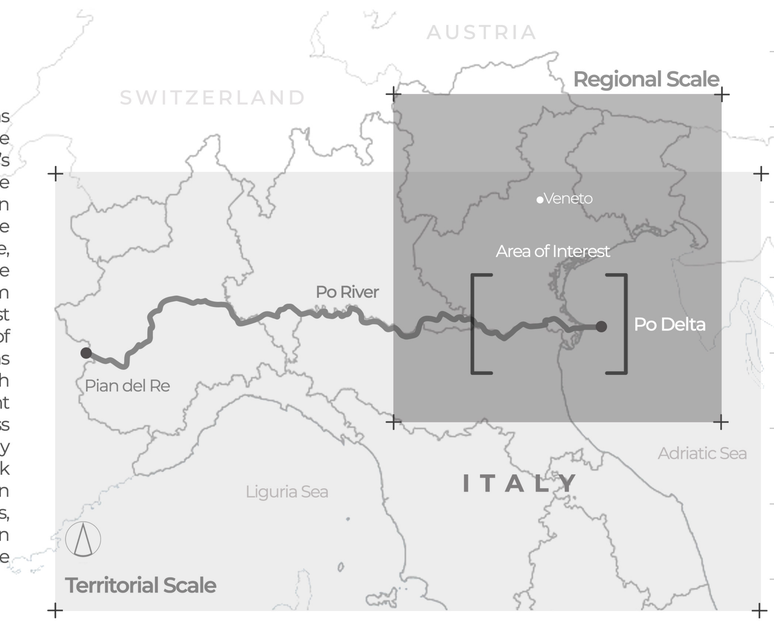
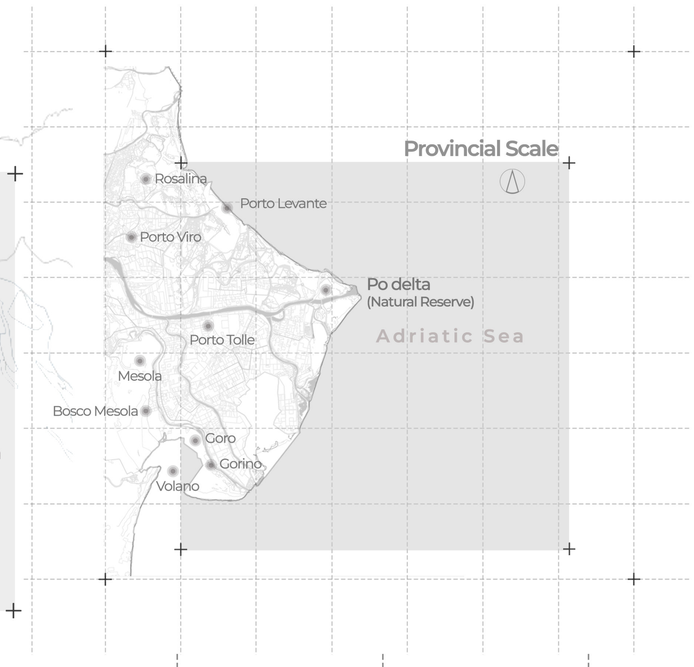
The Paradox of Plenty

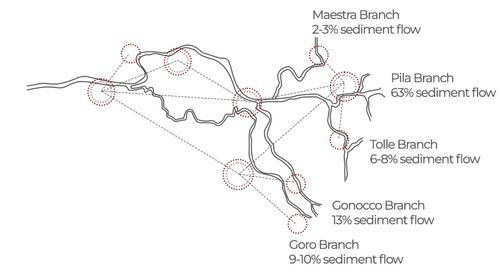
A new outlook towards productive landscapes

Prior to the industrial revolution, when production was minimal, it was crucial for the society to produce because not everyone could. The market's non-existence provided a way of life where people produced for themselves. This agricultural production required slavery at that time which formed the hierarchical social classes. Mass production took place, and production for the market began with the industrial revolution. A revolution was in approach from the perspective of producing everything most efficiently and profitably, so began the impact of rationalism. Whoever consumes more in society gains an identity causes further polarisation between the rich and the poor. In a way, the social categorization brought about by modernism and the problem of mass production is questioned again with the recently emerging post- modernism.What we ate and drank helped form mindsets, societies, empires, and even today's metropolises throughout human history. Wars, separations, trade, and our social positions have been shaped by the existence of the products we produce and consume.





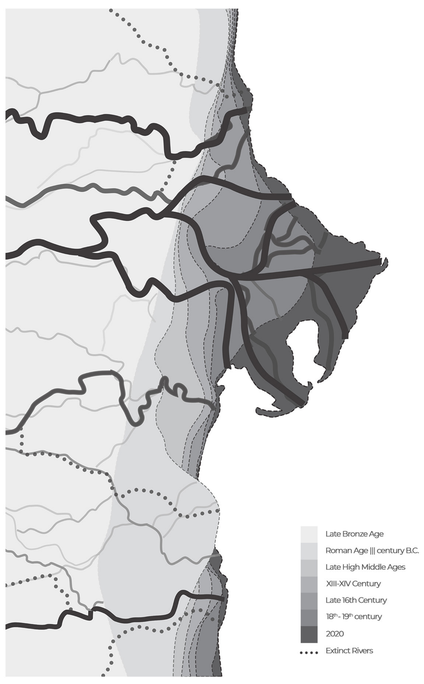
Where the river meets the sea.....



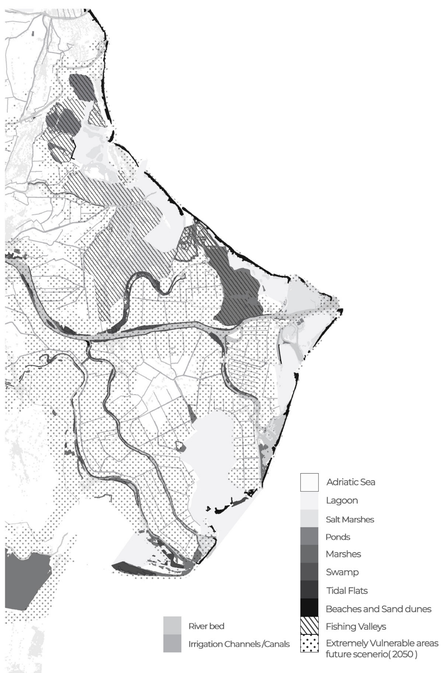
Sedimentation flow rate of the five branches

The Po River is the longest river in Italy;it originates from Pian del Re of Monte Viso,and flows eastward till the Adriatic Sea near Venice. The Po Basin that lie between Veneto and Emilia Romagna region of Italy has a drainage area of 71,327 km2.The main land use of the Po plain is intensive agriculture, about 41 % of the Po basin land use is agriculture.The unique cuspate shape of this delta is determined by the main channel Po di Pila which carries the maximum amount of sediments to the coast.

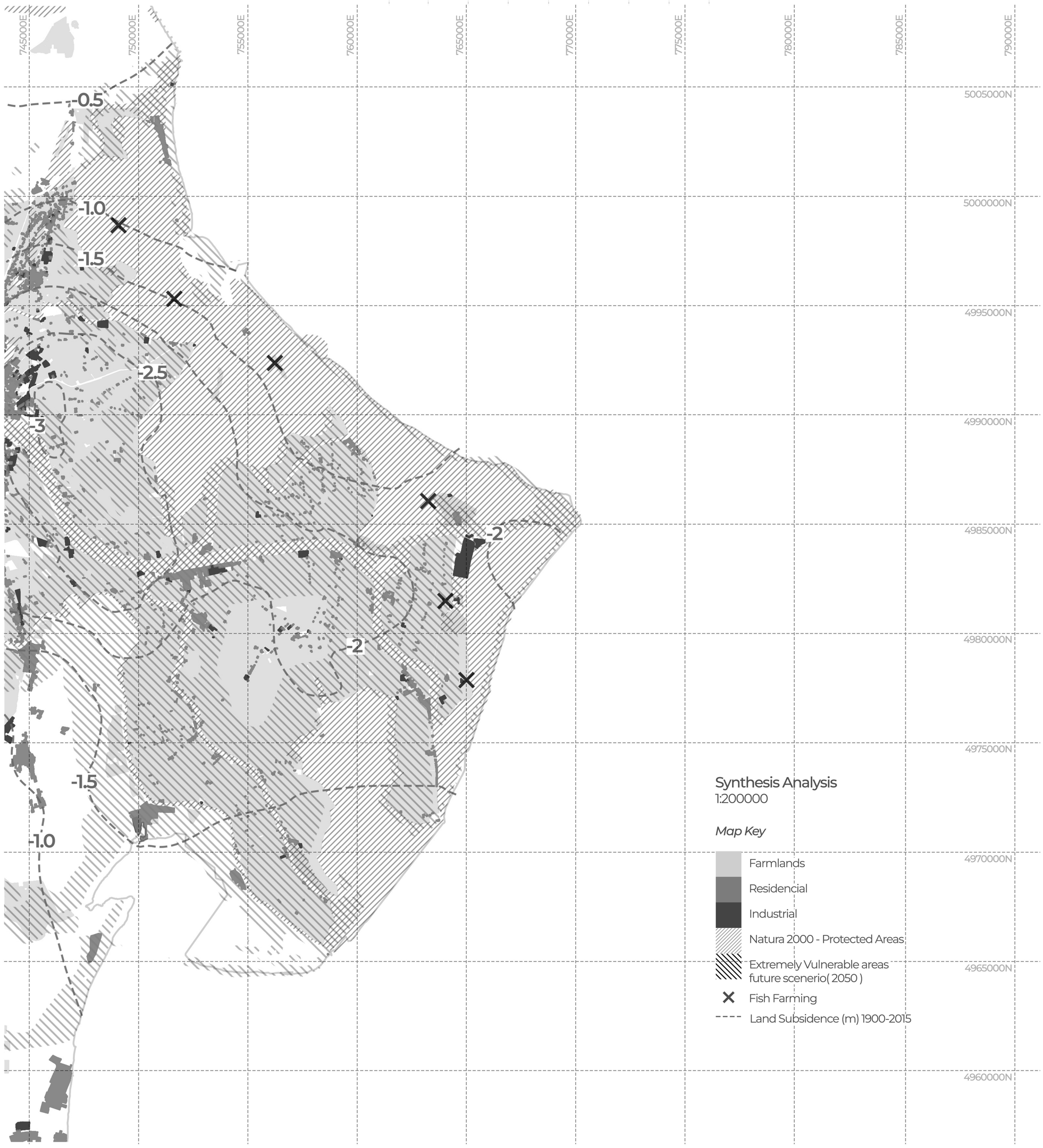
Historical Evolution



Blue Infrastructure



Farming Practices



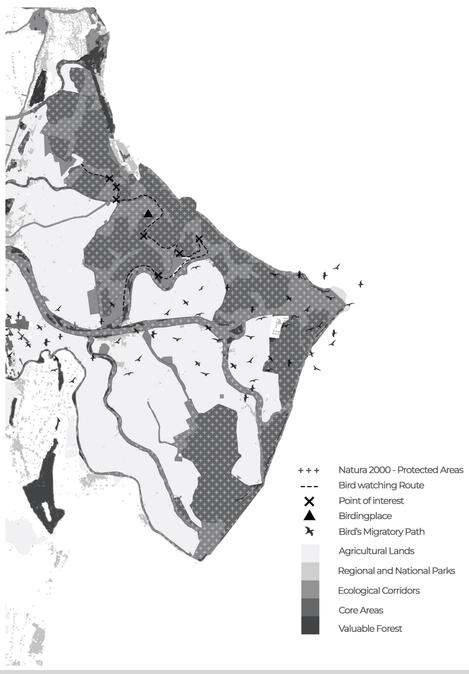
Synthesis Analysis

1:200000

Map Key

- Farmlands
- Residencial
- Industrial
- Natura 2000 - Protected Areas
- Extremely Vulnerable areas future scenerio(2050)
- Fish Farming
- Land Subsidence (m) 1900-2015

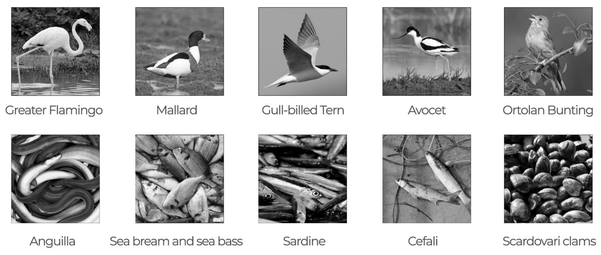
Green Infrastructure



Bio Diversity of Po delta

The Po Delta, with its distinctive territorial and ecological features, protects the biggest portion of protected wetlands in Italy. The Delta's ever-changing scenery, is a result of the fragile interplay between water and land and offers a wide range of biodiversity.

Migratory Birds & Aquatic species

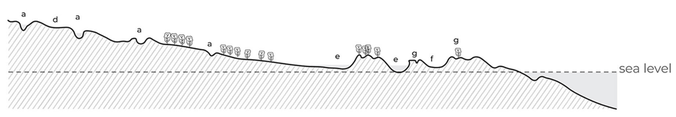


Agriculture Crops

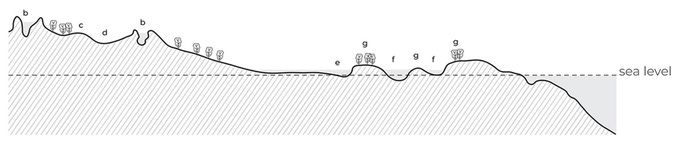
The Po Delta Rice IGP is the cereal; its varieties are Carnaroli, Volano, Baldo, Arboreo. Major agriculture production is of soy beans,vegetable (carrots),fruits (peaches and pears) and sunflower.

Human Impacts on Po delta

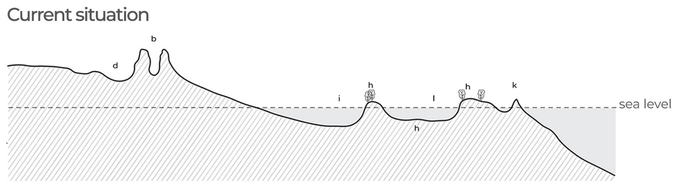
Situation before human intervention



Situation before mechanical remediation



Current situation



a. rivers with or without natural banks / b. rivers with artificially raised banks / c. bumps of extinct rivers / d. relative depressions between active and extinct rivers / e. freshwater basins / f. brackish water basins / g. ancient and recent coastal ridges, wooded / h. partially or totally flattened coastal strips / i. areas dried up by fresh water / l. areas dried up by brackish water / k. dams at sea

Observation and Conclusions

Sea level rise and climate change are significant challenges, particularly for deltas like the Po Delta in Italy. The Po Delta's evolution demonstrates the succession of diverse environmental events in space and their superposition in time. Anthropogenic activity has been a significant factor throughout the previous few millennia. The development was brought on by years of **coastal erosion, Sediments supply** and a few other human-made interventions, such as **Land reclamation and methane extraction from the groundwater table**.

Po delta is a delicate area of land that experiences ongoing ground subsidence. The landscape is now more vulnerable due to the increasing sea level and other effects of climate change. The areas lies under extremely vulnerable areas that are in the verge of being under- water in 2050. The region is a Natura 2000 protected area and contains a wide network of open spaces. Since it has been neglected for years, this region, which is rich in biodiversity in both flora and wildlife, needs immediate attention.

The design proposal presented in the following pages rethinks the organization of the territory and the significant changes that landscapes can cost. The existing infrastructure of the area can be retrofitted with minimal changes resulting in significant transformation.

Traces and Patterns

Farming Practices

Po delta has extensive Agriculture lands, with the abundance of fresh water the site has rice fields that thrive on water. It has fishing lagoons, which forms the main economic activity of the local community.The area also has fish farming ponds cultivating Eels, Fishes, Shell fish and Mussels.

Water Culture

The construction of various environments as a result of the interchange of water and sediments between the delta's water bodies and the sea produces morphologies that are highly dynamic due to the unpredictability of natural forcing, human intervention, and trends in sediment availability.

Green Network

The Po Delta, with its distinctive territorial and ecological features, protects the biggest portion of protected wetlands in Italy. The delta offers protected natural and semi-natural landscapes restoring, protecting and conserving plant and animal species.

Landscape Form

The Po delta lies in an area of interesting landscapes offering wetlands, various beaches and most importantly sand dunes. These landscapes are as a result of years of progradation and land subsidence due to human interevntions.

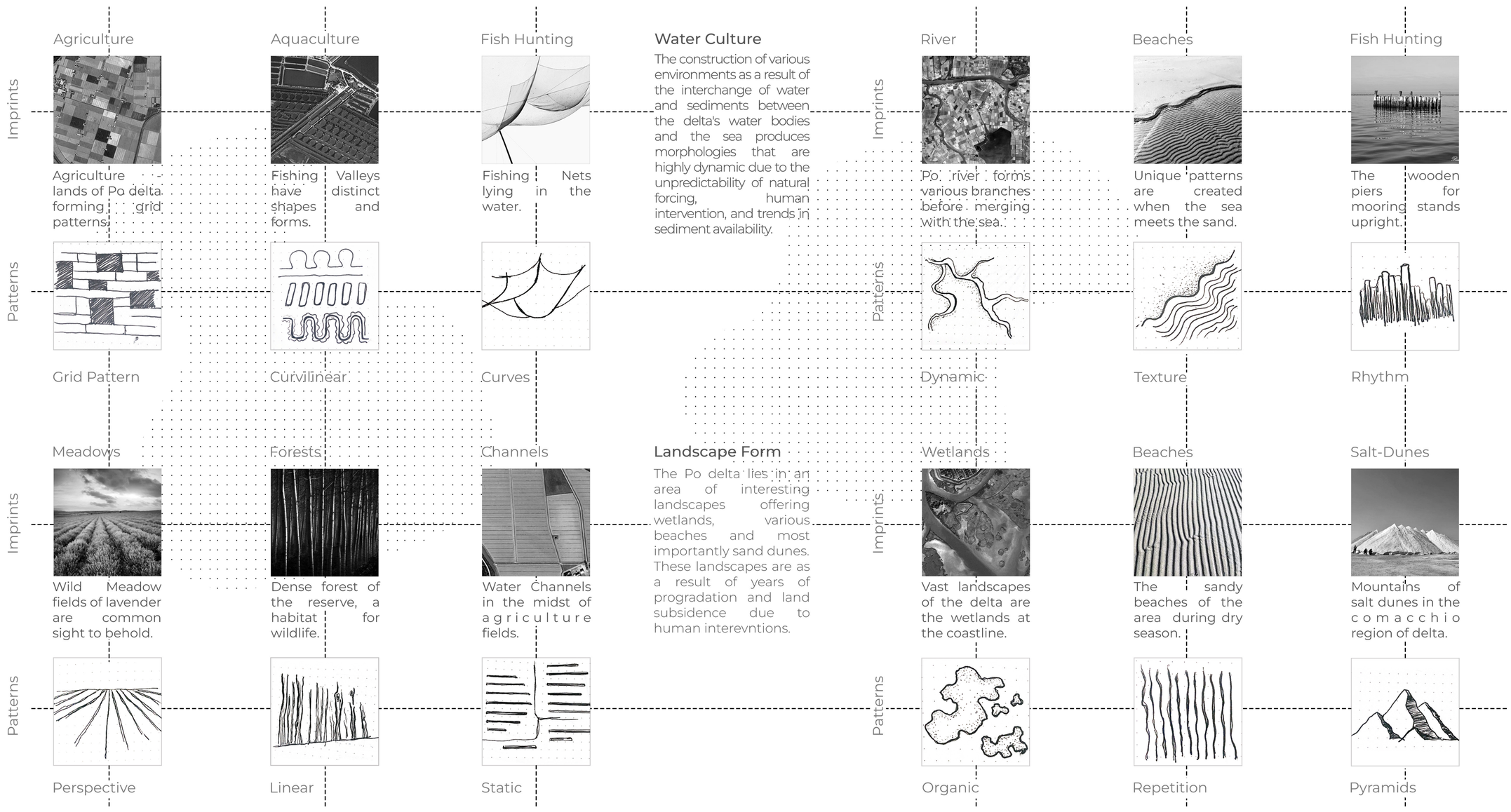
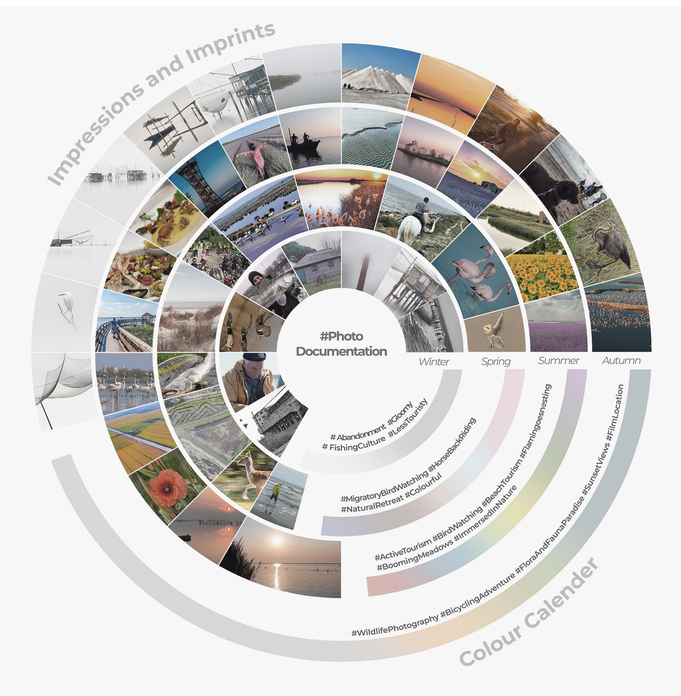
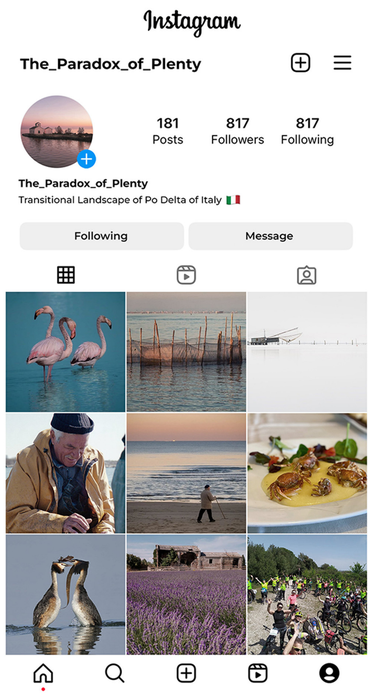
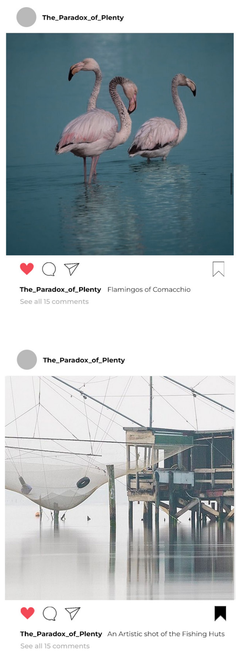


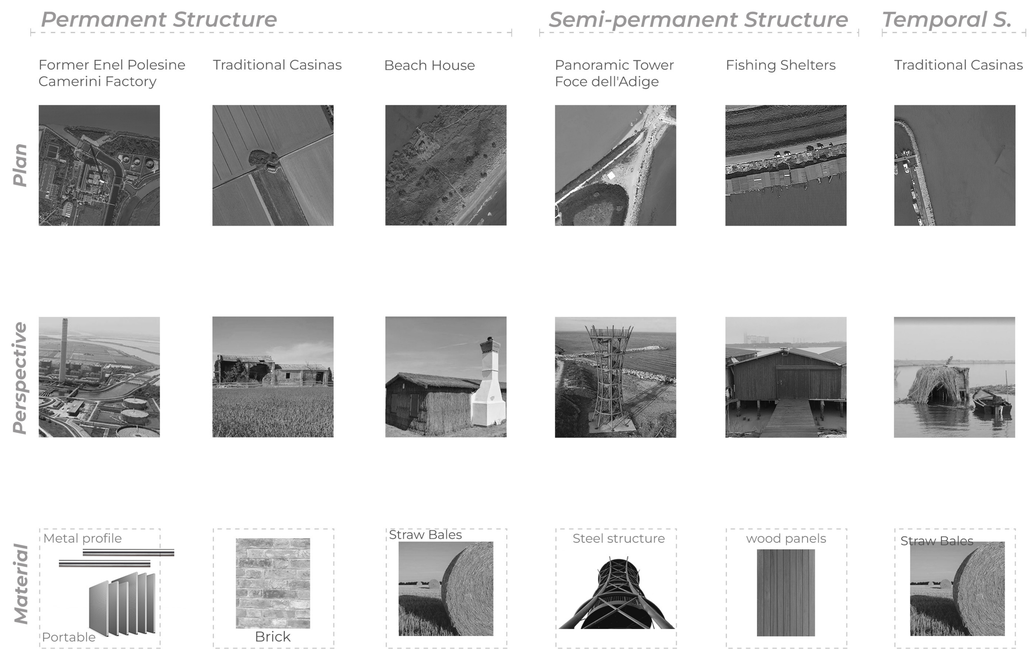
Photo Documentation



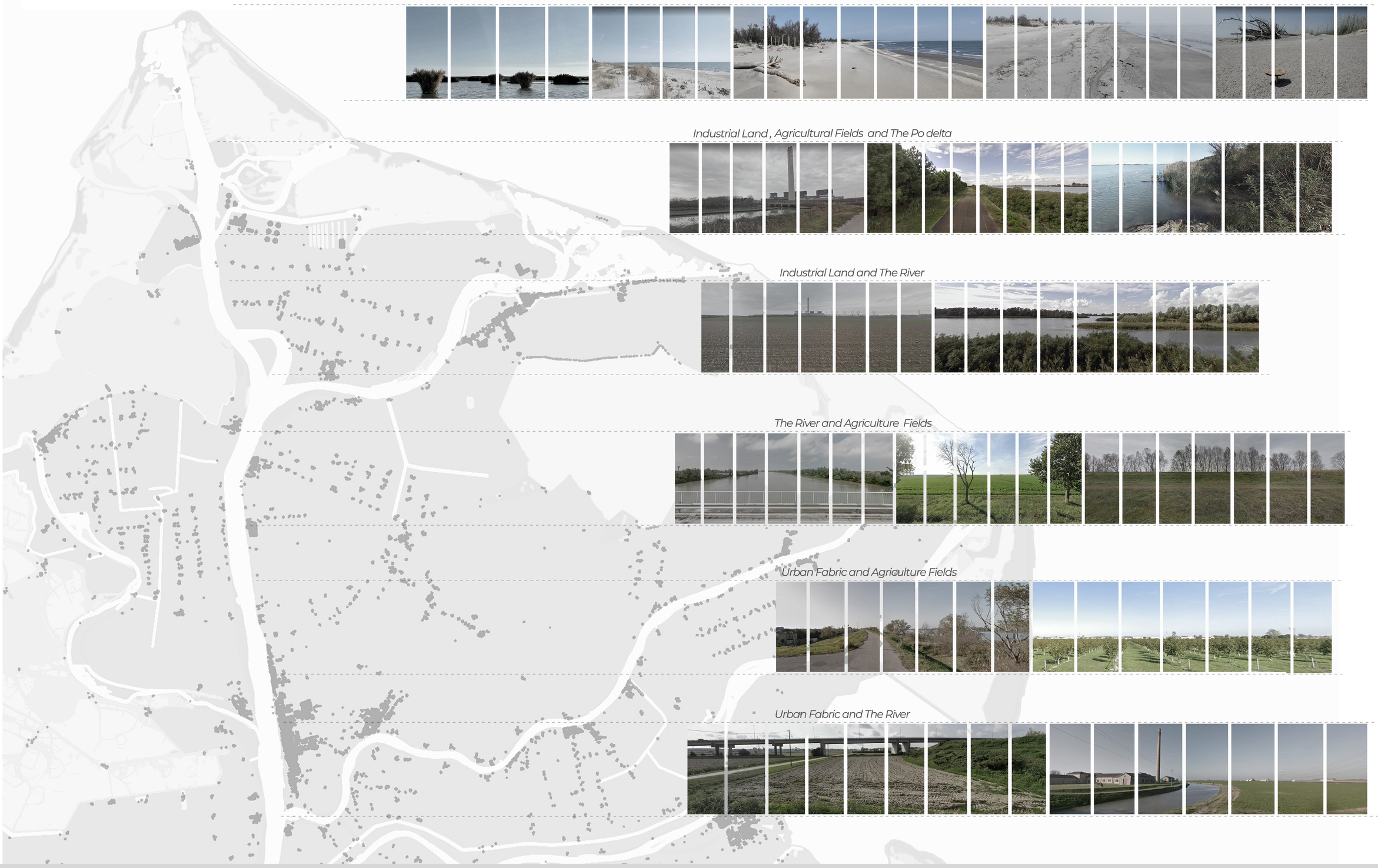




Building Volume Typology



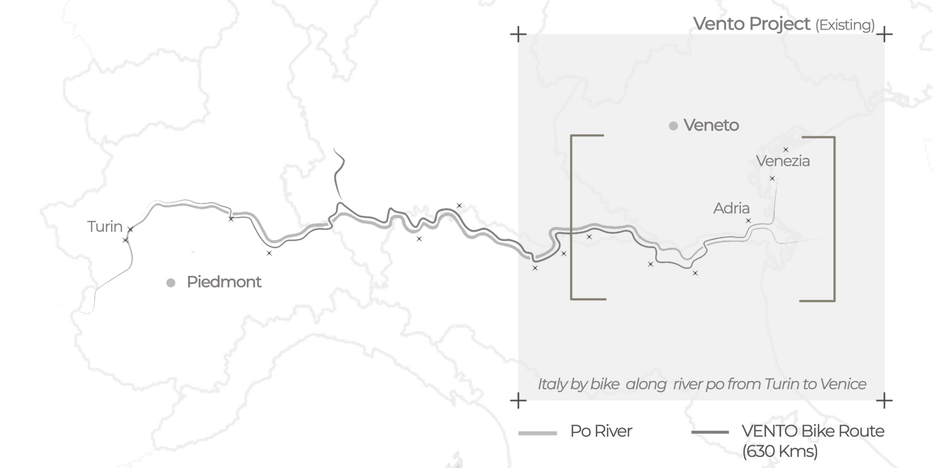
Transition of Landscapes

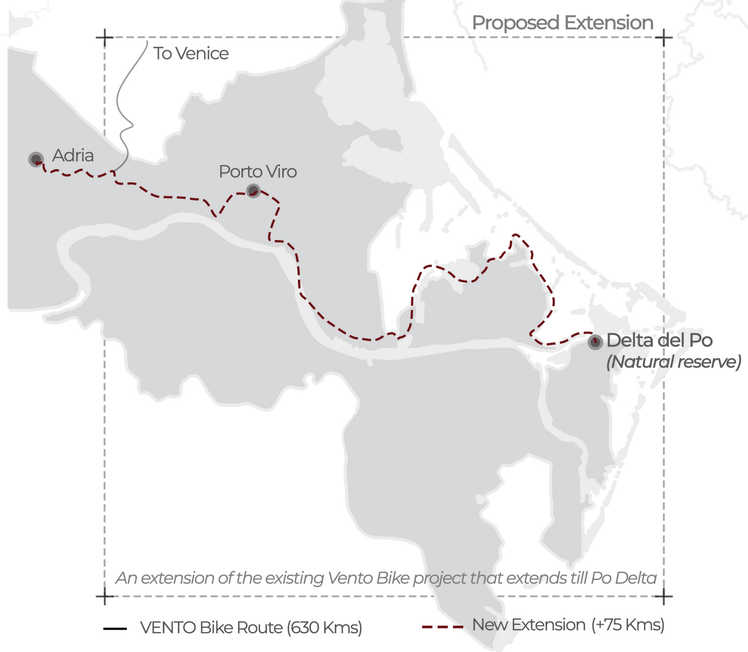


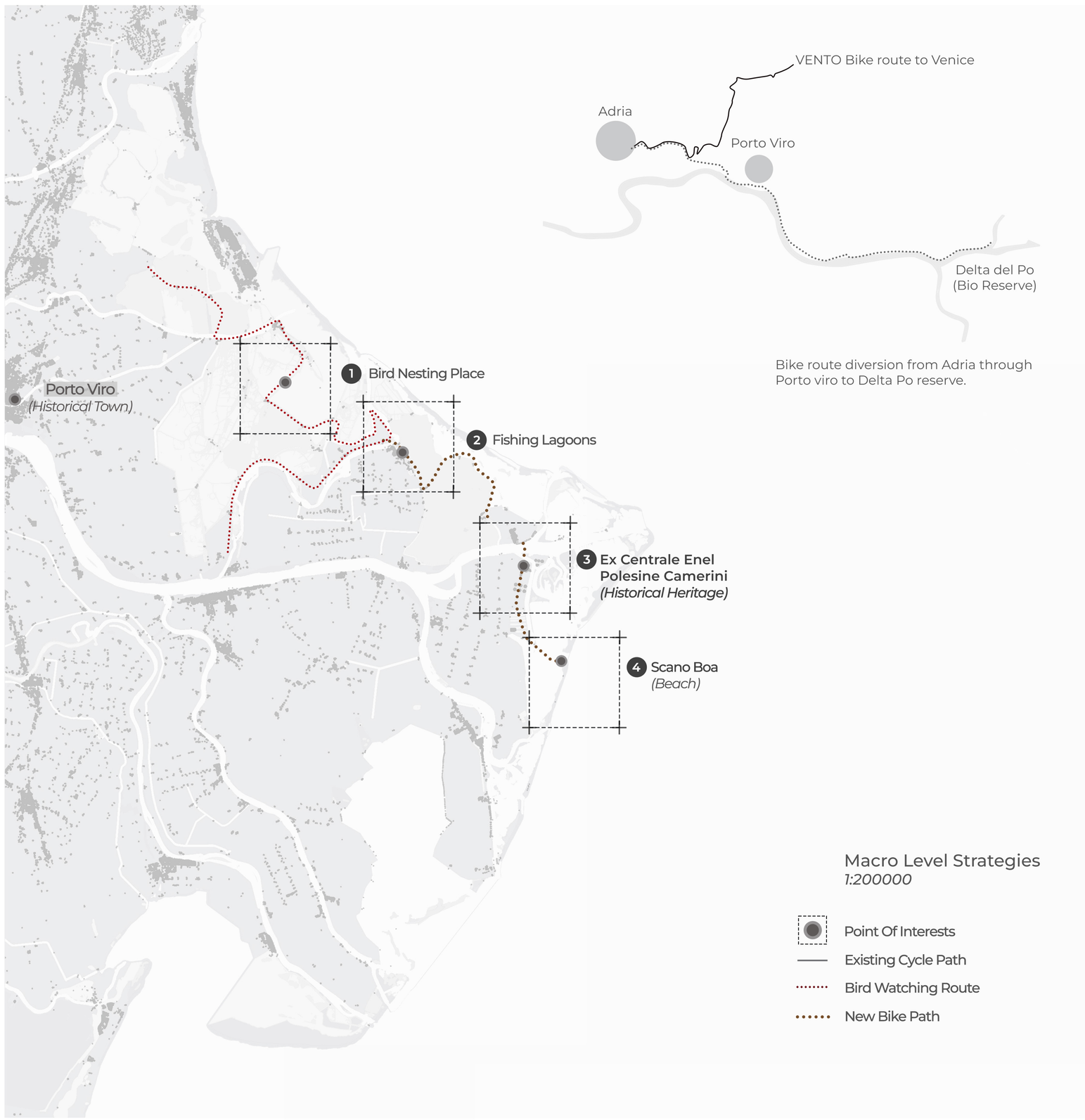
Macro Level Design Strategies

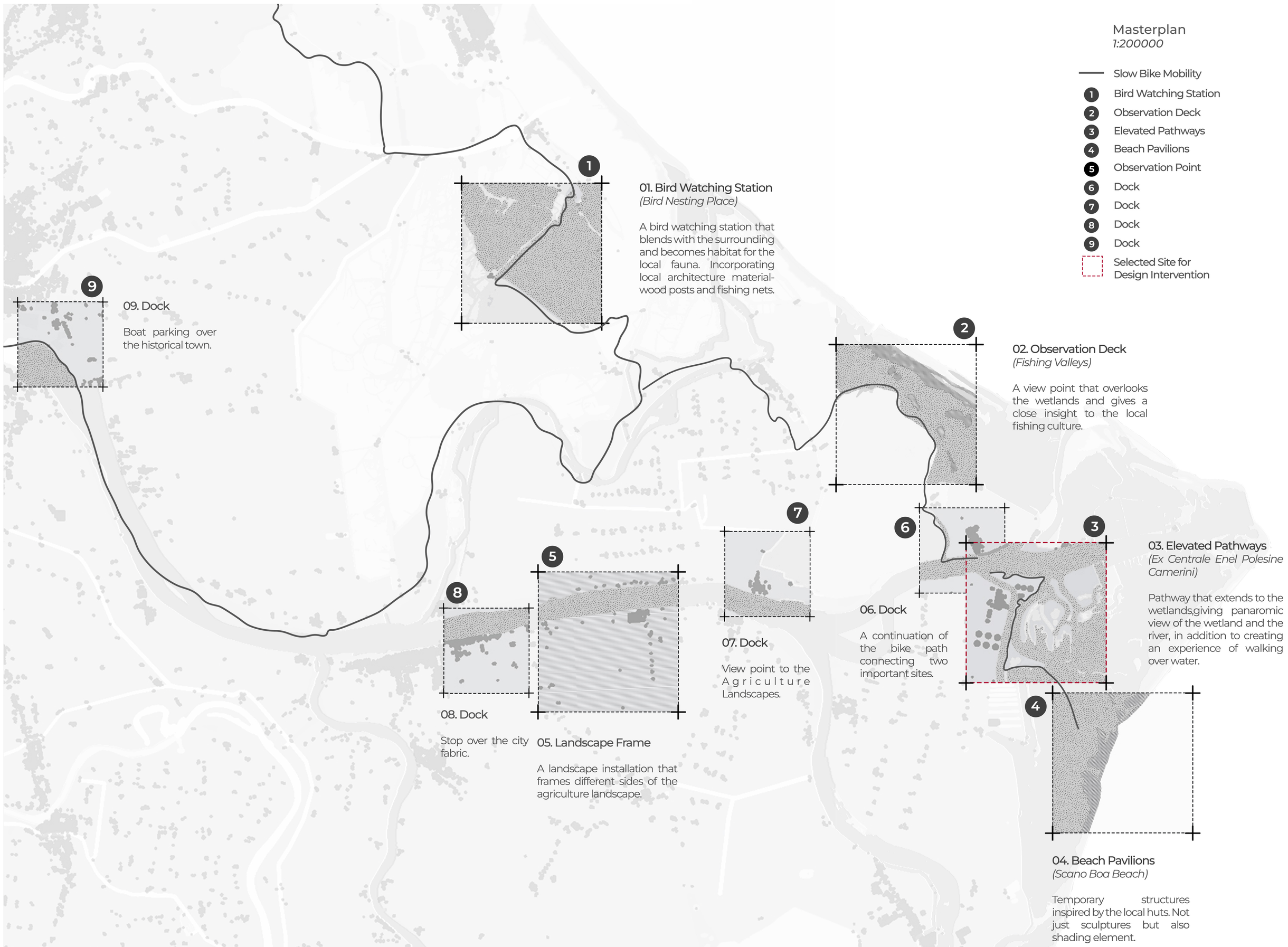
Designed by the **Politecnico di Milano, VENTO** is a 630 km long bike path that will connect **Venice to Turin.** The route winds mostly **along the Po River** through the Po Valley by touching some of the largest cities in northern Italy such as Ferrara, Mantua and Milan, and countless small food, wine and artisan centers. The idea **is to stimulate ecological mobility** by creating a green passageway that adequately valorizes the natural and artistic beauties of the area. The proposal is to extend this **Green mobility** from **Adria** passing **through Porto Viro** (the historical town) to **Delta Po** where nature enthusiasts can experience **UNESCO recognized** Biosphere reserve. This new extension will not only bring new **job opportunity** but also become new **tourist attraction**.The proposal is an estimated extension of **45kms** of the existing bike path route that goes through the historical town where visitors can have a taste of the art, architecture and nature.

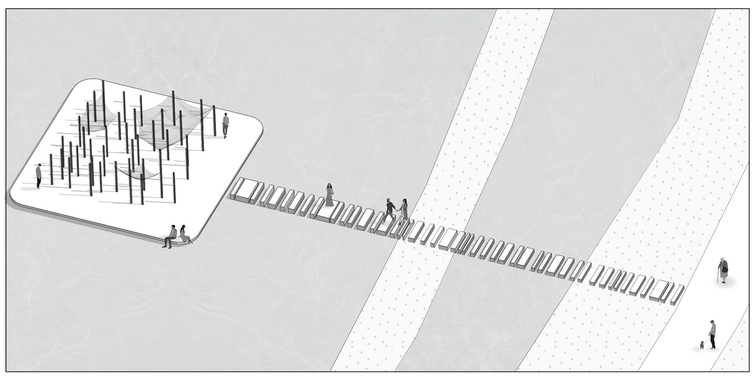
Macro Level Strategy | Extenstion of Vento Bike route



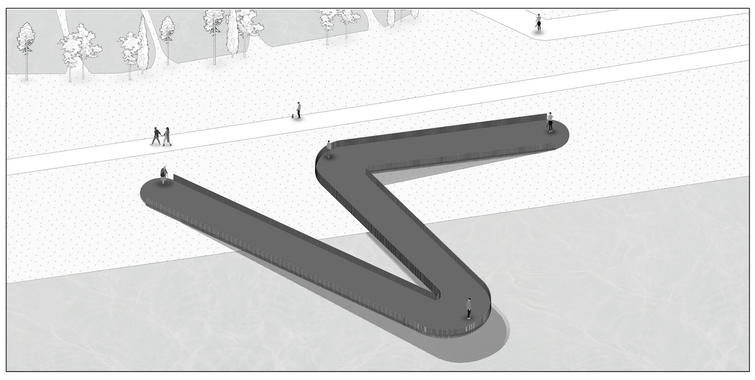




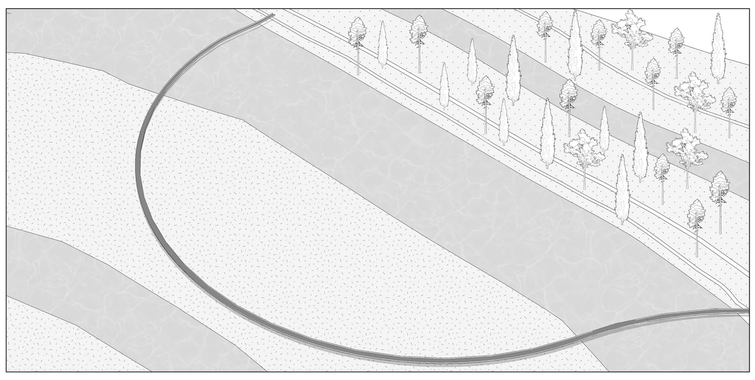




1 Bird Watching Station

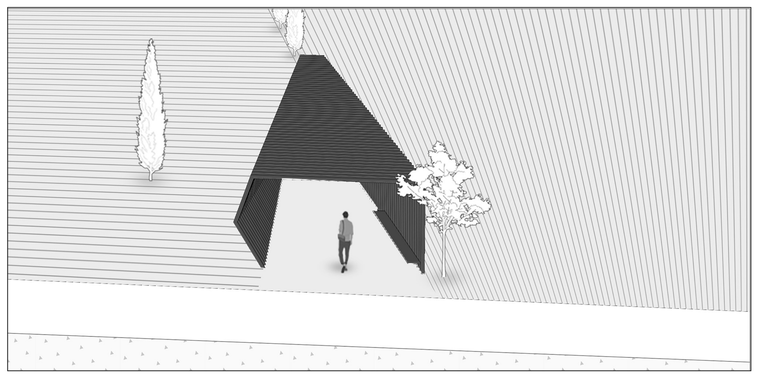


2 Observation Deck

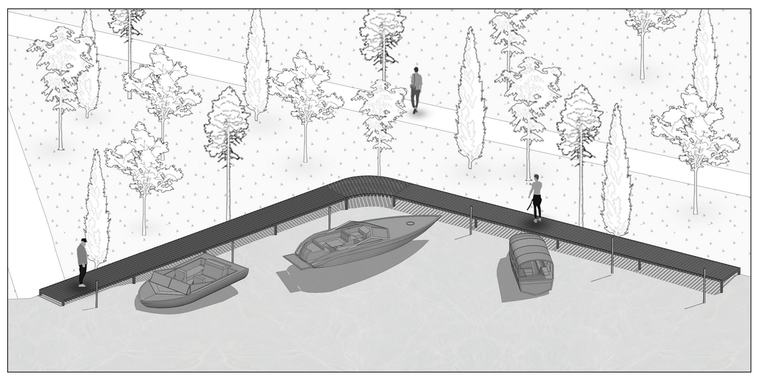


3 Elevated Pathways

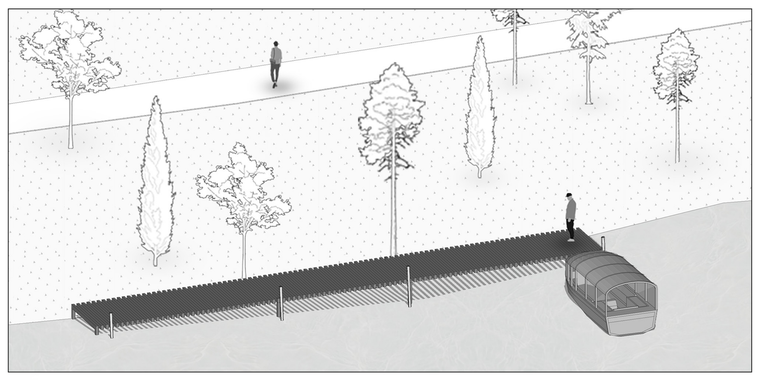
4 Beach Pavilions



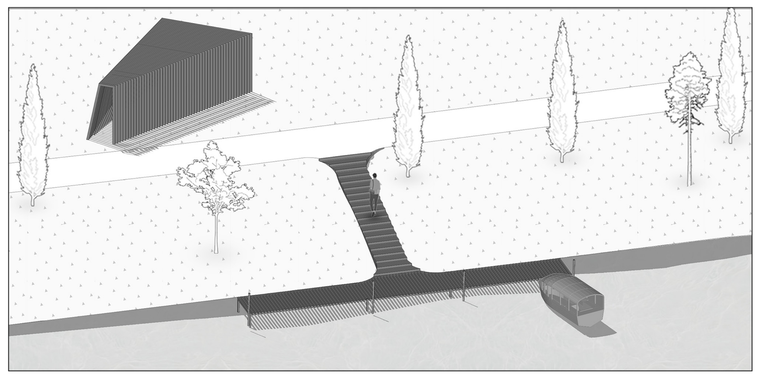
5 Landscape Frame



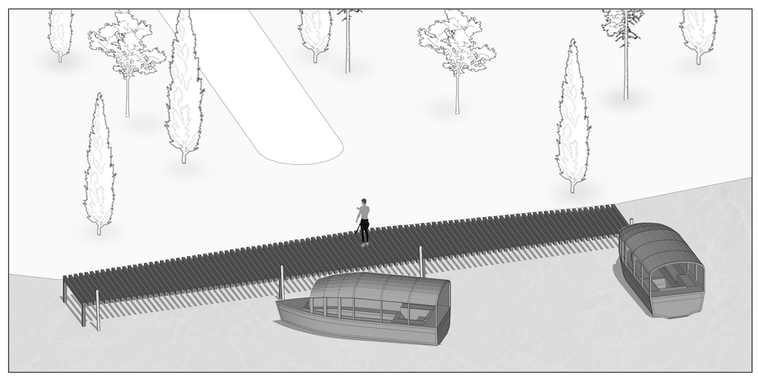
6 Dock



7 Dock



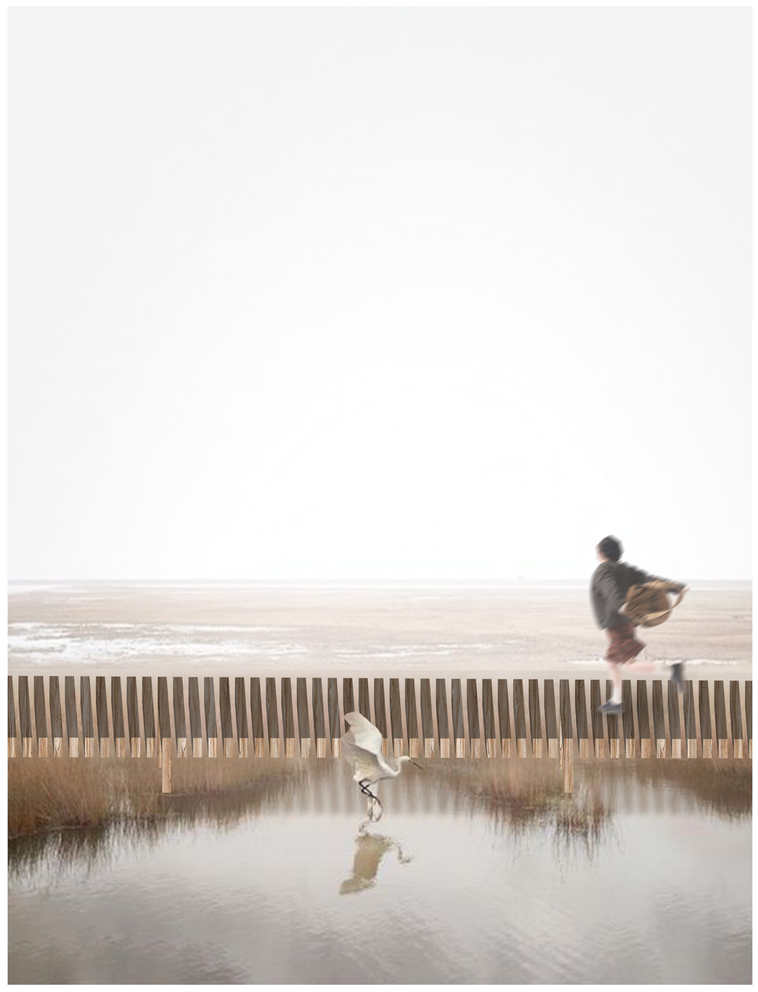
8 Dock



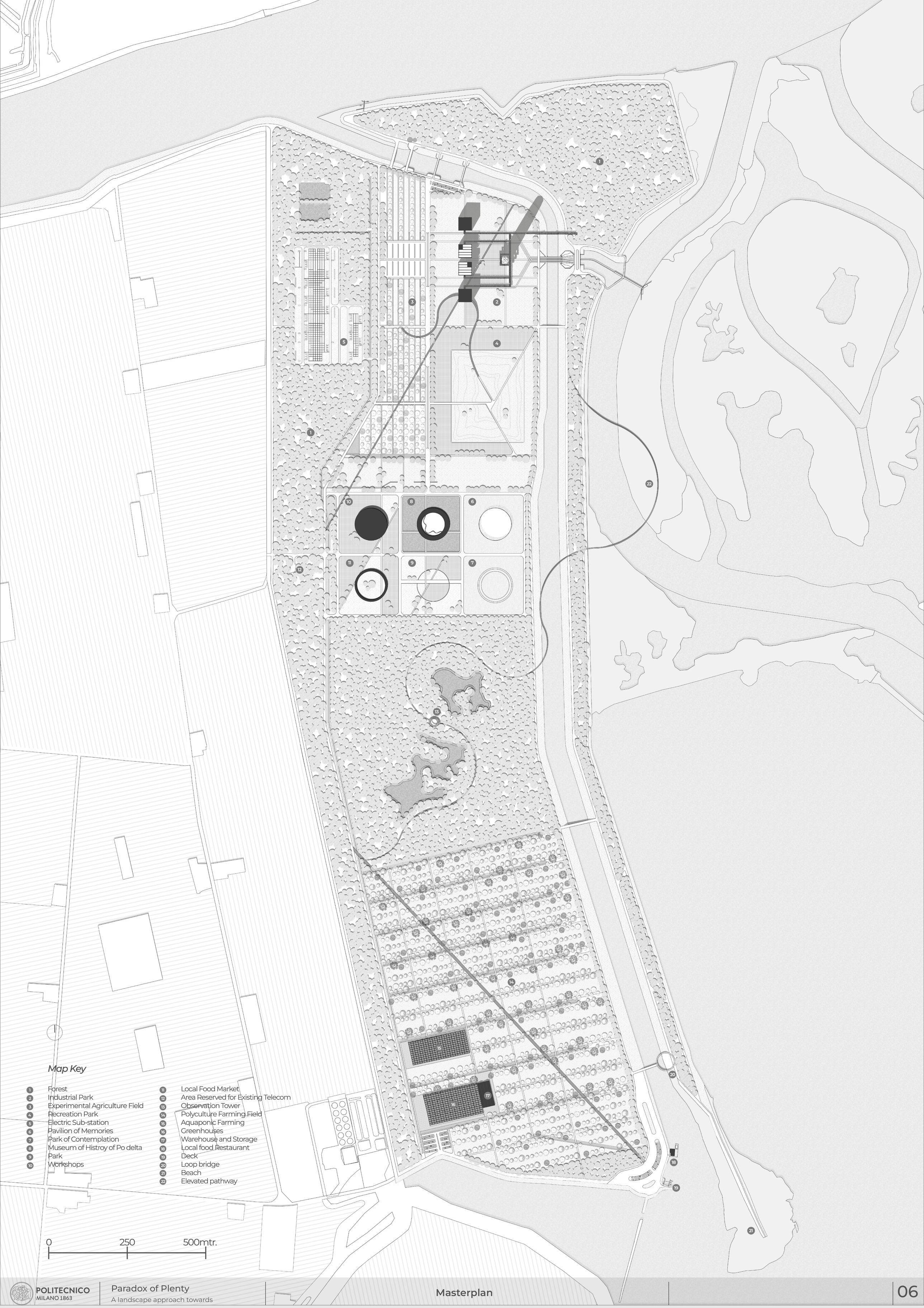
9 Dock

Beach Pavilions

Bird Watching Station



Elevated Pathways


Map Key
1 Forest
2 Industrial Park
3 Experimental Agriculture Field
4 Recreation Park
5 Electric Sub-station
6 Pavilion of Memories
7 Park of Contemplation
8 Museum of Histroy of Po delta
9 Park
10 Workshops
11 Local Food Market
12 Area Reserved for Existing Telecom
13 Observation Tower
14 Polyculture Farming Field
15 Aquaponic Farming
16 Greenhouses
17 Warehouse and Storage
18 Local food Restaurant
19 Deck
20 Loop bridge
21 Beach
22 Elevated pathway
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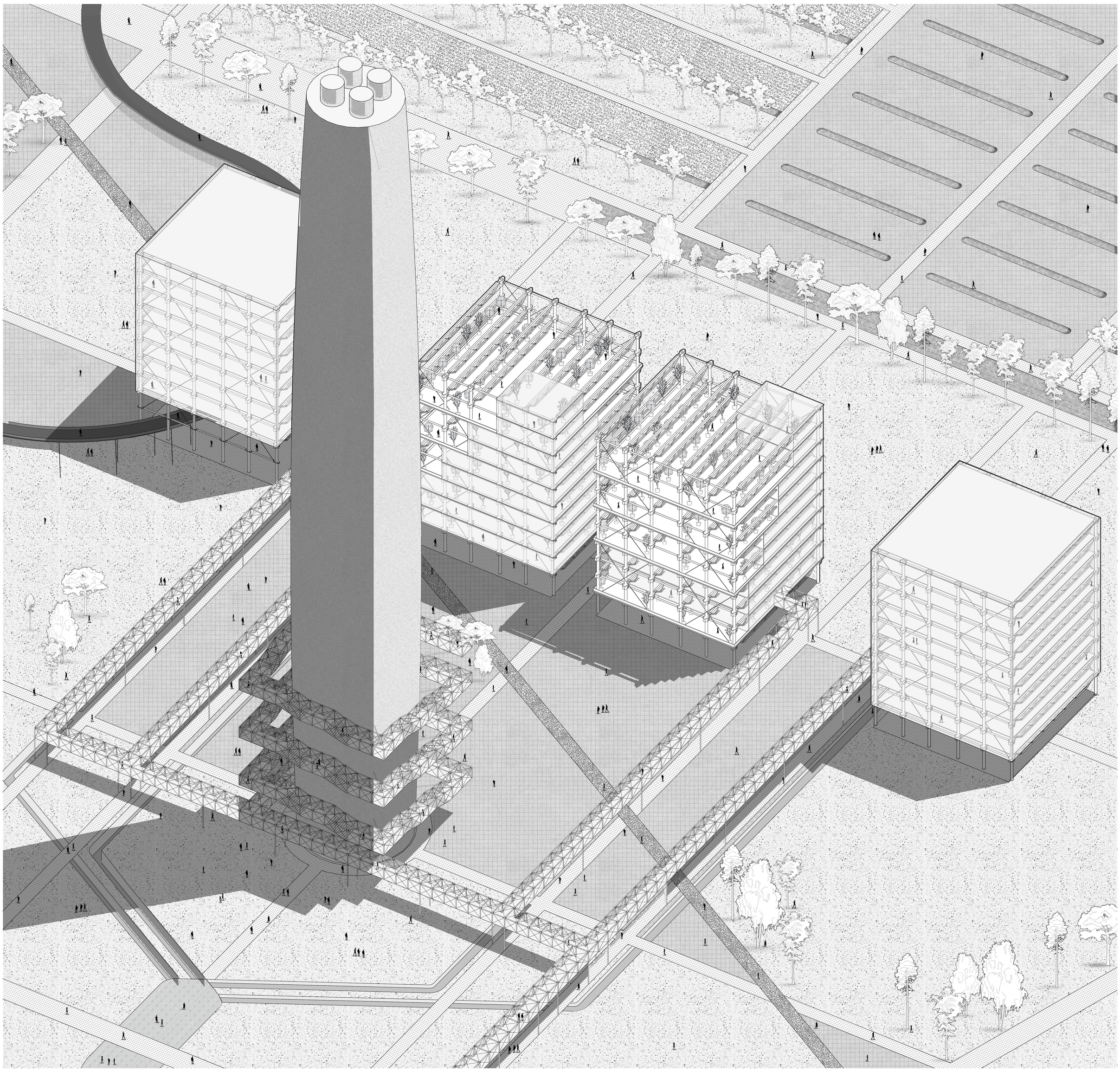
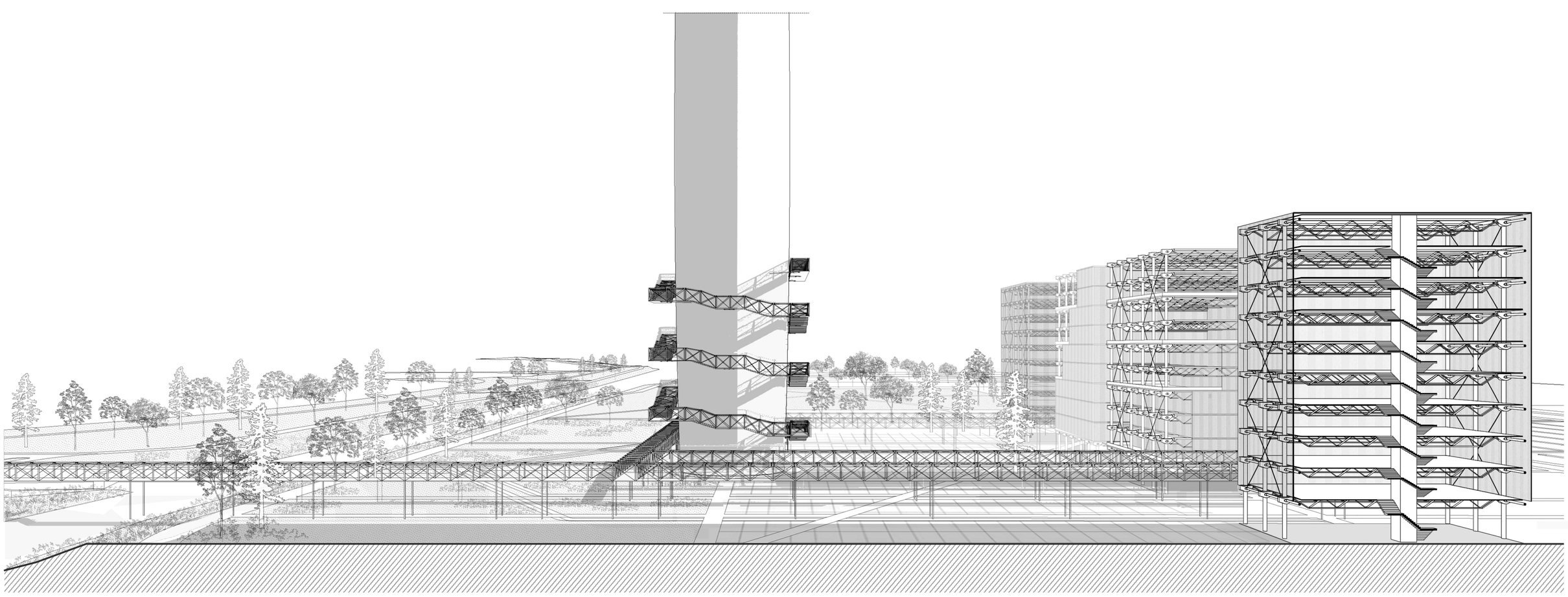
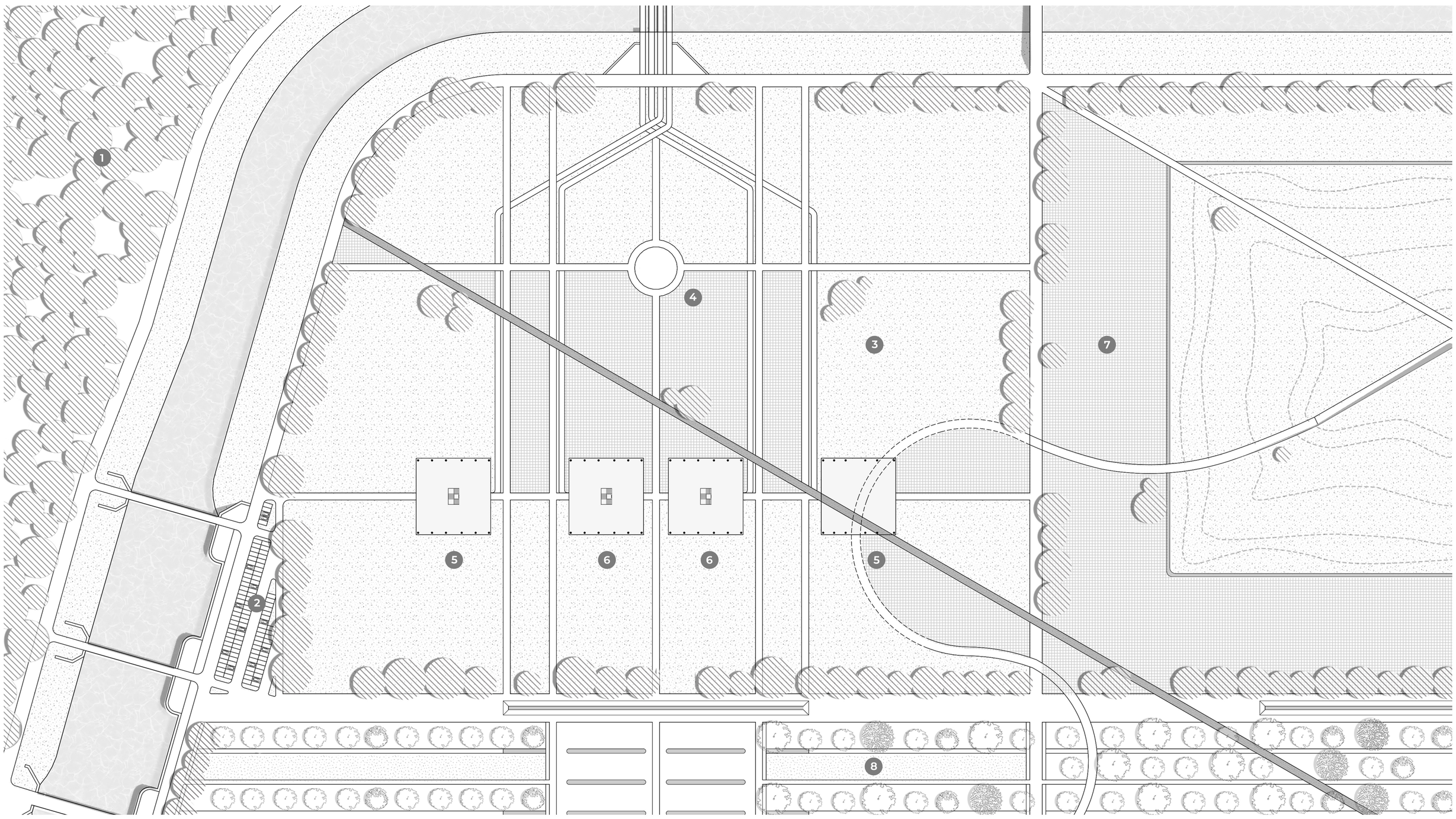
500mtr.



Axonometry of the Industrial Park



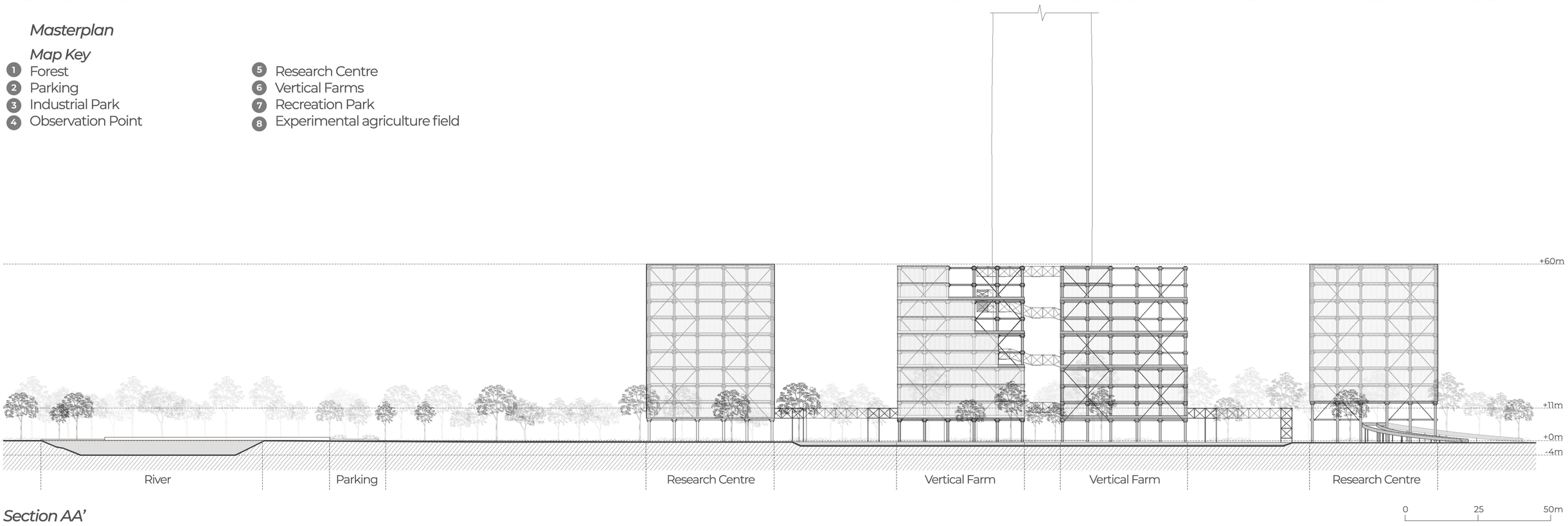
Perspective Section from the north side of the Industrial Park



Masterplan

Map Key

1. Forest
2. Parking
3. Industrial Park
4. Observation Point
5. Research Centre
6. Vertical Farms
7. Recreation Park
8. Experimental agriculture field



Section AA'

Section cutting Industrial park, Recreation park and the Agriculture area

3D Visualization