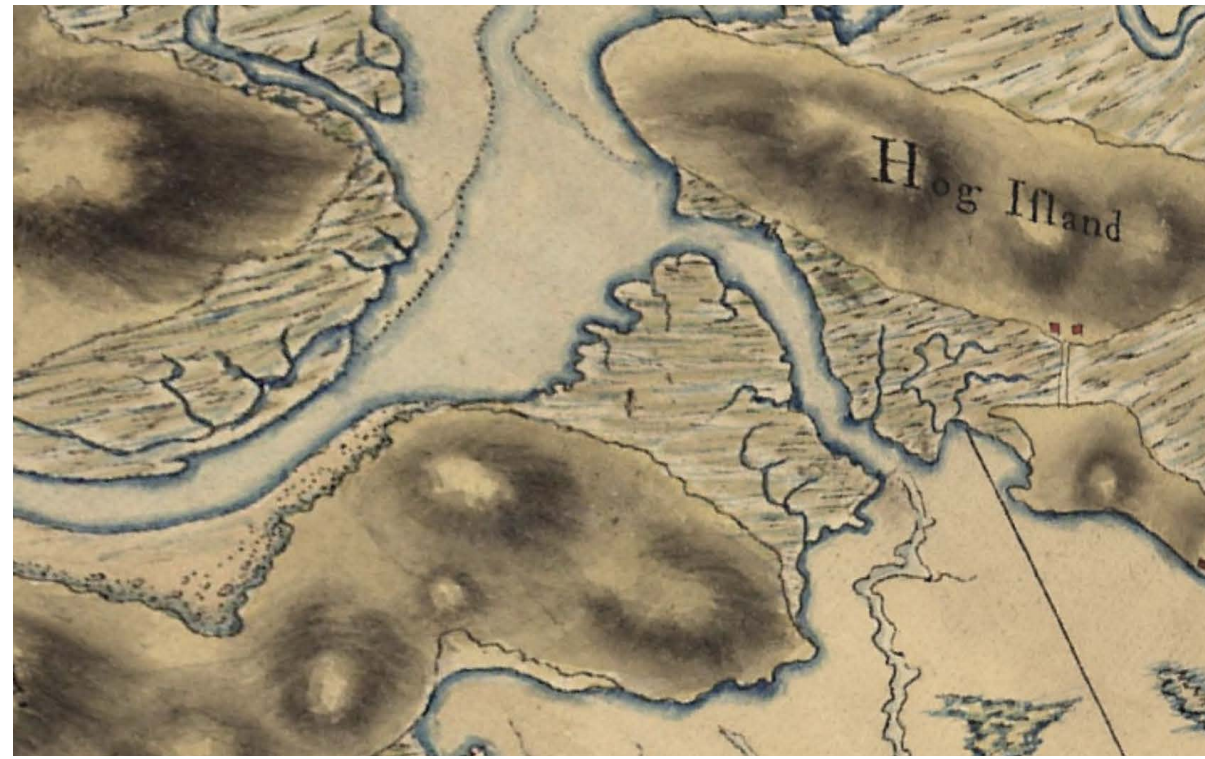


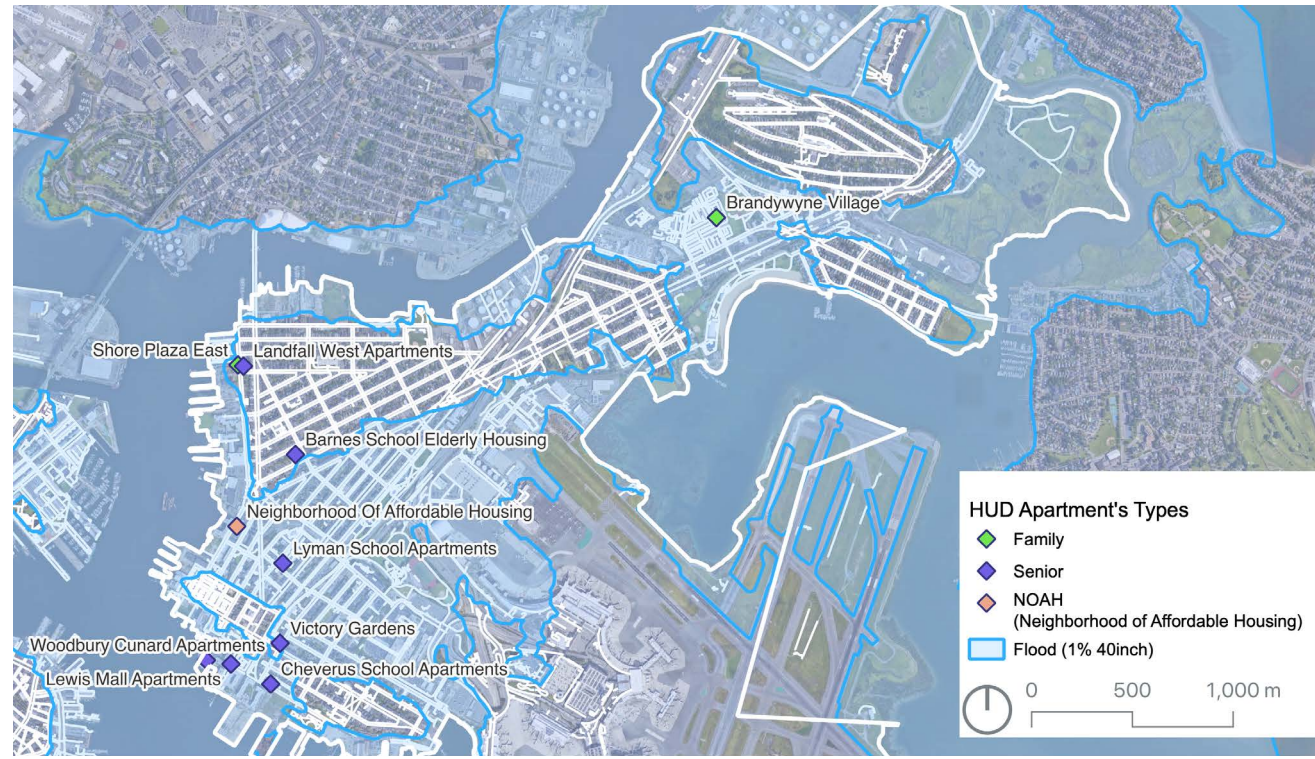
# RESILIENT and LIVABLE BRANDYWYNE VILLAGE

## HISTORY OF VULNERABILITY AND OLD HOUSING STOCK

History of water connection



Vulnerability analysis



Old housing stocks

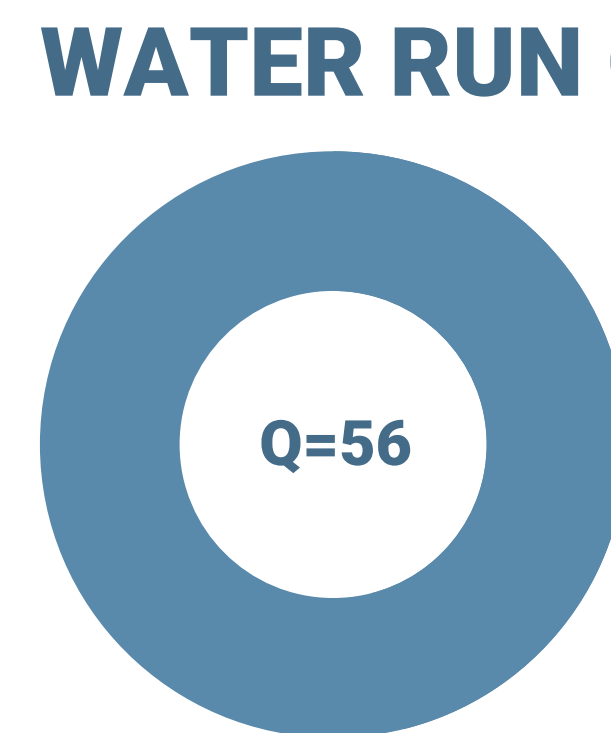
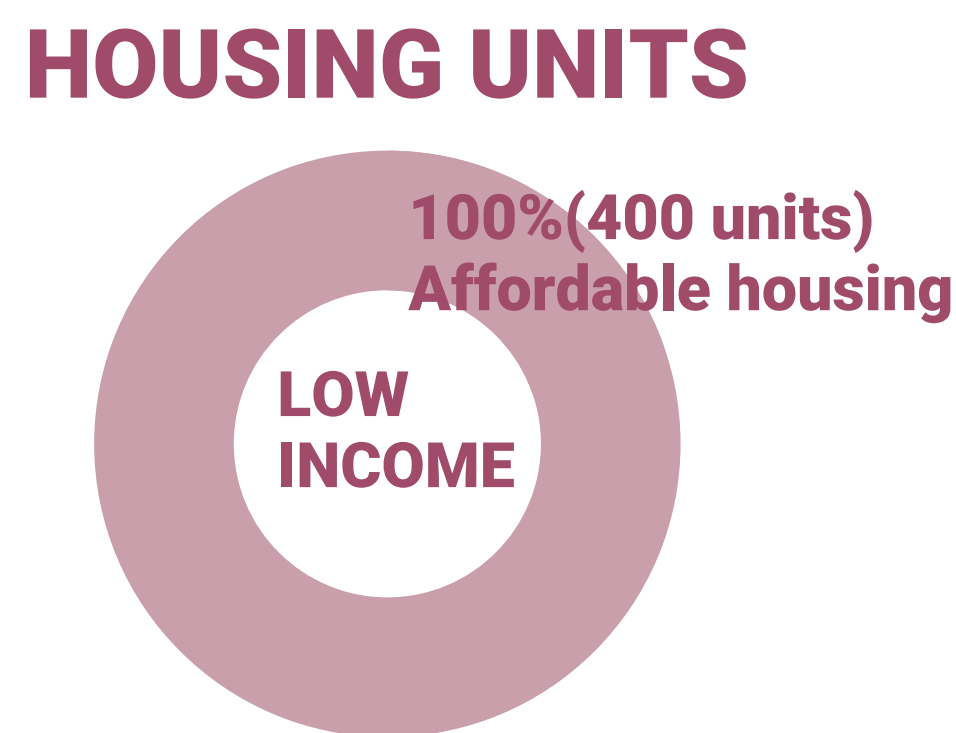
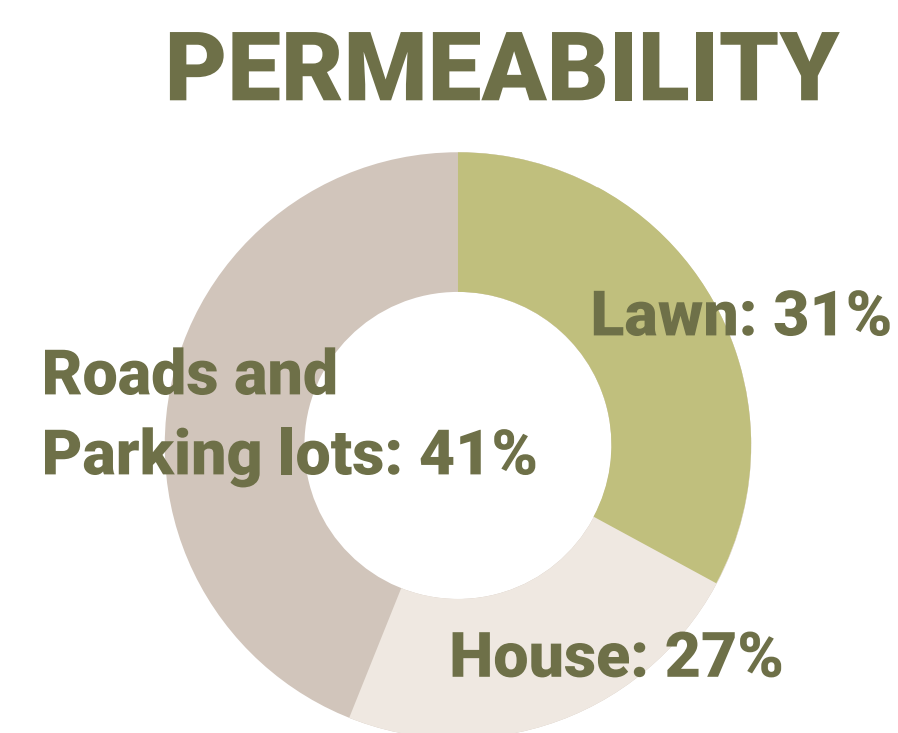


Current housing typologies

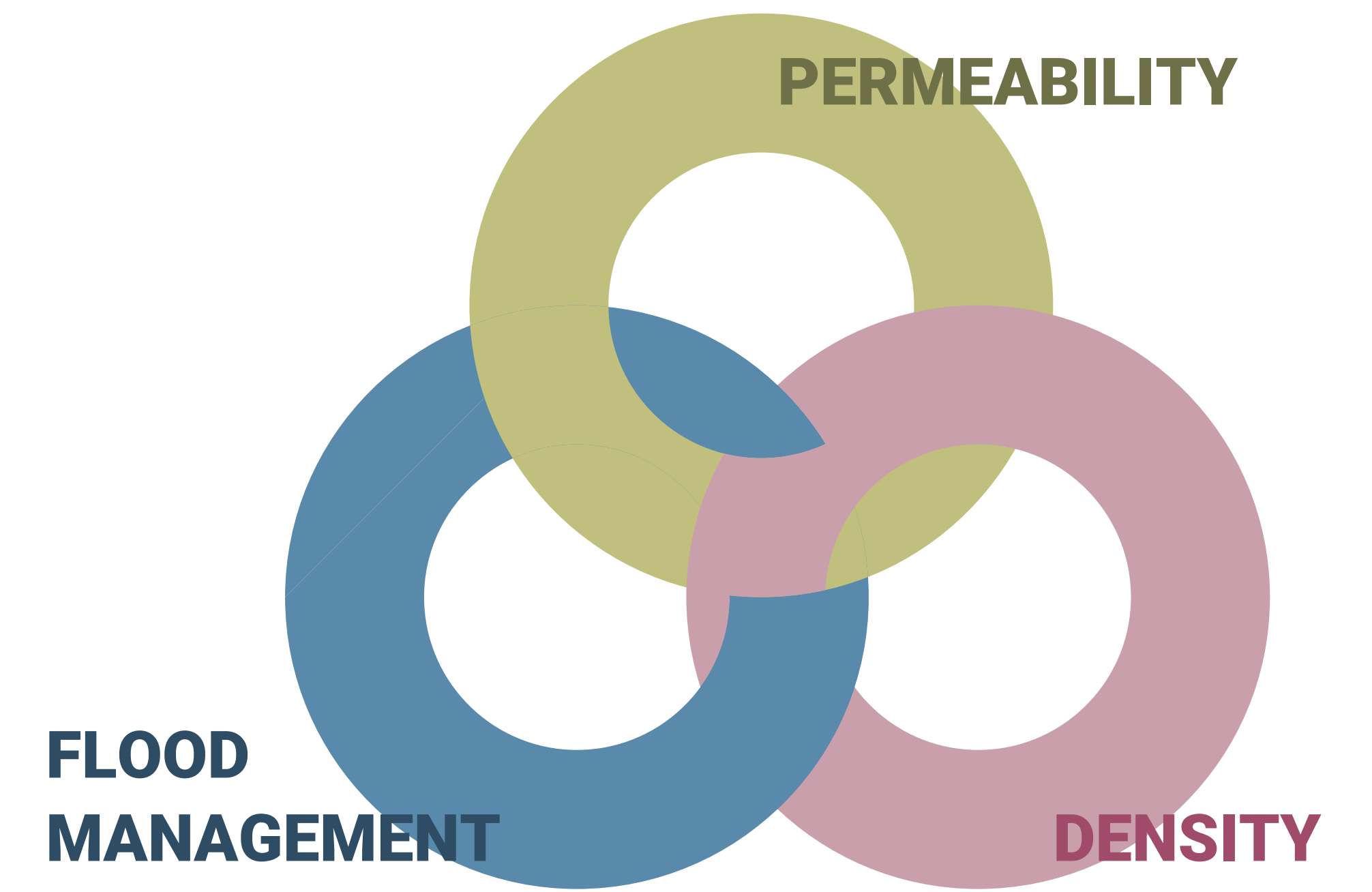


## CURRENT CONDITION AND ISSUES

Impermeability



## CONCEPT



## METHODS FOR PERMEABILITY INCREASE

Stormwater Planters and Parkway Bioswales



Street Trees



Stormwater Parks



Green Roofs



District Stormwater Management

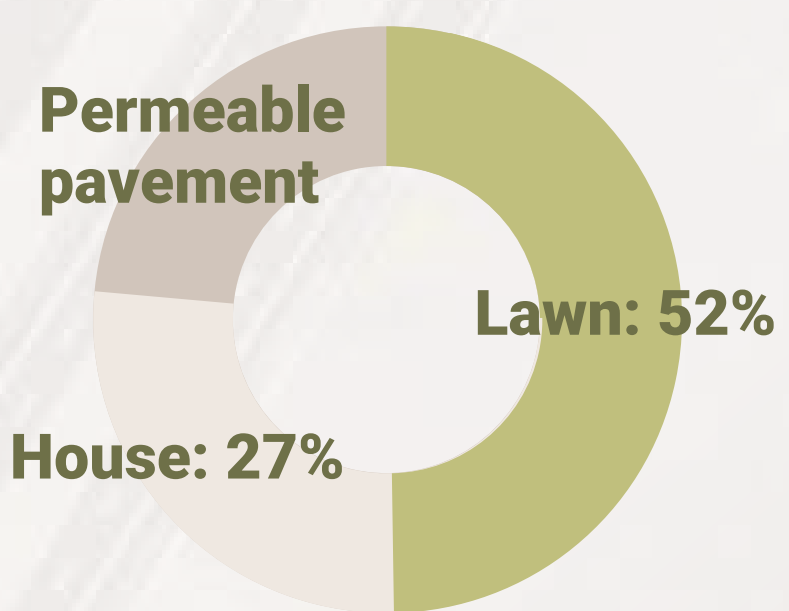


Permeable Pavement



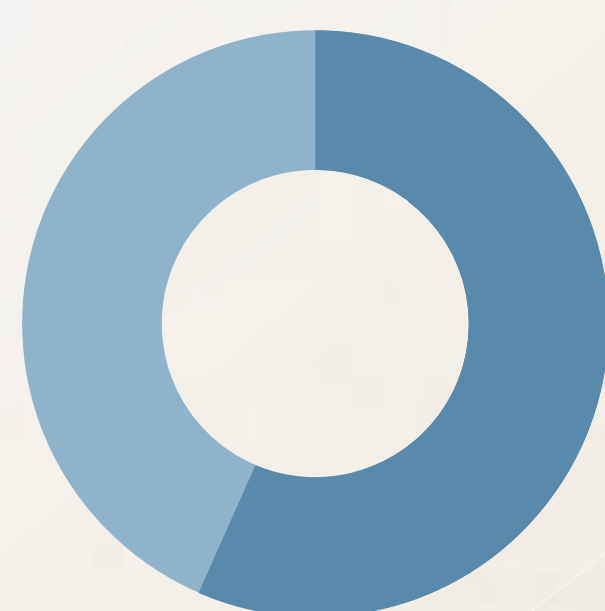
**PERMEABILITY**

**HOUSING UNITS: 402 units**



**WATER RUN OFF**

59% of the current



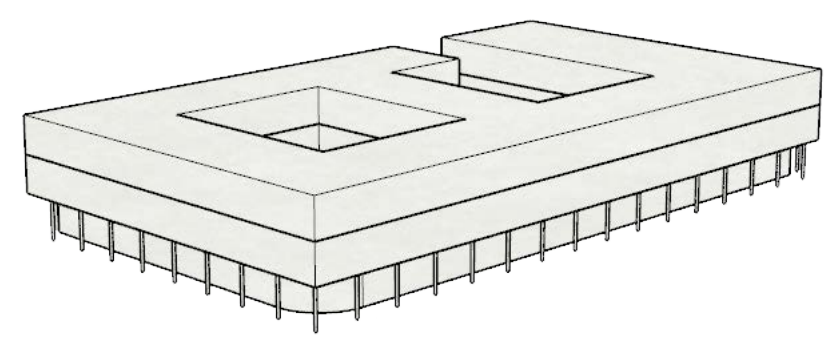
## PERMEABILITY CHANGE



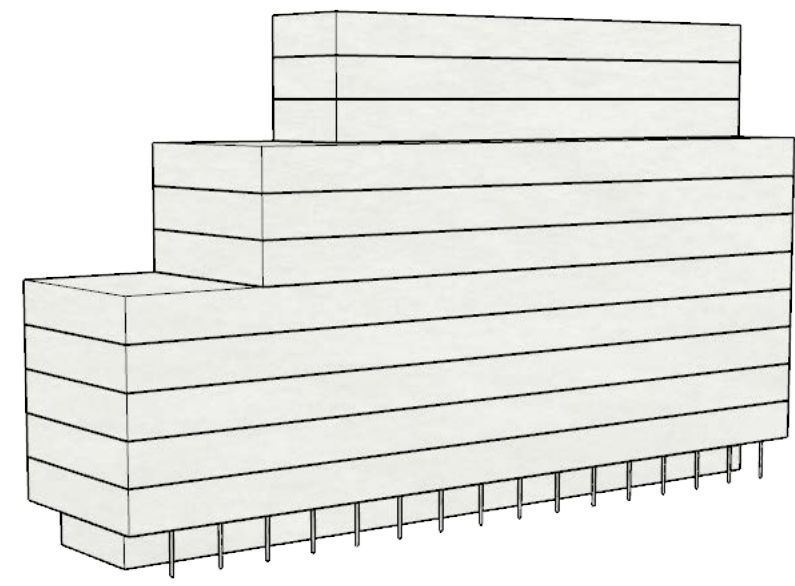
Transection

## HOUSING TYPOLOGIES

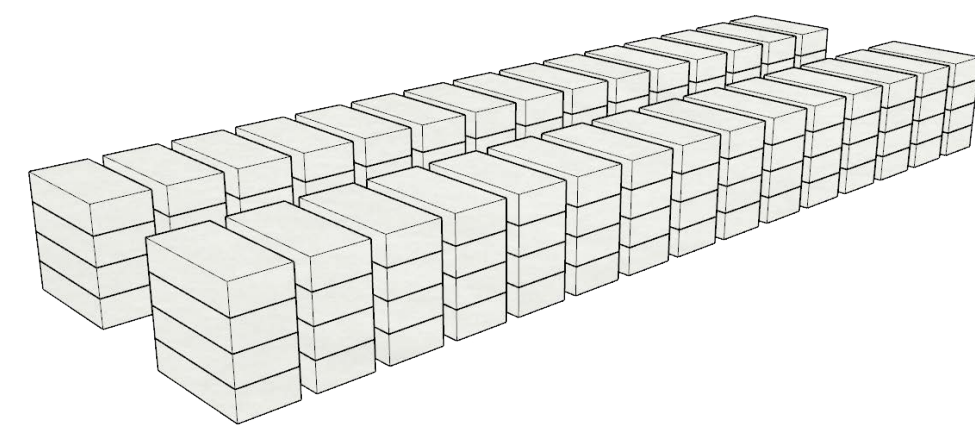
Low-rise type



High-rise type



Boston Classic type



## PHASING

Phase 1



Phase 2



Phase 3: Completion

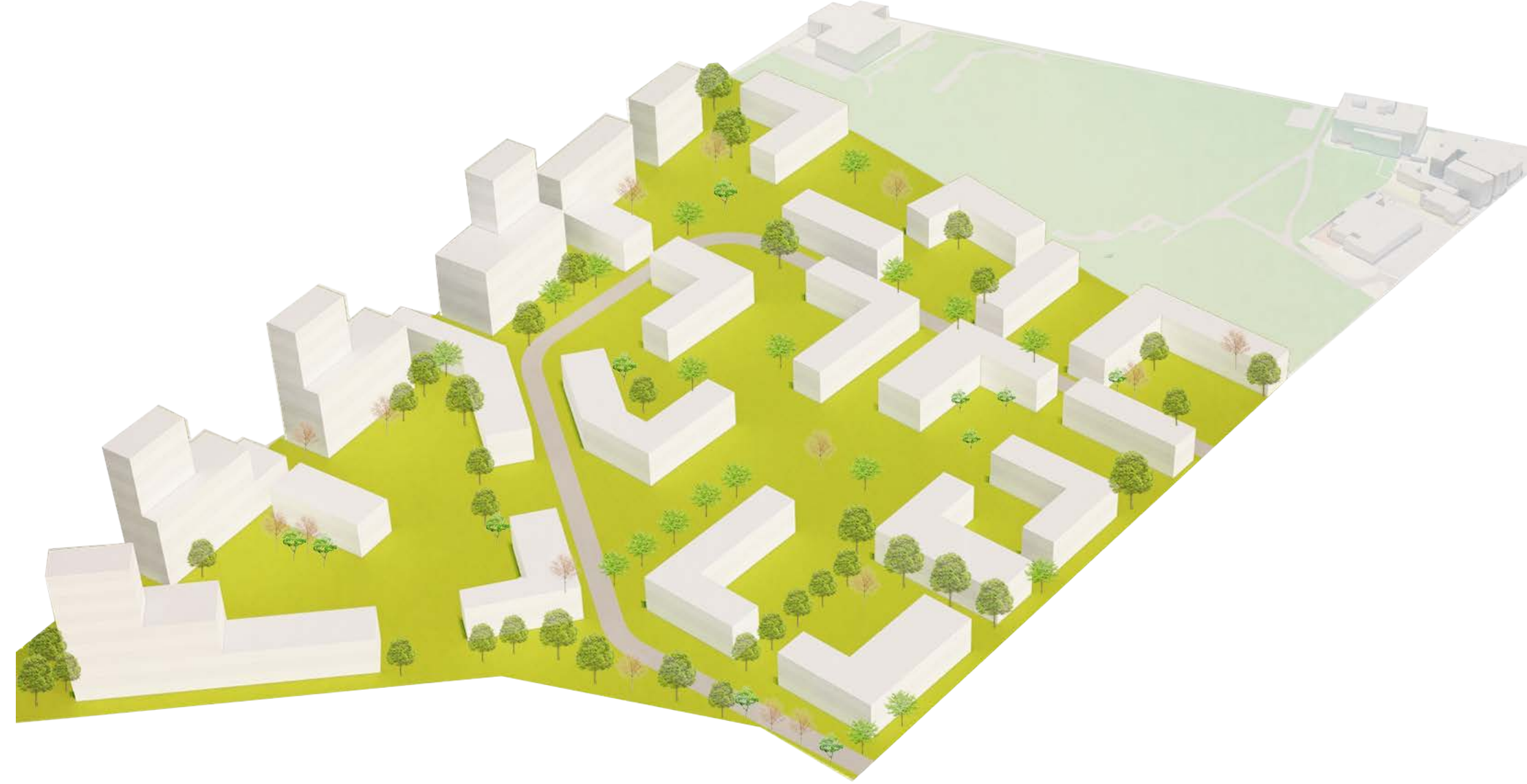


## DIFFERENT TYPES OF PLANS

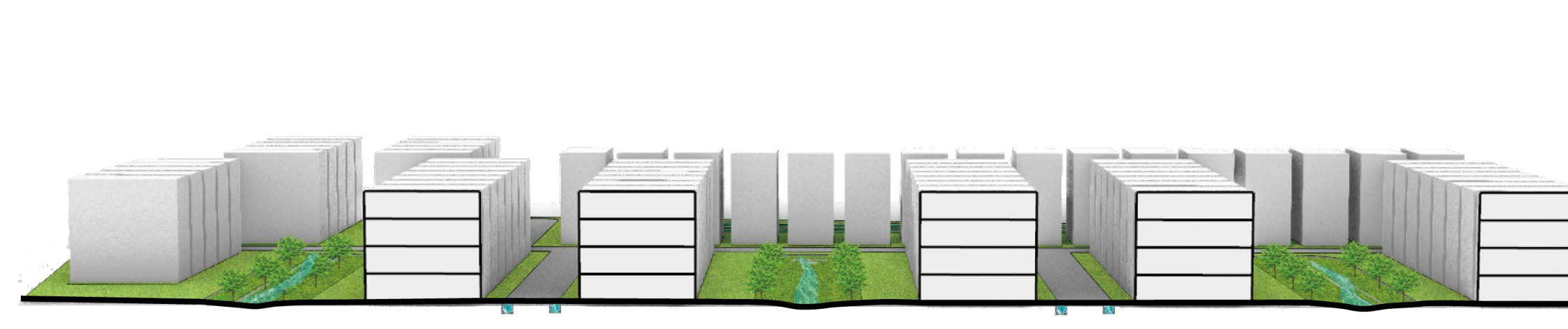
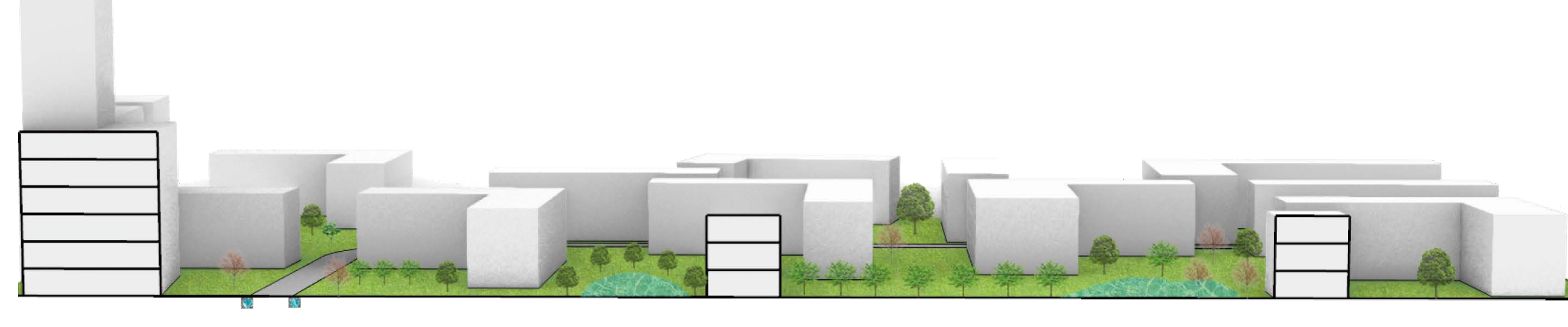
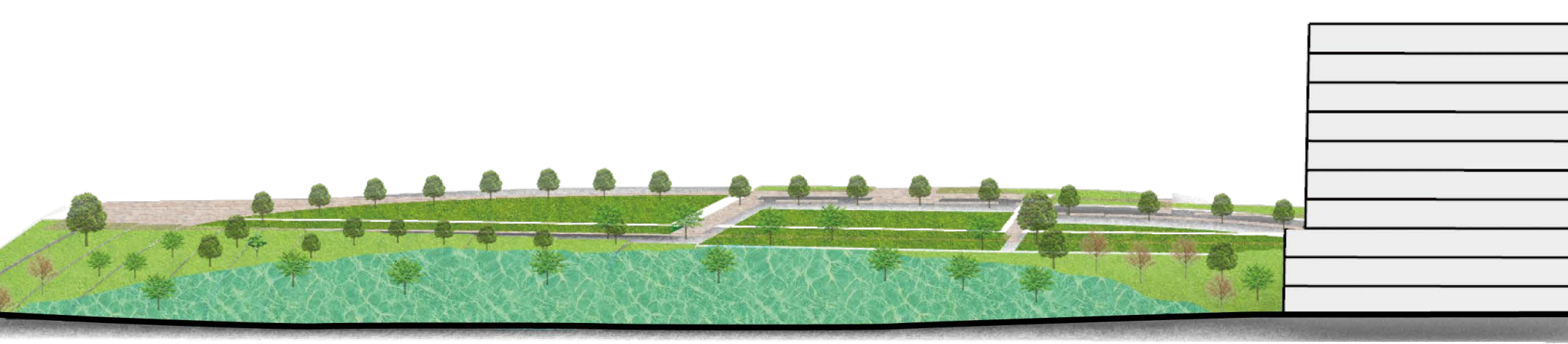
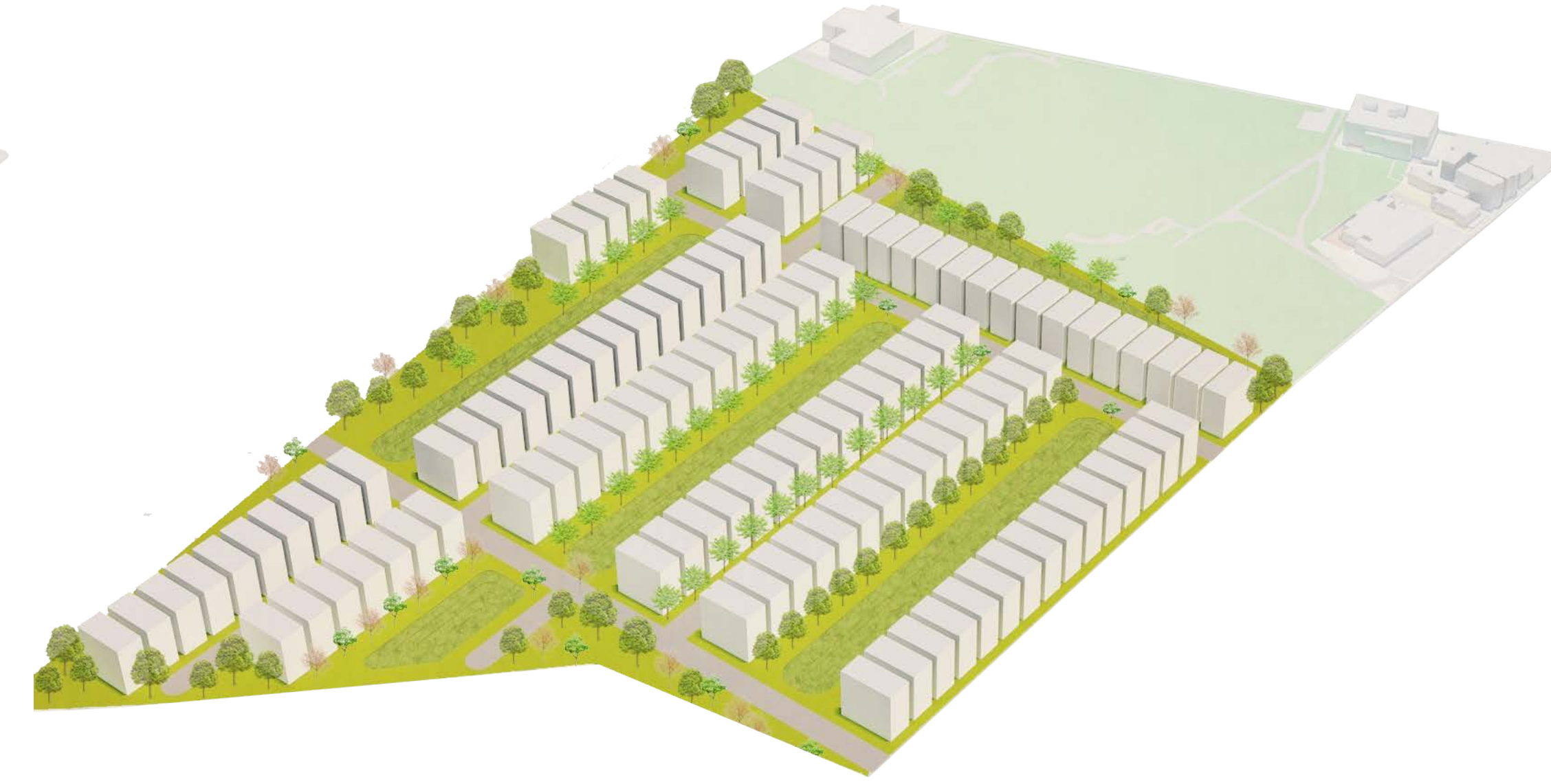
High-rise



Low-rise



Boston-classic



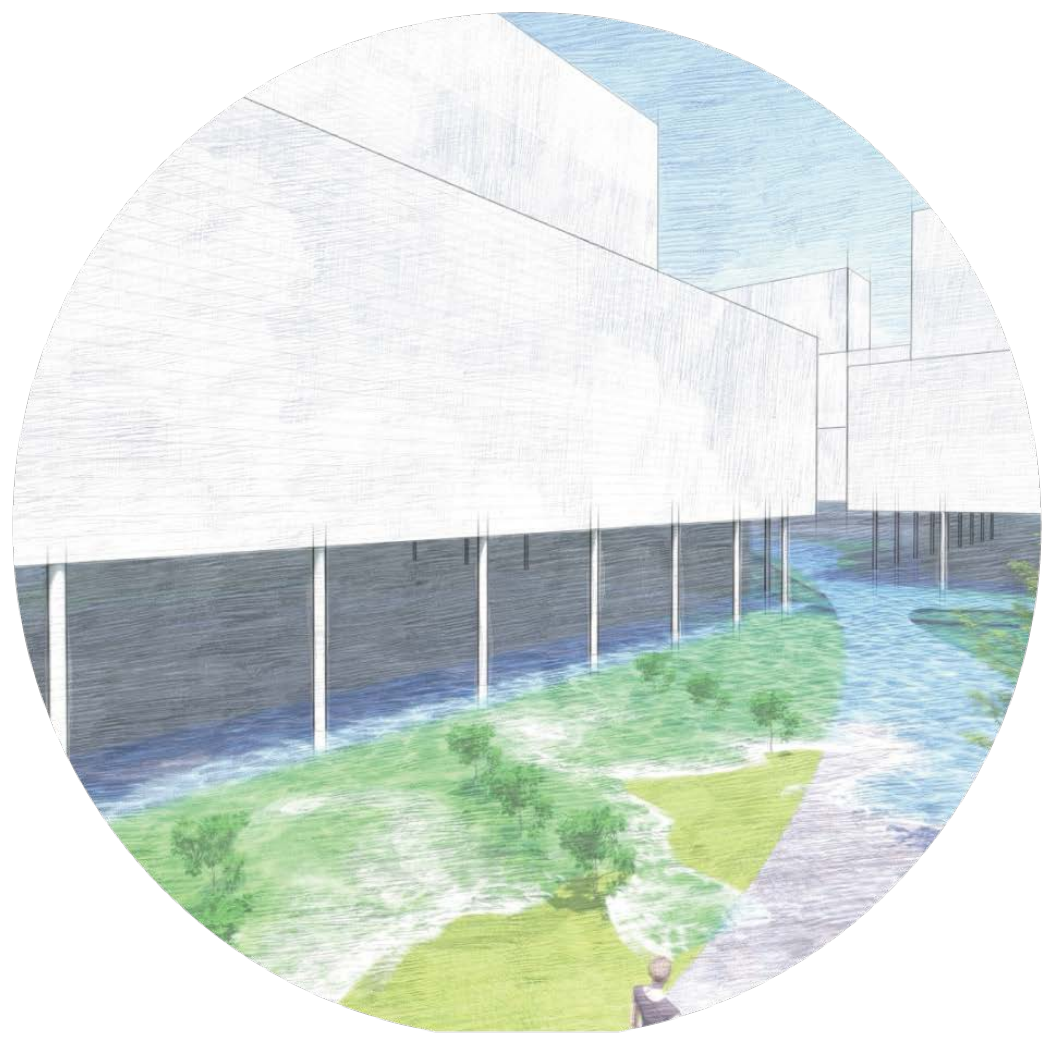
**DENSITY: 415 units**  
**GREEN SPACES: 92% of the site**  
**FLOOD RISK: 27% water run off**

**DENSITY: 900 units**  
**GREEN SPACES: 51% of the site**  
**FLOOD RISK: 67% water run off**

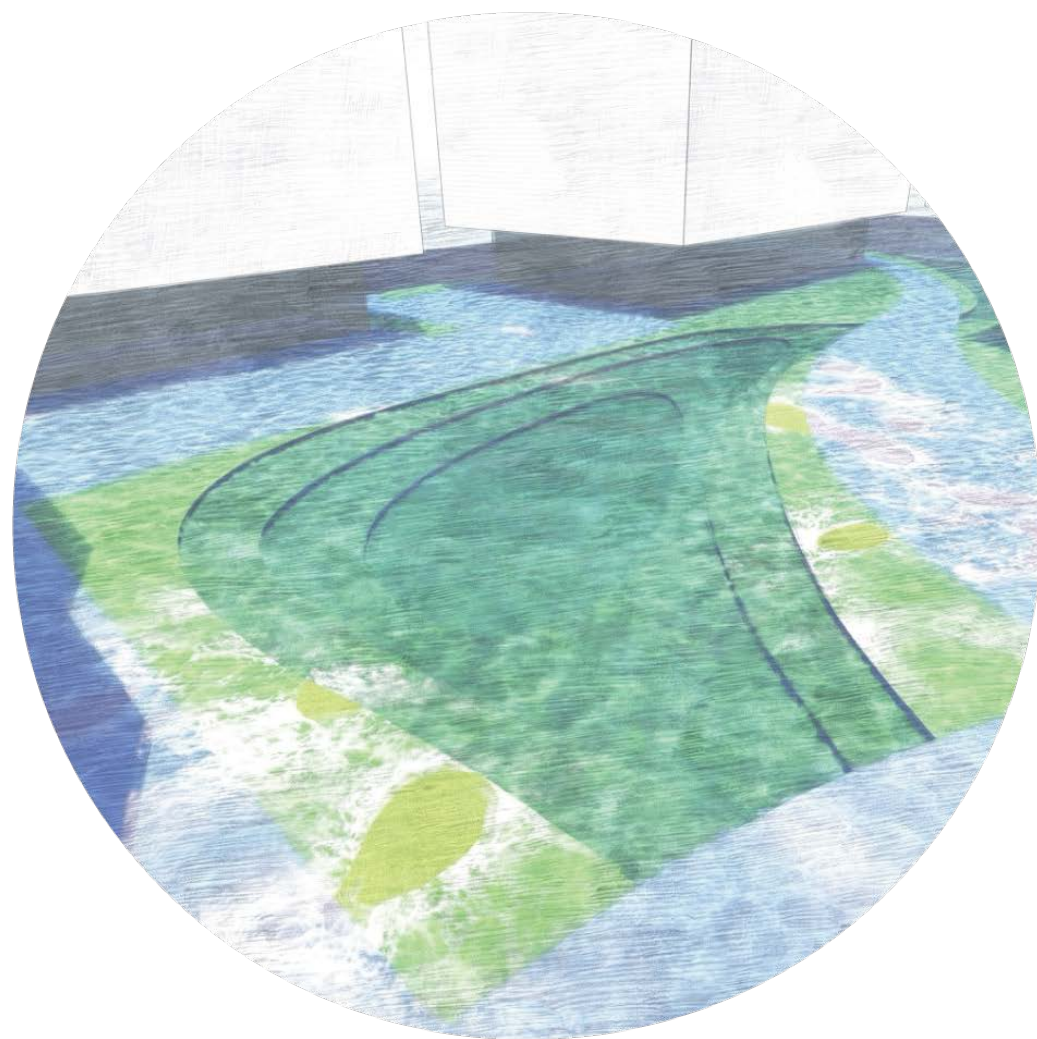
**DENSITY: 492 units**  
**GREEN SPACES: 64% of the site**  
**FLOOD RISK: 59% water run off**

## METHODS FOR FLOOD RISK MANAGEMENT

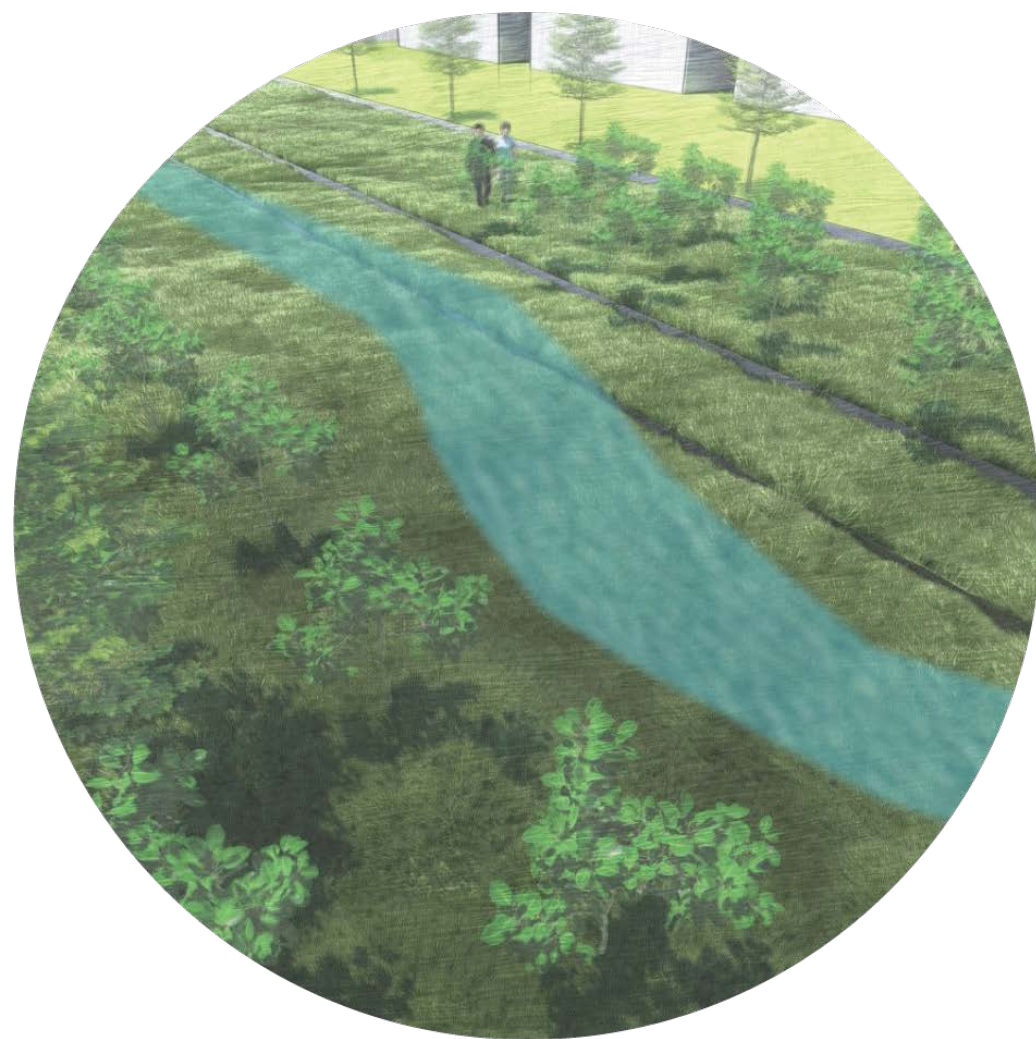
Ground Floor Planning



Flood Water Storage



Green Infrastructure



Drainage



## CASE PRACTICE

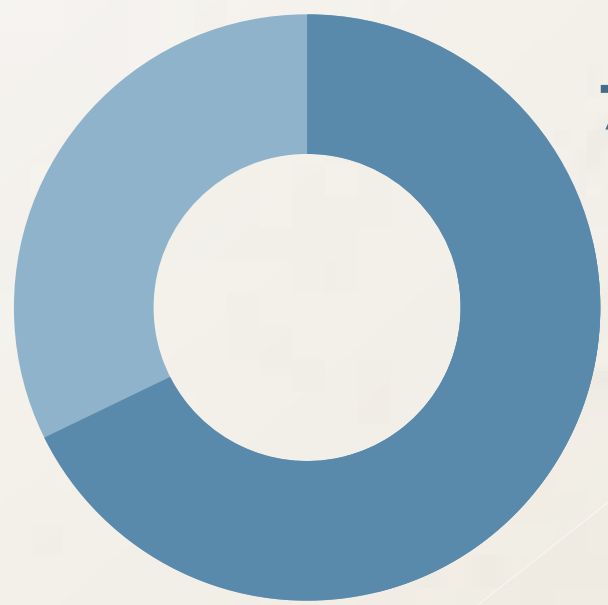


**PERMEABILITY**  
 Impermeable: 5%  
 Permeable pavement: 11%  
 Lawn: 50%  
 House: 34%

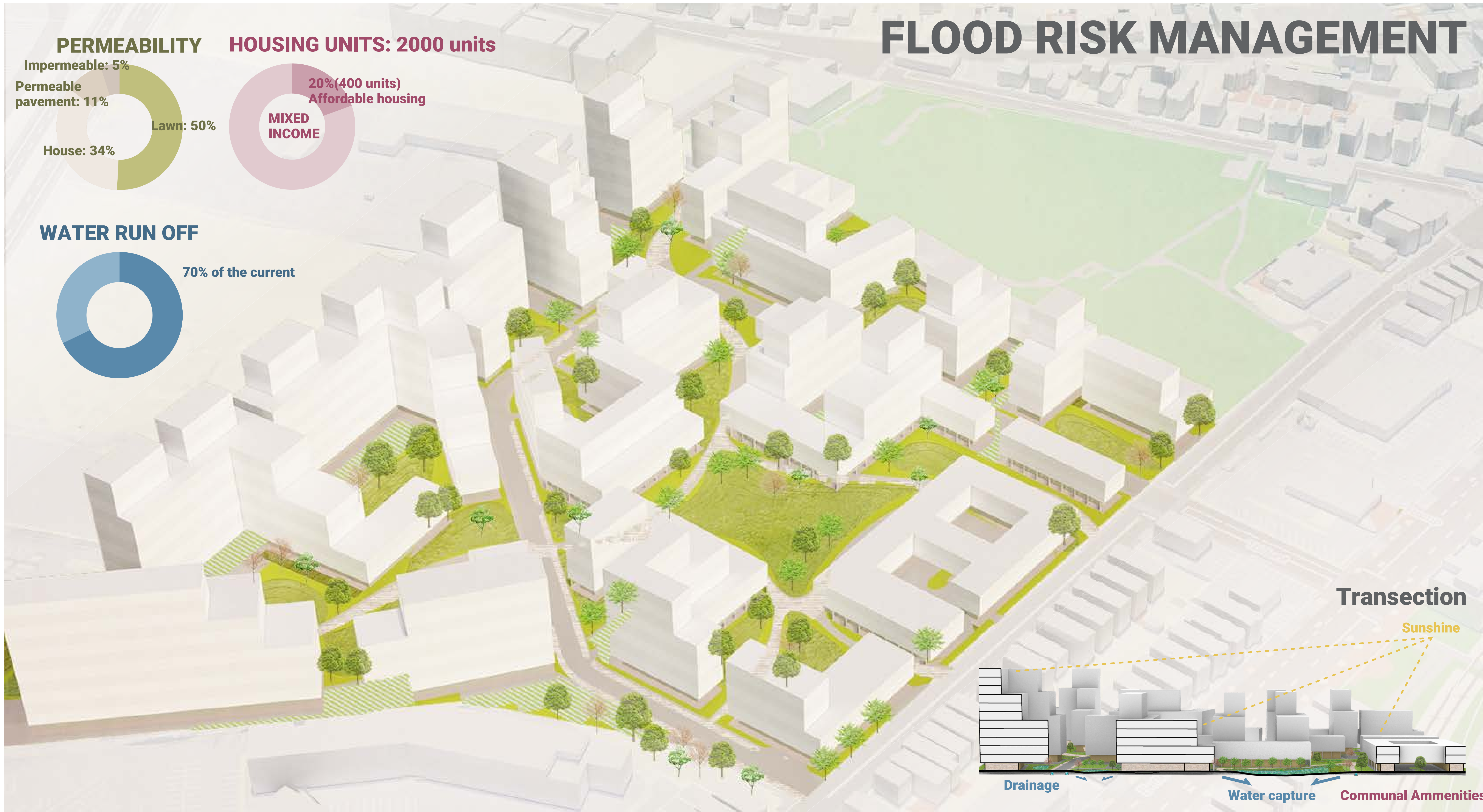
**HOUSING UNITS: 2000 units**  
 20% (400 units) Affordable housing  
**MIXED INCOME**

**WATER RUN OFF**

70% of the current



## FLOOD RISK MANAGEMENT



Transection

Sunshine

Drainage

Water capture

Communal Amenities

# HABITABLE GREEN SPACE



# EDUCATIONAL EFFECT



# COMMUNAL AMMENITIES



# AMBITIOUS IDEA: CONNECTION AMONG THREE WATER FRONTS