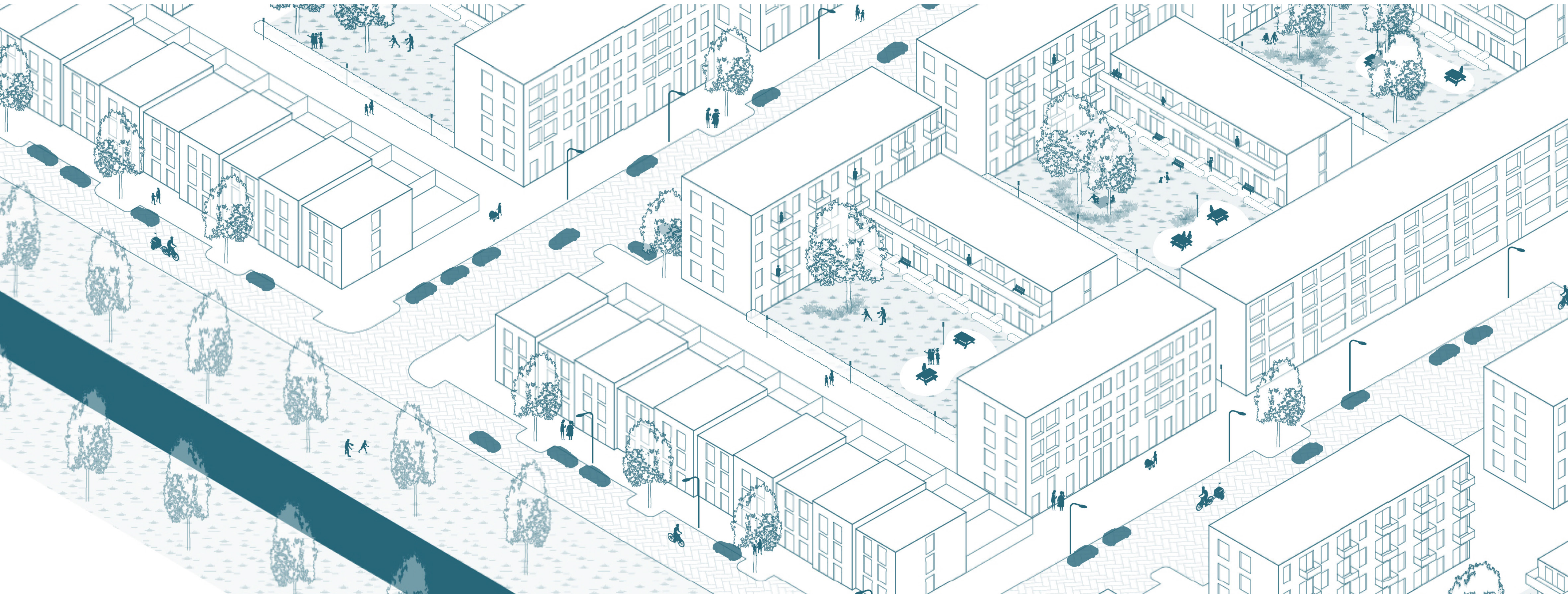# UNSAFETY

Improving perceived safety through spatial design in Pendrecht

by Lieke Marijnissen (Delft University of Technology0
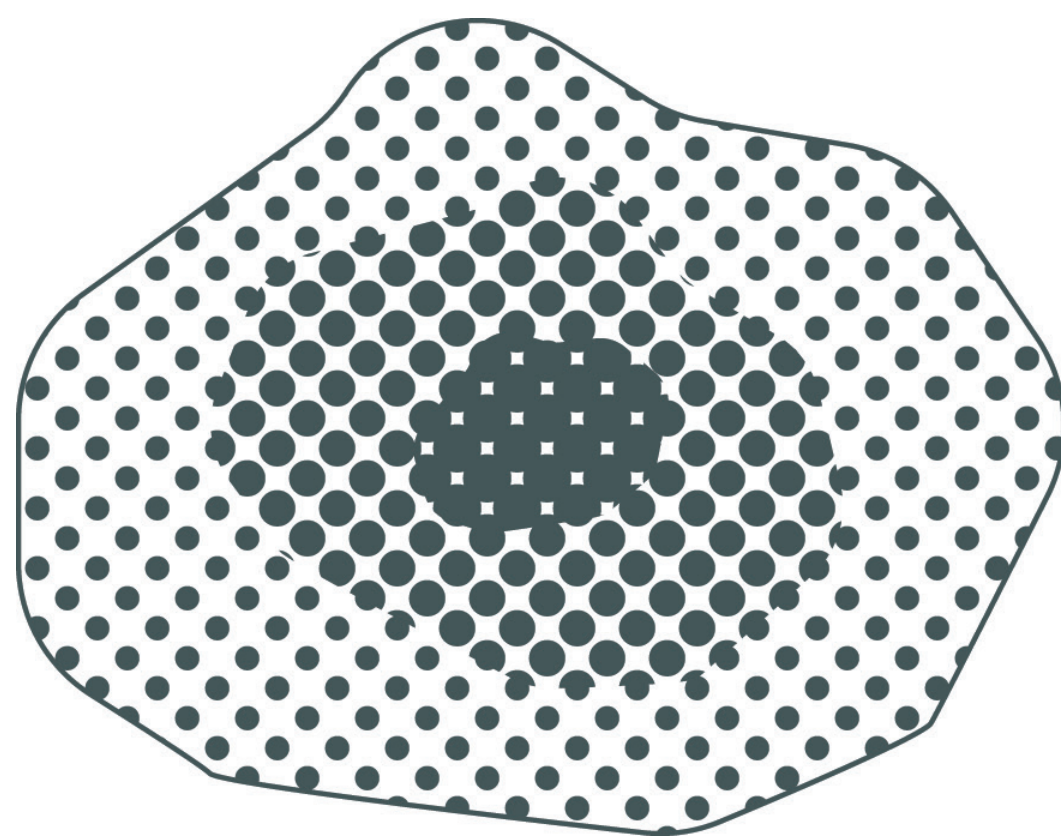
URBAN CHALLENGES

Growing population in cities

Densifying the existing urban environment

Maintaining the quality of life

QUALITY OF LIFE
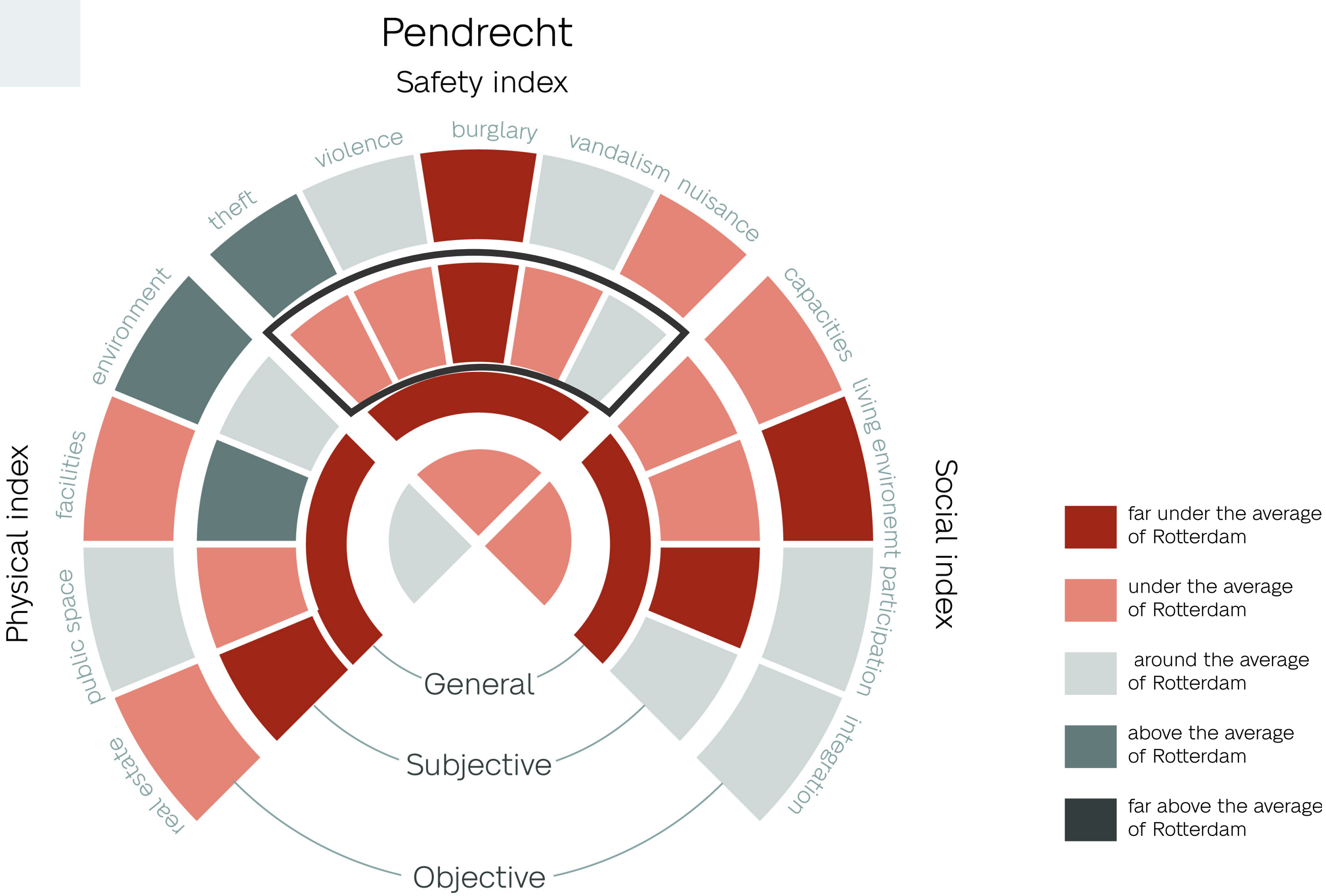
Livability ☑

Sustainability ☑
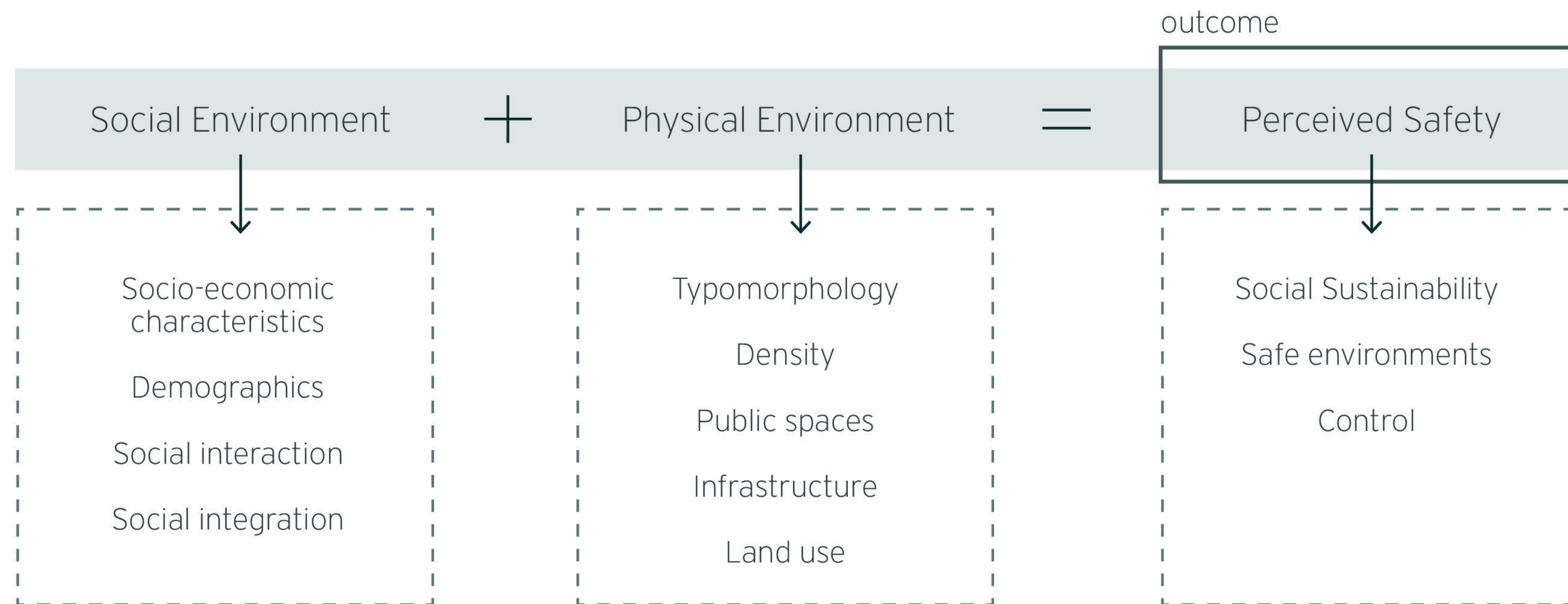
Society ☑

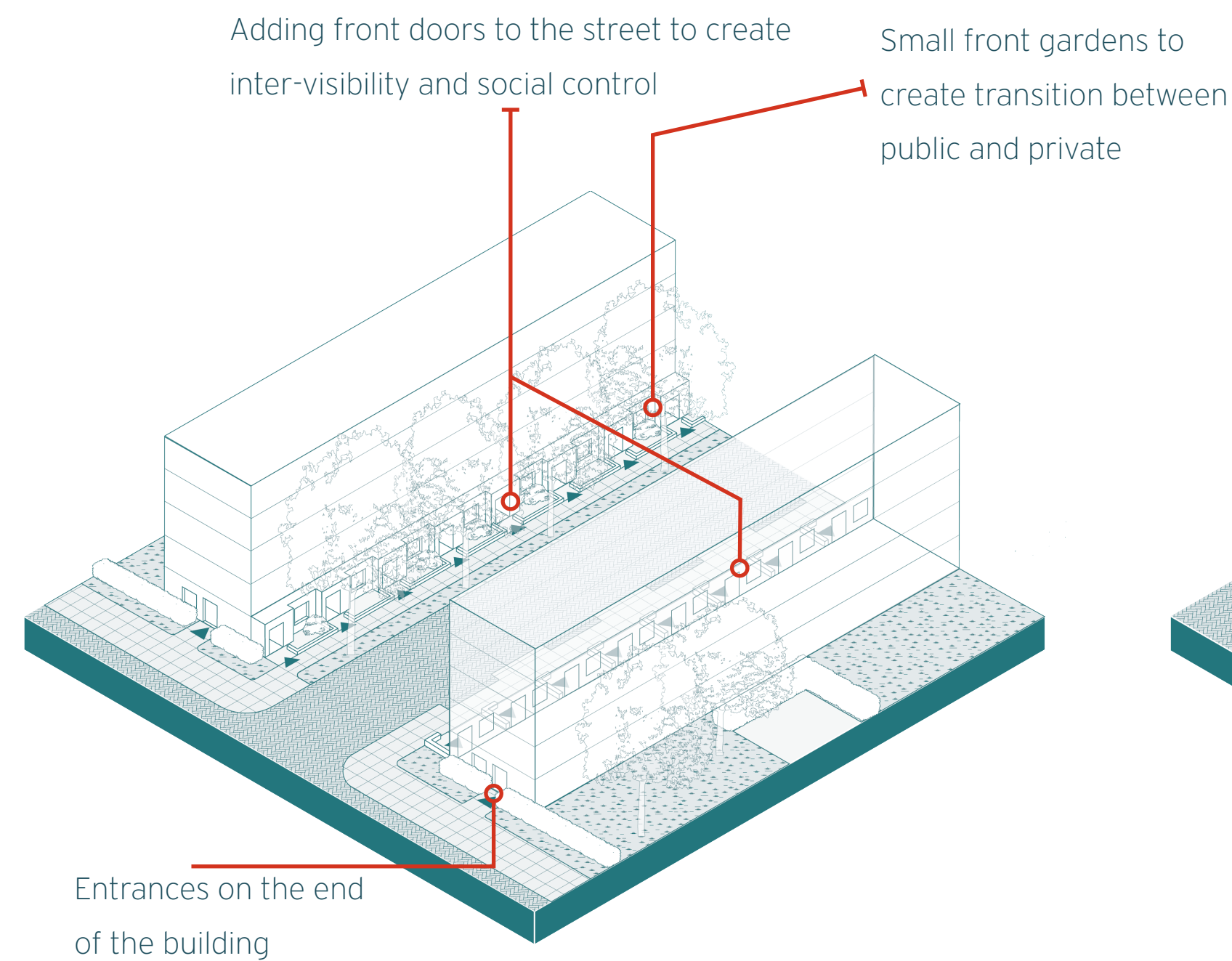Safety ☑

MODERNIST NEIGHBORHOOD

NEIGHBORHOOD PROFILE

NEIGHBORHOOD PROFILE

Pendrecht
Safety index

theft violence burglary vandalism nuisance

environment capacities

facilities living environemt participation

Physical index Social index

public space integration

real estate

General

Subjective

Objective

far under the average
of Rotterdam

under the average
of Rotterdam

around the average
of Rotterdam

above the average
of Rotterdam

far above the average
of Rotterdam

PERCEIVED SAFETY

outcome

| Social Environment | + | Physical Environment | = | Perceived Safety |

Socio-economic
characteristics

Demographics

Social interaction

Social integration

Typomorphology

Density

Public spaces

Infrastructure

Land use

Social Sustainability

Safe environments

Control

1) INCREASING SOCIAL CONTROL

Adding front doors to the street to create inter-visibility and social control

Small front gardens to create transition between public and private

Entrances on the end of the building

2) DEFINING TERRITORIES

adding a playground to the public space

physical borders
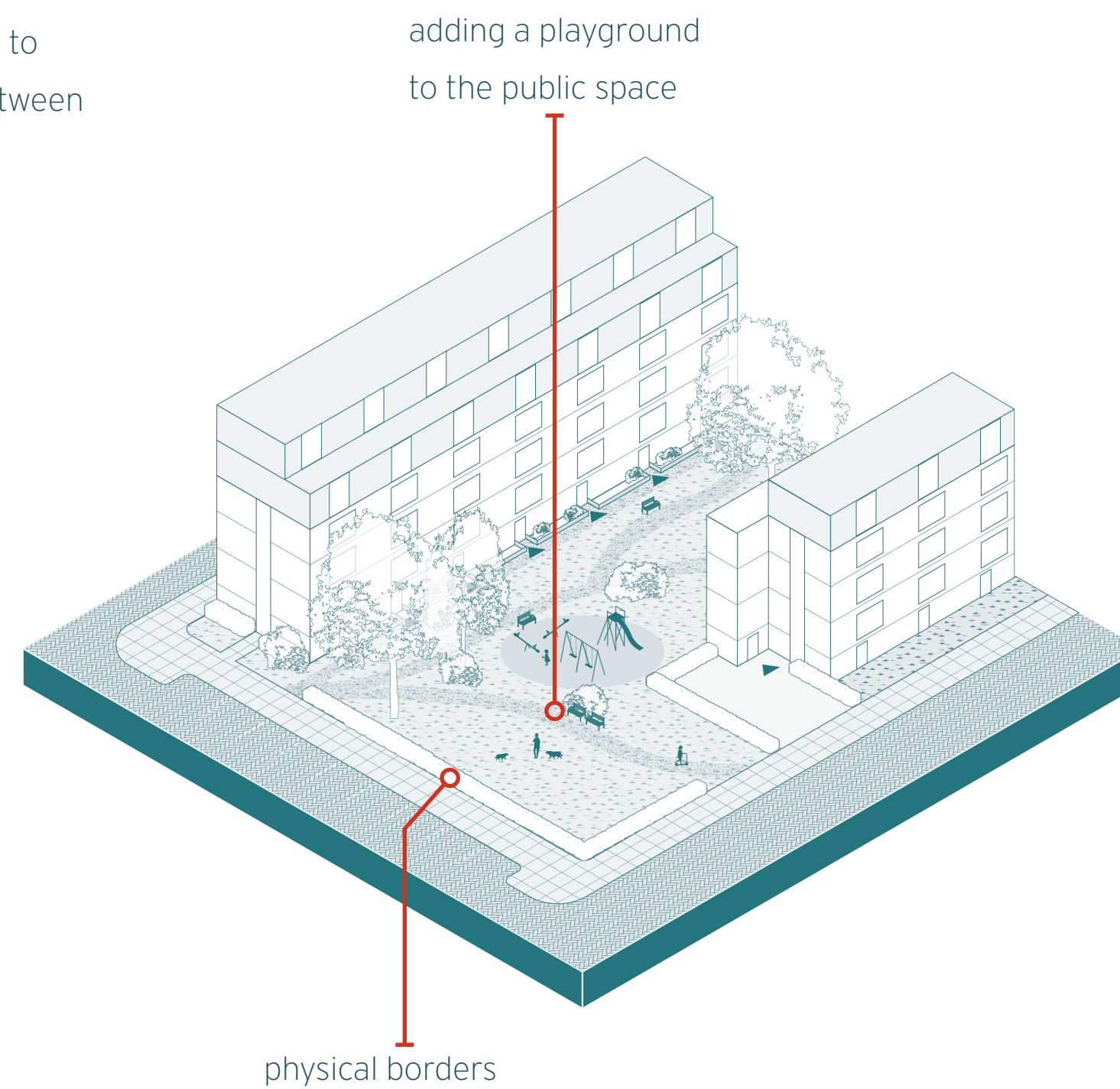
3) CREATING ALTERNATIVE ROUTES

splitting the long building block in shorter buildings

creating an attractive pedestrian path along the canal
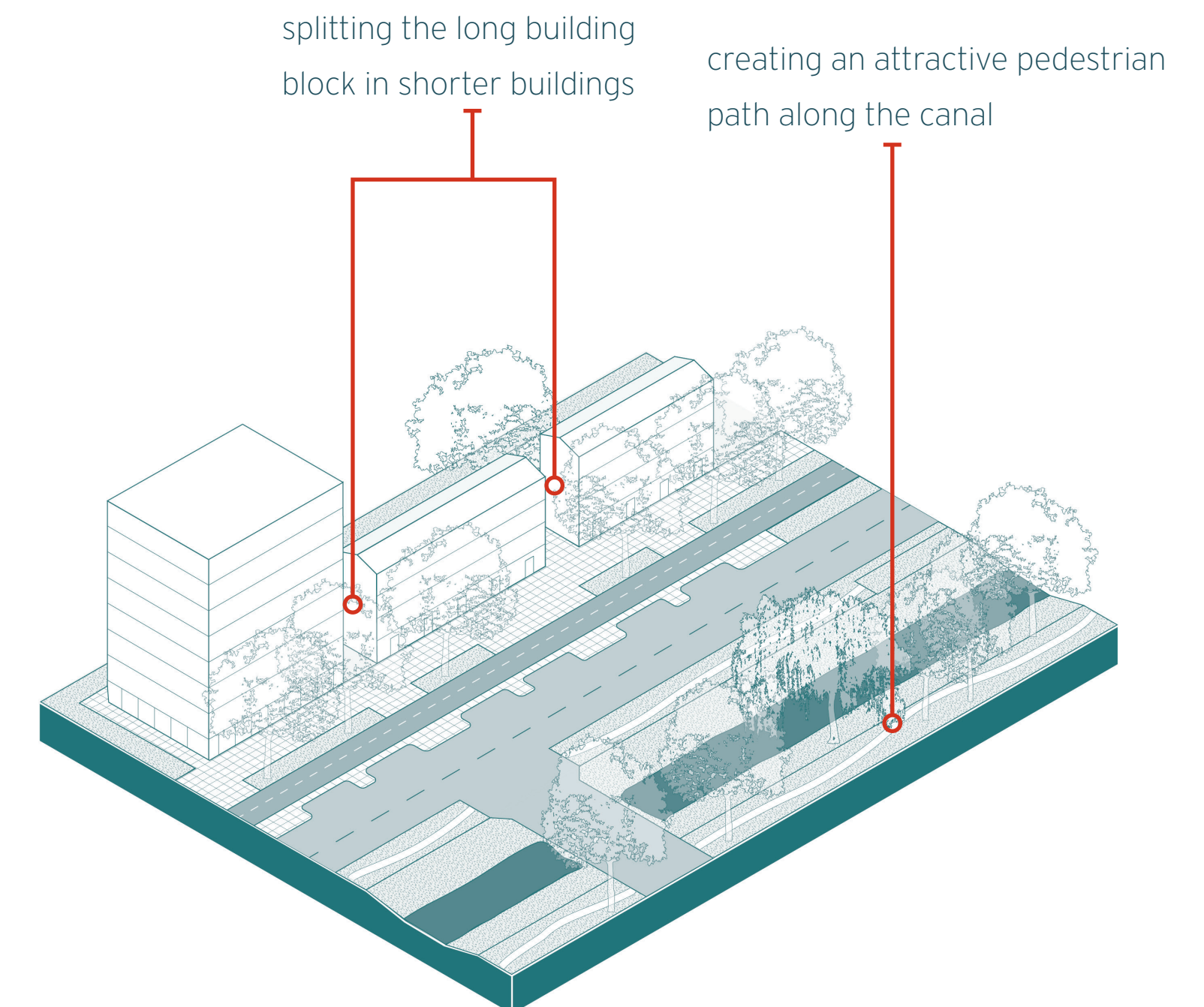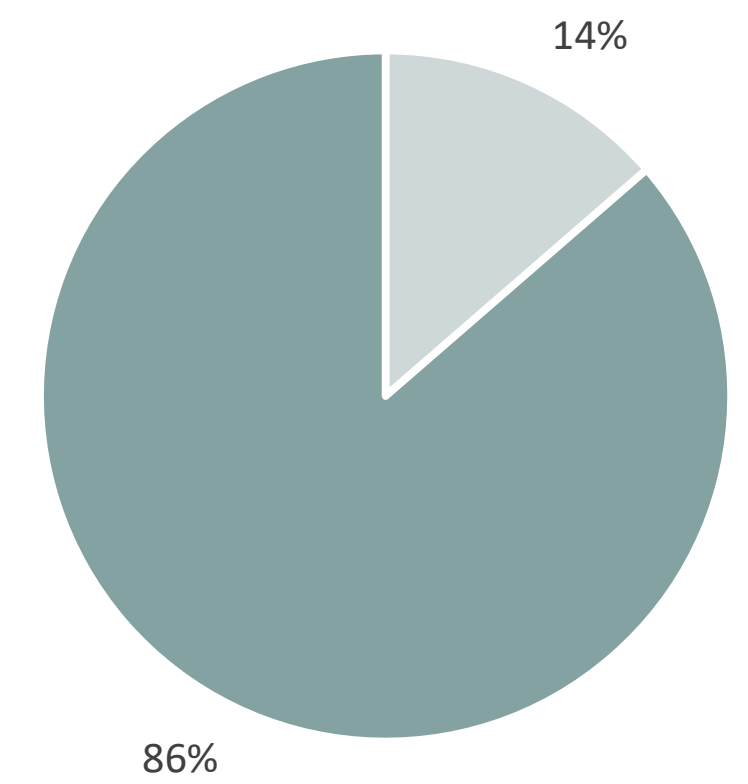
1 / ADDING FRONT GARDENS

Current situation

Added front gardens

Preference results added front gardens
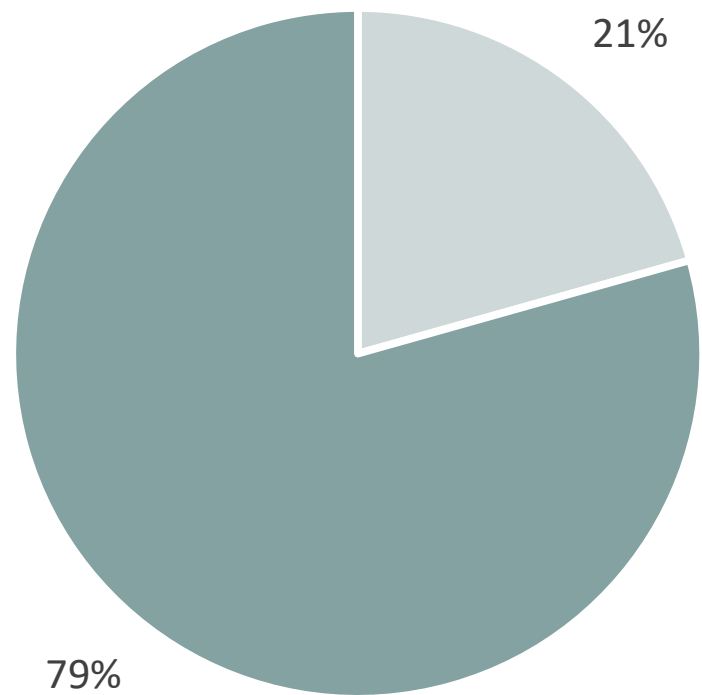

14%

86%

2 / ADDING FRONT DOORS

Current situation

Adding front doors

Preference results added front doors

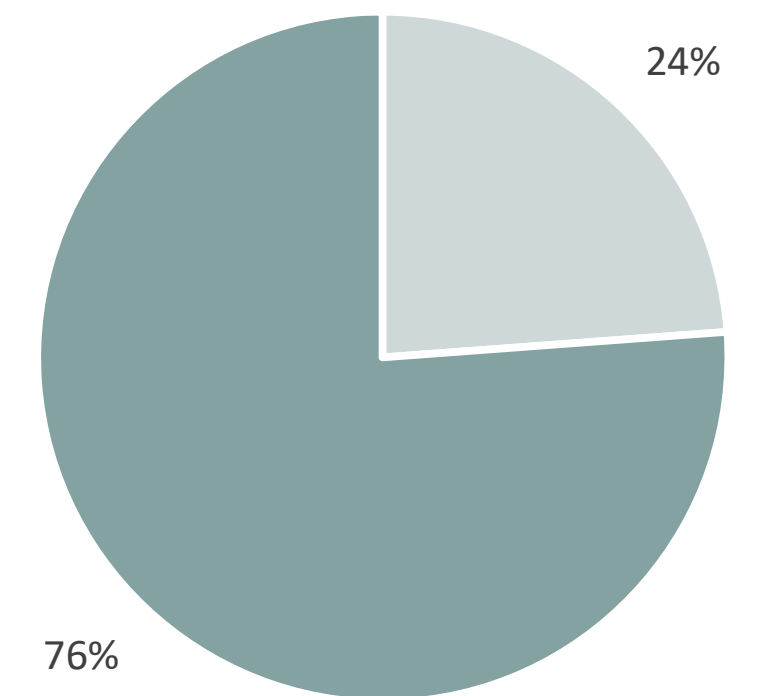

21%

79%

3 / SPLIT A LONG BUILDING

Current situation

Splitting long building

Preference results splitting long building

24%

76%

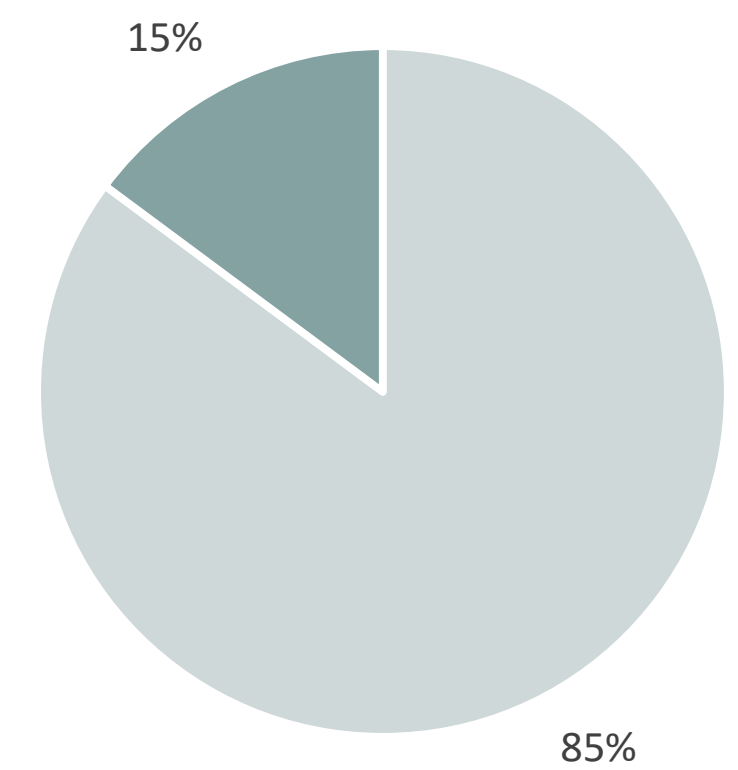# 4 / ADD A PATH TO AN EMPTY PUBLIC SPACE

Continue walking on the sidewalk
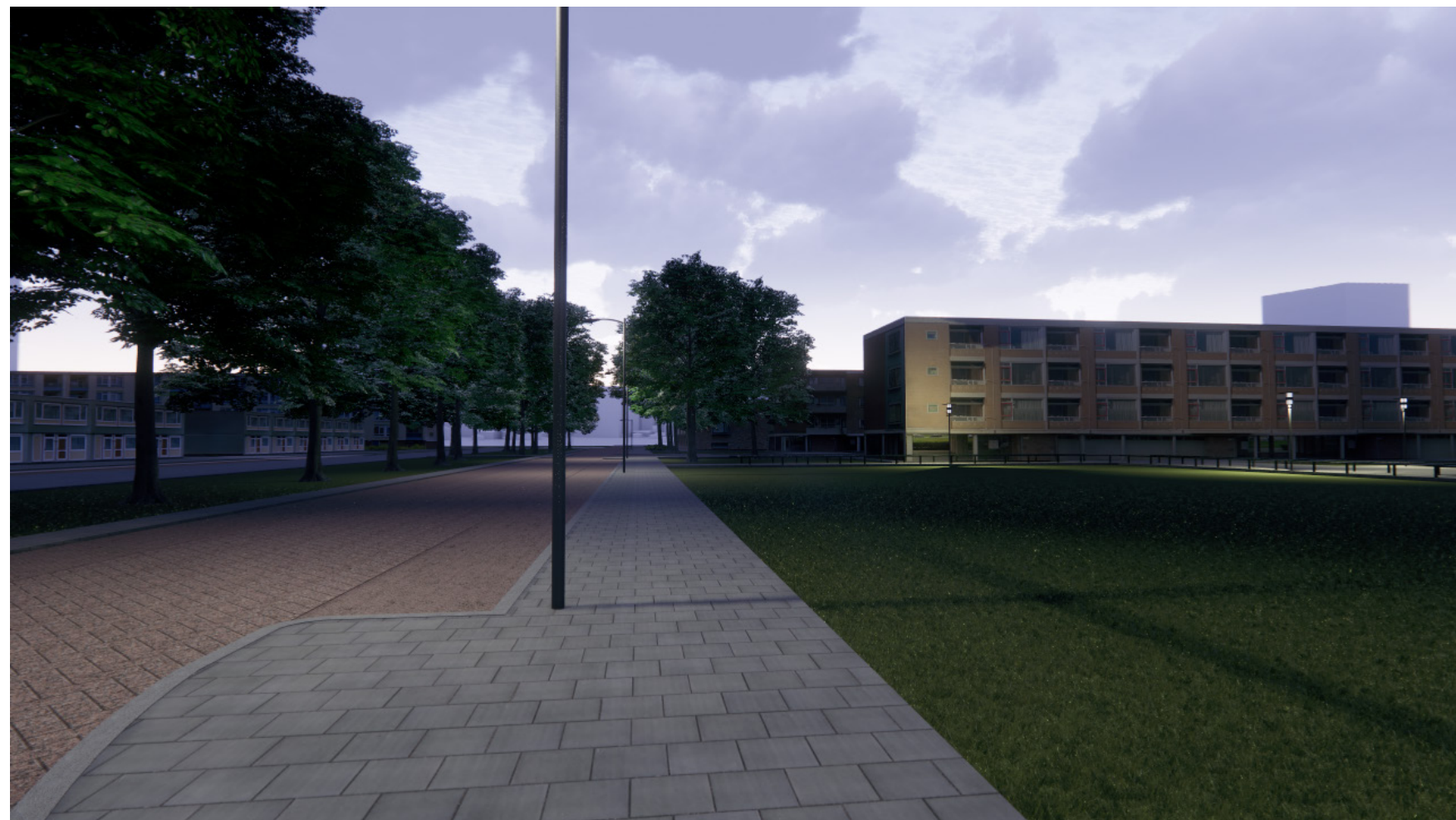

Turn right on the park path

Preference results from adding a path to an empty public space
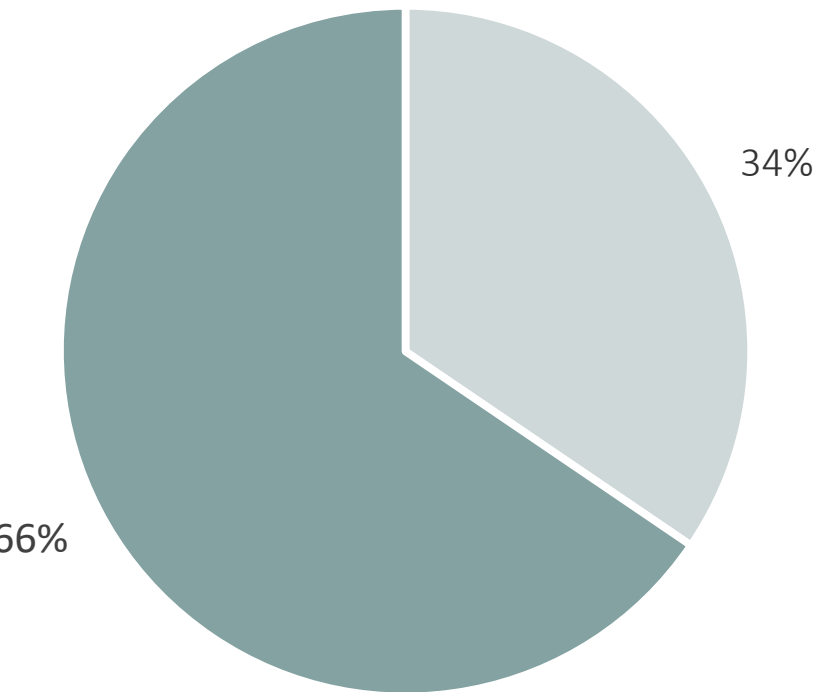

15%

85%

5 / ADDING PHYSICAL BORDERS

Current situation

Adding physical borders

Preference results from adding physical borders
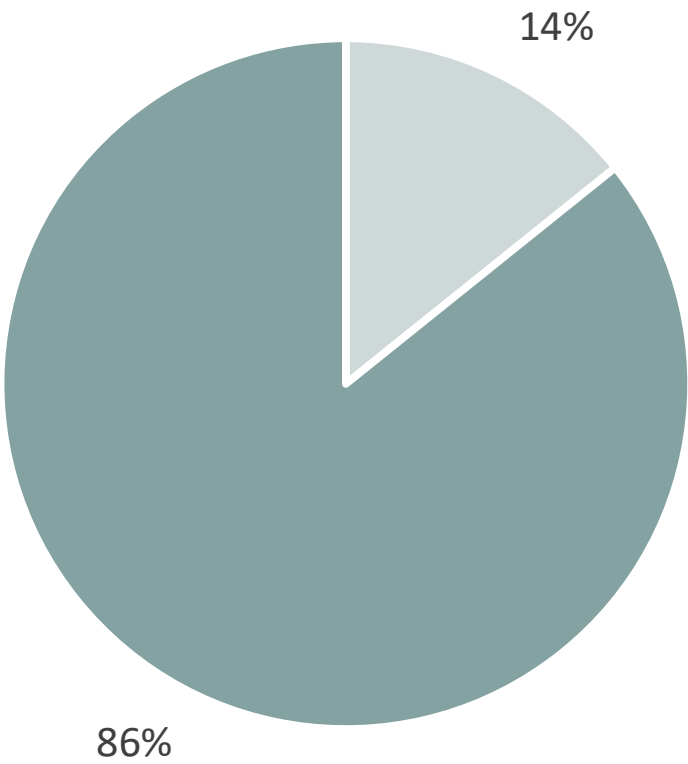

34%

66%

6 / ADDING BUILDING FLOORS
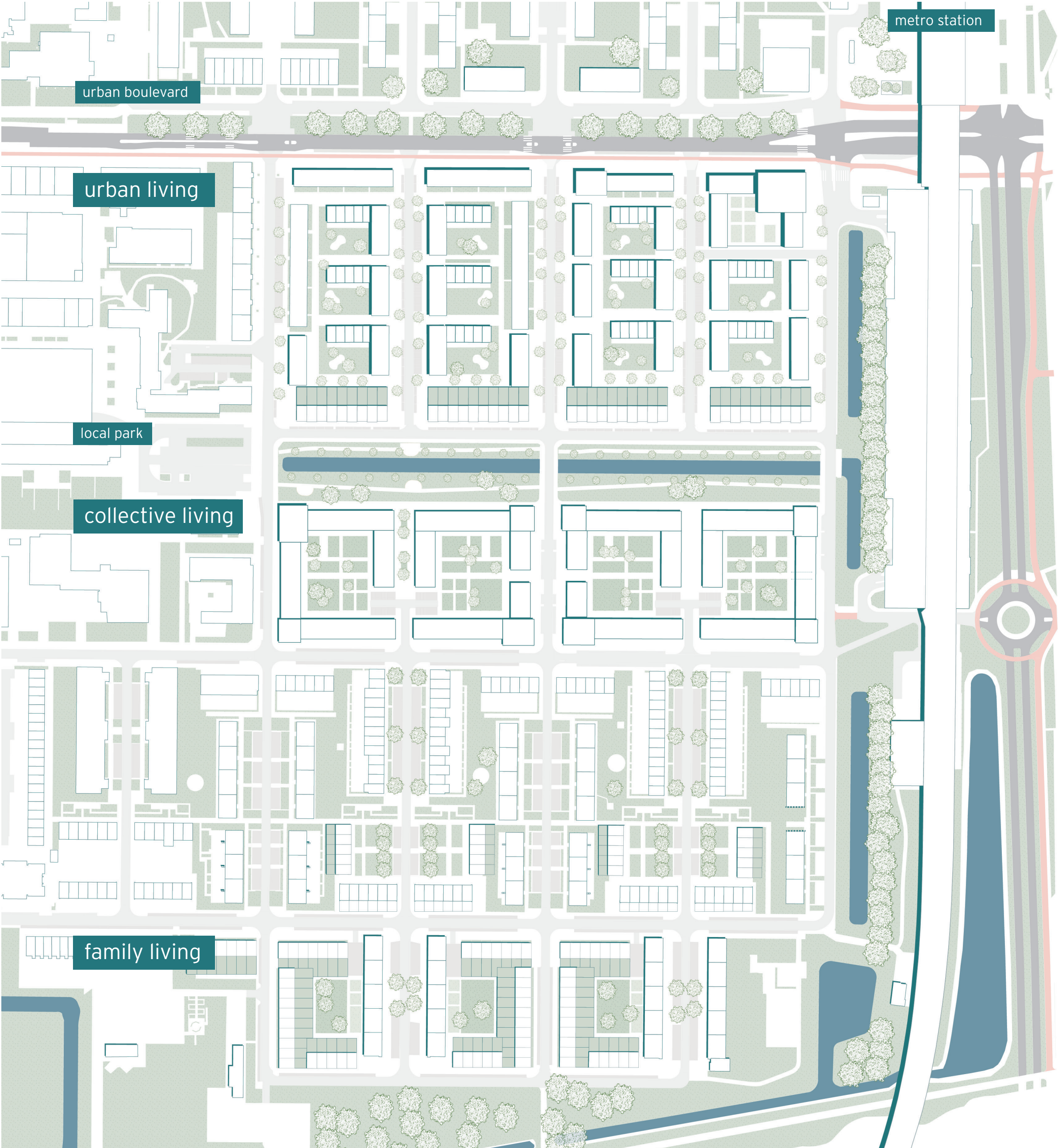
Current situation

Adding building floors
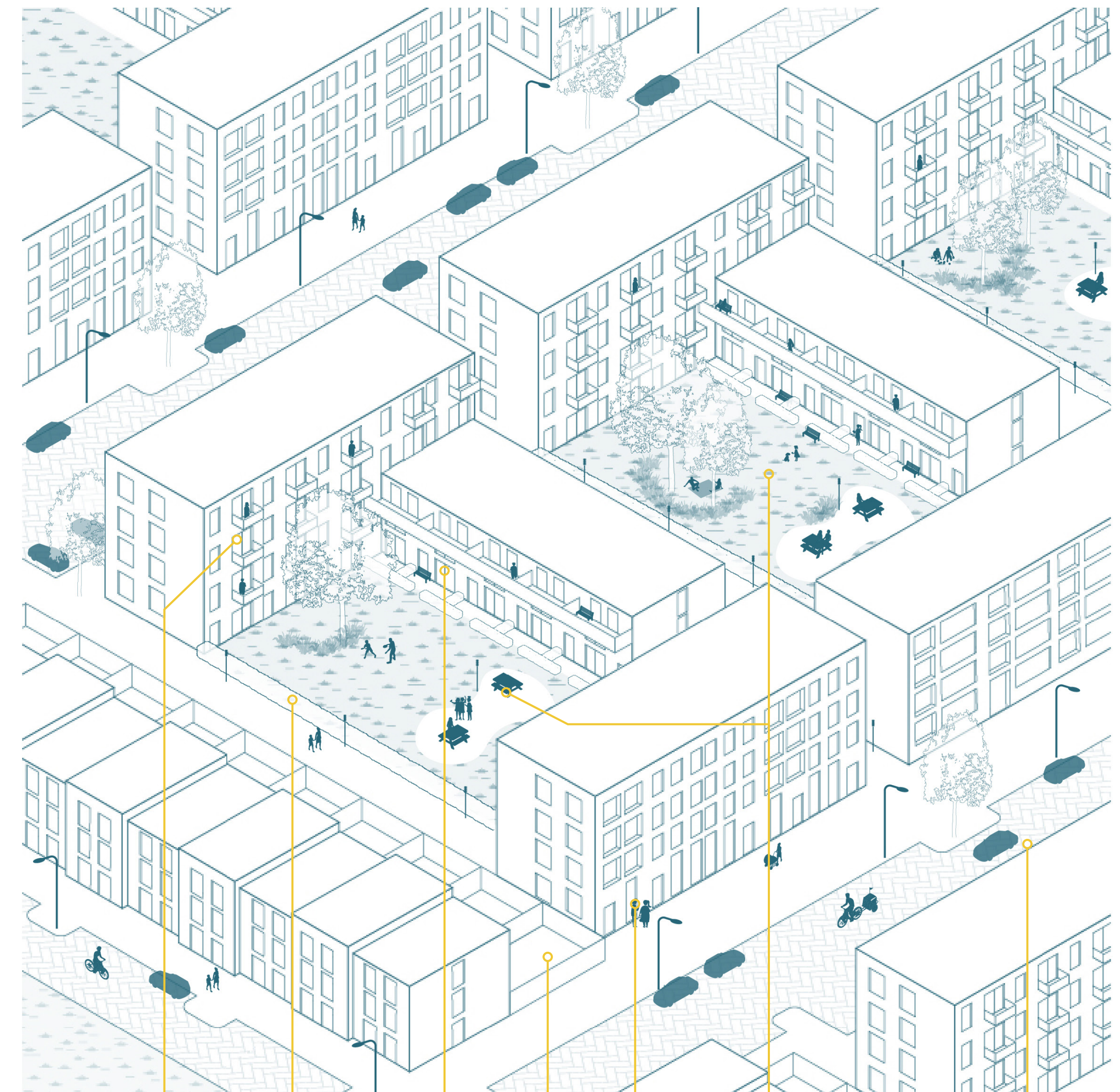

Preference results from adding building floors

14%

86%

MASTERPLAN

metro station

urban boulevard

urban living

local park

collective living

family living

Hedge defining the
collective garden

Shared entrances
on the public side
of the building

Collective garden
seating area
flowerbeds and trees
places to play

Public street

Apartments overlooking the
public street and the collective
garden with balconies for infor-
mal supervision

Apartments adjacent to the
collective garden for infor-
mal supervision

Fenced of backyards
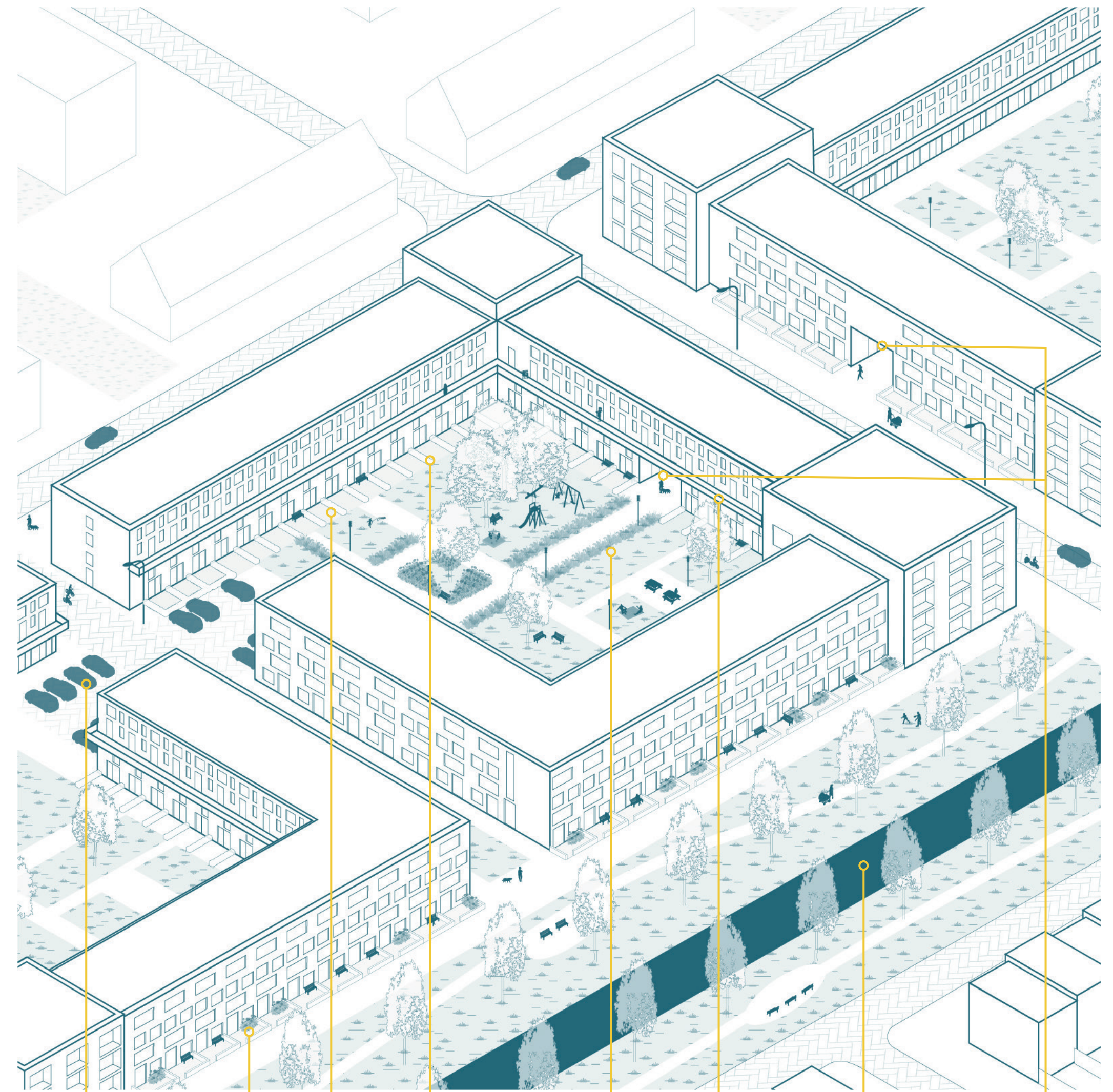
Parking area for the residents of the block

Front door and front garden that overlook the local park

Backyards which function as transition zones between private and collective sapce

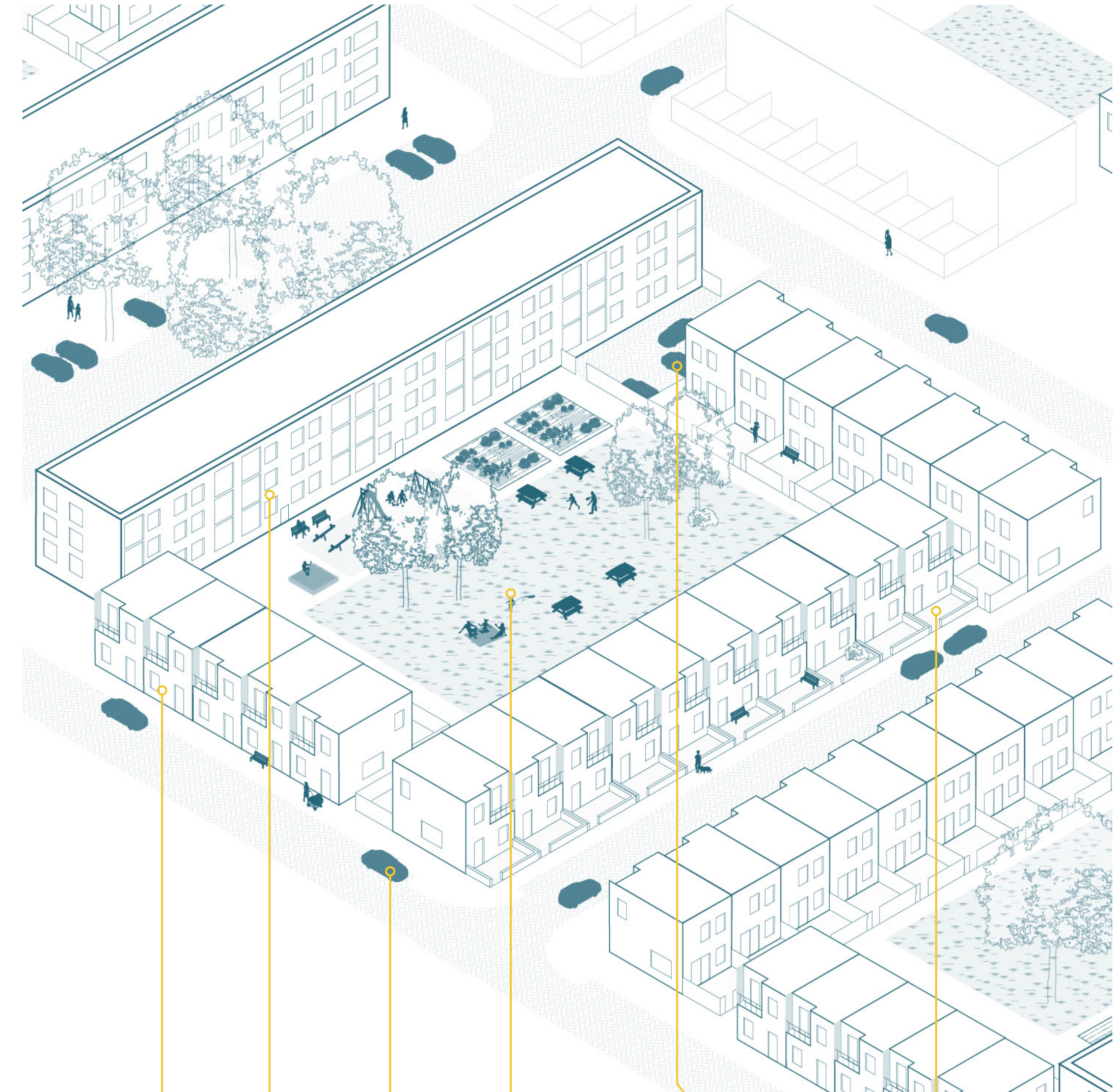Hedges separate the backyards of the maisonettes

Collective garden
seating area
playground
flower beds
pedestrian paths

Gallery to enter the maisonettes on the second floor

Local public park for the neighborhood residents and visitors

Underpass with shared entrances to the upper maisonette homes

Single family houses
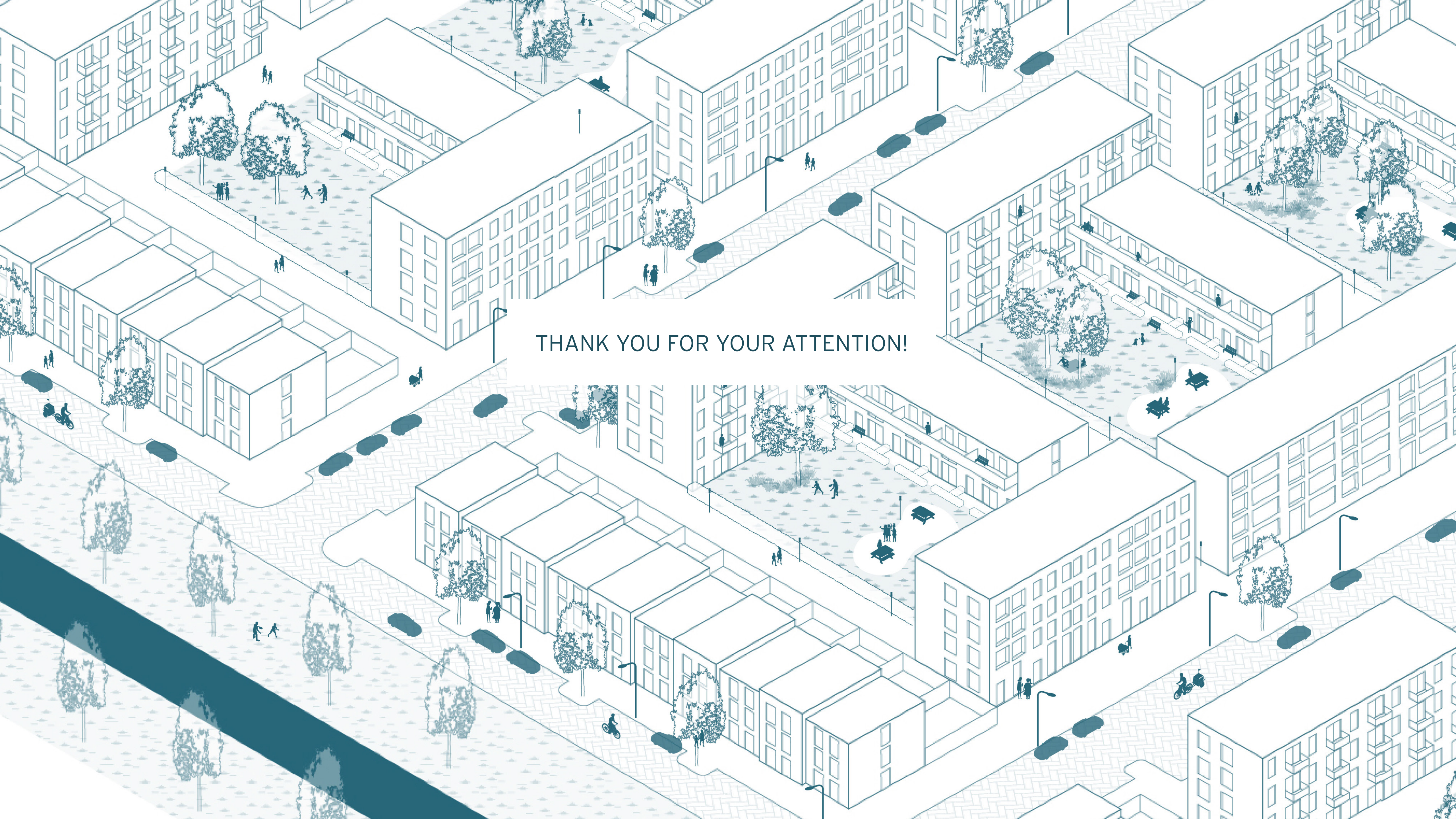
Parallel parking in front of the houses

Collective garden
Program of the garden will be determined by the residents

Parking area for the residents of the block

Front gardens to encourages encounters between neighbors

Existing apartment building with added doors to the collective garden

THANK YOU FOR YOUR ATTENTION!