CLIMATE ADAPTIVE PUBLIC REALM

#COCREATE, CAPE TOWN

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OKRA 2019

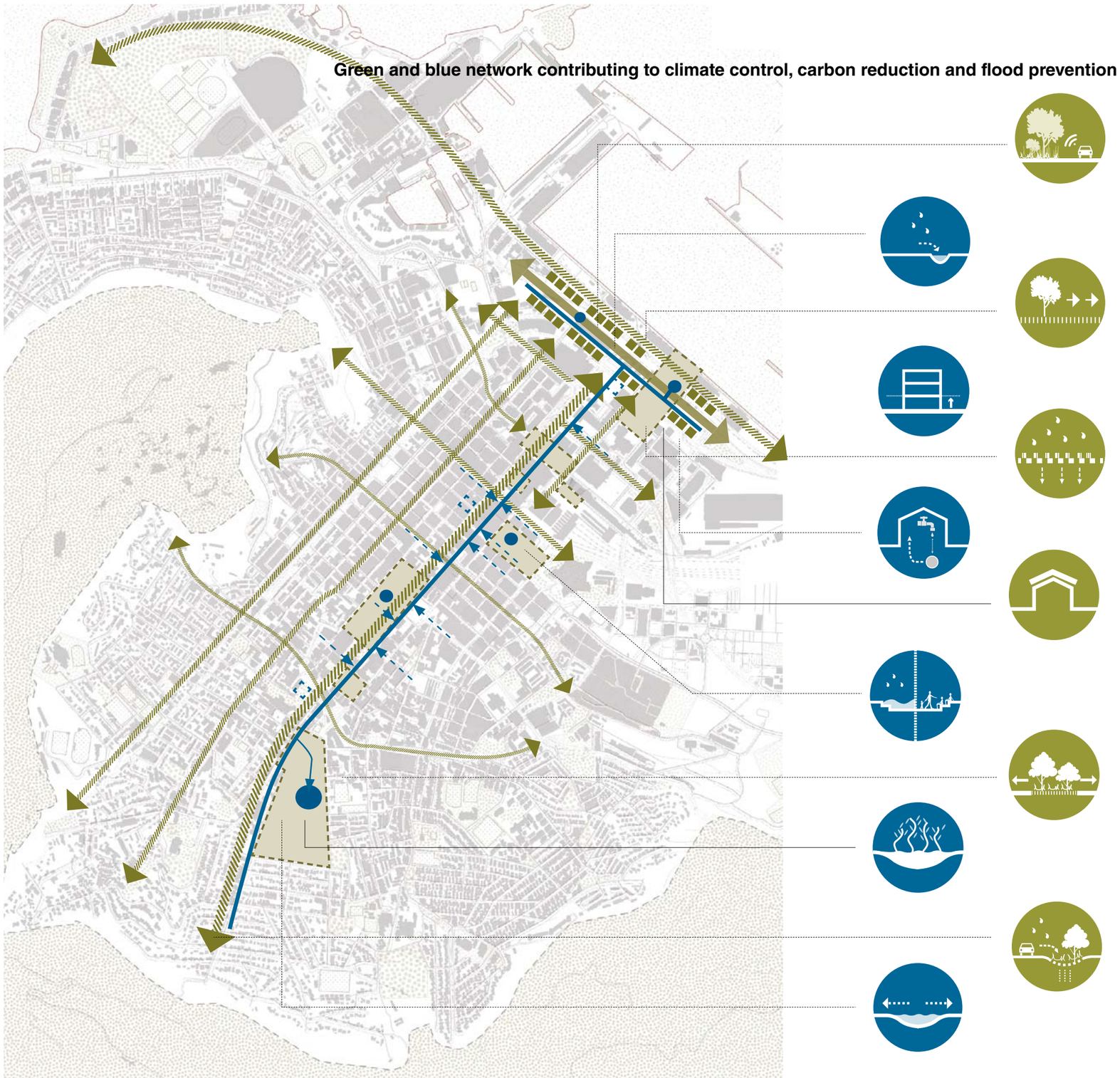
THE CHALLENGE TO CREATE HEALTHY CITIES

OUR EVOLVING CITIES SHOULD COMPRISE THE IDEA OF HEALTHY CITY.

= RESILIENT
= ACCESSIBLE
= VIBRANT
=CIRCULAR

CAPE TOWN

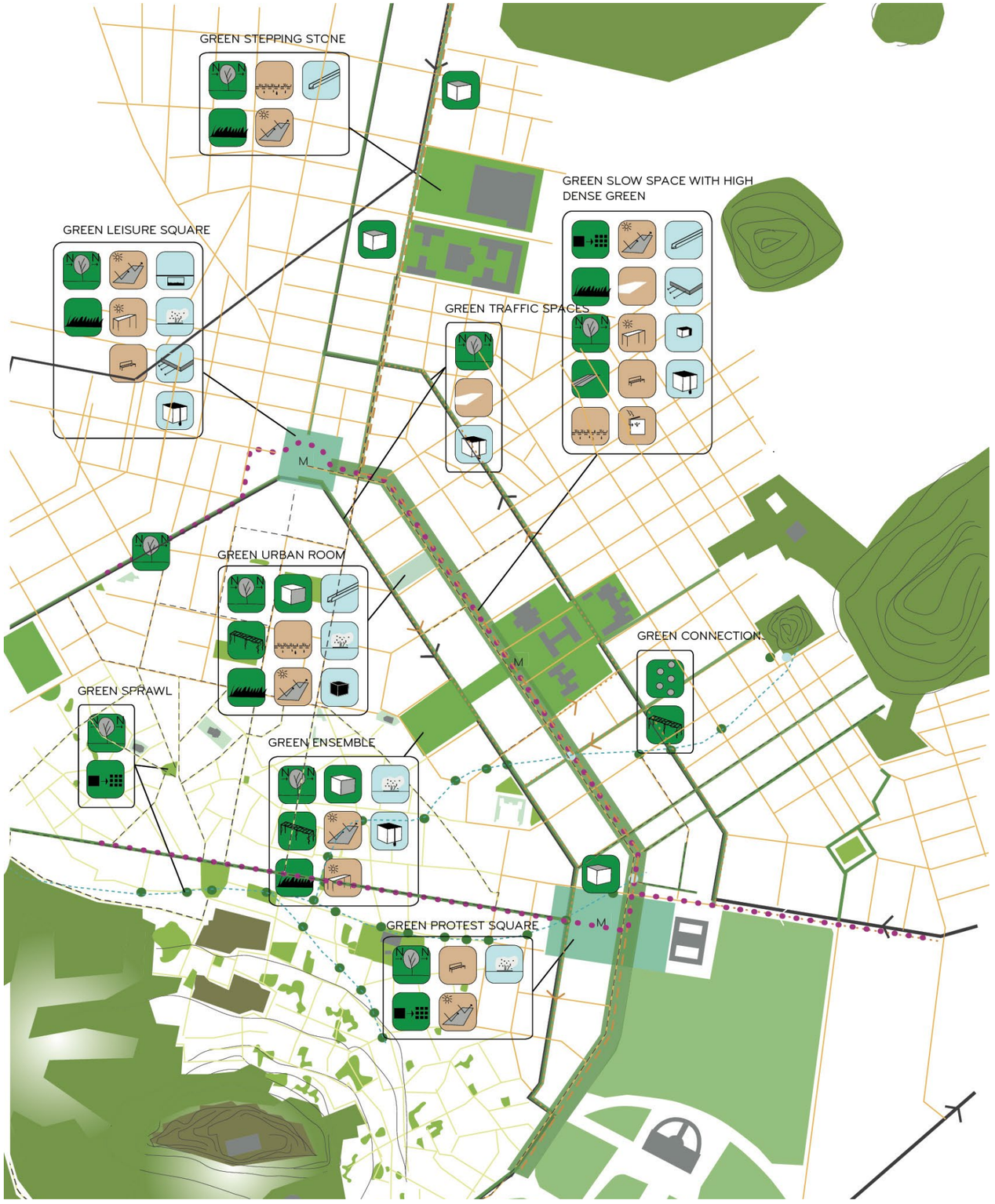
INTEGRATED GREEN & BLUE STRATEGY



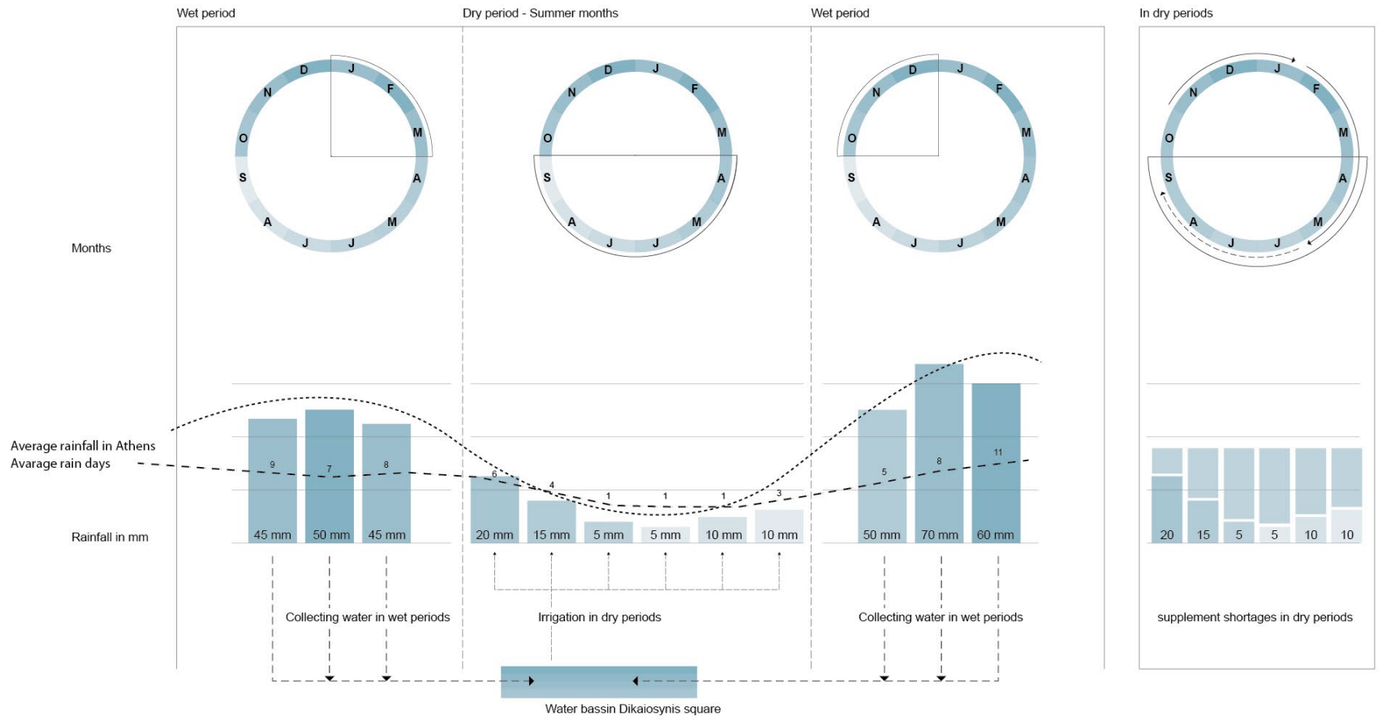
RE-THINK ATHENS

ATHENS, GREECE

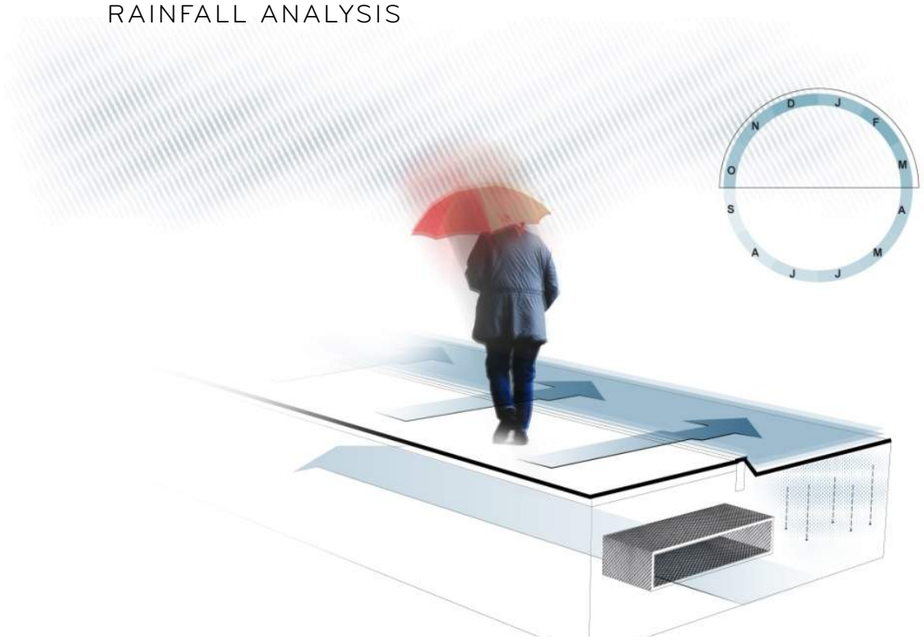
CLIMATE ADAPTIVE STRATEGY



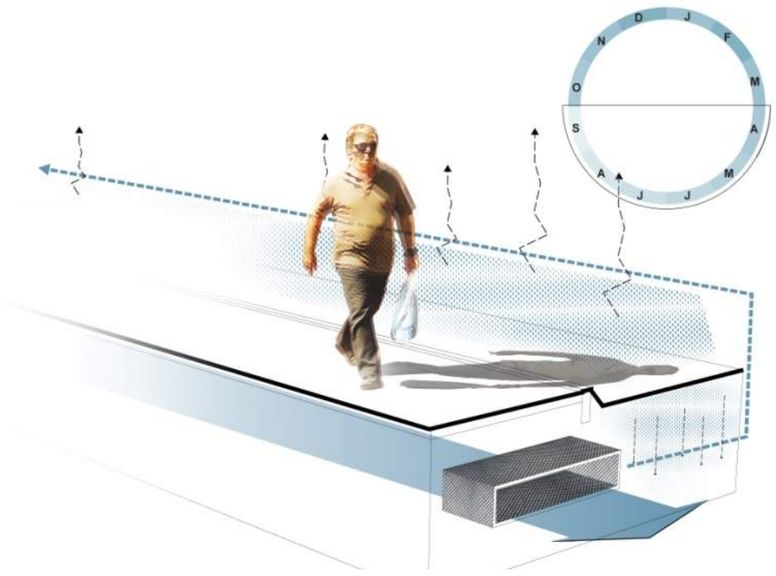
WATER HARVESTING AND RE-USE



RAINFALL ANALYSIS



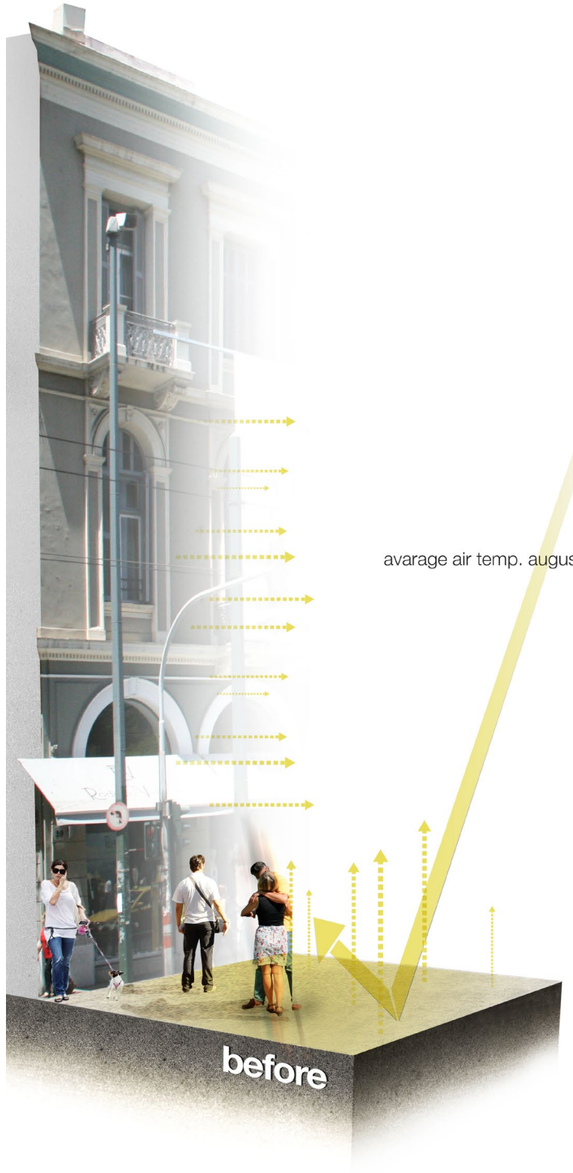
WATER RETENTION IN WET SEASON

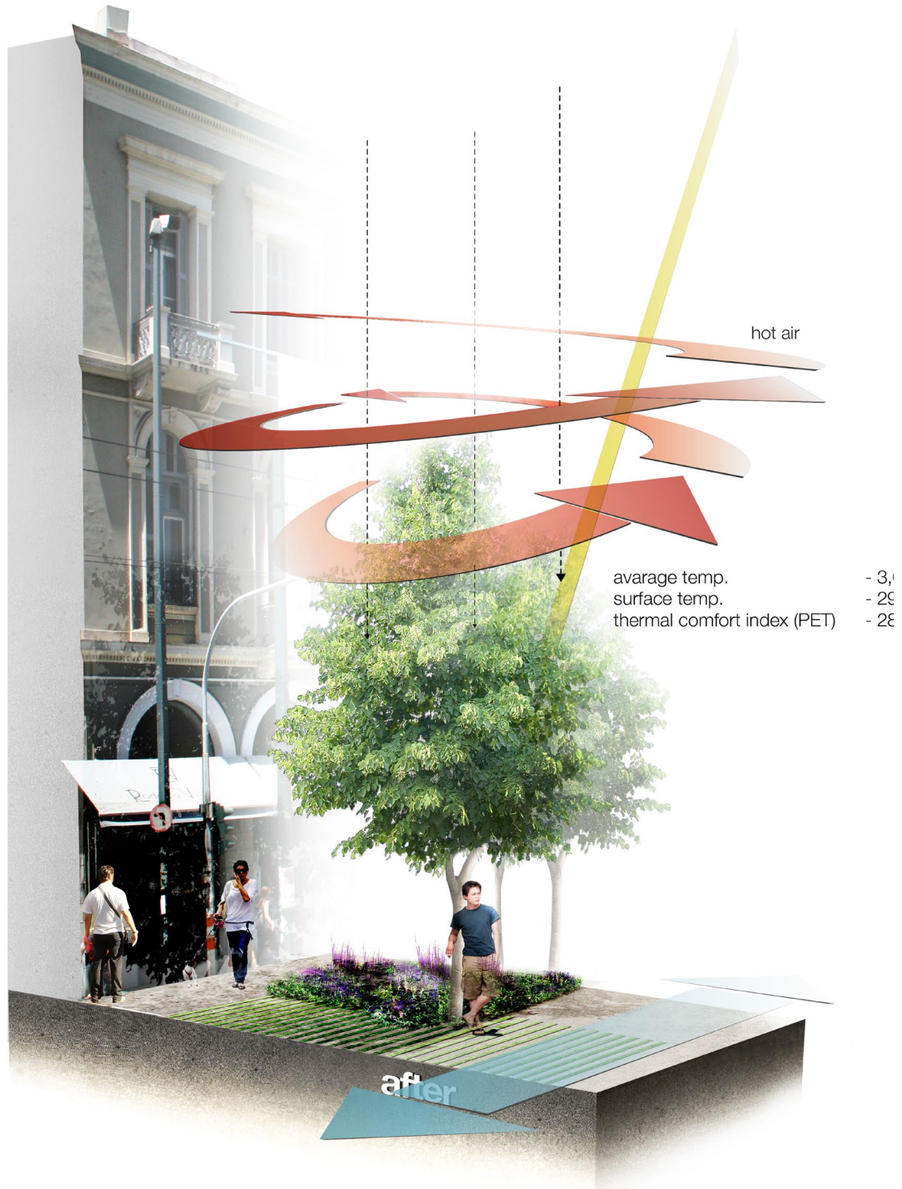


IRRIGATION IN DRY SEASON

14.500 m3

IMPROVEMENT OF CLIMATE COMFORT





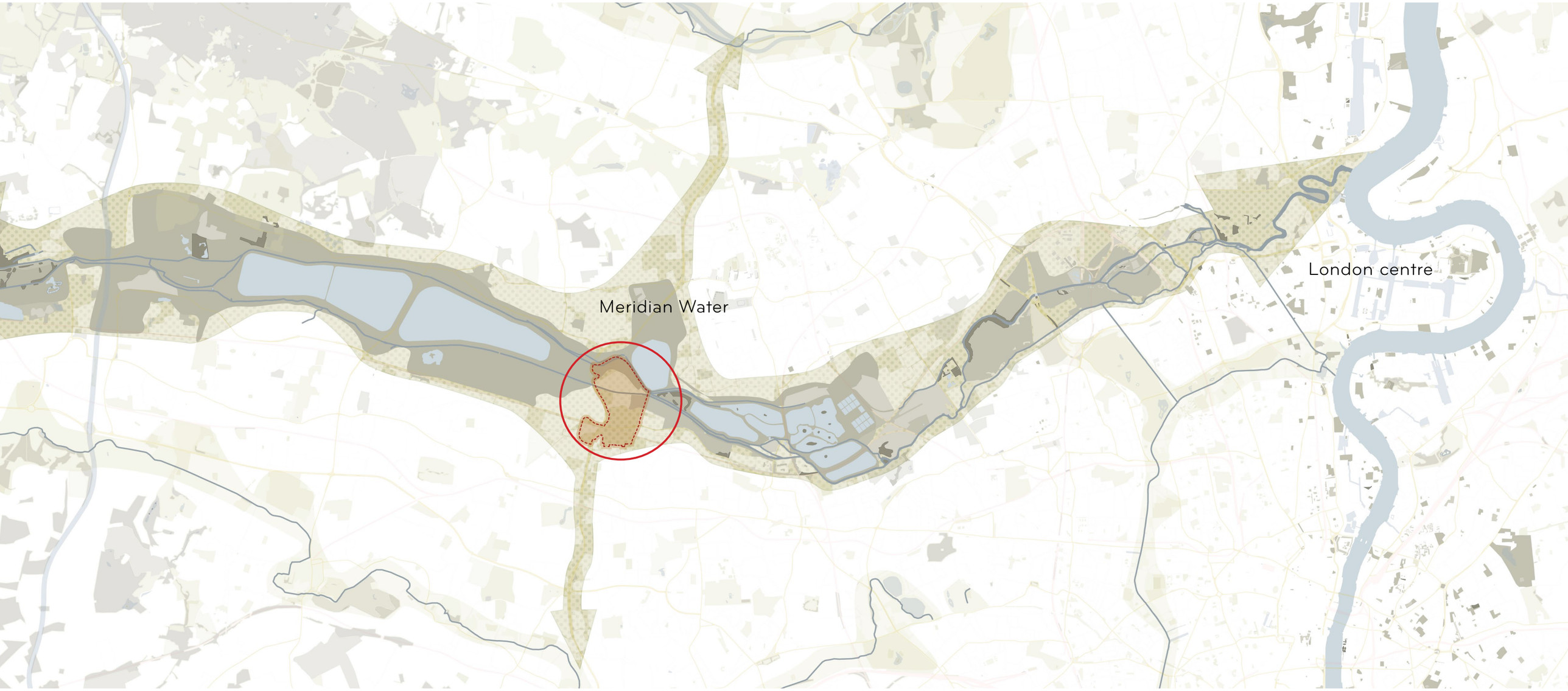
1.5 - 3.0 degrees temperature reduction

URBAN WATER SENSITIVE DESIGN TOOL

MERIDIAN WATER

LONDON, UK

NEW DEVELOPMENT IN NORTH LONDON



MATRIX OF URBAN WATER SENSITIVE DESING TOOLBOX

MANAGING FLOOD RISKS

SUSTAINABLE URBAN DRAINAGE/ STORM WATER MANAGEMENT

WATER RE-USE

WATER PRODUCING IDENTITY- EXPERIENCING WATER

RIVER LEE AND DRINKING WATER BASINS

Reinforcing dykes

Retention area

Flood plain enlargement

Create more open water

Rain water ponds

Green shores and river banks

Accessing canals

THE CANAL ZONE

Raising land

Raising floor level

Evacuation route at elevated levels

Create extra canals

Urban farming

Water squares

Grey water re-use

Fog fontains

Accessing canal

Visible drainage elements

Fontains

Wet floor

THE BROOKS ZONE

Green shores and river banks

Raising floor level

Evacuation route at elevated levels

Green roofs

Polder dak

Create more open water

Helophyte filter

Disconnected paved surfaces from sewer system

Accessing canal

Visible drainage elements

MERIDIAN ANGEL

Raising land

Raising floor level

Detention basins

Rain water tanks

Rain water storage below the buildings

Reduction paved surfaces / more green spaces

Urban farming

Grey water re-use

Fog fontains

Playground

Fontains

Gutter

Disconnect paved surfaces from sewer system

Wet floor

Visible drainage elements

EDMONTON

Green water walls

Rain gardens

Create more open water

Wadi

Bioretention areas

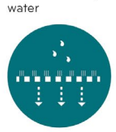
Fog fontains

Playground

Visible drainage elements

Filter stripe

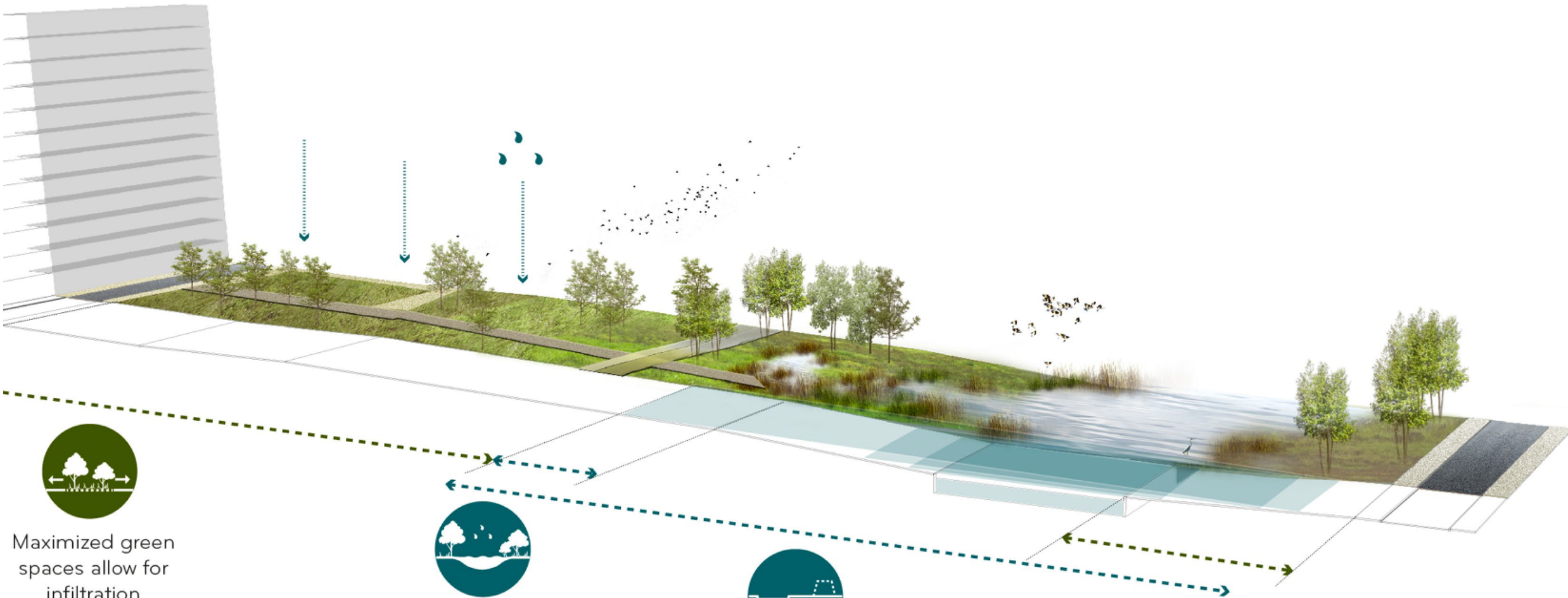
Reduction paved surfaces / more green spaces


Permeable pavement

Reconstruct combined sewer system

Fontains

RESILIENT WATER STRATEGY



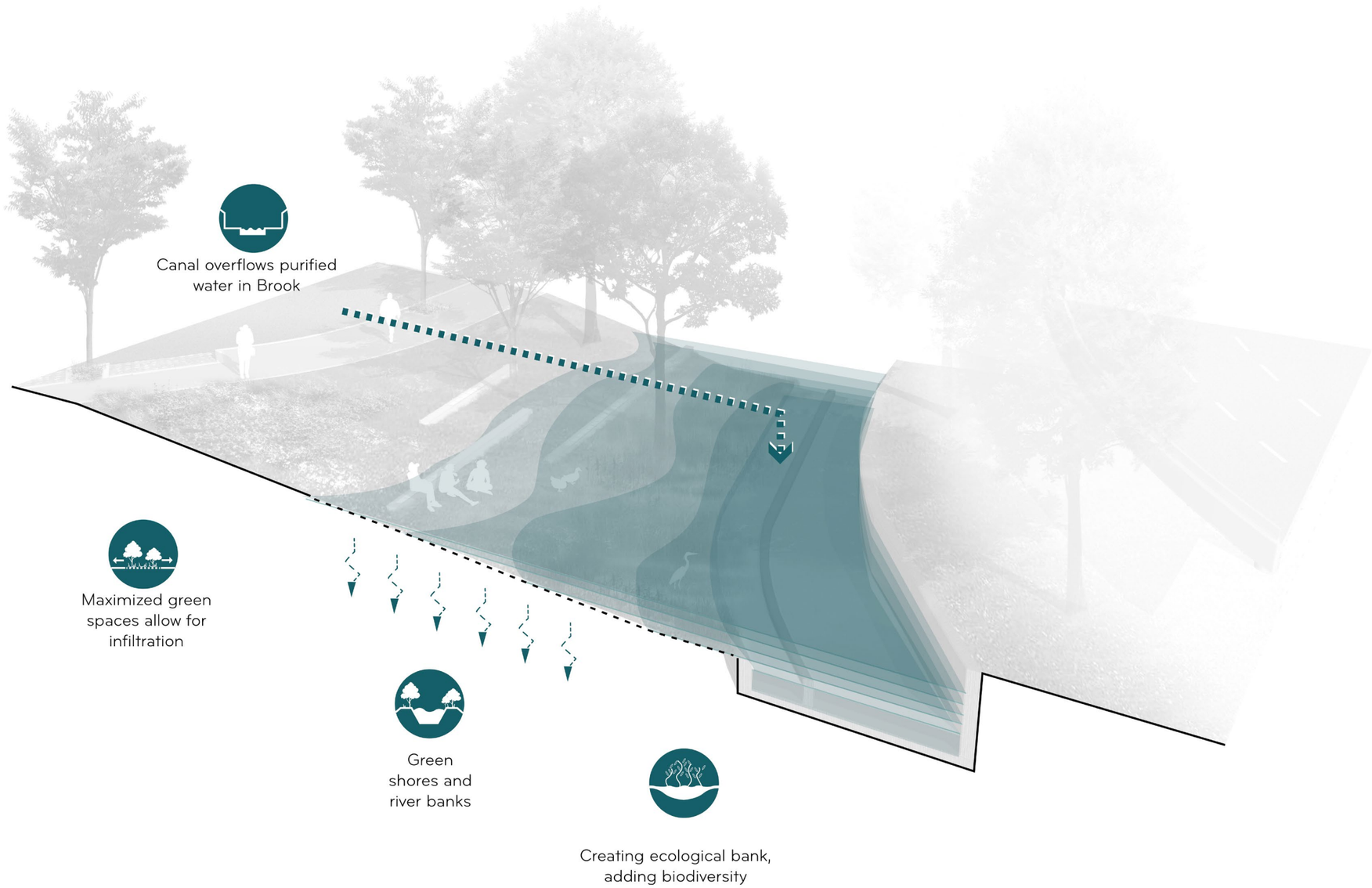
Maximized green spaces allow for infiltration

Rain water ponds

Flood plain enlargement reduces flood risk

Green river banks allow for greater biodiversity

RESILIENT WATER STRATEGY

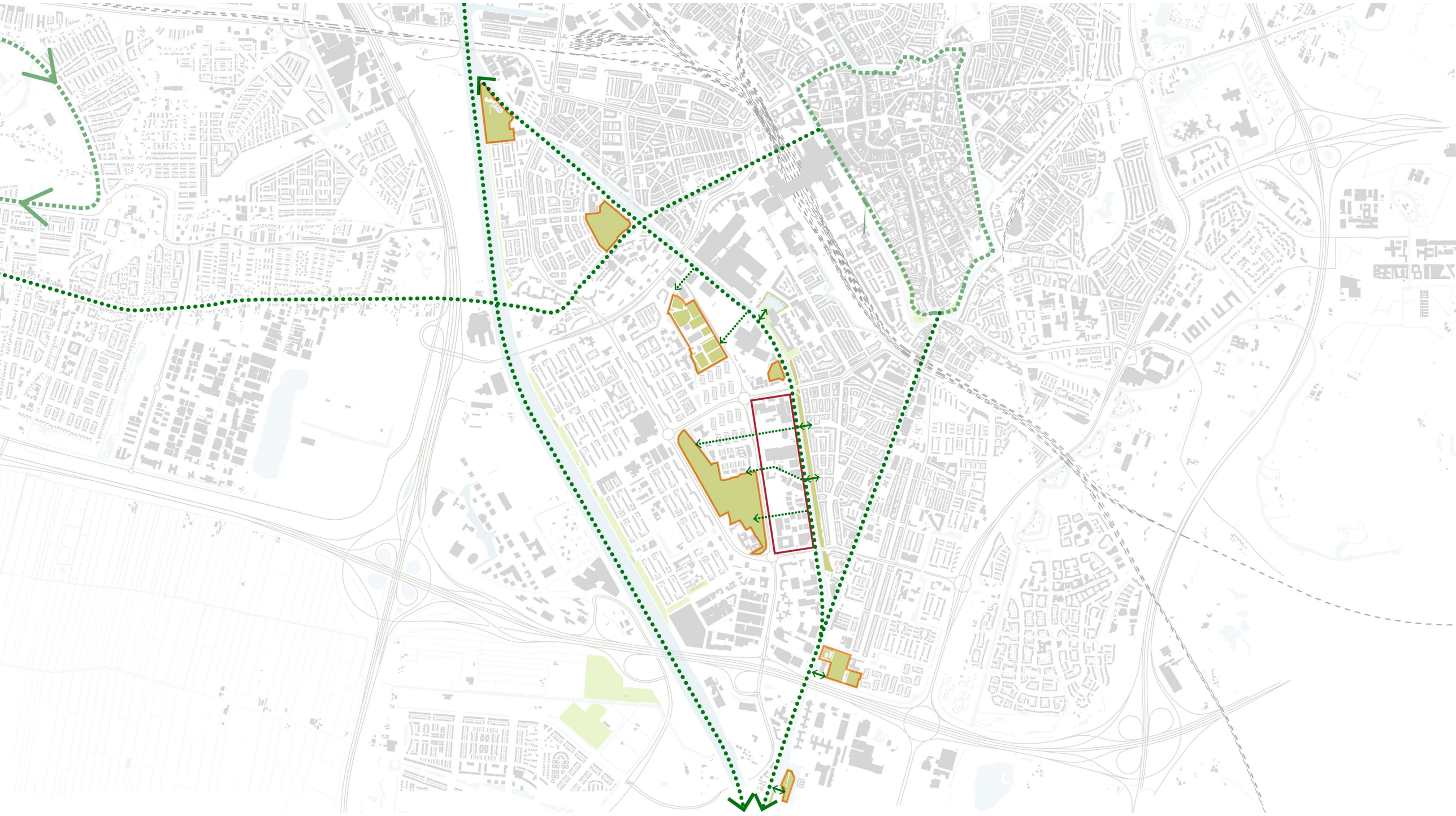


HEALTHY URBAN LIVING

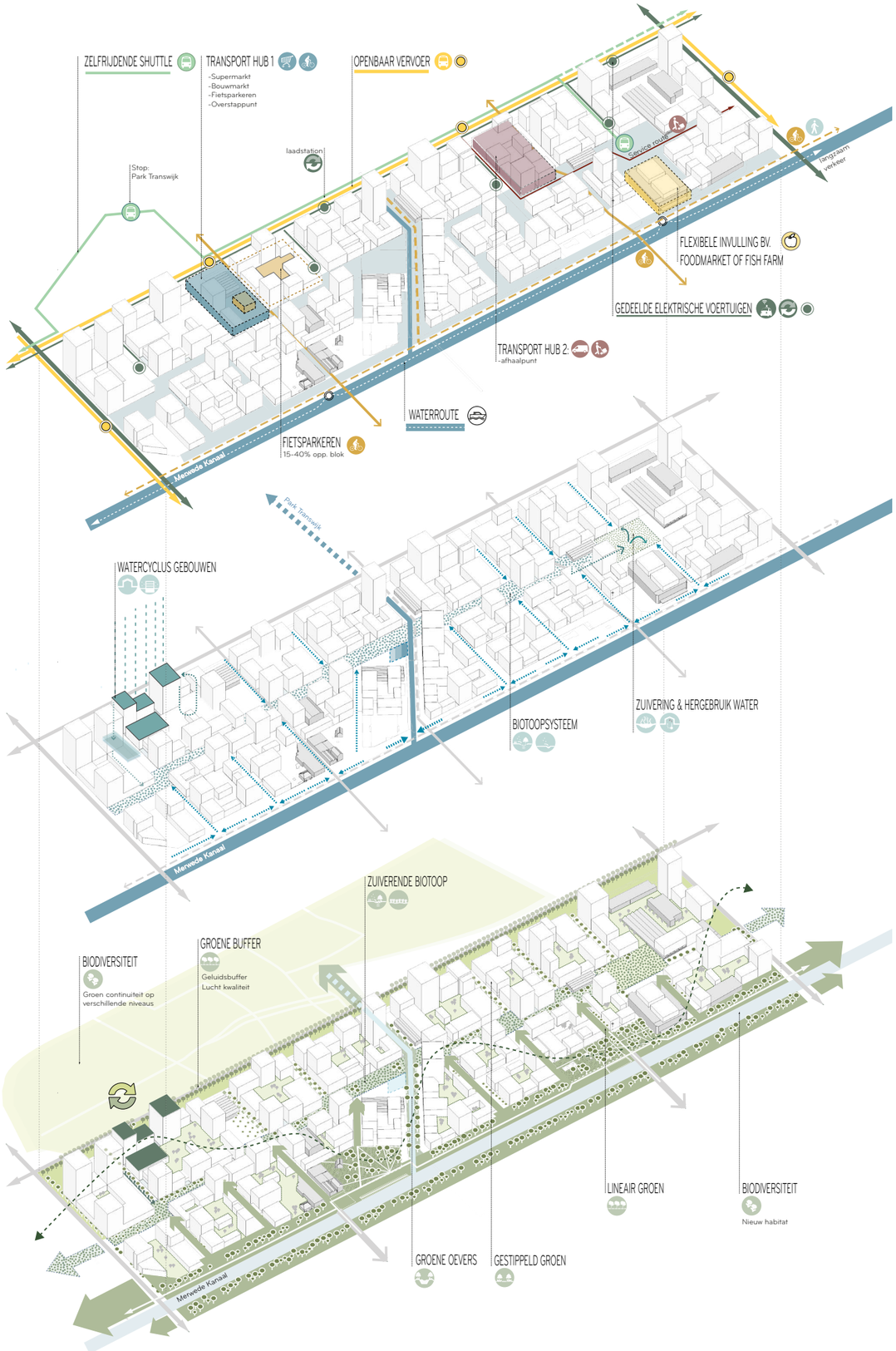
MERWEDE CANAL ZONE

UTRECHT, NL

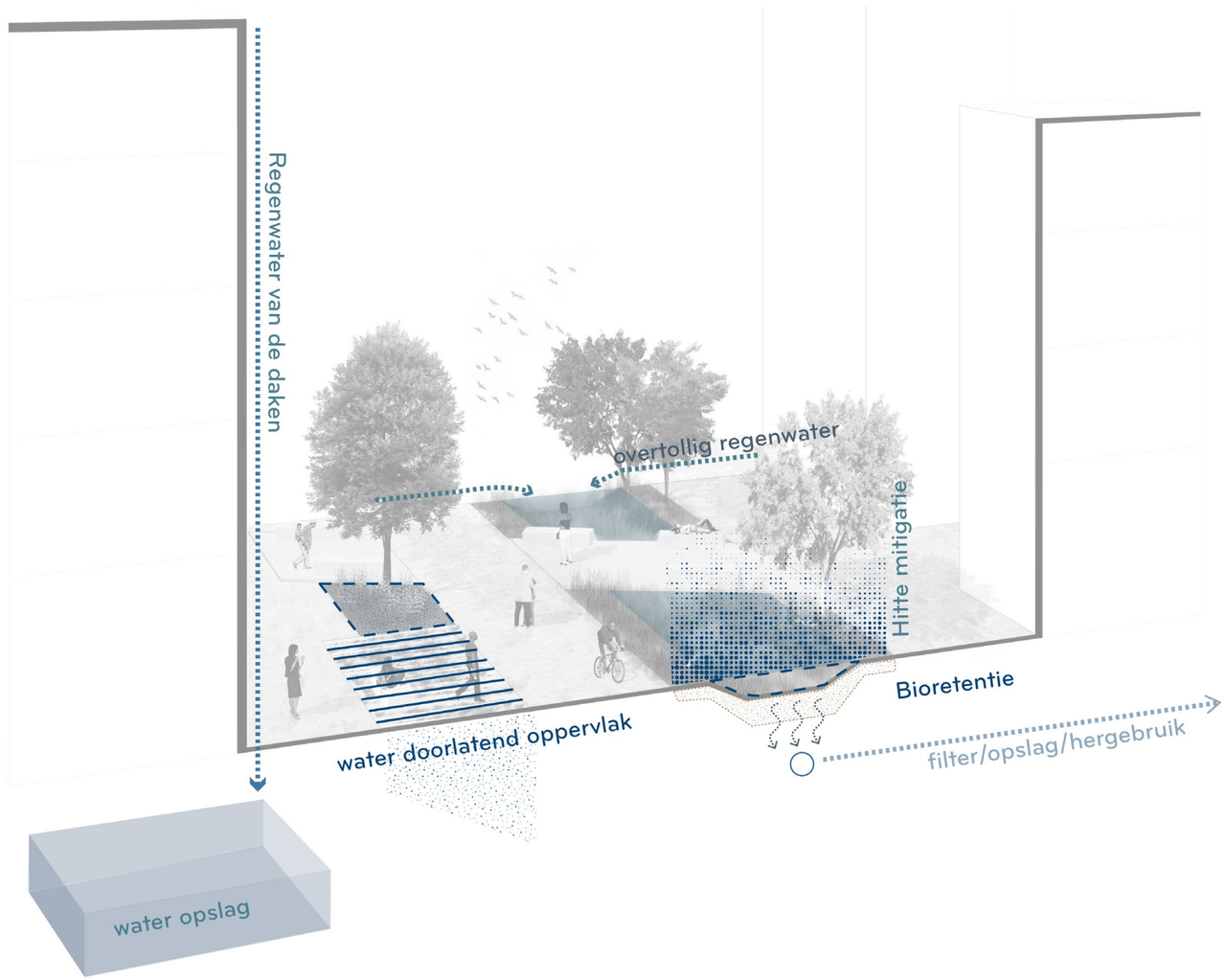
LOCATION IN THE GREEN SYSTEM



INTEGRATED STRATEGY



RESILIENT WATER STRATEGY



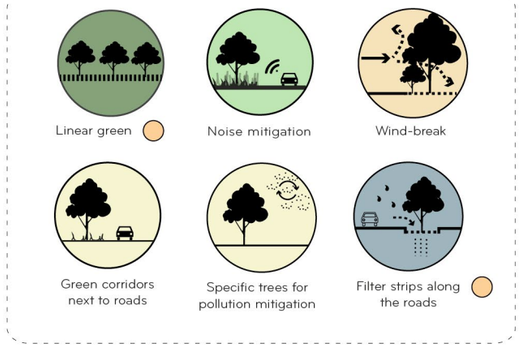
KLEINES CAFE

RESILIENT NEIGHBOURHOOD MODEL

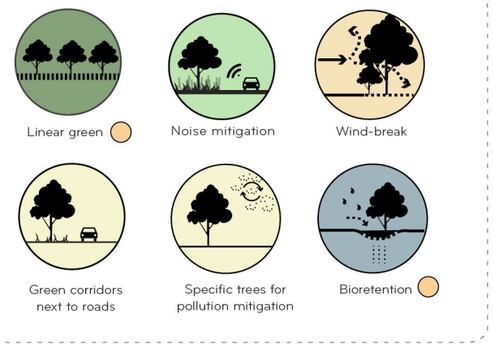
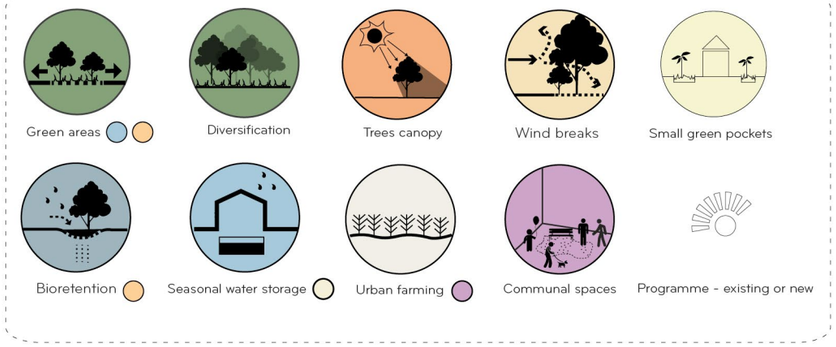
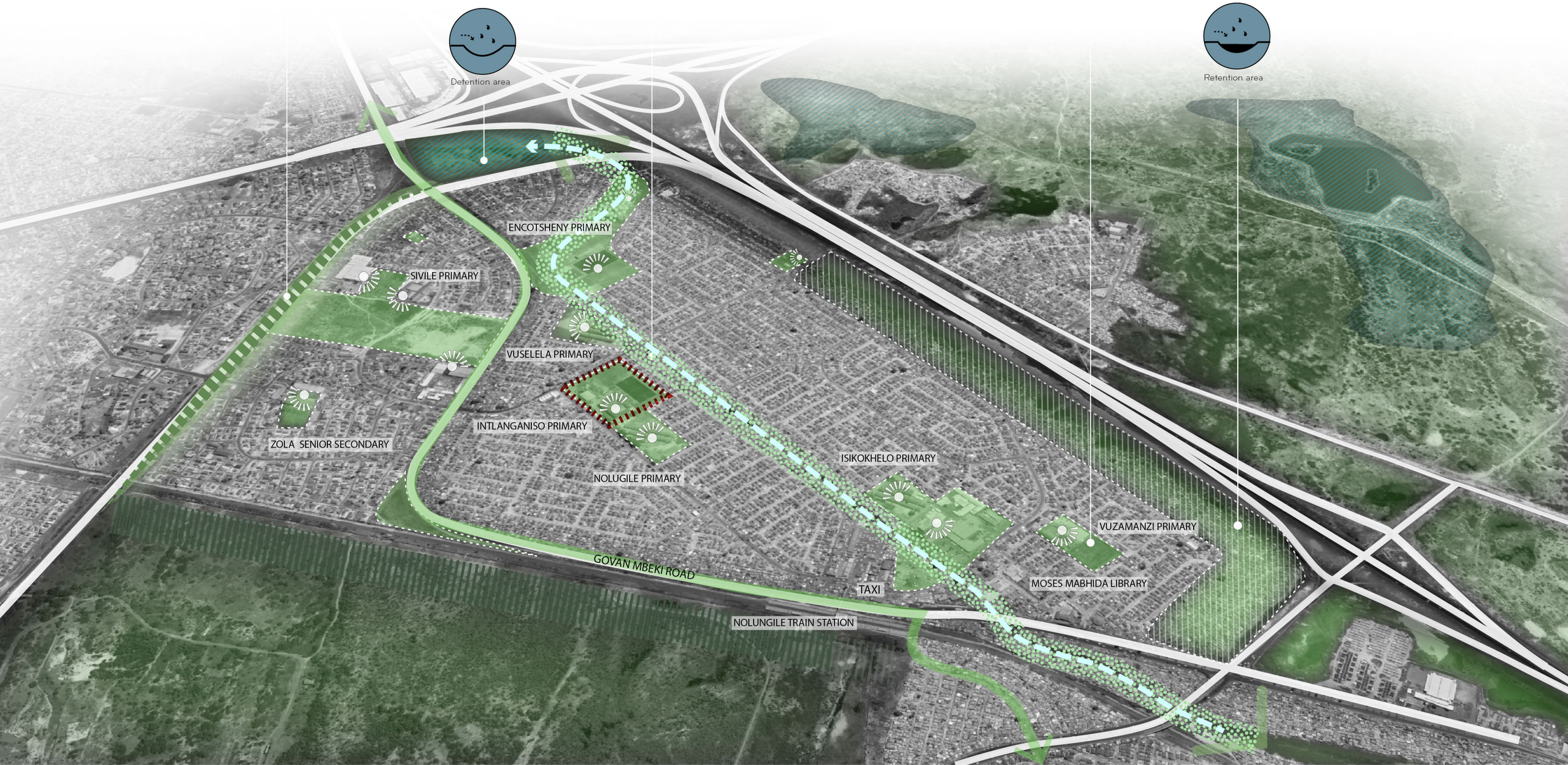
LUKHANYO HUB,

KHAYELITSHA, SA

LINEAR GREEN ALONG MAIN INFRASTRUCTURE



CENTRAL GREEN SPINE



GREEN ISLANDS