



Walk  
your way to  
Joy

Charlotte Verkleij  
P5 18<sup>th</sup> of June 2024

A radical redesign of the postwar neighbourhood  
for a joyful future of its residents

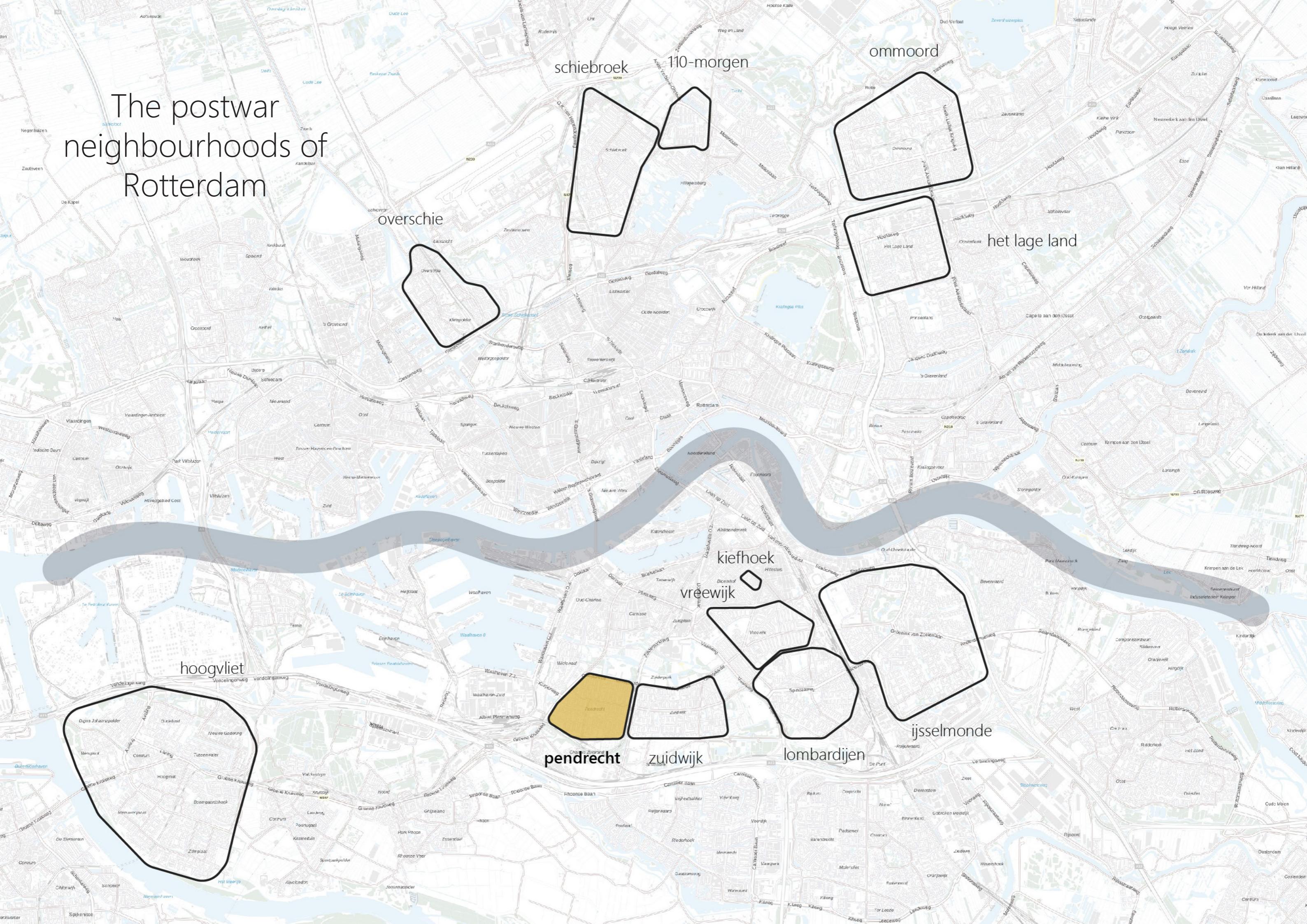




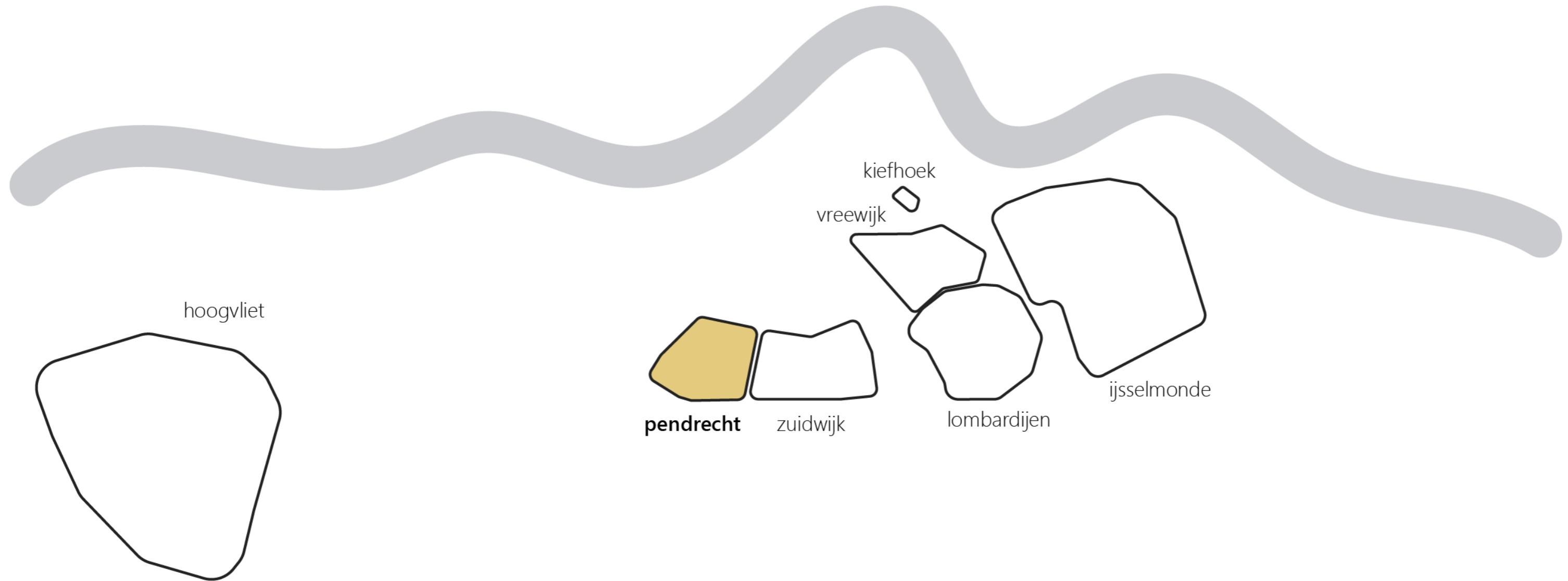
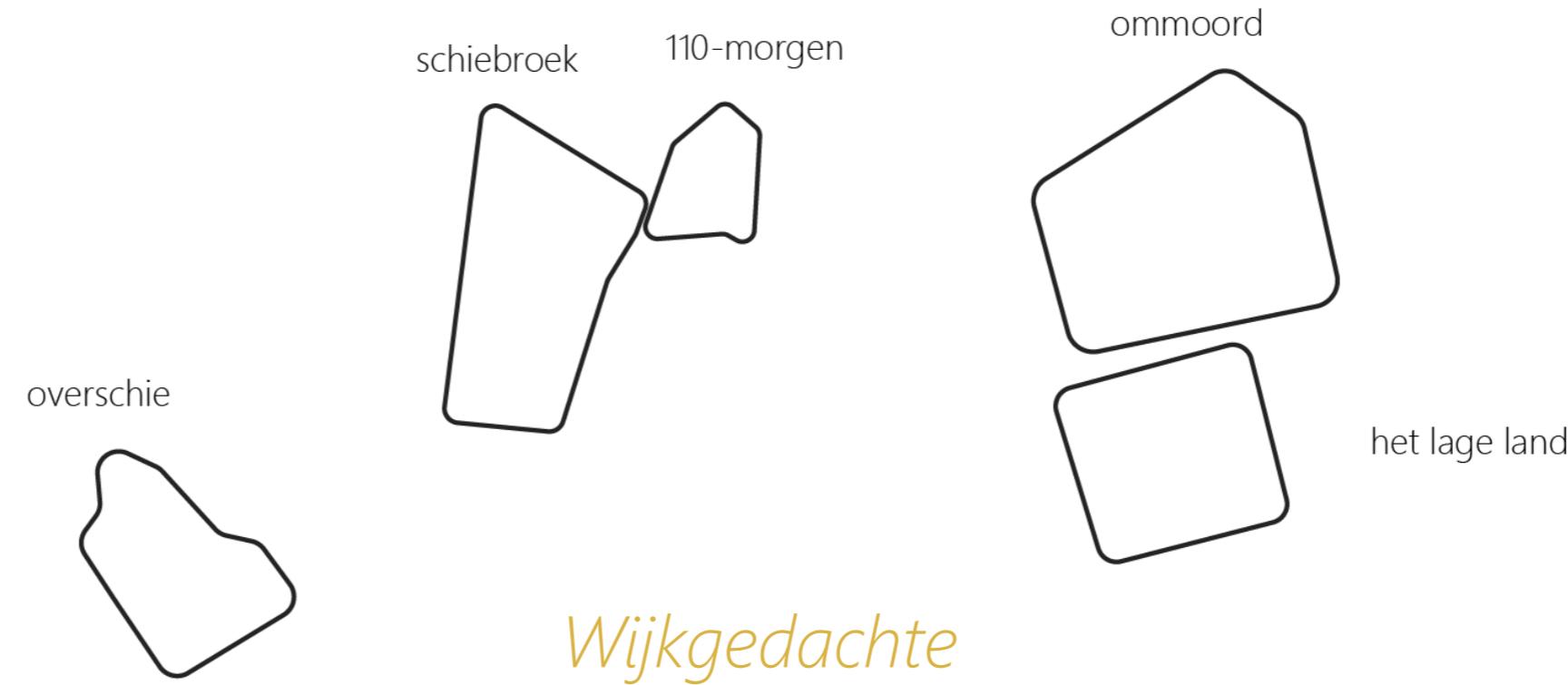


Middelhuisstraat  
21-49

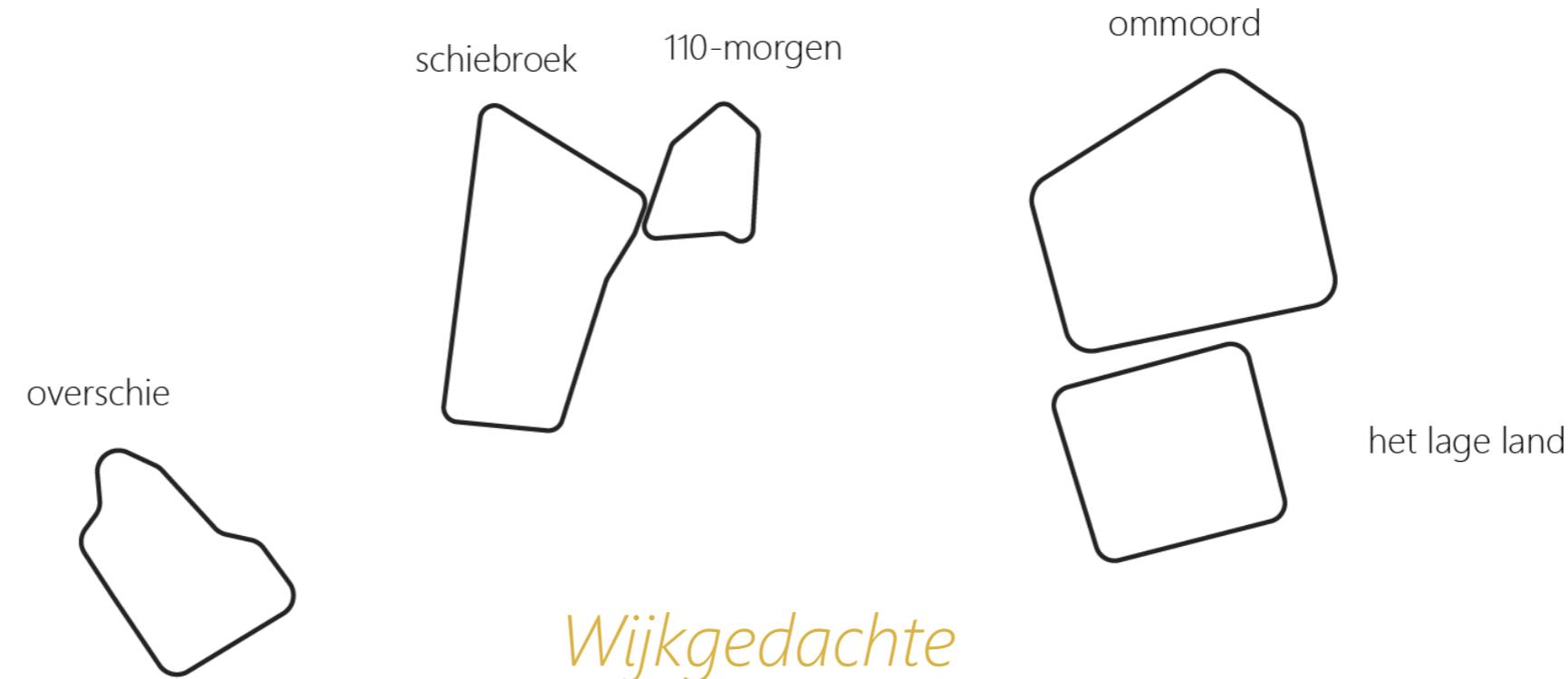
# The postwar neighbourhoods of Rotterdam



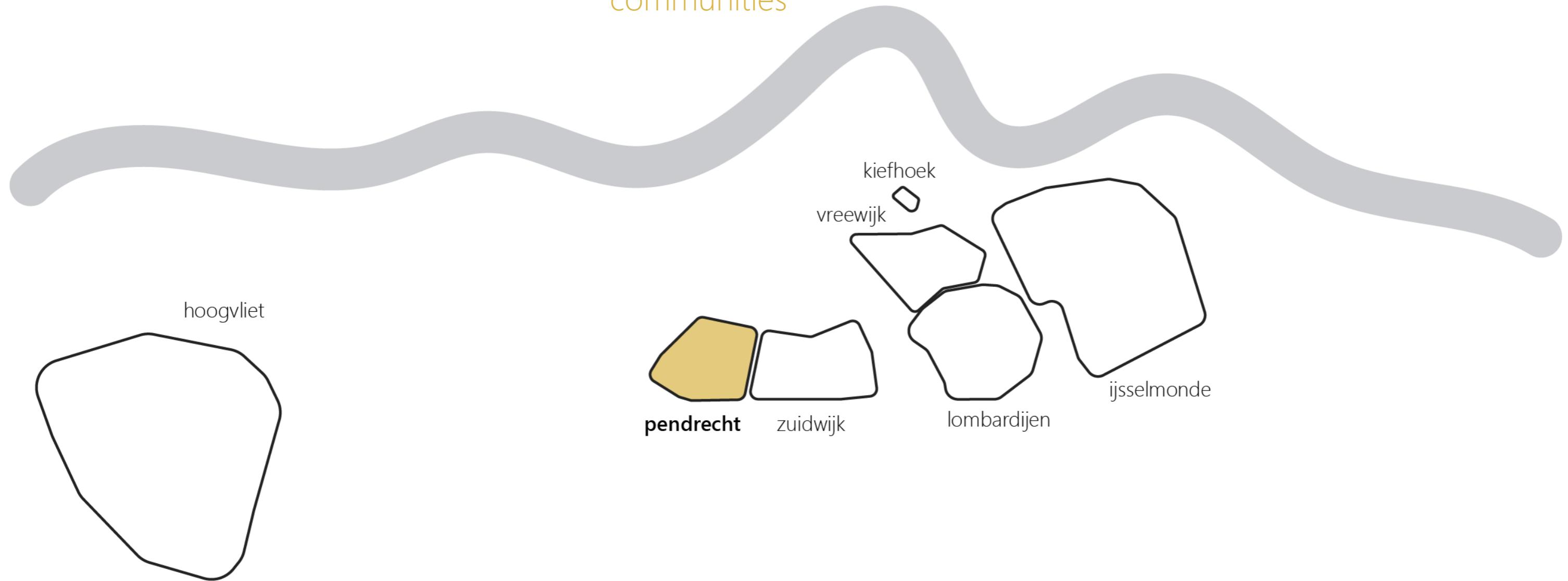
# The postwar neighbourhoods of Rotterdam



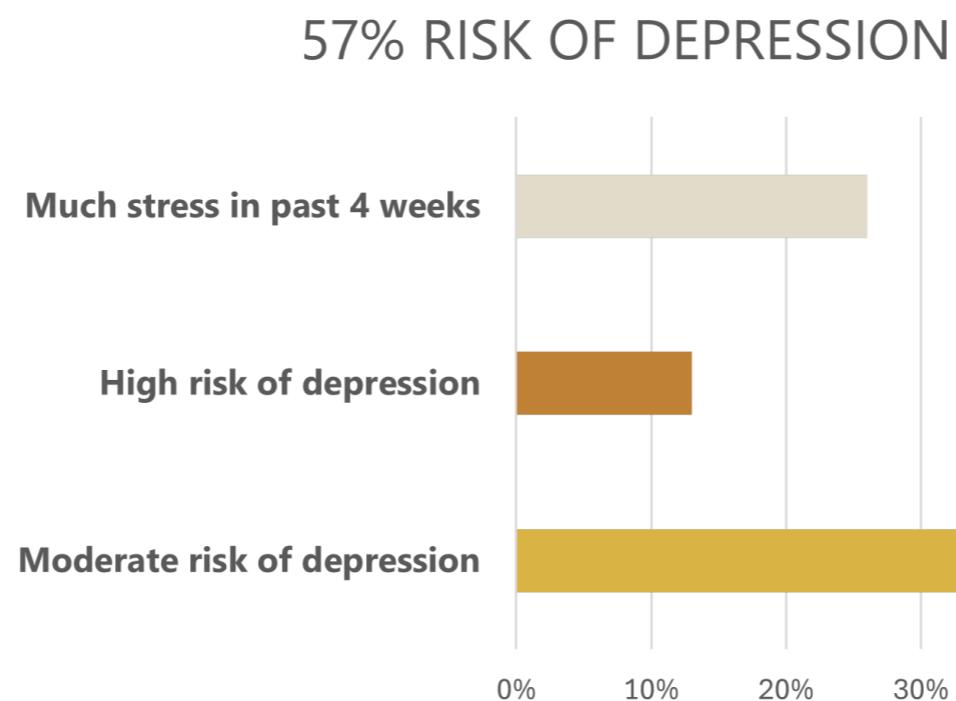
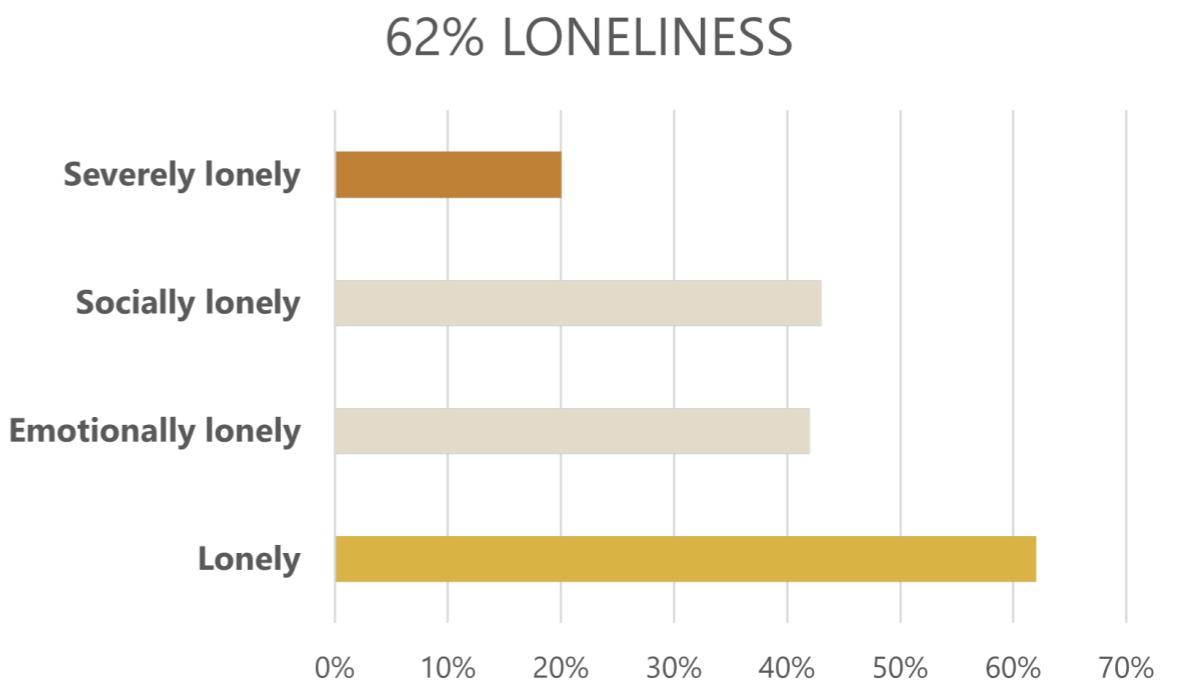
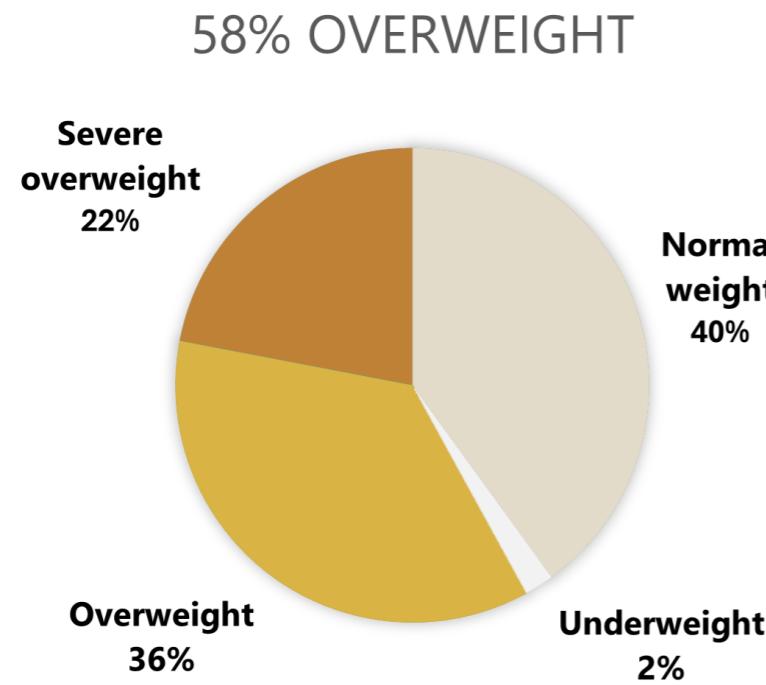
# The postwar neighbourhoods of Rotterdam



strong social  
communities      joie de vivre



# Pendrecht: Joy?



How can the radical redesign of a postwar neighbourhood lead to a joyful future for its residents?

# Utopia

Definition:

'A utopia (/ju: 'toupiə/ yoo-TOH-pee-ə) typically describes an **imaginary community** or society that possesses **highly desirable** or near-perfect **qualities** for its members.'

(Source: Wikipedia, n.d.)

A light gray thought bubble shape with a wavy bottom edge and a small trail of three smaller circles extending to the right. Inside the bubble, the text 'What if...' is written in a yellow, cursive, sans-serif font.

*What if...*

In what way can the urban environment  
evoke joy?

# Joy

Definition:

The emotion evoked by the totality of **physical**, **mental** and **social** well-being.

# *Walking*



physical well-being

social well-being

mental well-being

# *Joy*

# *Walking*

physical activity  
(Urhahn, 2017)

good for the brain  
(Hersenstichting, n.d.)

not polluting the urban  
environment  
regarding air- and noise pollution

physical well-being

social well-being

mental well-being

# *Joy*

# *Walking*

physical activity  
(Urhahn, 2017)

good for the brain  
(Hersenstichting, n.d.)

not polluting the urban  
environment  
regarding air- and noise pollution

social encounters  
(Te Brömmelstroet, 2023; Montgomery, 2015)

potential exposure to  
diversity  
(Te Brömmelstroet, 2023)

warmth of people  
(Montgomery, 2015)

feeling of belonging  
(Kluiters, n.d.)

physical well-being

social well-being

mental well-being

# *Joy*

# *Walking*



# *Joy*

# *Walking*

physical activity  
(Urhahn, 2017)

good for the brain  
(Hersenstichting, n.d.)

not polluting the urban  
environment  
regarding air- and noise pollution

social encounters  
(Te Brömmelstroet, 2023; Montgomery, 2015)

potential exposure to  
diversity  
(Te Brömmelstroet, 2023)

**warmth of people**  
(Montgomery, 2015)

intentionally slowing  
down  
(Hemel, 2023)

**healing touch of nature**  
(Montgomery, 2015)

better mood with less  
stress  
(Hersenstichting, n.d.)

physical well-being

social well-being

mental well-being

# *Joy*

rich experience of  
surroundings  
(Gehl, 2010)

feeling of belonging  
(Kluiters, n.d.)

# The utopia of the walkable city



Walkability



Proximity of amenities



Local economy



Public space for people



Attractive surroundings



Connection to nature



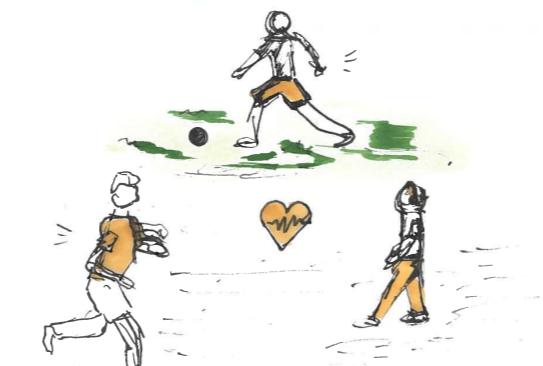
Community building



Social encounters



Accessibility for all



Physical health



Post-growth economy



Time affluence

# What does the pedestrian need?

Proximity of urban amenities

**02**  
**Many and different destinations within walking distance**

**10**  
**Rich facades, lively plinths**

**03**  
**Symbiosis between public transport and walking**

Inviting routes for people and nature

**01**  
**A complete and coherent network of walking routes**

**06**  
**Findable and accessible**

**08**  
**Walking comfort**

**09**  
**The senses of the walking human**

More space for walking, less space for driving

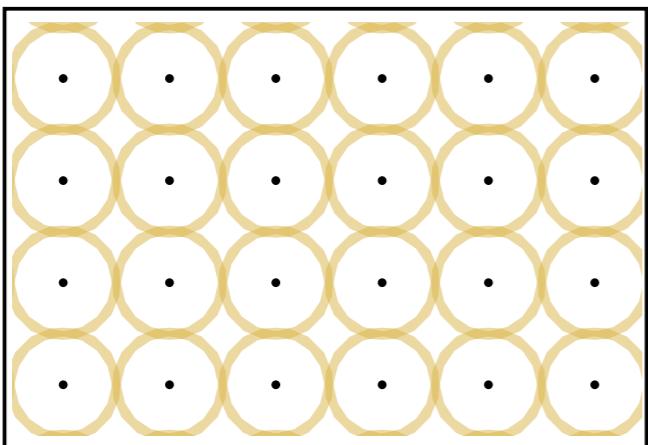
**04**  
**Less cars, low velocity**

**05**  
**Crossings are for pedestrians**

**07**  
**More space for pedestrians**

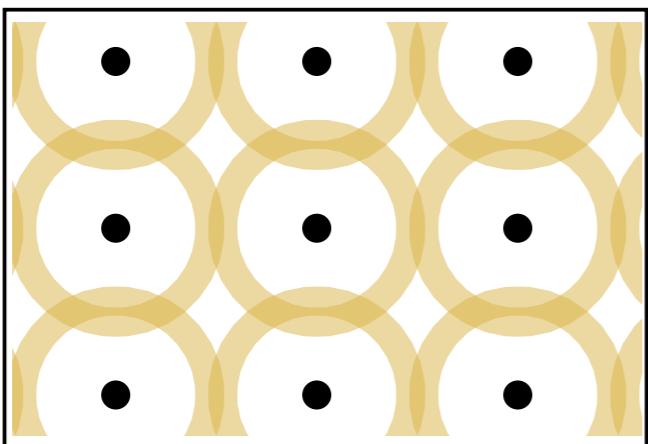
# Urban amenities

## Hierarchy of amenities



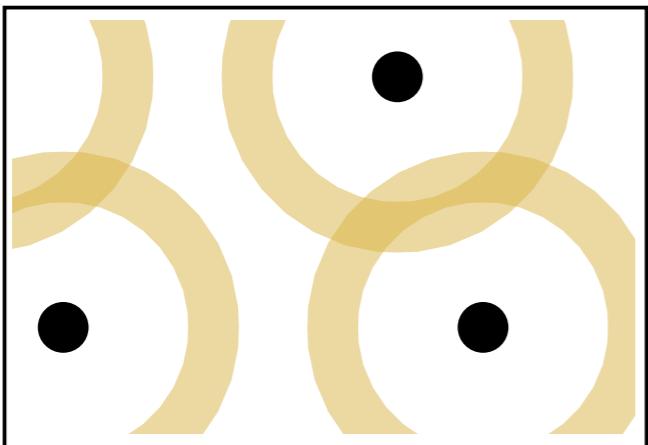
### DAILY **NEIGHBOURHOOD**

e.g. primary school, general practitioner, playgrounds, supermarket, café, metro station



### WEEKLY **DISTRICT**

e.g. library, cultural centre, sport hall, allotment gardens, warehouse, train station



### MONTHLY **RIVER BANK**

e.g. secondary school, podium, cinema, nature park, transfer train station

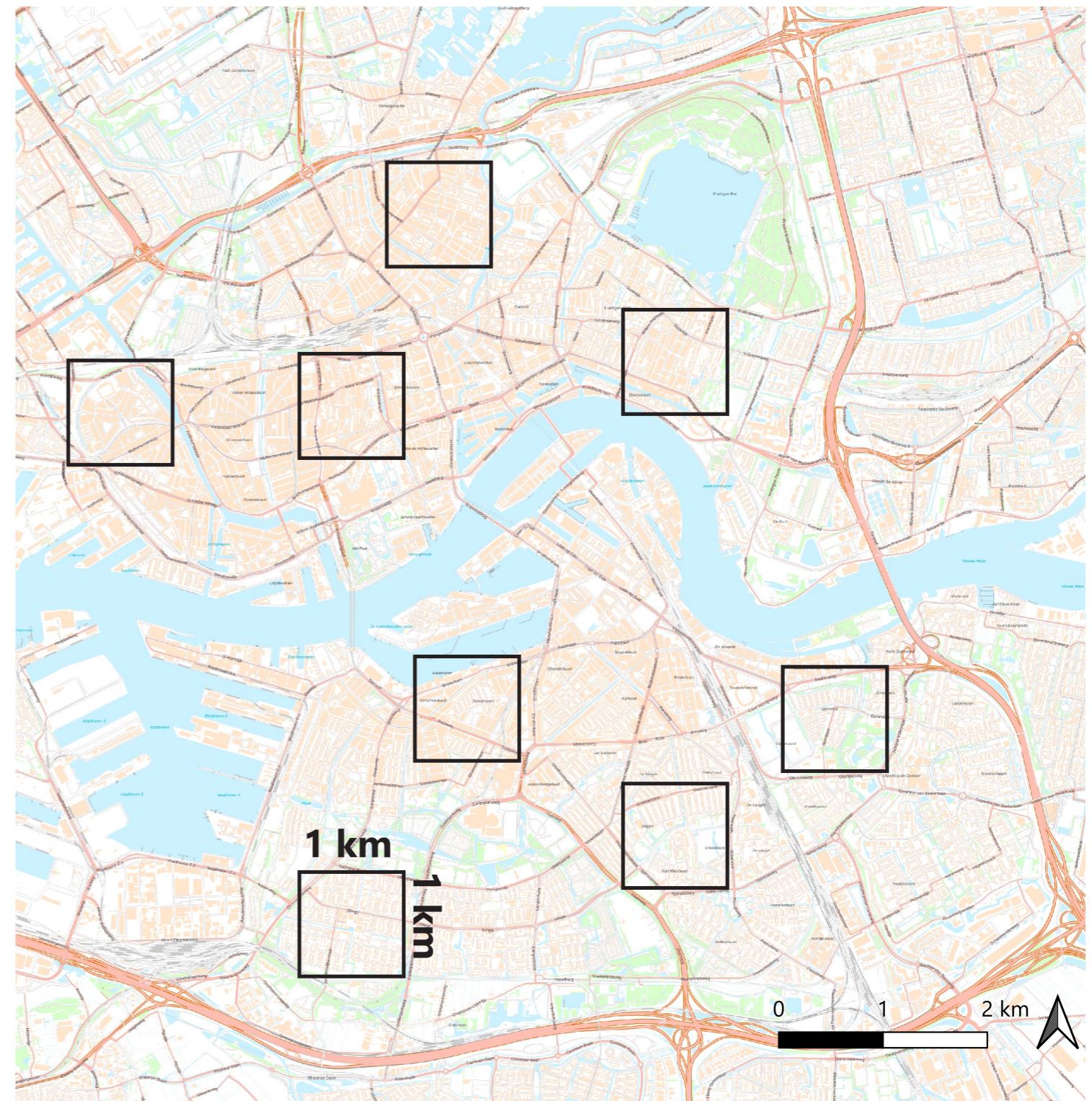
# Proximity

Urban amenities within walking distance

*What is walkable?*  
max. 15 min. walking  
speed ~ 4 km/h  
distance ~ 1 km

The walkable unit  
1 x 1 km

The walkable unit



What are the hidden qualities of the postwar  
neighbourhood?

Pendrecht

Pendrecht



(Google Earth, 2024)

Google Earth



Design Lotte Stam-Beese 1950's  
*Wijkgedachte*



One independent neighbourhood



Four smaller communities

Design Lotte Stam-Beese 1950's  
*Wijkgedachte*



Community shopping street  
Zijpe, 1958

(Fototechnische Dienst Rotterdam, 1958)



Four smaller communities

Design Lotte Stam-Beese 1950's  
*Wijkgedachte*



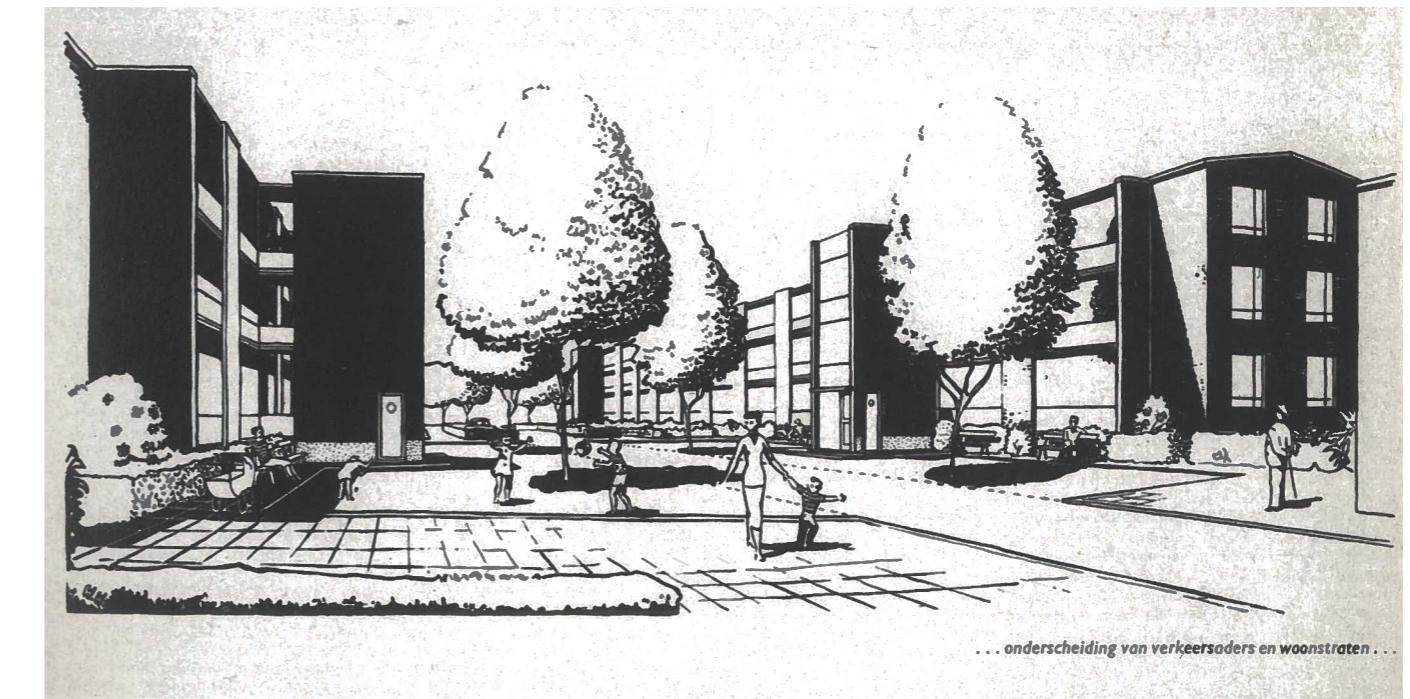
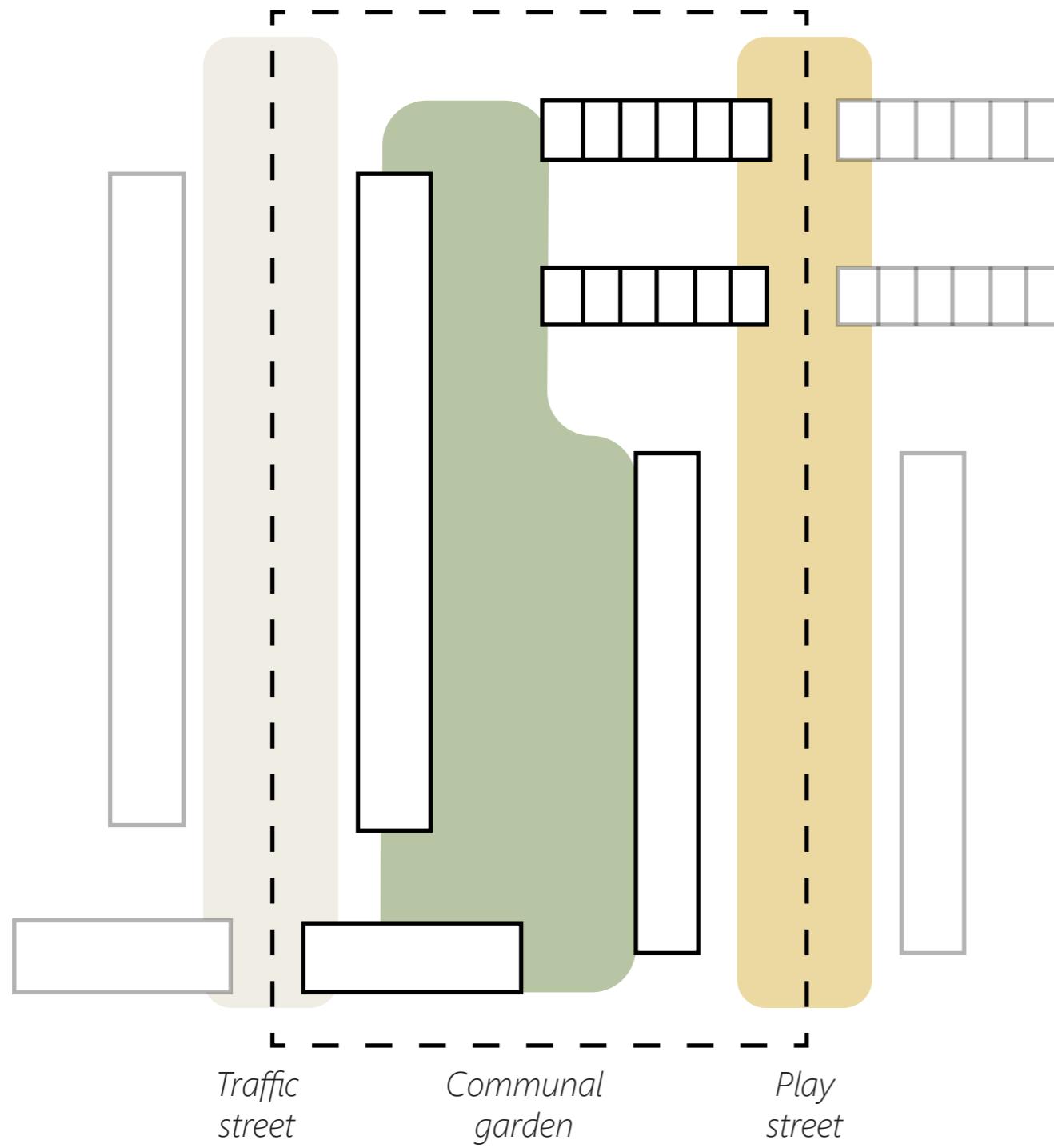
Community shopping street  
Zijpe, now



Four smaller communities

# Design Lotte Stam-Beese 1950's The neighbourhood unit

Half-open block  
with 90 dwellings

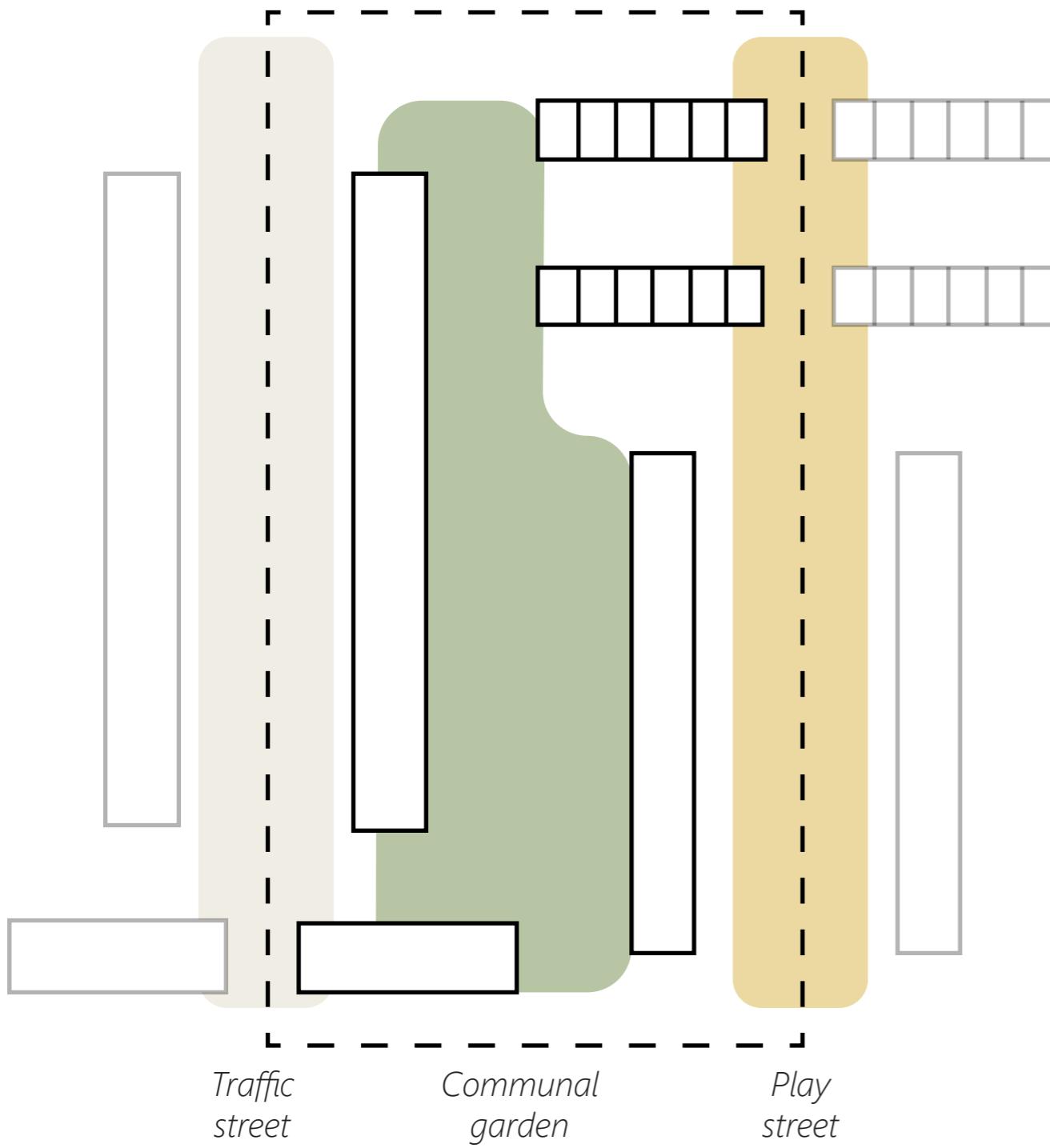


The play street

(Hage & Zweerink, 2005:159)

## Design Lotte Stam-Beese 1950's The neighbourhood unit

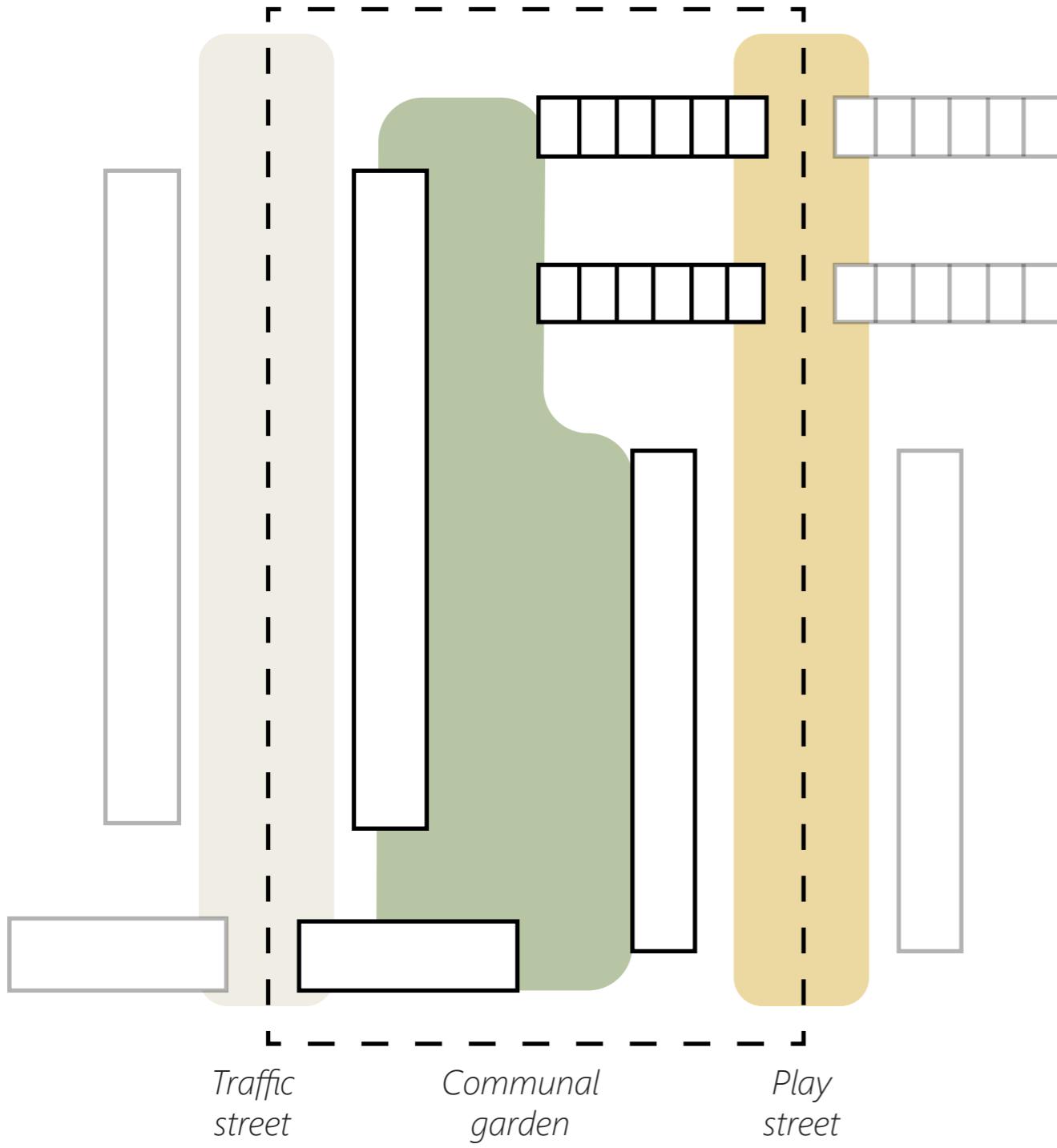
Half-open block  
with 90 dwellings



The communal garden

# Design Lotte Stam-Beese 1950's The neighbourhood unit

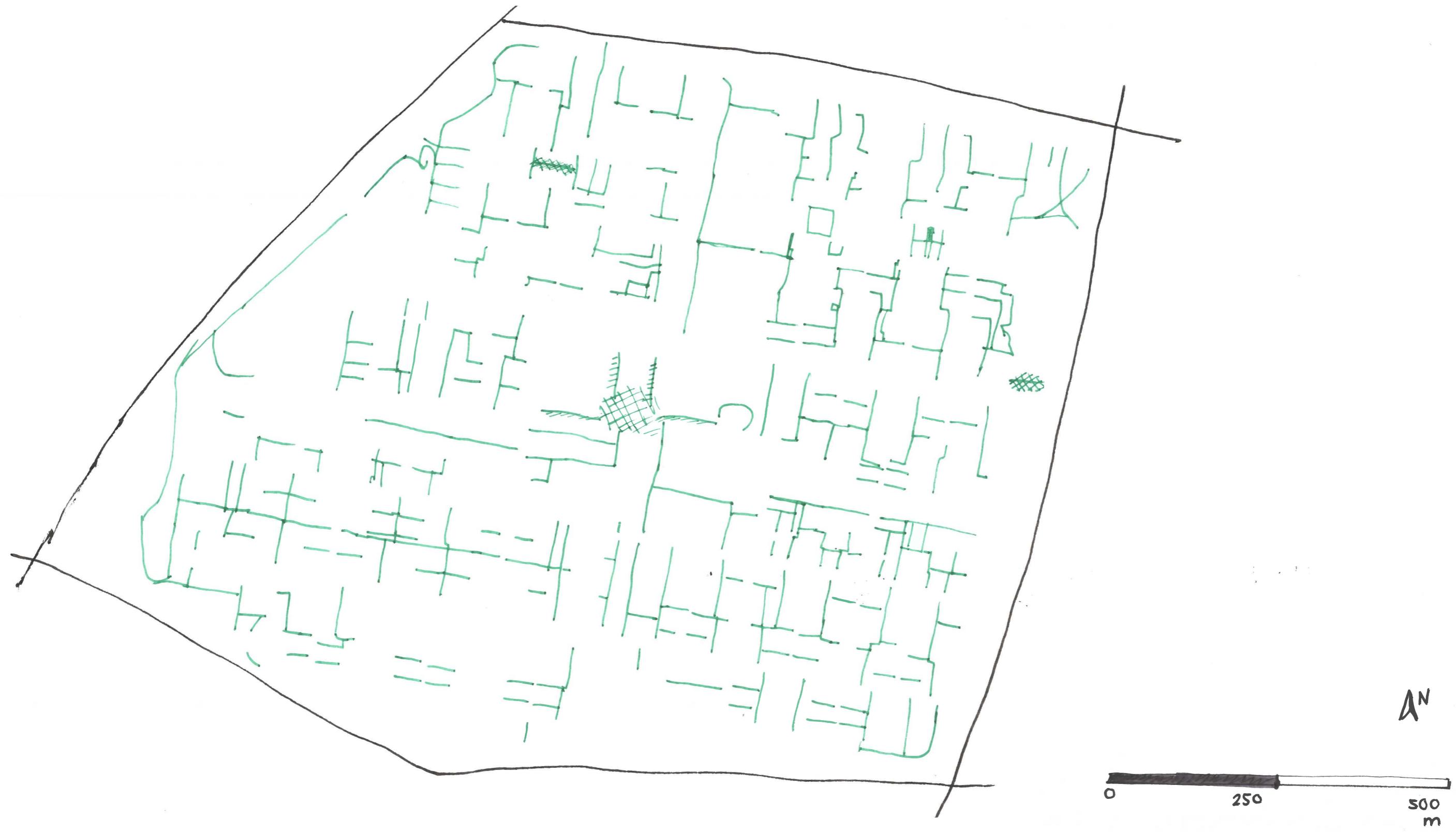
Half-open block  
with 90 dwellings



Underpass to communal garden

(Hage & Zweerink, 2005:158)

Existing network of walking paths





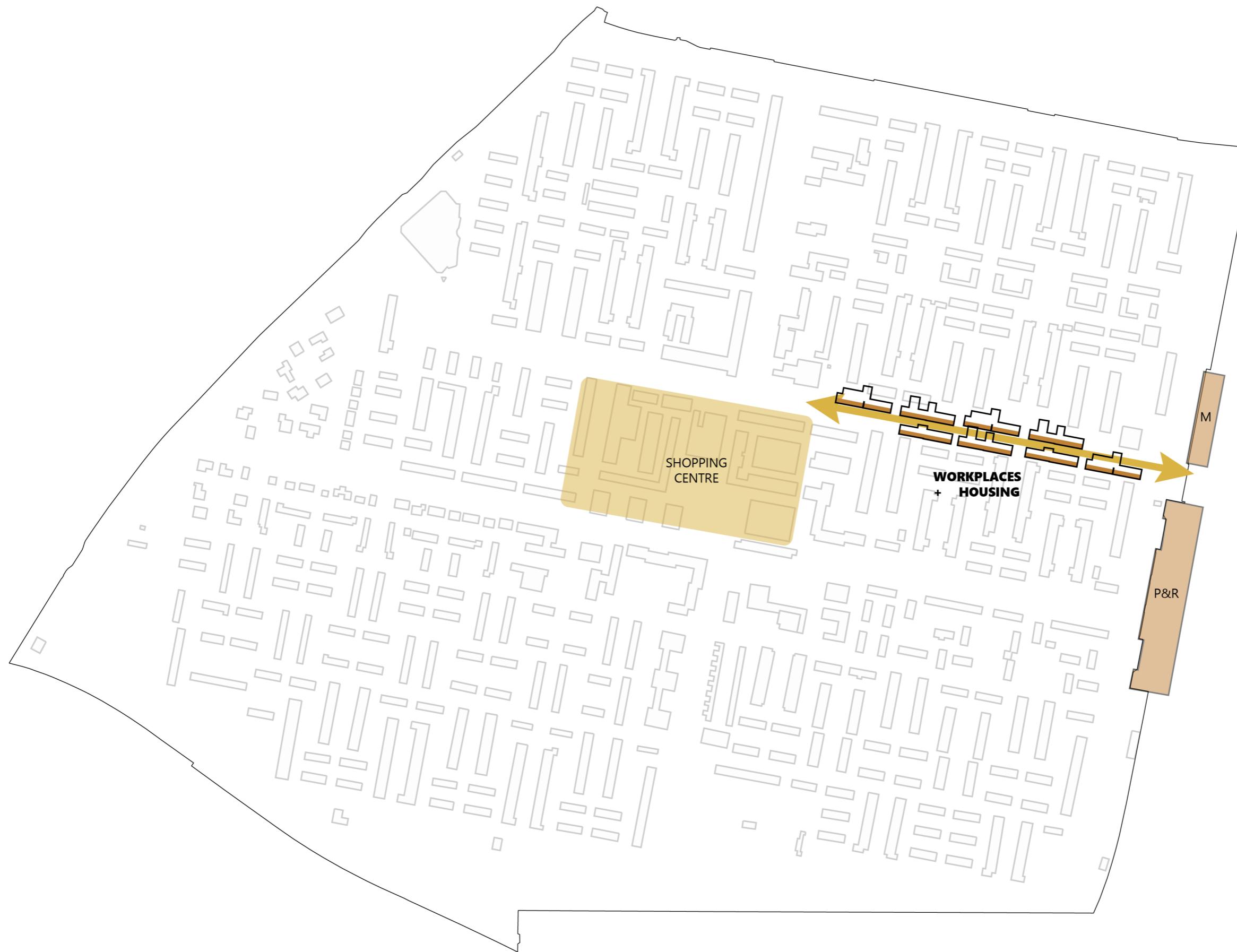
Structure walking plan

## Sources and destinations





# Densify Slinge



# Public park Slinge



## Community centres



## Parking hubs



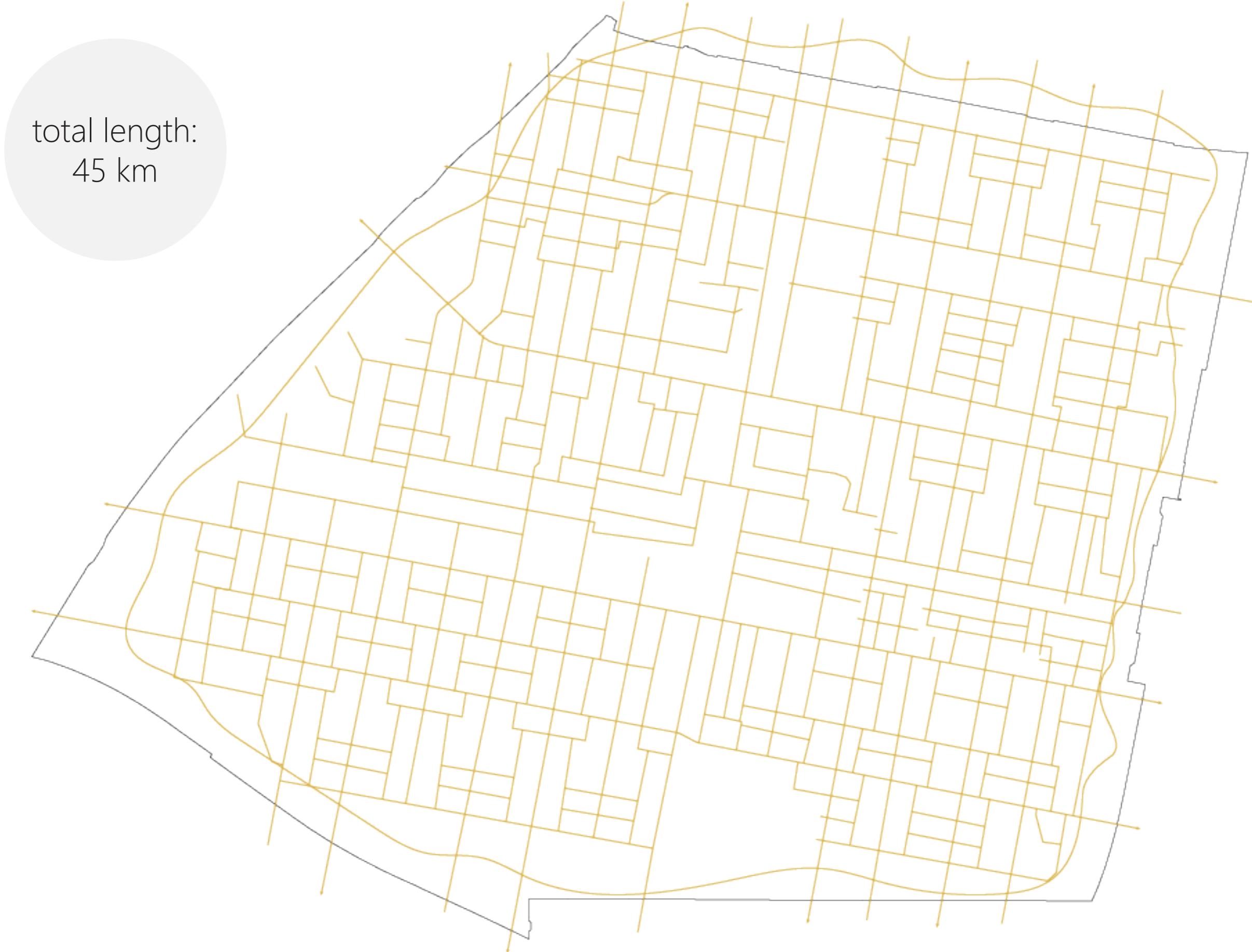
## Ecological route



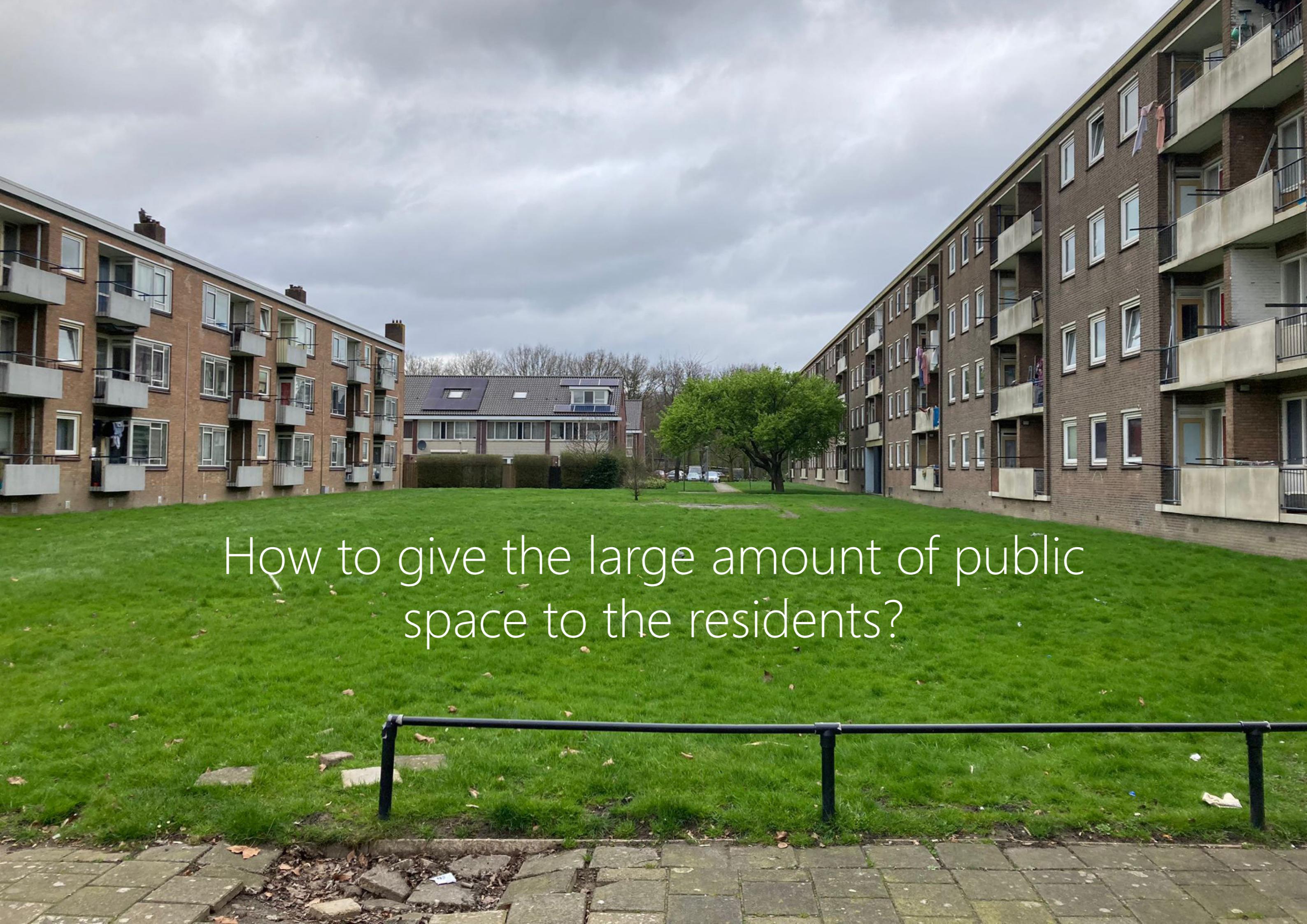
Long lines: main walking paths



## Close-knit walking network







How to give the large amount of public space to the residents?



Allotment garden complex  
Delftse Hout  
(Google Earth, 2024)

100 m



shrubs along  
path max.  
1,0 meter



max. 25%  
pavement,  
incl. shed

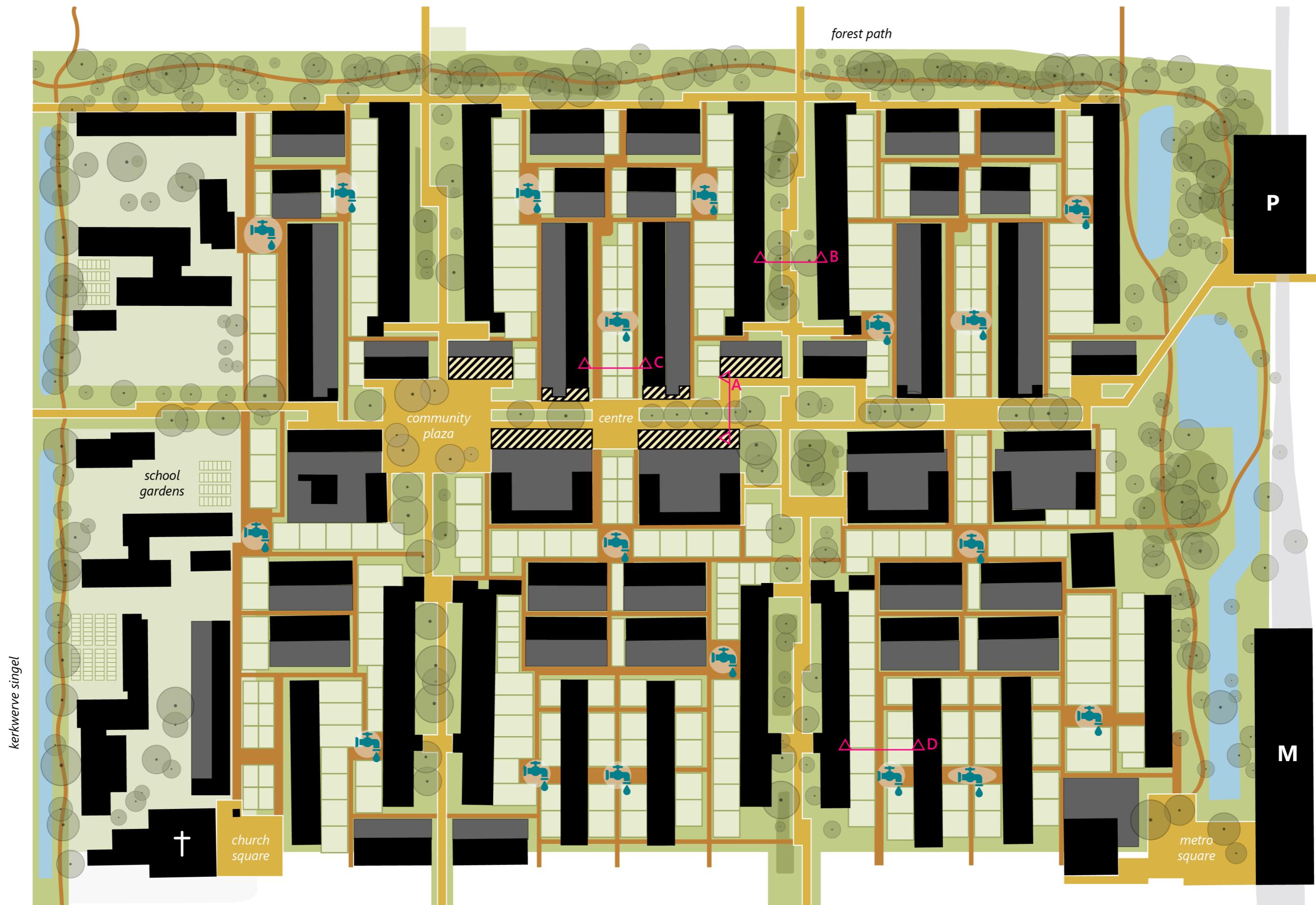
# Allotment garden complex Pendrecht



Joy!

Inviting  
routes for  
people and  
nature

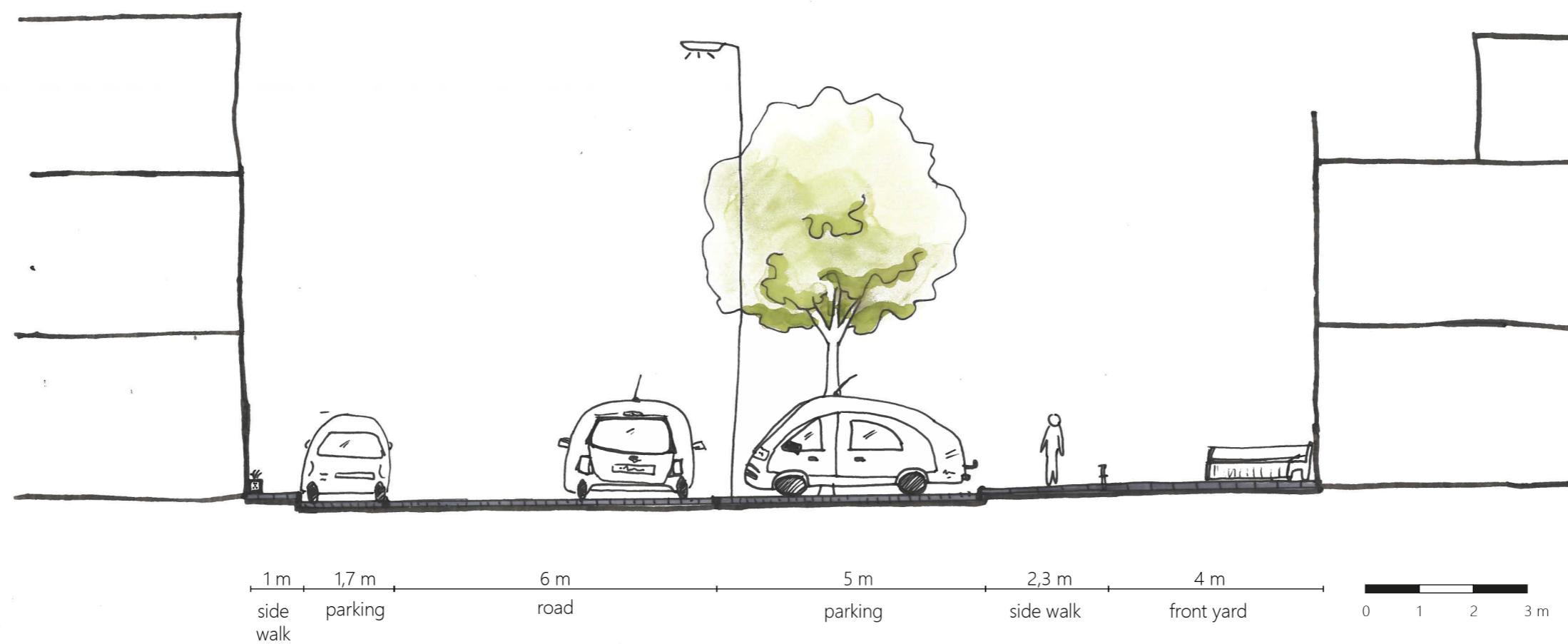
More space  
for walking,  
less space for  
driving



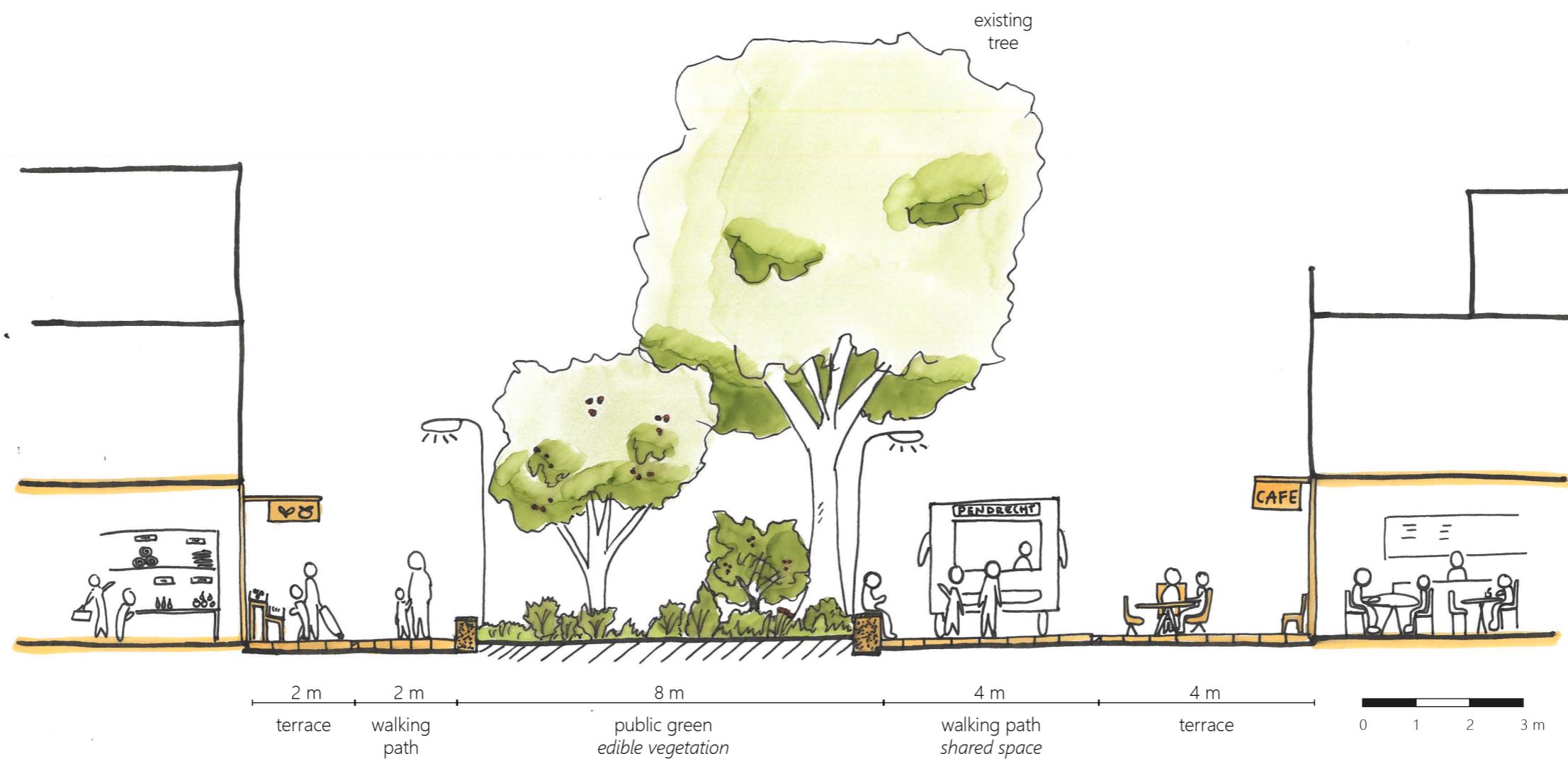
The garden community  
Herkingenbuurt



Before...



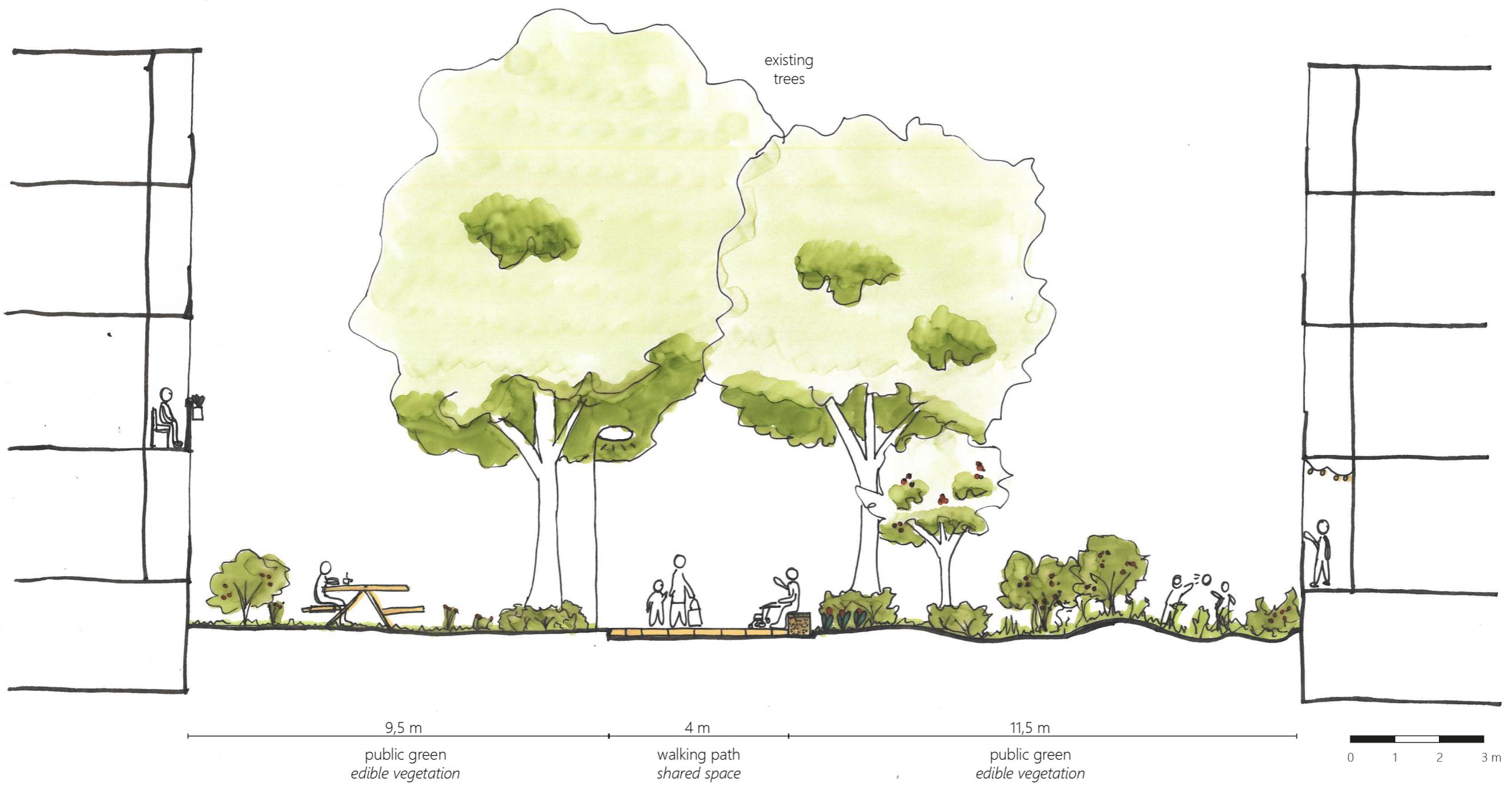
# Community centre



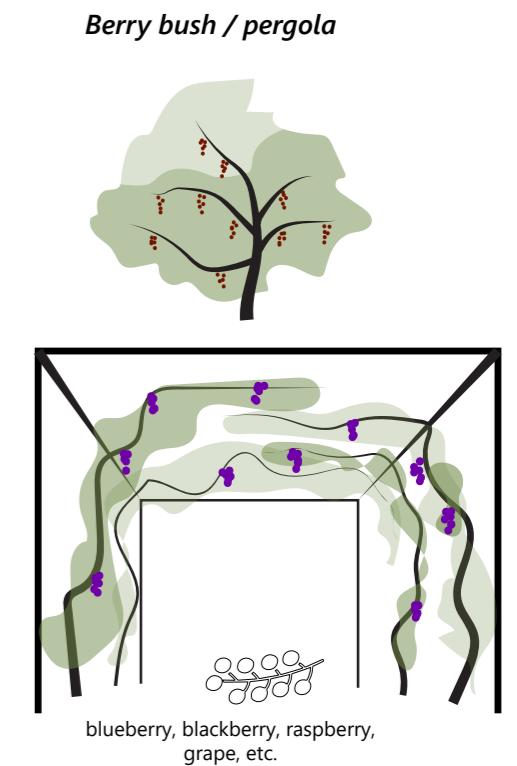
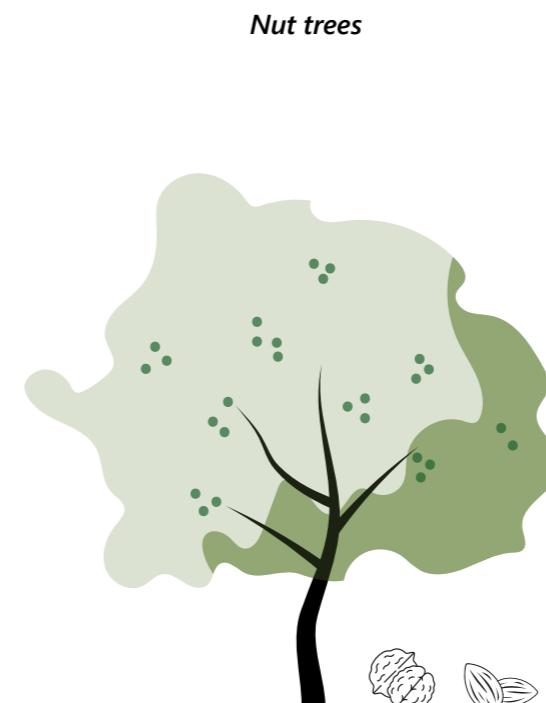
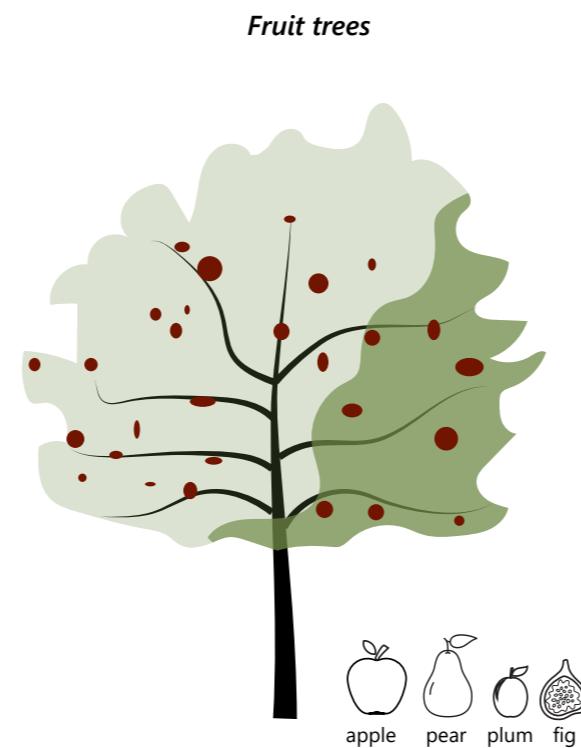
Before...



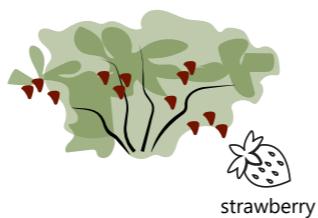
## Main walking route



# Main walking route edible vegetation



*Perennial plants*



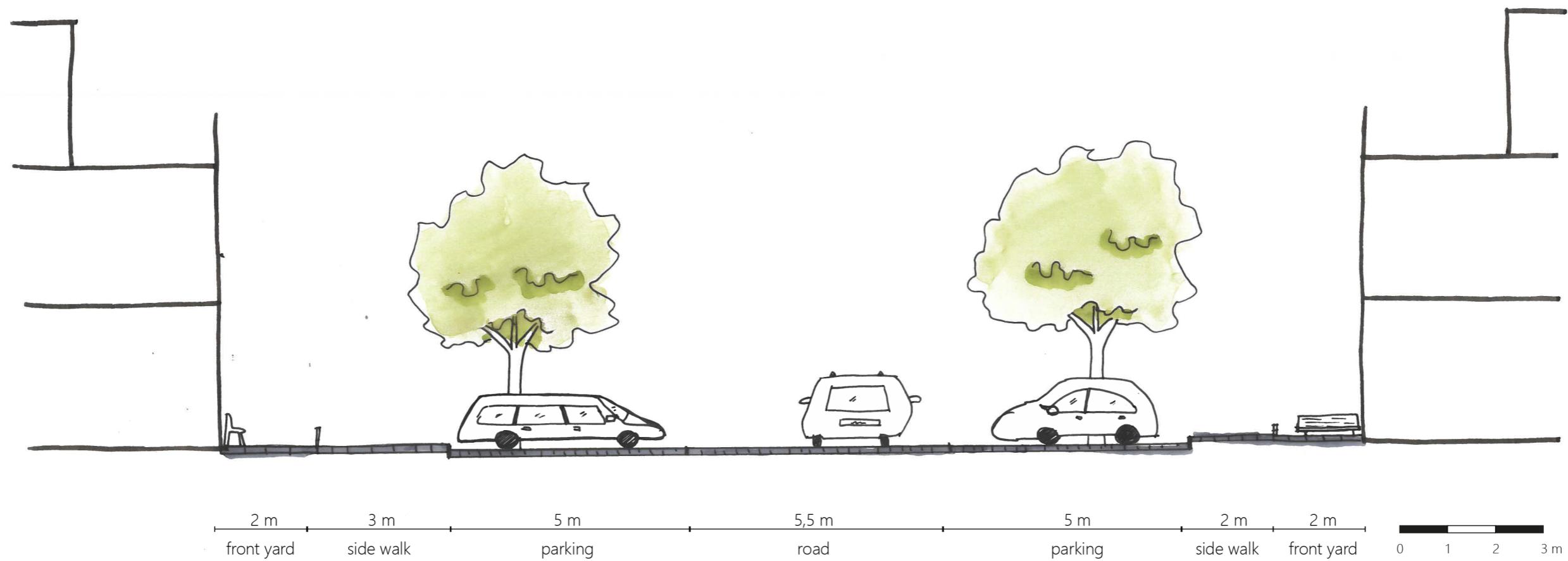
*Herbs*



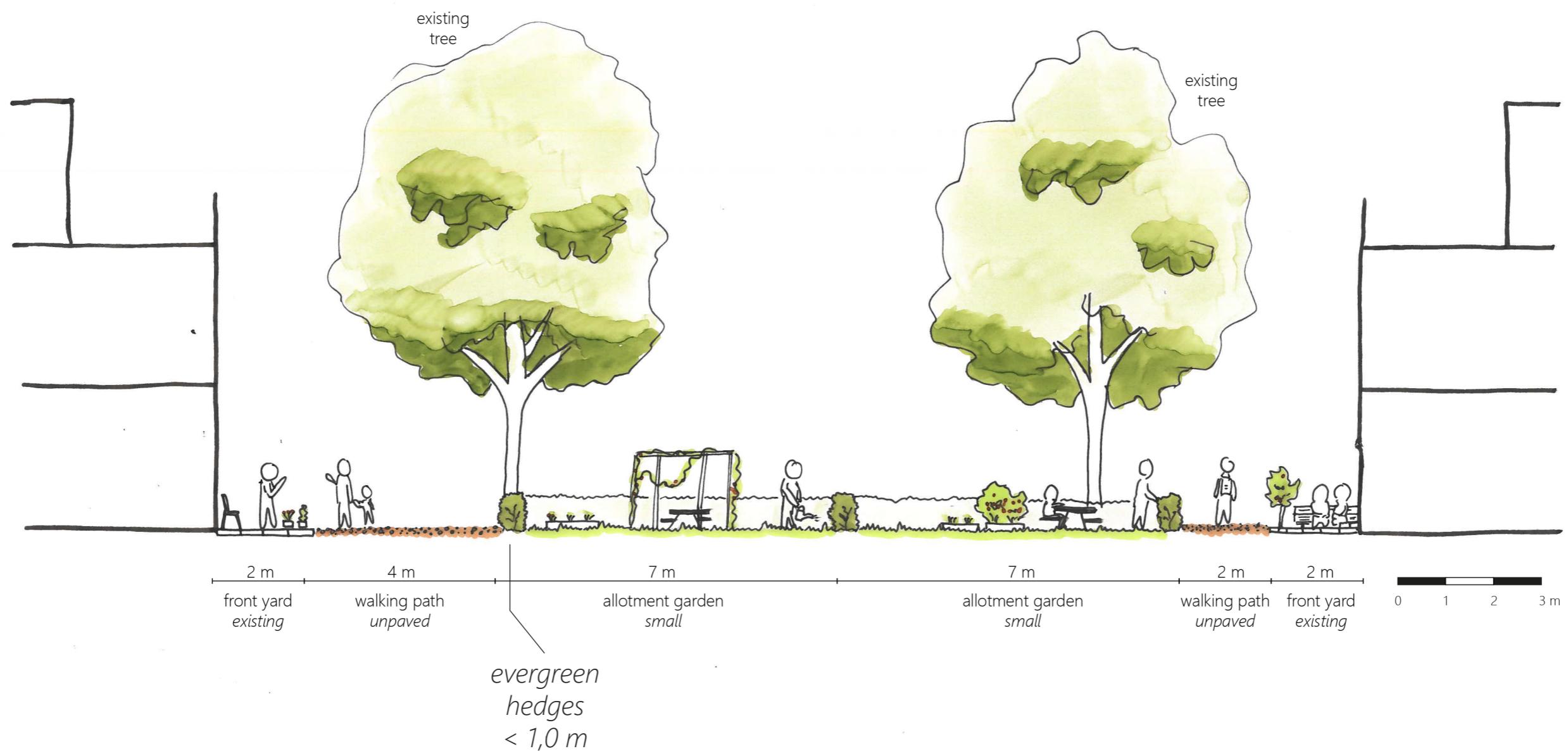
*Layers of vegetation*



Before...

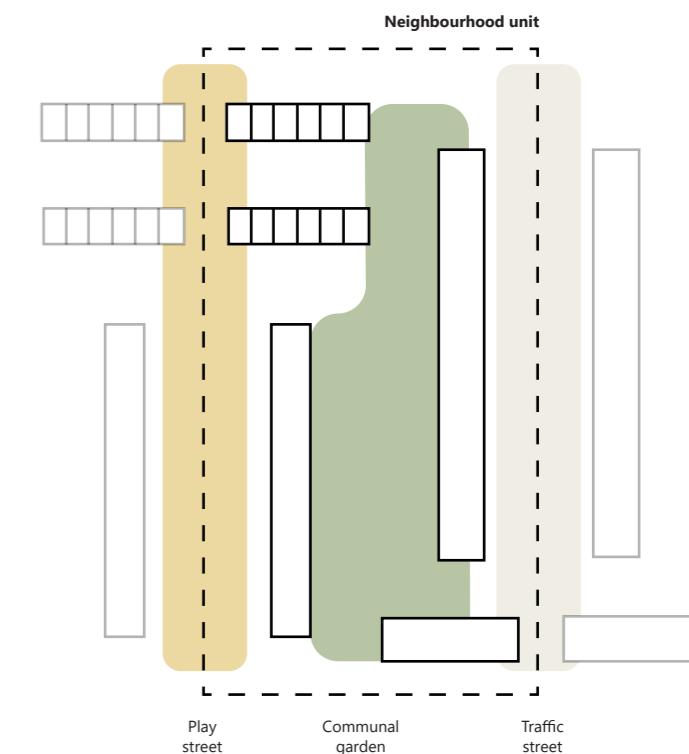


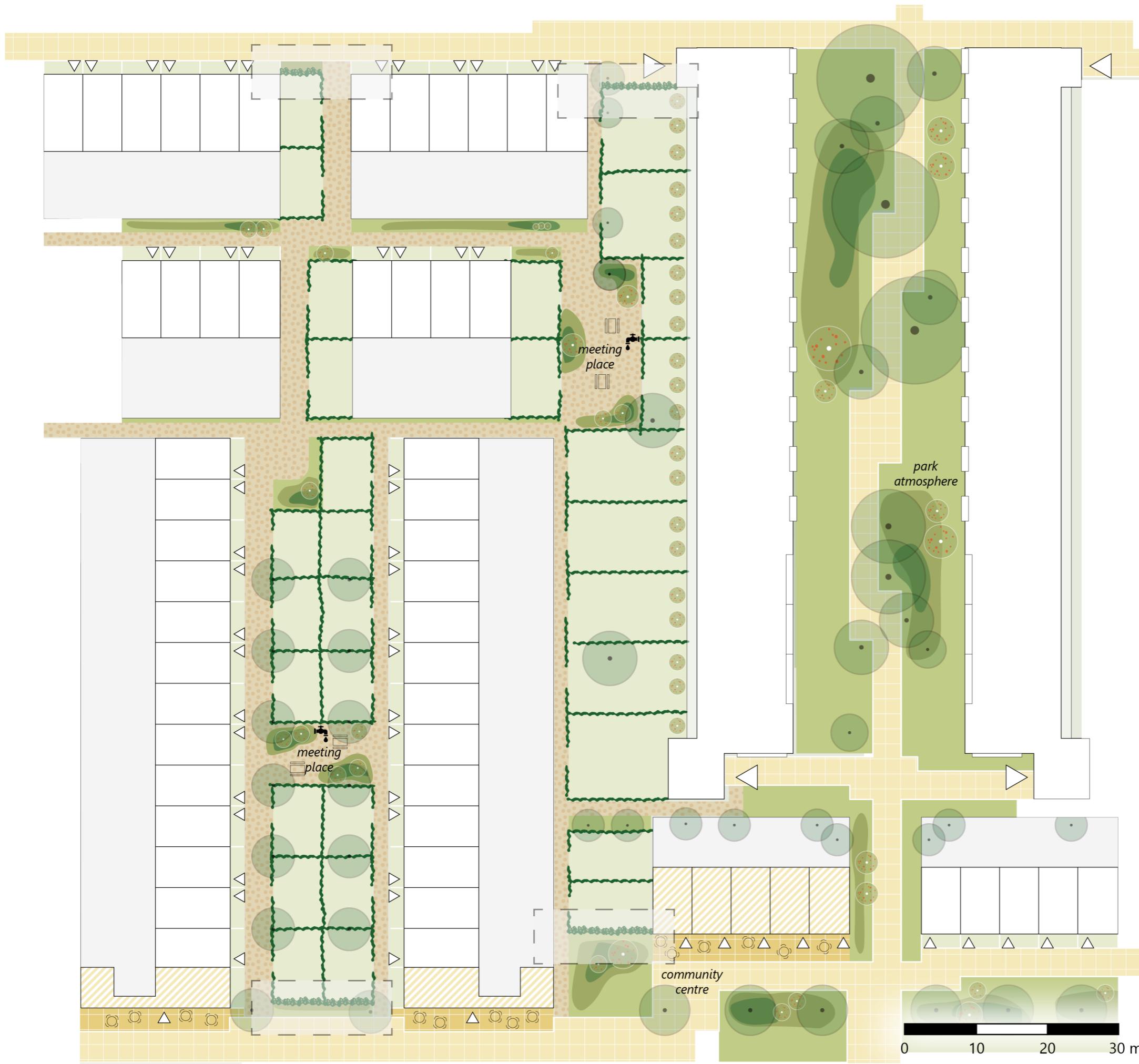
# Garden street





Neighbourhood unit





Neighbourhood unit

flowery  
bushes



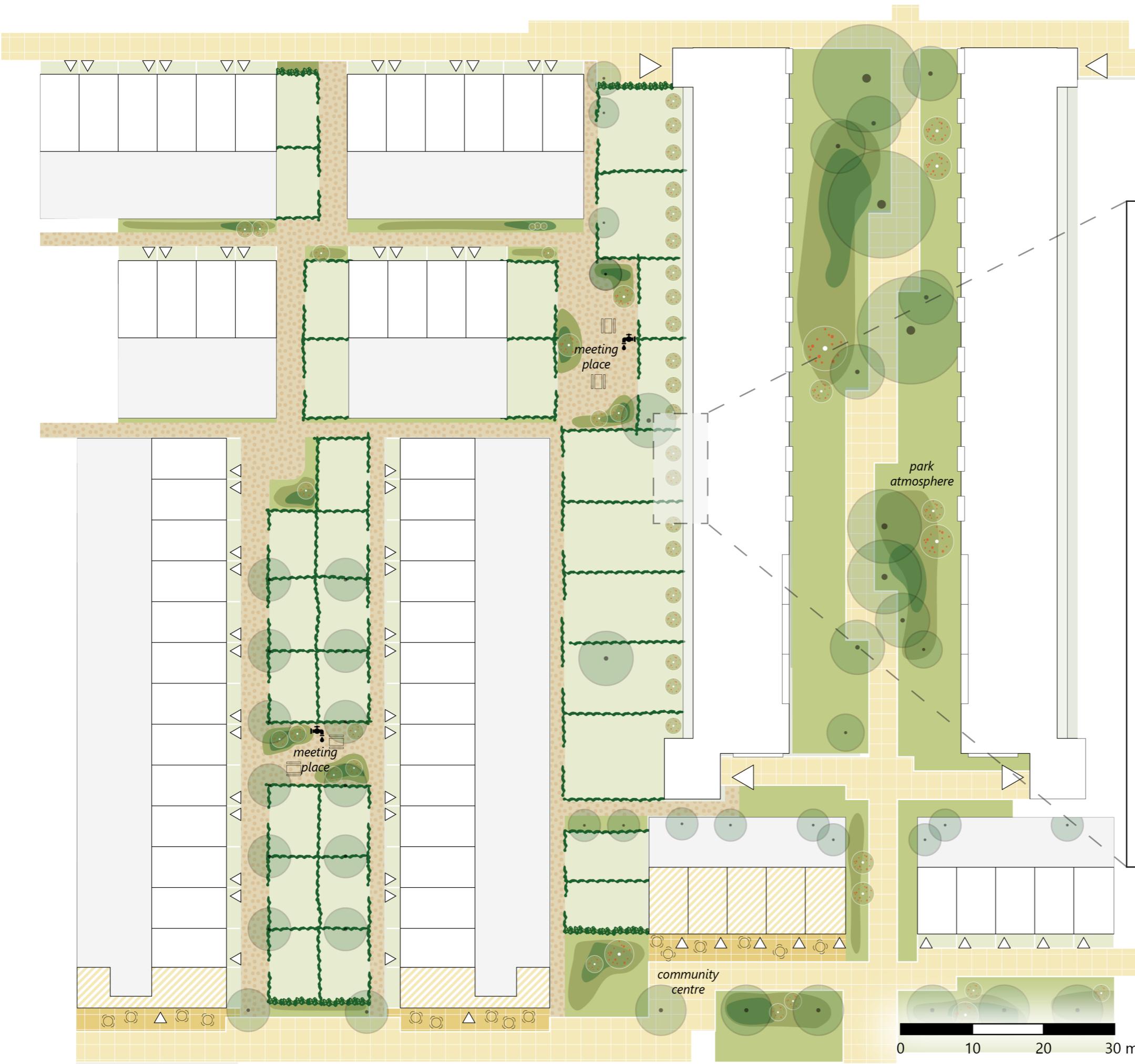
Neighbourhood unit

Gardens

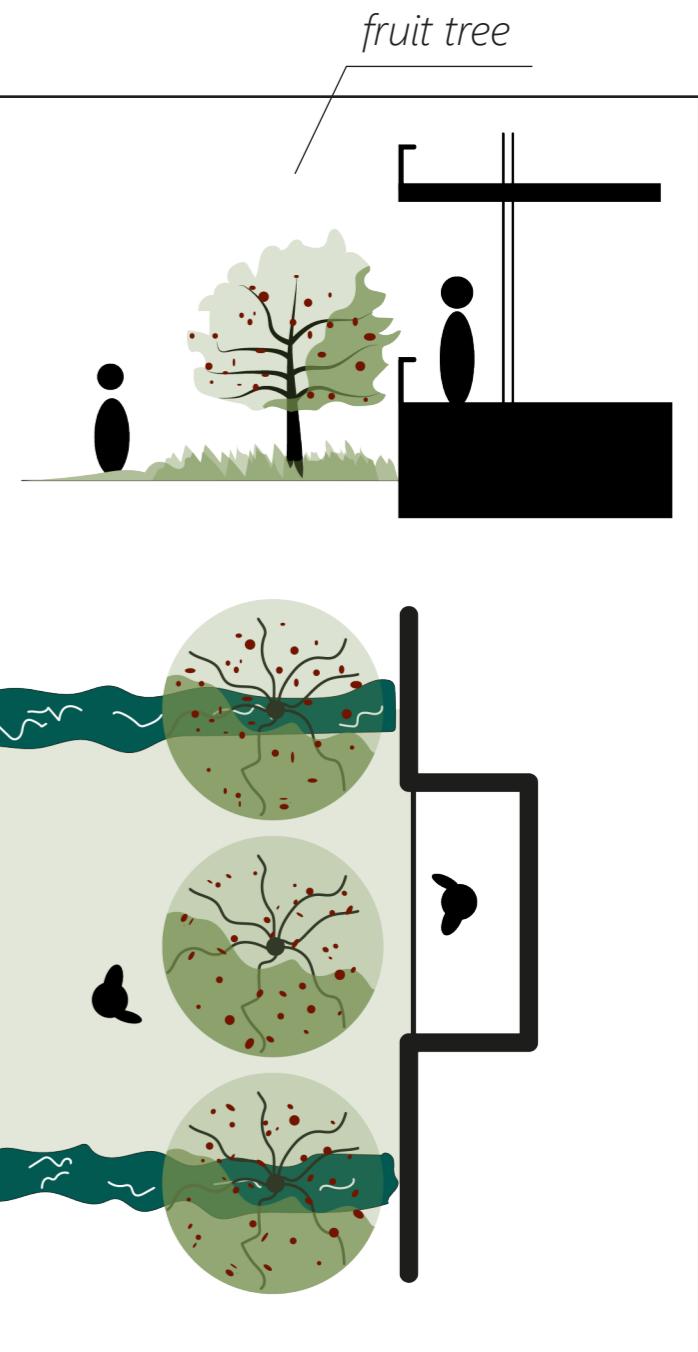
S: 10 x 7 meters.

M: 12 x 12 meters.

L: 10 x 20 meters.



Neighbourhood unit



## Existing materials

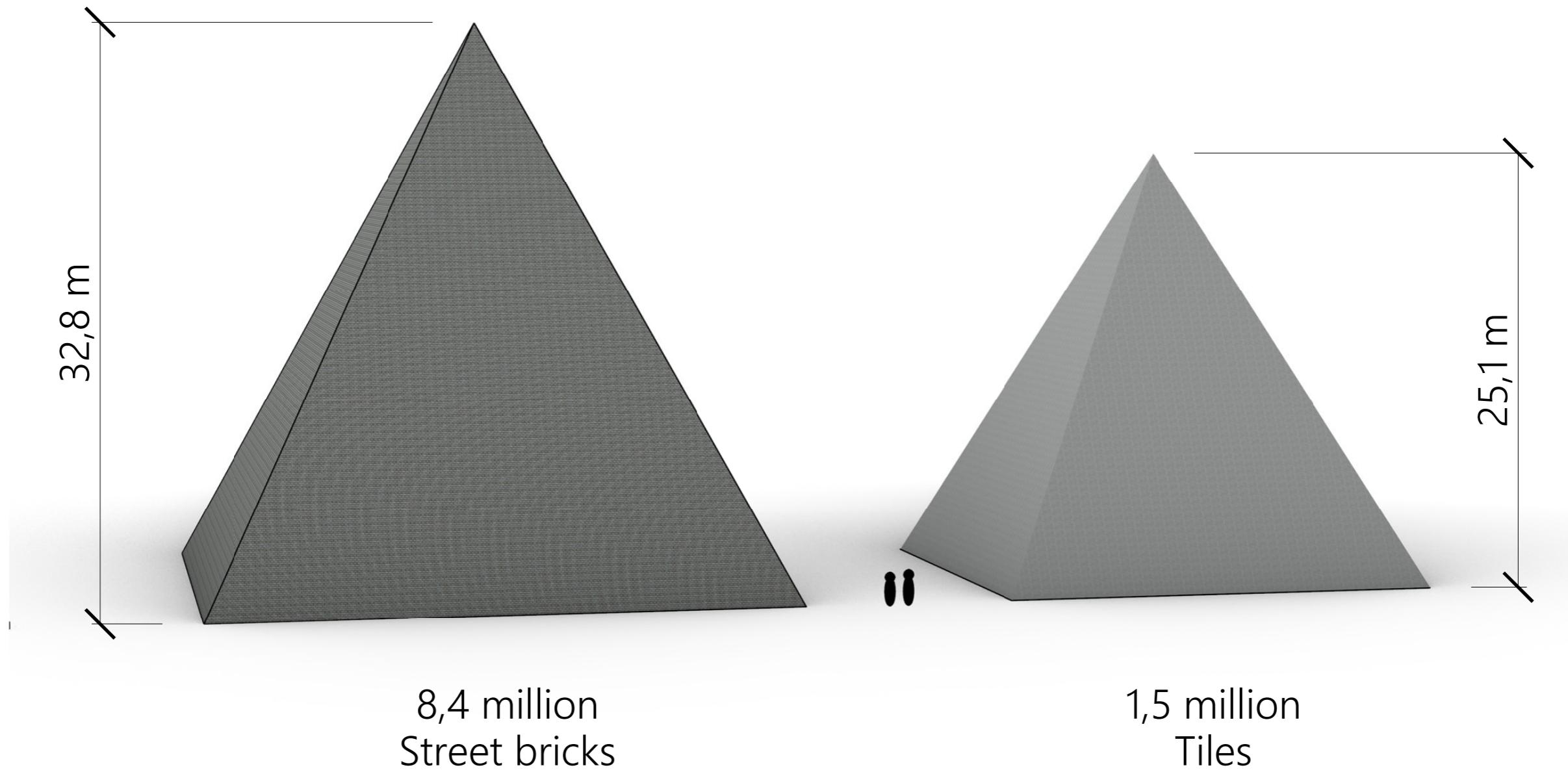


Street bricks

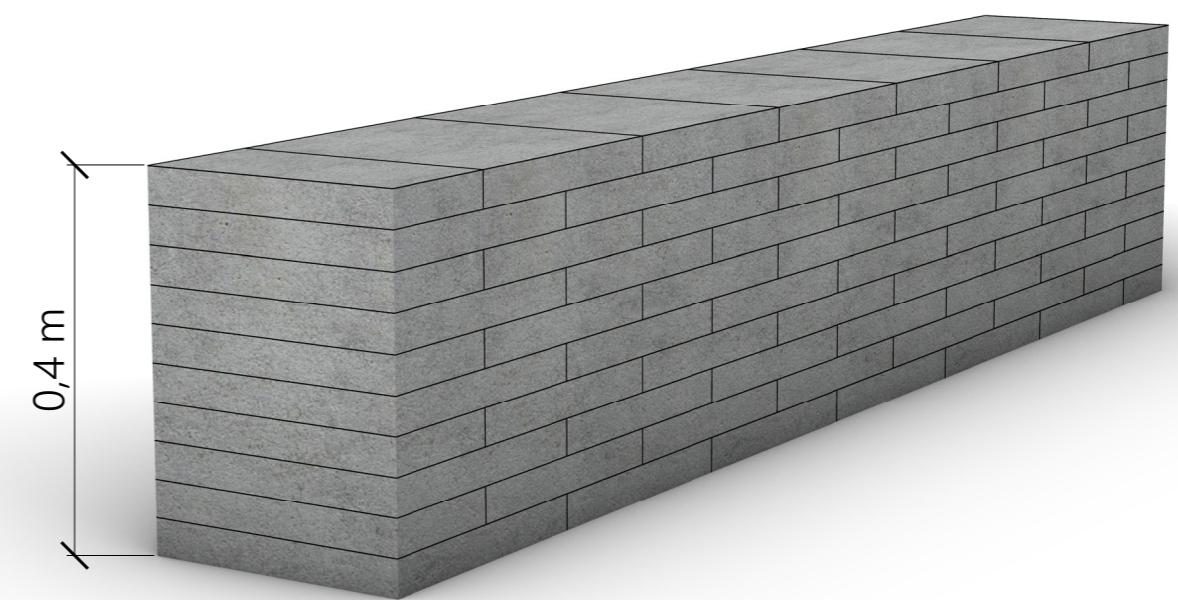
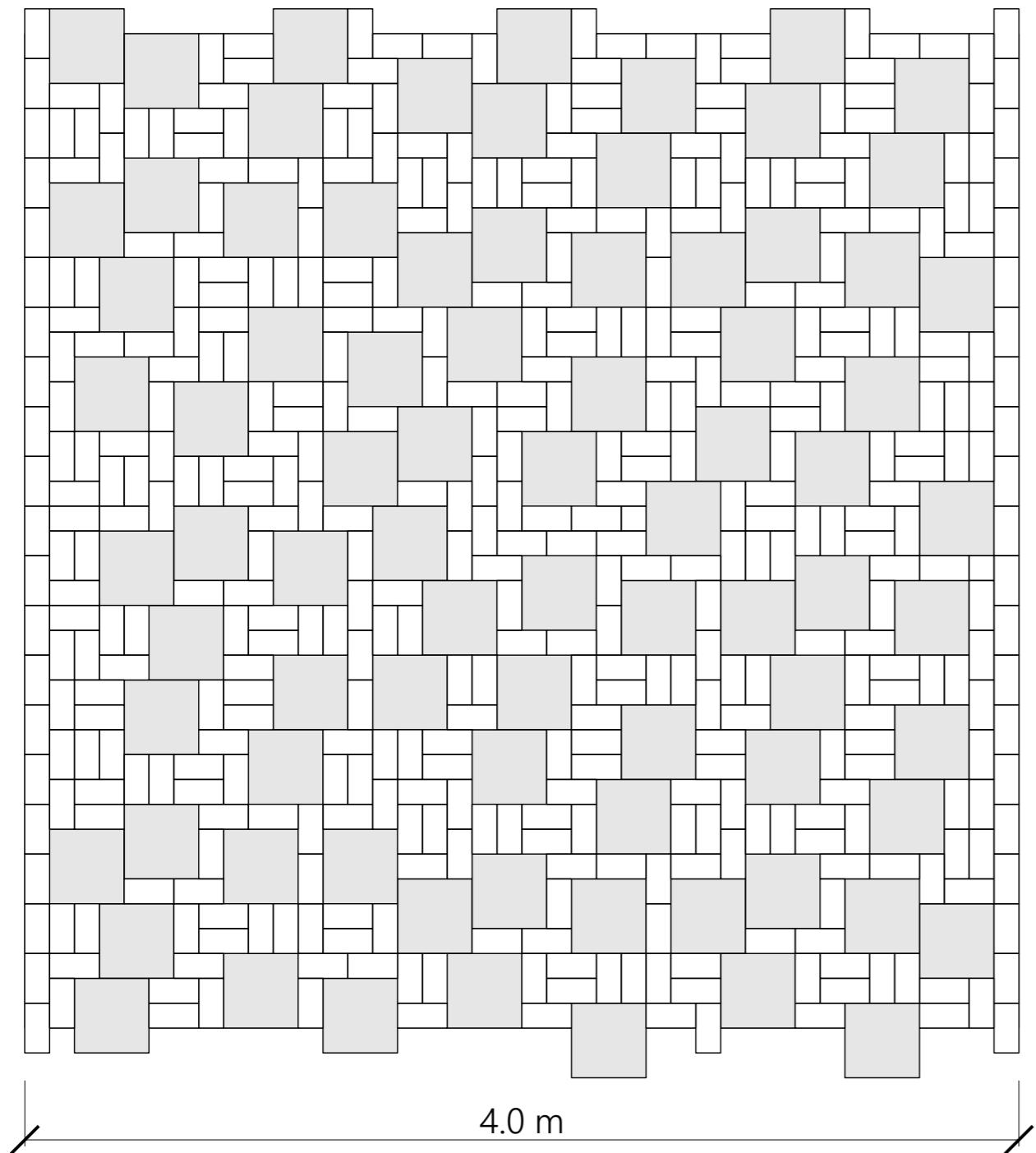


30 x 30 cm tiles

## Existing materials

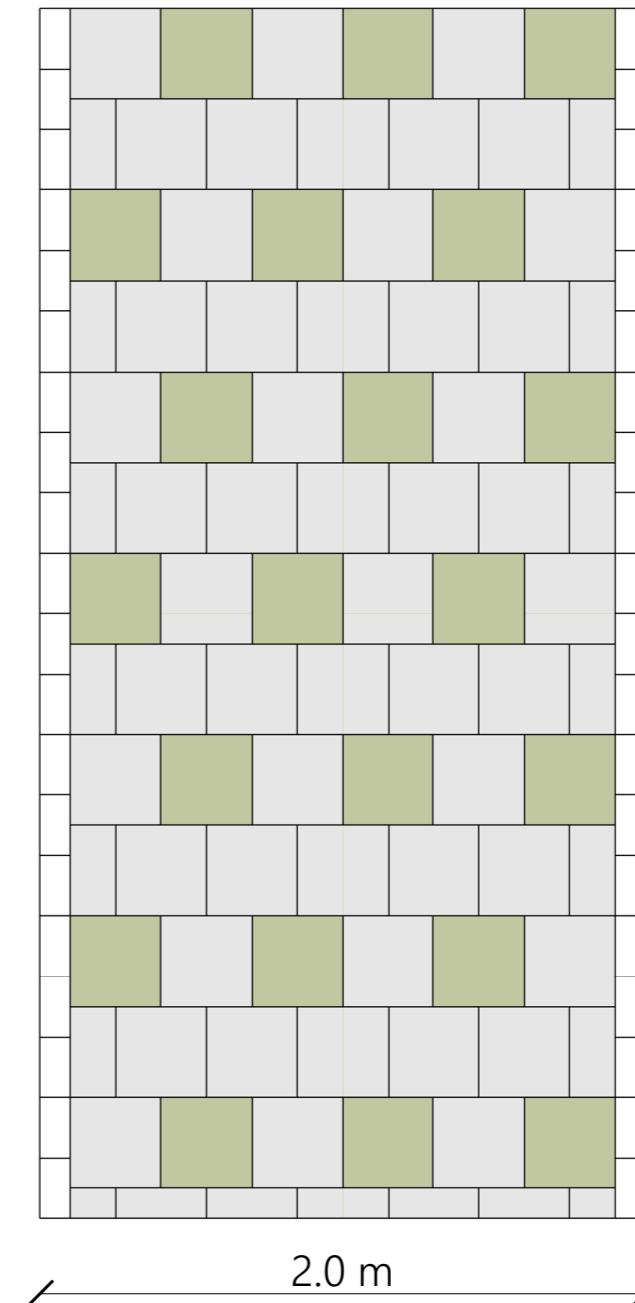
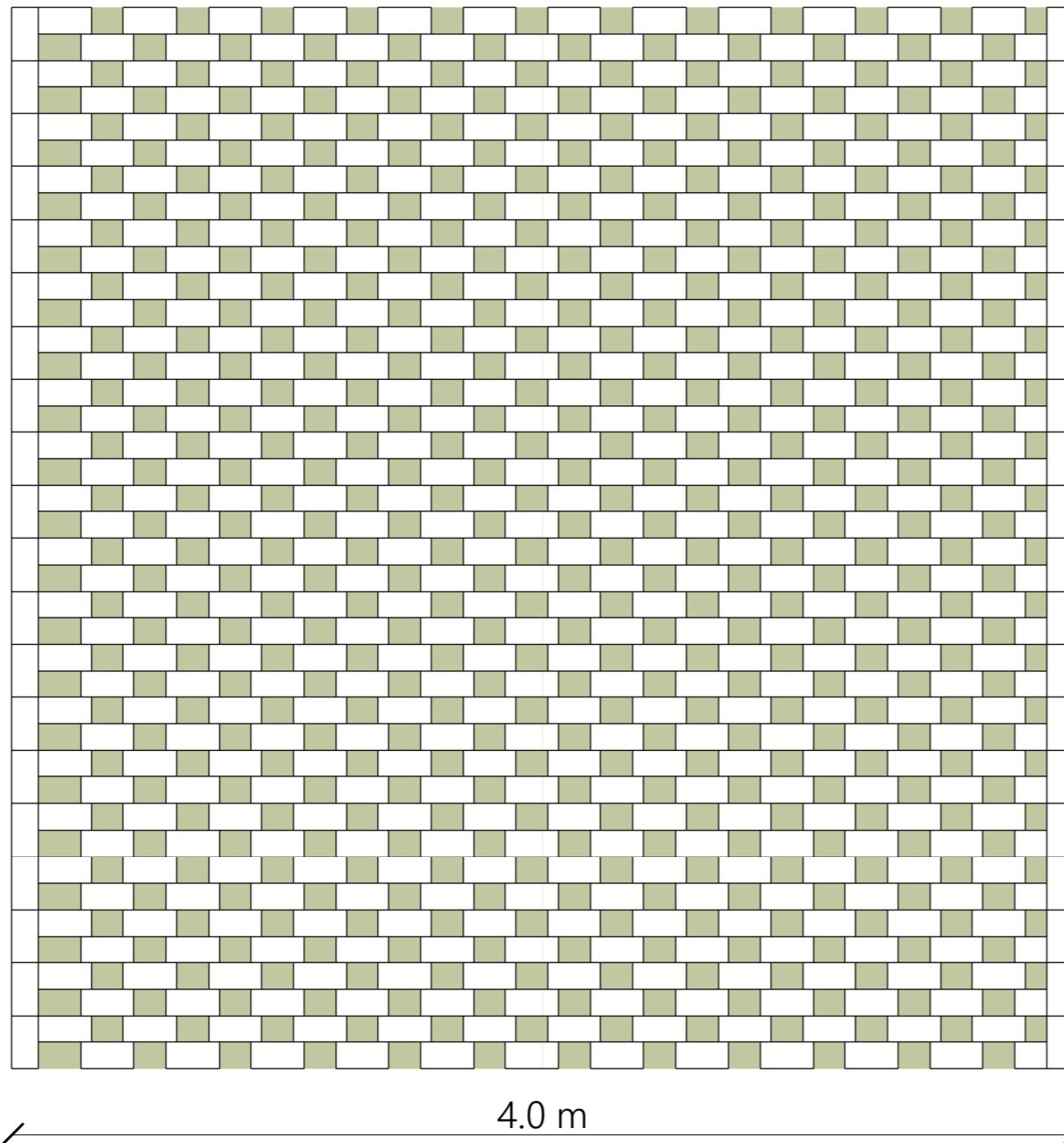


## Reuse materials main walking paths

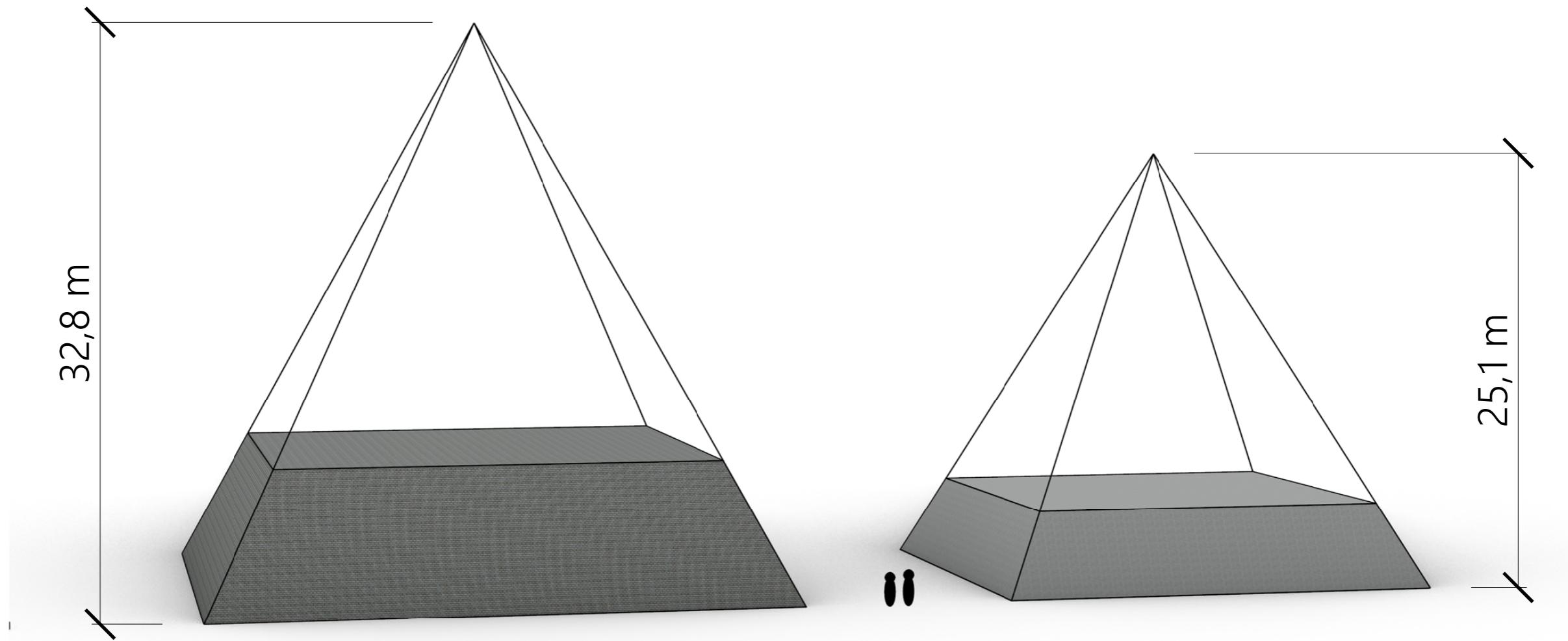


# Reuse materials

## garden streets and paths



## Left-over materials

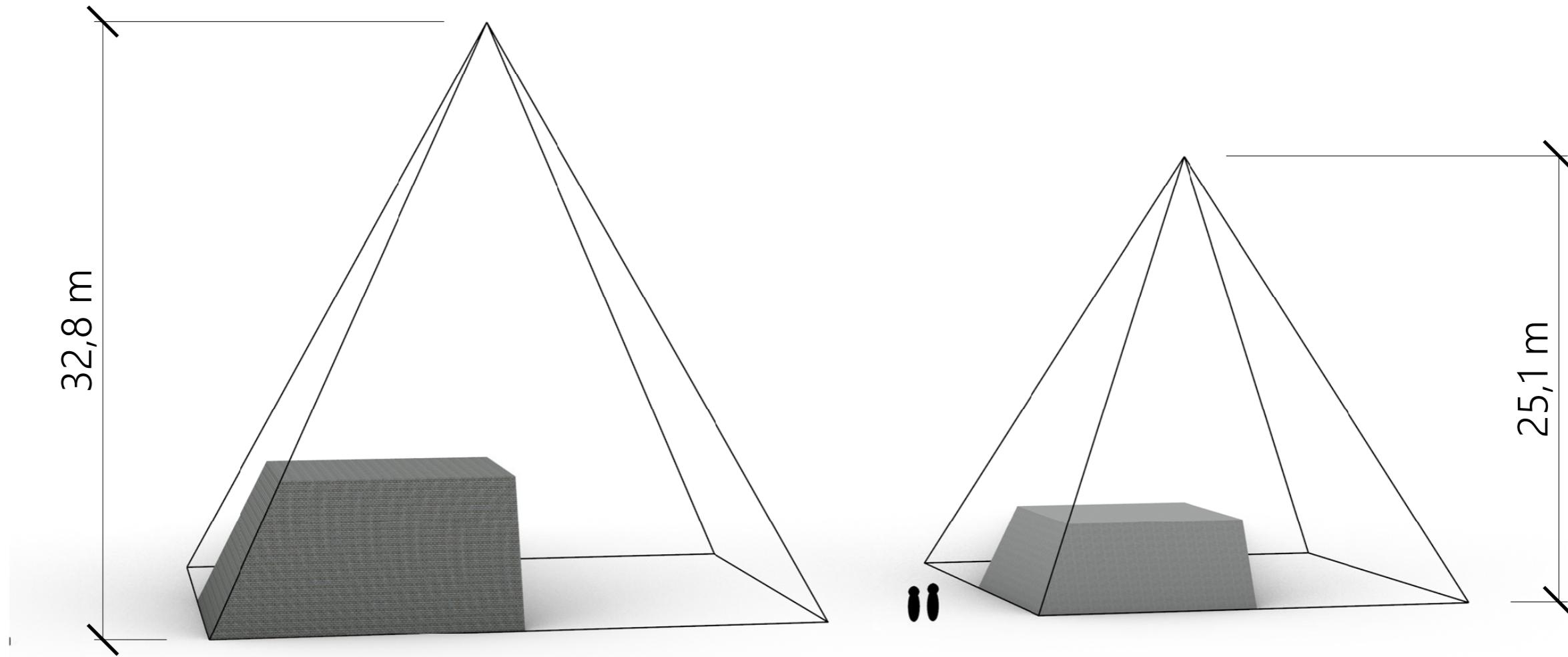


4,7 million  
Street bricks  
56% left

;"

0,68 million  
Tiles  
46% left

## Left-over materials



1,2 million  
Street bricks  
*per community*

170 thousand  
Tiles  
*per community*

# Community sculpture



Ecokathedraal Mildam (Vondeling, n.d.)



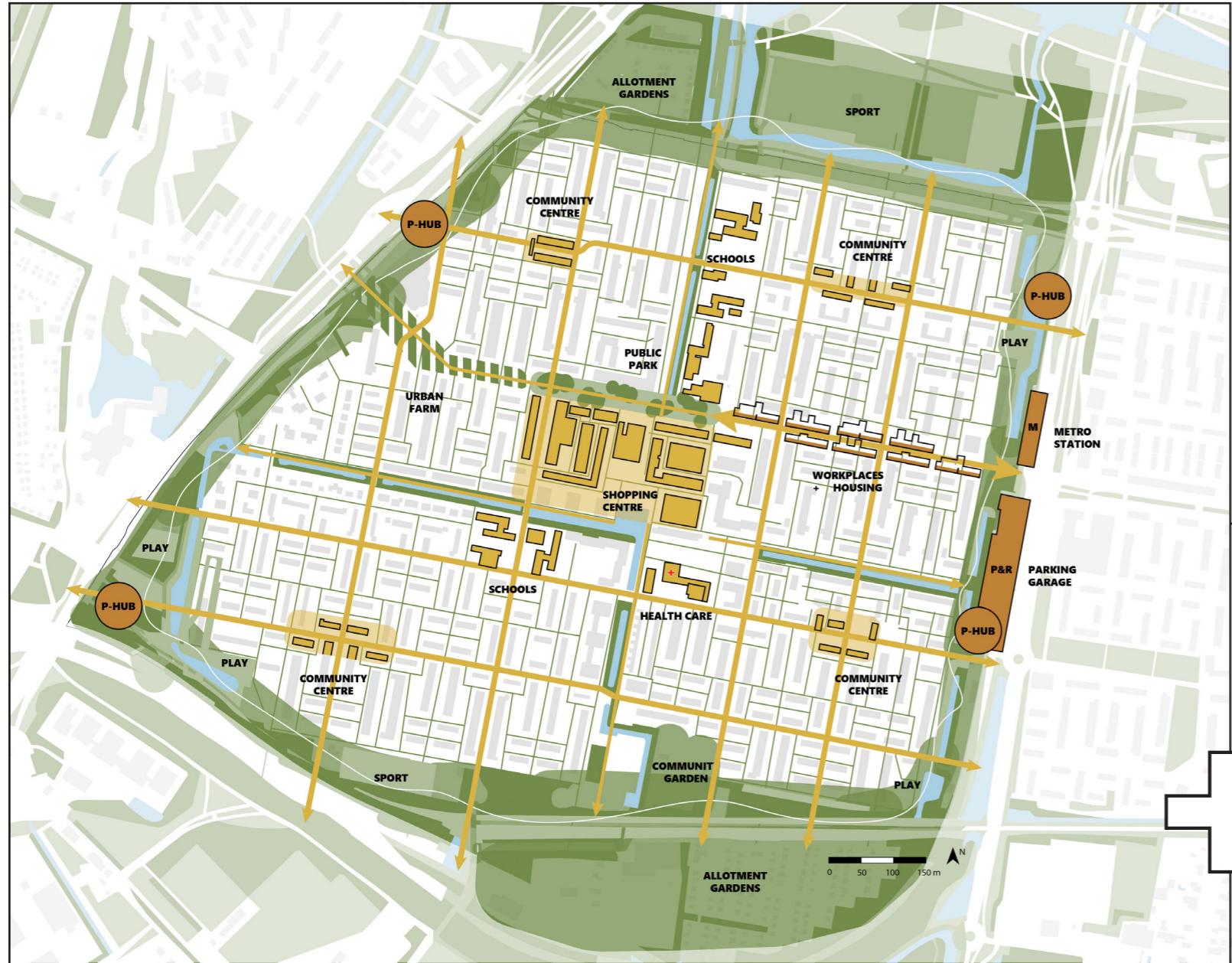
Amphitheatre (Ecologisch Adviesbureau Mulder, n.d.)



Jardín Agua Zarca (Borrell, 2021)

## Conclusion

How can the radical redesign of a postwar neighbourhood lead to a joyful future for its residents?



Walkable neighbourhood

Allotment garden communities



# A joyful walk through Pendrecht





the garden street

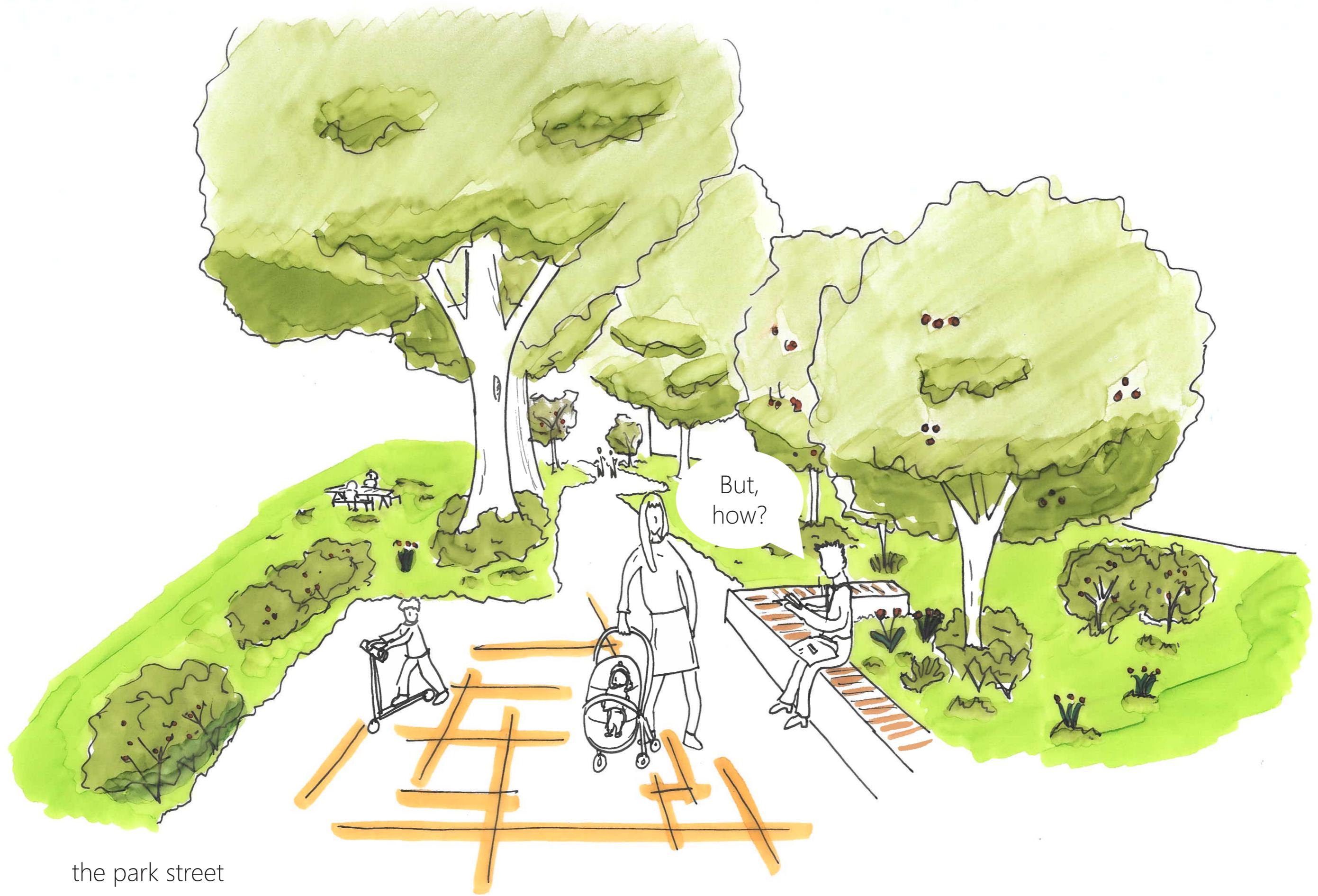


the community centre



the forest path





*'Geen woorden, maar daden.'*

## Strategy of execution

## Strategy of execution

Modular parking hubs

# Modular parking garages

0,6 ha per P-hub if 1 car per household and 5 layers of parking



(Google Earth, 2024, adapted by author)

## Strategy of execution

Modular parking hubs

Link to sewer replacement

## Strategy of execution



## Strategy of execution

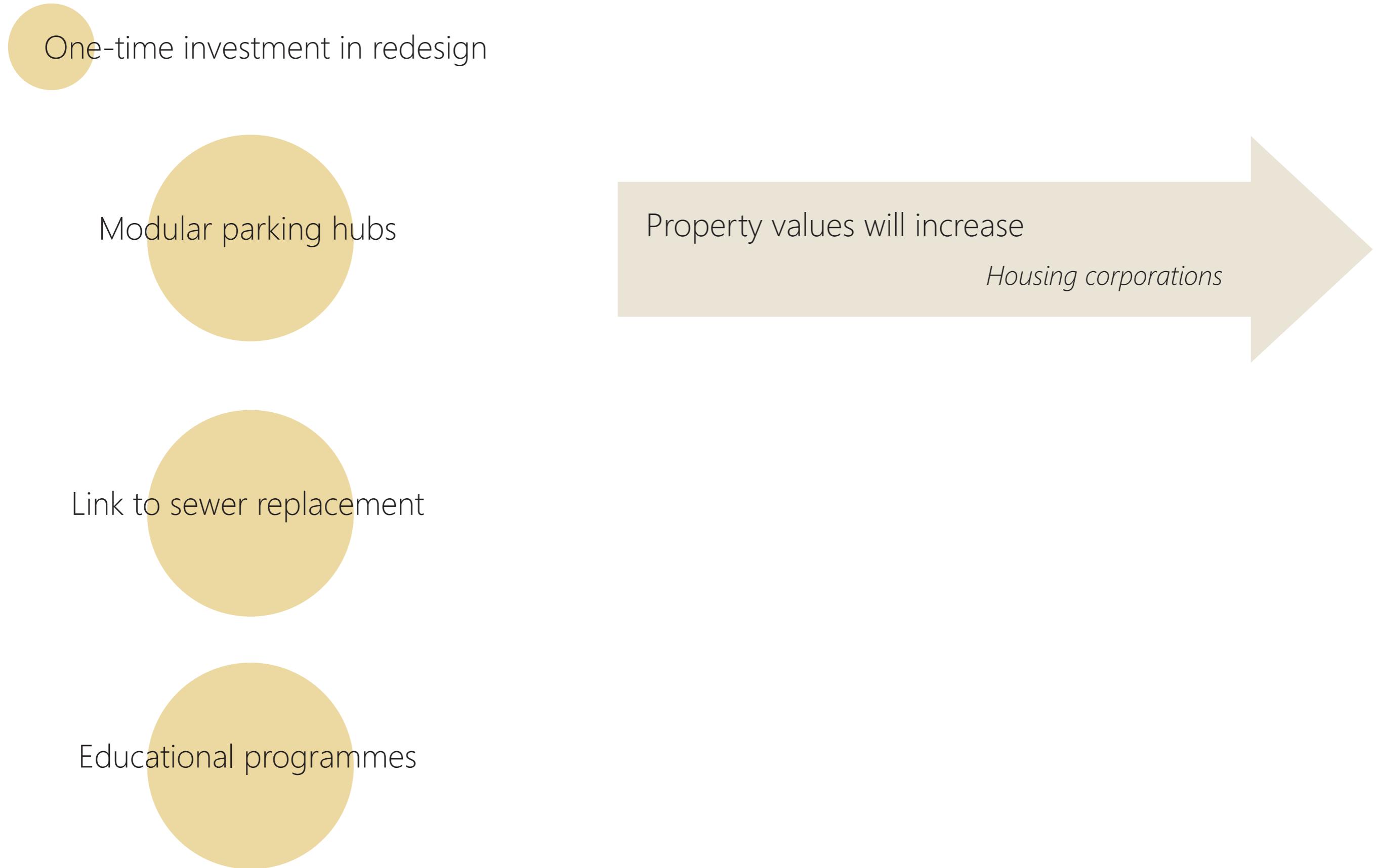
One-time investment in redesign

Modular parking hubs

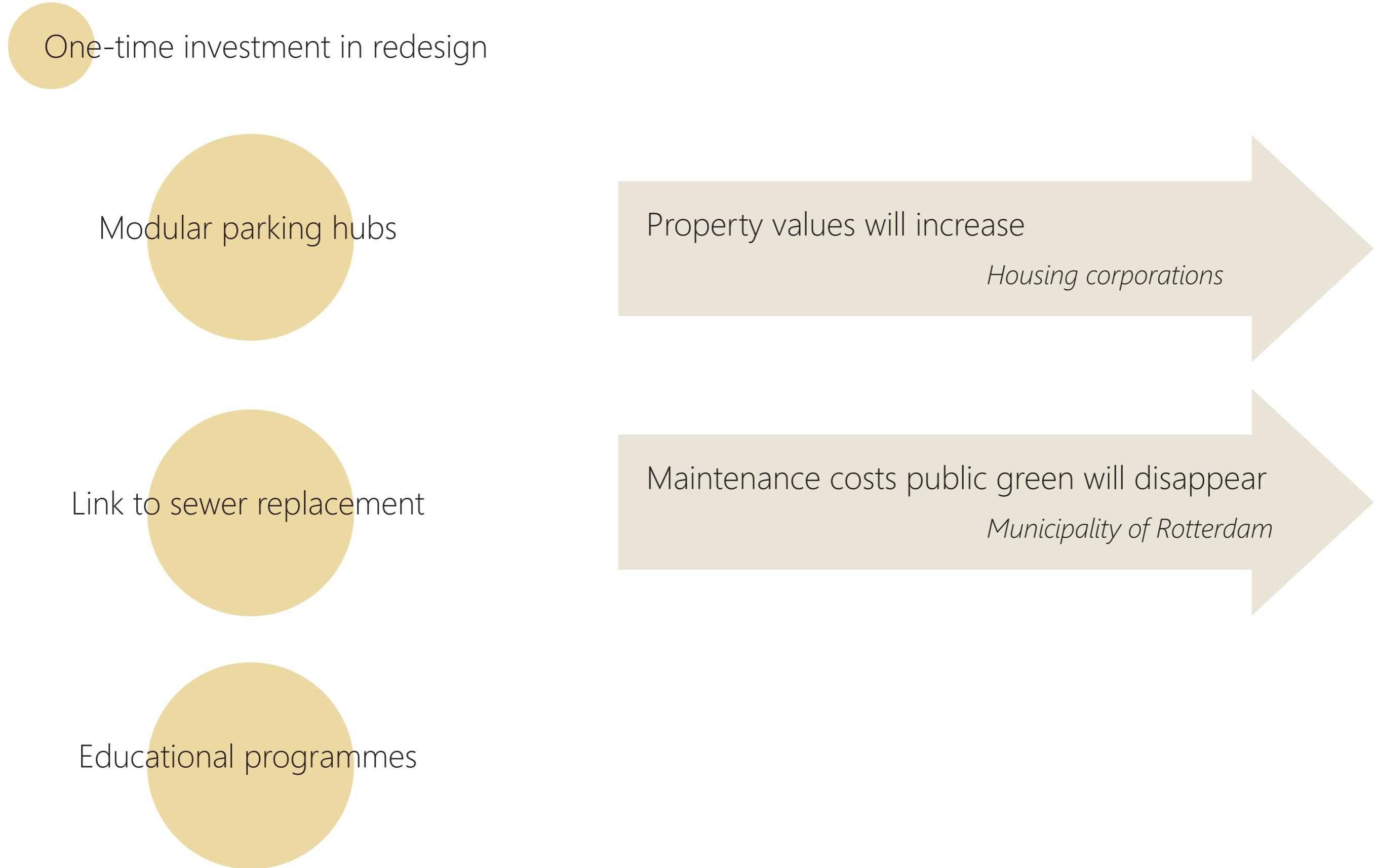
Link to sewer replacement

Educational programmes

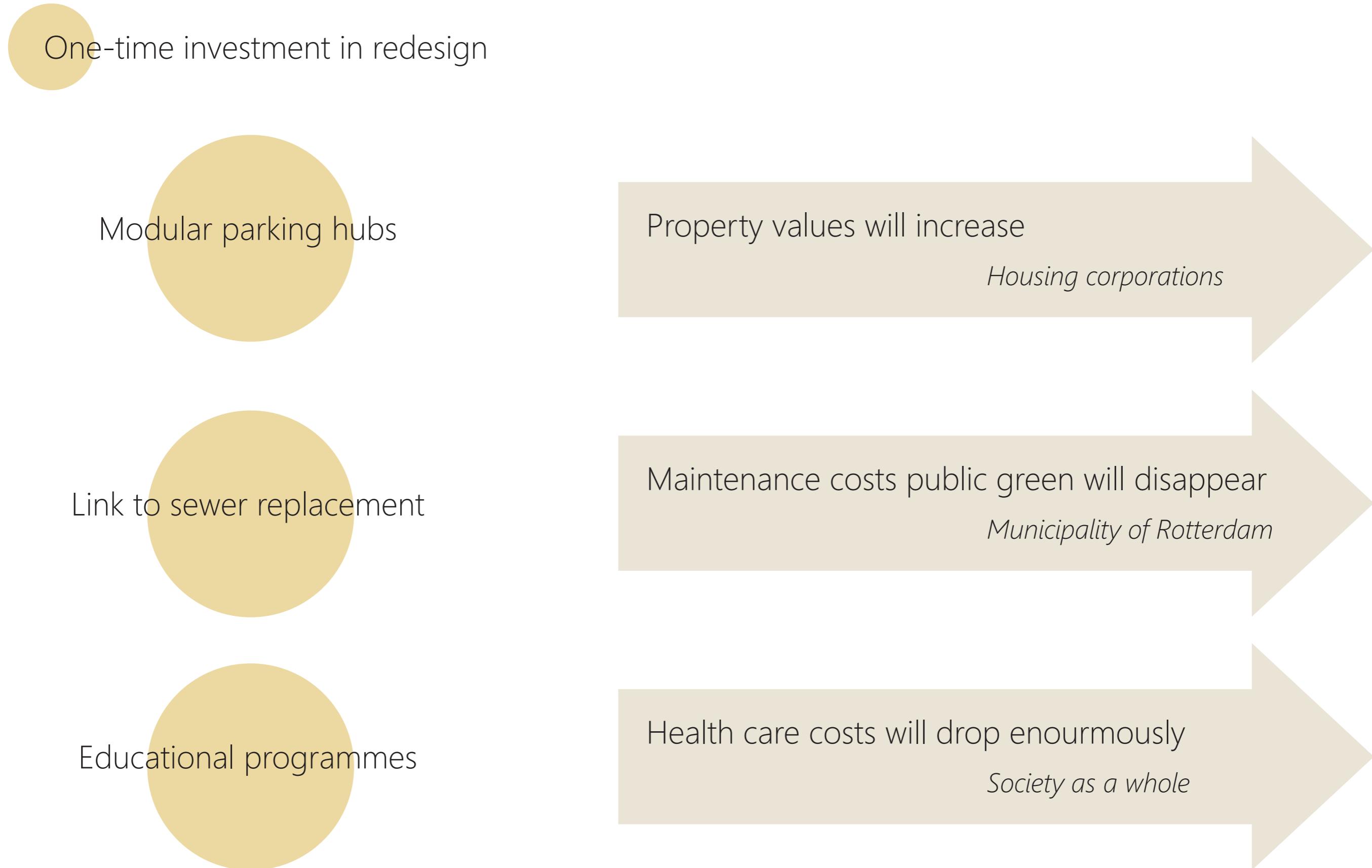
## Strategy of execution



## Strategy of execution

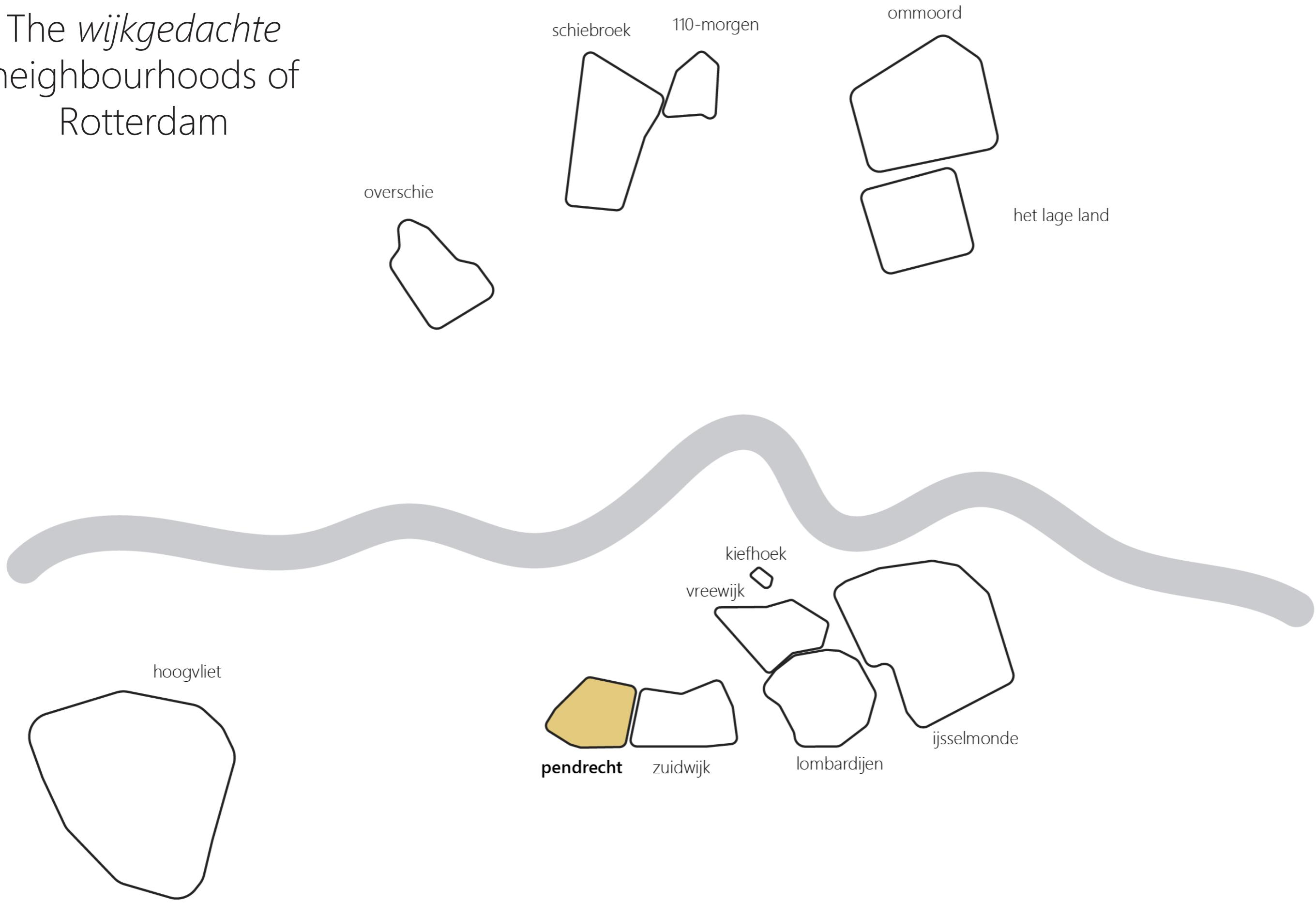


## Strategy of execution

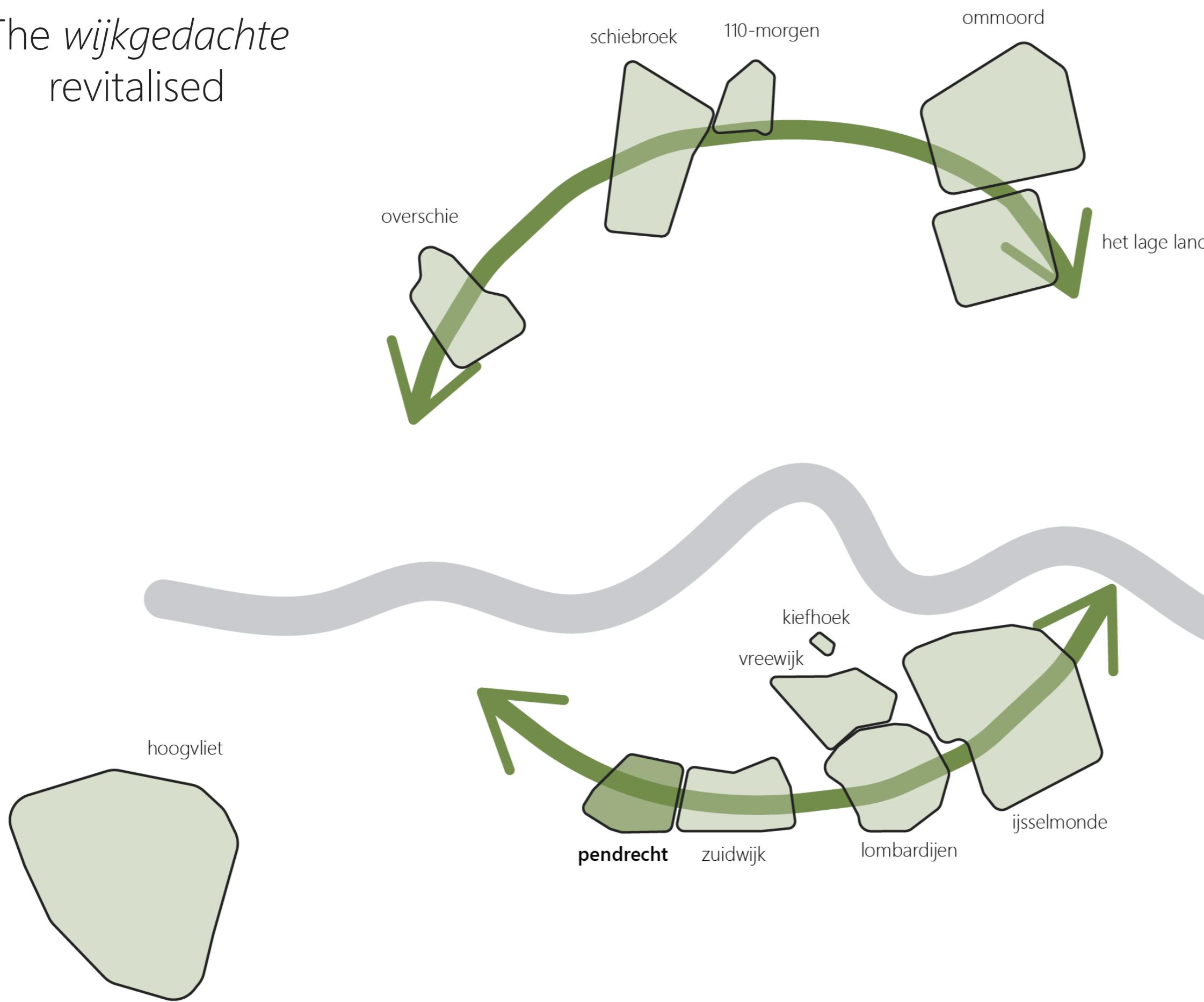


Being happy will save you money

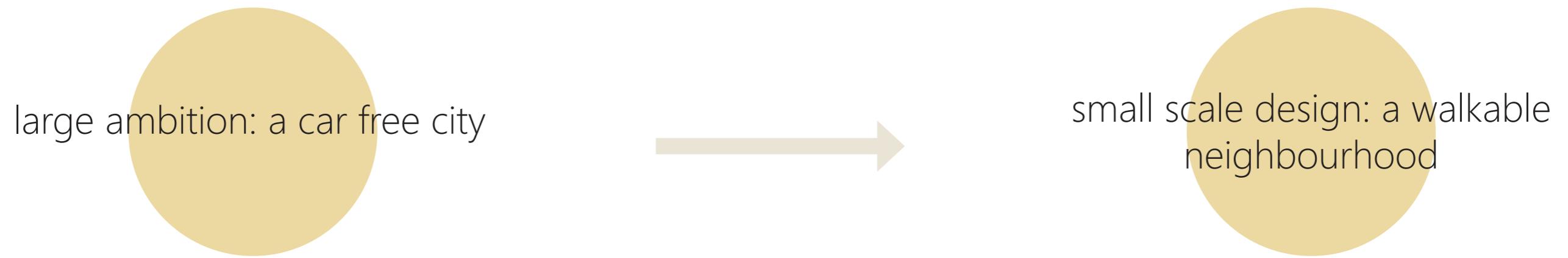
# The *wijkgedachte* neighbourhoods of Rotterdam



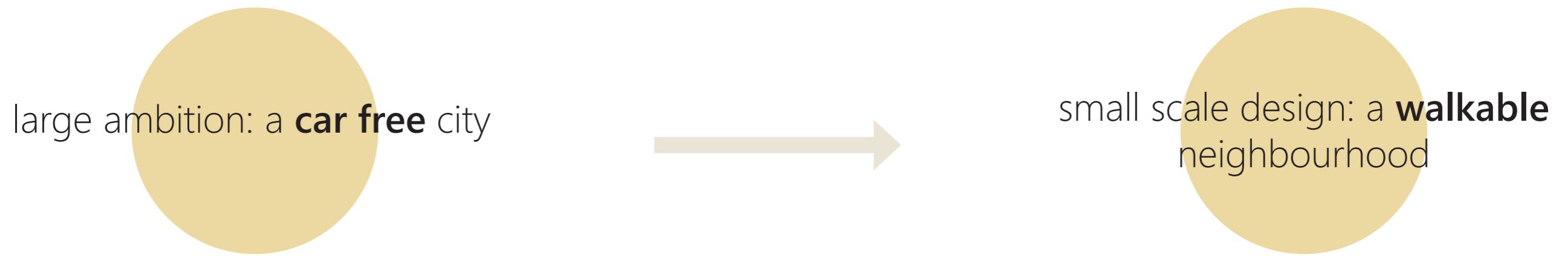
# The *wijkgedachte* revitalised



## Reflection



## Reflection



## Reflection



I would like to encourage all of you to

I would like to encourage all of you to

WALK  
your way  
to JOY

# Bibliography of presentation

AlleCijfers.nl. (2024). *Statistieken buurt Pendrecht*. <https://allecijfers.nl/buurt/pendrecht-rotterdam/>

Borrell, D. R. (2021). *Jardín Agua Zarca / TANAT*. Arch Daily. <https://www.archdaily.com/974184/jardin-agua-zarca-tanat>

Ecologisch Adviesbureau Mulder. (n.d.). *Amfitheater*. <http://prive.ecologischadviesbureau.nl/amfitheater.php>

Fototechnische Dienst Rotterdam. (1958). *Mensen winkelen op binnenplaats Zijpe in Pendrecht. Aan weerszijden winkels met bovenwoningen, links op de voorgrond een telefooncel. Rechts een Co-op snelbediening*. Stadsarchief Rotterdam. <https://hdl.handle.net/21.12133/161D46C48D6C42B99757A82FE8F9B5C8>

Gehl, J. (2010). *Cities for people*. Island Press.

Hage, K., & Zweerink, K. (2005). *Van Pendrecht tot Ommoord : geschiedenis en toekomst van de naoorlogse wijken in Rotterdam*. Thoth.

Hemel, Z. (2023). *Mooi land, eend Odyssee*. <https://zefhemel.nl/bonnema-2/>

Hersenstichting. (n.d.). *Ommetje-app*. <https://www.hersenstichting.nl/ommetje/>

Kluiters, M. (n.d.). *De Fijne Stad 2: Bewegen als uitgangspunt met Wendy van Kessel*. Ecosofie podcast. <https://www.urhahn.com/podcast-bewegen-als-uitgangspunt/>

Molster, A., & Schuit, S. (2020). *Loop! Tien ontwerpprincipes voor een loopvriendelijke omgeving*. NPN Drukkers.

Montgomery, C. (2015). *Happy city : transforming our lives through urban design*. Penguin Books.

Te Brömmelstroet, M. (2023). *Movement: public talk with Marco te Brömmelstroet*. <https://www.youtube.com/watch?v=xMekwTixj20>

Urhahn. (2017). *The active city*. Drukkerij Jubels bv. <https://www.urhahn.com/de-beweegvriendelijke-stad/>

Vondeling, H. (n.d.). *Ecokathedraal Mildam*. Beleef Het Lage Noorden. <https://beleefhetlagenoorden.nl/ecokathedraal-mildam/>

Wikipedia. (n.d.). *Utopia*. <https://en.wikipedia.org/wiki/Utopia>