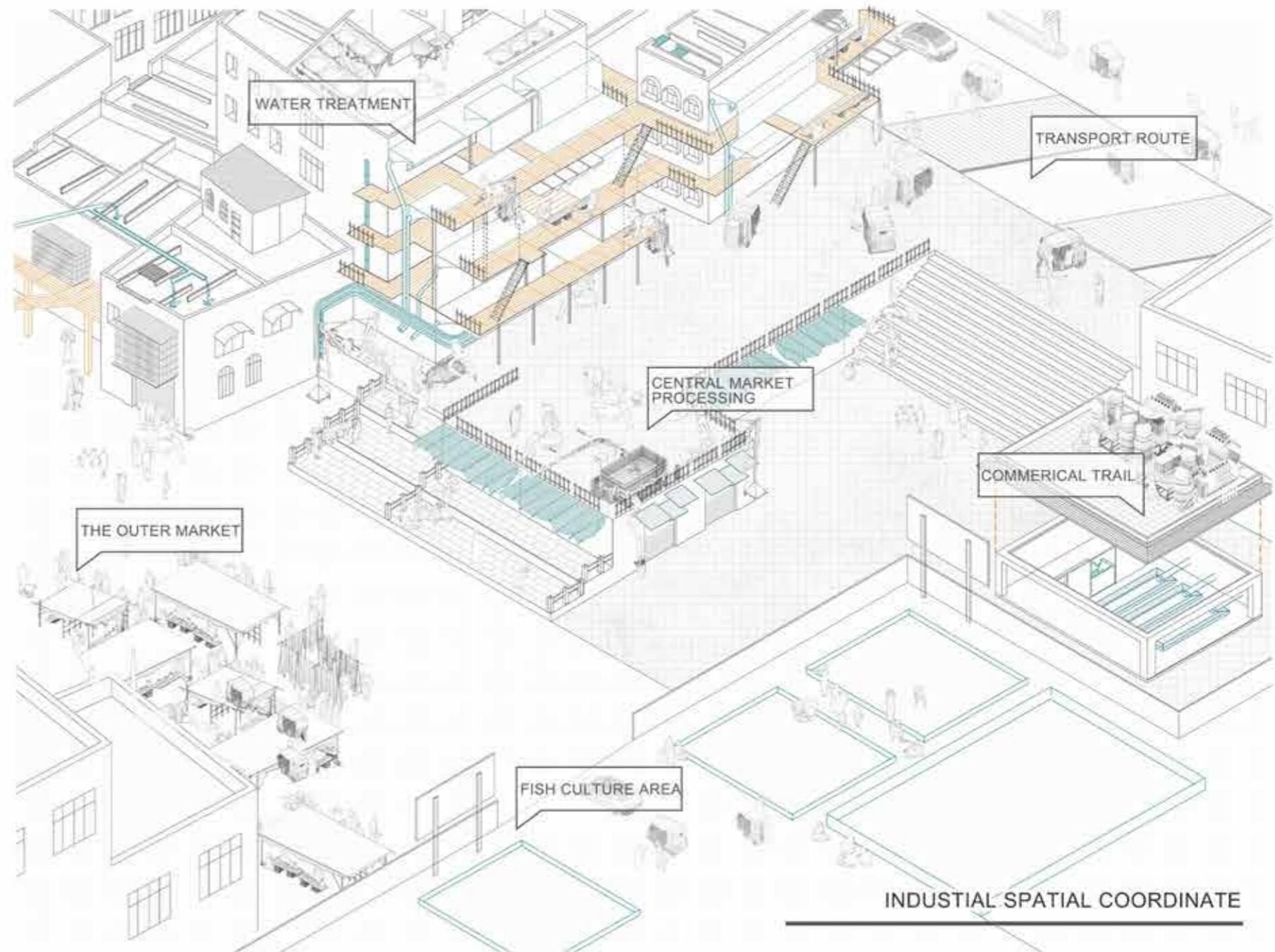
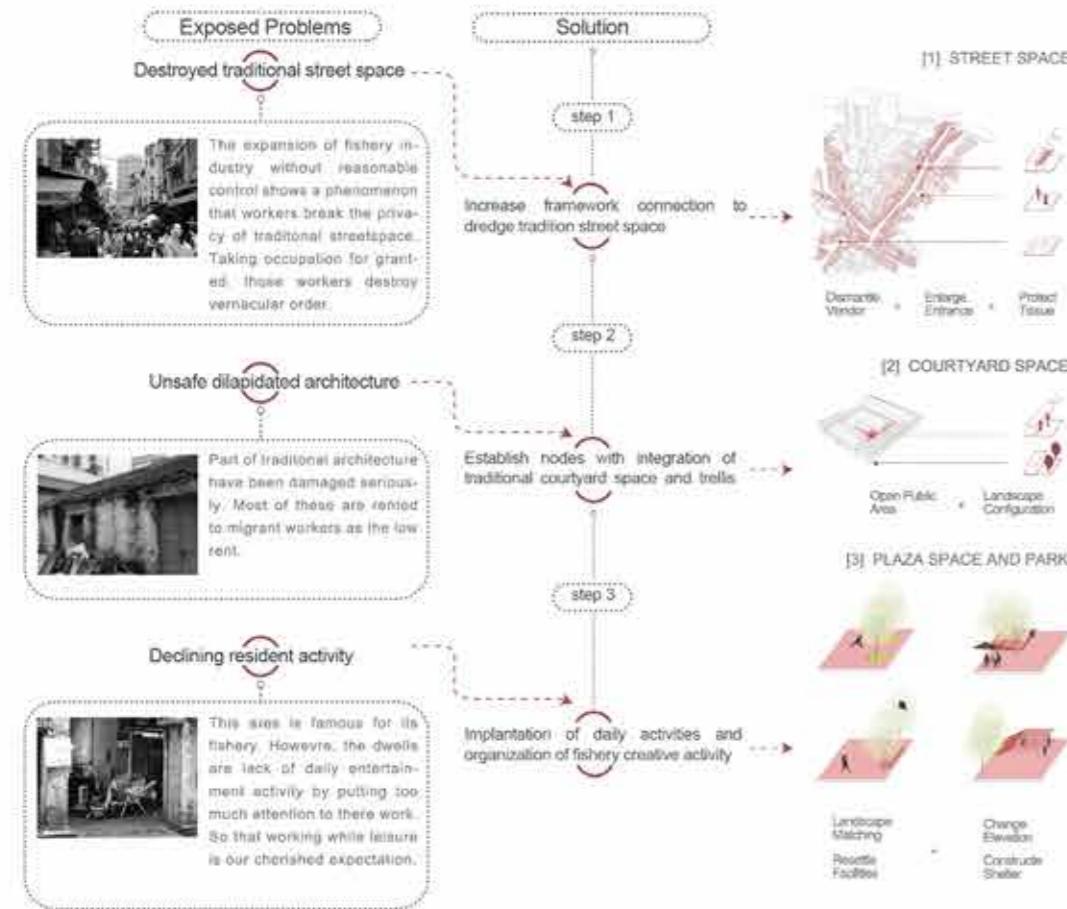


The 2nd Step: Establish network nodes



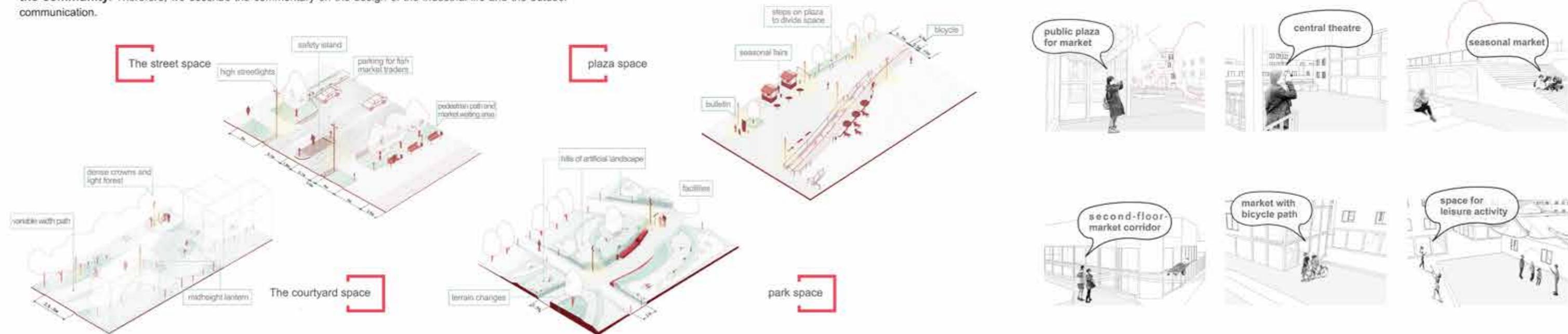
OVERALL SPATIAL DESIGN OF COMMUNITY

Besides the spatial processing of the market, we also divide the general outer space environment of the old community into four types—street space, courtyard space, plaza and green space. Based on the analysis of the cultural activities characteristics and behavior patterns of local residents, we put forward the countermeasures, and repair the problems of the current situation. So that form the community's network of residents' activities.



The Evolution of Spatial Pattern

According to the strategy, we summarize the reference for modifying the four spatial schema languages, and classify different activities into suitable spatial patterns. Besides, the relationship between the architectural group and the outer space is mainly carried out by the occasion activities of the residents in the community. Therefore, we describe the commentary on the design of the industrial life and the outdoor communication.

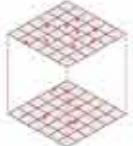


SPATIAL MECHANISM OF THE COMMUNITY MARKET

The main problem of the existing market is that the market carrying capacity is insufficient. So a lot of vendors are gathered on the roads, so the roads are blocked. Meanwhile, many fragmented markets are not connected. Based on the analysis of relationship between traffic stress and space composition, we **readjusting the layout of the market and the linkage of each market system**.

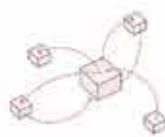
Market Layout Mechanism

Stage 1:
Market distribution area screening



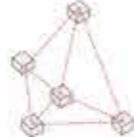
Through the investigation of the crowd gathering degree, we get the point that the crowd density is high.

Stage 2:
Linkage of fishery industrial activities



According to analysis of the relationship between the various links of fishery industry, the map of the industrial macro development is obtained.

Stage 3:
Space node connection



The path of these points are designed to avoid disturbing the normal life of the residents.

Overall Spatial Layout Adjustment

[1] more convenient traffic



[2] more public space



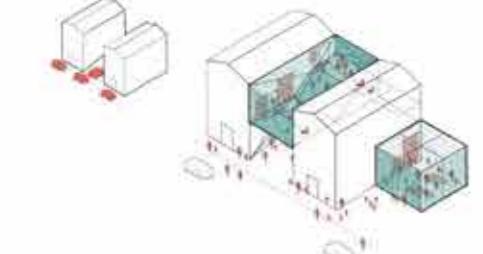
[3] reasonable distribution of market products



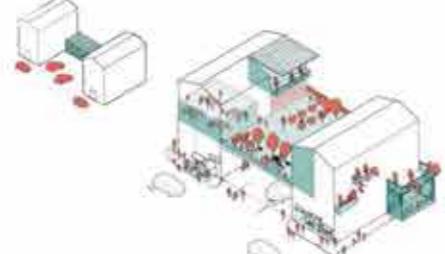
Market Building Spatial Adjustment

[1] connection between market buildings

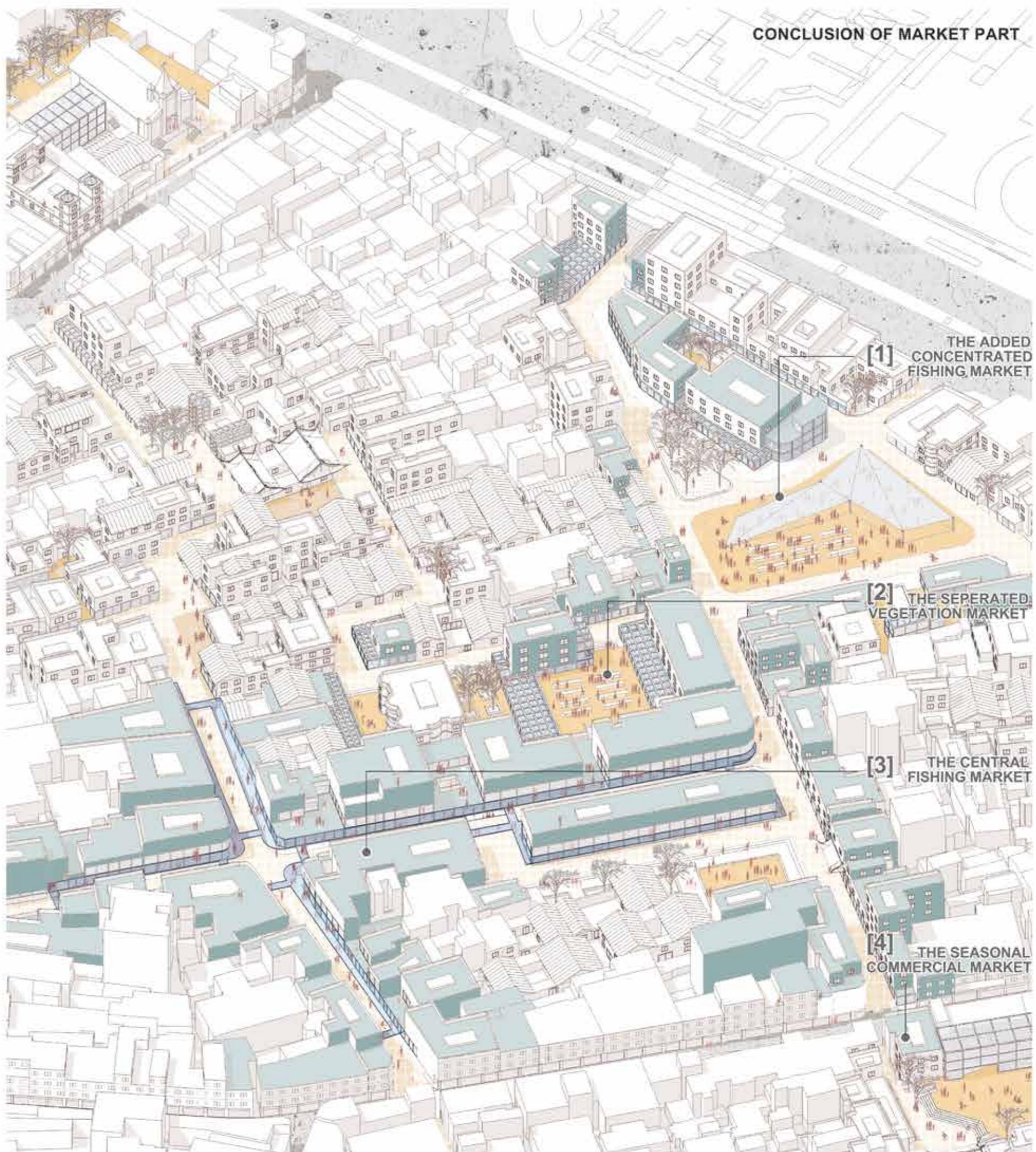
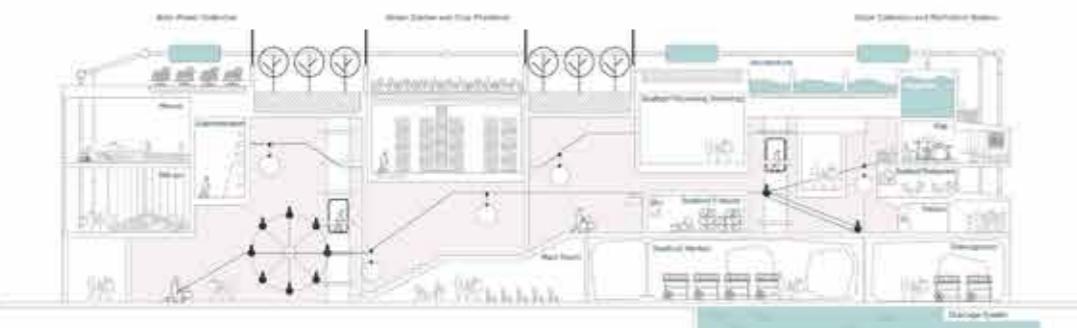
Hybrid connection - common corridor creation



Adaptive market connection - spatial cooperation spatial



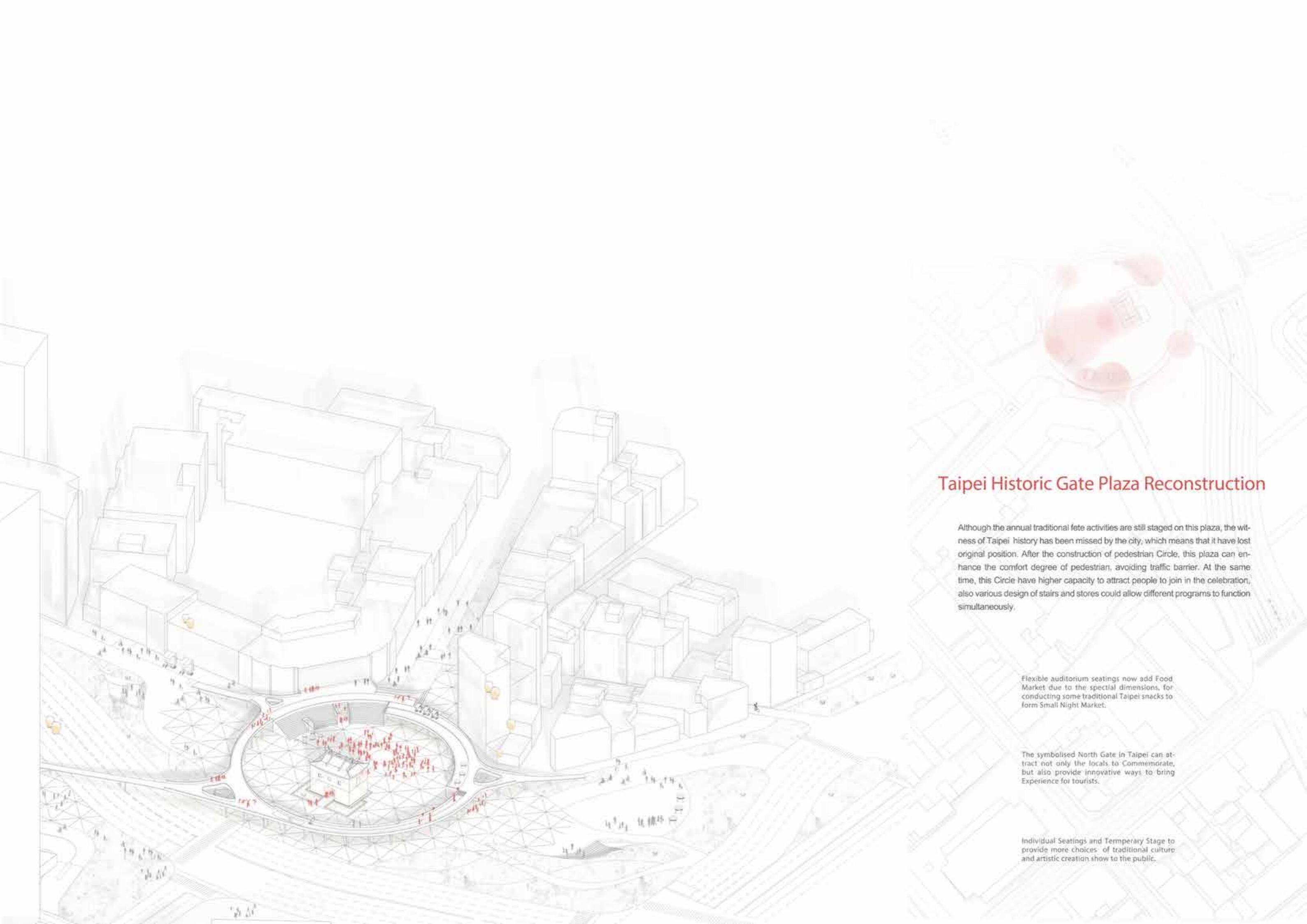
[2] industrial cluster activities in single building



CONCLUSION OF MARKET PART

AERIAL VIEW OF THE OLD FISHING COMMUNITY





Taipei Historic Gate Plaza Reconstruction

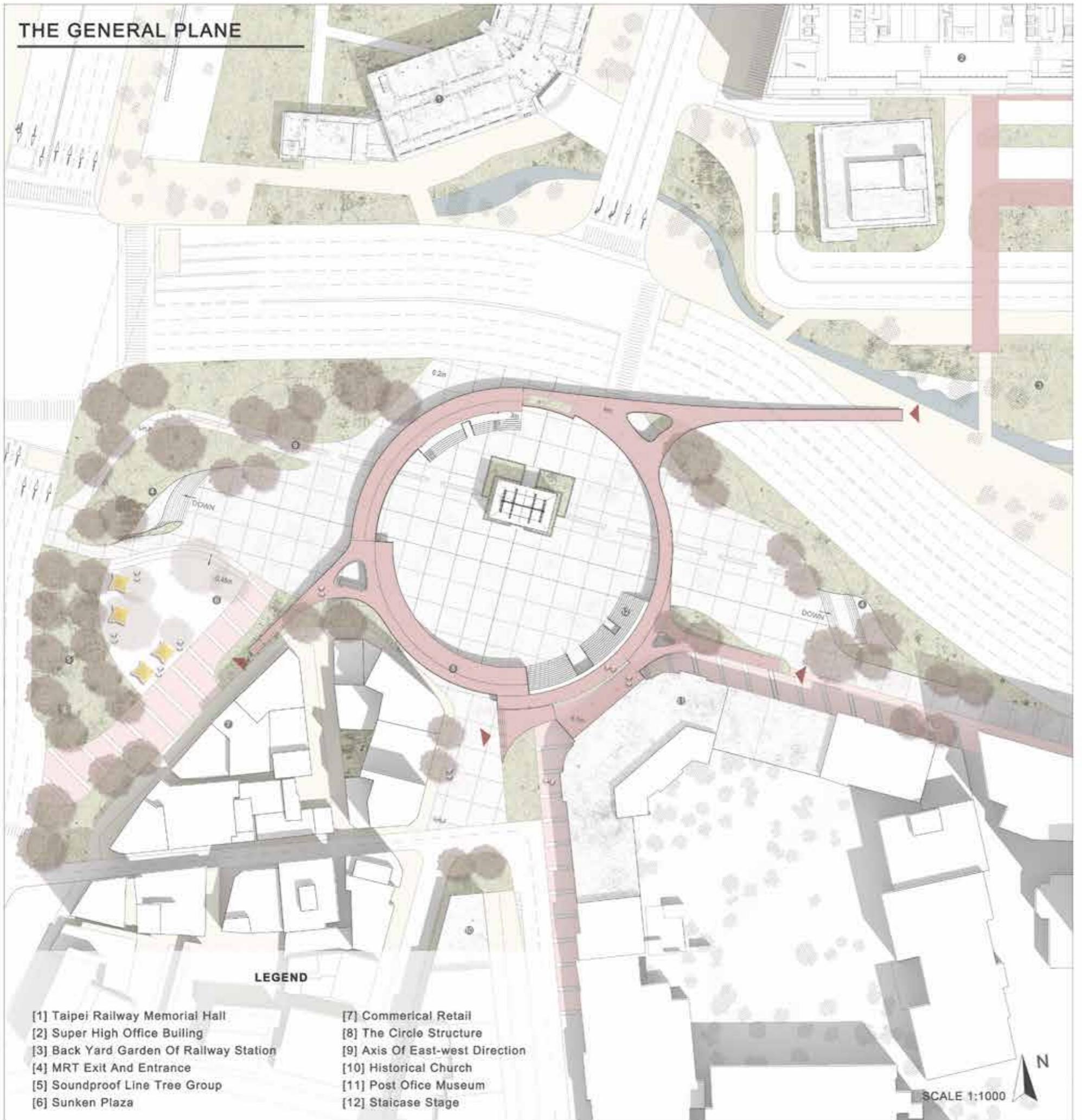
Although the annual traditional fete activities are still staged on this plaza, the witness of Taipei history has been missed by the city, which means that it have lost original position. After the construction of pedestrian Circle, this plaza can enhance the comfort degree of pedestrian, avoiding traffic barrier. At the same time, this Circle have higher capacity to attract people to join in the celebration, also various design of stairs and stores could allow different programs to function simultaneously.

Flexible auditorium seatings now add Food Market due to the spectial dimensions, for conducting some traditional Taipei snacks to form Small Night Market.

The symbolised North Gate in Taipei can attract not only the locals to Commemorate, but also provide innovative ways to bring Experience for tourists.

Individual Seatings and Temprary Stage to provide more choices of traditional culture and artistic creation show to the public.

THE GENERAL PLANE



VIEW 1/ The North Gate scene of Southern Church



VIEW 2/ MRT Exit In The West Square



VIEW 3/ Under The Colonnade



DIFFERENT FUNCTIONS OF THE NORTH GATE PLAZA

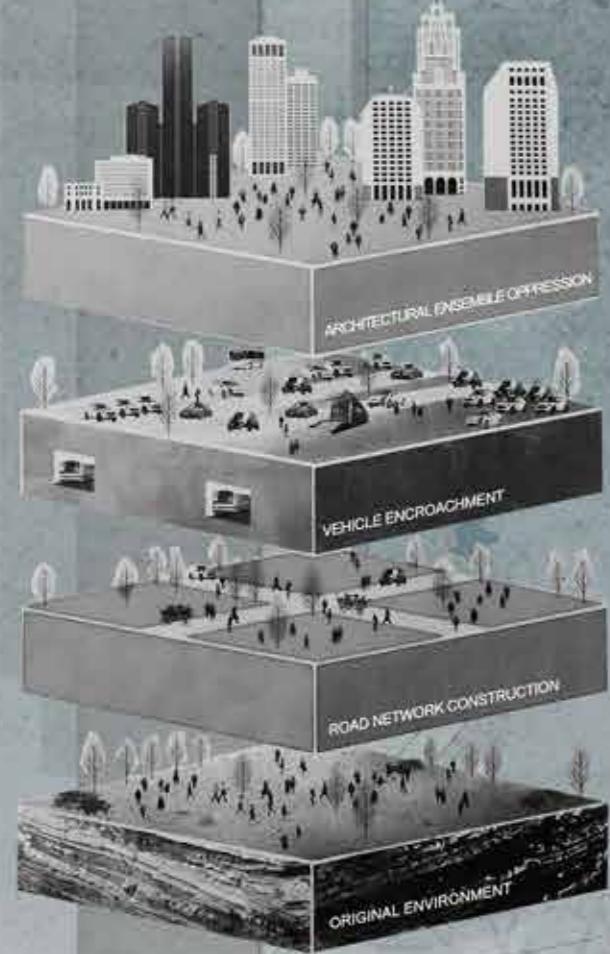
Since the design is based on human beings, I use structure to communicate with the northern traffic, while setting up the landscape to separate the noise and exhaust disturbance, making the whole space more pure. After use of the landscape and the guide, square will be divided into the central region, the East Plaza and West Plaza, those each undertake different functions.

WEST SQUARE-- The square for people to have a rest and stay

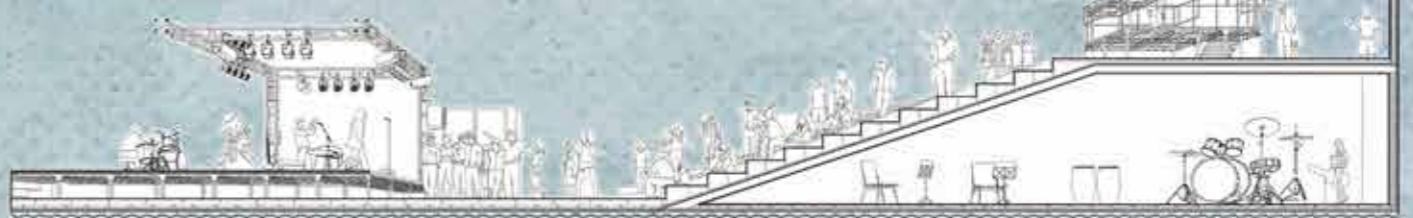
CENTRAL SQUARE-- The square for Improvisational performance and festival activity

EAST SQUARE-- The square for pedestrian overground crossing and underground transportation connectivity

Pedestrian Overground Transit Of Urban Plaza

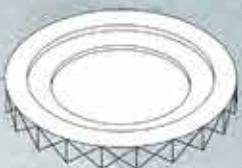


Temporary Performance Scene



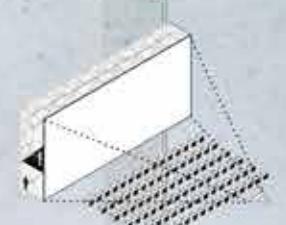
Circle Structure

Making use of the height difference between the circle structures and the horizon to make up the central stage



Temporary facilities

The reserved area of central plaza is beneficial to build a temporary performance square and gather a lot of impromptu performers and audiences

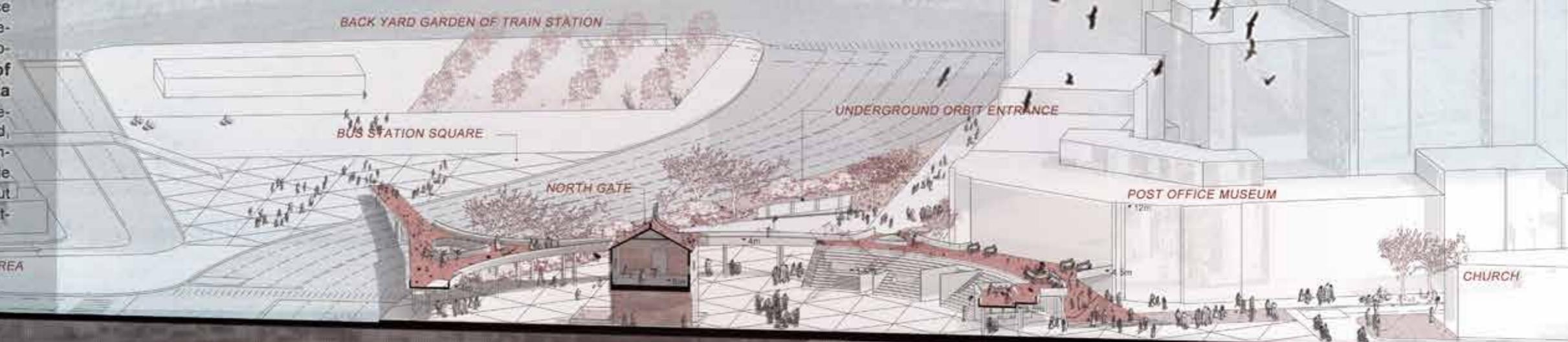


Commerical Service

Part of the areas below the structure arrange commercial retail point and consist of night fair



As a special type of urban plaza, the historical significance and function of pedestrian crossing ability are severely degraded. By using certain method and sustainable approaches, **building auxiliary structures is one of the most significant approaches to help the plaza break out the surrounding of traffic interfere**. Besides, With the new structure and square facilities added, it is convenient for pedestrian crossing and activities connection with surrounding areas. The colonnade of circle not only symbolizes the original walls of North Gate but also create a shelter and sequence for people that is suitable for the activities in modern society.



THE SECTION SCENE OF PLAZA





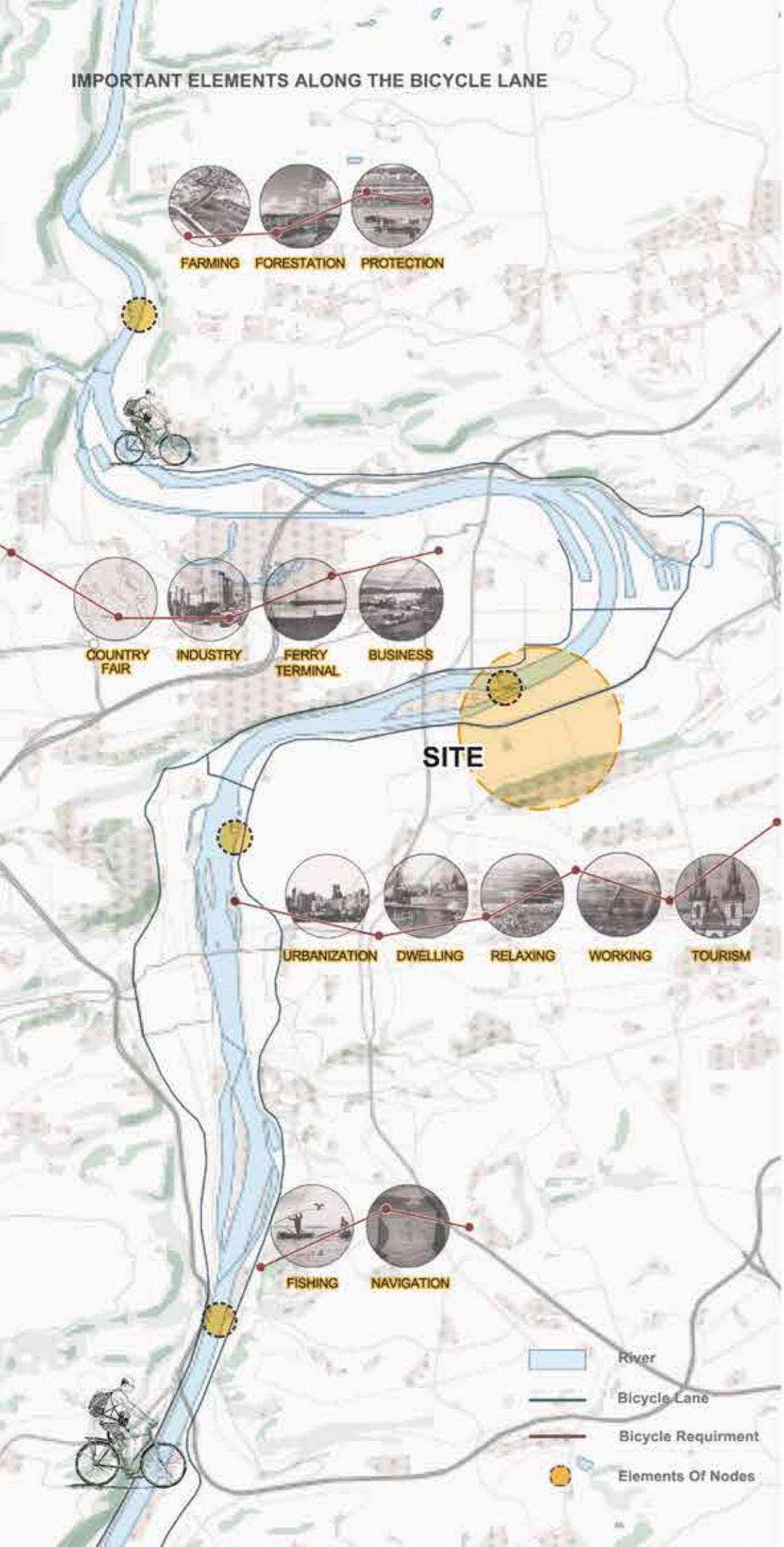
BICYCLE CORRIDOR BRIDGE

ACADEMIC / 2017 / THE BRIDGE COMPETITION

SITE | VLTAVA, PRAGUE

INDIVIDUAL

IMPORTANT ELEMENTS ALONG THE BICYCLE LANE



BICYCLE BRIDGE CORRIDOR

With abundant resources in the Prague River Vltava River, these resources and important elements of the city are connected by the bicycle lanes. Our site is located in the center of the river, a special island with sports facilities and historical architecture. So that based on design, we **connected the north and south sides of the bikeway to strengthen bicycle network and establish landscape corridor**.

BICYCLE CORRIDOR REQUIREMENT



ACTIVITY RESOURCE DISTRIBUTION



USEFUL OPEN SPACE
Park Plaza



UNIQUE BRIDGE
Location Landscape Surrounding Landuse



WATERFRONT BCYCLE
Bridge Traffic



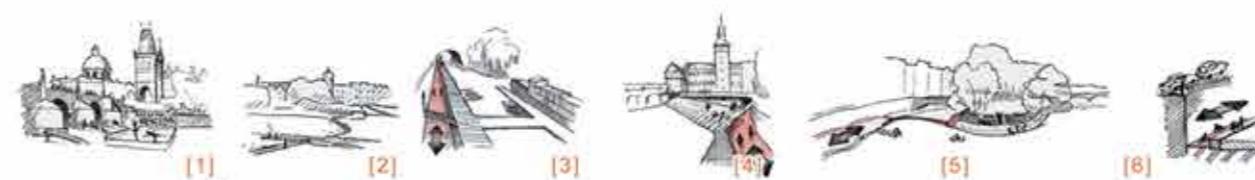
ROUTE NODE
Transport Relax



SPORTS SQUARE
Island Forest Park

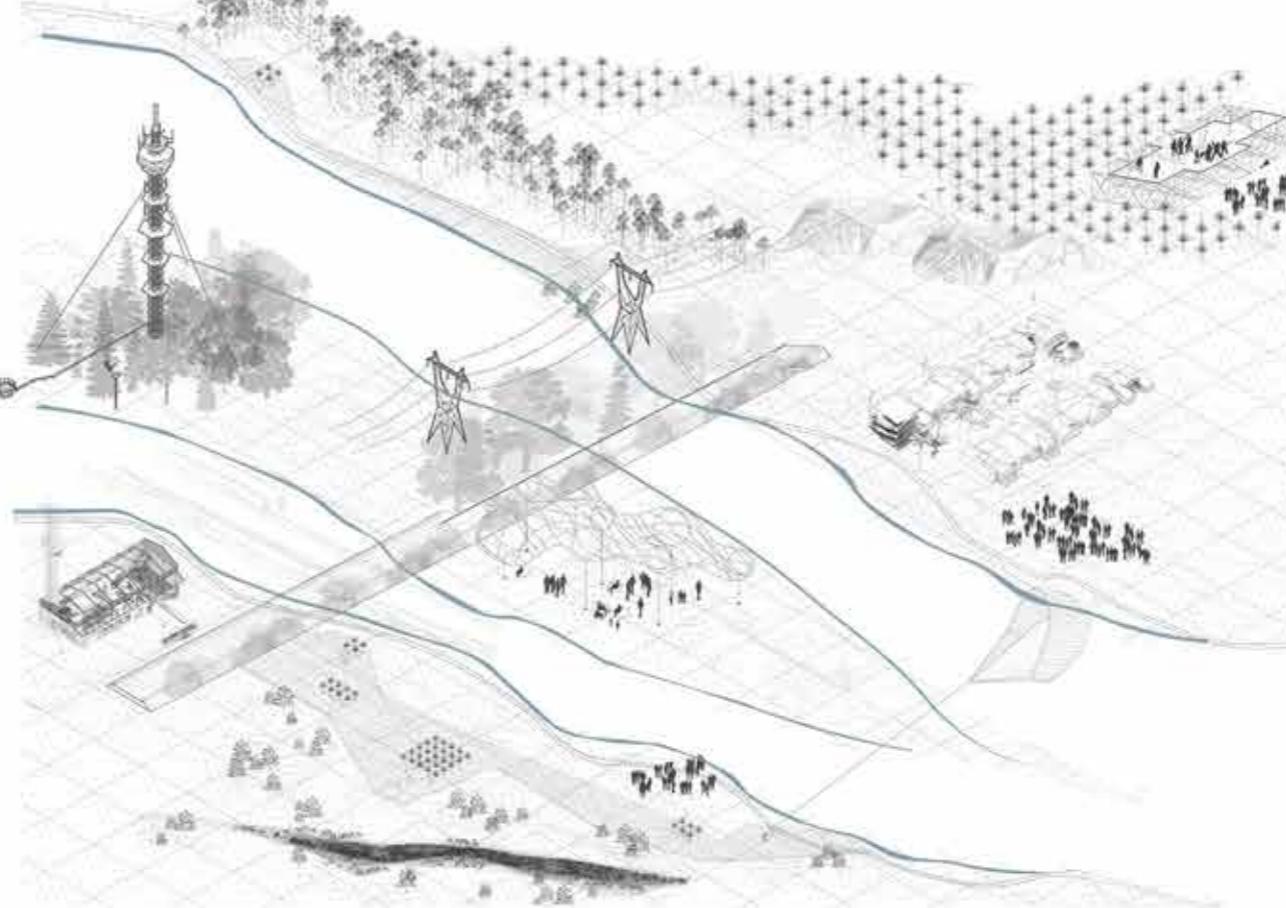


FAIR RADIATION RANGE
Resident Business Infrastructure Tourism Spot



Sub Topic: How to make a system of bicycle corridor including leisure activities and providing a platform for people to have different view of surrounding.

Because of the abundant view, the passing bridge can not satisfy bicyclists. So that it has become a sub topic for the research that how to provide a leisure bicycle corridor crossing the river.



[1] Comfortably connection with the original bicycle system

First, adopt the form of a curve to construct bridge, instead of the direct connection between banks. Second, in terms of height difference of the surface between the banks and central islands, the change of the slope of the bridge body is carried out.

[2] The variability and Continuity of the landscape configuration of the bicycle system

Using the curve of the bridge to combine landscape changes on north and south. Besides, bridge also have landscape configuration.

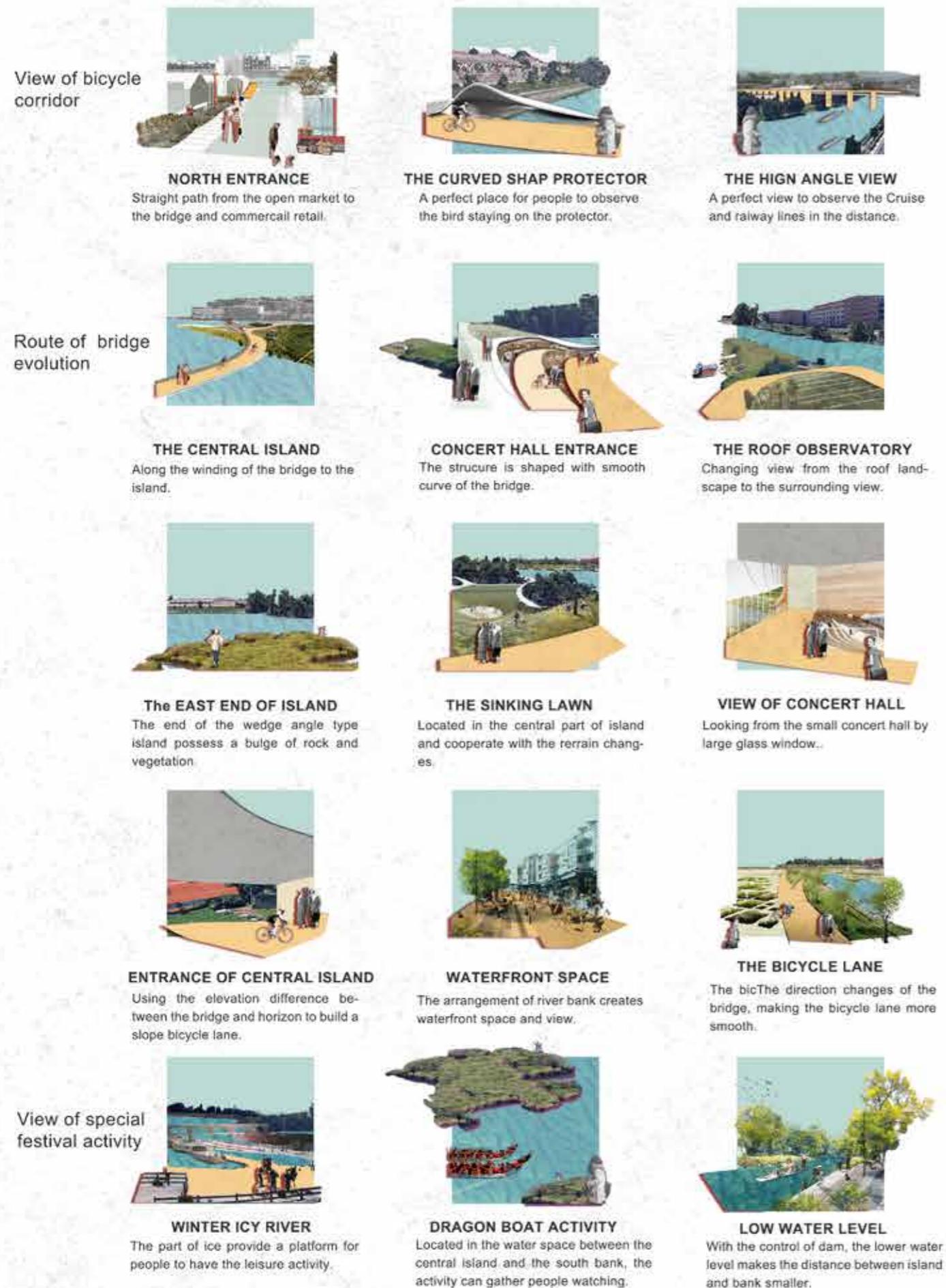
[3] The integration of the function of the surrounding cities

For those who undertake the city's function around, it is convenient to get on bridge. And bridge needs recreational facilities to allow these people to gather.



DETAIL DESIGN

Every important story scene are designed carefully along the bicycle corridor over the river. Here are storyboard for them.

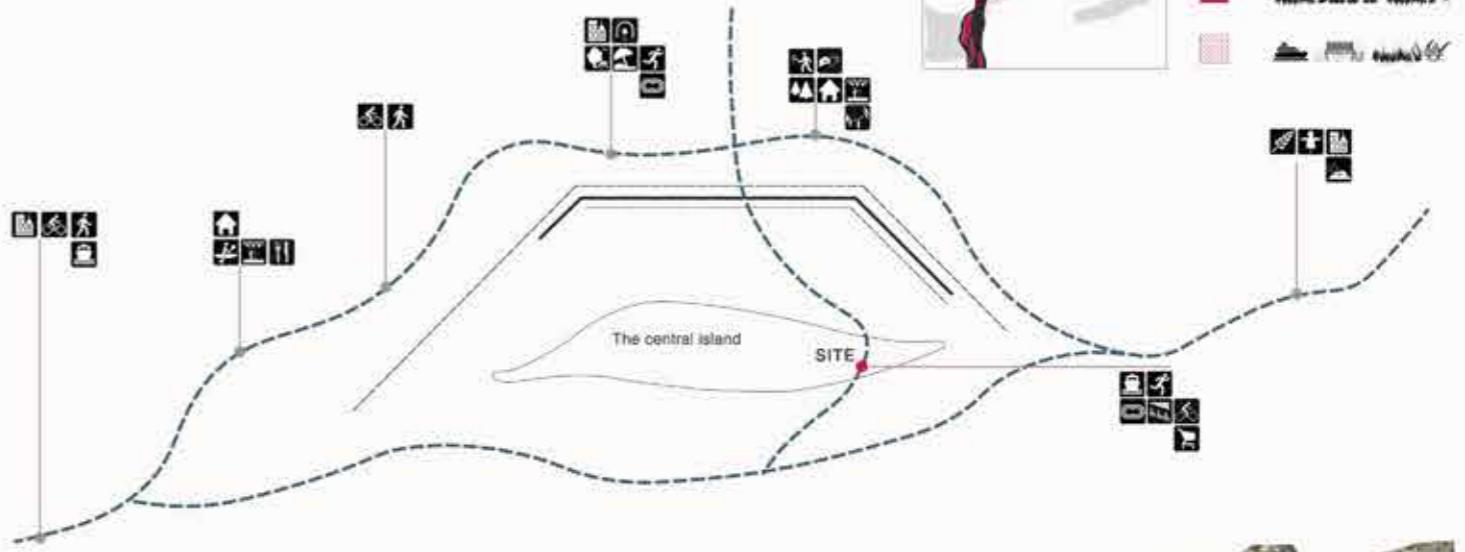
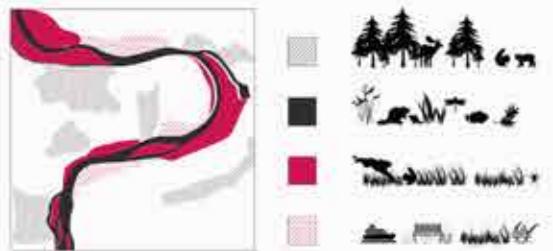


----- Bicycle Connection

From east to west, linking all the surroundings along Bicycle Corridors through land and river

----- Harbor

Artificial embankment to create a login node of a cruise ship



Surrounding Ecologies



MAIN FINDINGS OF ENVIRONMENT ANALYSIS & PLANTING STRATEGIES



BUILD GREEN LINKAGE:

- The biodiversity in the **edge areas** has the most species record.

Planting from the edge to connect the existing habitat from the edge.

- There are several species recorded in **existing green patches**.

Develop Existing biodiversity Hotspot

BUILD GREEN PATCHES:

- Existing large **bare ground**

Create mosaic habitats to increase biodiversity

BARE GROUND-PLANTING THEORY

AIM: LESS IMPORT BUT MORE OUTPUT

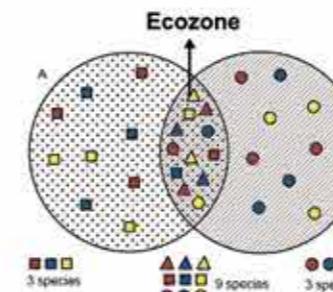
OBJECTIVE: CREATE MORE MOSAIC HABITATS TO INCREASE BIODIVERSITY

WHY & HOW MOSAIC HABITATS INCREASE BIODIVERSITY?

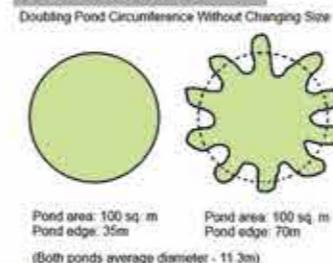
- The Mosaic habitats when they meet together will cause the '**edge effect**'.

- The 'edge effect' will cause the **ecozone (transition zone)** when different habitats meet together which has the most biodiversity potential.

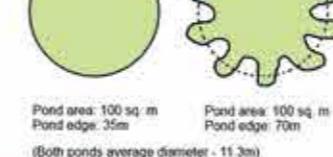
THE "EDGE EFFECT"



DESIGN PATTERNS OF GREEN PATCHES

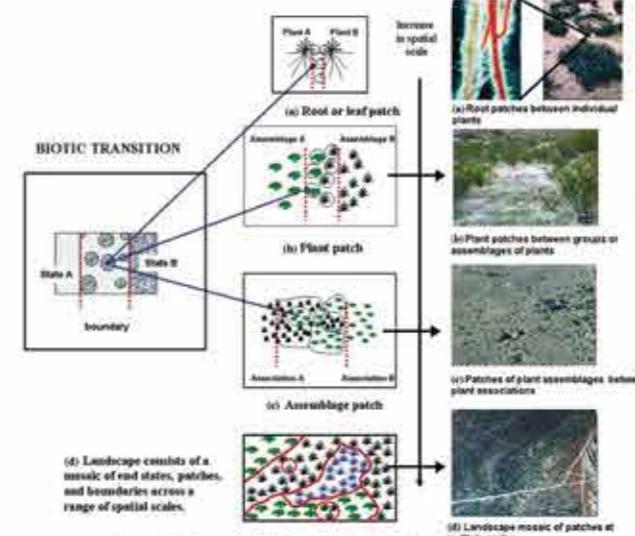


Pond area: 100 sq. m
Pond edge: 35m
(Both ponds average diameter - 11.3m)



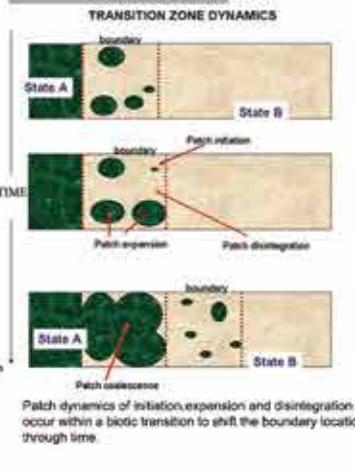
Boundary
(i) Root or leaf patch
(ii) Plant patch
(iii) Assemblage patch
(iv) Landscape mosaic of patches at multiple spatial scales

ECOZONE FORMING PROCESS



Conceptual framework of biotic transitions at multiple spatial scales.
Deep Green Permaculture(2009). 10: Edge Effect [online]. Deep Green Permaculture [viewed 13 March]. Available from:<https://deepgreenpermaculture.com/permaculture/permaculture-design-principle/10-edge-effect/>
Peters, Debra, P. Goetz, C. Peckman, R. Parmenter, William Collins, and T. Muldavin. "Integrating Patch and Boundary Dynamics to Understand and Predict Biotic Transitions at Multiple Scales." *Landscape Ecology* 21.1 (2006): 19-33. Web.

ECOZONE DEVELOP THROUGH TIME

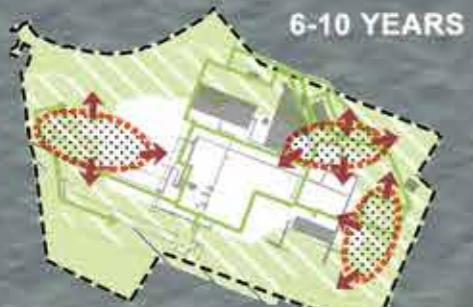


Patch dynamics of initiation, expansion and disintegration occur within a biotic transition to shift the boundary location through time.

PLANTING STATEGIES



Phase1:
Planting From the Edges and Establish Visiting Green Corridors

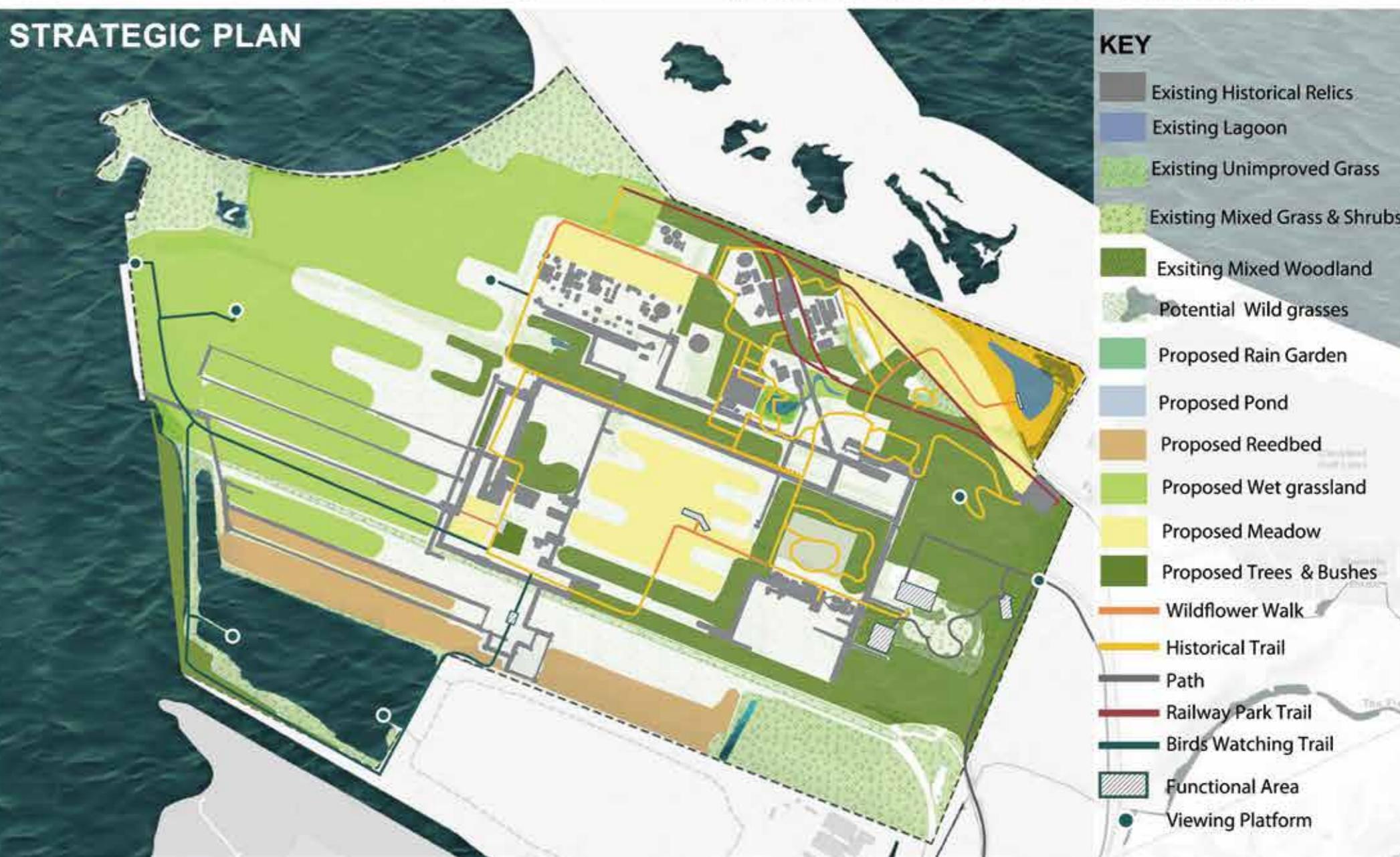


Phase2:
Develop Existing Biodiversity Hotspot



Phase3:
Create Mosaic Habitats

STRATEGIC PLAN



MASTER PLAN



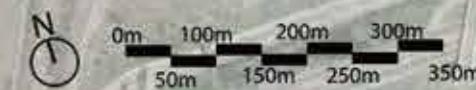
KEY

- Reedbed
- Woodland
- Trees and Bushes
- Rain garden
- Wildflower

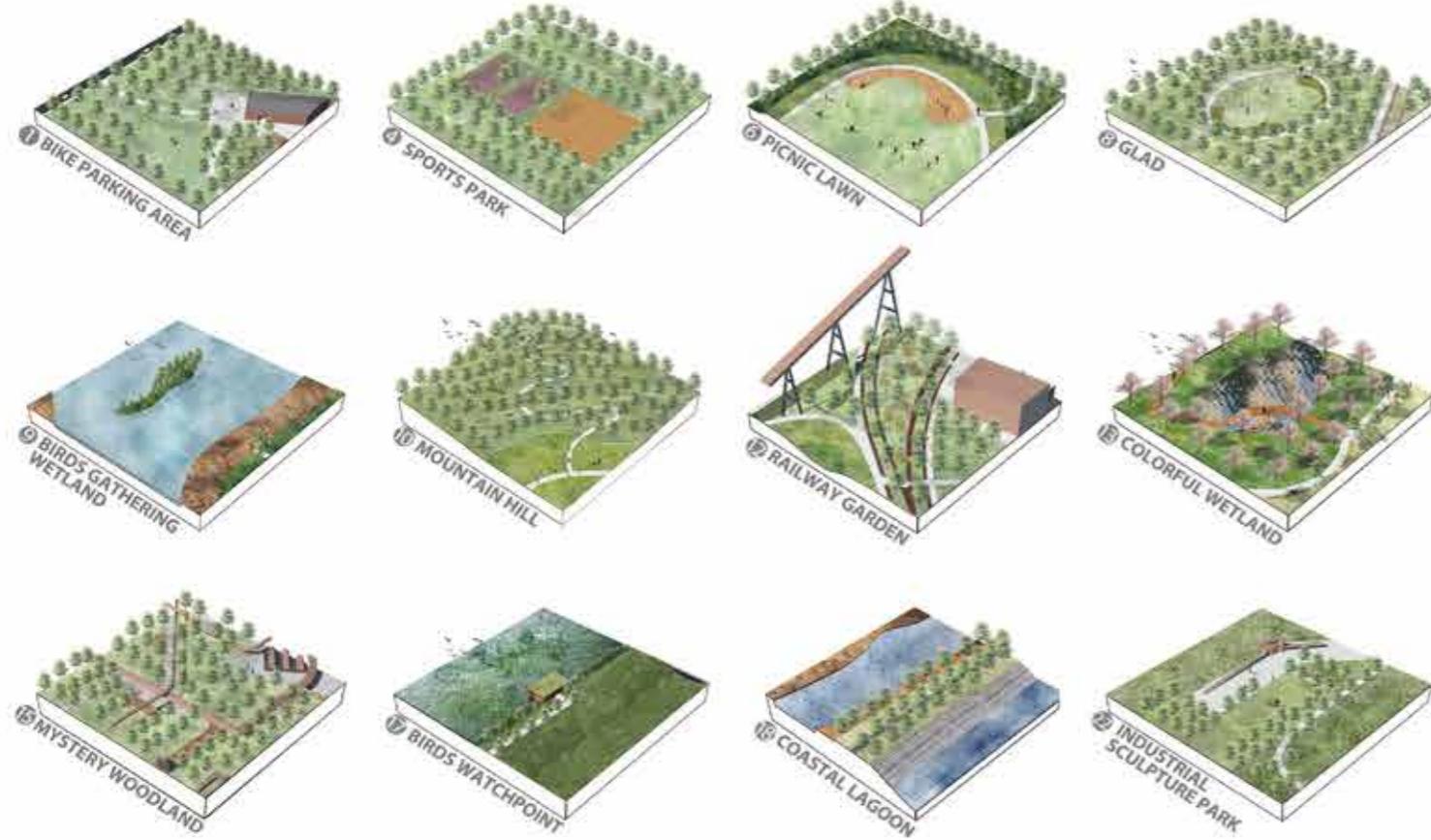
- Grassland
- Hedgerow
- Wet Grassland
- Wild Grass
- Raw Industrial Material
- Industrial Relics

1. Bike Parking Area
2. Playful Garden
3. Car Park
4. Sports Park
5. Visitor Center
6. Picnic Lawn
7. Interactive Wetland
8. Glade
9. Birds Gathering Wetland
10. Mountain Hill
11. Educational Center
12. Railway Garden
13. Colorful Wetland
14. Cafe & Toilet
15. Mystery Woodland
16. Wildlife Watchpoint
17. Birds Watchpoint
18. Common Seal Watchpoint

- 19. Lagoon
 - 20. Photographic point
 - 21. Leisure Area
 - 22. Industrial Sculpture
- ▲ Entrance



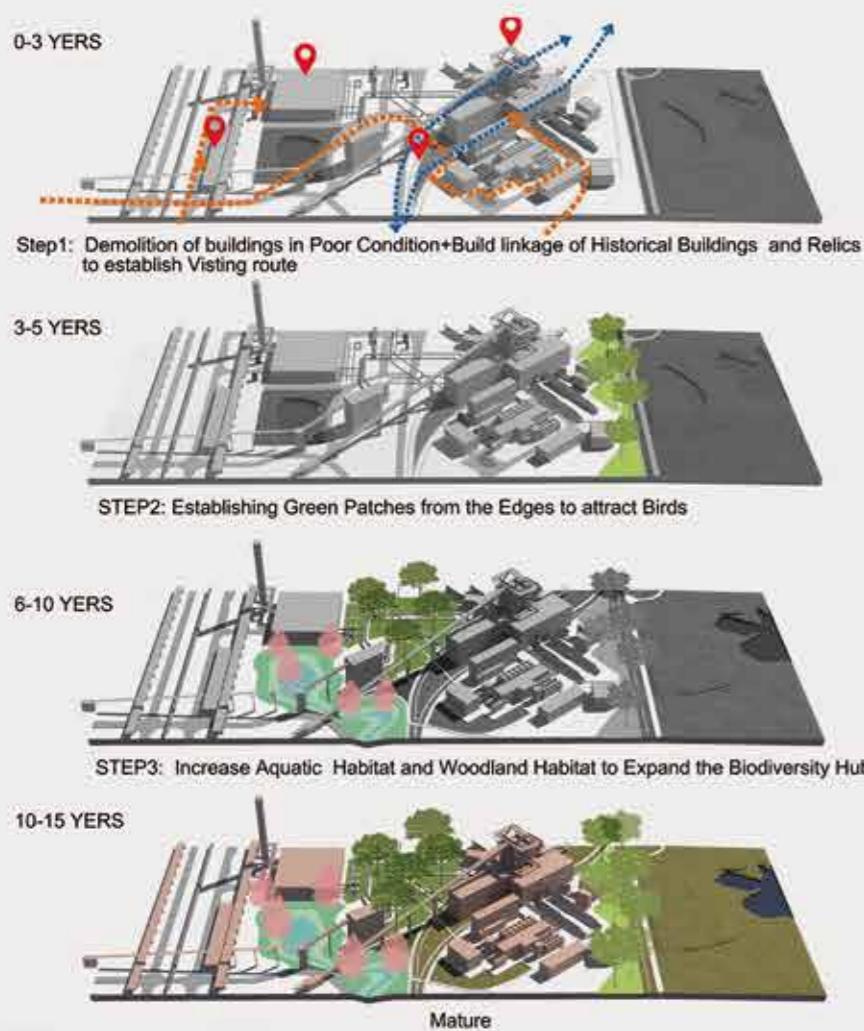
POSITIVE OUTDOOR SPACES



MOSAIC HABITATS VISUALIZATION



MANAGEMENT PROCESS



Step 1: Introduce Farmland Birds From Edges



Step 2: Establish Woodland habitat to attract Woodland Birds



Step3: Establish Wetland habitat to attract Water and Wetland Birds





WIND FARM PLANNING

Large Scale Landscape Planning

APPLICATIONS

LCA Landscape Character Assessment
Landscape Character Sensitivity
Landscape Capacity
ZTV - Zones of Theoretical Visibility

WIND FARM IN LANDSCAPE PLANNING

LCA - Landscape Character Assessment
Landscape Character Sensitivity
Landscape Capacity

LOCATION

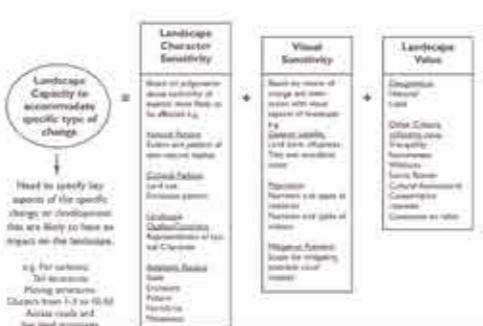


The Study Area is located west of Sheffield city. Half of the site sits within Sheffield's green belt and west suburbs, whilst the other half lies within the Peak District National Park. The total scale of the site is 3163 ha (7815 ac).

Both Loxley Valley and Rivelin Valley run west to east within the Study Area. A large portion of the Study Area's land uses are devoted to pastoral farming and managed moorland. Other land uses such as small scale settlements and suburbs, dams and water treatment and amenity landscapes are also present in the landscape.

The aim of this project is to plan locations and scenarios of wind turbines, which can generate 10MW, using Landscape Character Assessment.

LVIA - Landscape Visual Impact Assessment
ZTV - Zones of Theoretical Visibility



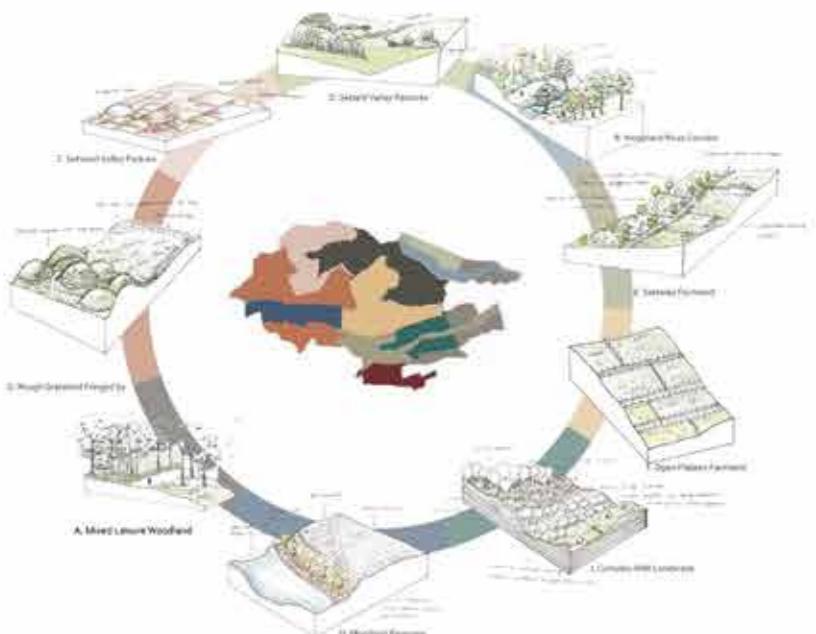
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LANDSCAPE SENSITIVITY AND CAPACITY STUDY

LANDSCAPE CHARACTER ASSESSMENT PROCESS

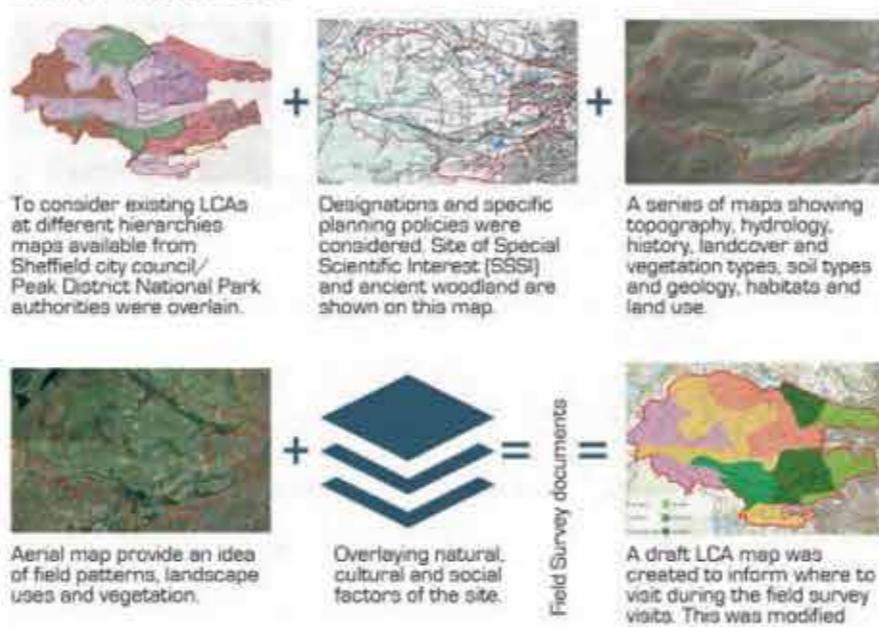


A. Mixed Leisure Woodland
-Strong sense of enclosure formed by dense trees along both sides
-Dominated by coniferous trees and mixed with deciduous broadleaved trees
-Trees usually have clear stems with leisure function beneath
-Enclosed landscape with views restricted by trees

B. Wooded River Corridor
-Narrowed valley containing meandering rivers occasionally sided by stone containing walls
-Strong sense of enclosure formed by valley landform and dense trees along both sides
-Valley sides are moderate to steep
-Wooded character associated with bridleways along stream

C. Rough Moorland
Heather moorland dominated with rough grass patches
Open and exposed landscape with expansive views
Unwooded landscape other than deciduous trees scattered

LCA PROCESS



To consider existing LCAs at different hierarchies maps available from Sheffield city council/ Peak District National Park authorities were overlaid.

Designations and specific planning policies were considered. Site of Special Scientific Interest (SSSI) and ancient woodland are shown on this map.

A series of maps showing topography, hydrology, history, landcover and vegetation types, soil types and geology, habitats and land use.

Aerial map provide an idea of field patterns, landscape uses and vegetation.

Overlays natural, cultural and social factors of the site.

A draft LCA map was created to inform where to visit during the field survey visits. This was modified following the field survey

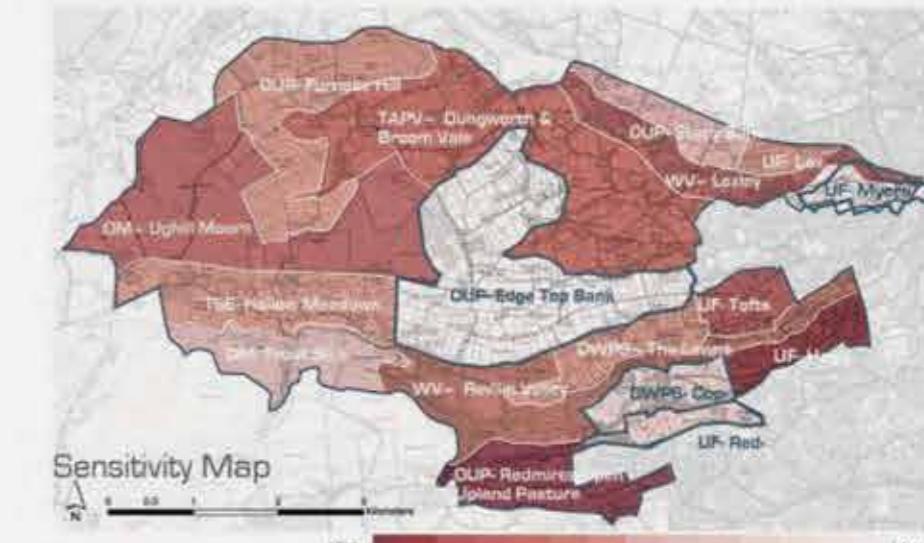
LANDSCAPE CAPACITY MAP

Landscape character assessment[LCA] is a standardised system used to identify, define, classify and map variations of the character of the landscape. By doing this we may see the differences and similarities between landscapes, to consider the contribution of specific landscape elements to its overall character.

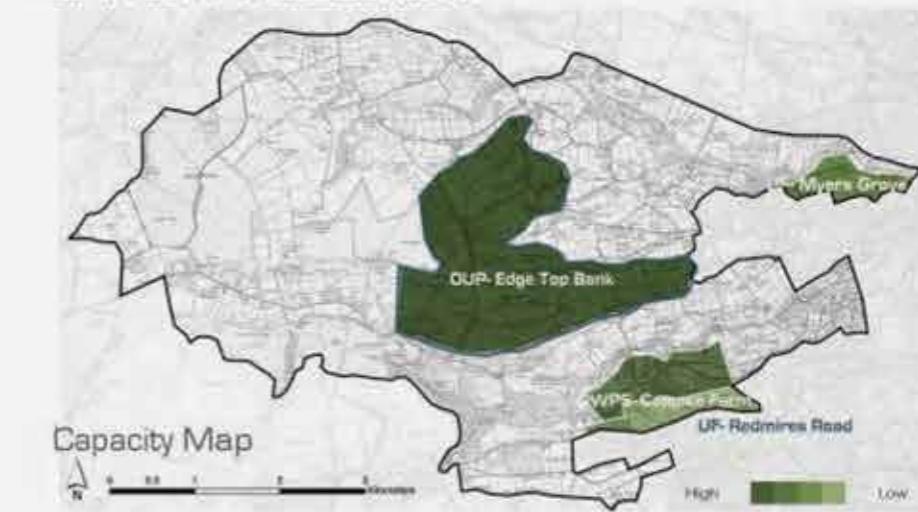
LANDSCAPE CHARACTER ASSESSMENT



SENSITIVITY ASSESSMENT



CAPACITY ASSESSMENT



Forms and planning documents



Landscape Sensitivity to specific change



Landscape Sensitivity to wind farm development =
Landscape Character Sensitivity + Visual Sensitivity

Landscape Capacity



Landscape Capacity =
Overall Landscape Sensitivity + Landscape Value.

From our LCA we are able to conduct landscape sensitivity study and capacity studies in order to make suggestions for most suitable locations for the proposed wind farms.

According to Topic Paper 6: Techniques and Criteria for JUDGING CAPACITY AND SENSITIVITY by the COUNTRYSIDE AGENCY AND SCOTTISH NATURE HERITAGE [2002]

D. Settled Valley Pastures
Irregular small size of pattern farmland enclosed by dry-stone walls and hedgerow trees.
Undulated rolling landform with gentle slope.
Dense copse connected by hedgerow species.
A network of small valleys dissecting the main valley sides.

F. Open Plateau Farmland
Dry-stone walls are widespread, defining a more geometric regular large size of field pattern.
Gentle to moderate rolling plateau landscape.
Improved grassland dominated with rough grass grazed by sheep.
Clear skyline with open views with a distinct absence of trees.

H. Moorland reservoir
Rough grass and bracken dominated with areas of damp heathland.
Open lakes sided by rough grass with expansive views.
Open moorland covering a gentle sloping landform.
Undulating planes to moderate slopes with a natural topographic transition between reservoir and moorland.

E. Settled Farmland
Relatively regular pattern fields bounded by dry-stone walls.
An open settled landscape with undulated rolling landform.
Settlements along main roads and scattered farmsteads.
Enclosed landscape with views filtered by hedgerow trees.

G. Moorland fringe rough grassland
War field covered with soft rough grasses.
Gentle to moderate upland slopes fringing open moors.
Open landscape with expansive views with a distinct absence of trees.
Rough grassland grazed by sheep.

J. Complex wild landscape
Mixed landscape dominated by moorland and woodland with marshland fragments.
Gentle to moderate rolling landform divided by a deep stream valley.
Nature reserve with leisure function.
Complex landform and varied landcover formed diverse spatial experiences.

WIND FARM IN LANDSCAPE PLANNING

LANDSCAPE CHARACTERS

OUP - Open Upland Pasture



- Rural character with footpaths and country lanes.
- Dotted trees and sparse hedgerow and very occasional copse associated with farmsteads.
- Mainly permanent pastoral farmlands (with few arable and occasional amenity areas and managed playing fields).
- Dry stone walls and simple timber fenced boundaries, with mostly large-scale regular shaped field patterns.
- Gentle rolling hills and sinuses skyline often with distant suburban view.

UF - Urban Fringe



- Narrow steep valleys with mixed amenity land uses and facilities such as allotments, urban farms, park, golf courses etc.
- Human influences are noticeable with more complexity/ dotted paraphernalia of human use, with linear settlements along a road to the west meeting with sprawling edge of Sheffield to the east
- Occasional pastoral fields with dry stone walls and rural fenced boundaries, typically small scale with regular field patterns.
- Views to urban and suburban settlements and Woodland Valley below.

JUSTIFICATION

■ High ■ Medium High ■ Medium Low ■ Low

Level	Landscape Character Sensitivity	Visual Sensitivity	Sensitivity Level
High	Intervisibility with adjacent	Numbers and types of	High
Medium High	Skyline Prominent landscape features (land cover)	Numbers and types of residents	Medium High
Medium Low	Sediment/ Human influence Perceptual aspects and tranquility	Landform	Medium Low
Low	Landscape Pattern/complexity	Tree and woodland cover	Low

DWPS - Densely Wooded Pastoral Slopes



- Rolling slopes and broad valley leading down to steeper ravines
- Rural character enclosures are darkened by dense woodland, hills and ridges.
- Permanent pasture with blocks of mixed deciduous woodland or woodland belts includes few conifer plantations.
- Boundaries are typically dry stone walls in relatively good condition.
- Scattered occasional settlements, with roads vary from steep winding to shallow straight.
- Has a distinct human scale, which contrasts greatly from large scale Open Upland Pasture Character Type.
- Views to Urban Fringe and Open Upland Pasture.

WV - Woodland Valley



- Rivers with historic weirs and small to medium dams and reservoirs.
- Presence of large dams within character area are noticeable in the distance.
- Steep banks either densely vegetated or manured and reinforced at dams.
- Mixed woodland with some regenerating areas, ancient woodland in narrow cloughs and conifer plantation.
- dependant on building age.

TAPV - Tributary Ancient Pasture Valley



- With rolling hills and incised narrow and tributary valleys undulating landform and cloughs.
- Mainly permanent pastoral farmlands (with few arable and occasional amenity areas).
- Small to medium irregular ancient field patterns due to topography, these are defined by dry stonewalls and hedgerow trees.
- Mainly sparse traditional farm buildings but occasional modern nucleated hamlets with churches and schools.
- Suburban areas are noticeable in the distance of skyline, however, many views are blocked by woodland, hills and ridges.

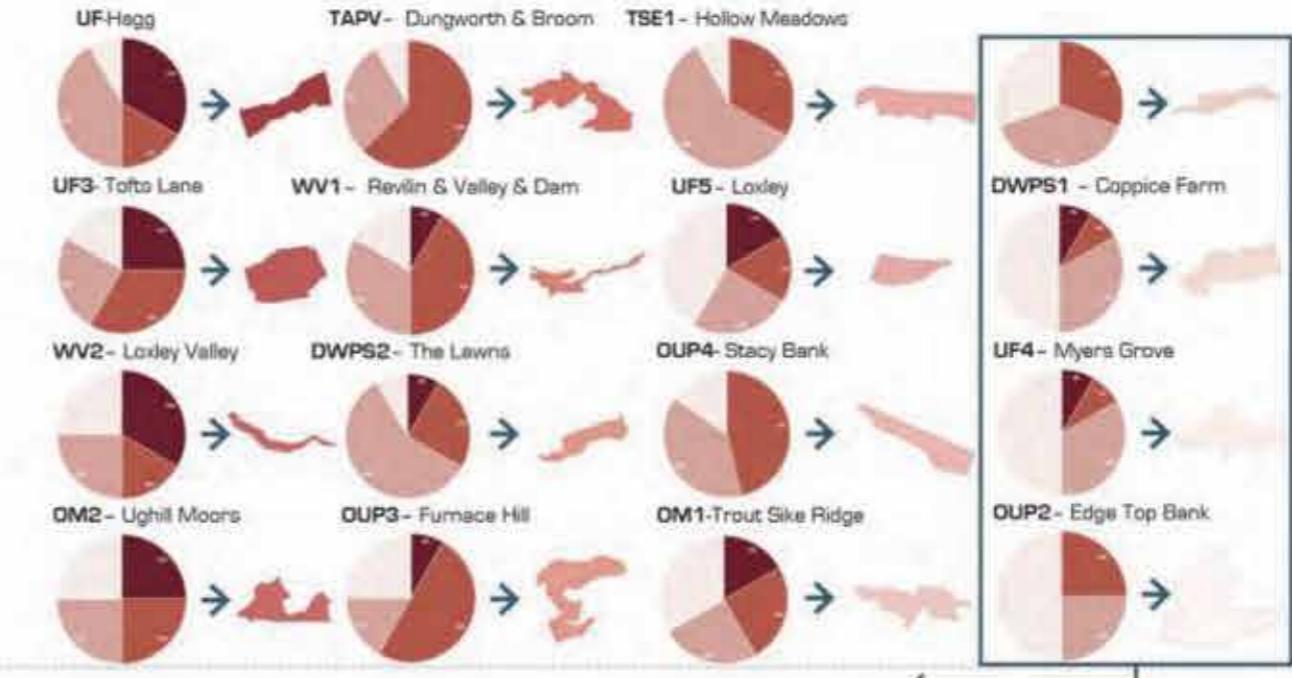
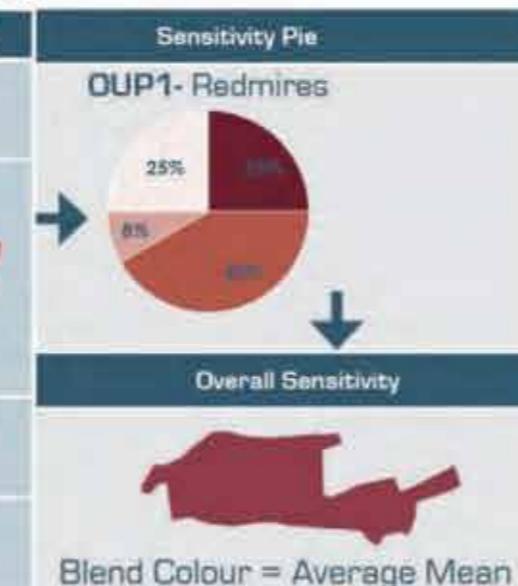
OM - Open Moorland



- Unenclosed heather and grass moorland, with some areas of birch scrub.
- Gently rolling hill and slopes with occasional plateaus.
- Highly exposed wild character with expansive open views.
- Rocky outcrops and vertical rock formations, scattered large rocks amongst heathland and tussock grasses.
- Patchwork of heather being burned on rotation is noticeable from a distance.
- Smooth and clear skyline with little to no vertical features, aside from some rocky outcrops.

JUSTIFICATION

■ High ■ Medium High ■ Medium Low ■ Low



JUSTIFICATION

■ High ■ Medium High ■ Medium Low ■ Low

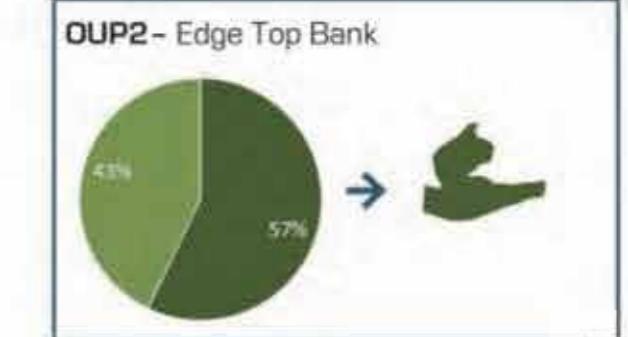
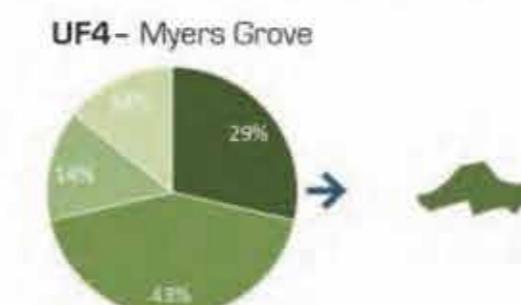
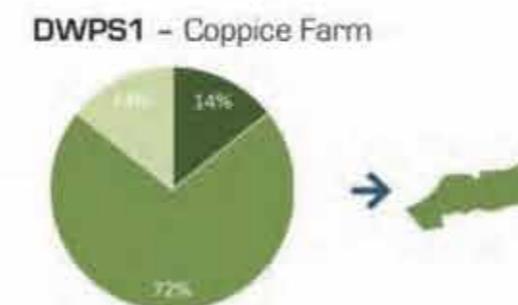
Level	Value of Landscape	Percentage	Capacity Pie
High	Recreation value	11%	UF1 - Redmires Road
Medium High	Special qualities	17%	DWPS1 - Coppice Farm
Medium Low	Landscape qualities	43%	UF4 - Myers Grove
Low	Scenic quality	17%	OUP2 - Edge Top Bank
	Conservation interests	11%	

Four least sensitive landscape character areas, which means high capacity areas for wind farm development, are chosen to assess capacity of each area.

Landscape capacity consist of overall landscape sensitivity (landscape character sensitivity + visual sensitivity) and landscape value of the area.

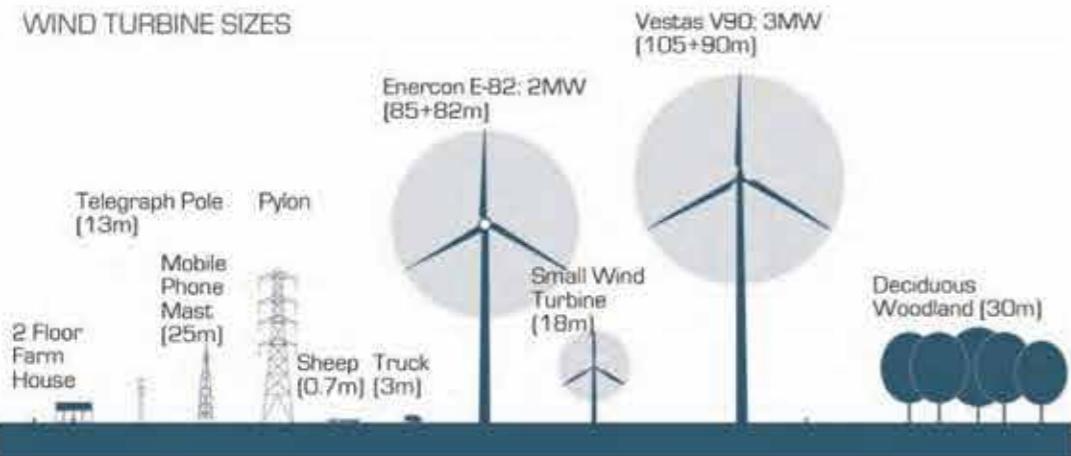
As the result, OUP2- Edge Top Bank Upland Pasture is evaluated as the highest capacity landscape character area for wind farm development on the site.

We will use this result for the next stage of the project, design development of wind farms.



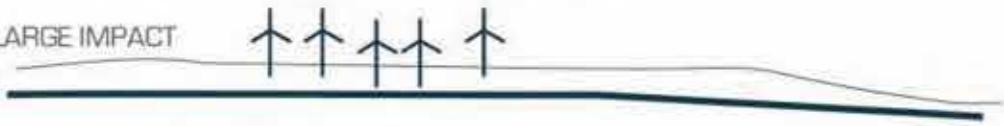
WIND FARM IN LANDSCAPE PLANNING

WIND TURBINE SIZES



PERCEPTION OF WIND TURBINES IN THE LANDSCAPE

LARGE IMPACT



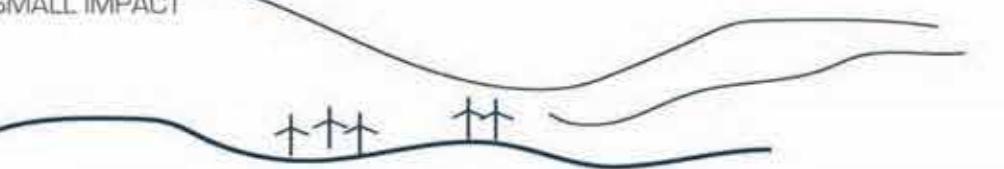
SMALL IMPACT



LARGE IMPACT



SMALL IMPACT



Contour line 1



Contour line 2

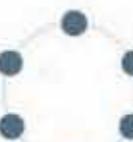


WIND TURBINE SPATIAL CONFIGURATION OPTIONS

Adjacent wind farms should consider trying to have types and sizes of turbines in keeping with each other. Existing wind turbines already situated within the same Character Area are different from each other because:

Wind turbines will face west towards the prevailing wind and so this is expressed in the visualizations.

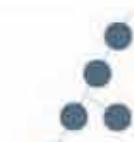
Special considerations:
2 rotor widths between each turbine and 5 to 7 rotor widths between rows are needed for the layout.



Circle



Grid



Line



Staggered



Follow the Field Pattern



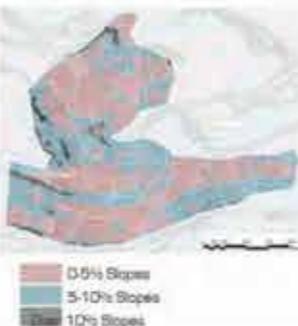
Follow the Contour Line

DETAIL SITE SELECTION

House Buffer Zones & Access Roads



Topography & Gradients

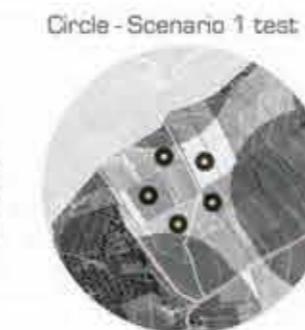


CHOOSING THE POSSIBLE LAYOUTS OF WIND TURBINES

Follow the Contour Line - Scenario 1 & 2 test



Line - Scenario 1 test



Circle - Scenario 1 test

SCENARIOS ON THE SITE

AERIAL VIEWS EXPLANATION

The areal views to the right give an impression of which wind turbine layout might be the most aesthetically pleasing. Two different final layouts are chosen for scenario 1 and 2 based on the turbines relationship with topography field patterns, existing vertical structures, shadows and landmarks created. Reasoning for the decisions made are given in the far right hand columns.

CIRCLE

- Research shows that wind turbines are aesthetically pleasing in cluster formation. The circle pattern means that turbines are seen this way from all distances.

- This pattern type makes the wind turbines become a new aesthetic landscape element and perhaps, also a new landmark.

CONTOUR LINE 1

- The wind turbines follow the existing contour lines.

- The plantation located on the left side of the wind farm provides a background for the turbines.

- The wind turbines follow the existing field pattern in a more organic form.

LINE

- The line pattern respects existing landscape features such as vegetated belts and the ridge of the hill.

- Mimics line of surrounding vertical features (tree lines and power lines) means that the wind turbines respect existing landscape forms.

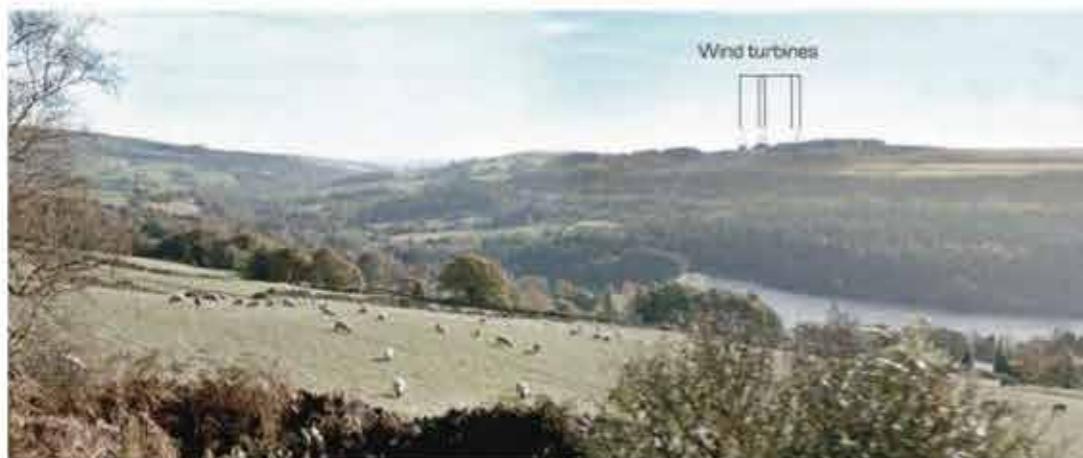
CONTOUR LINE 2

- The wind turbines follow the existing contour lines.

- The wind turbines follow the existing field pattern in a more organic form.

WIND FARM IN LANDSCAPE PLANNING

POSSIBLE DESIGN SCENARIOS OF WIND FARM



SCENARIO 1 SCENARIO 2

1. DUNGWORTH RESIDENTIAL AREA

Negative?



Clear view of turbines from Dungworth residential area
However they have an attractive spacing and are harmonious with the power space lines

Positive?



Follow the contours of the hills ridge
Difficult to be seen from Dungworth residential area
Appears in view as being smaller than existing vertical features infrastructures such as power lines



2. FOOTPATH IN PEAK DISTRICT

3KM SOUTH OF THE SITE

Positive?

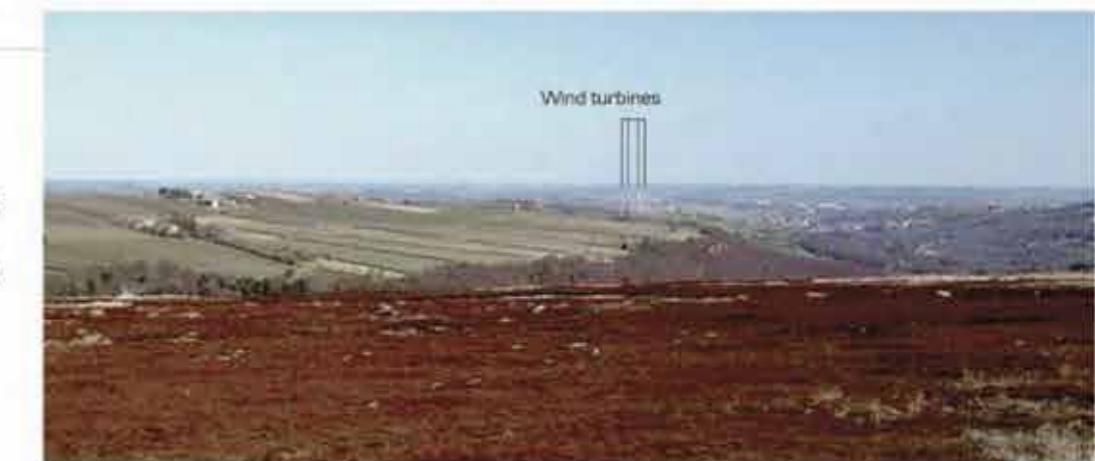


Blocked by surrounding hills
Wind turbines only partially visible

Negative?



Relatively open and at relatively lower level
All turbines are visible in the distance



3. ROAD IN PEAK DISTRICT

4KM NORTH+WEST OF THE SITE

Neutral?



Blocked by the hills and large scale woodland

Neutral?



Blocked by the hills and large scale woodland
Sinuous with skyline



4. URBAN AREA

7KM NORTHEAST OF THE SITE

Positive?



Not seen from urban area

Negative?



Visible from urban area but hard to be spotted in the distance



UNCHAINED FRIENDSHIP

A renewal design of bunkers for birds and humans



REVIVAL

The Büyüçekmece Lake, an important inlet of the city, which is surrounded by residential developments, industrial areas, farmland, woodland, etc., the industrial impact has been the most serious problem. Since the lake is an essential place for various birds' migration, there are acute problems with regard to the relationship between human and bird. Our design intends to establish a sustainable ecological corridor where human and birds could co-exist in perfect harmony, whilst respecting the local environmental context.

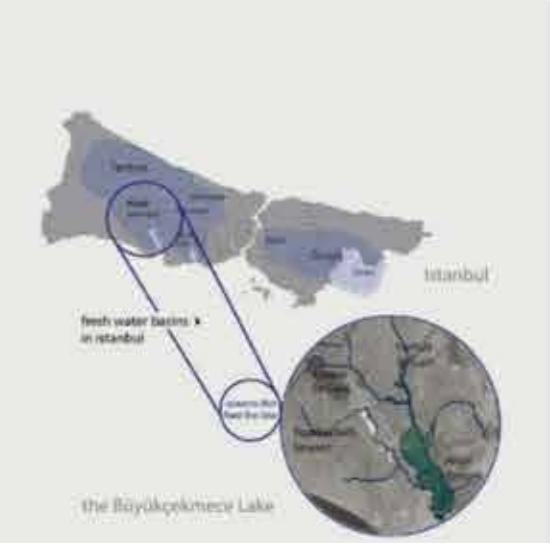
This design was developed based on the analysis of the current situation of the site and careful research about birds around the lake. By investigating the migration cycle, as well as quantities of them, several protected areas were identified as bird habitats in order to minimize human impacts. As there are two human settlements in the vicinity of the lake, public space should be also considered for residents. The bunkers around the lake built during the World War II provided great inspiration, which could

serve as an ideal bridge for communication between human and birds. By analyzing the living habits of the birds, Bunkers built during the World War II provided great inspiration, which could serve as an ideal bridge for communication between human and birds. By analyzing the living habits of the birds, such as nesting position, materials and means of construction, nesting models matching corresponding positions of the bunkers where birds can perch on were developed, whilst regenerating the bunkers.

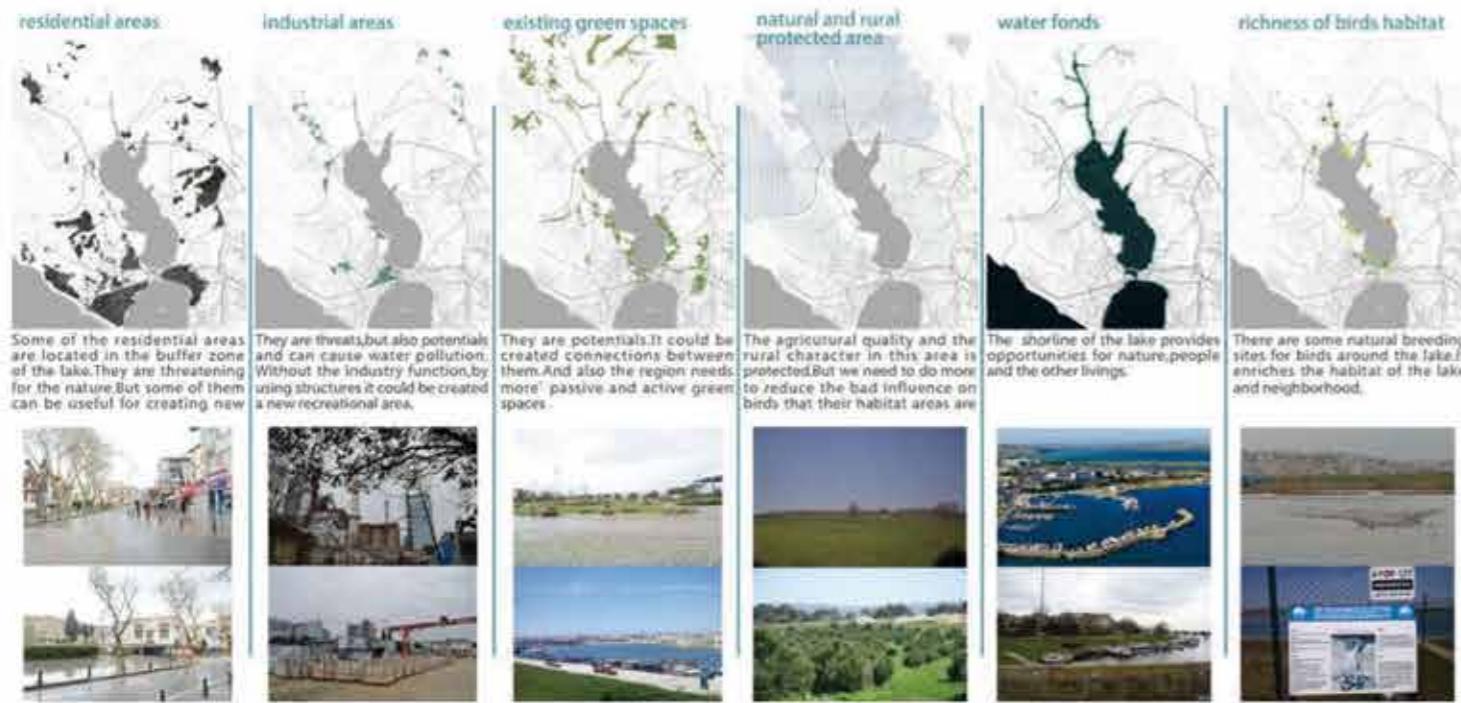
Additionally, based on analysis of the relationship between human and birds, three kinds of zones, separated without interference, were proposed: one for human recreation, one for birds' habitat, and one for the interaction between human and birds. With the integration of recreational functions, including enjoying the sight of birds, and the protection of birds' habitat, it is intended to build an ecological corridor where harmonious relationship between man and nature would be put into full play.

Location:

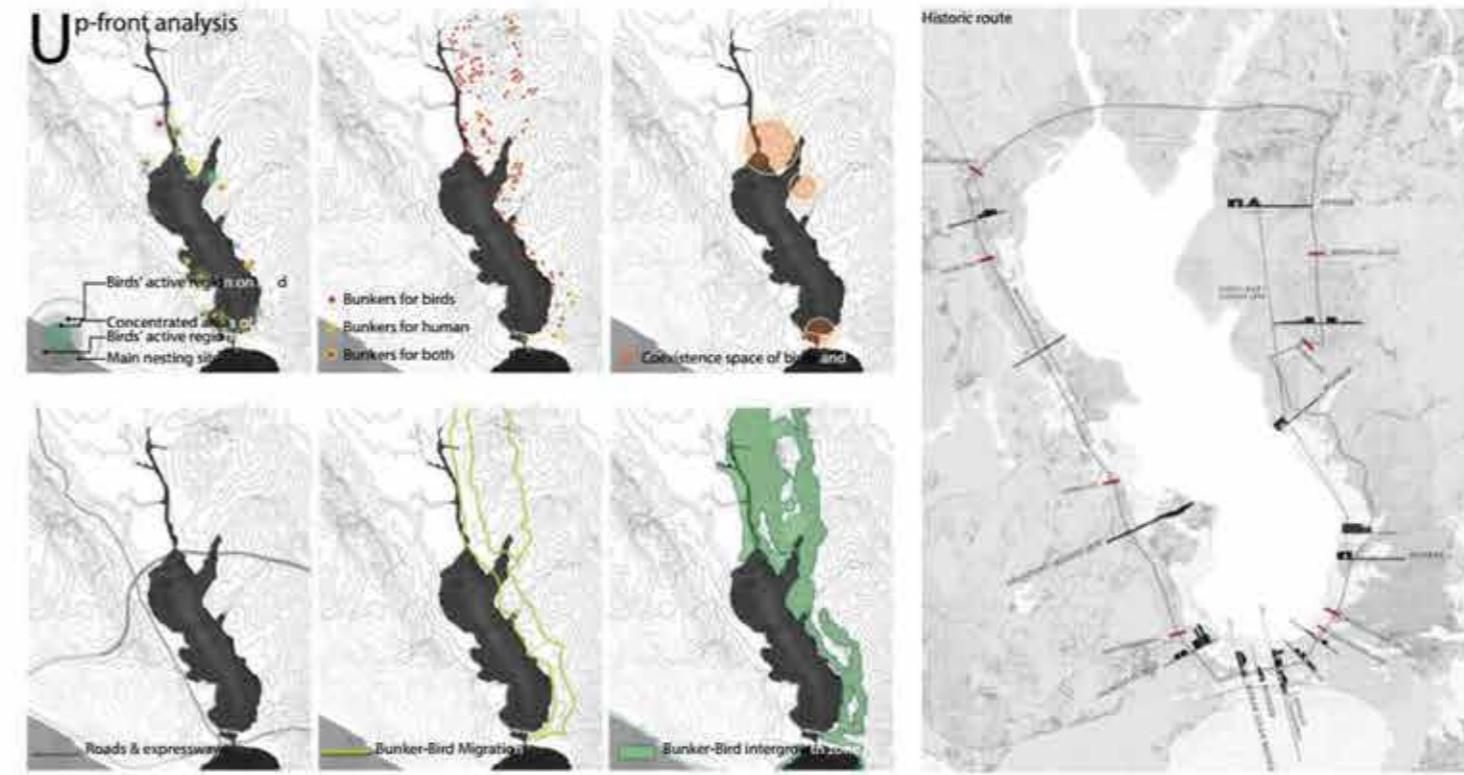
Located on the edge of Istanbul, Turkey, and adjoining the Sea of Marmara, the site of our design, the Büyüçekmece Lake, is an important inlet of the city.



Potentials and threats

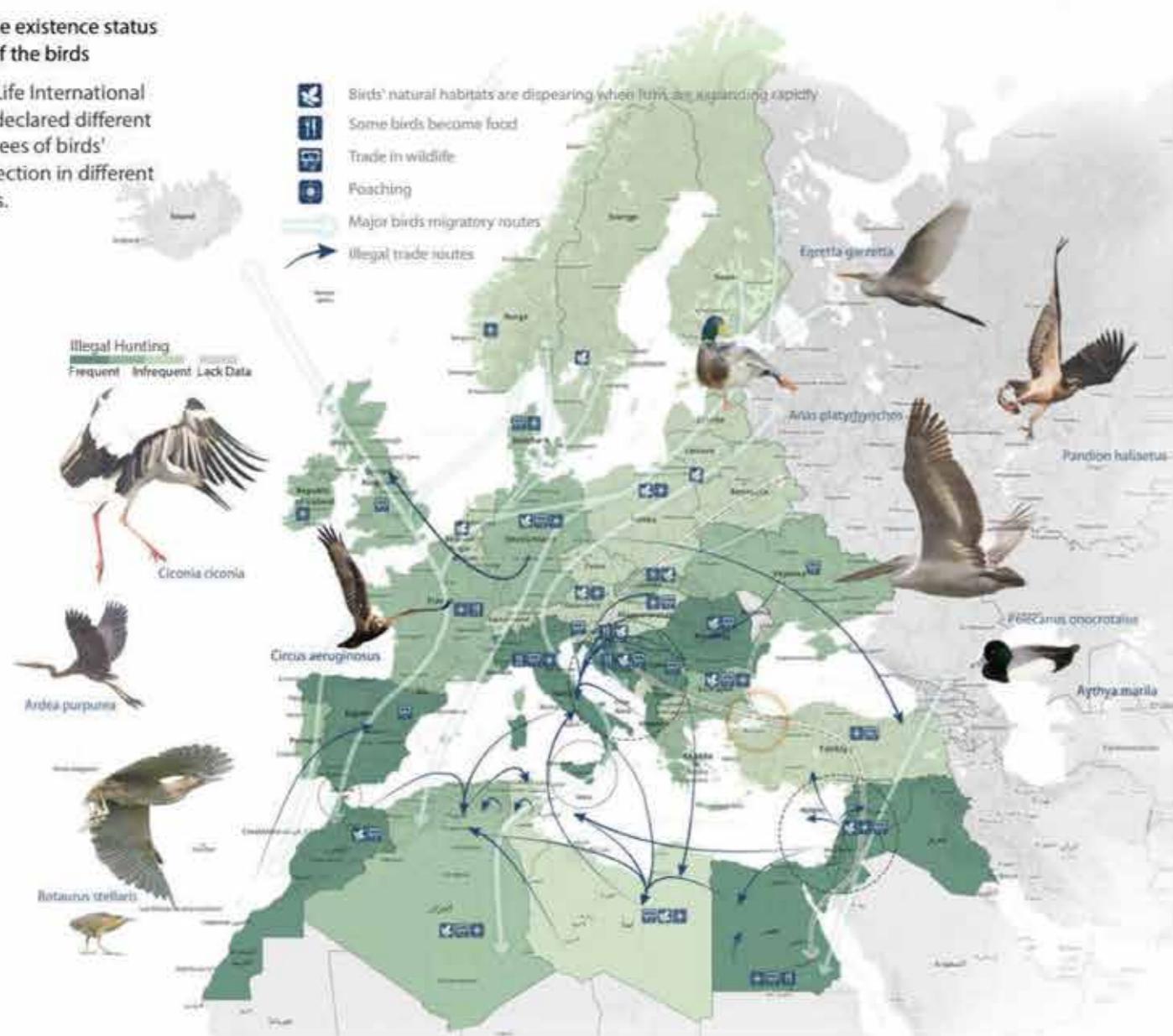


Up-front analysis

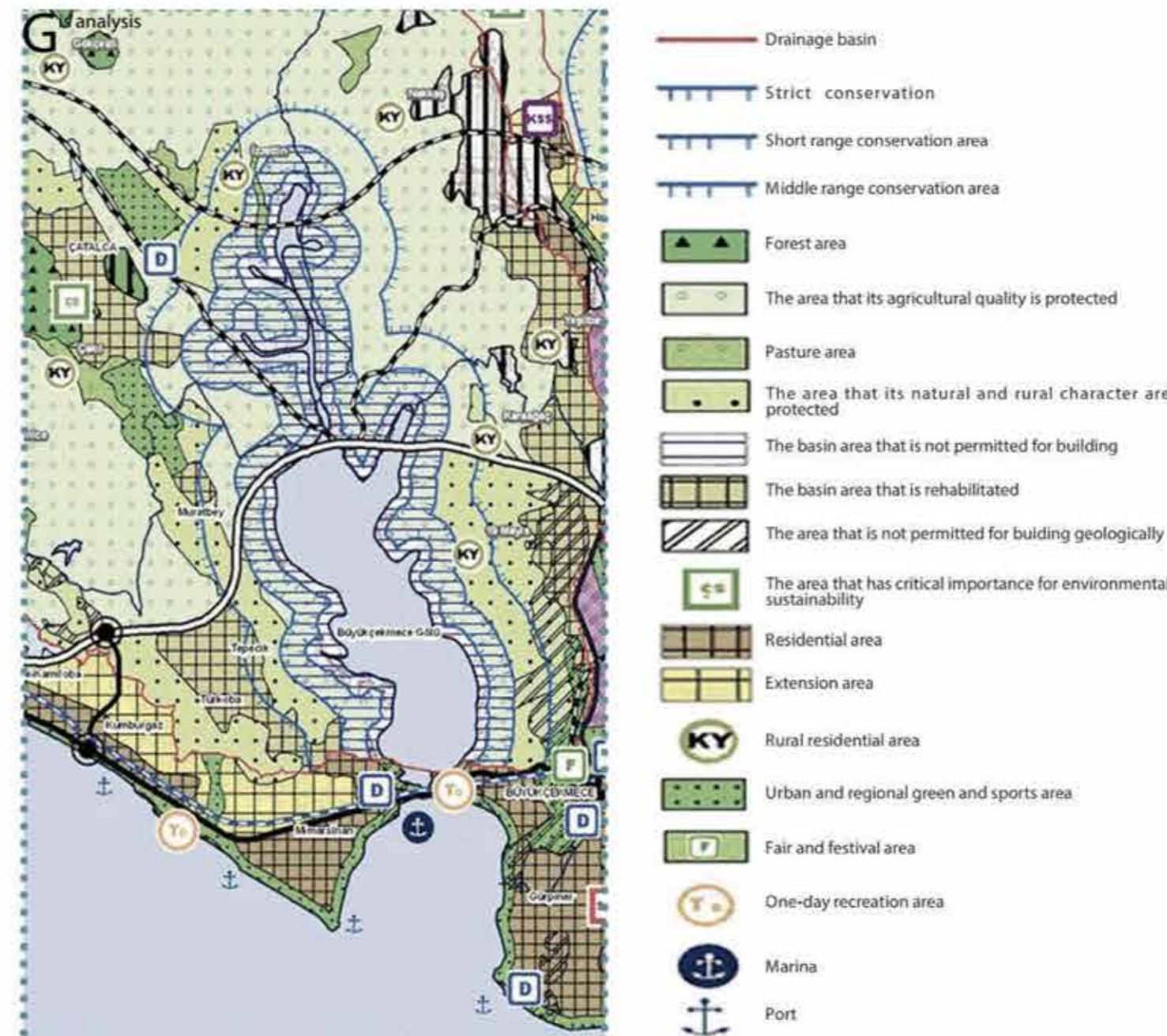


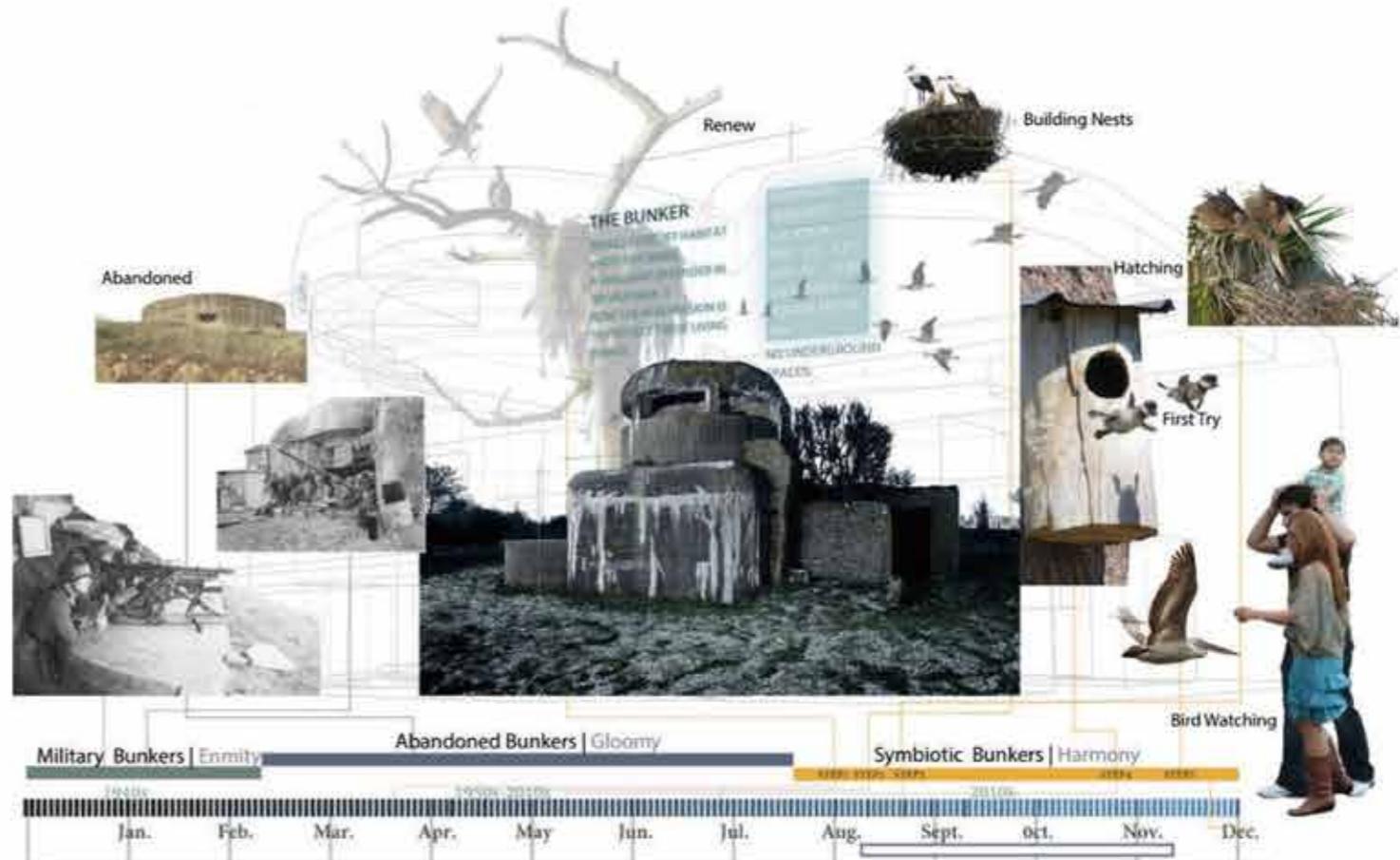
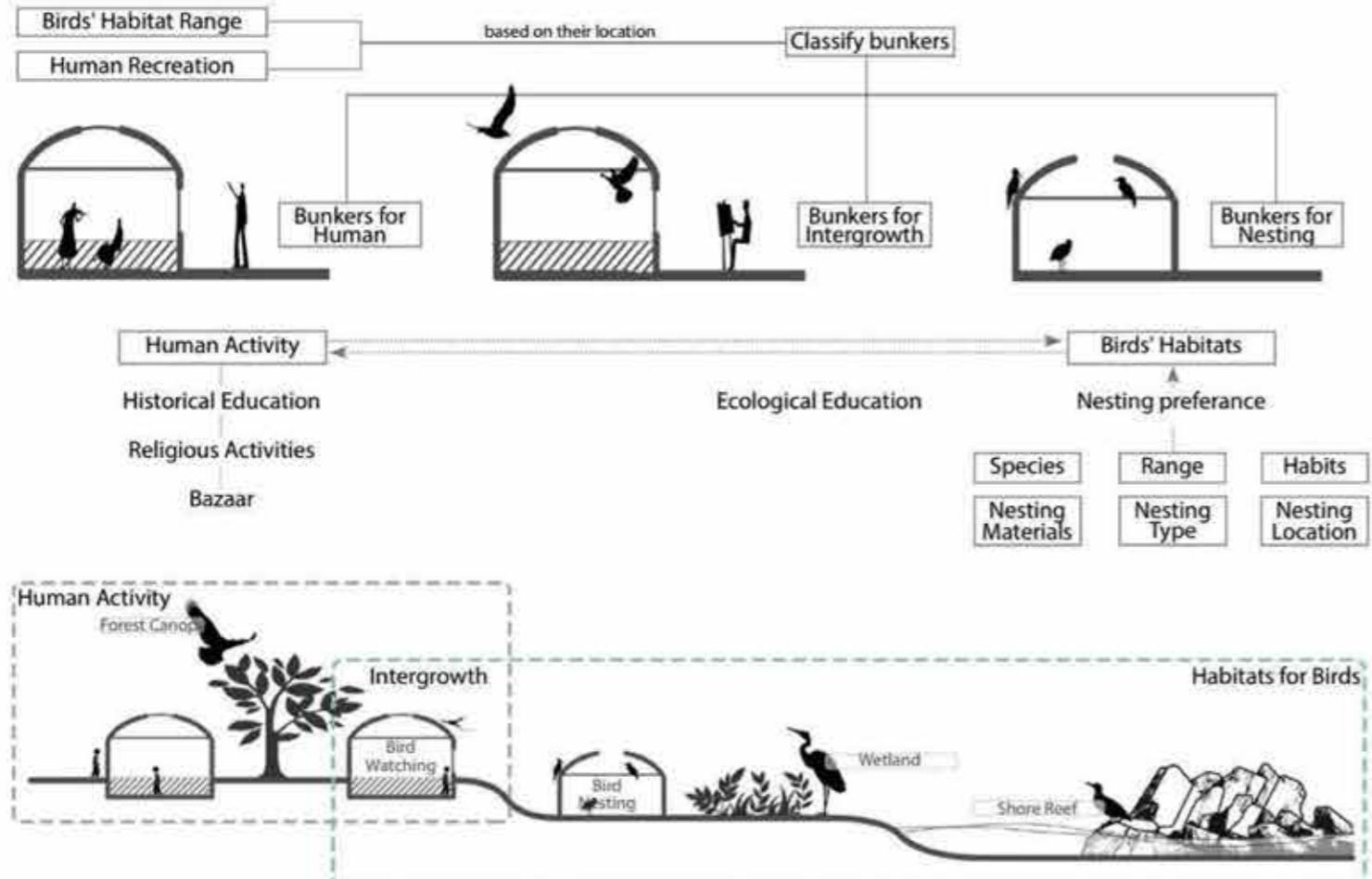
The existence status of the birds

BirdLife International has declared different degrees of birds' protection in different areas.

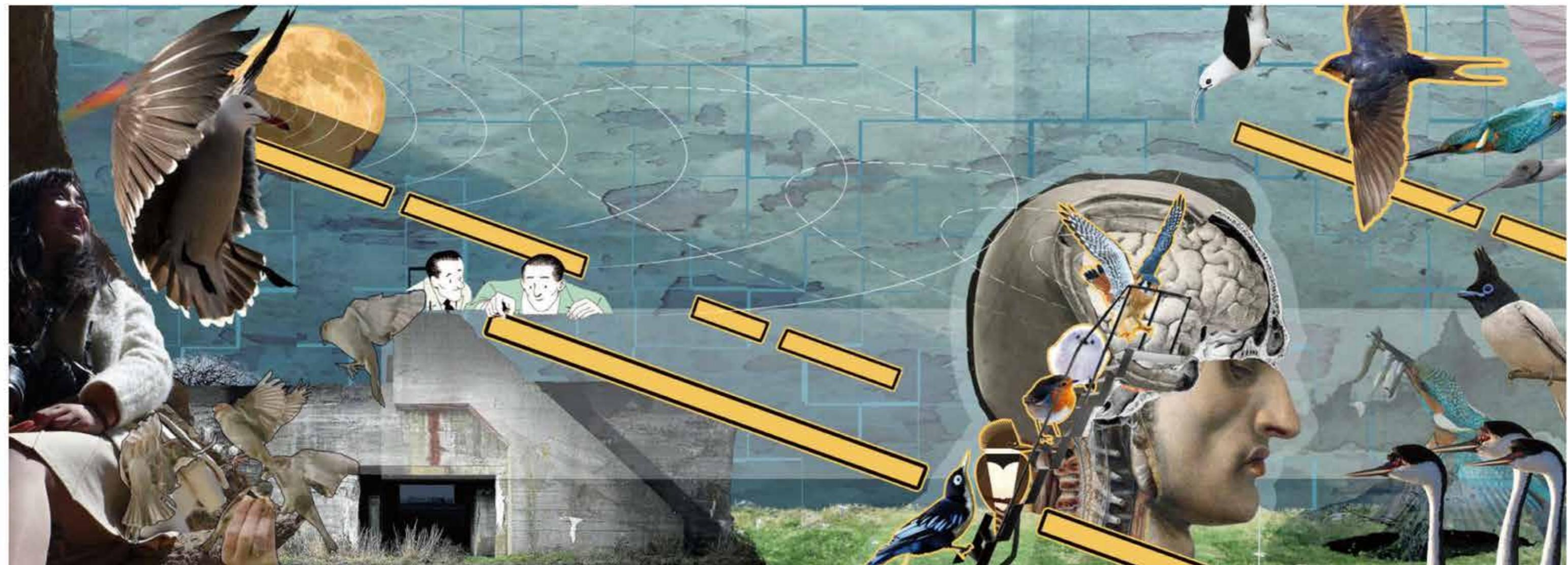


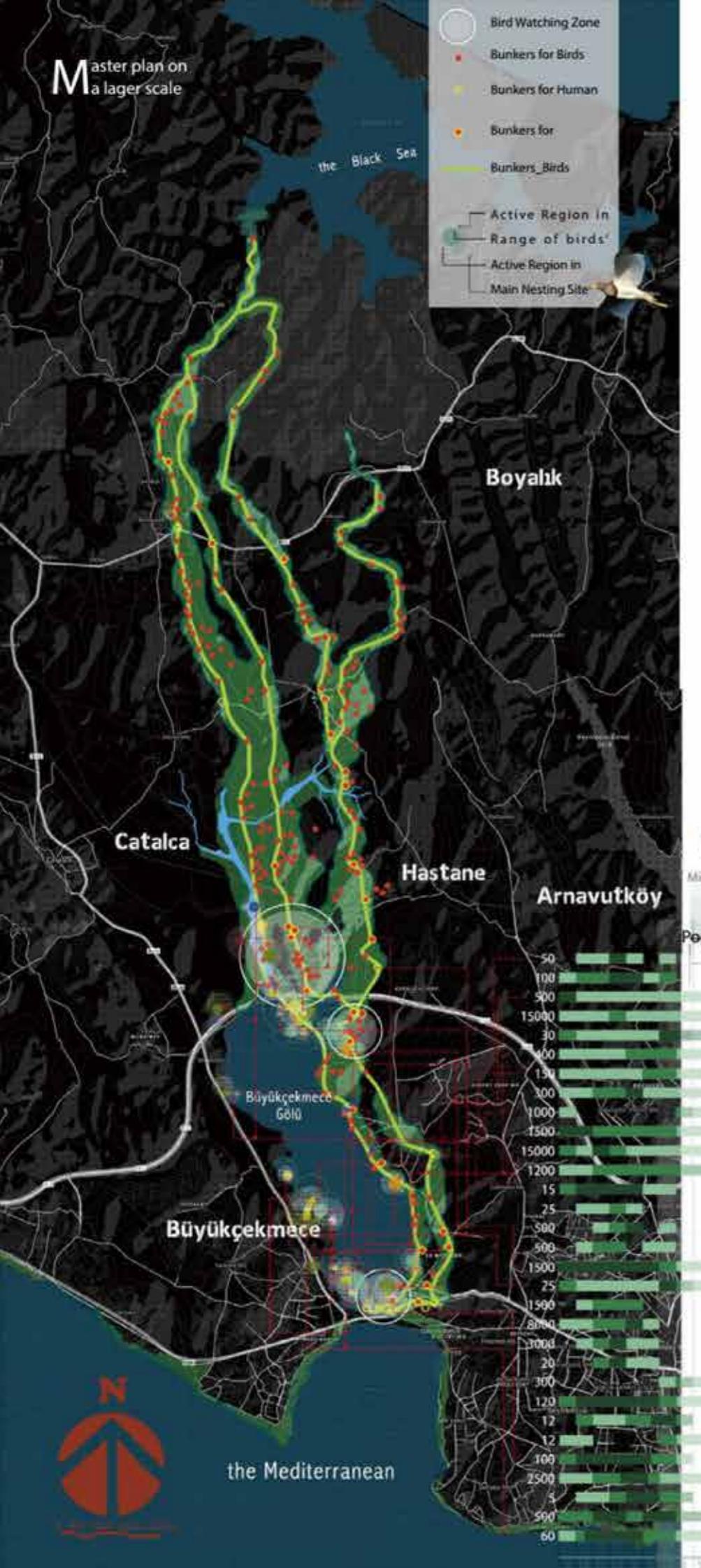
G analysis





Autumn is the best season for bird watching, since the number of migratory birds reaches a maximum at this season during a whole year. A safe distance between human and birdshas been kept in our design.

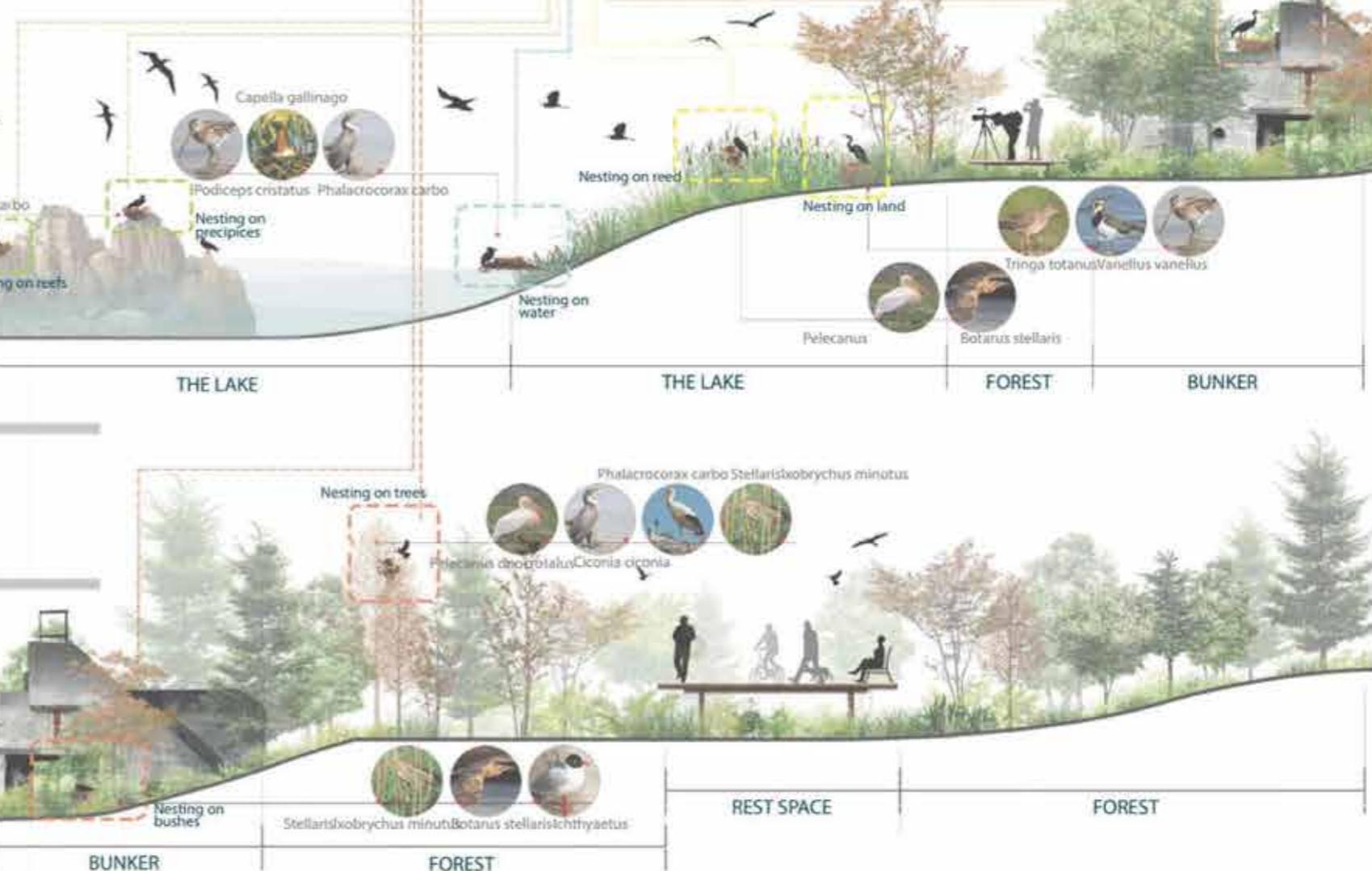




Name	Material	Shape	Location
Microcarbo pygmeus	Leaves	Shallow-shape	Rocks
Podiceps cristatus	Blade	Dish-shape	Water
Phalacrocorax carbo	Clay	Holes in the ground	Rocks Trees Water
Pelecanus onocrotalus	Branch	Basin-shape	Island Shoals Trees
Botarus stellaris	Feather	U	Bushes Shoals
Stellarisxbrychus minutus		U	Bushes Trees
Ciconia ciconia		U	Trees Buildings
Vanellus vanellus		U	Saline-Alkali Soil
Ichthyaetus melanocephalus		U	Sushes Ground Rocks
Tringa totanus		U	Earth Mound Ground
Capella gallinago		U	Swamp Earth Mound Ground

COINCIDENCE OR OPPORTUNITY

We marked the routes of bunkers according to our research in a larger region, they happen to lie in the birds migration routes.



ARE PARTITIONS

After analyzing the preferred habits of different types of birds, such as the birds nesting method & position, activity areas etc., we found that those birds who tend to have their nests on rocks or

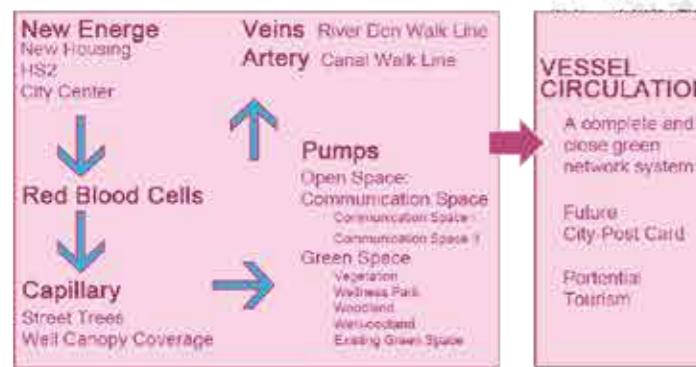
buidings, such as Microcarbo pygmeus, Botarus stellaris, Ciconia ciconia and Ichthyaetus melanocephalus couldn't find enough appropriate venue for creating nests. For this reason, 4 kind of nests are designed for these birds and could be built on some of the bunkers.

VESSEL CIRCULATION

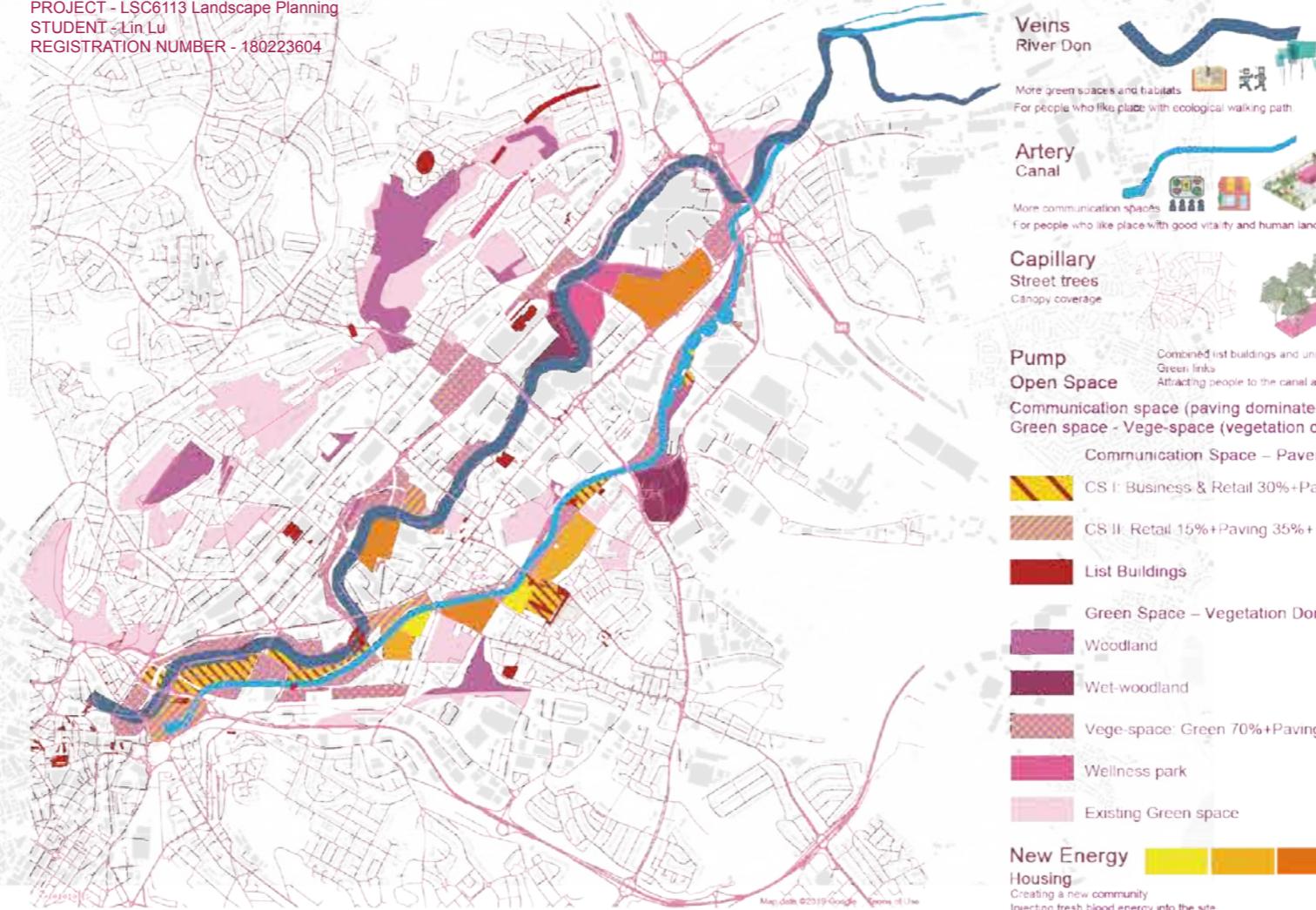
Vessel Circulation

I added housing in the central and northeastern regions of the region, with school and sports areas in the central region, and nursing services will build in the northeast region, so eventually a new and perfect community will be formed in the central part of the site, while a new community for medical services will be formed in the northeast. There are city center and HS2 in the southwest of the site, so there will be three dynamic points in the site.

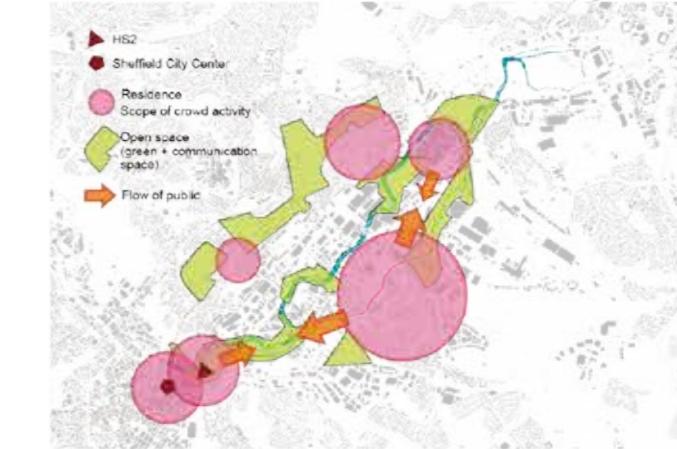
I compare people to red blood cells and canals and river don to arteries and veins, which means that these two water systems will become the main pedestrian routes in the site. I will add a large number of open spaces that combined list buildings and unique character factories to the site, just like Pump, and act as green links to attract people, and transport people to the canal and river Don to form a virtuous circle. According to the needs of different people, I divide open space into communication space and green space. Communication space is pavement dominated and for people who want to organize activities and need social activities, while green space is vegetation dominated and for people who want to go hiking and need a quiet environment. Communication space is divided into communication space I and communication space II. Communication space I is made of 30% business and retail, 30% paving and 40% green, while communication space II is 15% retail, 35% paving and 50% green space. At the same time, green space is divided into woodland, wet woodland, existing green space and vege space. In the vege space, there are 70% green and 30% paving. Moreover, I will add a lot of street trees to the streets to achieve a large area of canopy, which will connect the whole site as closely as capillaries. River don (veins) represents more green spaces and habitats so it is more suitable for people who want to experience more ecological walking path. Canal (artery) means that more communication spaces are more suitable for people who like place with good vitality and human landscape. Finally, a green network system like vessel circulation is formed in the site, which makes the site more active in the future and becomes the city postcard and tourists' destination in the future.



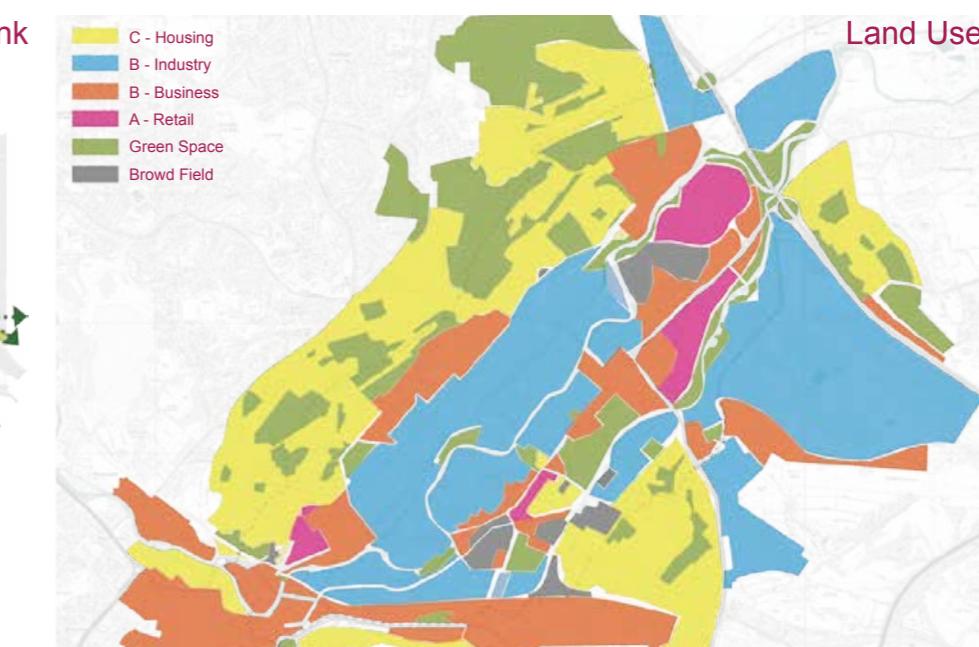
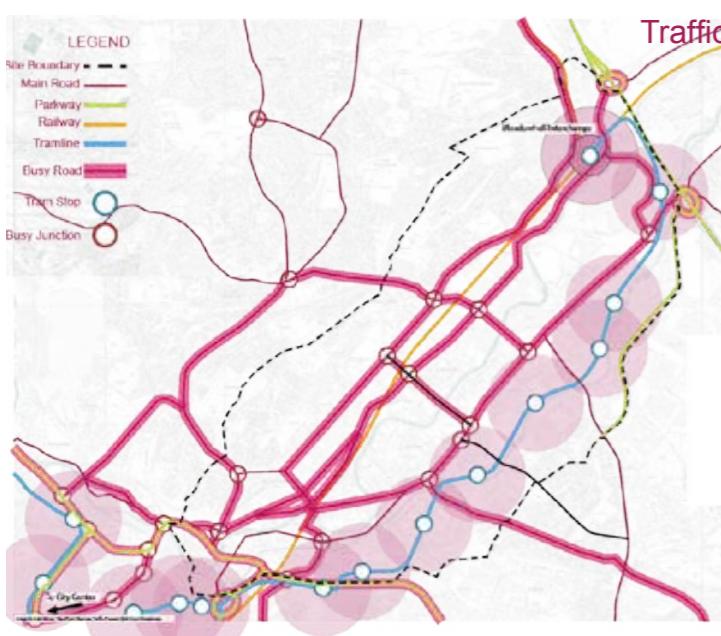
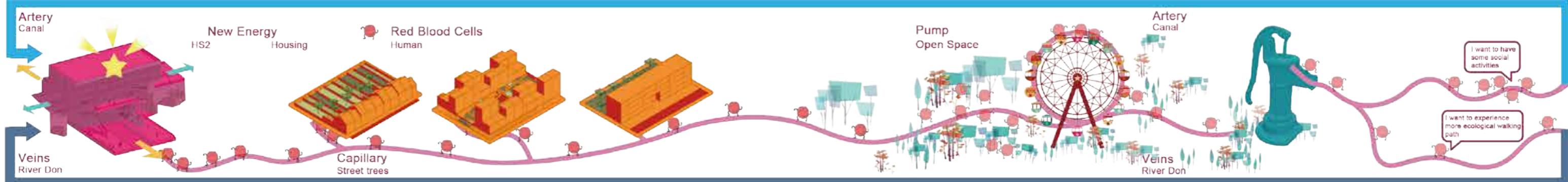
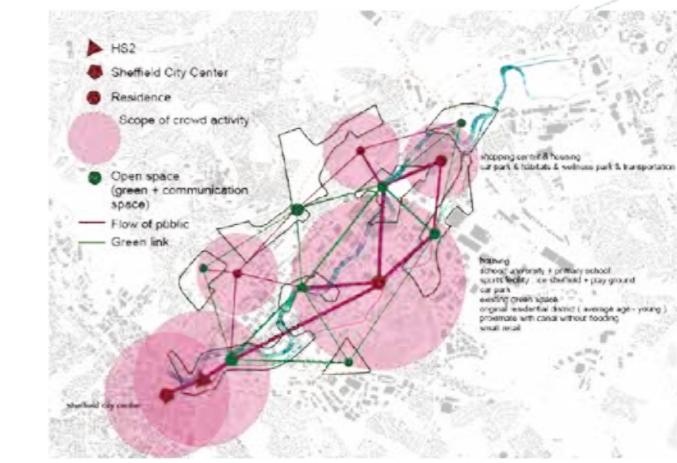
PROJECT - LSC6113 Landscape Planning
STUDENT - Lin Lu
REGISTRATION NUMBER - 180223604



Potential Preferred Walking Direction



District Position and Linkages



VESSEL CIRCULATION

Strategic Plan

This map illustrates the Vessel Circulation Strategic Plan, showing the proposed land use and infrastructure changes across the study area.

KEY

Open Space	
Communication Space I	
Communication Space II	
Wet-woodland (habitats)	
Woodland (habitats)	
Vege-space	
Nursing Park	
Original Green Space	

Housing

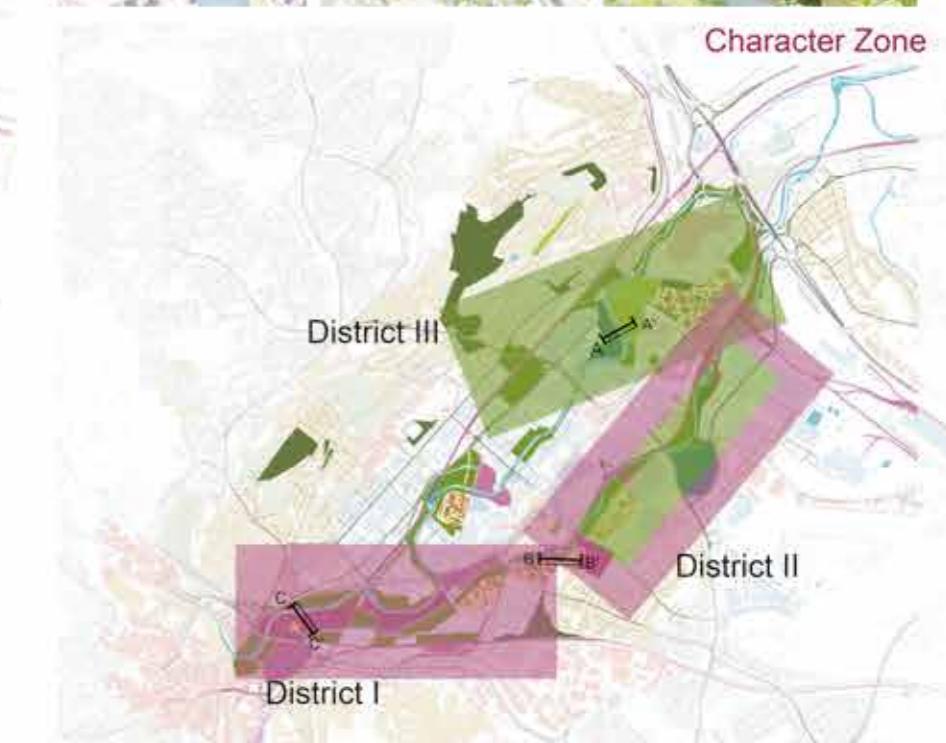
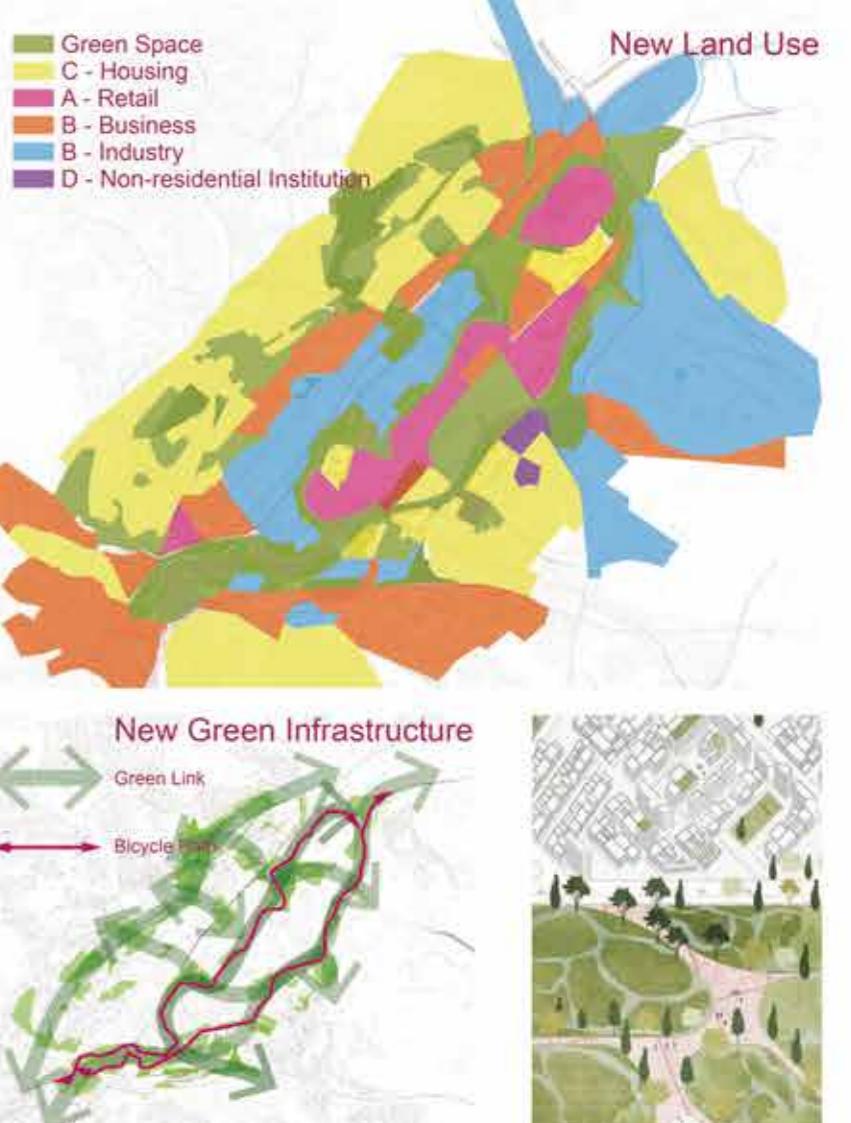
- High Rise Housing
- Medium Rise Housing
- Low Rise Housing
- Original Housing

Parking

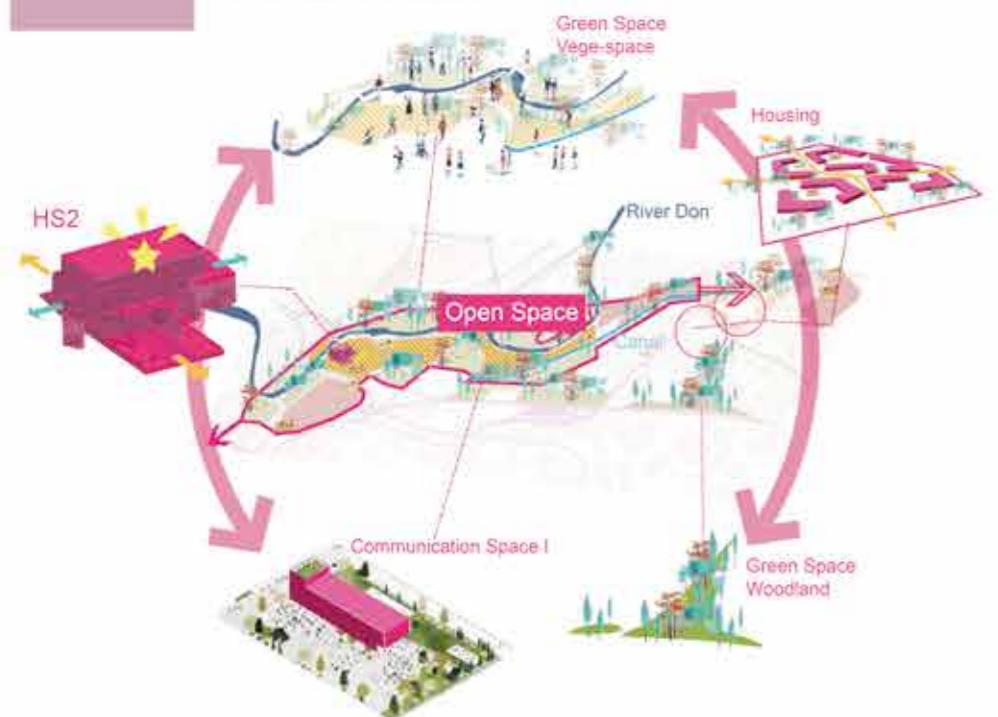
- Parking Lots
- High Rise Parking

Water

- Railway
- Road



District I Character



District II Character



District III Character



Flooding



Section A - A' 1:500

Green Space
Vege-space

Section B - B' 1:500

Veins
River Don

More Ecological Attractive

Pumps
Communication Space I

More Social Attractive

Artery
Canal



New Energy
Low-rise Houseing (1-2 levels)

New Energy
High-rise Houseing (5-7 levels)

Pumps
Communication Space I
Retail

Section C - C' 1:500

Artery
Canal



Pumps
Green Space
Vege-space





王好心

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成为一名专业的城市规划师和景观设计师的初衷是帮助人们摆脱城市化和环境保护恶化的负面影响。

奖学金

优秀学生奖学金 2013-2014
Huaqiao University School Of Architecture, Xiamen, China

华侨大学一等奖学金 2014-2015
Huaqiao University School Of Architecture, Xiamen, China

优秀学生奖学金 2015-2016
Huaqiao University School Of Architecture, Xiamen, China

软件技能

2D Graphics: AutoCAD, Photoshop, InDesign,
illustration

3D Modeling: Rhinoceros, Sketch Up

Rendering: V-Ray, Lumion

Others: ArcGIS

Coding: Grasshopper

获奖项目

全国“建筑与城乡规划学会研究”城市设计竞赛
获奖(二等奖奖)
The discipline of urban and rural planning in universities and
colleges, China

全国“建筑与城乡规划学会研究”城市调研竞赛
获奖(二等奖奖)
The discipline of urban and rural planning in universities and
colleges, China

华侨大学古村落修复设计大赛（二等奖）
Huaqiao University School Of Architecture, Xiamen, China

社会经验

布拉格人行桥景观重塑大赛
China / 2017

交流学习:台湾中原大学景观系
China, Taiwan / 2015

历史建筑普查
China / 2014

光明之城24小时搭建大赛
China / 2013

历史项目

Sheffield Ring Road 以人为主导的道路森林计划

Sheffield lower don valley 工业区景观规划项目

台北北门广场重塑设计

台湾中坜河流景观恢复项目

厦门城中村修复改造设计项目

福建平潭流水镇总体规划项目

泉州惠安区控制性规划项目

LONDON 森林城市计划与管理

Sheffield peak district 风车景观LCA/LVIA 系统评估

实习经历

深圳城市规划设计研究院
深圳小梅沙概念规划与设计；深圳深蓝大道景观提升计划

上海一字yiyu景观设计公司
南京世博园展馆景观设计；上海公园改造利用景观设计项目