

Geographical Location



Indonesia Location
Southeastern Asia, archipelago between the Indian Ocean and the Pacific Ocean

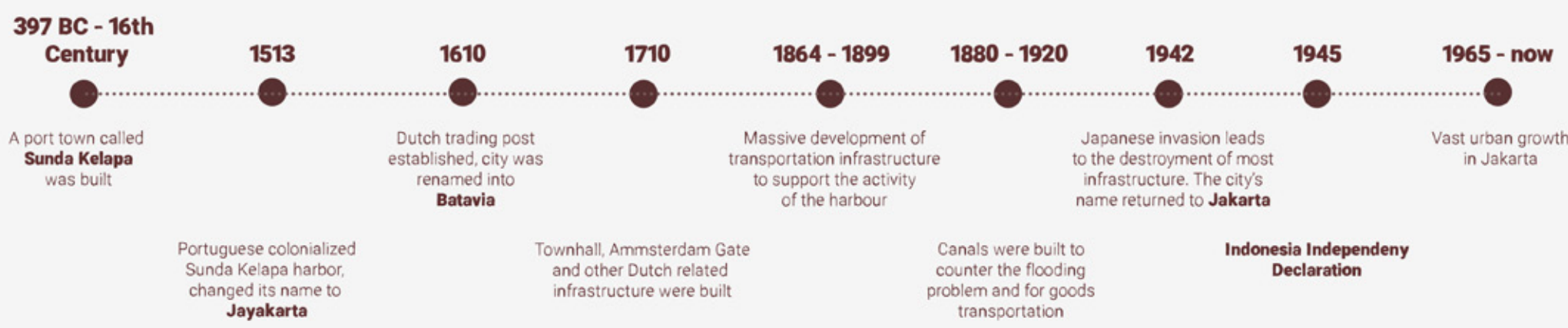
Area
total: 1,904,569 sq km
land: 1,811,569 sq km
water: 93,000 sq km

Border Countries (3):
Malaysia 1,881 km, Papua New Guinea 824 km, Timor-Leste 253 km



Jakarta's Topography and Watershed

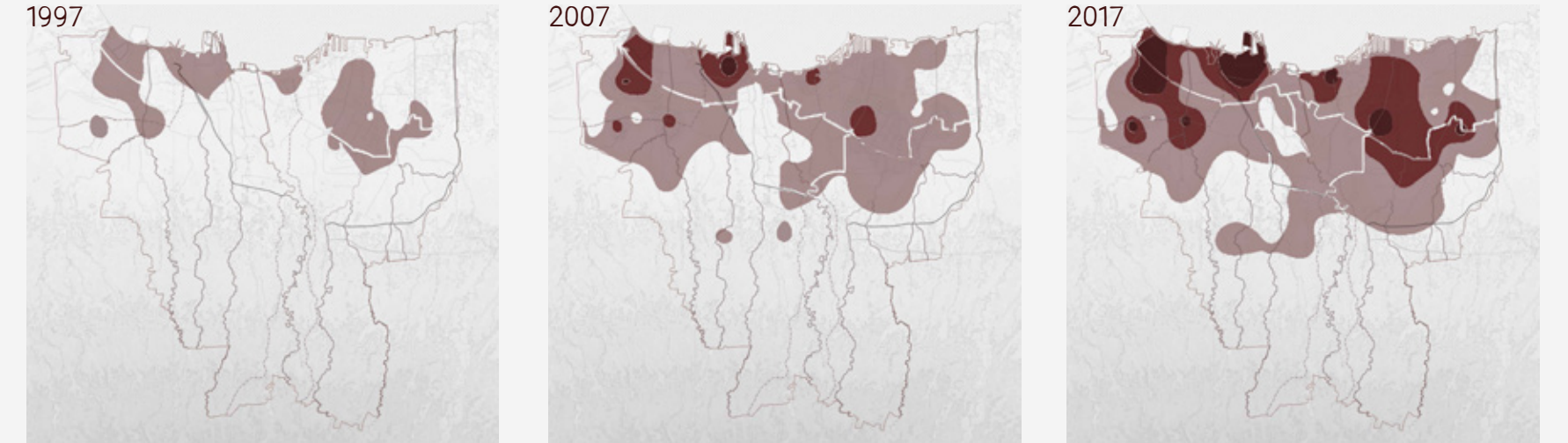
Jakarta's History Timeline



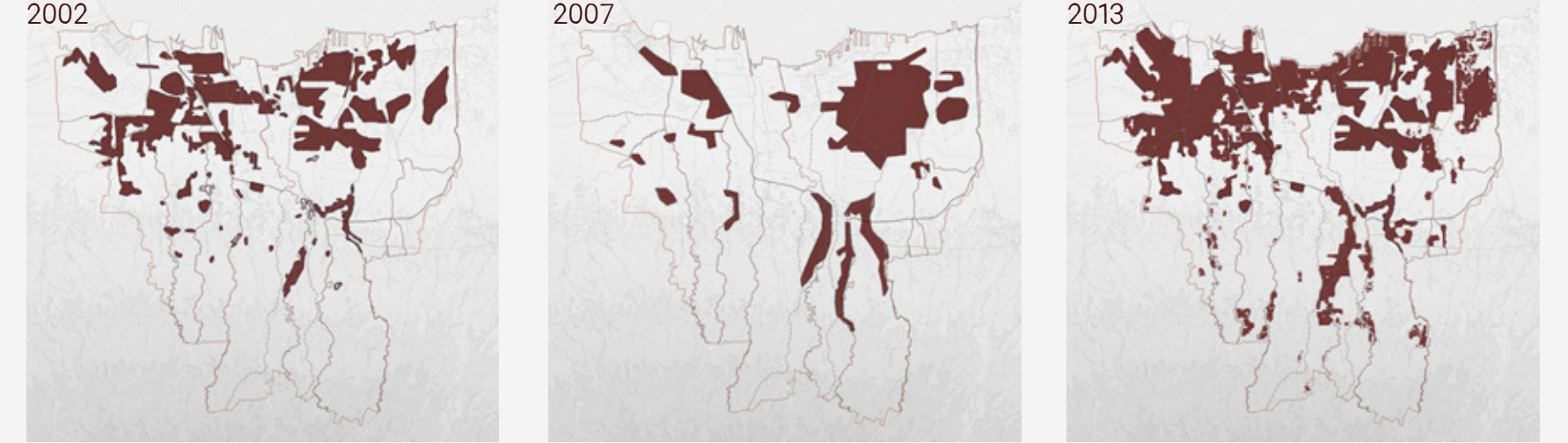
Jakarta's Urban Growth



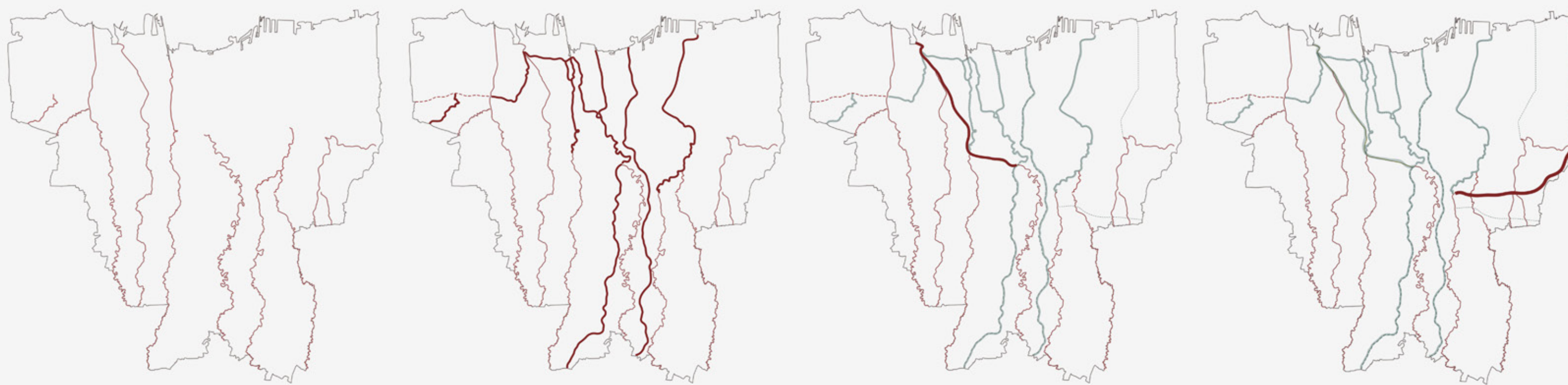
Jakarta's Land Subsidence



Jakarta's Flood Events

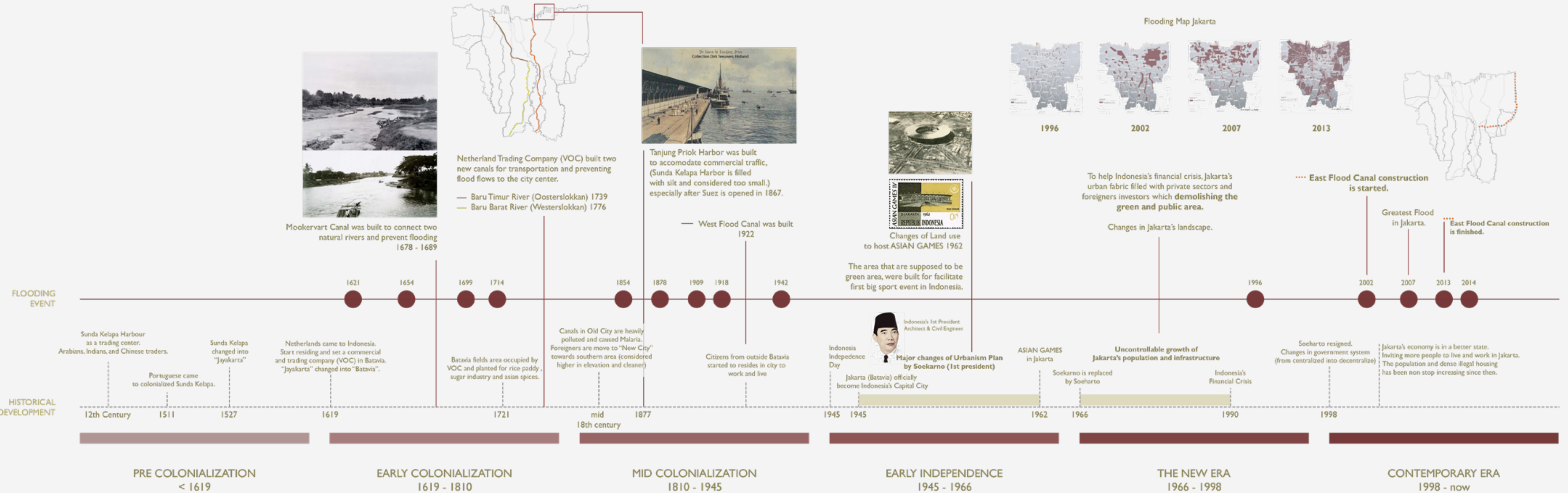
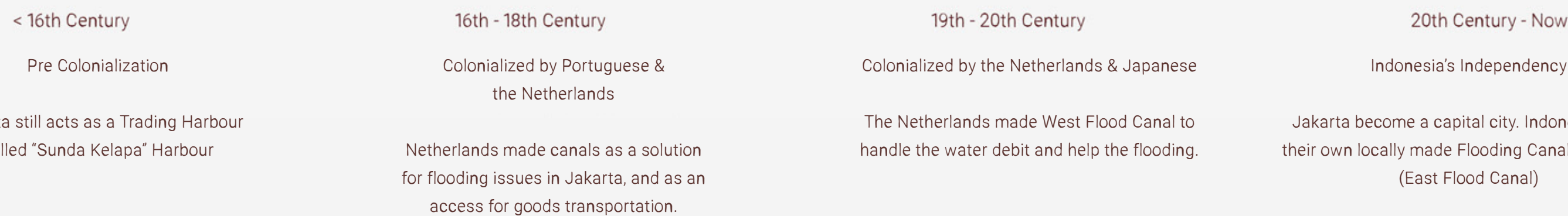


Jakarta's Blue Infrastructure Development



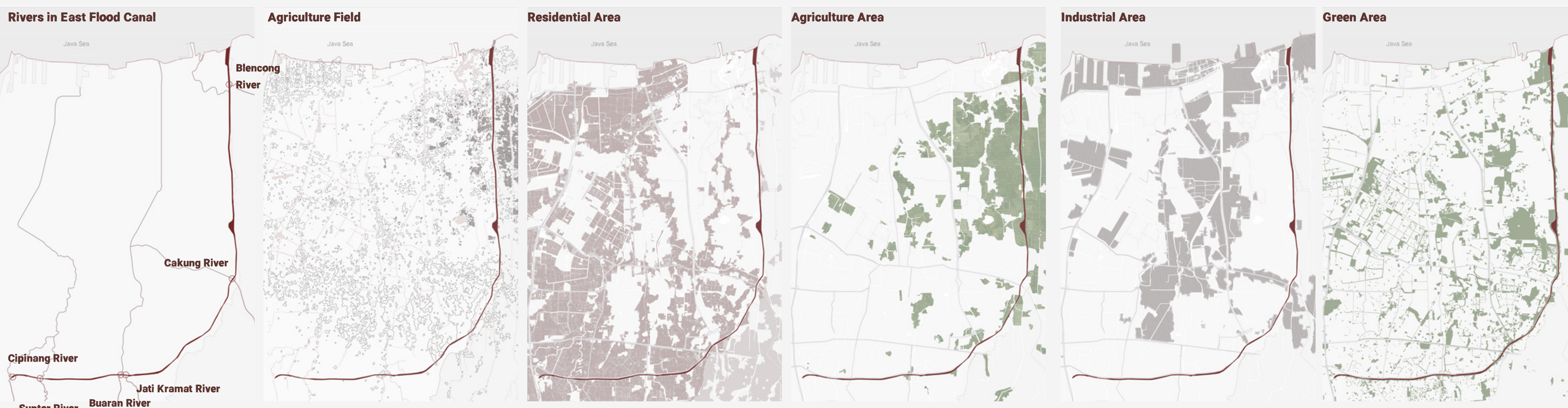
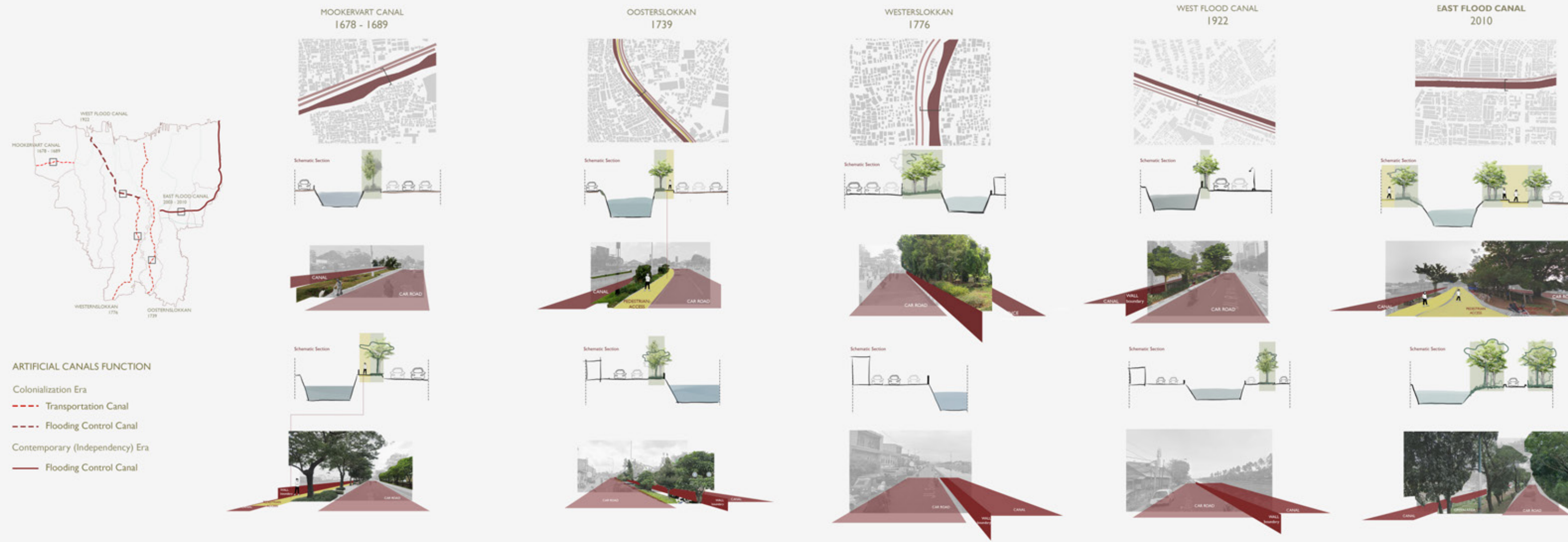
Since Jakarta was founded in the early days, flooding has been an issue in Jakarta because its location is in low-lying rivers that swell during the monsoon season. Recently, the flooding issue has grown excessively because of the land subsidence as well.

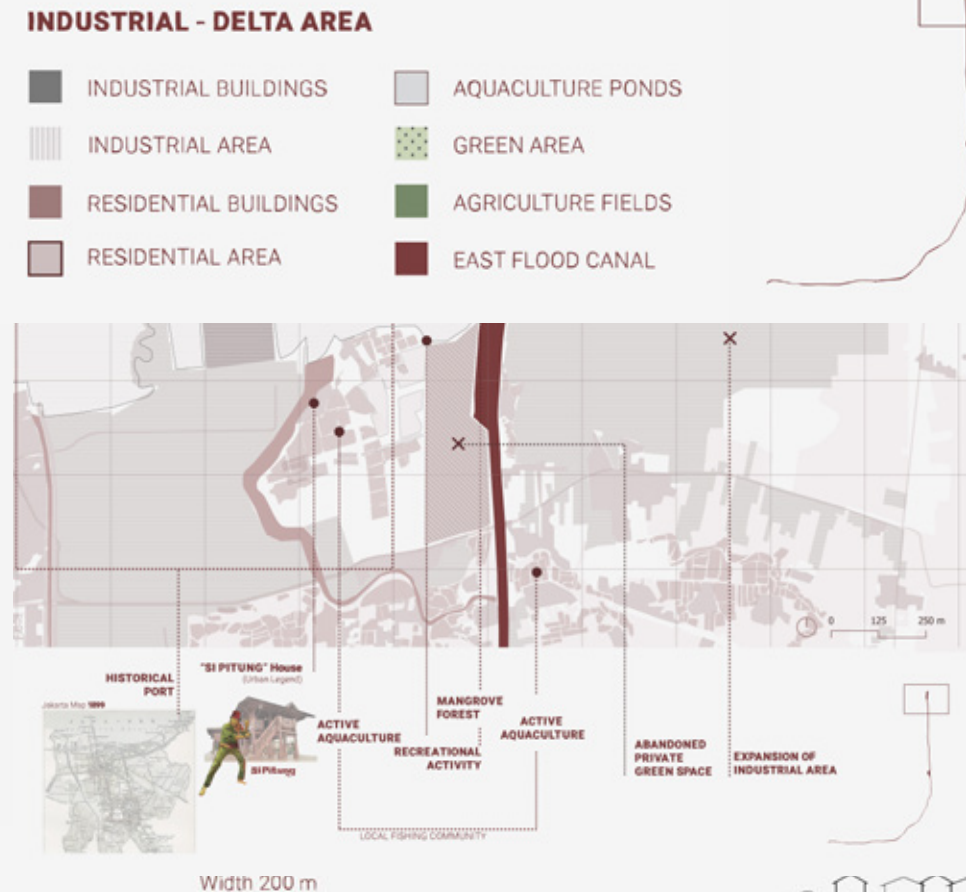
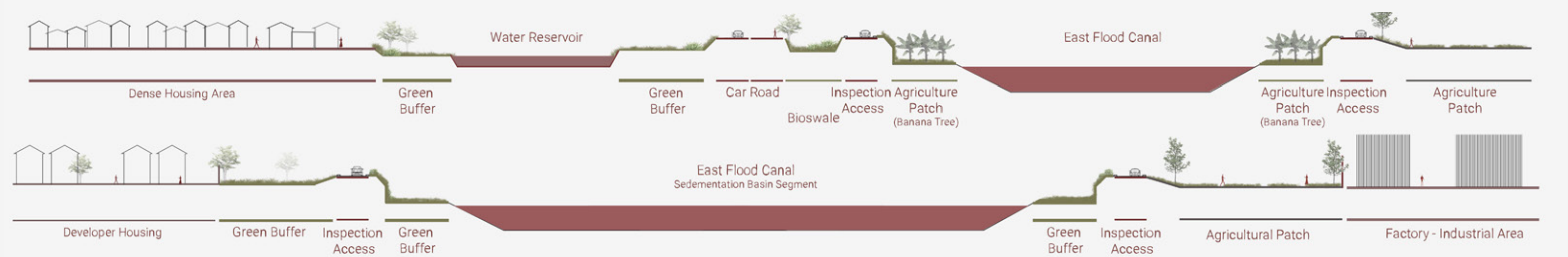
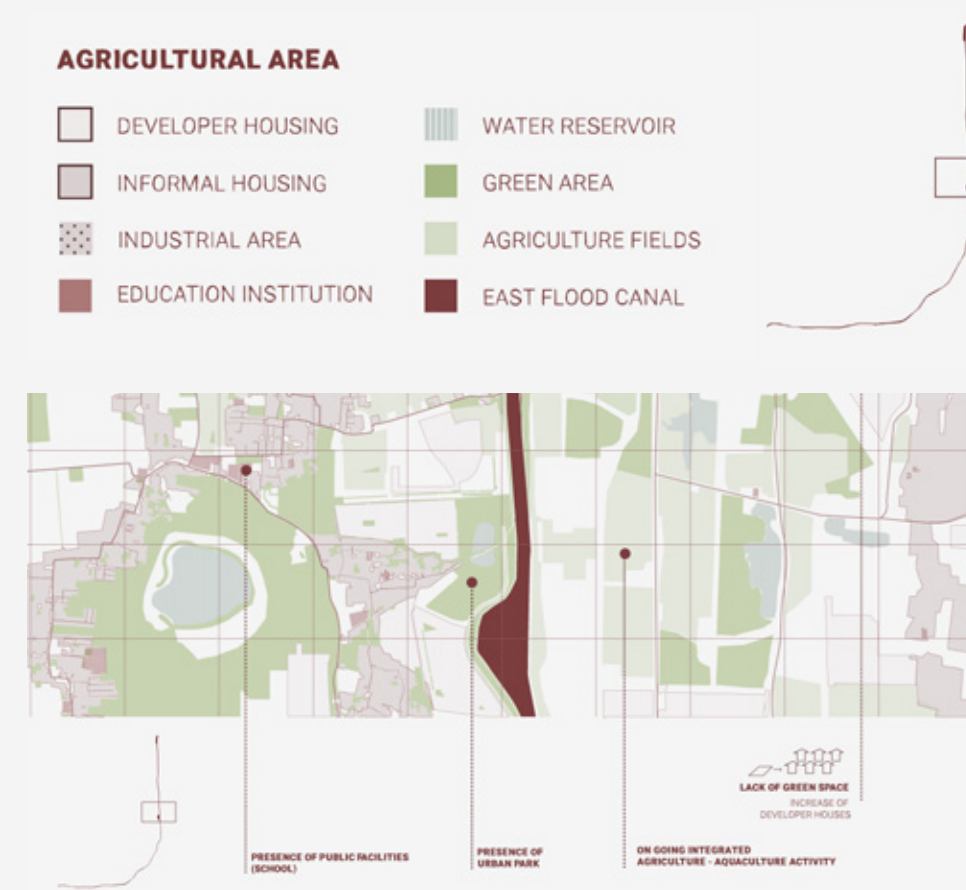
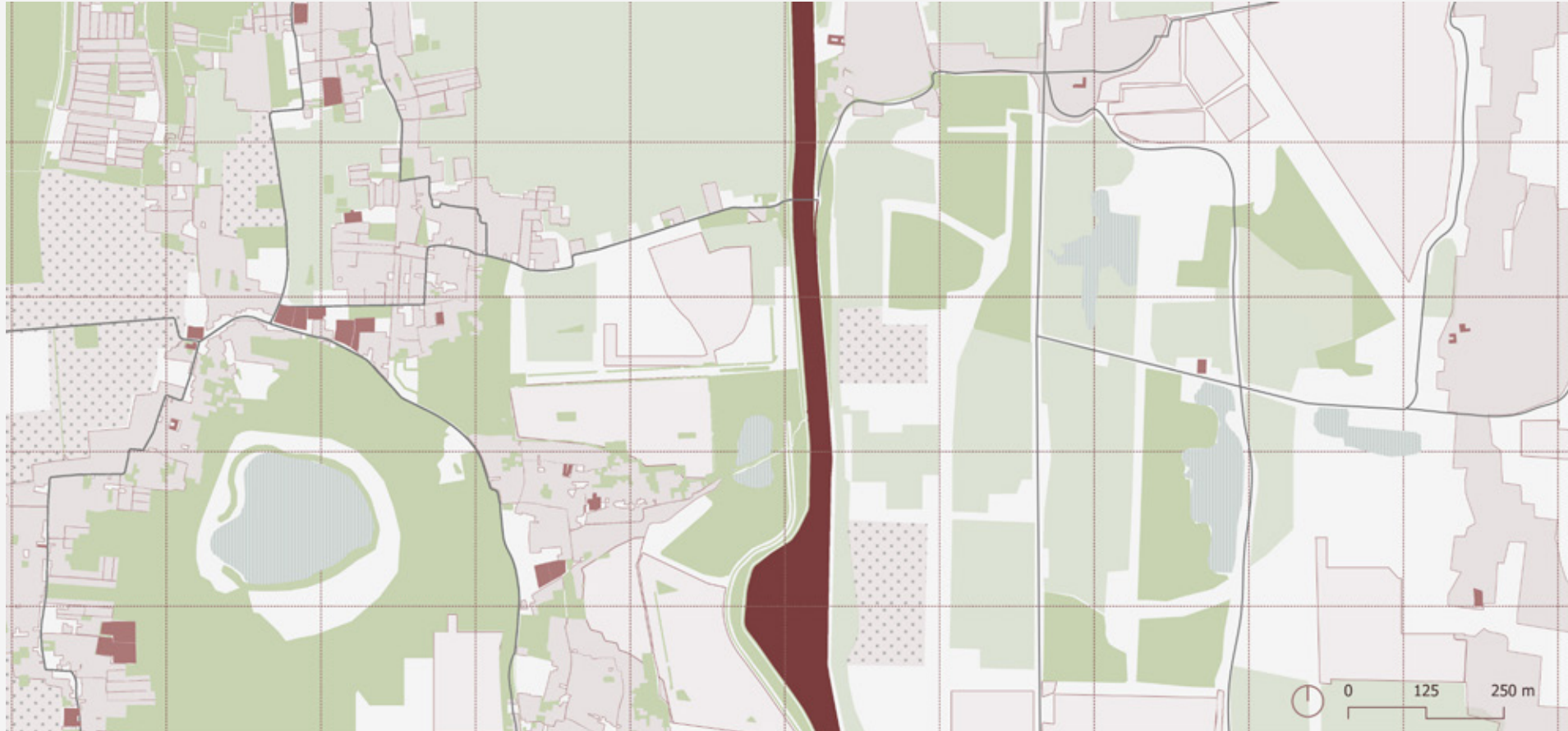
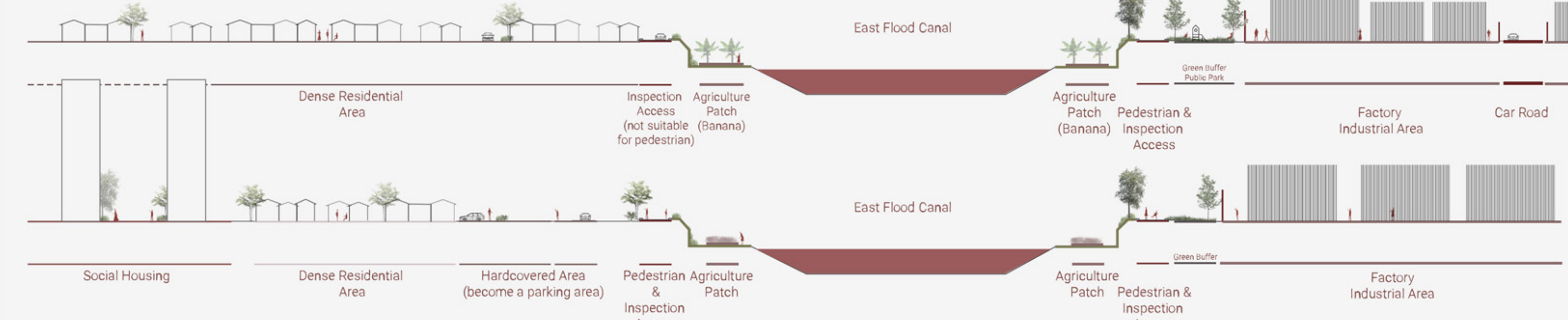
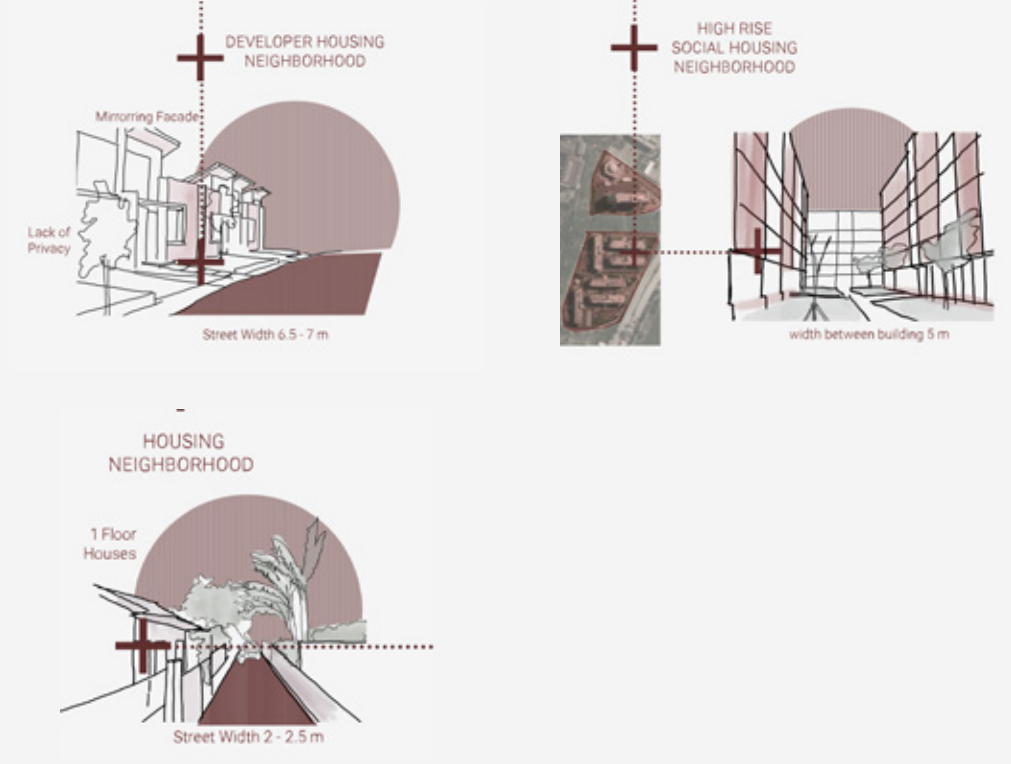
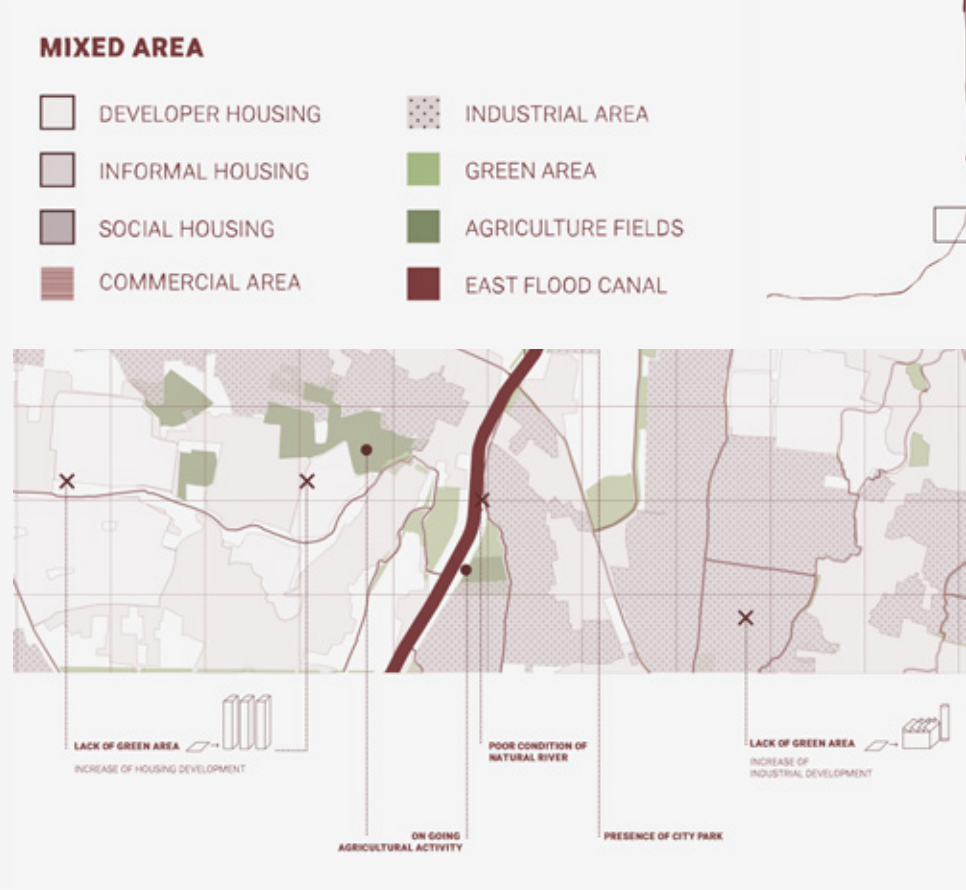
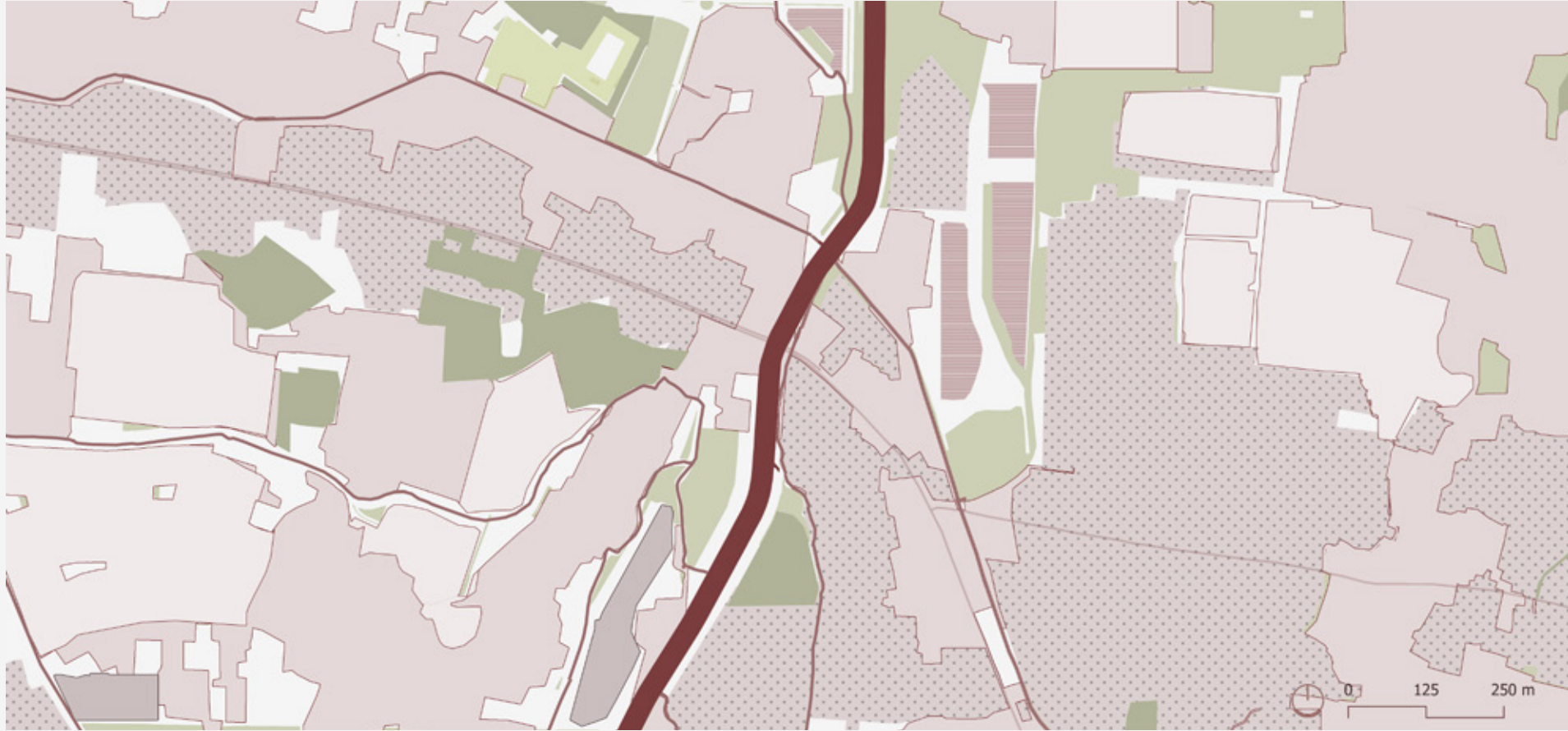
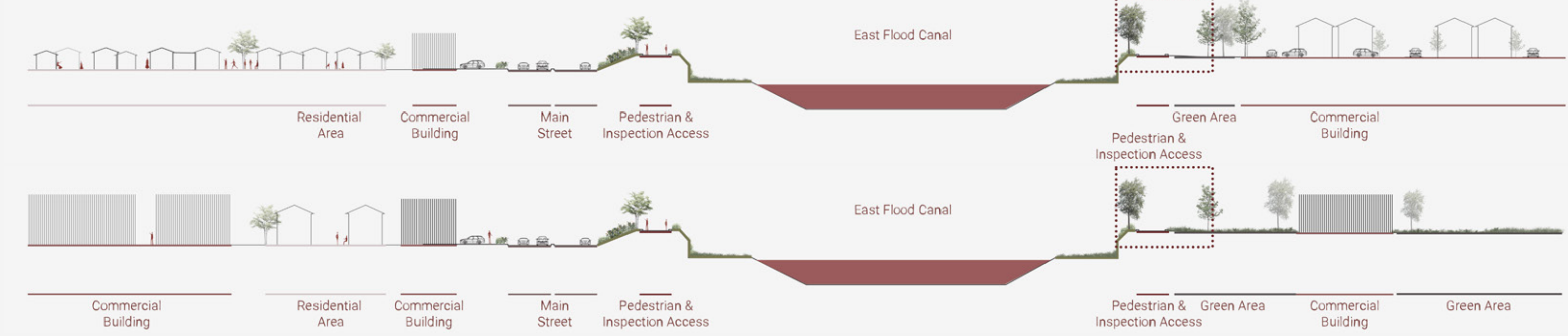
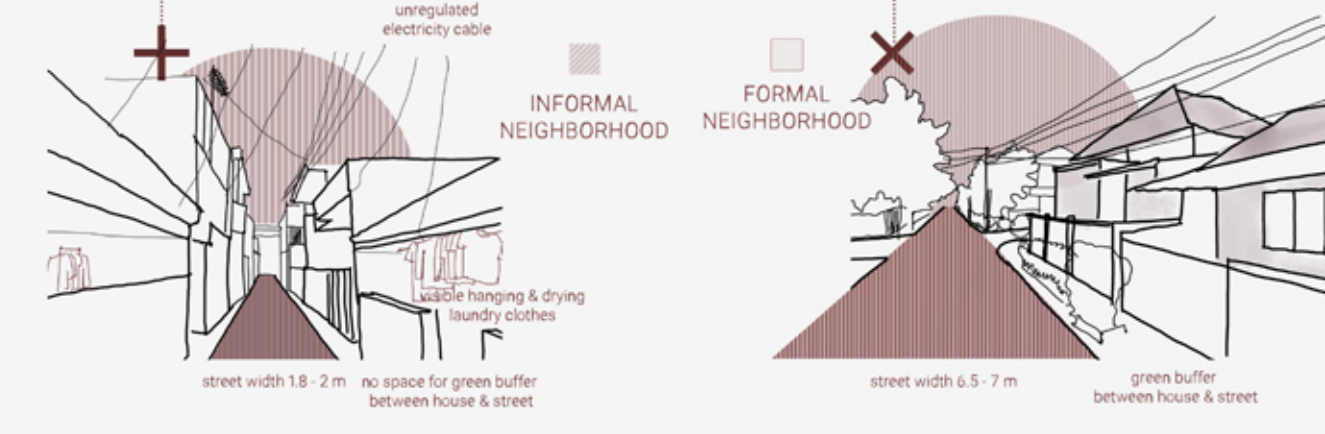
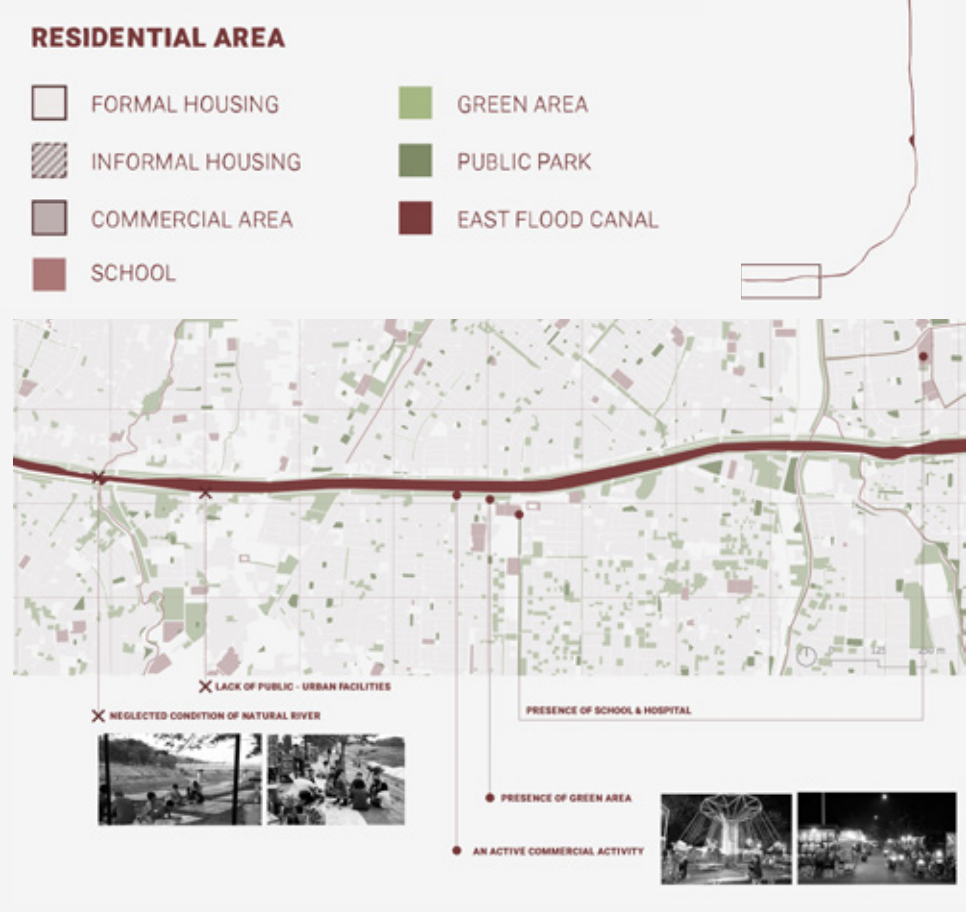
With mean and average global sea levels rising by 3.3 millimeters per year and rainstorms getting more intense as the temperature heats up, damaging floods have become common in Jakarta. Since 1990, major floods have happened every year in Jakarta, with ten thousand people displaced. The heavy rain and monsoon in 2007 severely damaged the city, with more than 70 percent of the city submerged in the water.

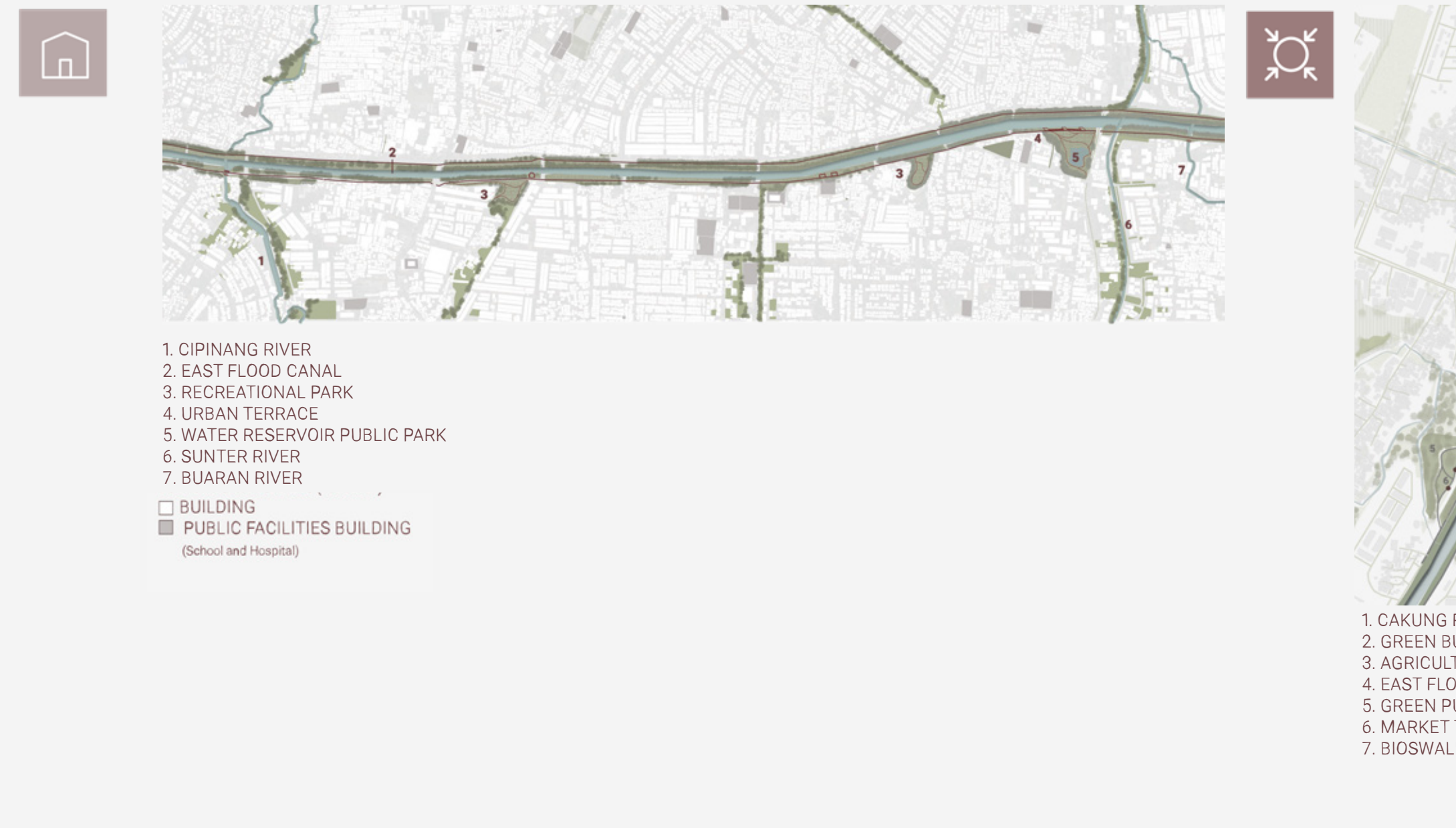
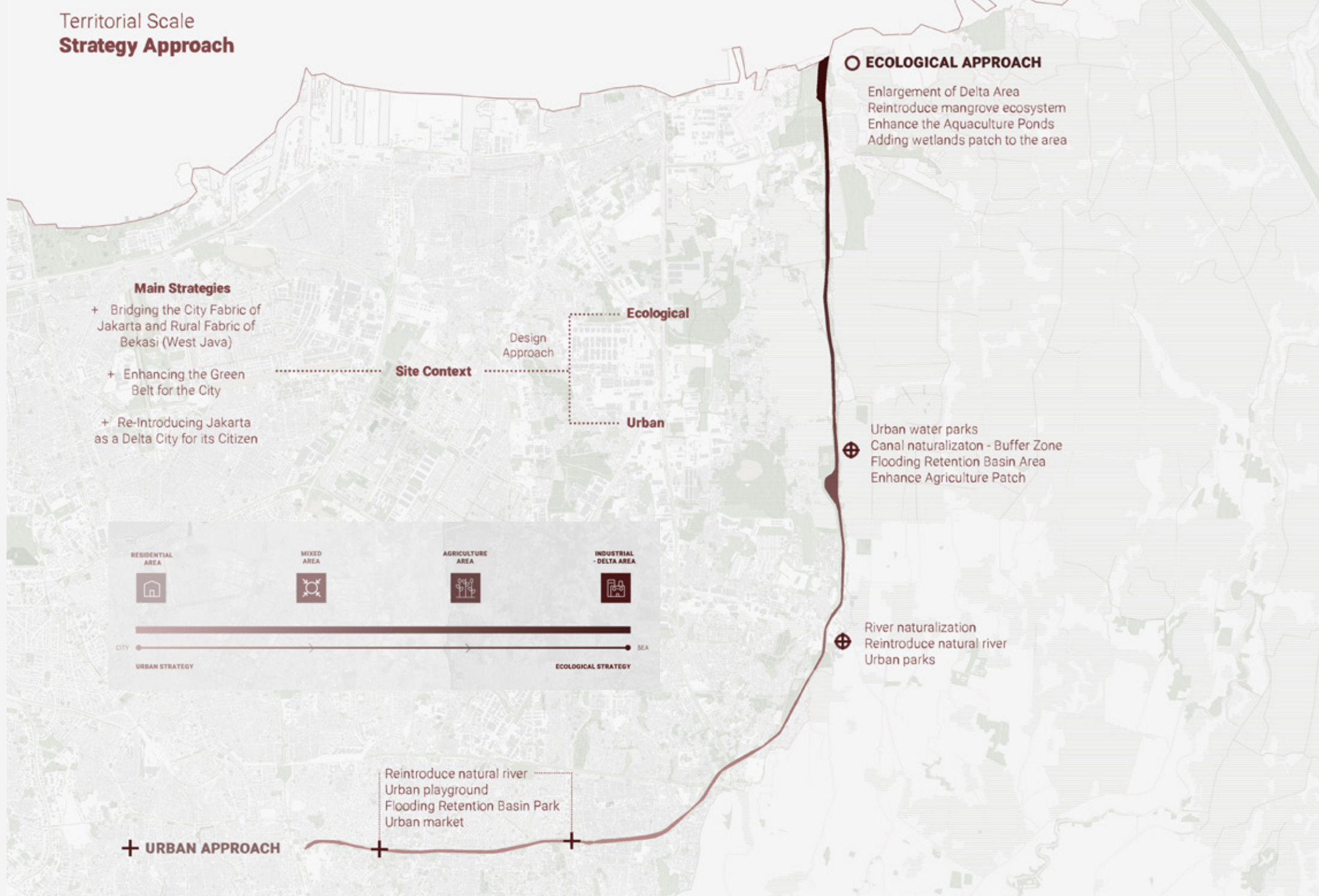


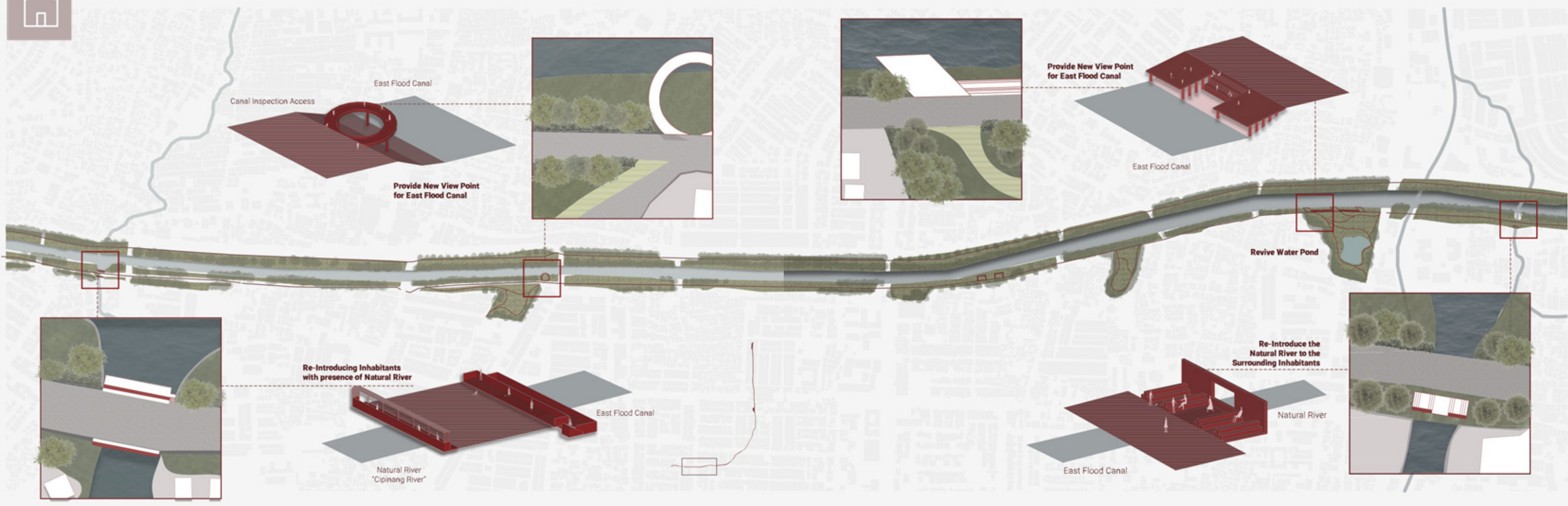
What makes **East Flood Canal** different than others?

The provided infrastructure inviting other activities to merged in. East Flood Canal activates of the surrounding neighborhood through **social** activity, **economy** and for the **environment**

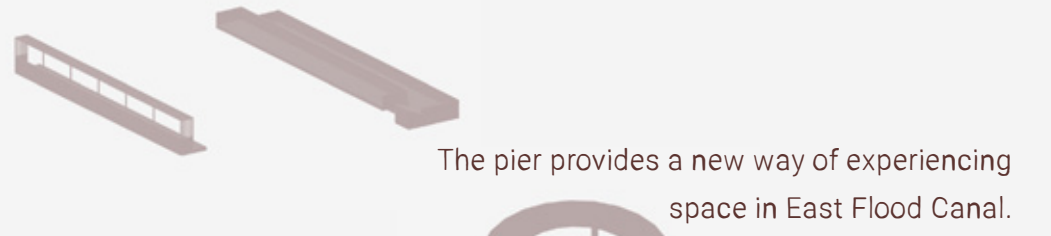




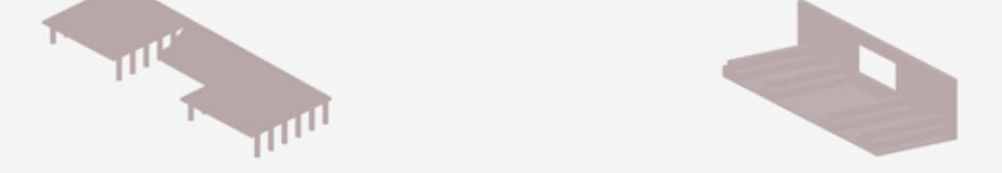




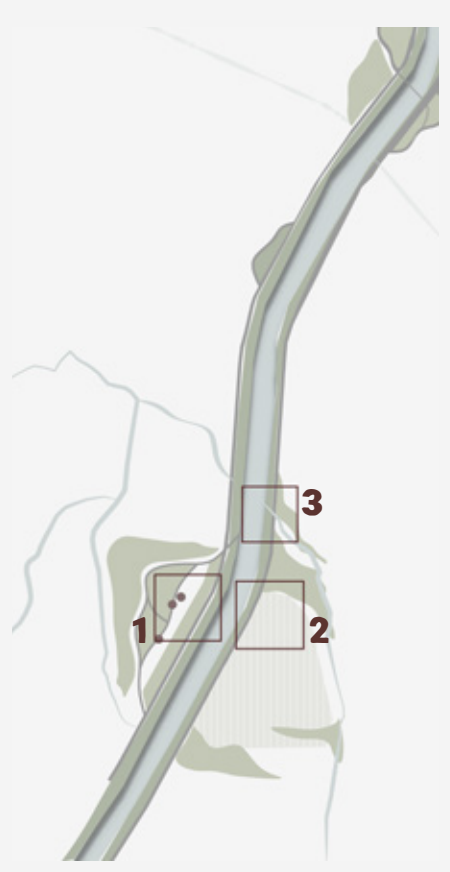
The infrastructure framed the natural river and provide a river terrace for the visitors.



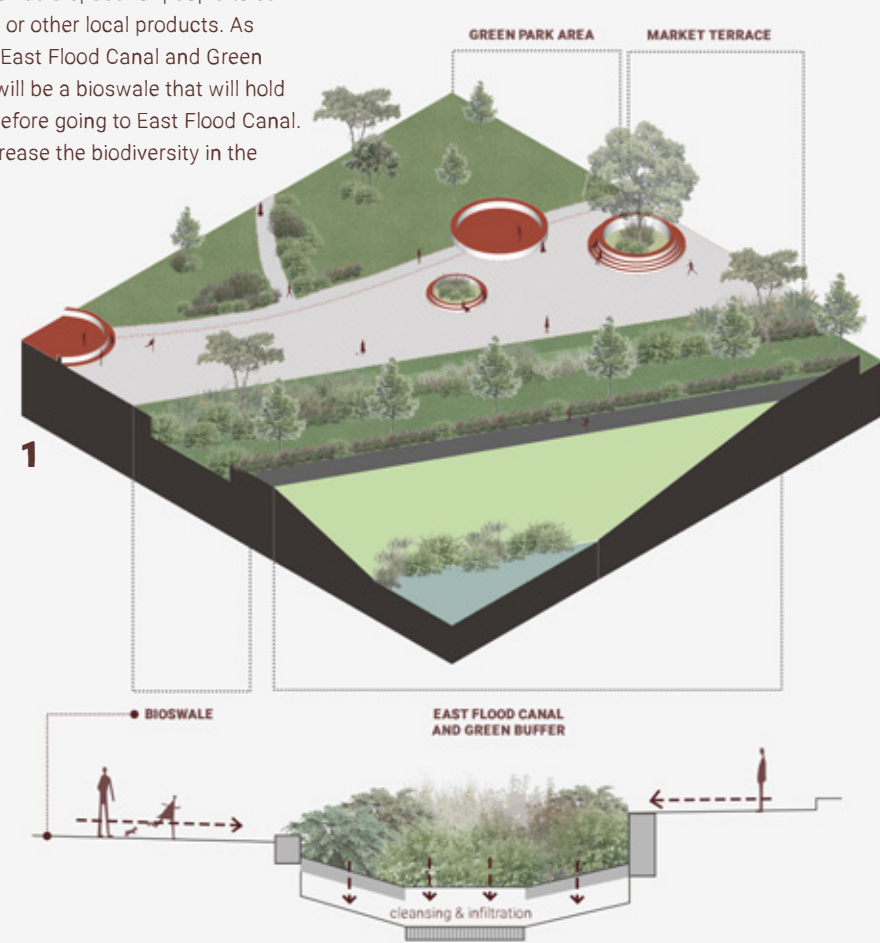
The infrastructure alongside the canal provide a new seating space for the visitors that wants to enjoy the scenery of East Flood Canal.



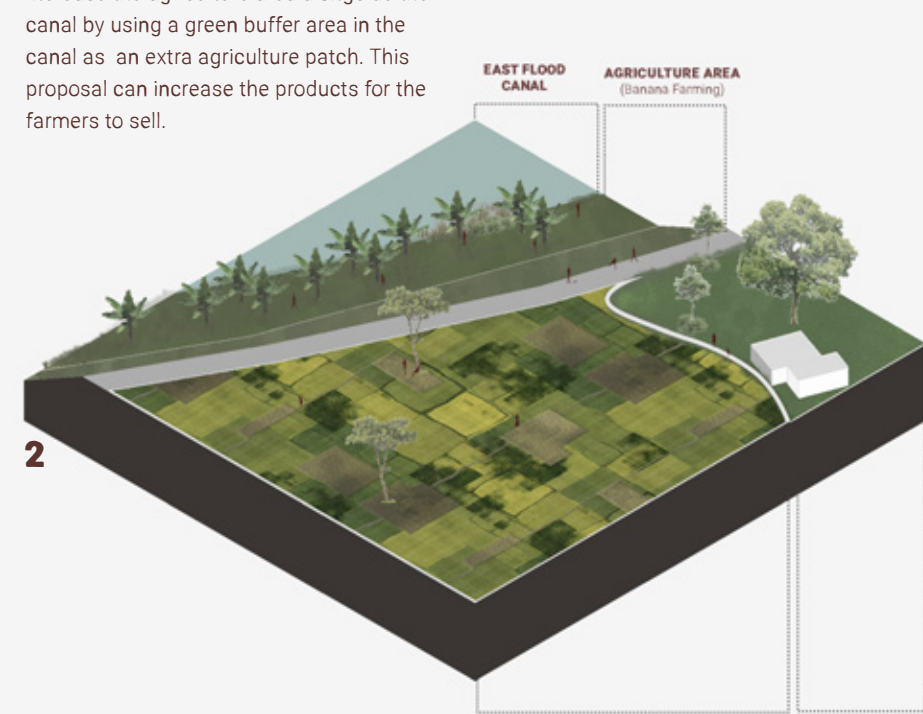
The urban furniture acts as a frame to direct people to enjoy and see the natural river that flows into East Flood Canal.



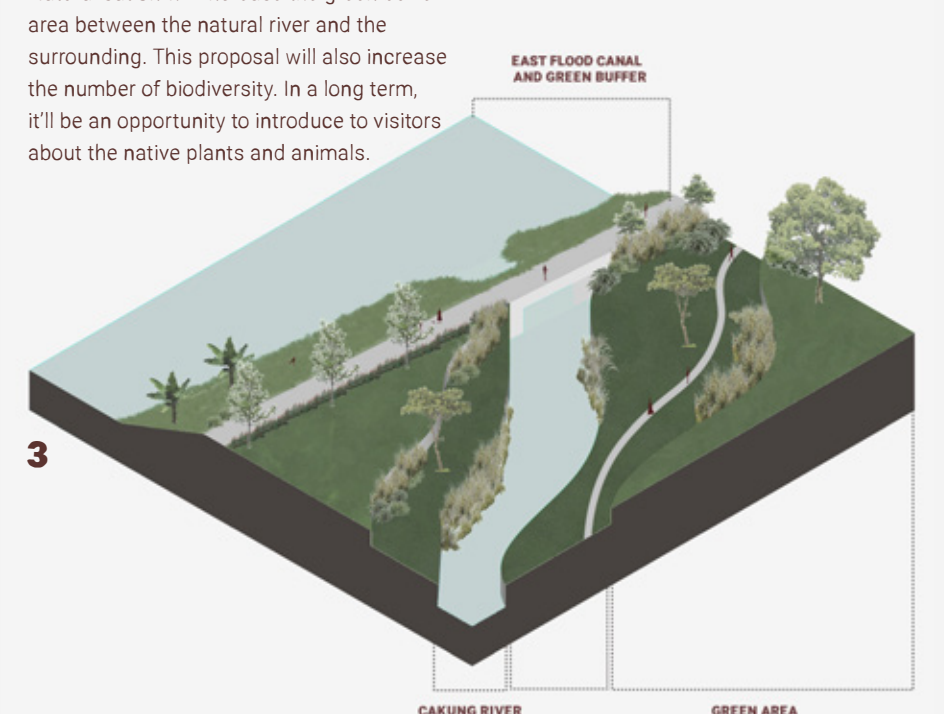
The Market Terrace provide a space for people to sell or buy their agriculture or other local products. As a buffer area between East Flood Canal and Green Market Terrace, there will be a bioswale that will hold the water and filter it before going to East Flood Canal. Bioswales will also increase the biodiversity in the area.



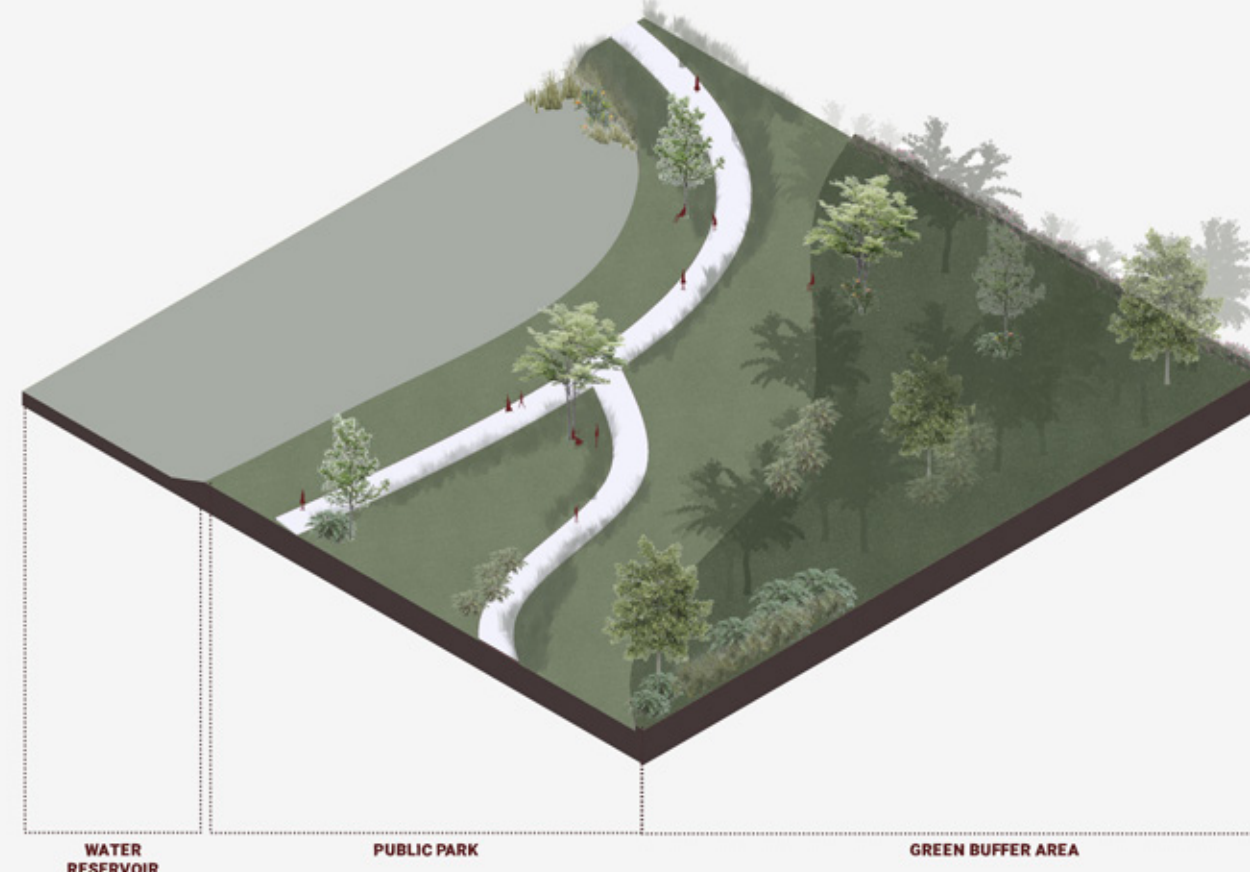
Increase the agriculture area alongside the canal by using a green buffer area in the canal as an extra agriculture patch. This proposal can increase the products for the farmers to sell.



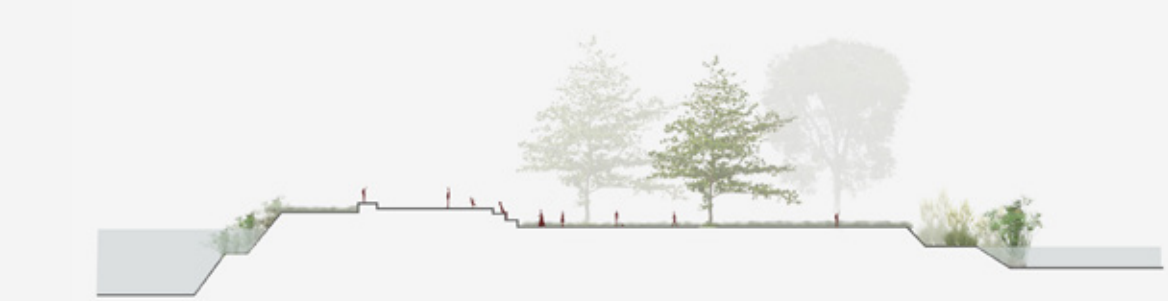
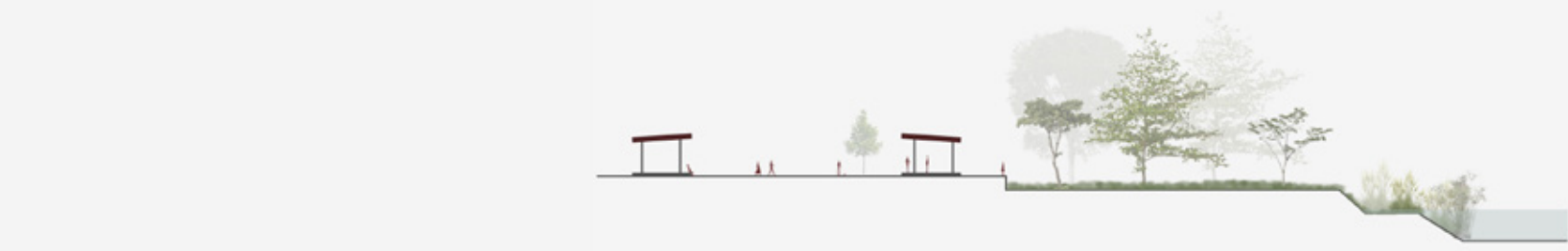
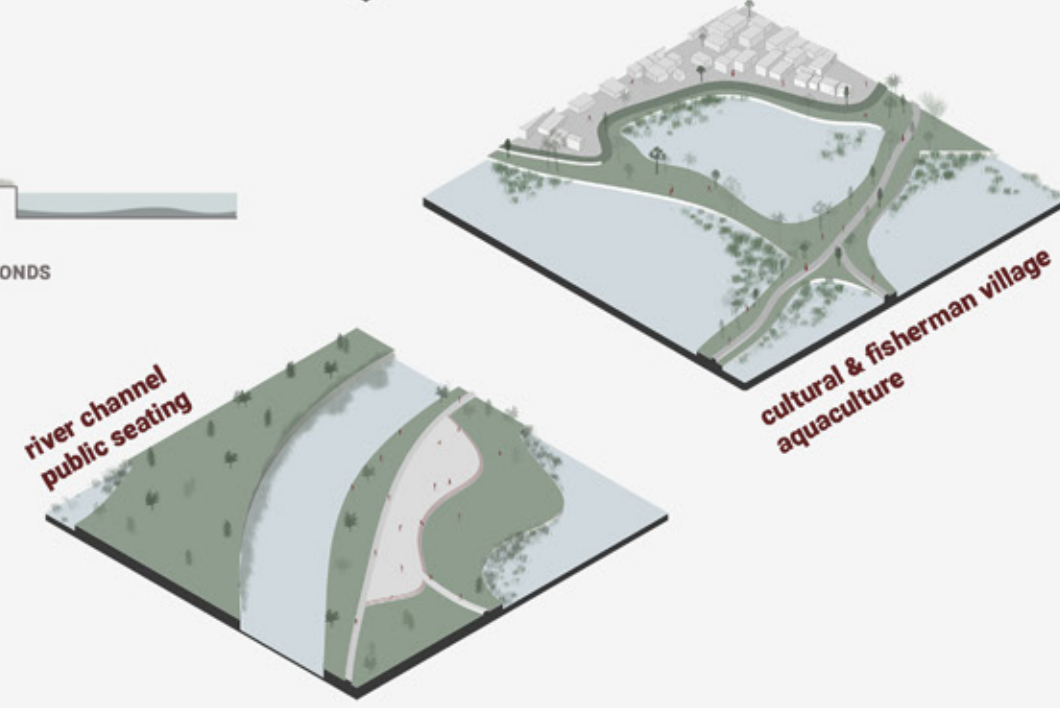
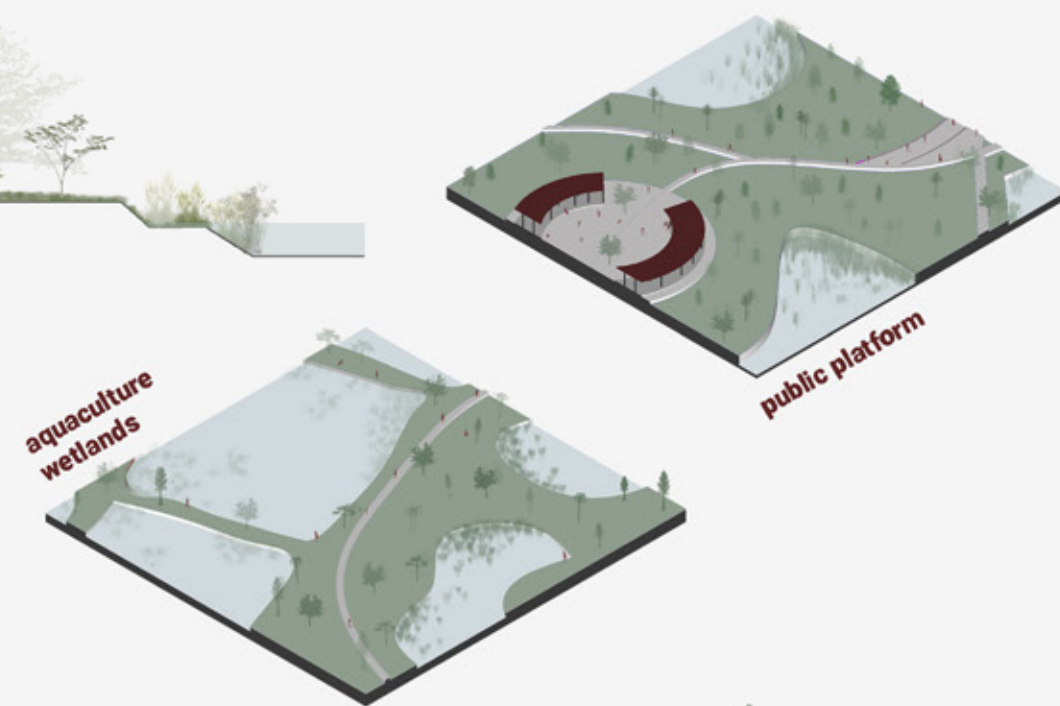
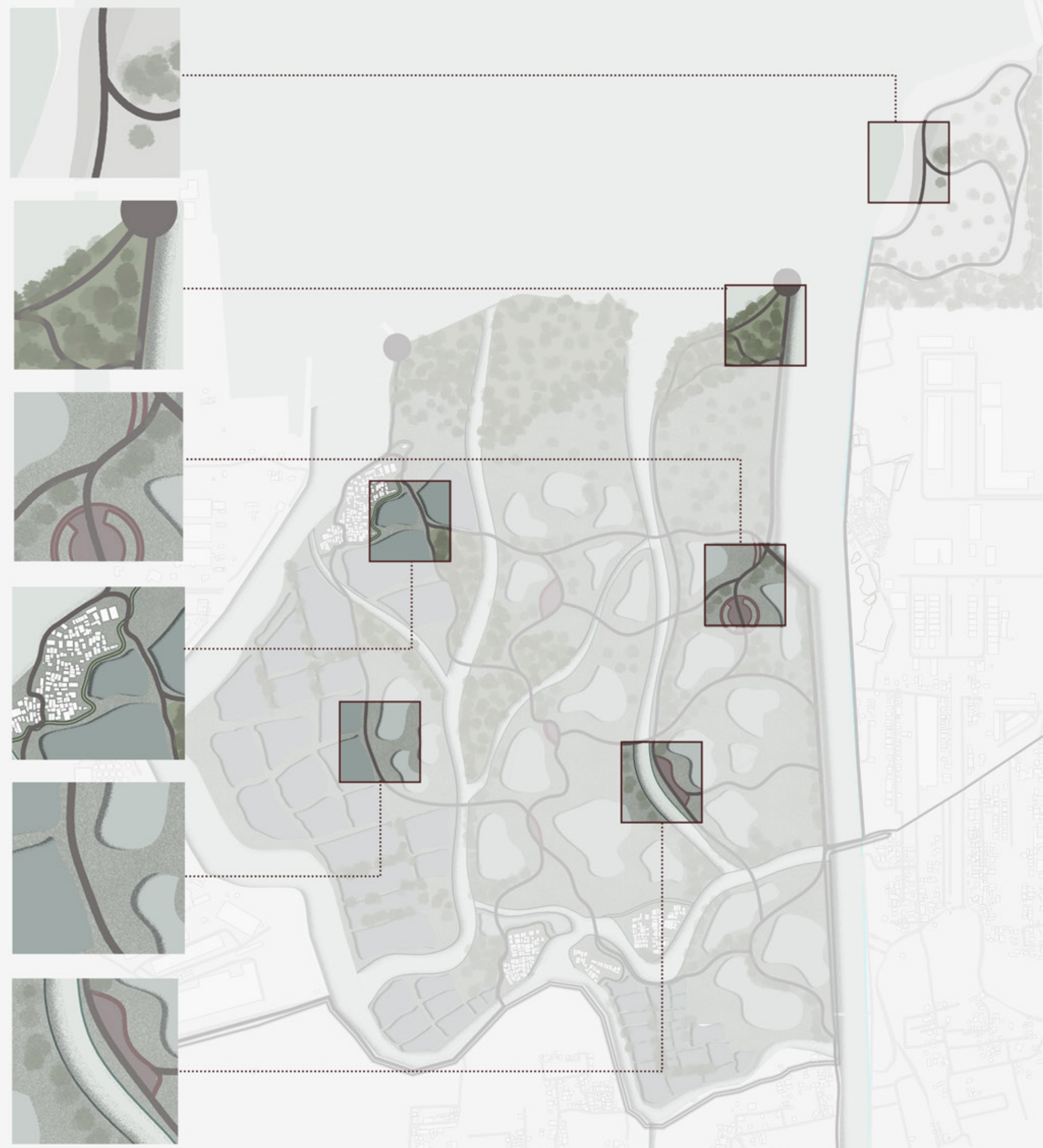
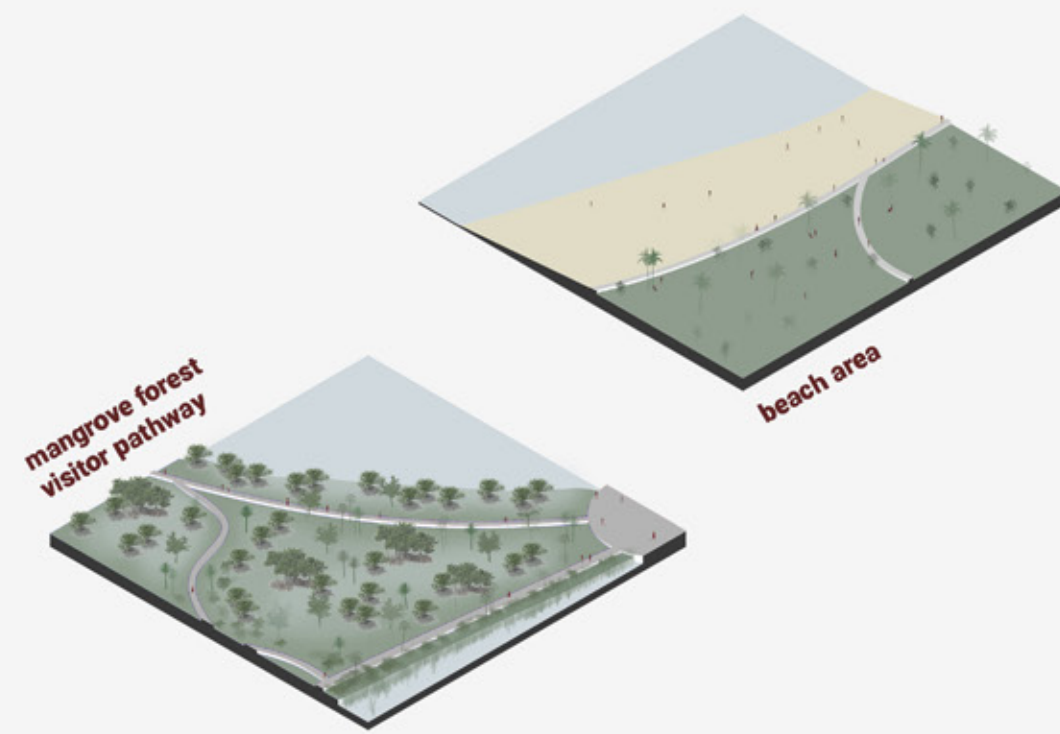
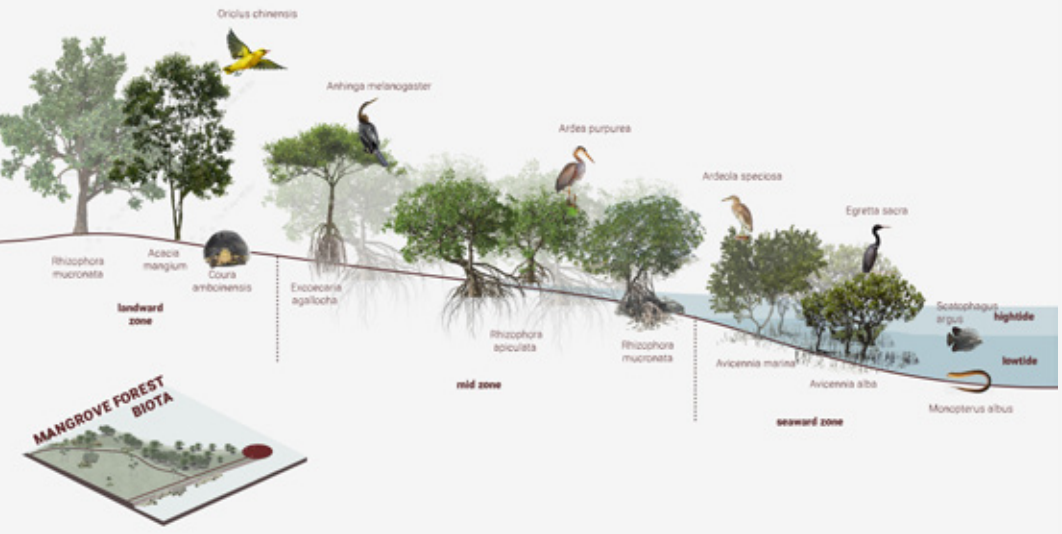
Naturalisation will increase the green buffer area between the natural river and the surrounding. This proposal will also increase the number of biodiversity. In a long term, it'll be an opportunity to introduce to visitors about the native plants and animals.

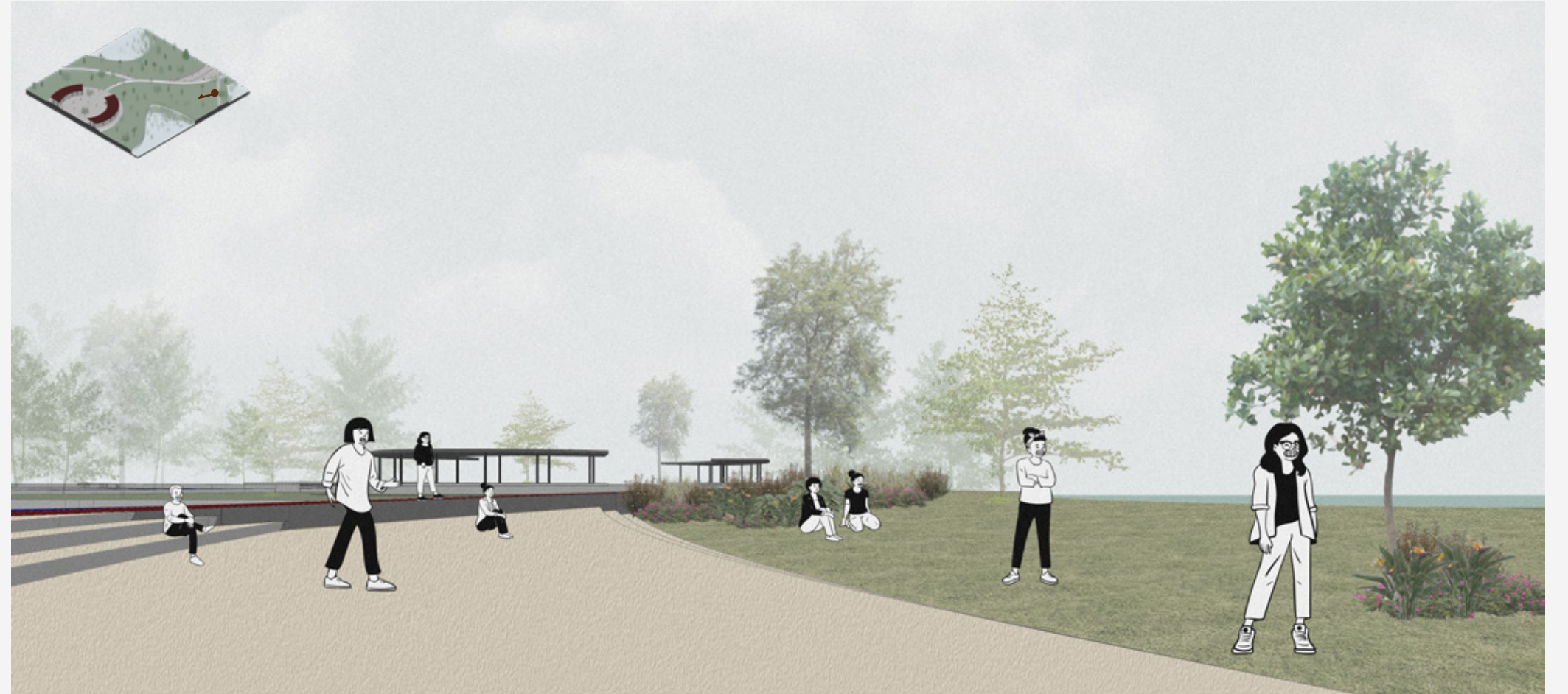


1 This water retention pond designed to store water and supporting aquatic and emergent vegetation. Beside increasing biodiversity in this area, the water retention pond also helps the decreasing the flooding issue.



2 Alongside the canal, there are bioswales to catch and filter the water before it runs to the East Flood Canal. Besides that, the existing car road will be functional as a public space for people to enjoy before going to the water reservoir urban park.





**EAST FLOOD CANAL
THE JOURNEY**

Starting from the southern area, the residential area, you will find urban furniture that allows us to sit, gather, and socialise with our neighbours. From food stalls, clothes until electronic shops can be found here.

As you go to the east, you will find more agricultural patches integrated with the green natural parks. In this area, you can see the Cakung river.

The purpose of the intervention in this area is to increase people's sense of belonging to the natural river. Moreover, it also preserves the cultural value of the river.

Next, you will get to the third area. This is the starting point where the flooding issue appears more due to the area's topography. Hence, water basins are designed to hold and distribute rain runoff, which could help the flooding problem.

At the end of the journey, you will get to the delta area. In this area, you can see fisherman neighbourhoods and fishing boats. Few interventions were made for this area. Adding wetlands to reduce the risk of flood is the first intervention. Secondly, to have more aquaculture ponds alongside the agriculture fields. These aquaculture ponds can provide more income for people who live in the area, of which the majority is a fisherman. Thirdly, to have more river channels. By adding more river channels, the water can be distributed in more ways. This will reduce the chance of flooding. The last intervention is to expand the mangrove forest. Larger mangrove forests provide more protection to the land and people from erosion and storms.

**EAST FLOOD CANAL
ECONOMICAL CYCLE
SCENARIO**

