

SOCIAL ACTS AT HEIGHT

Liberated from the loneliness and
social isolation in high-rise buildings

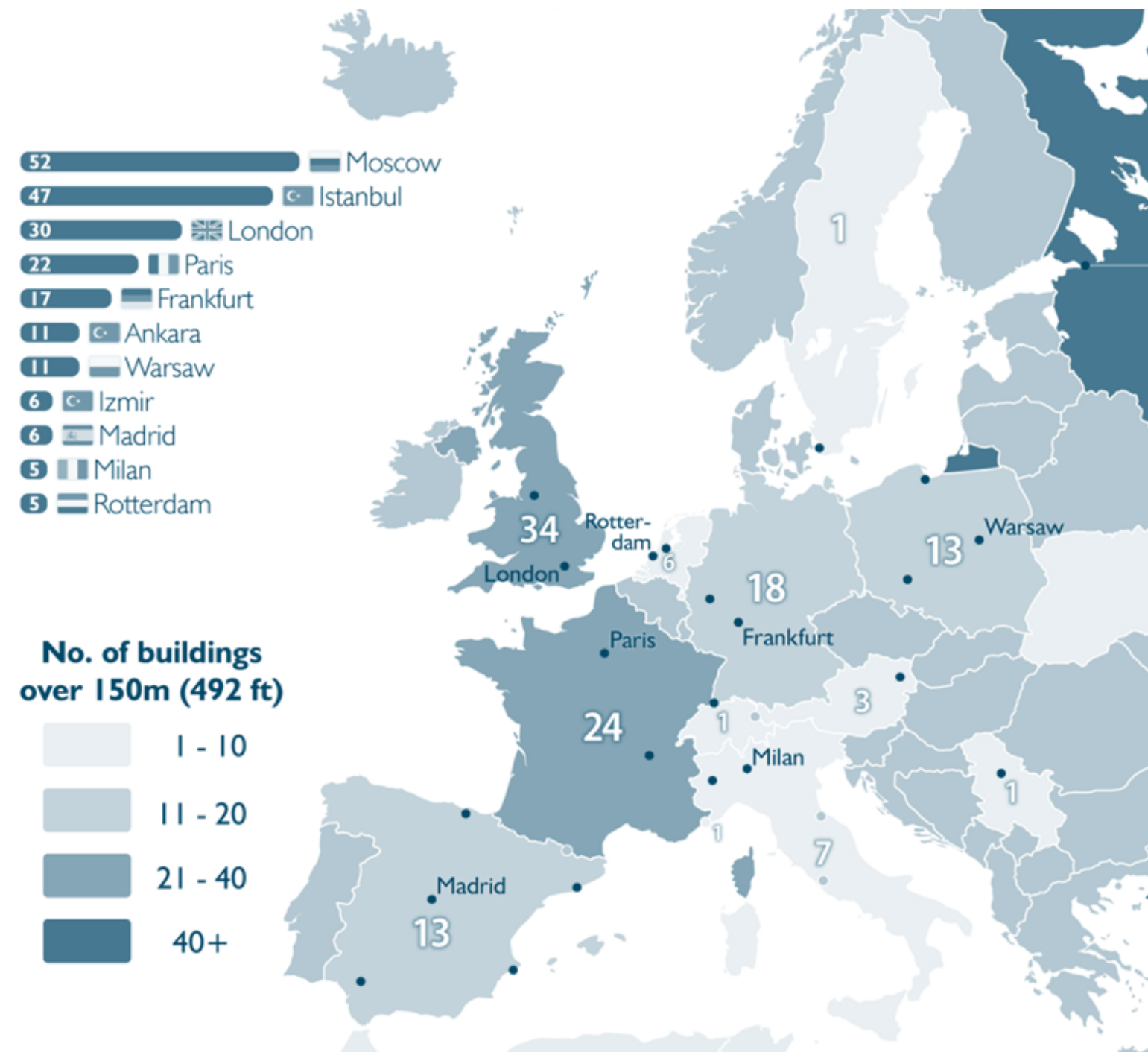
P5 presentation
MSC 3/4 City of the Future



Linda Tran Nguyen
Technical University Delft
Faculty of Architecture
04-07-2024

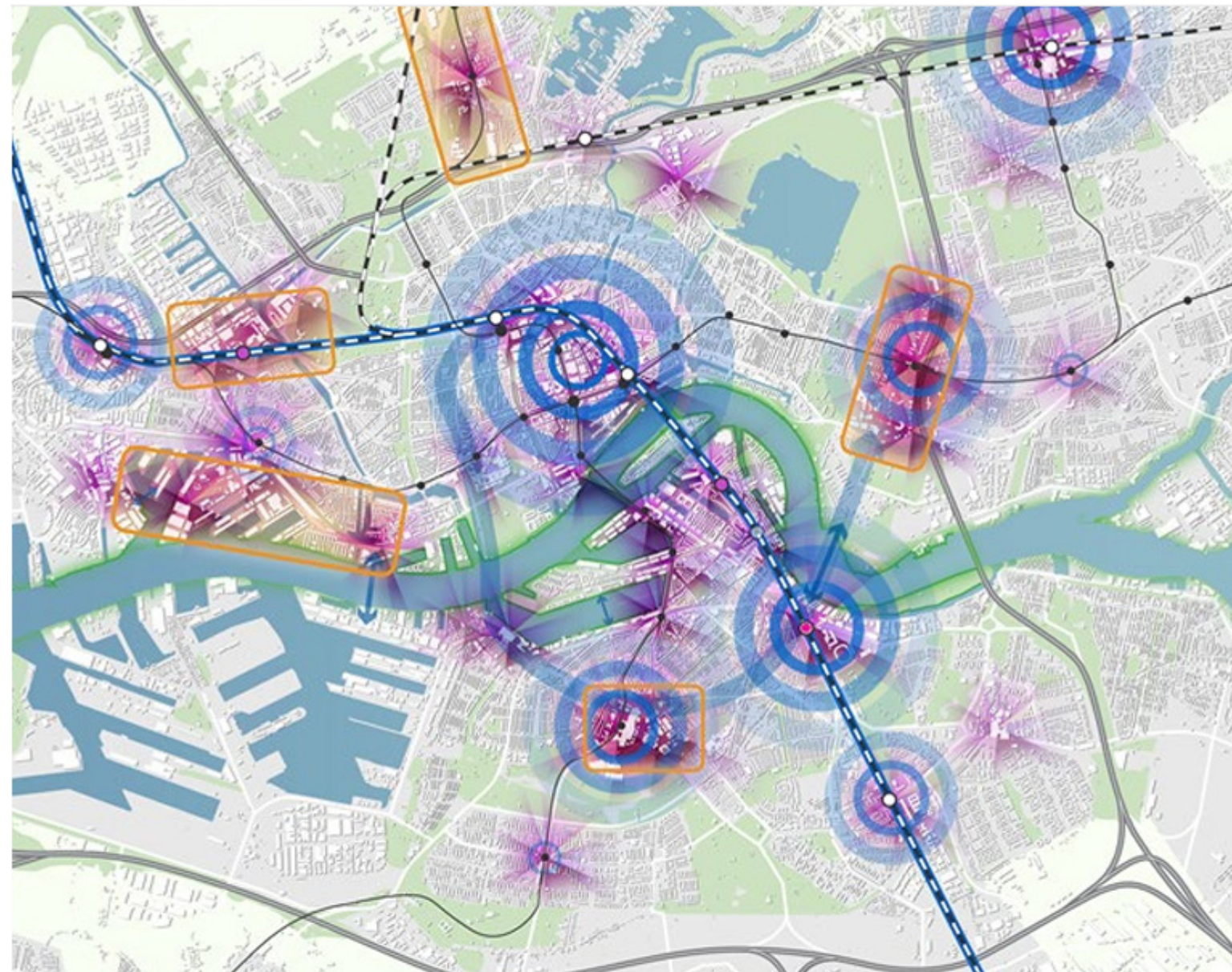
“Despite the stunning panoramic views and the convenience of modern amenities, there are times when I feel like I’m living in a bubble, disconnected from the world below.”
– Maru Kim, 4 March 2023.

The growth of high-rise



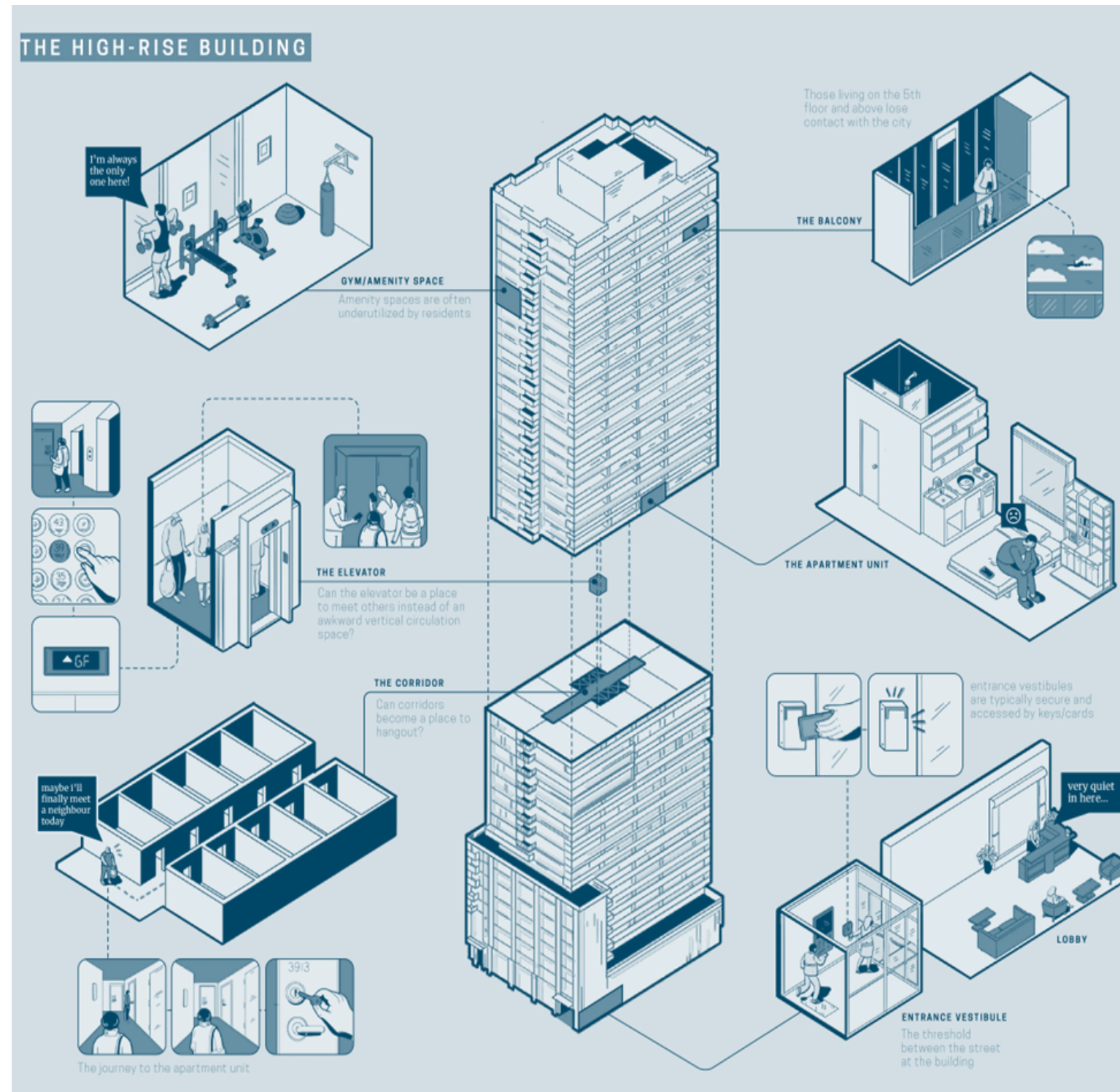
CTBUH, 2021: Emporis 2021

Densification opportunities in Rotterdam



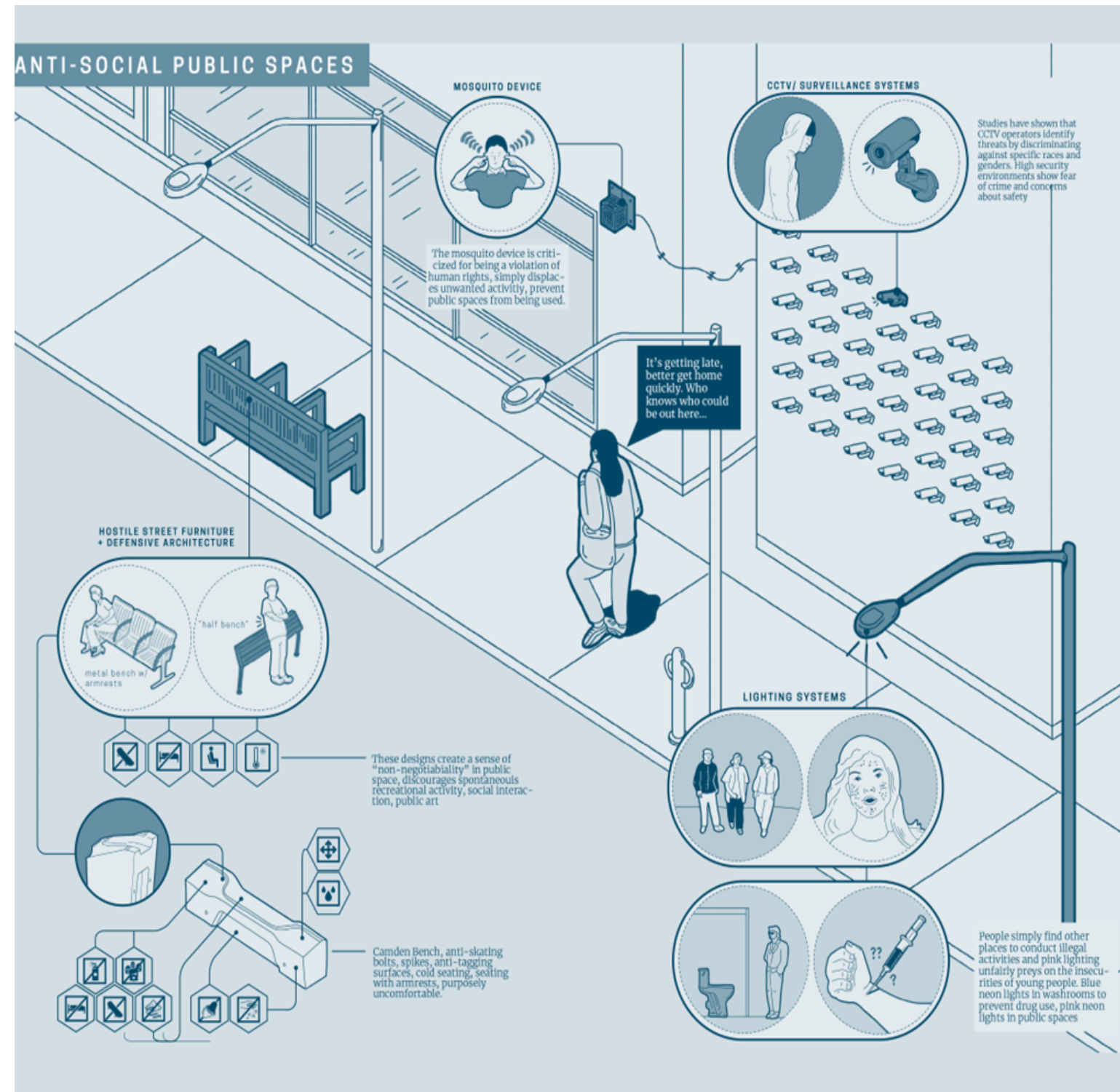
-  HOV knopen met verdichtingskansen
-  verstedelijkingszones nabij OV
-  binnenstedelijke verdichtingskansen
-  toekomstige stations
-  toekomstige HOV-as

The growth of the high-rise typology



Fu, K. (2020). <https://medium.com/humanics/strangers-in-the-sky-a-designers-guide-to-tackling-urban-loneliness-part-a-31991bd66e60>)

The anti-social city



Fu, K. (2020). <https://medium.com/humanics/strangers-in-the-sky-a-designers-guide-to-tackling-urban-loneliness-part-a-31991bd66e60>

What It's Like To Be Young and Extremely Lonely In A Big City

(Ben Copeland, 2018)

“Most people look forward to the weekend, but for me, it's the other way around. I look forward to Monday so I can speak to people at work.”

“People feel lonelier in crowded cities- but green spaces can help.”

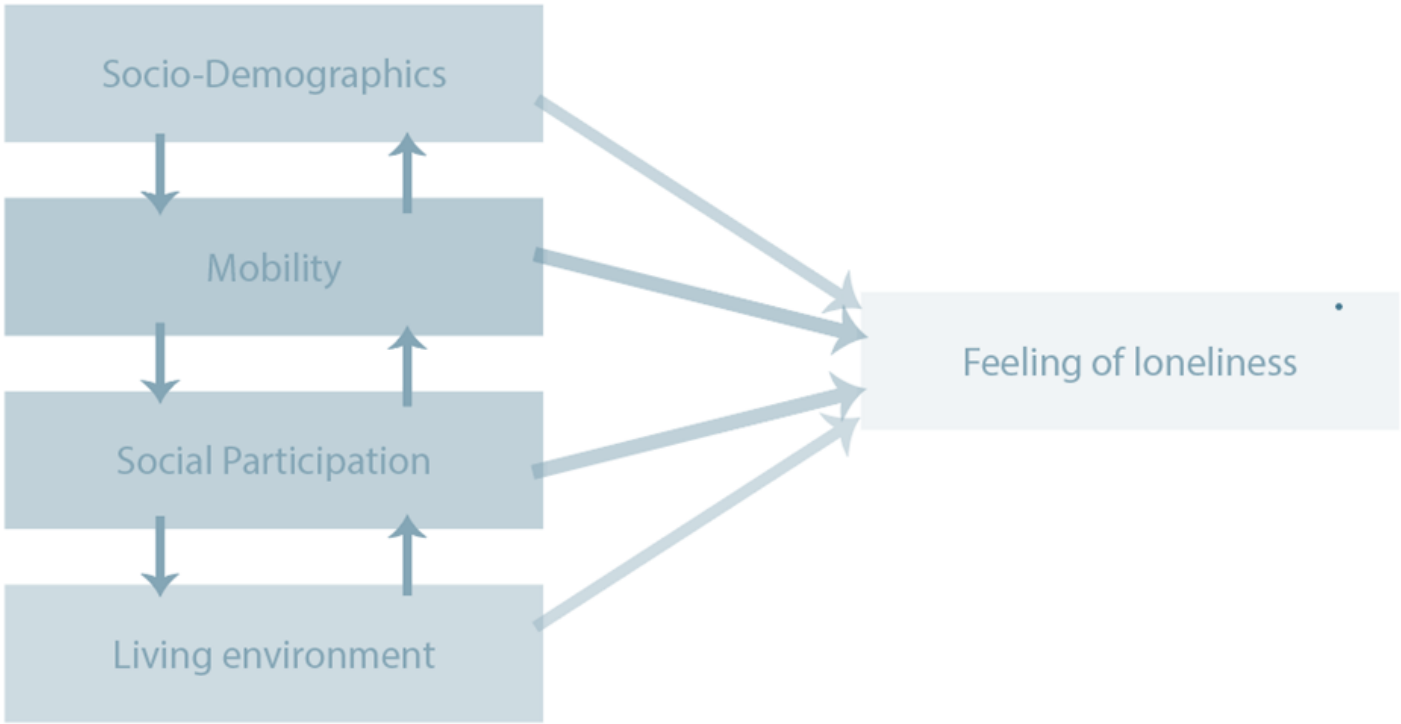
Published: December 20, 2021 (Andrea Mechilli, 2021)

“How do I not feel lonely living on my own in a studio apartment?”
(Connor Lishman, 2019)

Social loneliness

	DIFFERENT COMPARTMENTS OF SPACE				
	Social Spaces		Attentional Spaces		Architectural Spaces
3 Dimensions of Loneliness	Weiss, 1973	Dunbar, 2014	Hall, 1966	Ortigue et al., 2006	
Intimate	Emotional	Inner Core	Intimate	Personal	Private Space
Relational	Social	Sympathy Group	Social	Near Extrapersonal	Semi-Public Space
Collective	-	Active Network	Public	Far Extrapersonal	Public Space

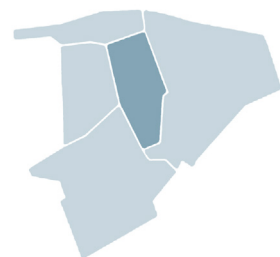
Fu, K. (2020). <https://medium.com/humanics/strangers-in-the-sky-a-designers-guide-to-tackling-urban-loneliness-part-a-31991bd66e60>)



Casestudies



Cooltower



Cool



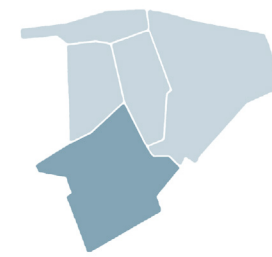
New Orleans



Kop van Zuid



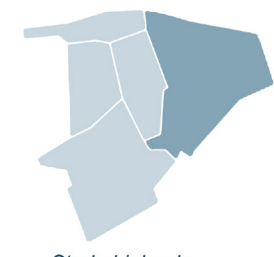
Zalmhaven I



Nieuwe werk / Dijkzicht

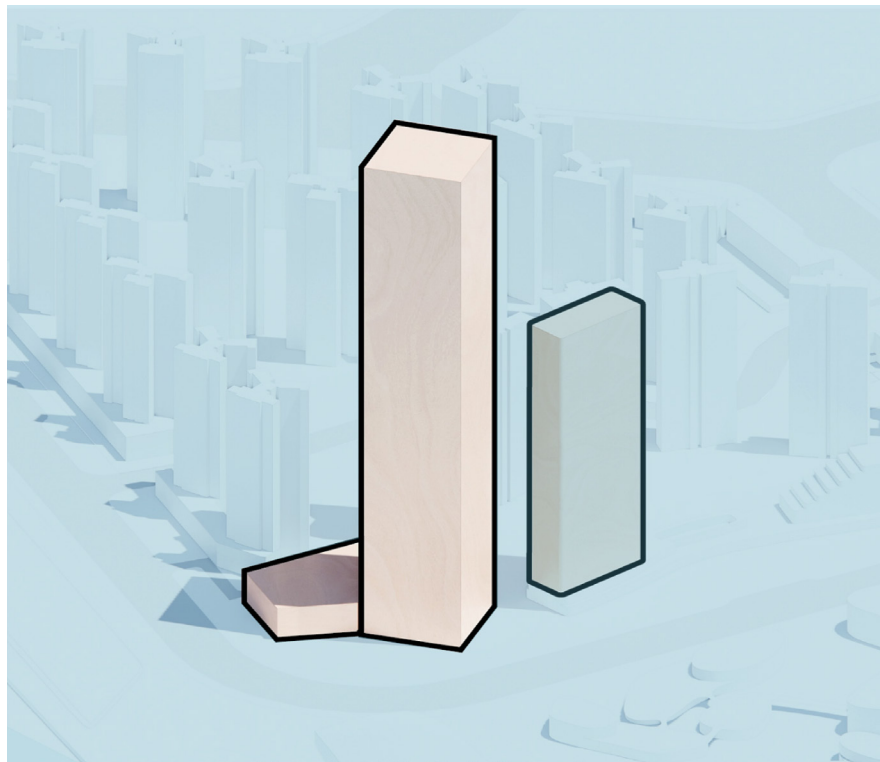


The Red Apple

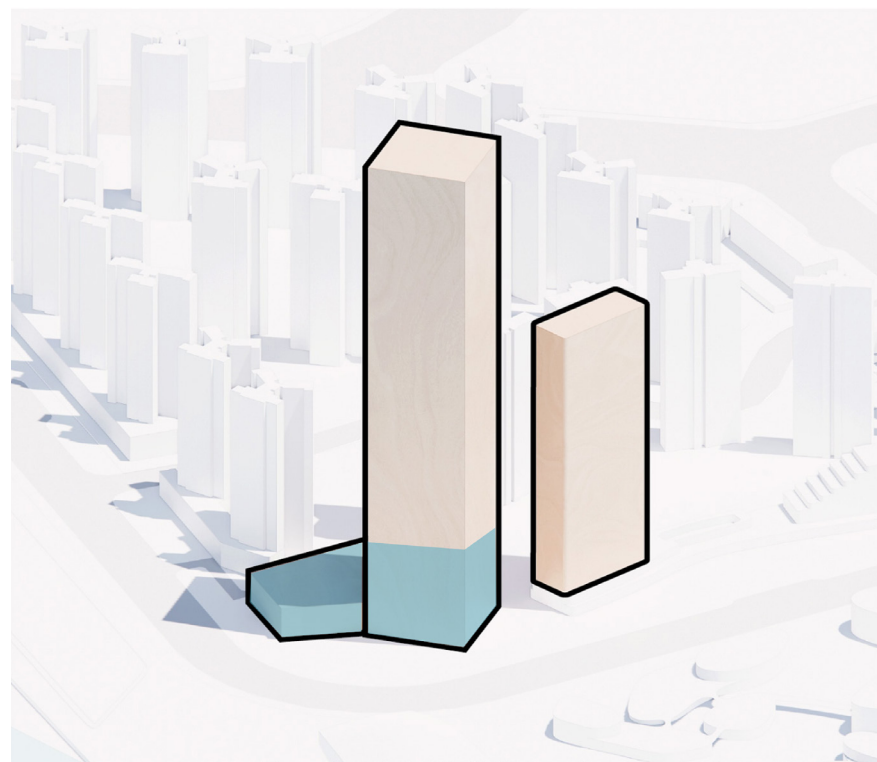


Stadsdriehoek

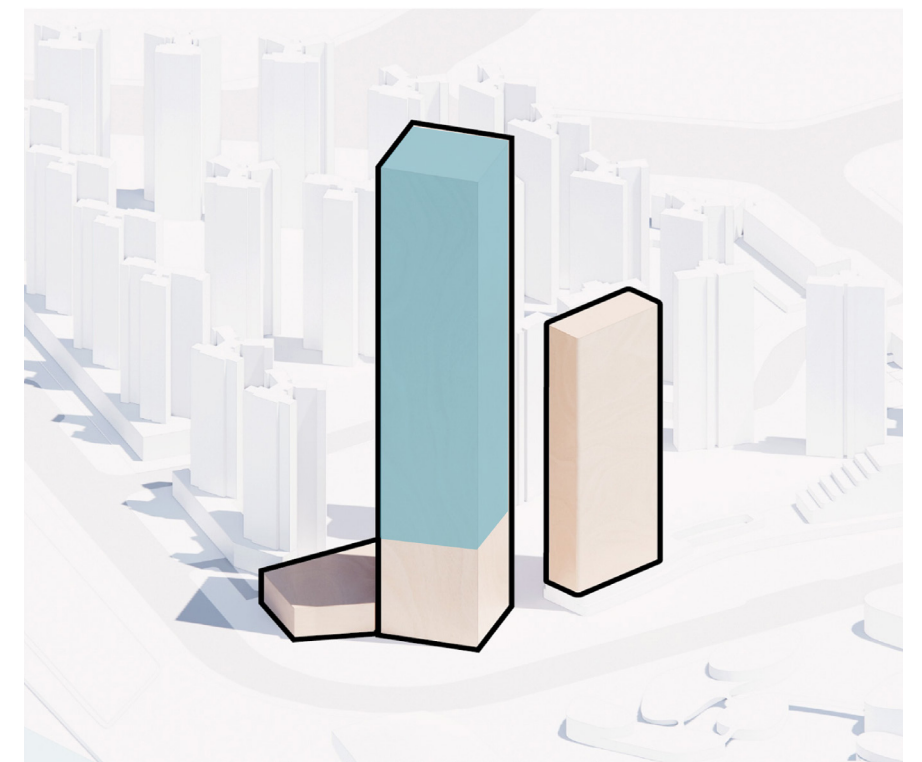
Focus points



Context



Plinth



Public interior

Context - negative highlights



Human scale

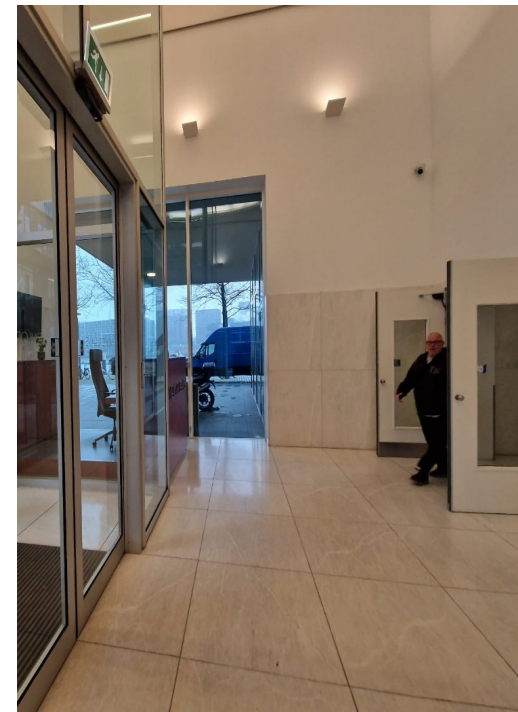
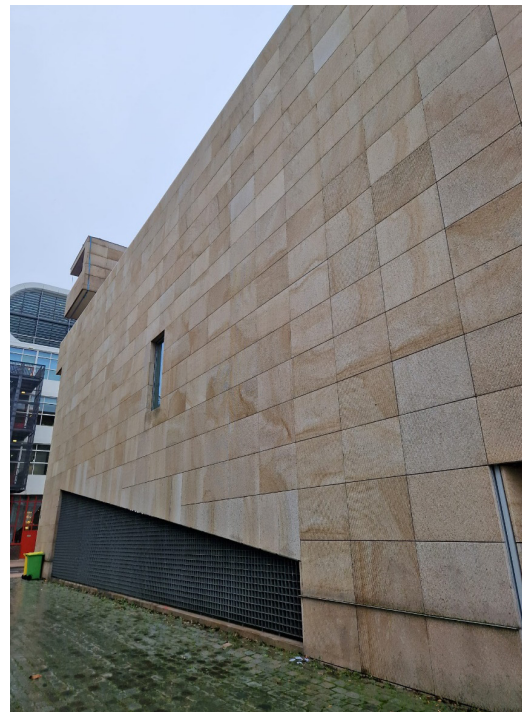
Mobility

Interconnecting

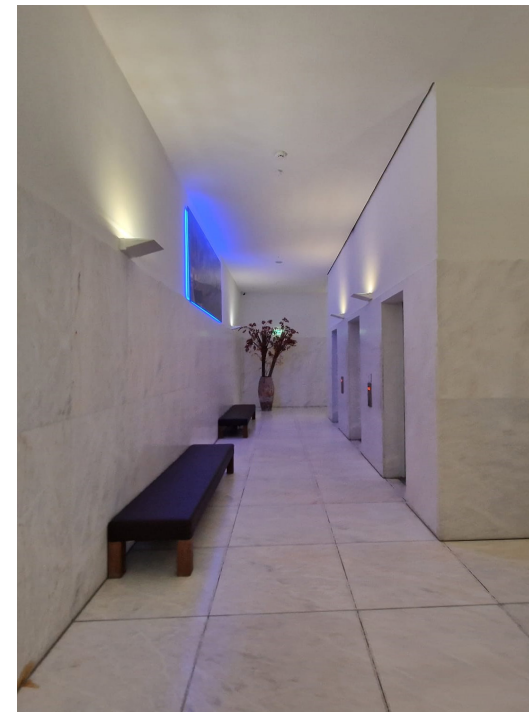
Plinth - negative highlights



Accessibility



Diversity



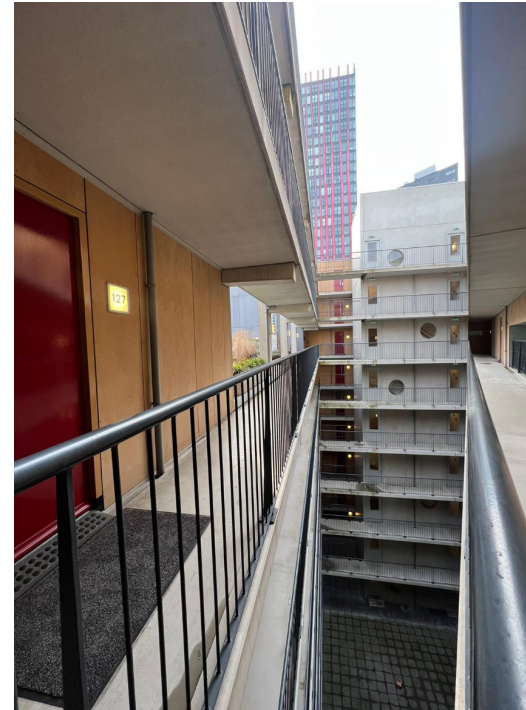
Functions



Public interior - negative highlights



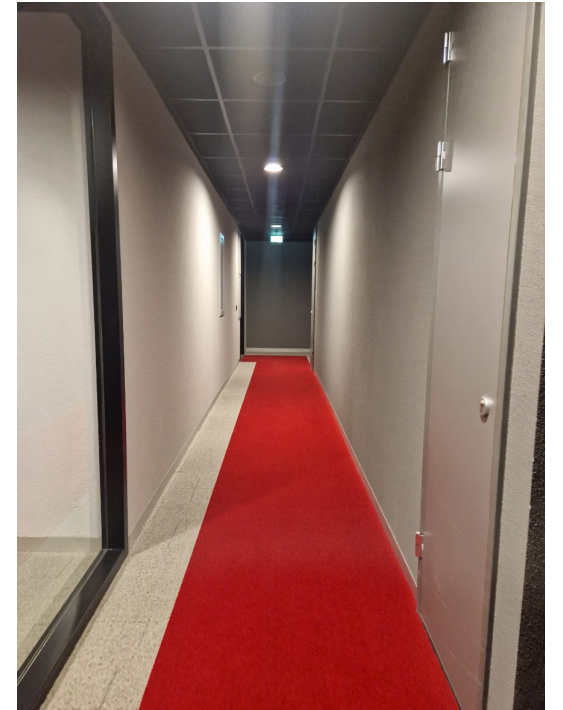
Flexibility



Social interaction



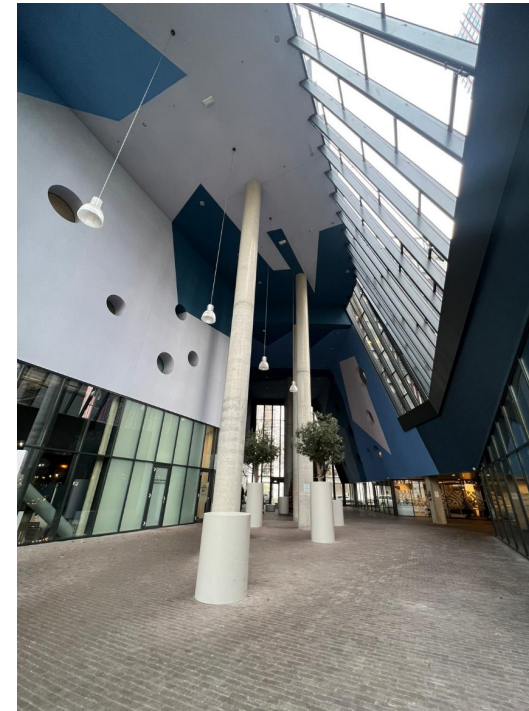
Sense of belonging



The positive highlights



Daylight

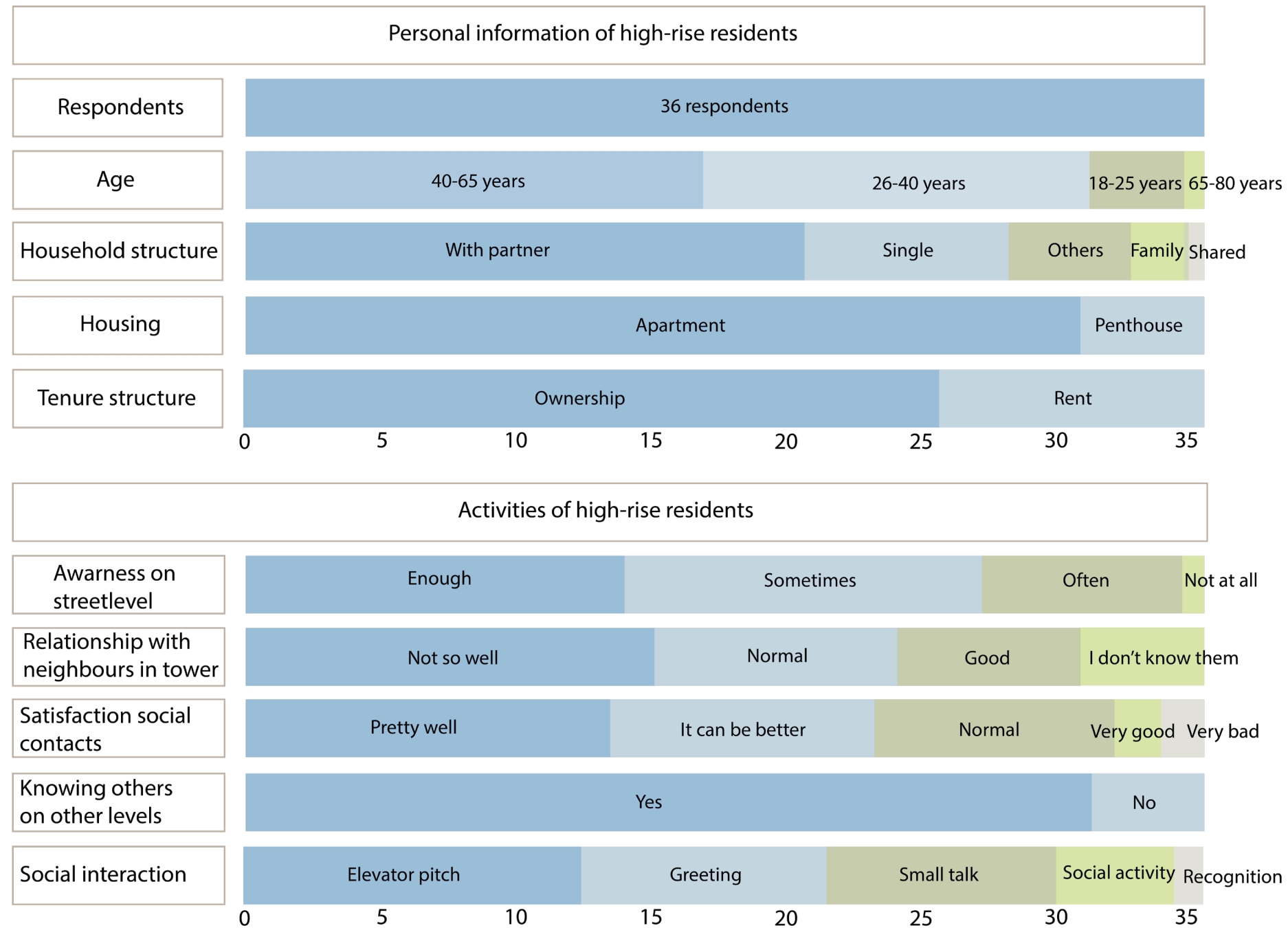


Shared spaces

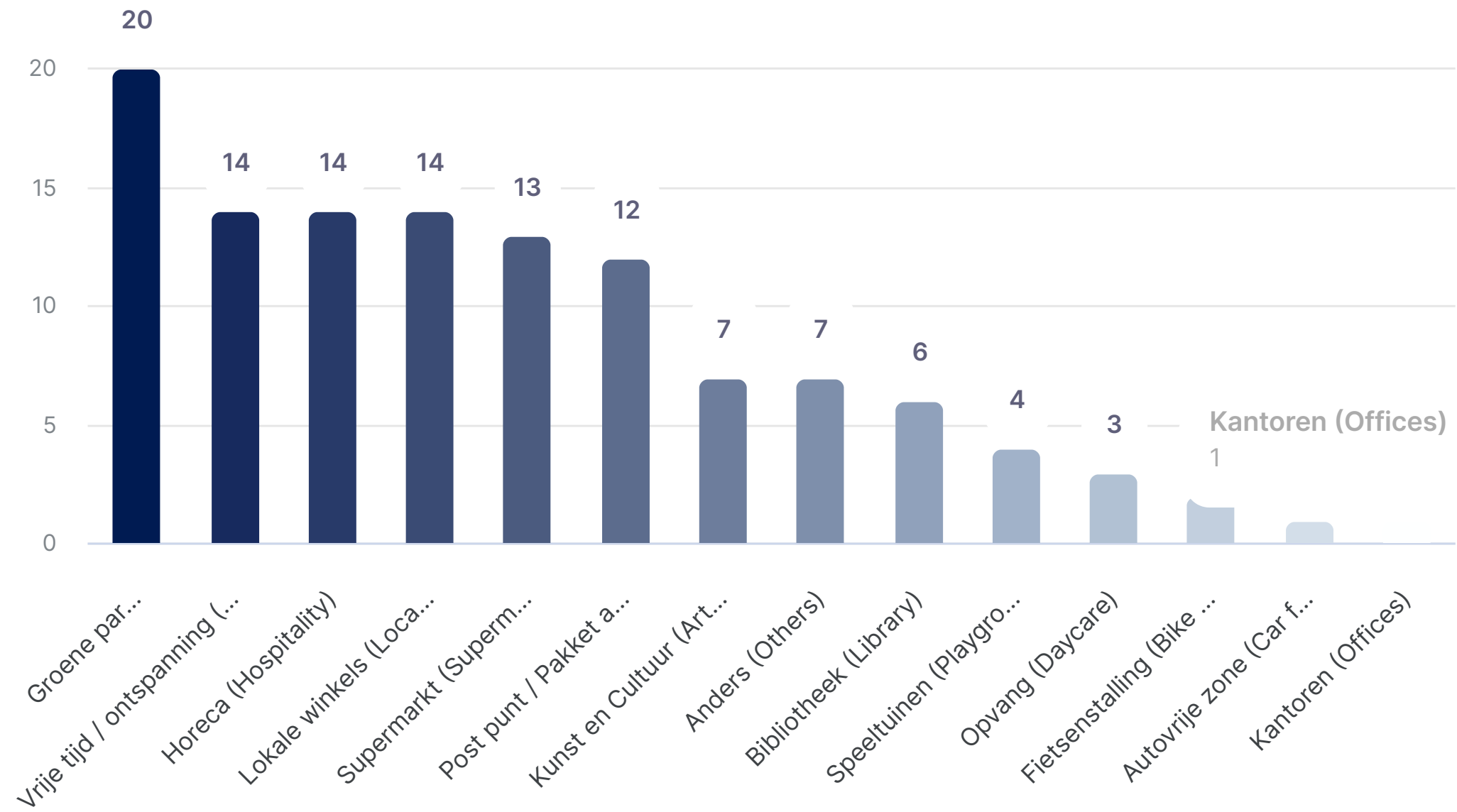


Diversity

Fieldwork



Fieldwork



Reference analysis



Sense of belonging

Reference analysis



Human scale

Reference analysis



Flexibility

Reference analysis



Community

Reference analysis



Diversity

Reference analysis



Participation

Location



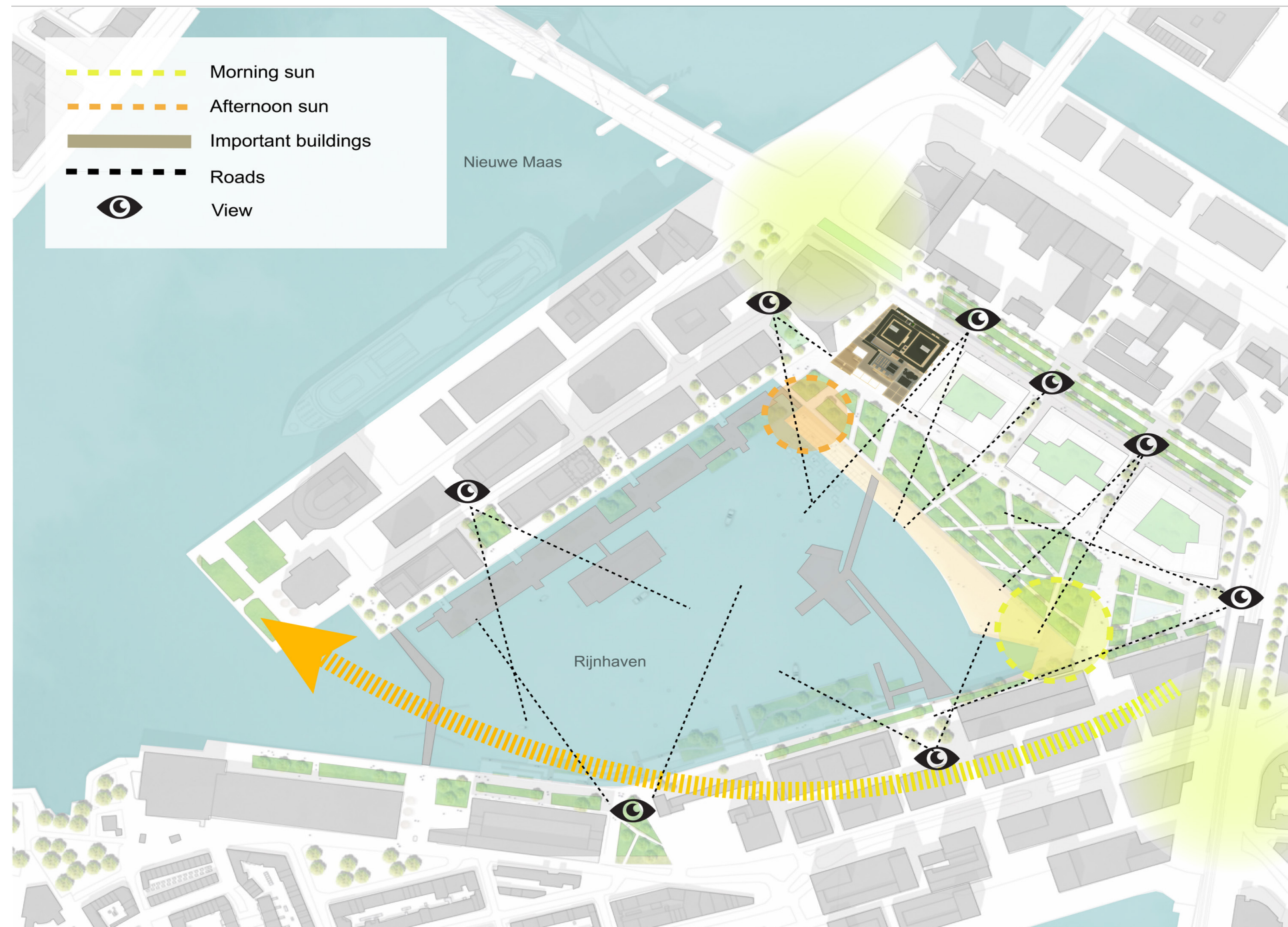
De Rijnhaven

Location analysis



Interconnecting

Location analysis



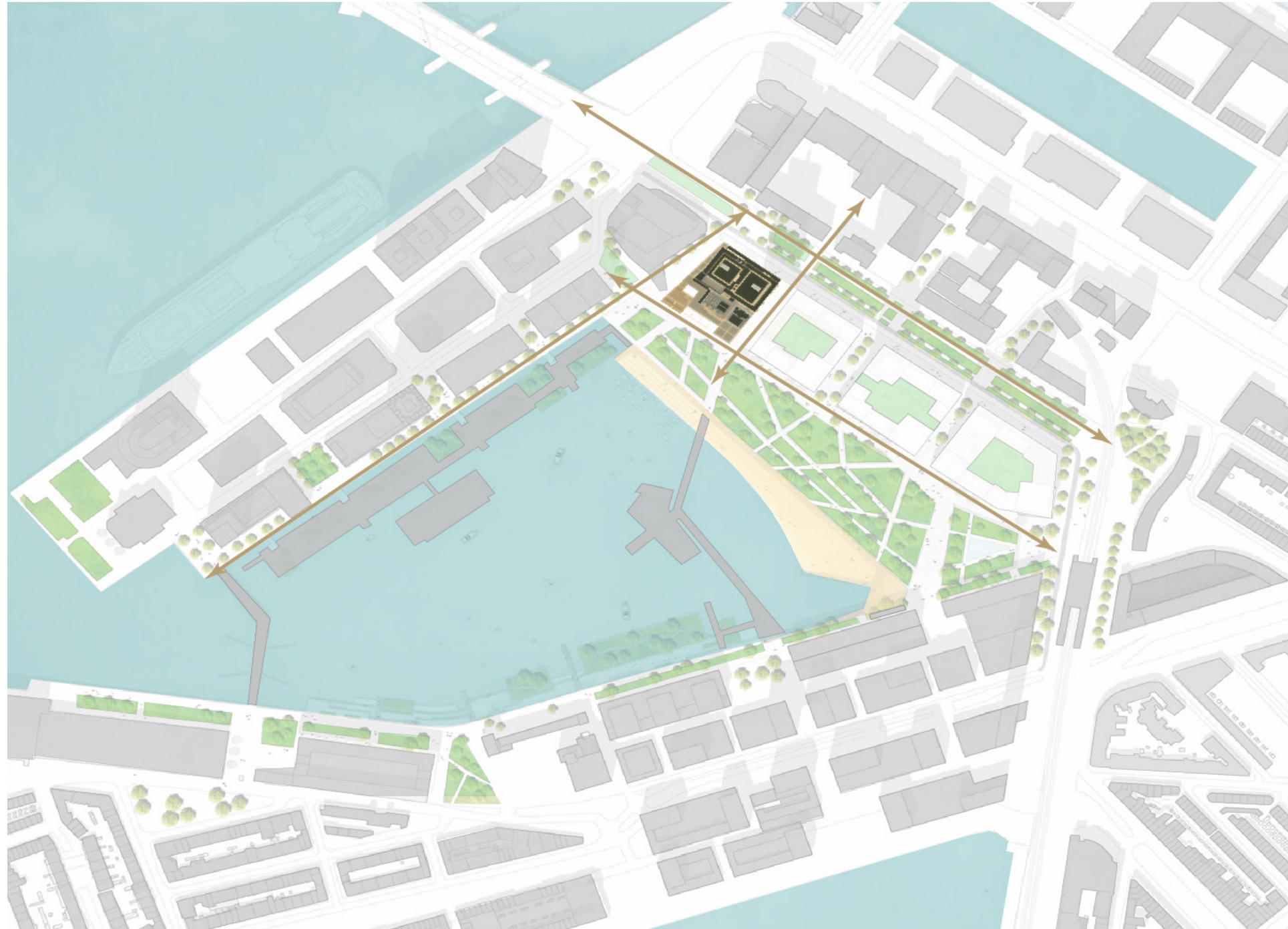
Area quality

Location analysis

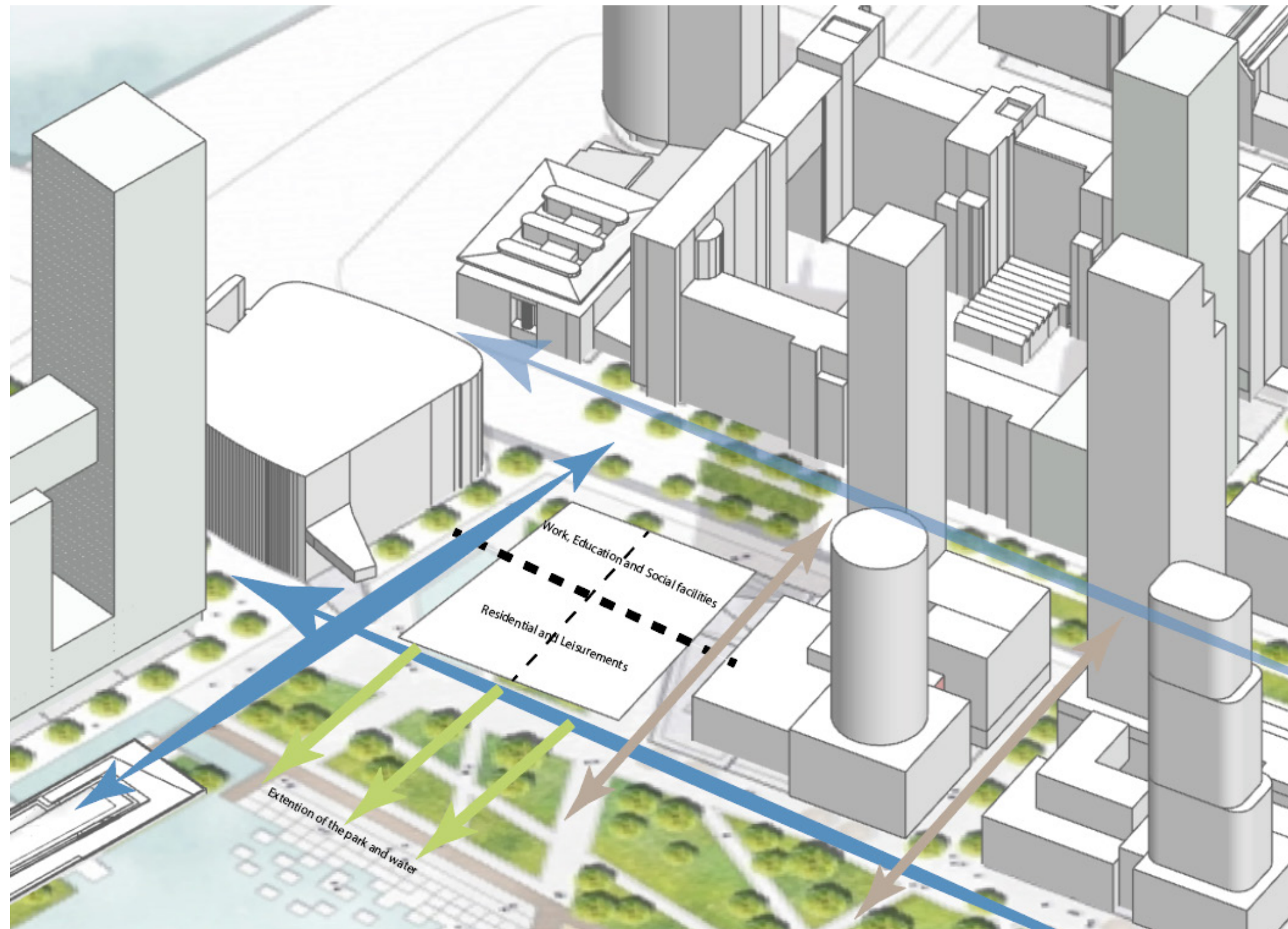


Central point

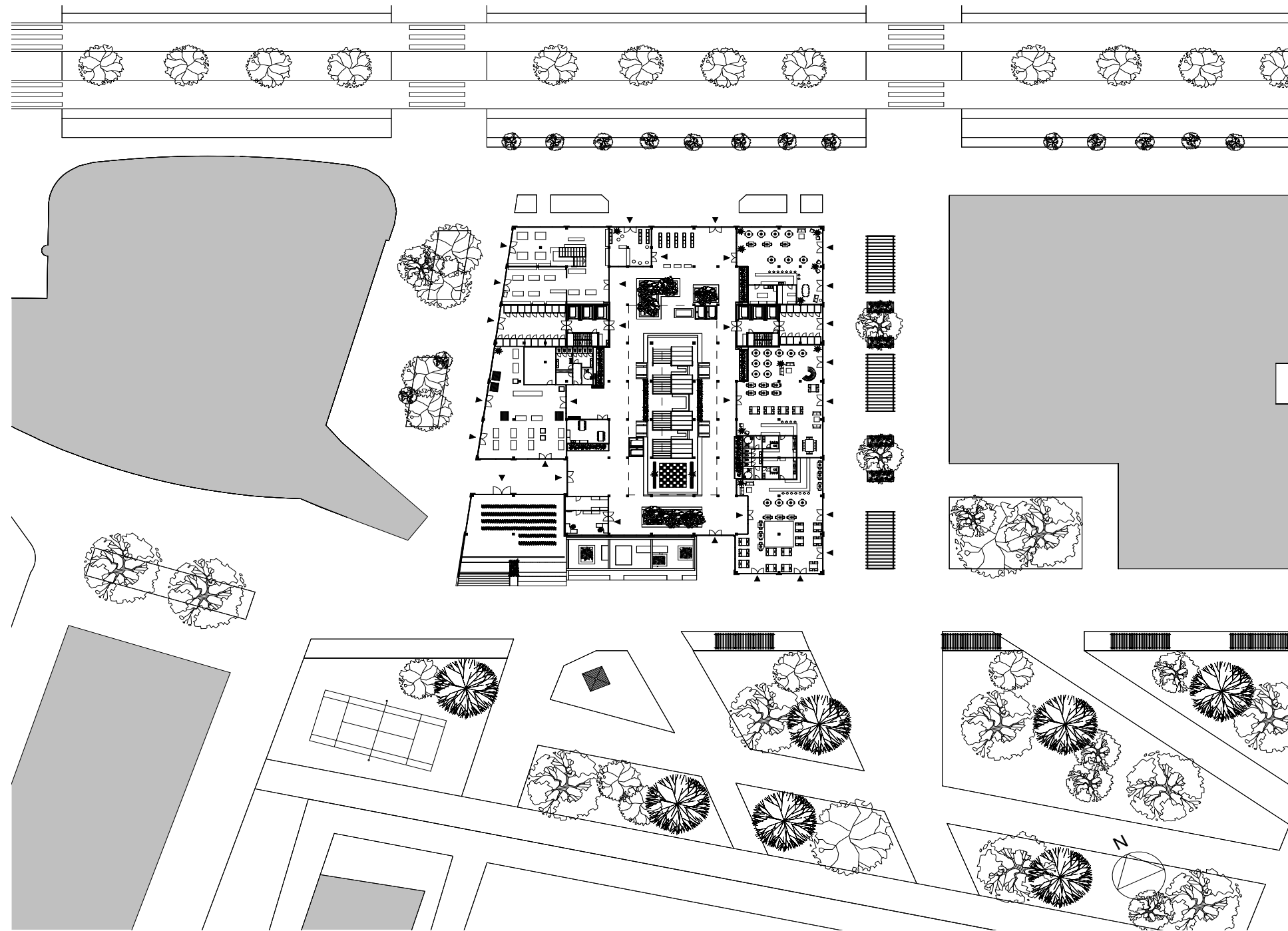
Masterplan 1:1000



Design concept



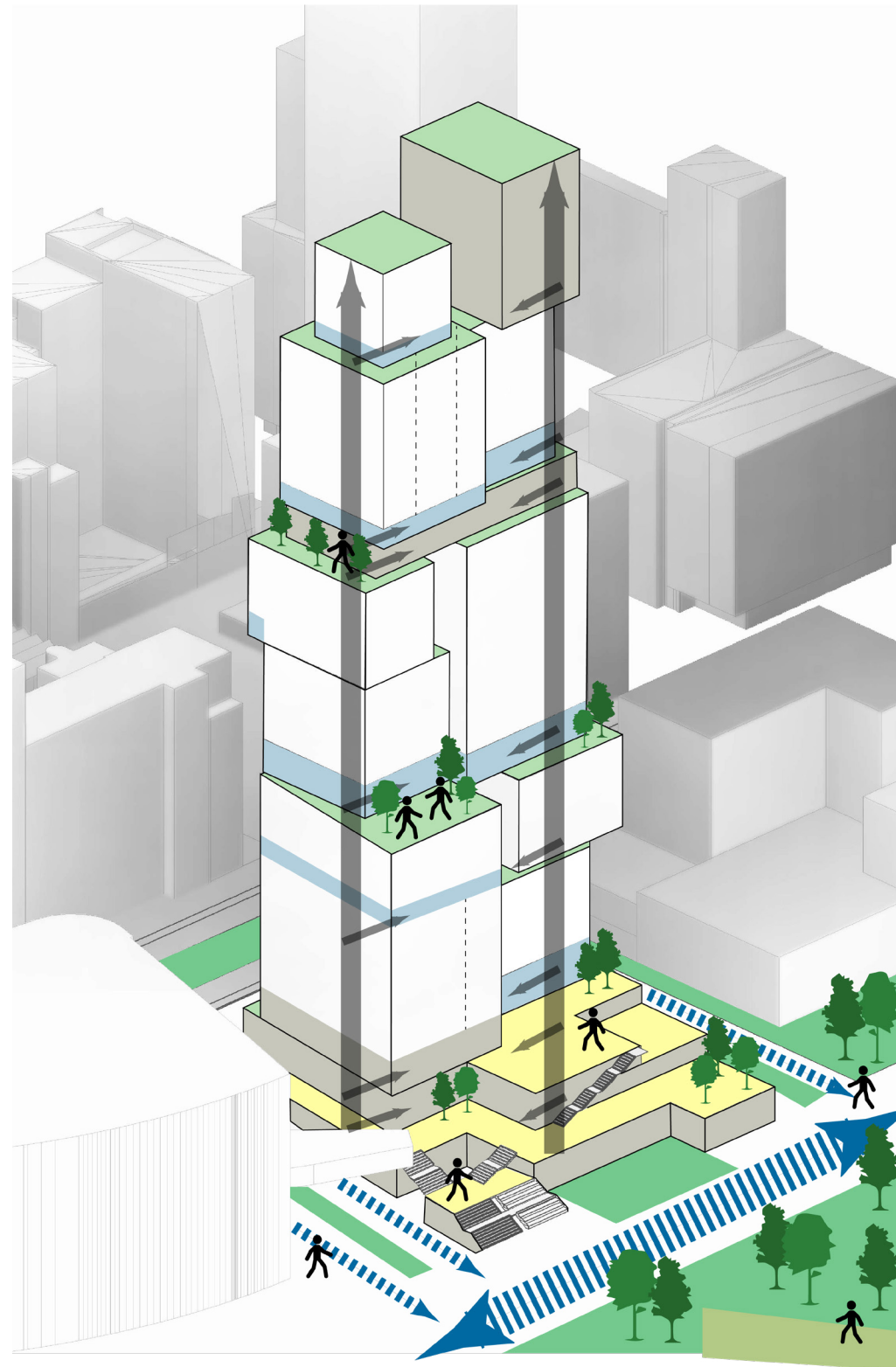
Situation 1:500



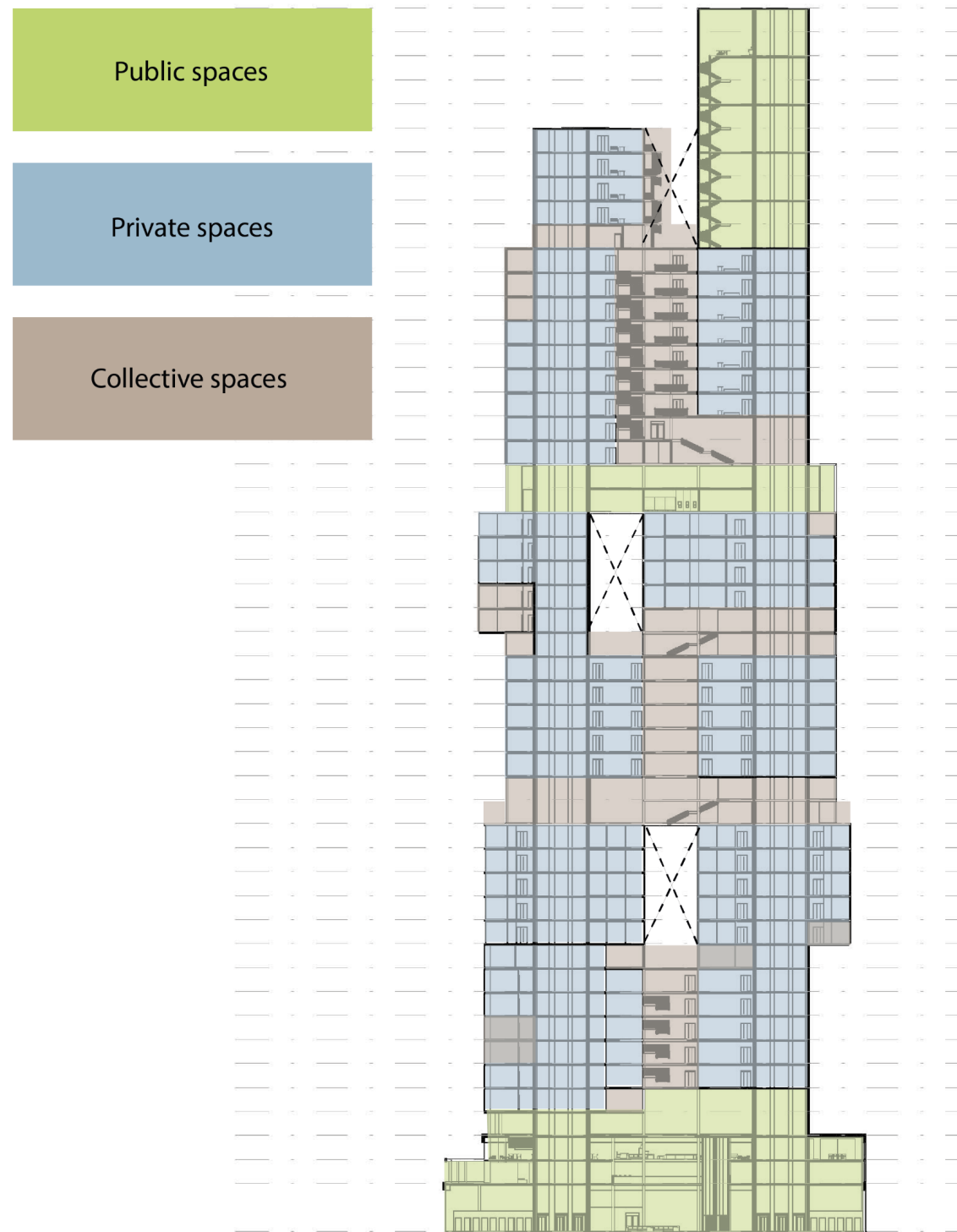
Street impression



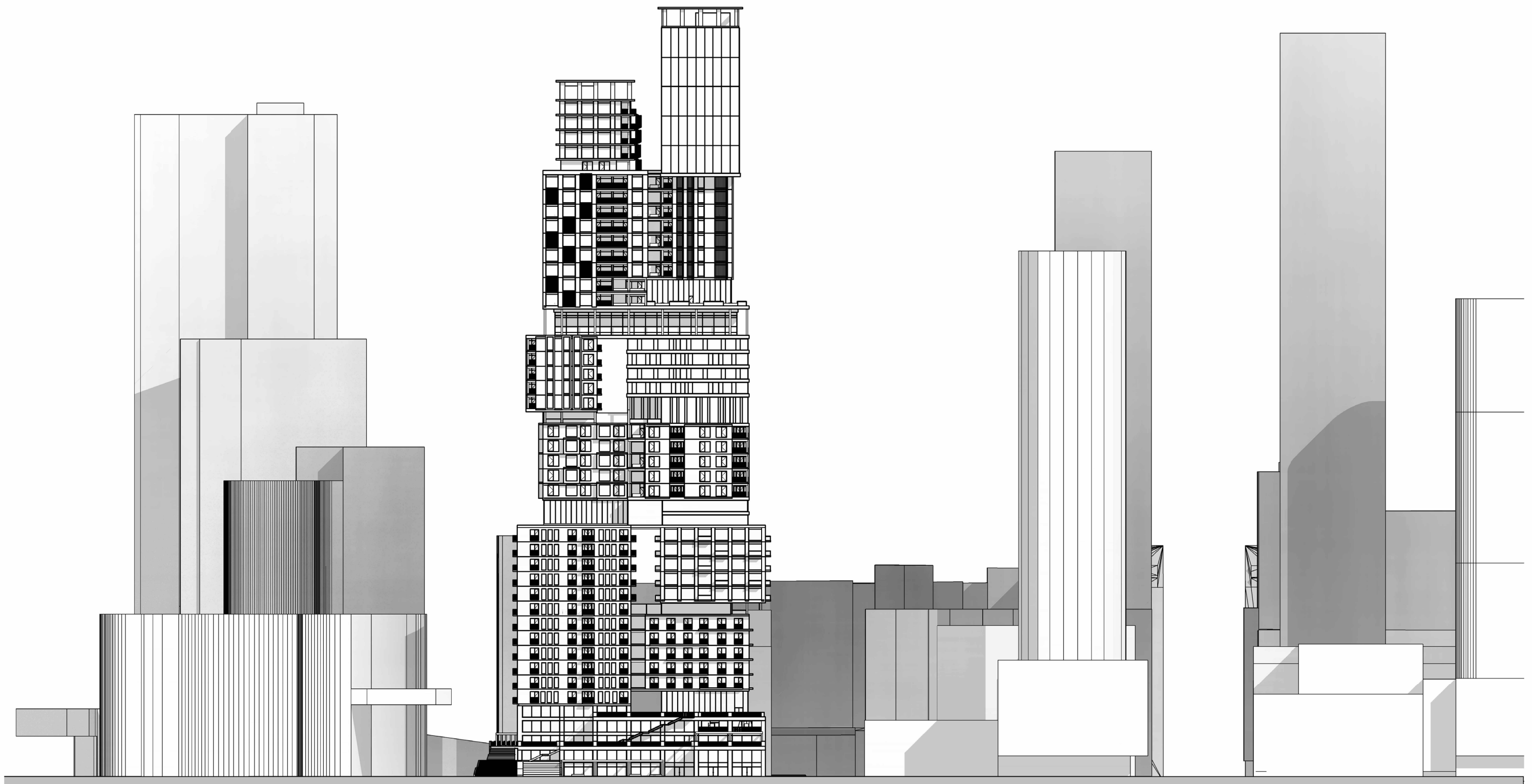
Design concept



Design concept



Elevation 1:1000



South facade

schaal 1 : 1000

Structure



Structure diagram



TOP

- Concrete slab as roof for reinforcement

RESIDENTIAL LEVELS

- Timber glulam construction
- Timber column 400 x 400 mm
- Timber beam 400 x 450 mm
- Cross laminated timber floor 300 mm

PUBLIC LEVELS

- Double height stories
- Concrete slabs as diaphragm

RESIDENTIAL LEVELS

- Timber glulam construction
- Timber column 400 x 400 mm
- Timber beam 400 x 450 mm
- Cross laminated timber floor 300 mm

PUBLIC LEVELS

- Double height stories
- Concrete slabs as diaphragm

CONCRETE CORES

- 2 Massive concrete cores
- Stabilisation
- Emergency exit

PLINTH

- Mass and hybrid timber construction
- Timber column 450 x 450 mm
- Timber beam 450 x 500 mm
- Concrete slab 250 mm

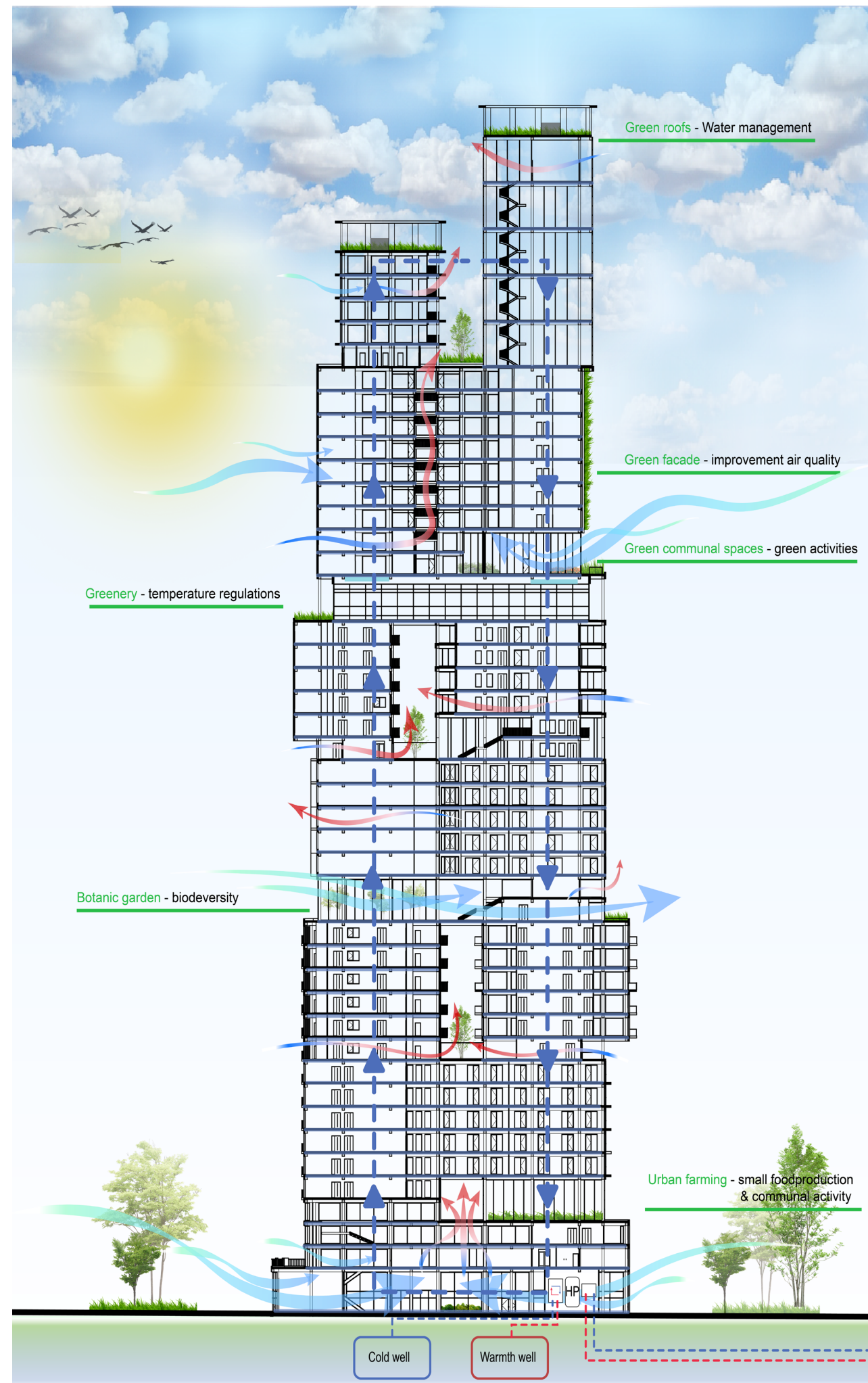
PARKING GARAGE

3 Stories parkinggarage (shared with other buildings)
Poured reinforced concrete walls and floors

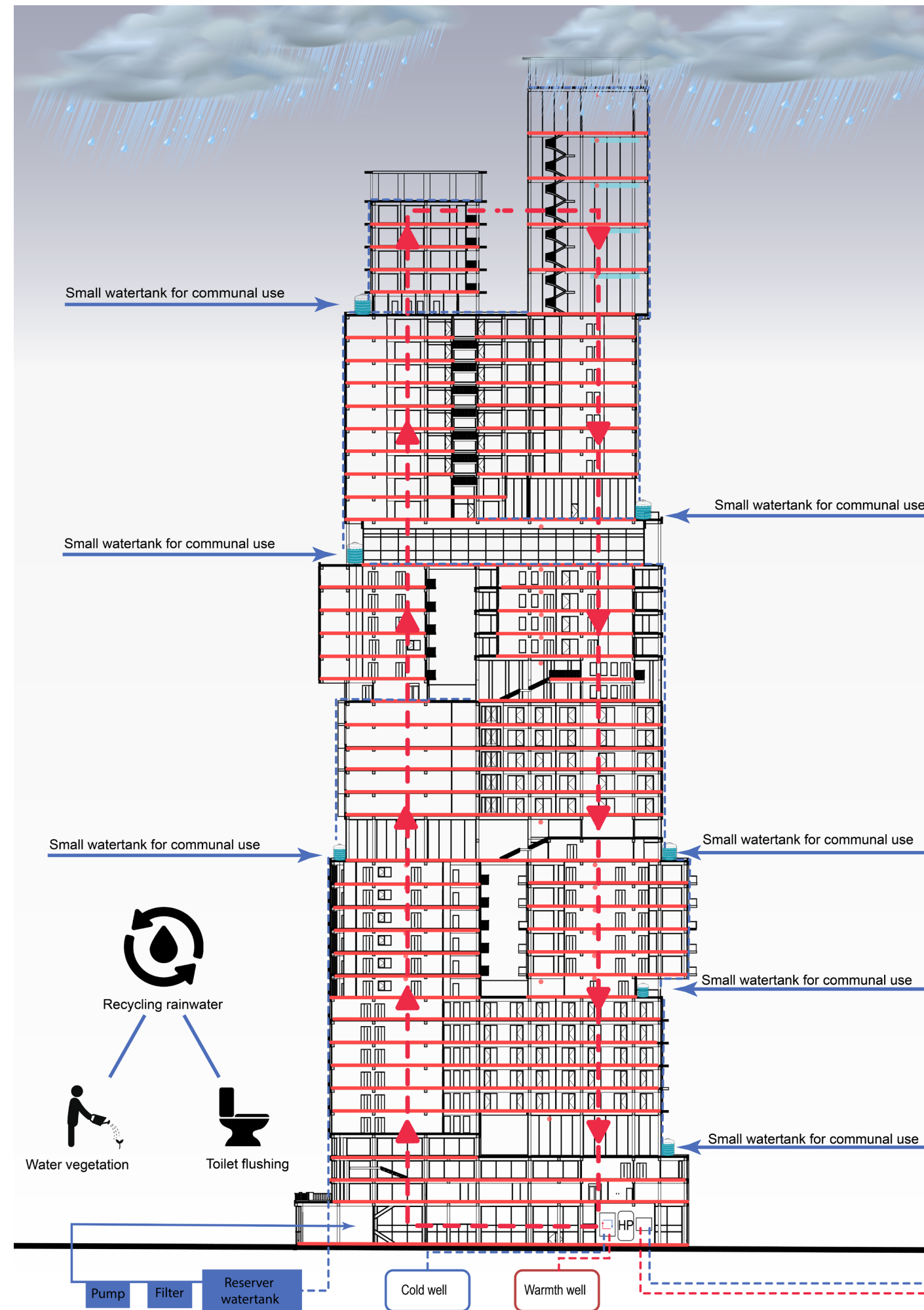
FOUNDATION

Foundation beams≈ 1500 x 2000 mm
Tubexpoles ≈ Ø 850 mm x 70.000 m

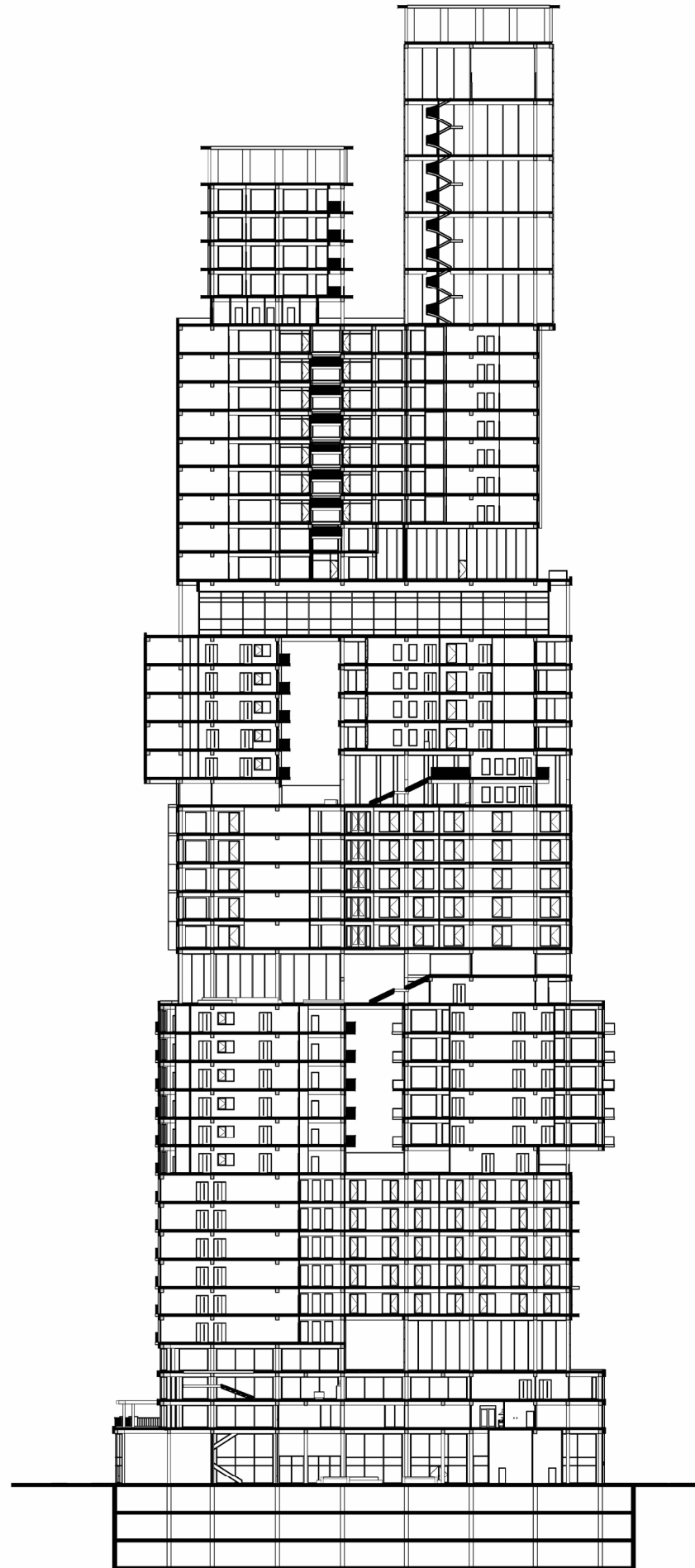
Climate diagram summer situation



Climate diagram winter situation

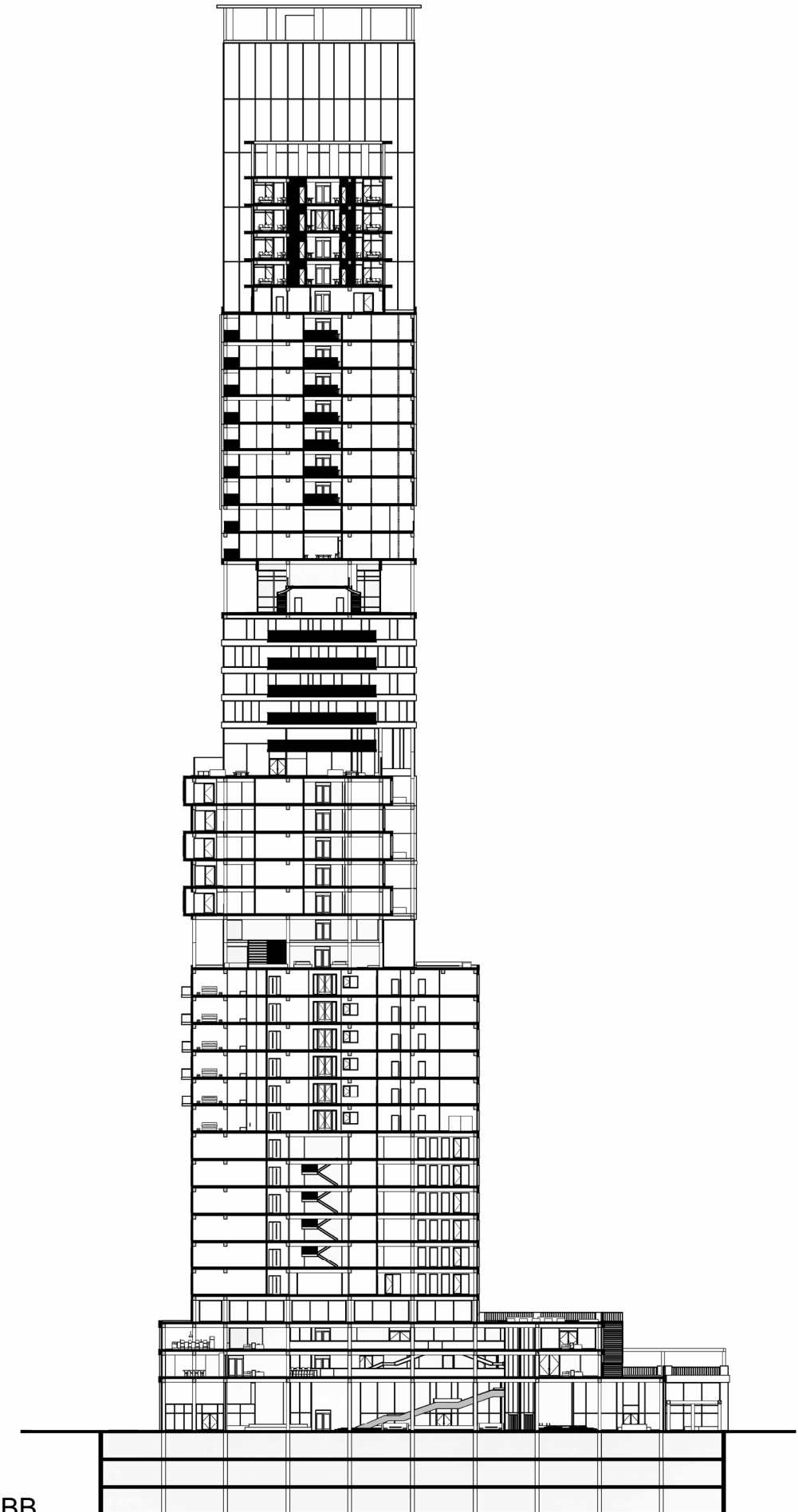


Sections AA and BB



Section AA

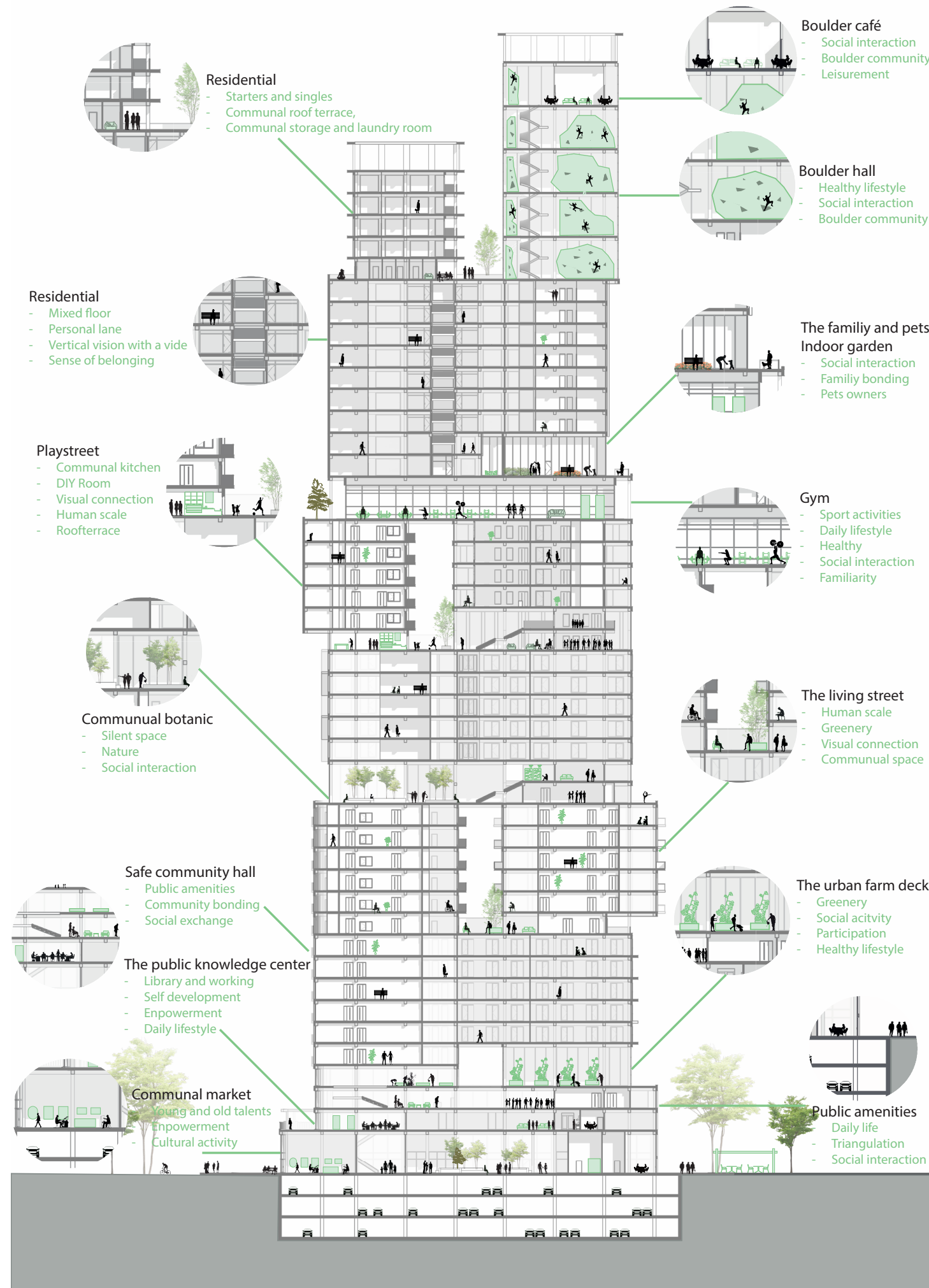
schaal 1 : 500



Section BB

schaal 1 : 500

Section with program



Design interventions

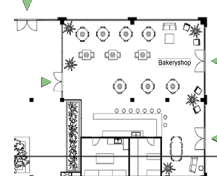
Accessibility



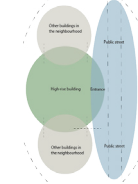
Multi-functional spaces



Transparency



Multiple entrances



Spatial transition



Urban connection

Collective spaces



Encounter



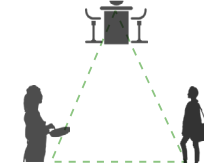
Daily needs



Social interaction



Knowledge

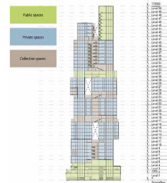


Triangulation

Diversity in space and expression



Hybrid development



Mix-use development



Program



Different demographics

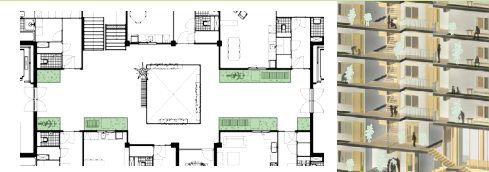


Facade lay-out

Identity and empowerment



Social identity



Personal strip

Flexibility



Division of spaces



Diversity in lay-out (indoor/outdoor)



Sustainable

Sense of belonging



Inclusive



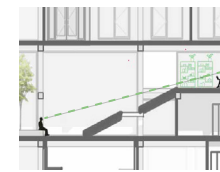
Participation



Personal infill



Placemaking objects



Visual connection

Human needs



Daylight



Climate



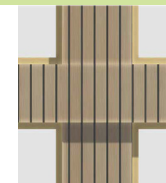
Cross ventilation



Furniture



Human scale



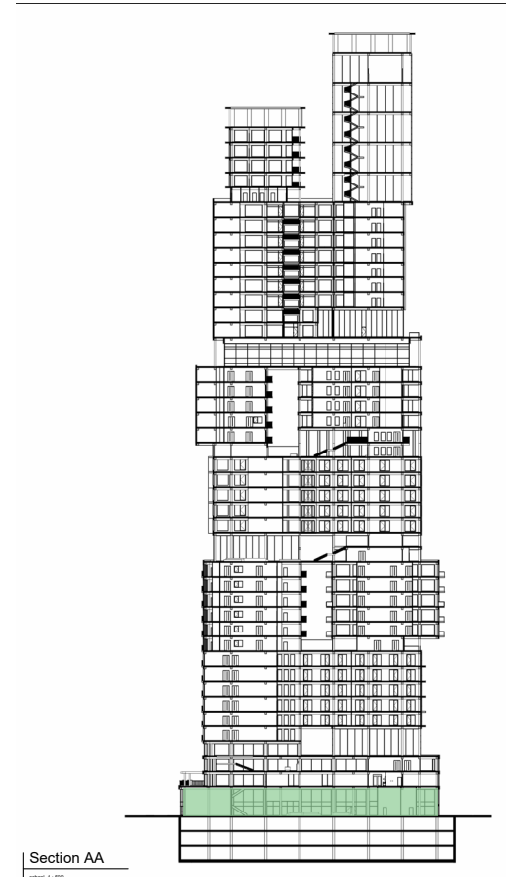
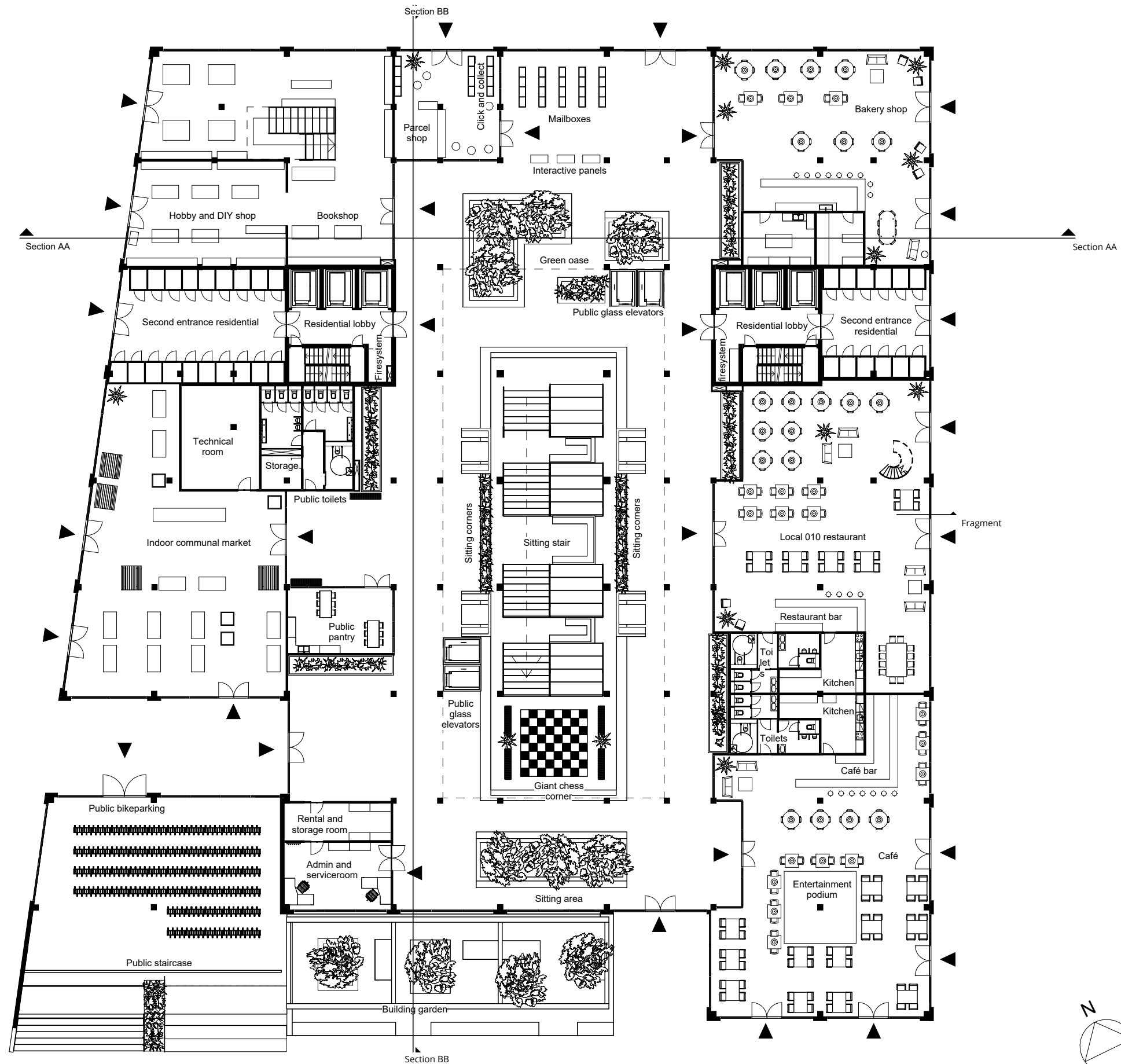
Materialisation



Greenery

Floorplan - Groundlevel

The interior urban street



Floorplan groundfloor

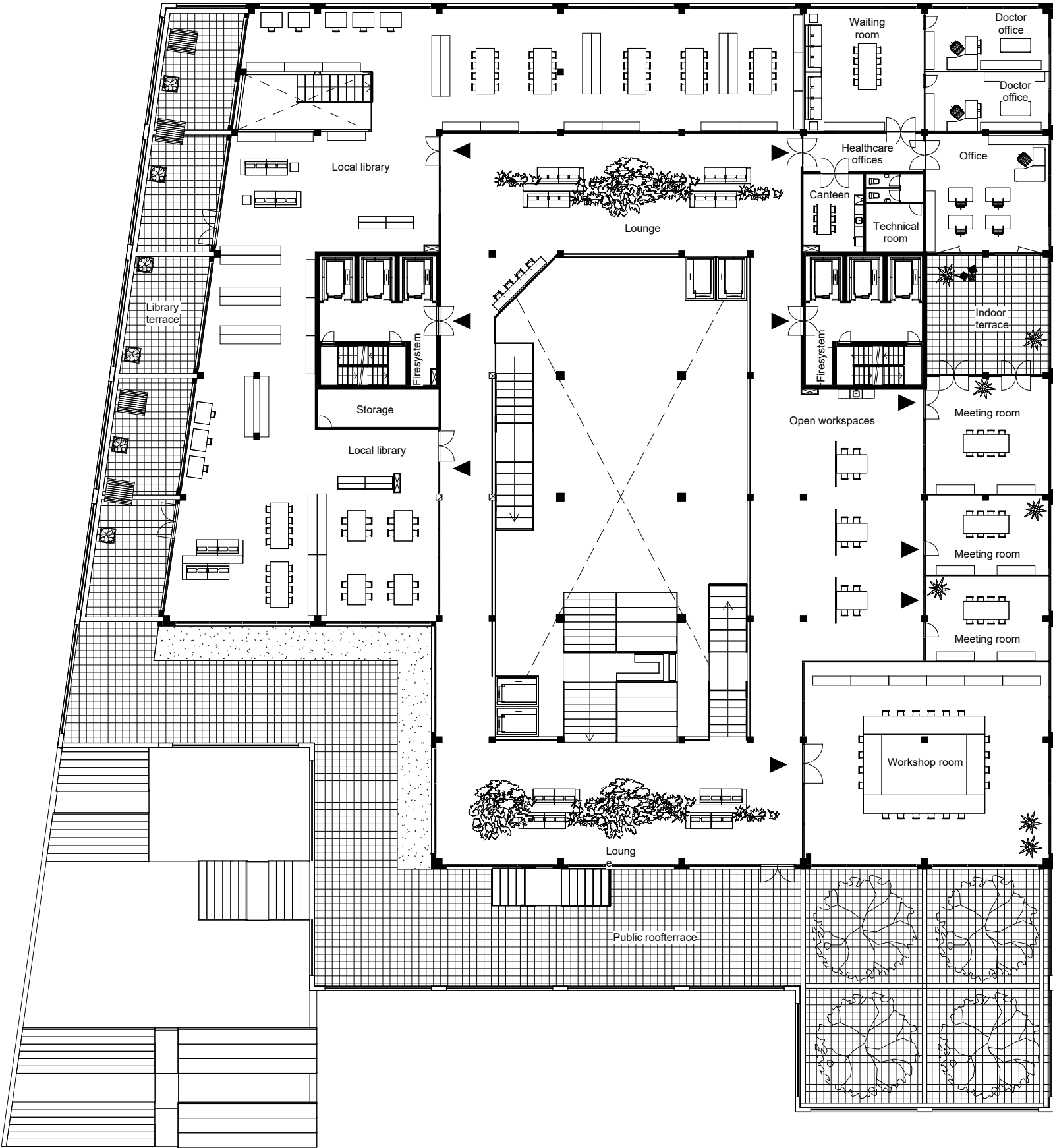
schaal 1 : 200

Impression groundfloor hall

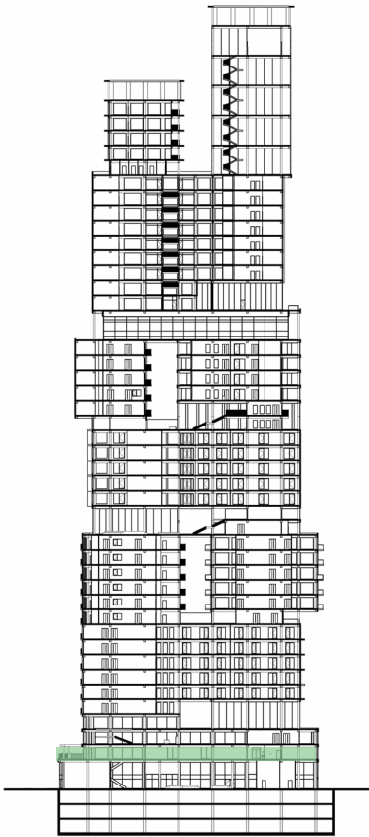


Floorplan - Level 1

The public knowledge center

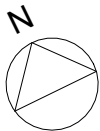


Section AA
schaal 1:200



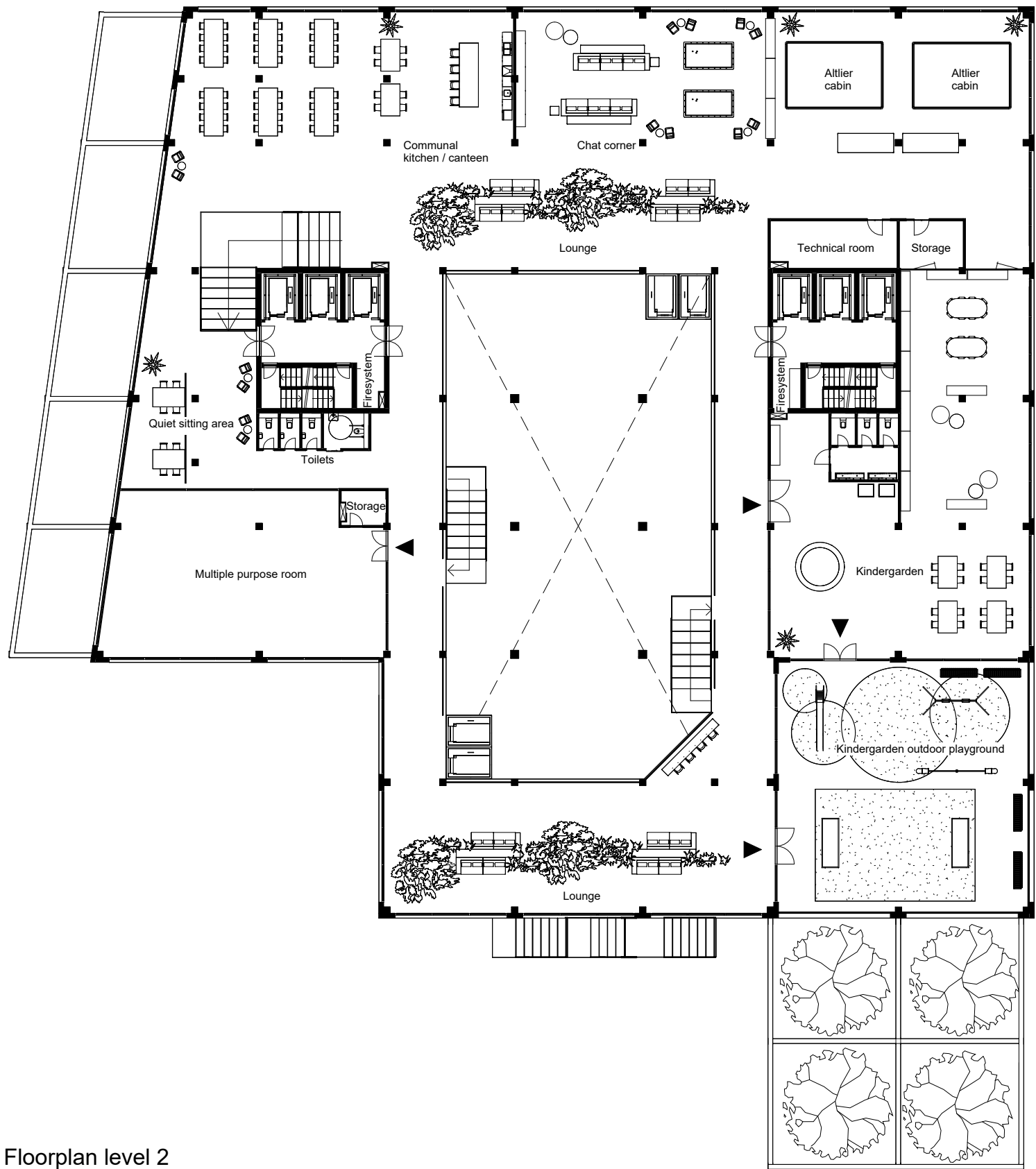
Floorplan level 1

schaal 1:200

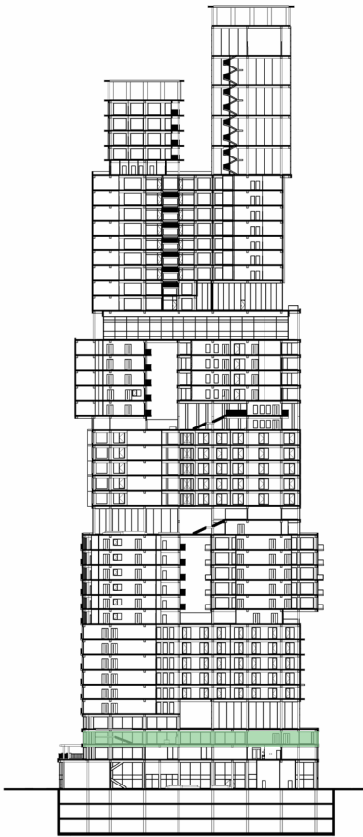


Floorplan - Level 2

The safe community hall



Section AA



Floorplan level 2

schaal 1 : 200

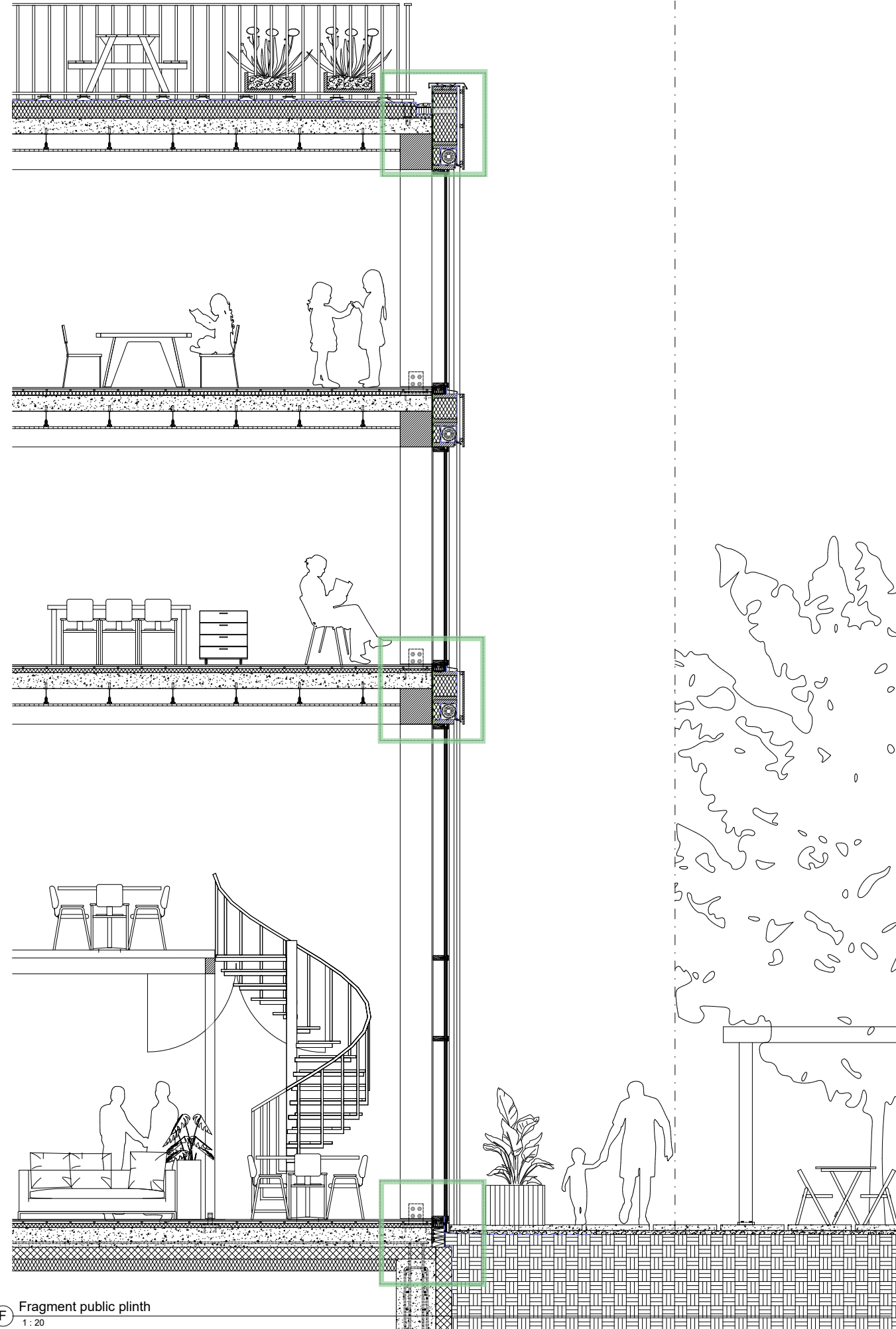


Impression level 3

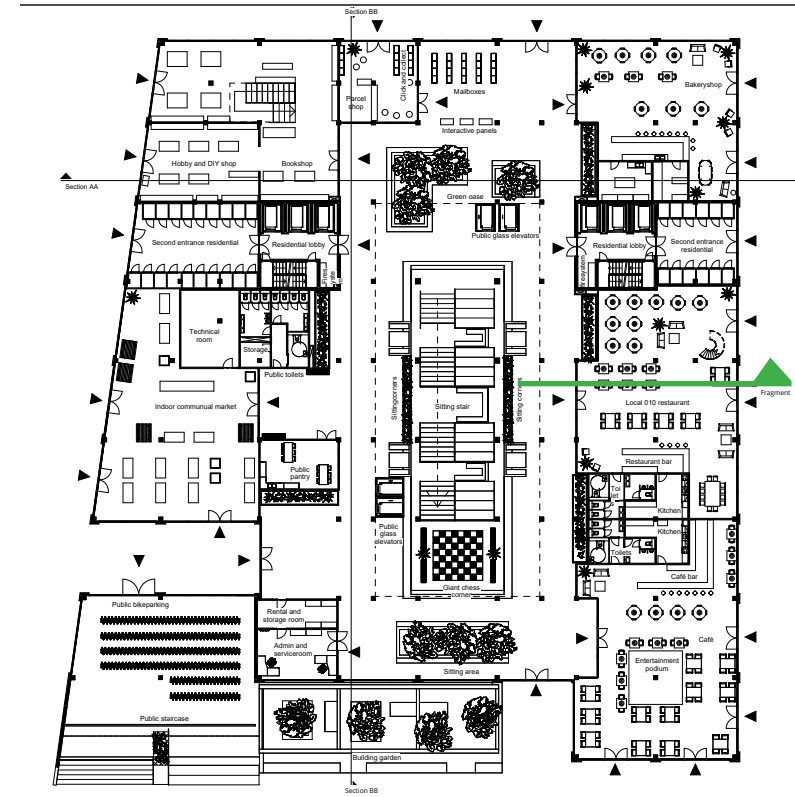
The urban farm deck



Fragment public levels 1:20

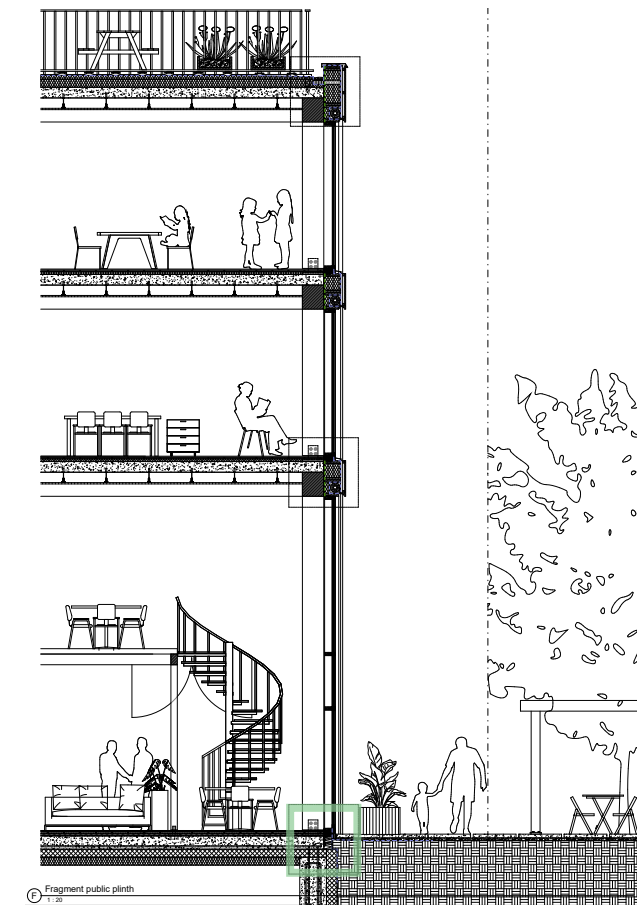
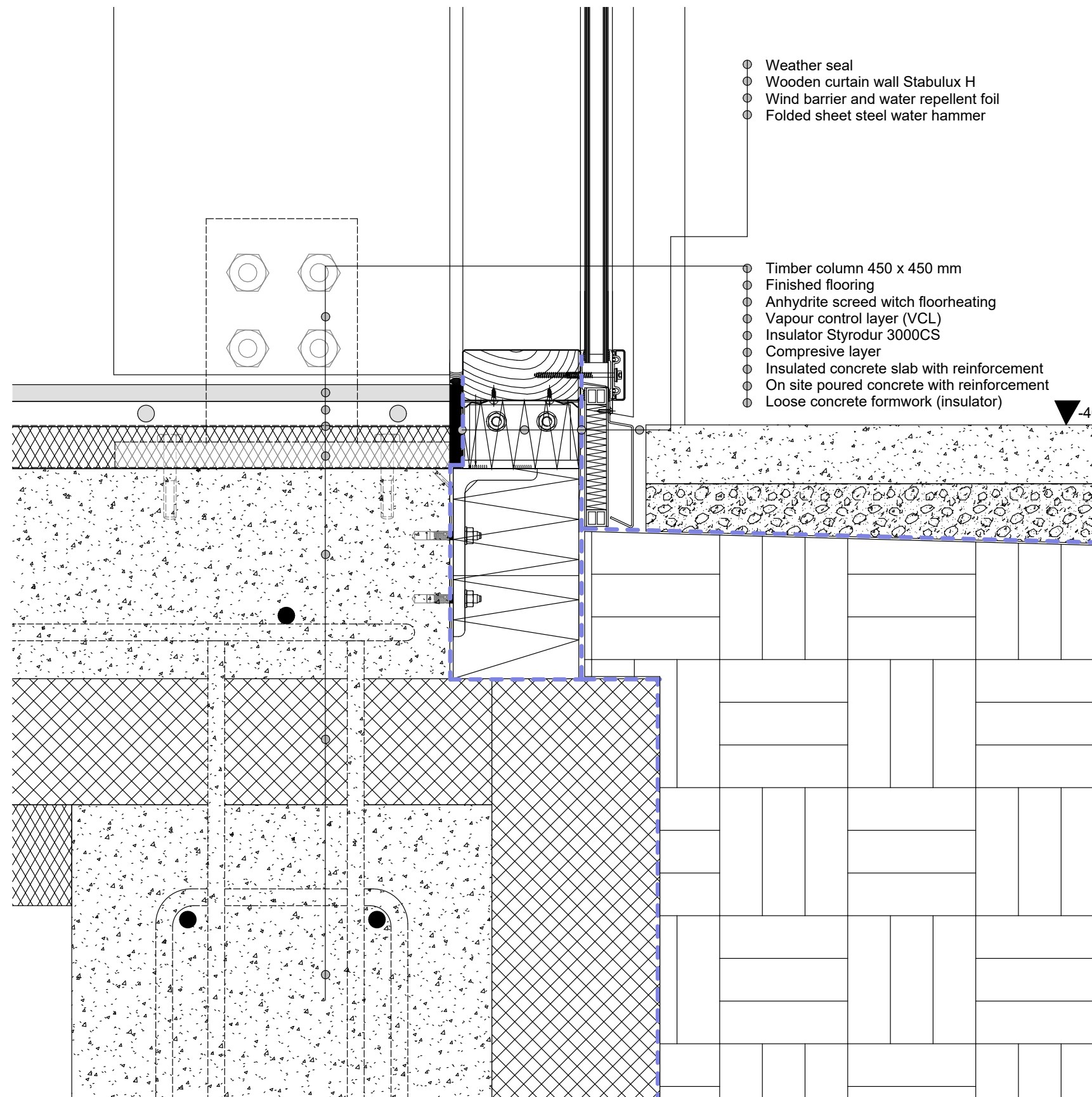


F Fragment public plinth
1:20



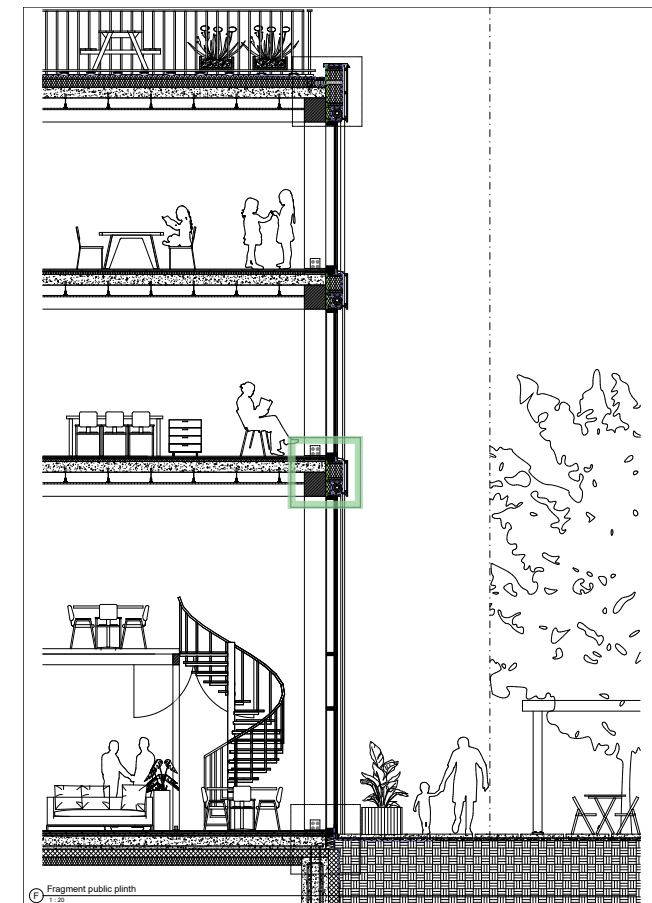
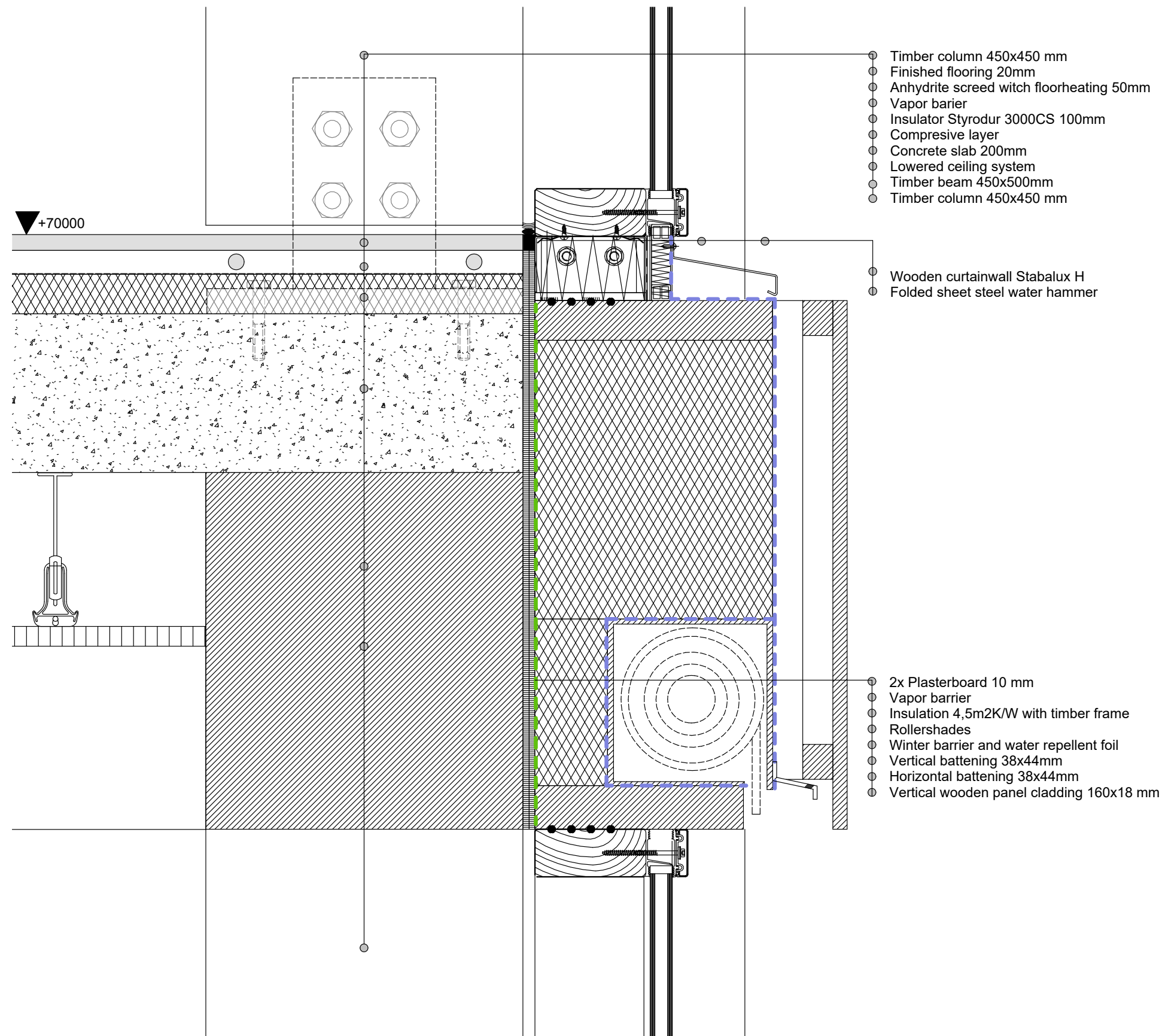
Detail 1:5

Groundfloor and parkinggarage



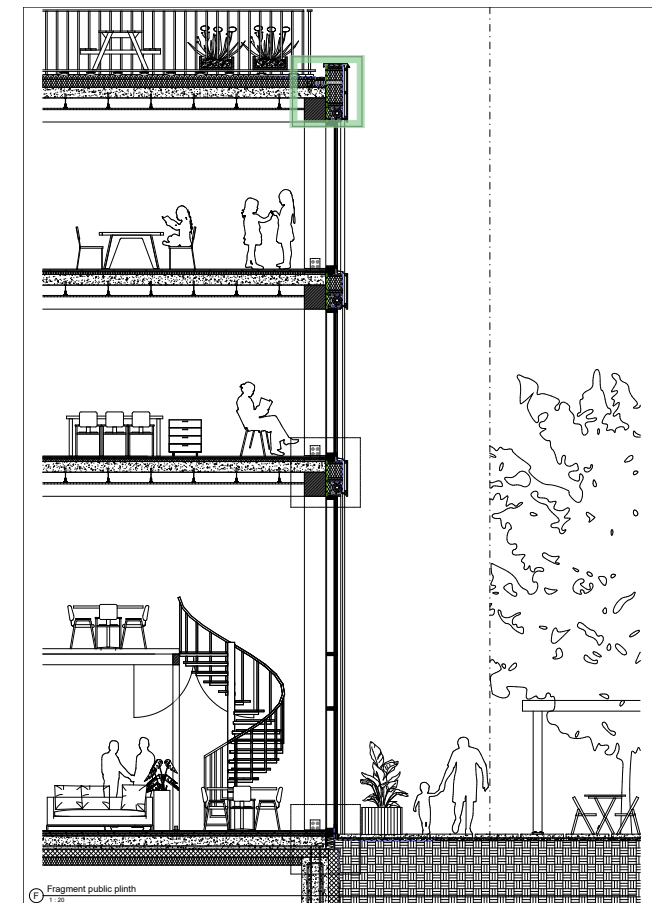
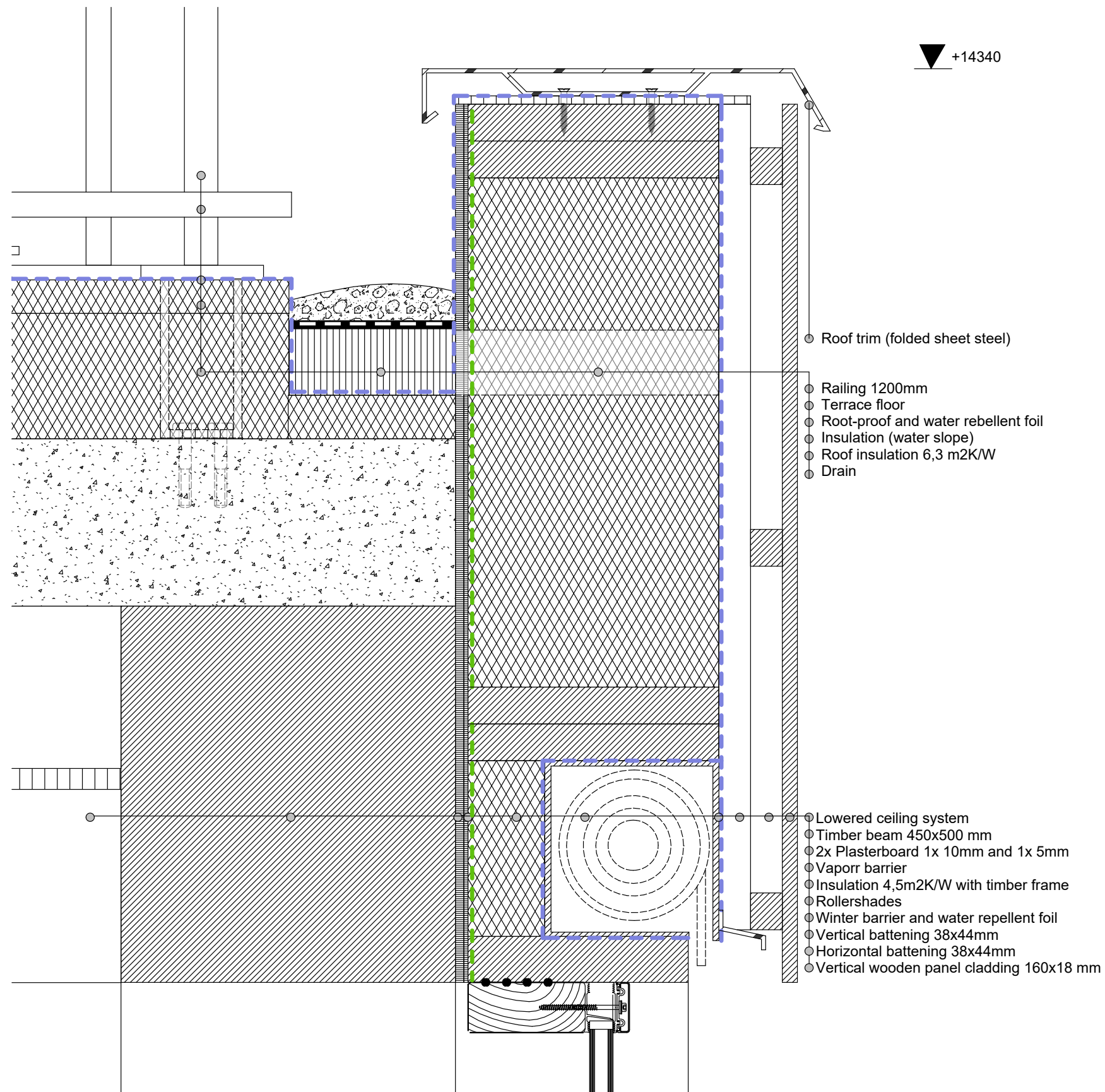
Detail 1:5

Public floor with facade



Detail 1:5

Public terrace with roof



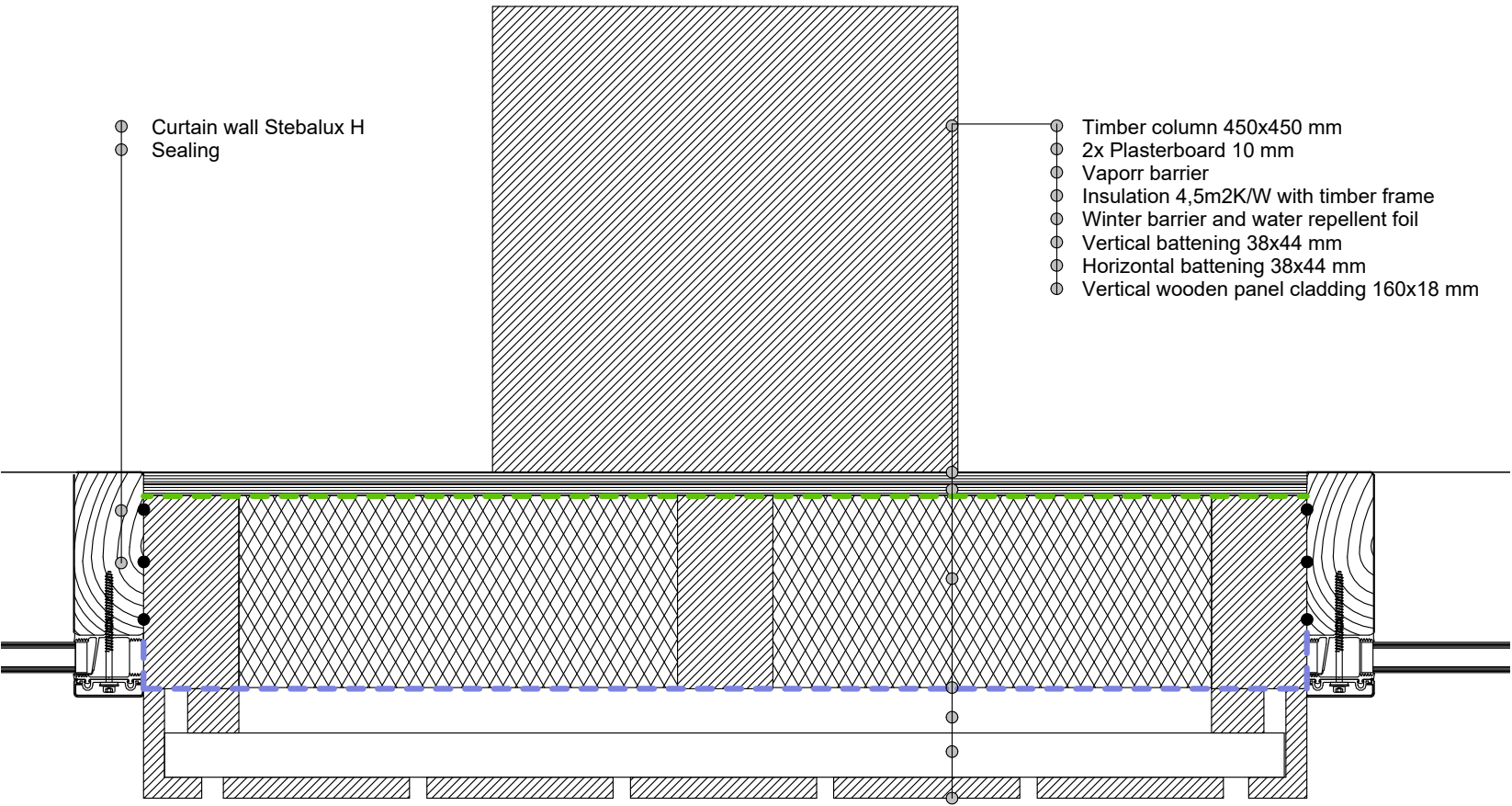
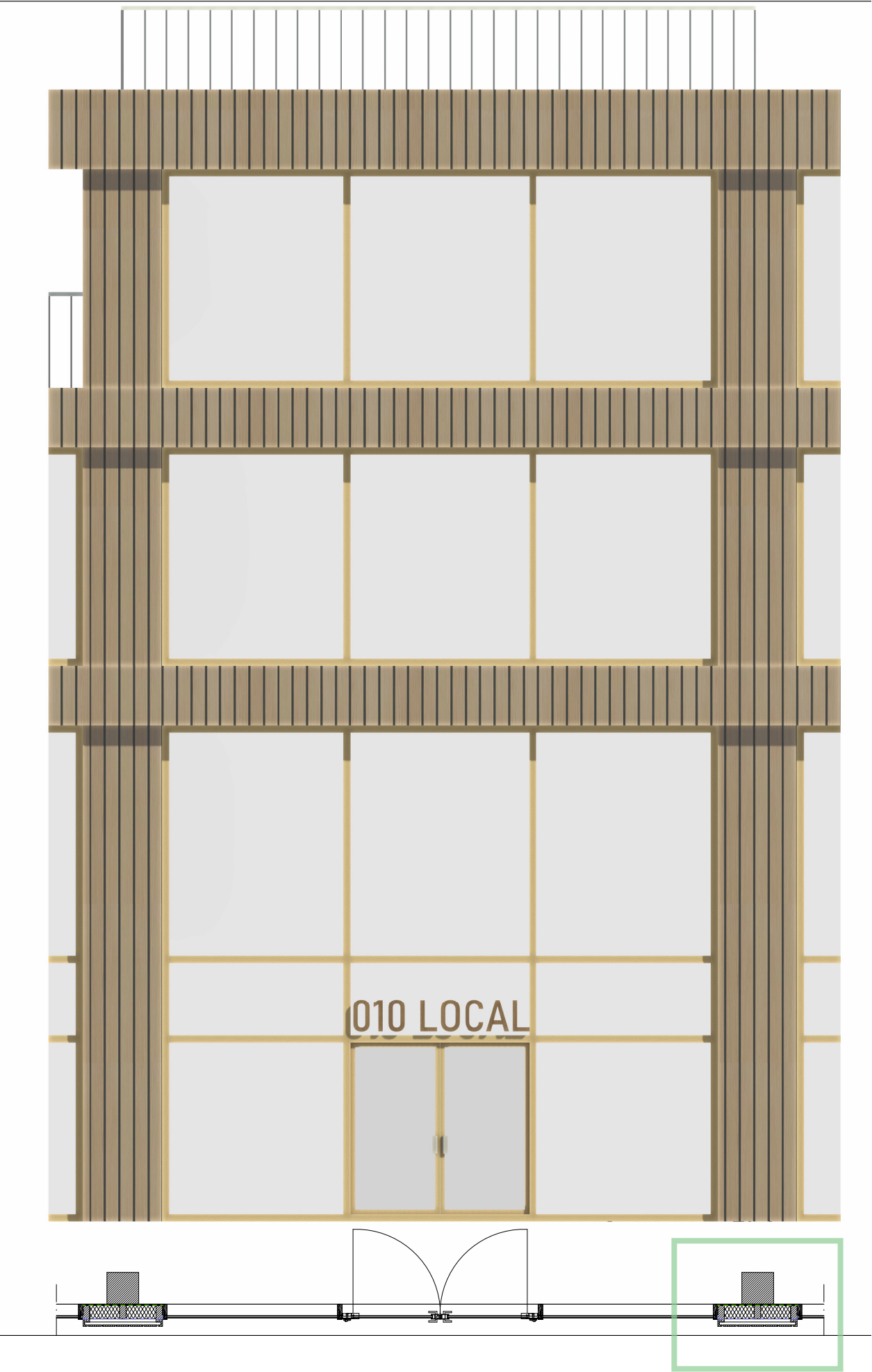
V

Detail roof terrace

1:5



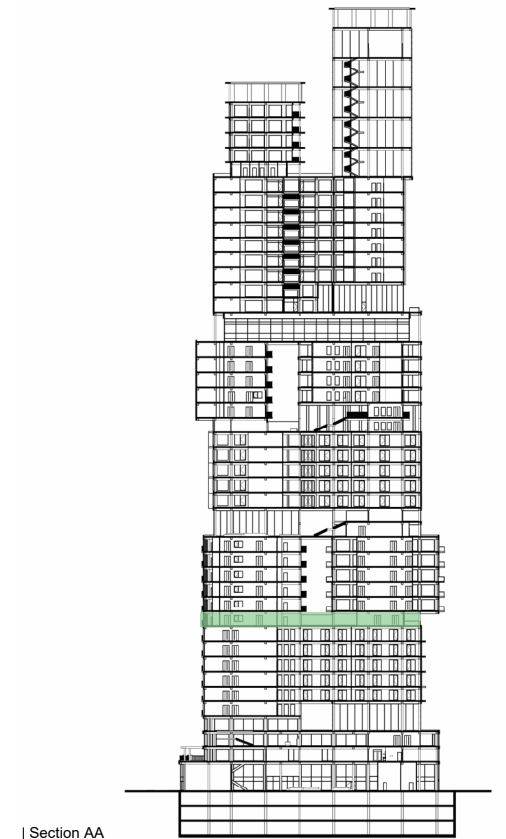
Horizontal fragment 1:20 and detail 1:5





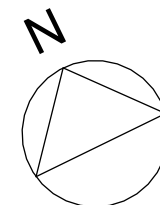
Floorplan - Level 10

The residential floor for old and starters



Floorplan level 10

schaal 1 : 200



Impression level 10

Communal livingroom



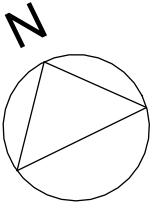
Floorplan - Level 23

The playstreet



Floorplan level 23

schaal 1 : 200

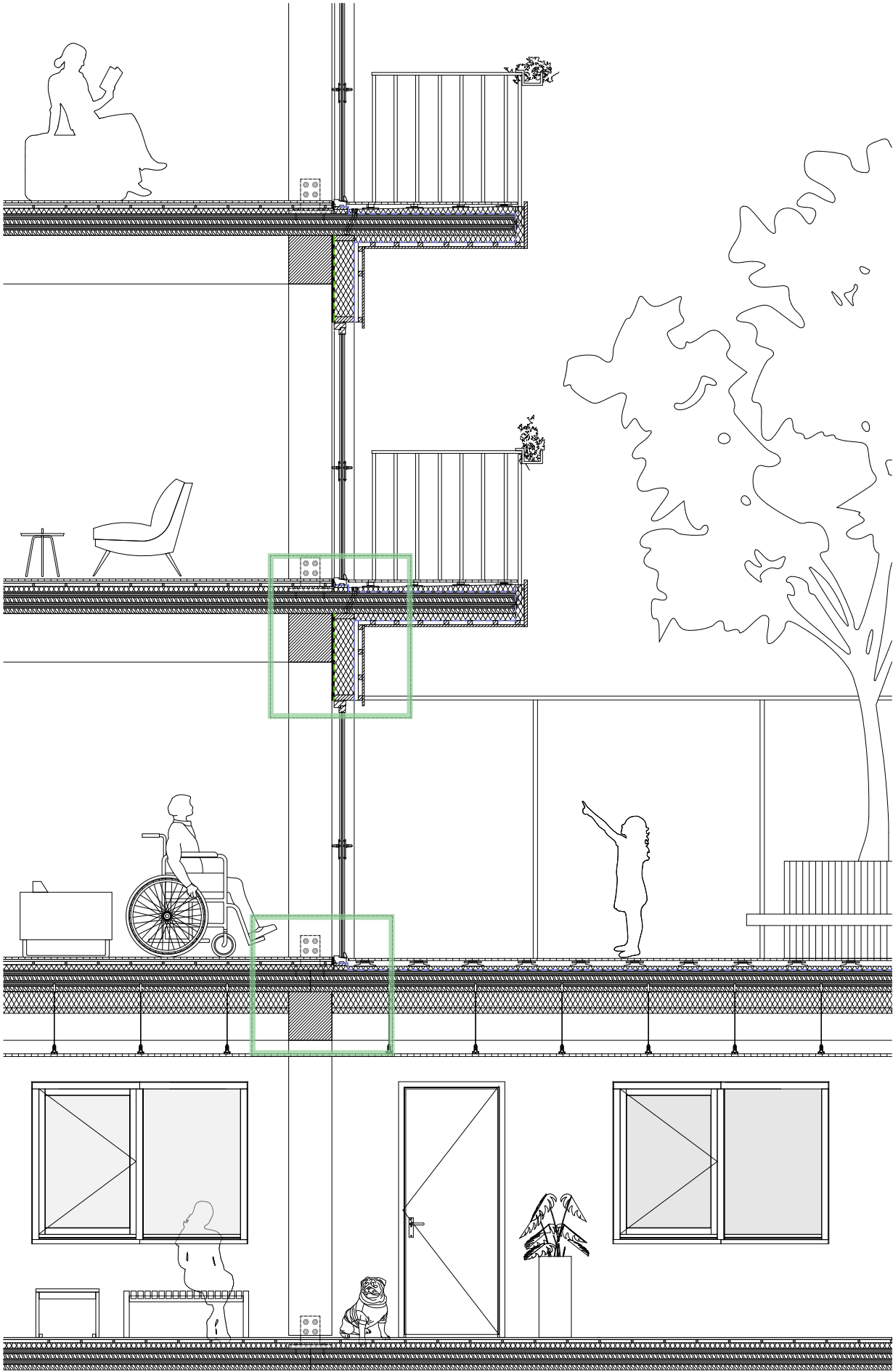


Impression level 23

The playstreet

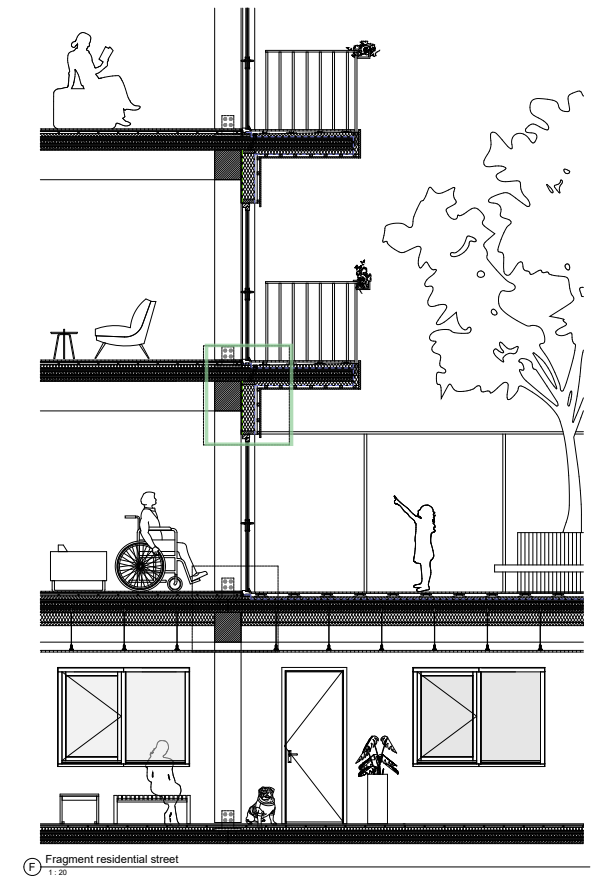
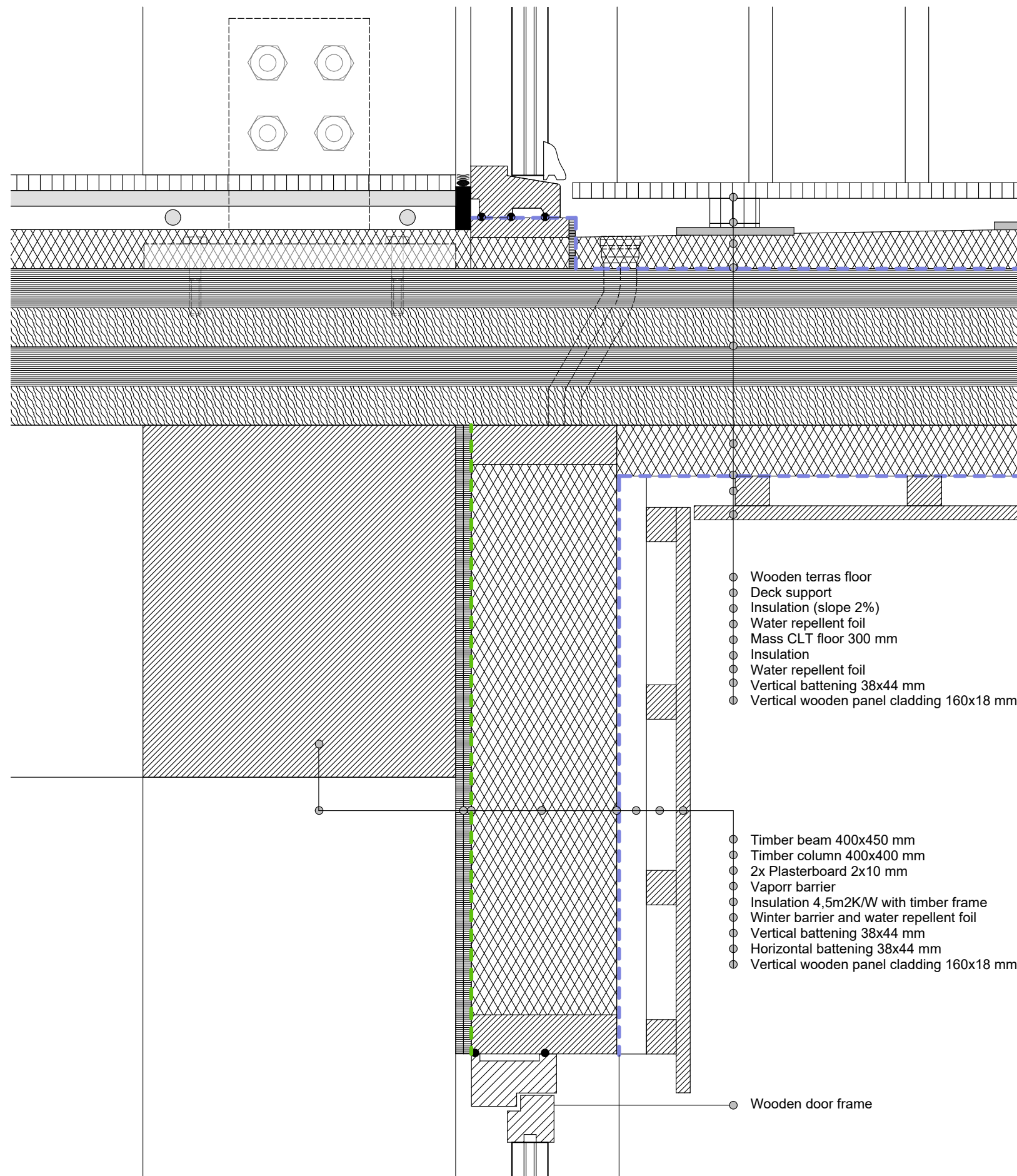


Fragment residential levels 1:20

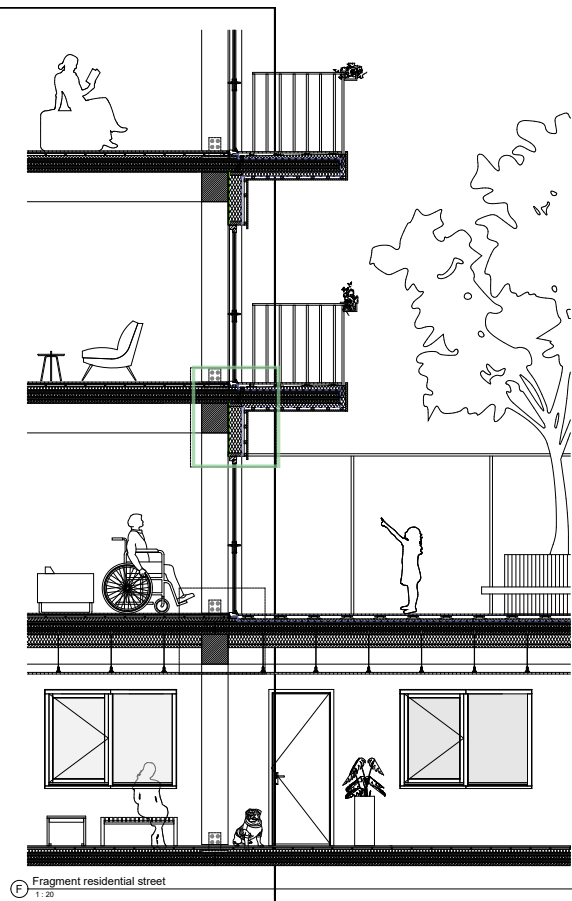
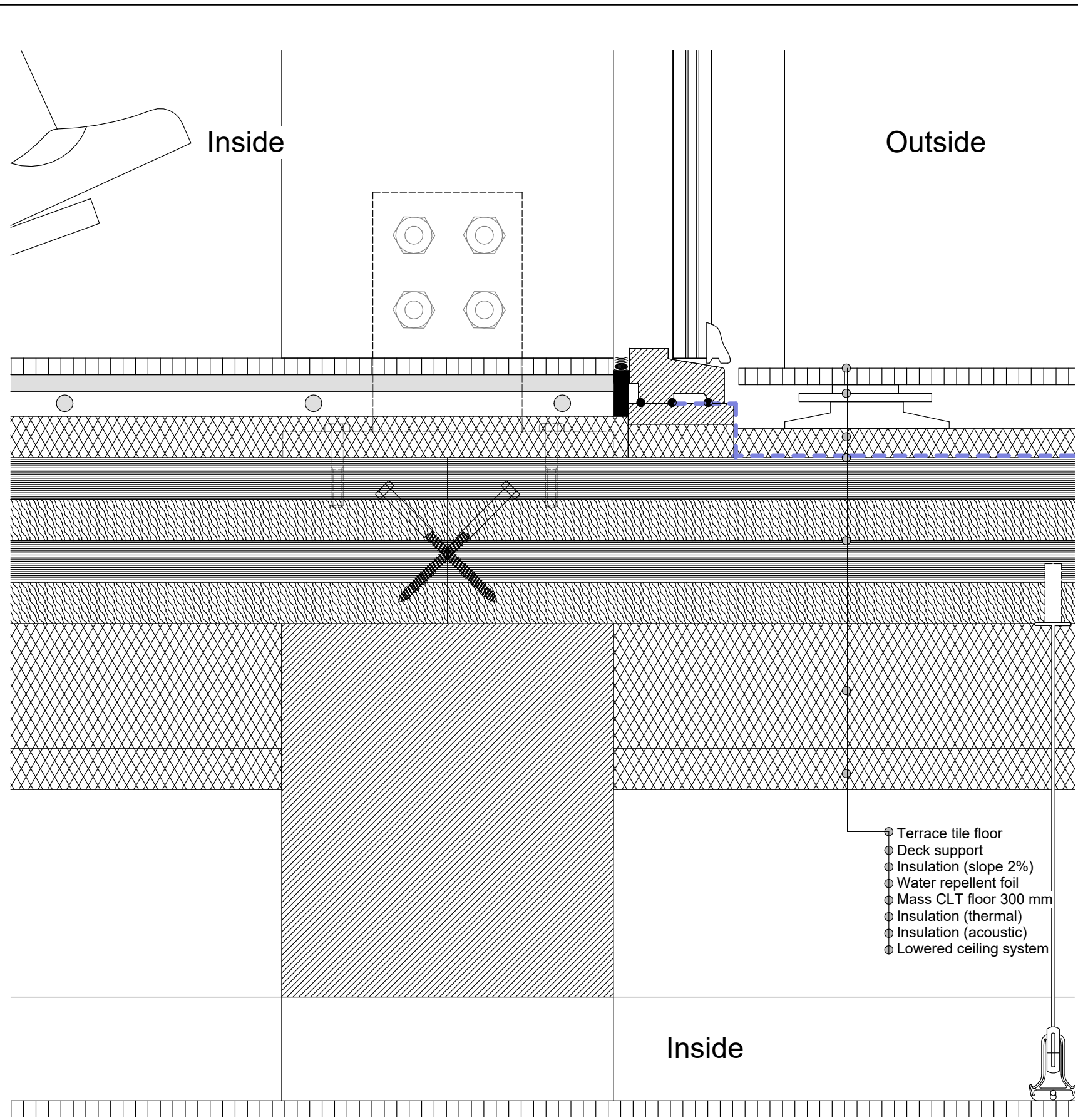


Detail 1:5

Balcony and facade



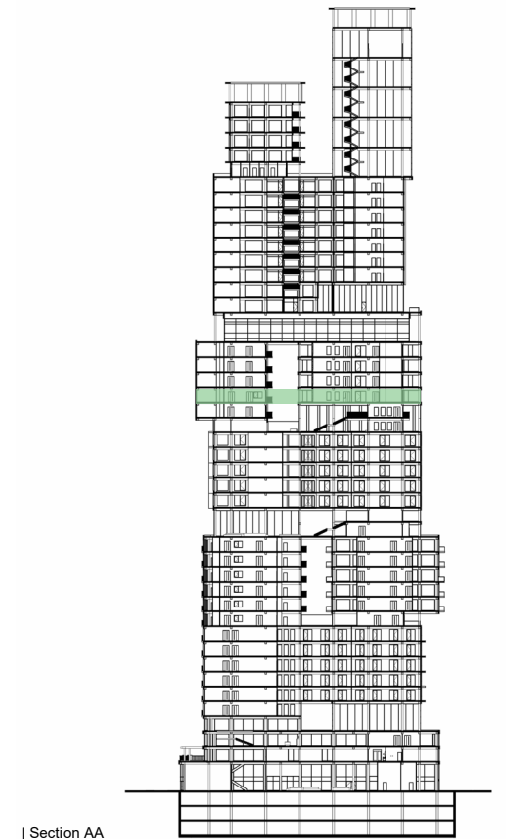
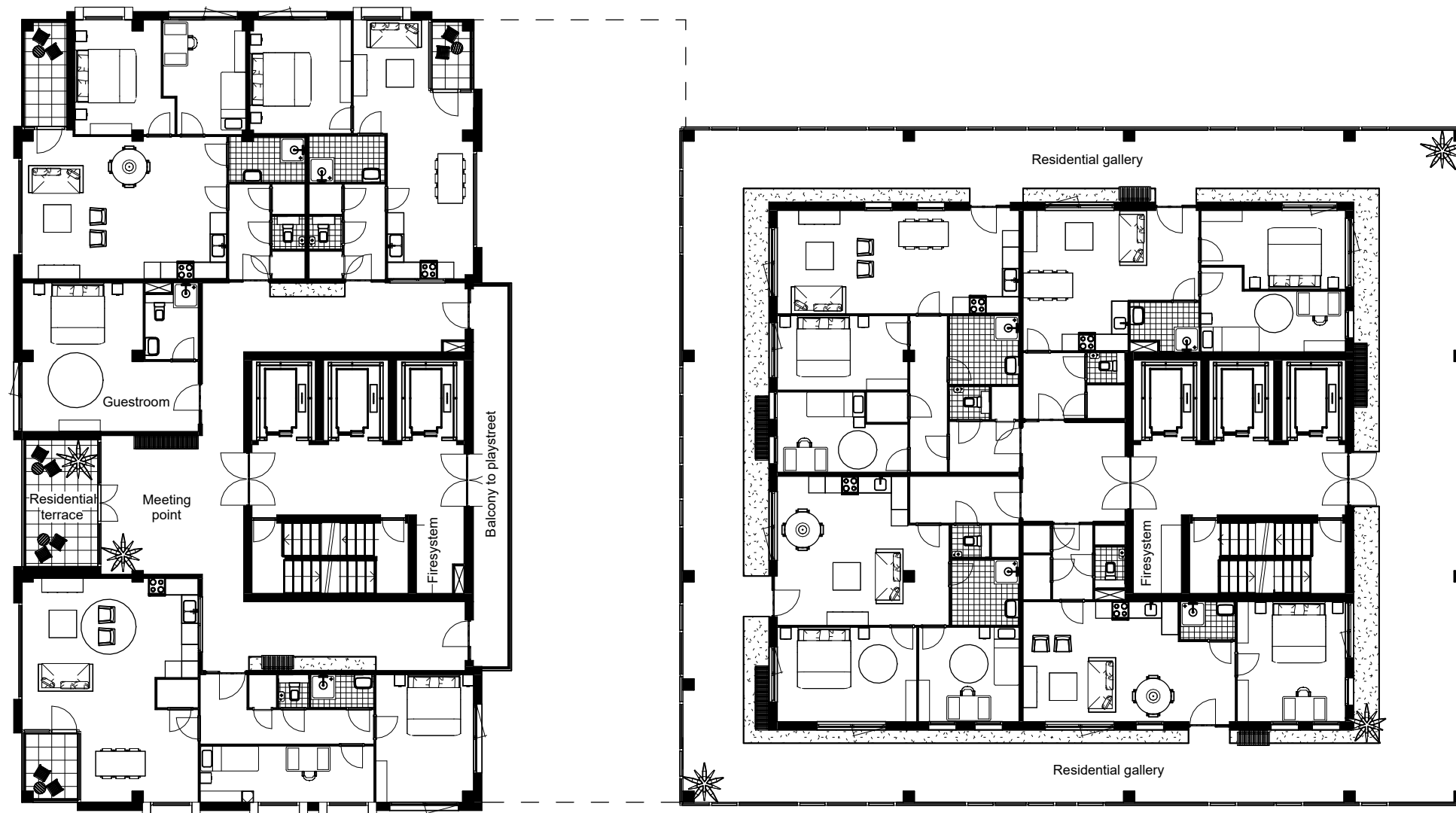
Detail 1:5
Inside and outside



V Detail Floor and street
1:5

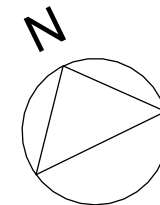
Floorplan - Level 25

The residential floor for families and students



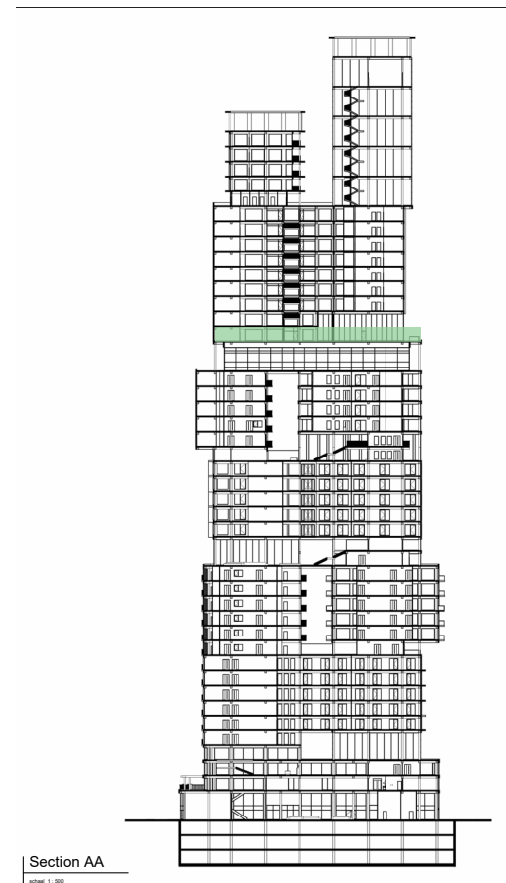
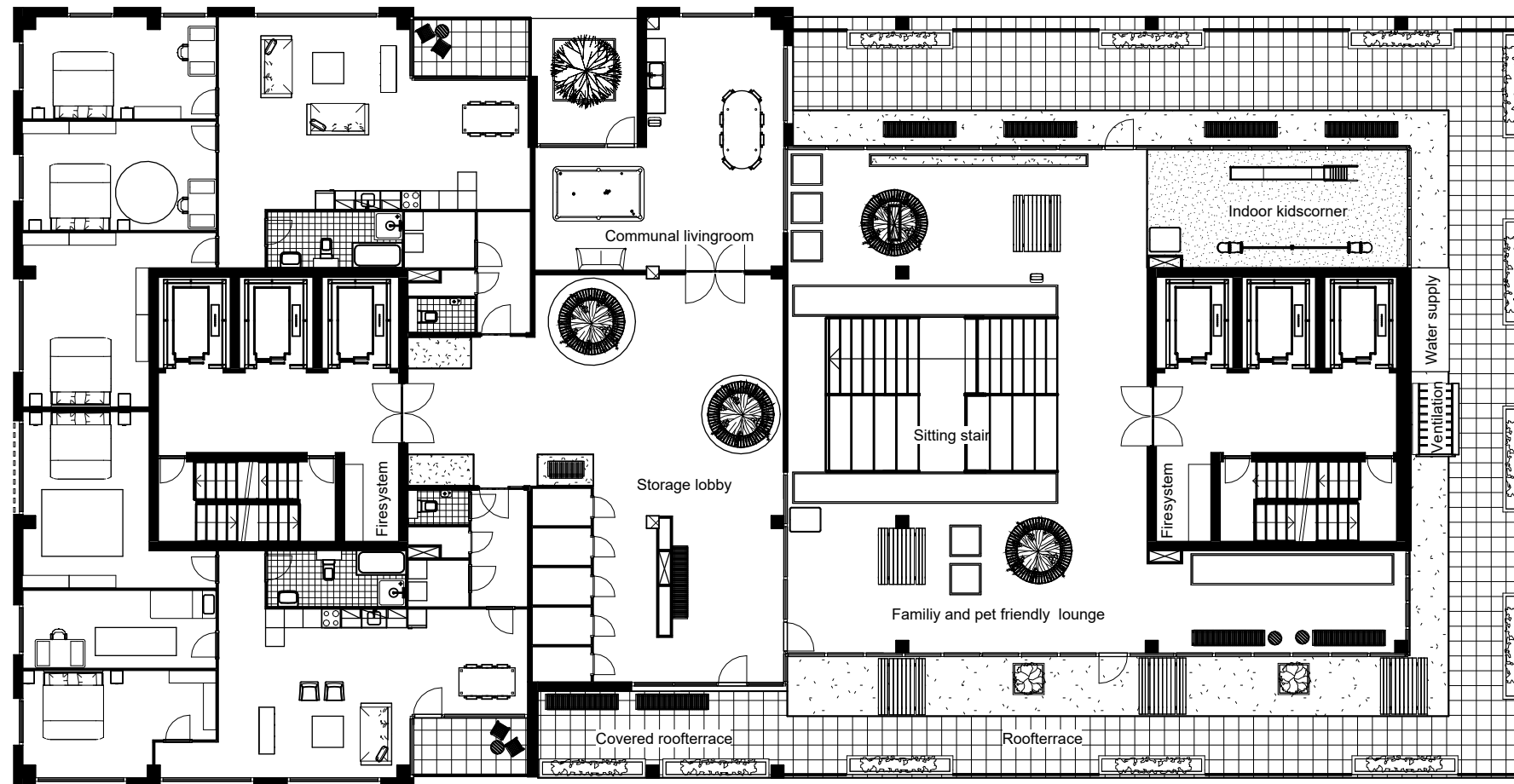
Floorplan level 25

schaal 1 : 200



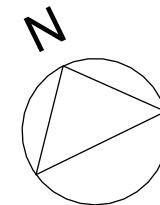
Floorplan - Level 31

The residential floor for big families



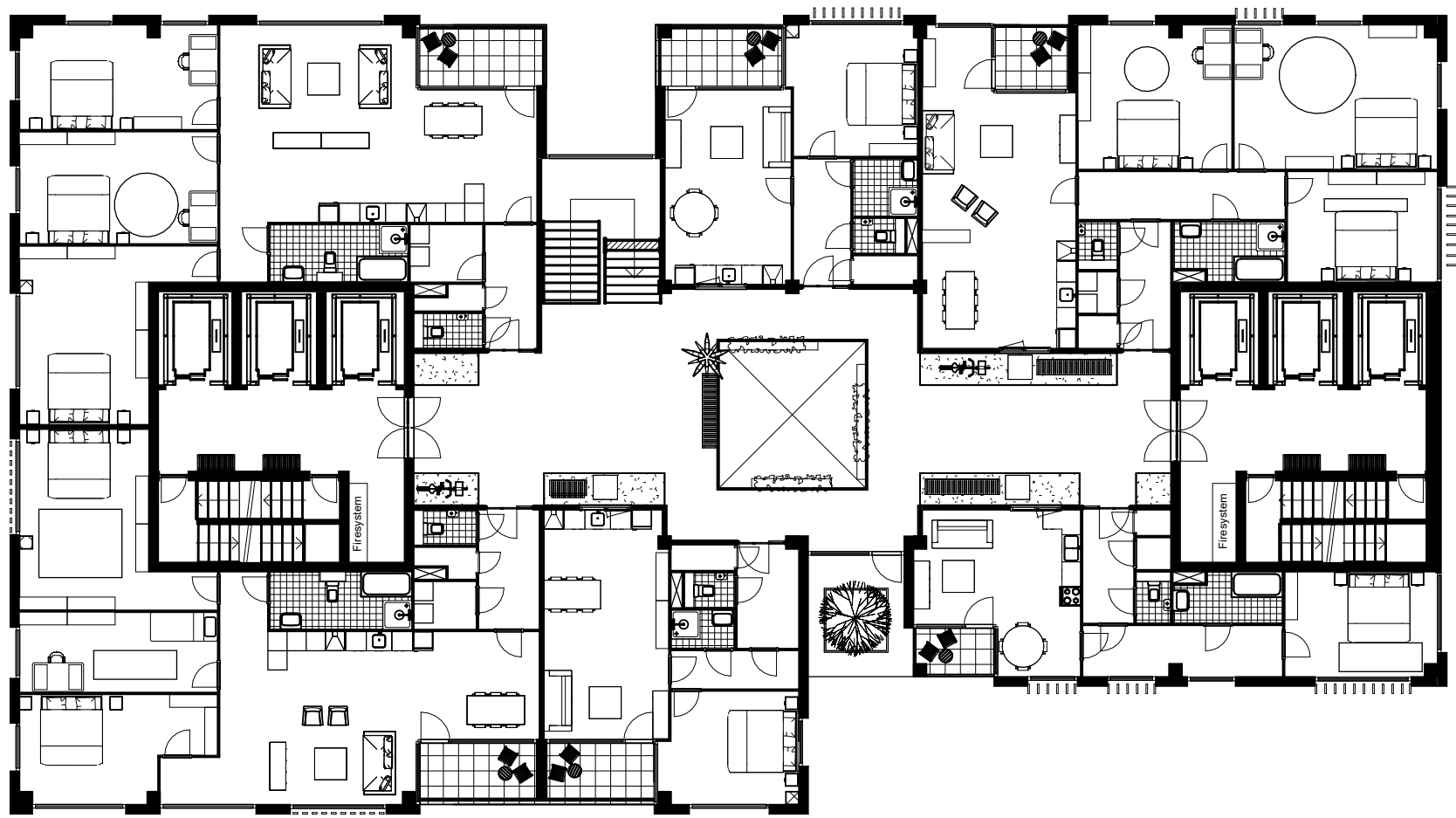
Floorplan level 31

schaal 1 : 200



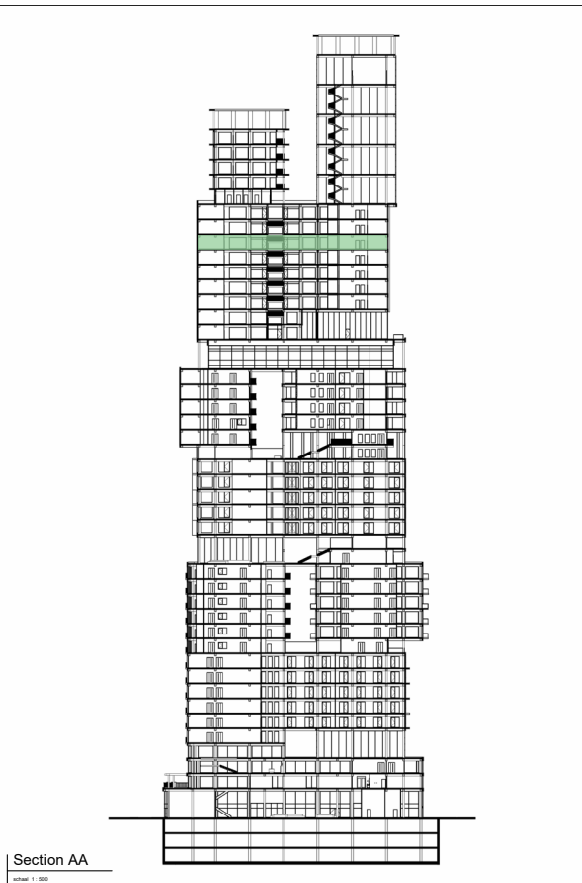
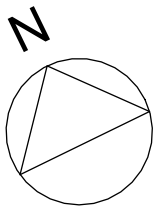
Floorplan - Level 37

The residential floor for mixed communities



Floorplan level 37

schaal 1 : 200



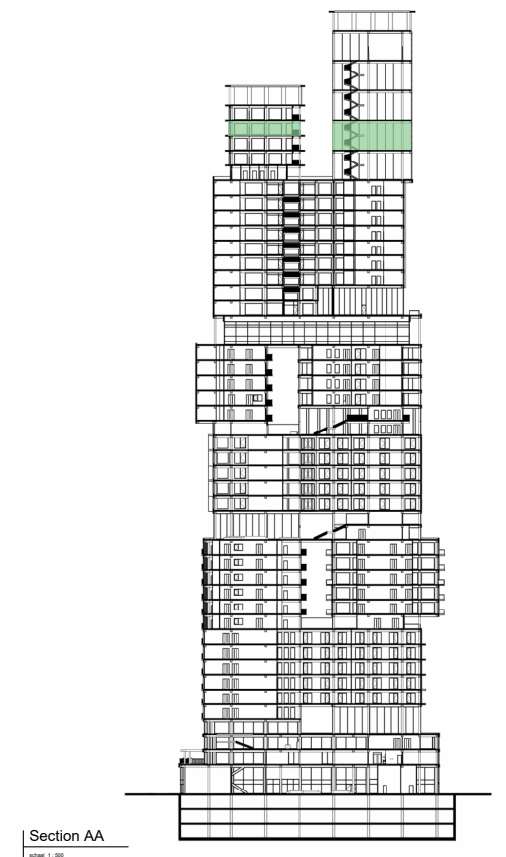
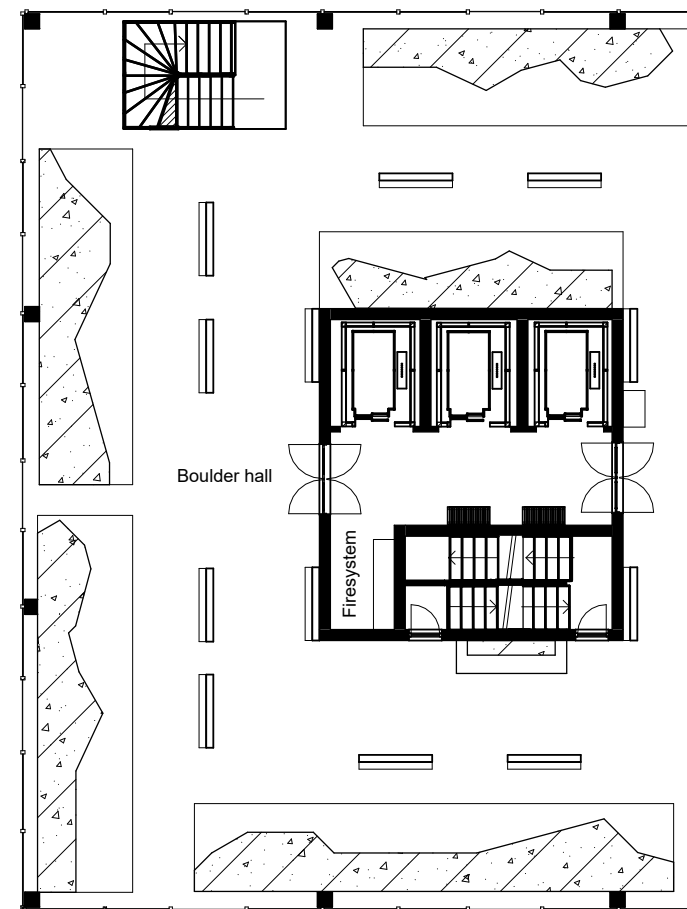
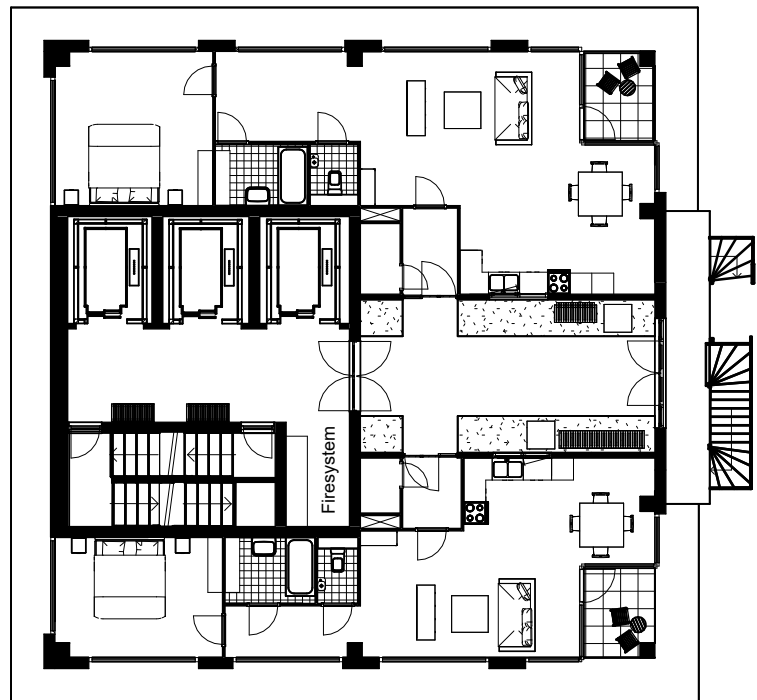
Impression - Level 37

The residential floor for mixed communities



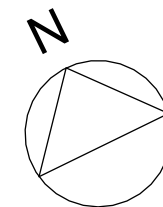
Floorplan - Level 43

The residential floor singles and starters



Floorplan level 43

schaal 1 : 200



South elevation 1:200



East elevation 1:200

