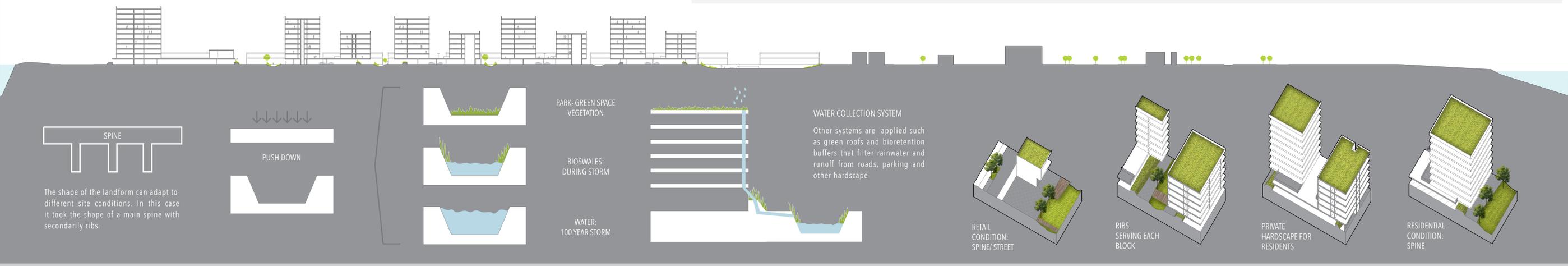
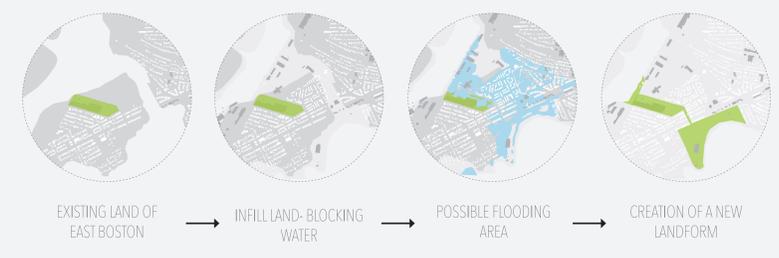


## Welcoming the flood: Urban Model with Stormwater Management Infrastructure and Installations

Coastal cities have a long history of infilling wetlands to create more buildable land to accommodate the rapid urban growth. However, due to the global rise in sea level, these lands have become particularly vulnerable to flooding. Urban developers are responsible for proposing a new sustainable model that will mitigate the excessive water that threatens the residential and industrial areas. This project studies that new proposal by organizing storm water management infrastructure and installations. It focuses on creating new landforms that work as both bioswales that collect and filter the storm water and public green spaces that contain temporary program that are adaptable to natural forces.

Secondarily, new architecture is applied such as green roofs and bioretention buffers that will filter rainwater and runoff from roads, parking and other hardscape. As a result, in the case of a 100-year storm, my proposed landform design will resiliently welcome the water level rise into the public green spaces to accommodate the inundation. The testing ground used for this proposal is in East Boston, MA. The specific site is very likely to be affected by flooding. This idea can be applied to different urban conditions in all coastal cities. By making urban developers and architects conscious of the problem we can find creative and adaptable solutions to mitigate the effects of sea level rise.



ARCHITECTURE: Varied architecture pieces can blend into the landform adapting to the different seasons.



VEGETATION: There are many types of greenery, some will be part of the bioswales and others will be used as public green spaces.



SNOW: The sloping landform allows for recreational activities during the winter.



100 YEAR STORM: The landform design resiliently welcomes the water level rise to accommodate the inundation.