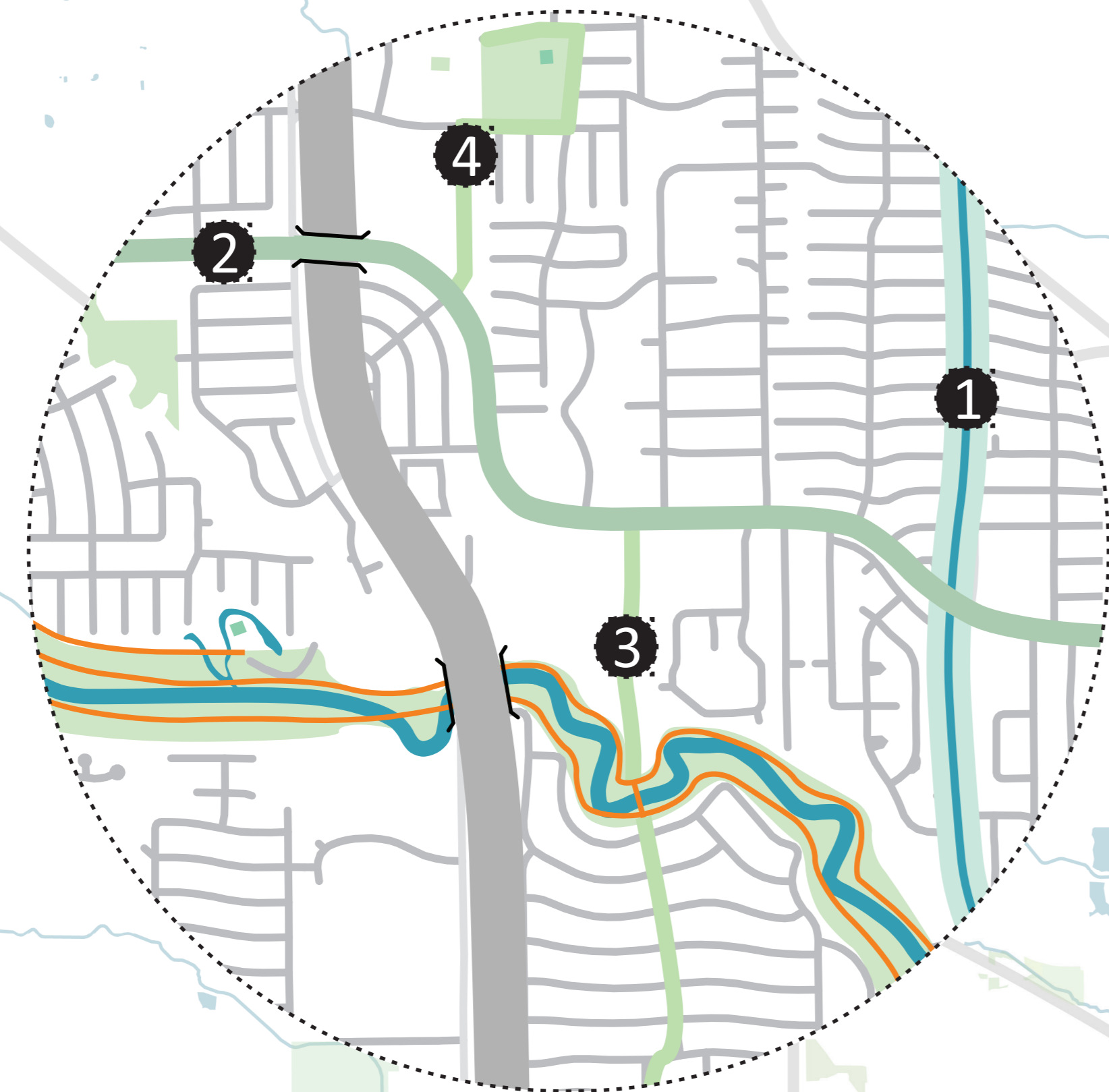


# URBAN ECOLOGY IN HOUSTON

Creating a soft natural border between the existing urban patterns to solve flood risk, while restoring the ecosystems

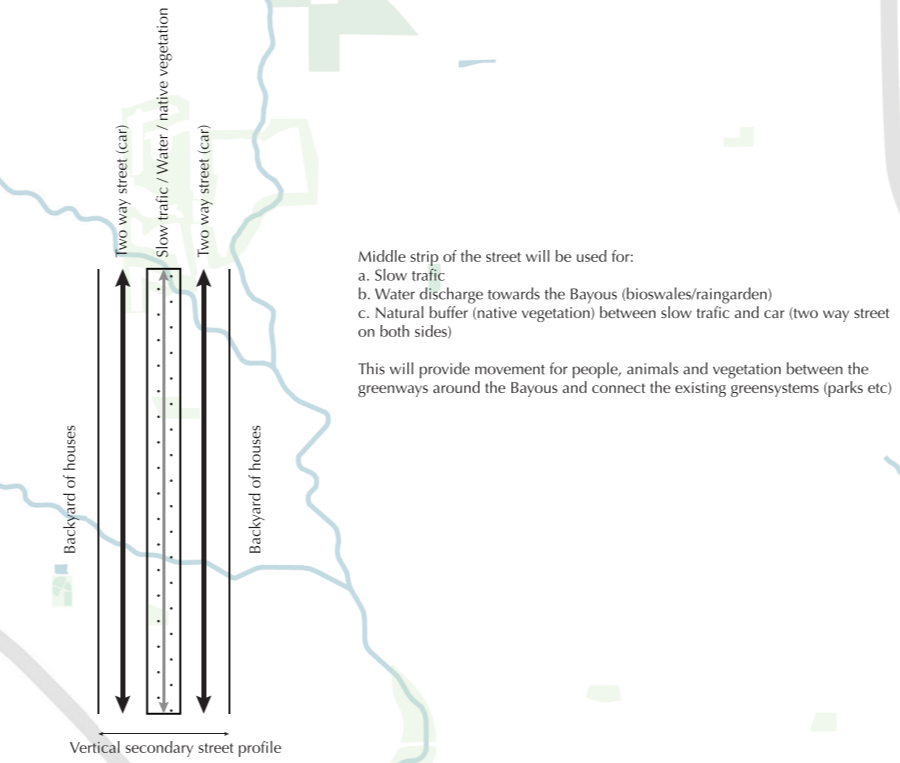
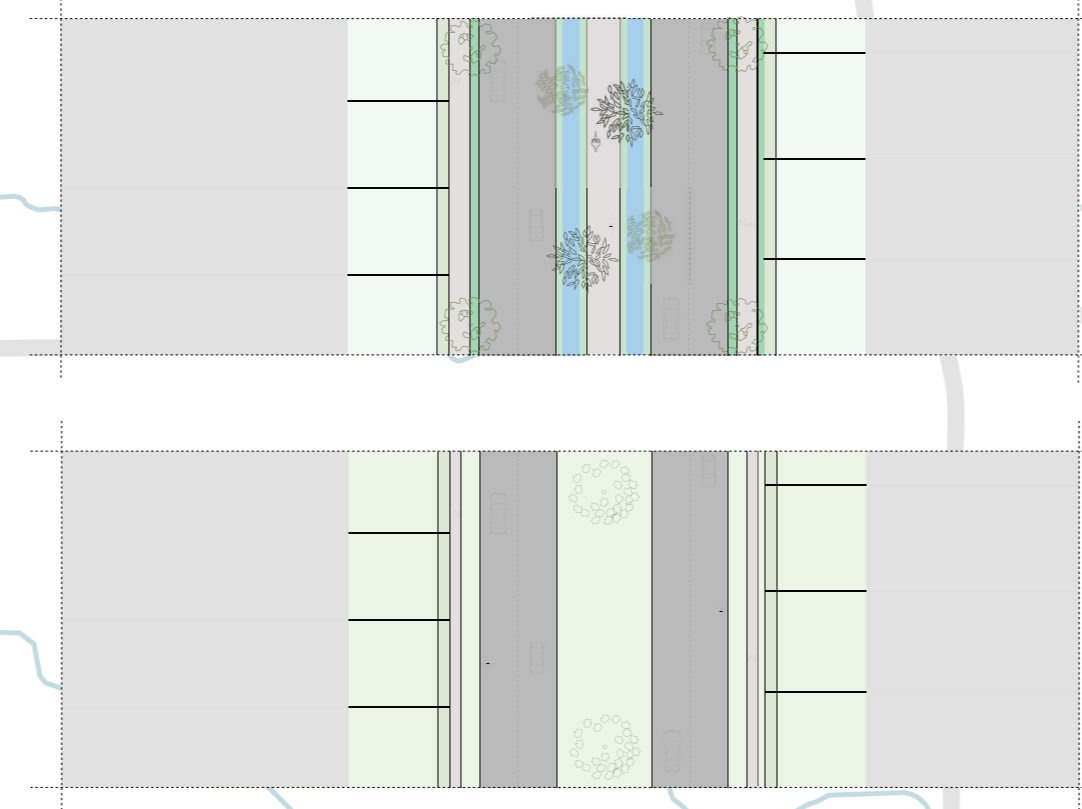
Sarah Brakel, 1280600  
Delta Interventions // Mentors: H. Meijer, S. Nijhuis

## 4 PROTOTYPES OF STREET PROFILES



### 1 SECONDARY STREET

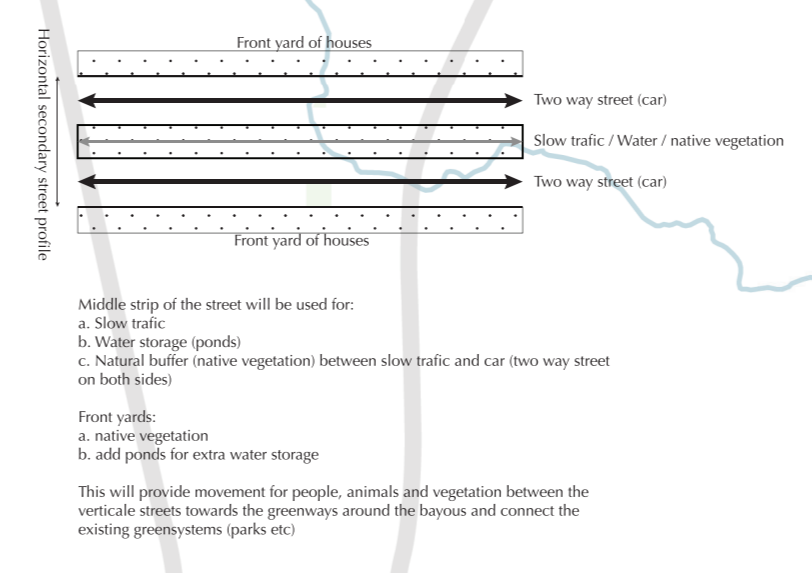
Blue green vertical street with water discharge capacities towards the Bayous.



Middle strip of the street will be used for:  
a. Slow walk  
b. Water discharge towards the Bayou (between sidewalks)  
c. Vertical green water vegetation between slow walk, and car drive way street on both sides  
This will provide movement for people, animals and vegetation between the greenway and the Bayou (connecting greenways parks).

### 2 SECONDARY STREET

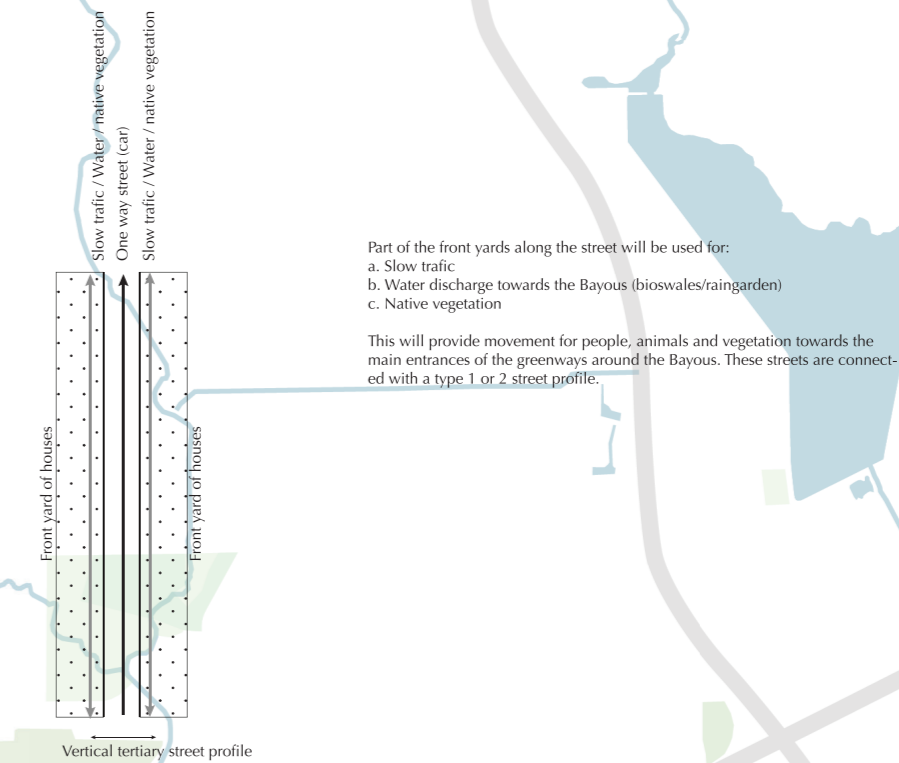
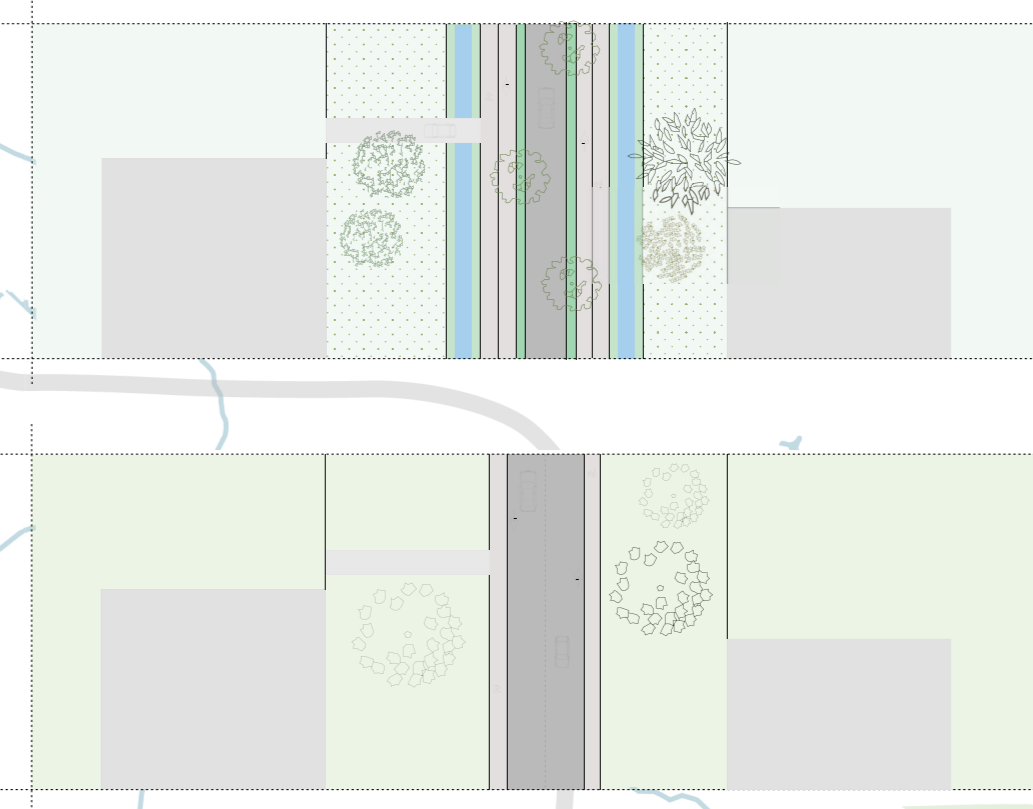
Blue green horizontal street with water storage capacities.



Middle strip of the street will be used for:  
a. Slow walk  
b. Water storage capacity  
c. Vertical green water vegetation between slow walk, and car drive way street on both sides  
This will provide movement for people, animals and vegetation between the greenway and the Bayou (connecting greenways parks).

### 3 TERTIARY STREET

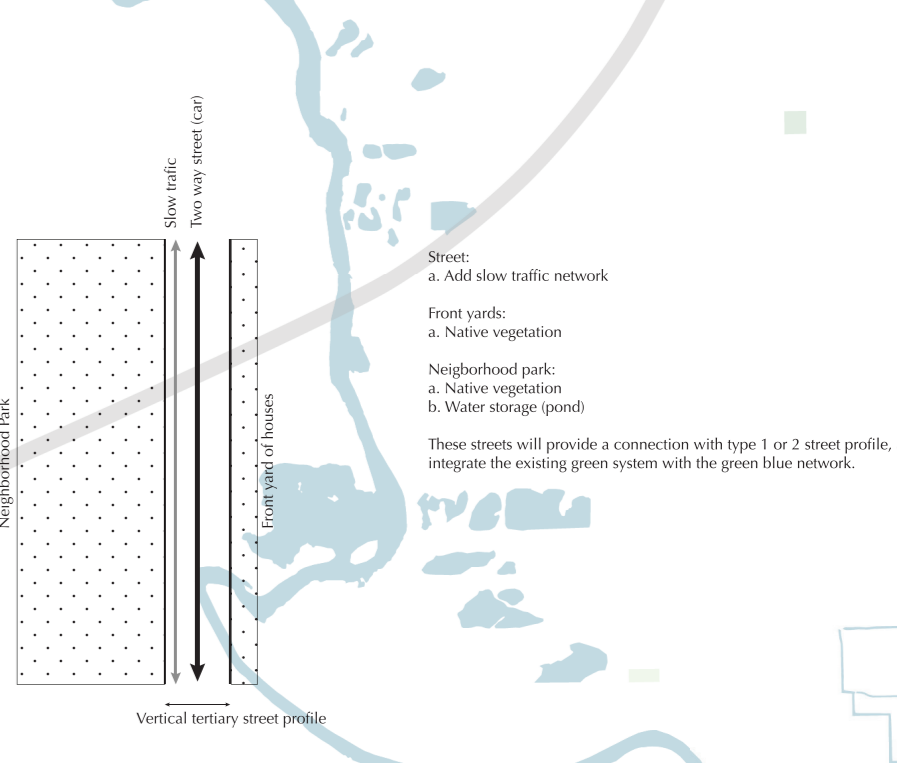
Blue green street with water discharge capacities towards the Bayous and main entrance street towards greenways.



Part of the street along the street will be used for:  
a. Slow walk  
b. Water discharge towards the Bayou (between sidewalks)  
c. Water storage  
This will provide movement for people, animals and vegetation towards the greenway and the Bayou (connecting greenways parks).

### 4 TERTIARY STREET

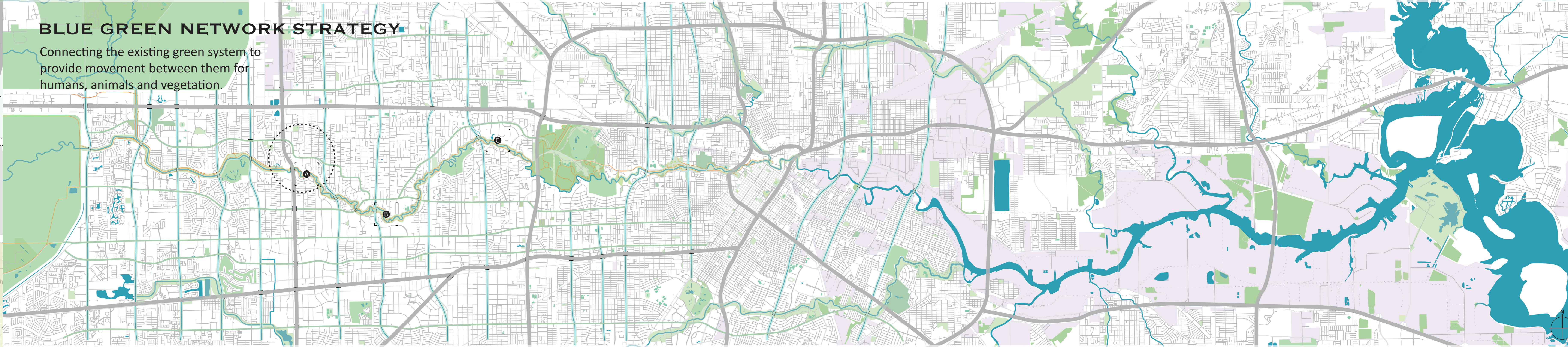
Blue green horizontal street with water storage capacities and connector for the neighborhood parks.



Middle strip of the street will be used for:  
a. Add slow walk network  
b. Water storage capacity  
c. Water storage  
d. Water storage  
This will provide a connection with type 1 or 2 street profiles and integrate the existing green system with the green-blue network.

## BLUE GREEN NETWORK STRATEGY

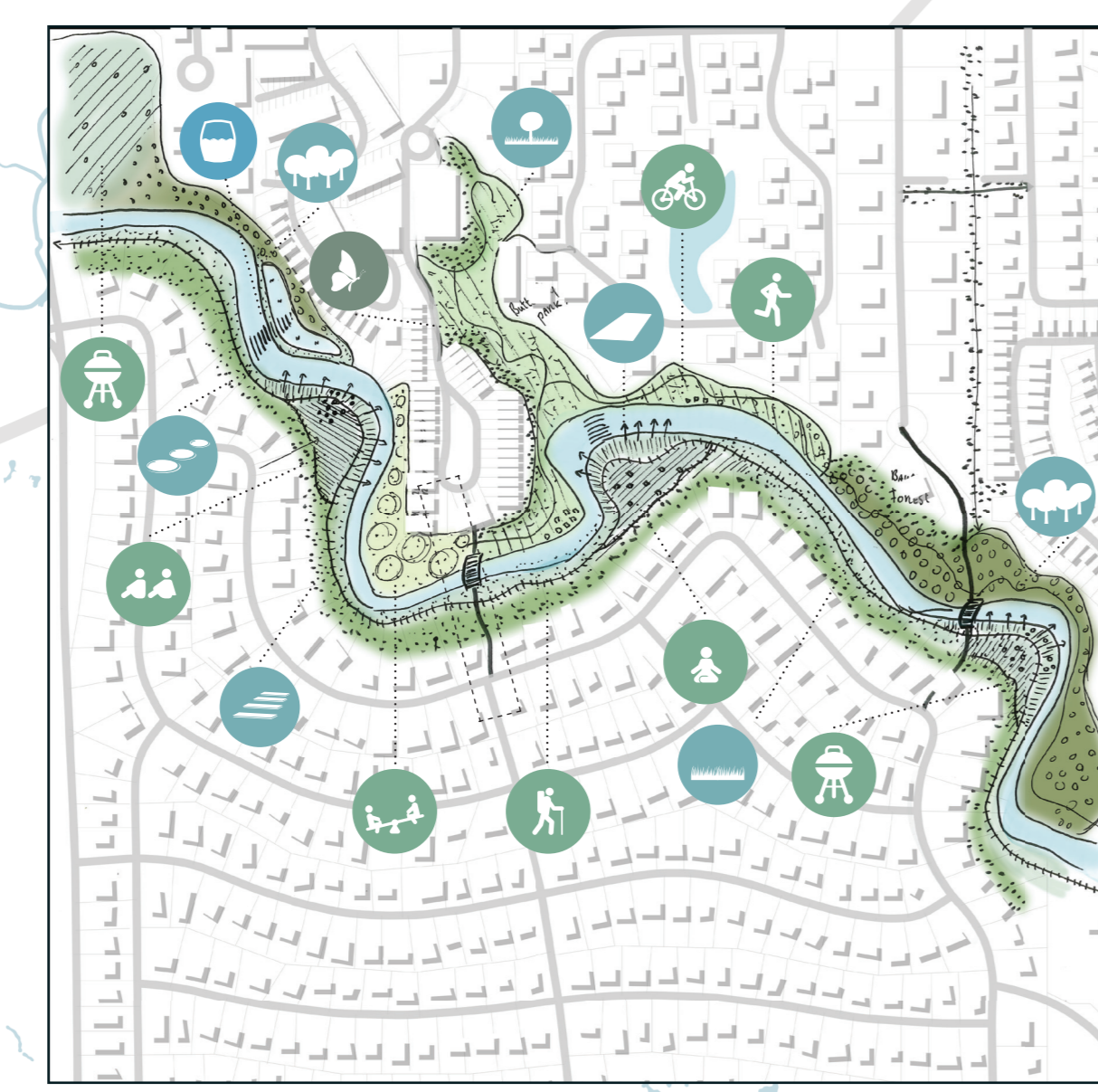
Connecting the existing green system to provide movement between them for humans, animals and vegetation.



## INTERVENTIONS WITH DIFFERENT FLOOD RISK

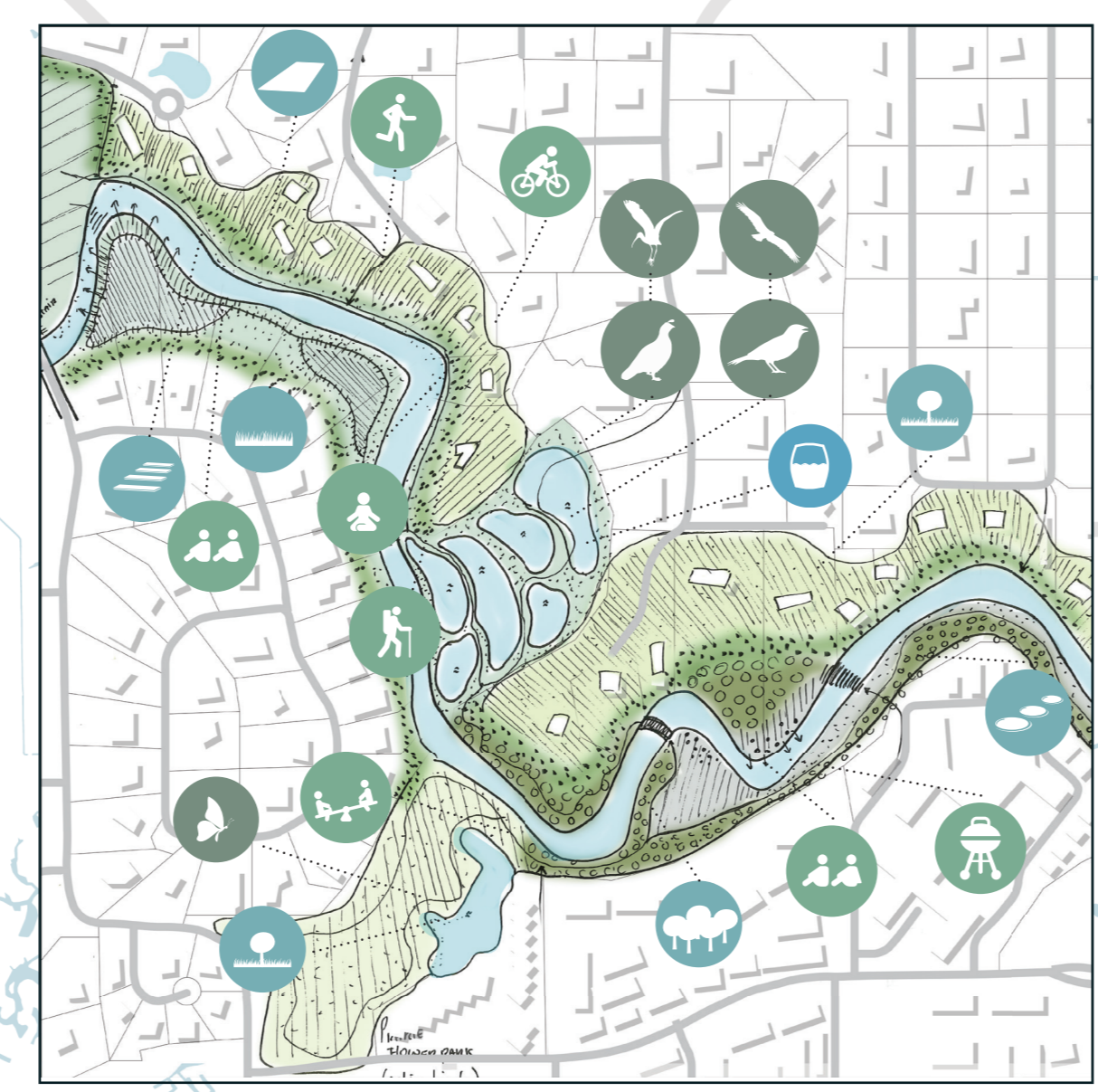
### A 500 YEAR FLOODPLAIN

- Main entrance street towards greenway
- Extra water storage along the Bayou
- Butterfly habitat



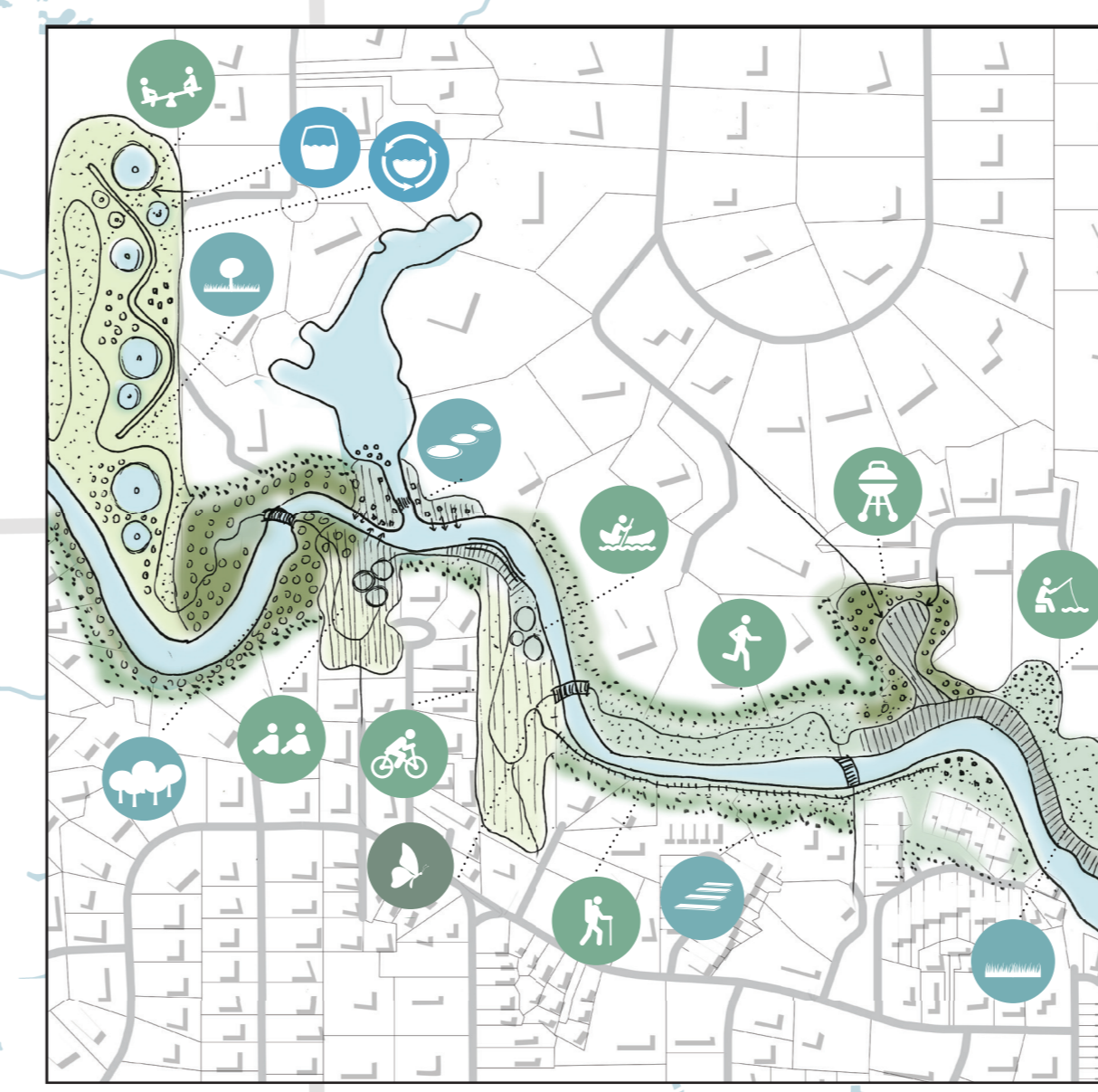
### B 500 & 100 YEAR FLOODPLAIN

- Prairie wetland
- Bird habitat
- Butterfly habitat



### C NO FLOODPLAIN

- Water storage and reuse underneath children's waterplay park
- Water related activities



## DESIGN PRINCIPLES

