Presentation Hannah Griffioen

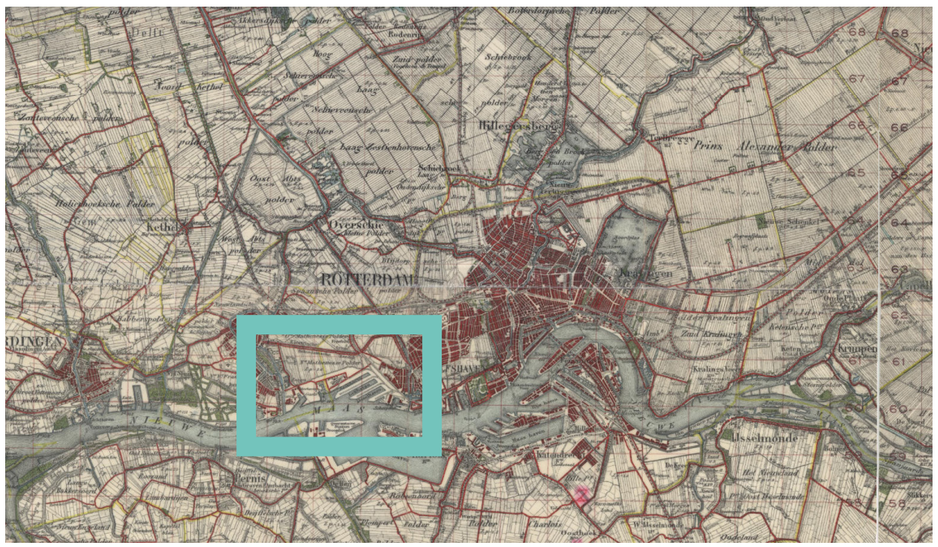
Advanced housing design

The location

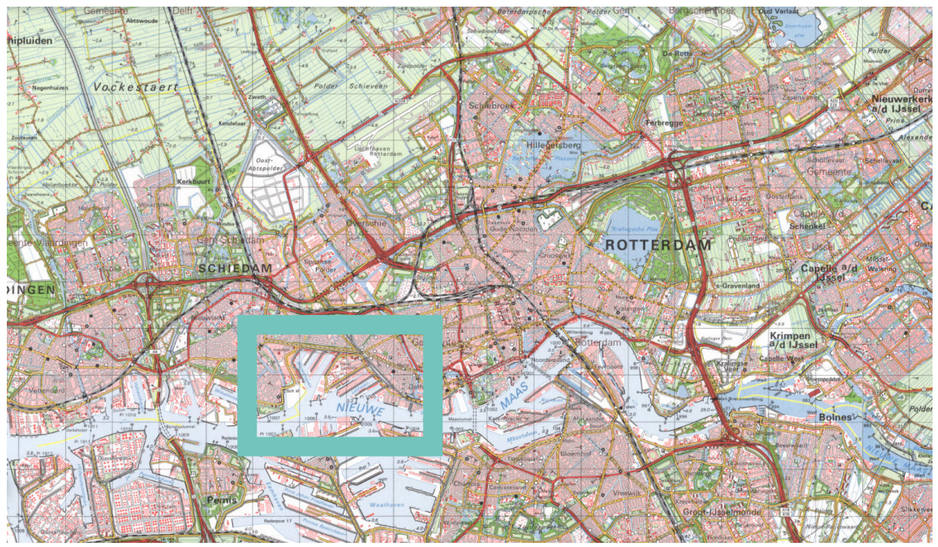
The location

1815

1850

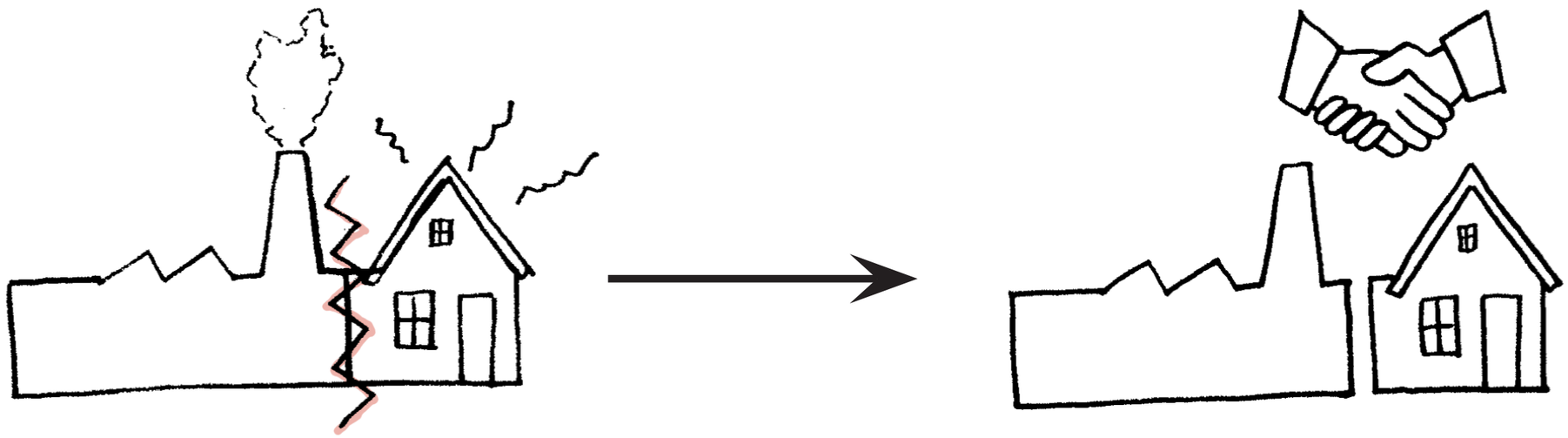


1920



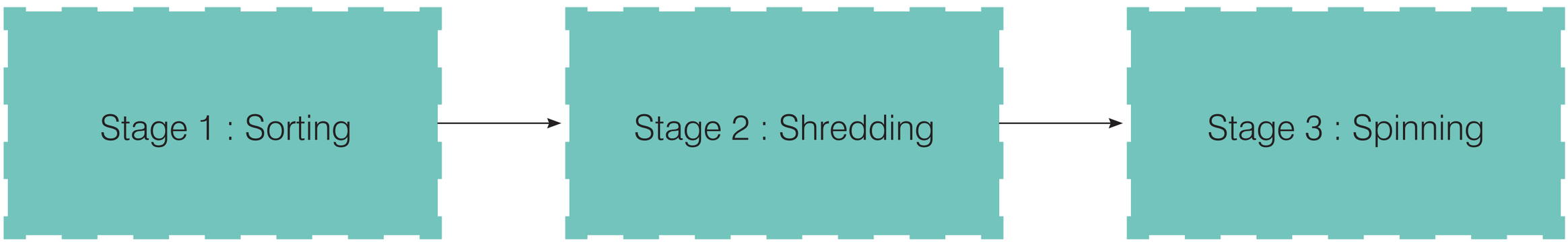
2000

The objective

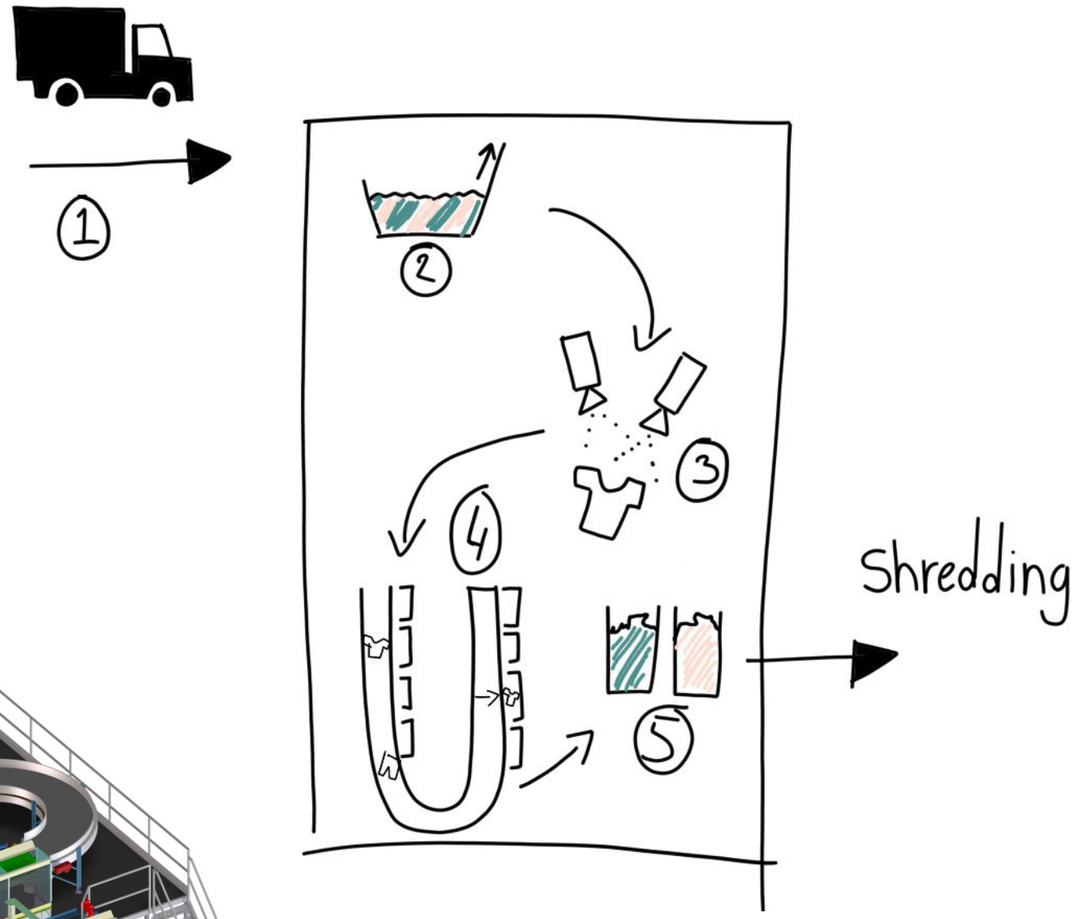


The masterplan

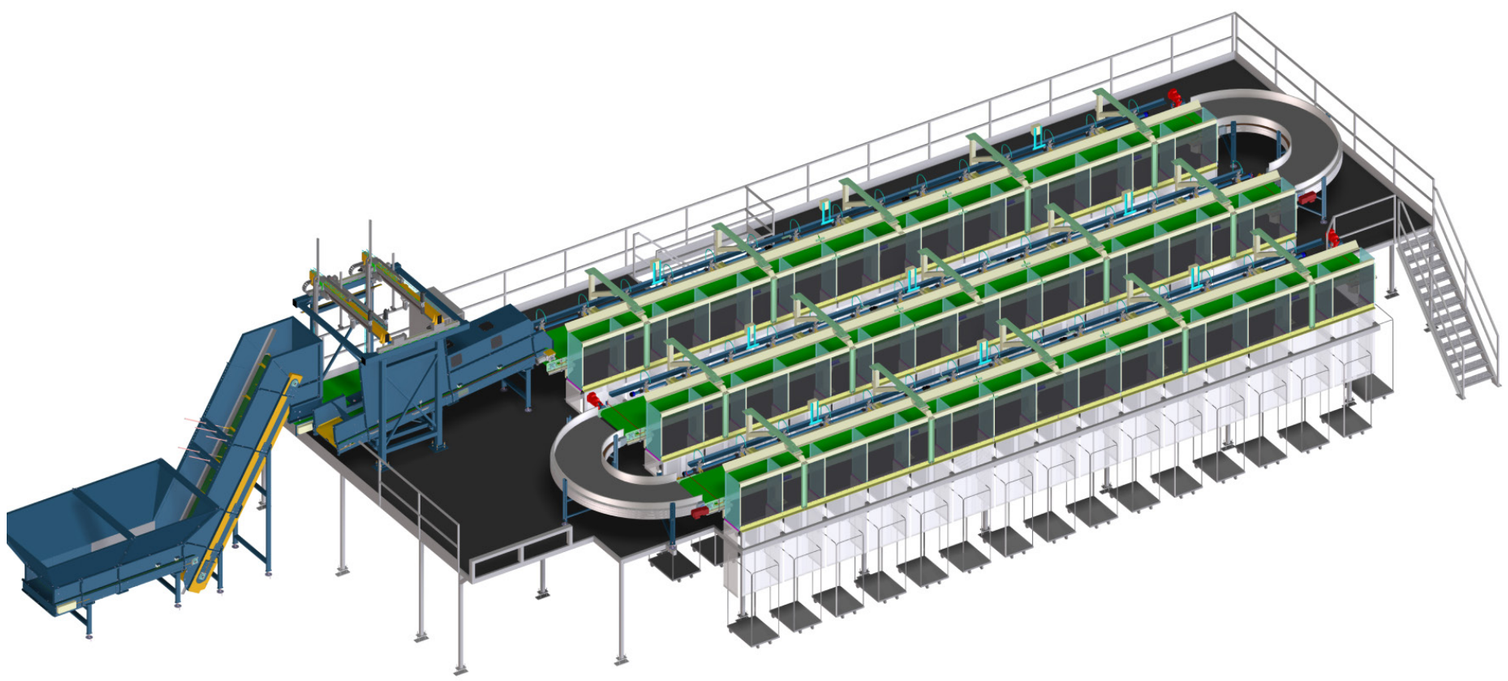
554 kiloton (554 million kilograms)
textiles to waste or exported
as second hand



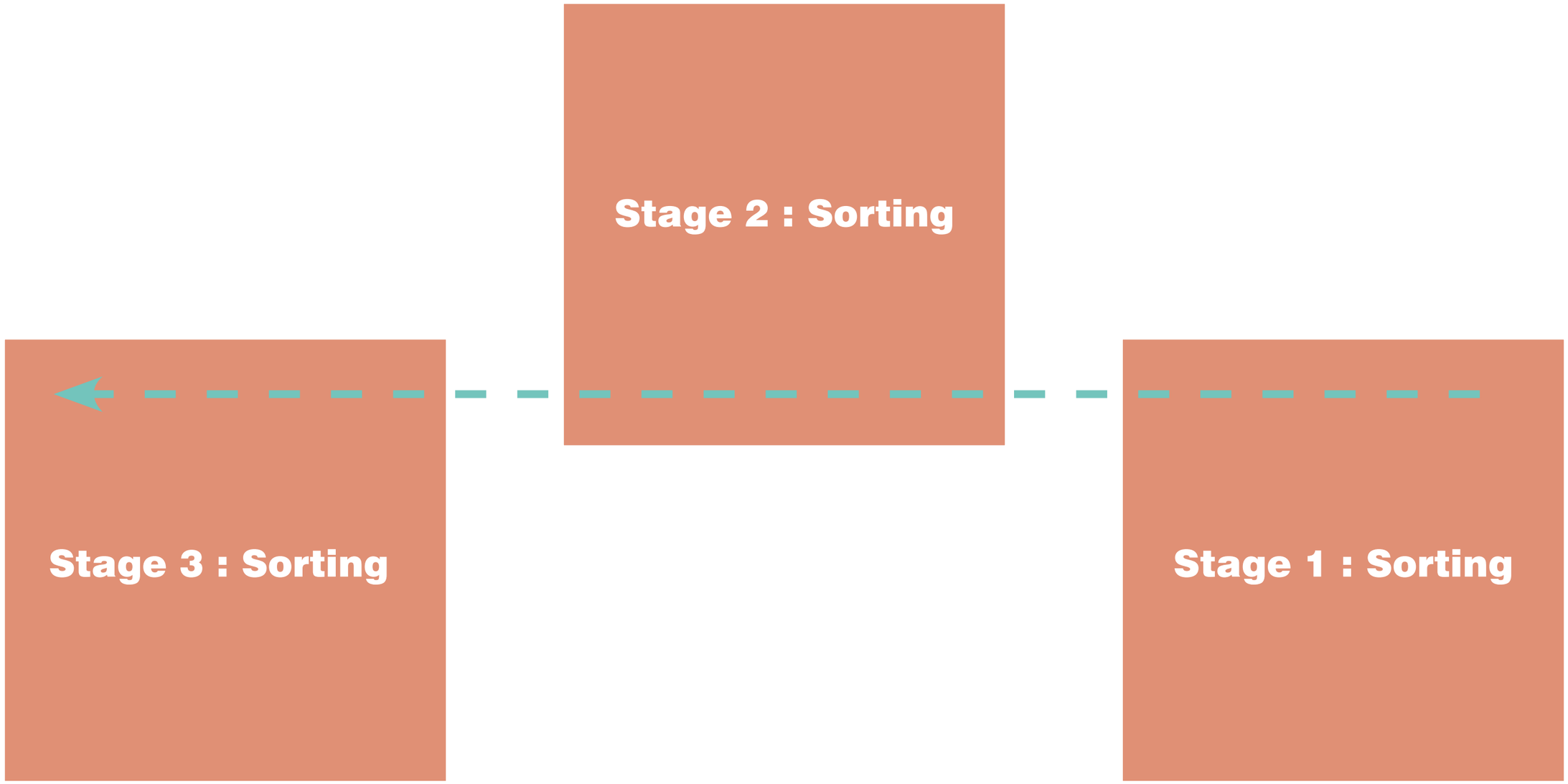
The industry



The Fibersort

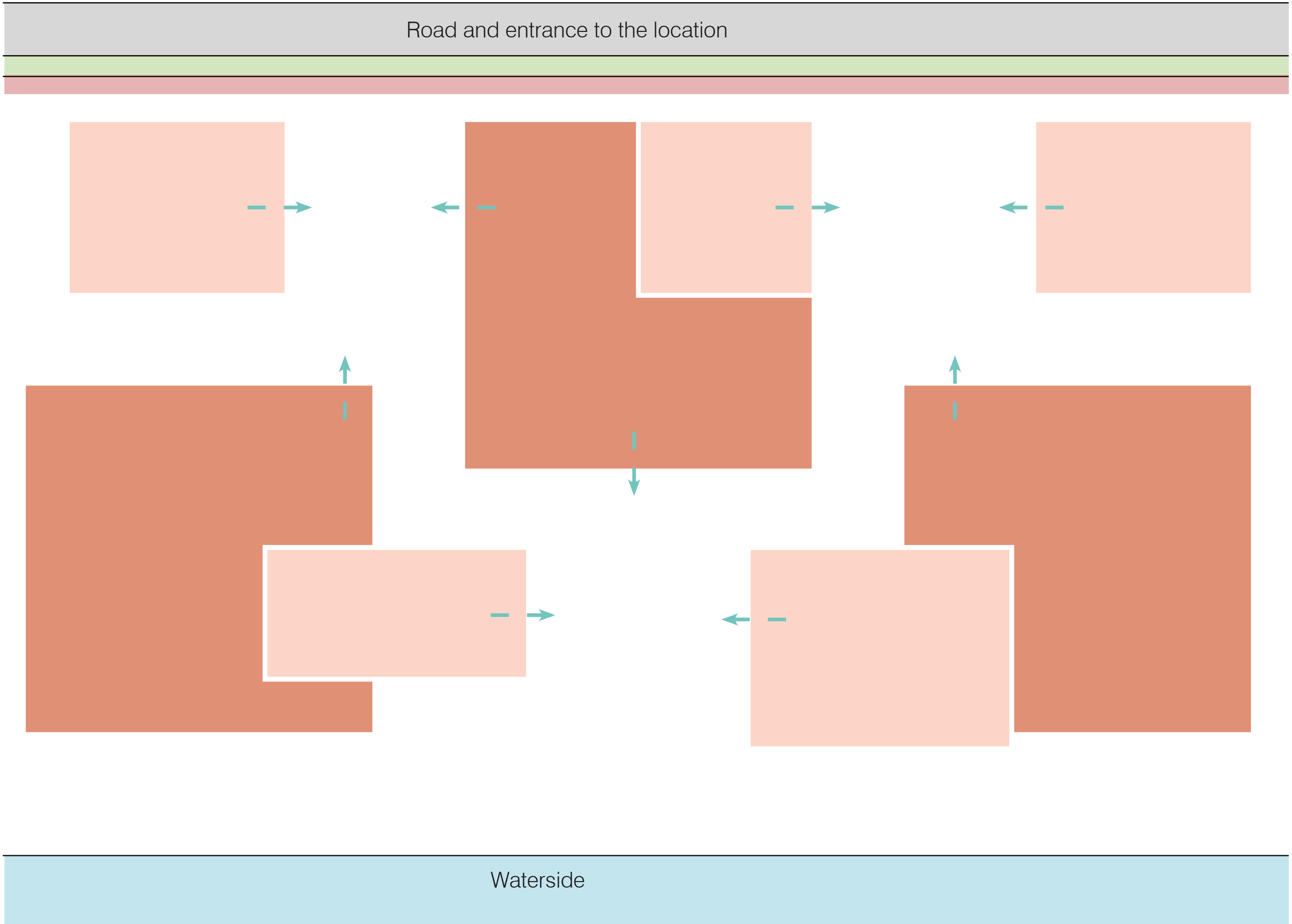


The Masterplan

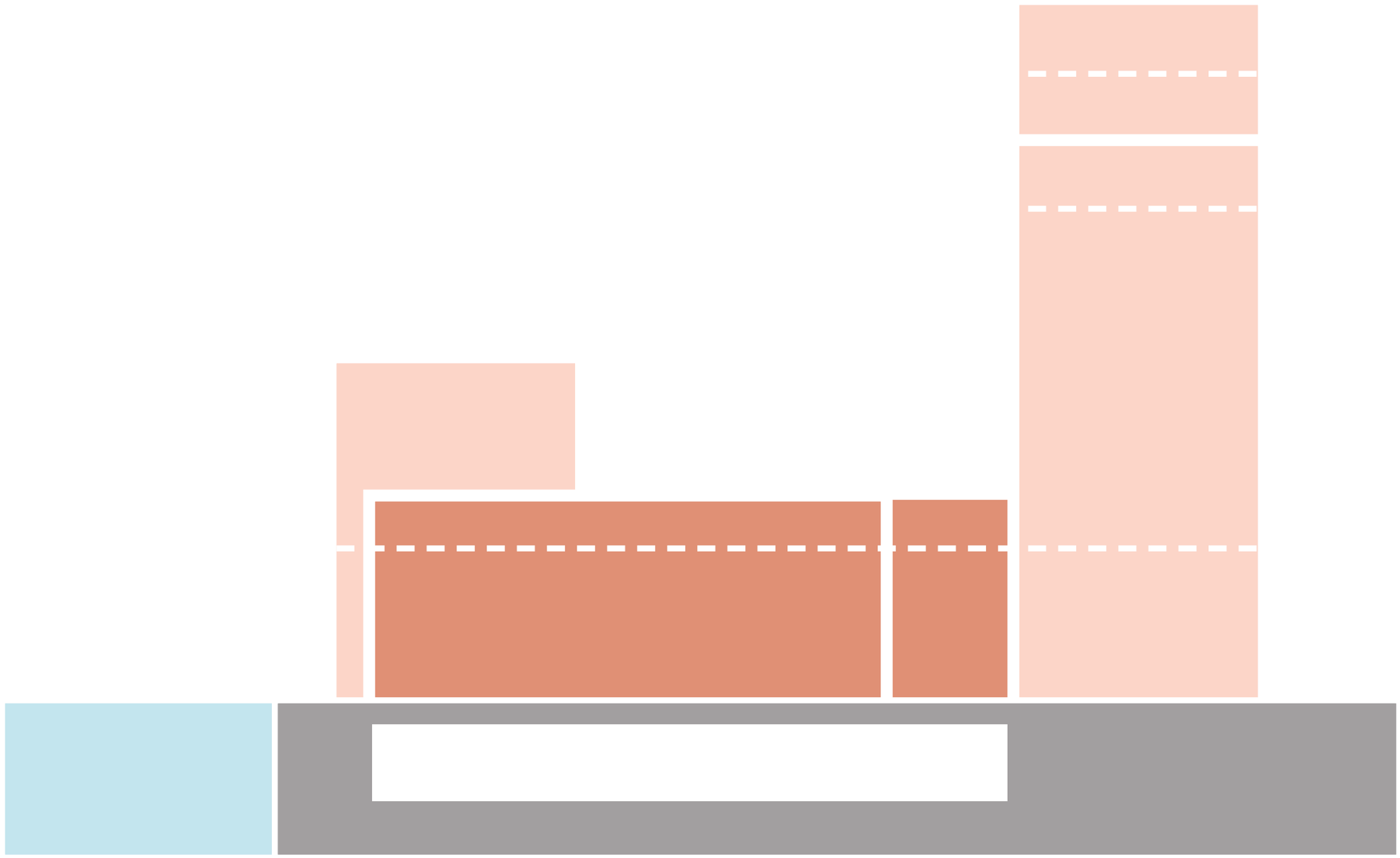


The masterplan

The masterplan



The masterplan



Research

Whom am I designing for?

The problem	How could we solve this?	Who can solve this?
National housing shortage	One way is for people to start moving	The young retirees

How to create architectural spaces that would benefit the interaction between young retirees and motivate them to move?

Research

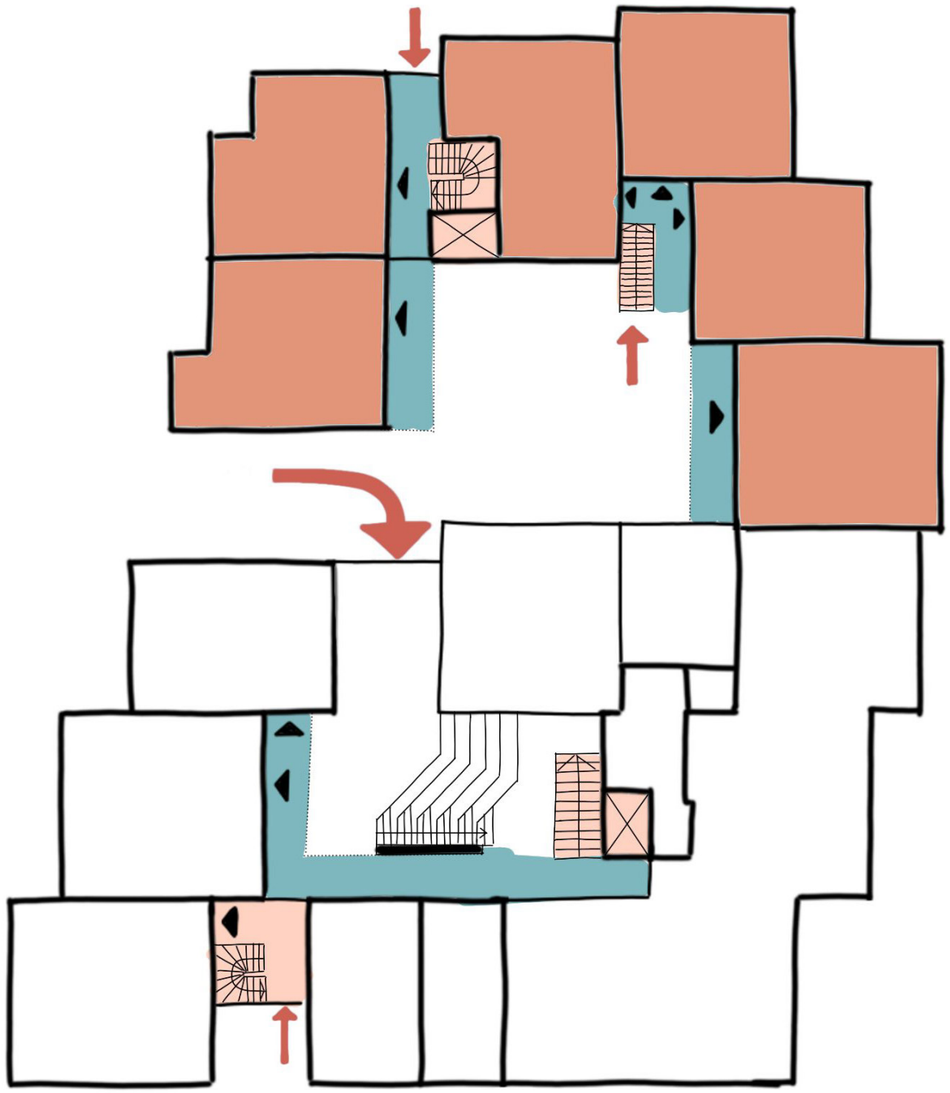
Children	Adult	Young retirees	Elderly
First stage	Second stage	Third stage	Fourth stage
Learning	*Working and caring*	*Time and new ambitions*	*Be taken care of*

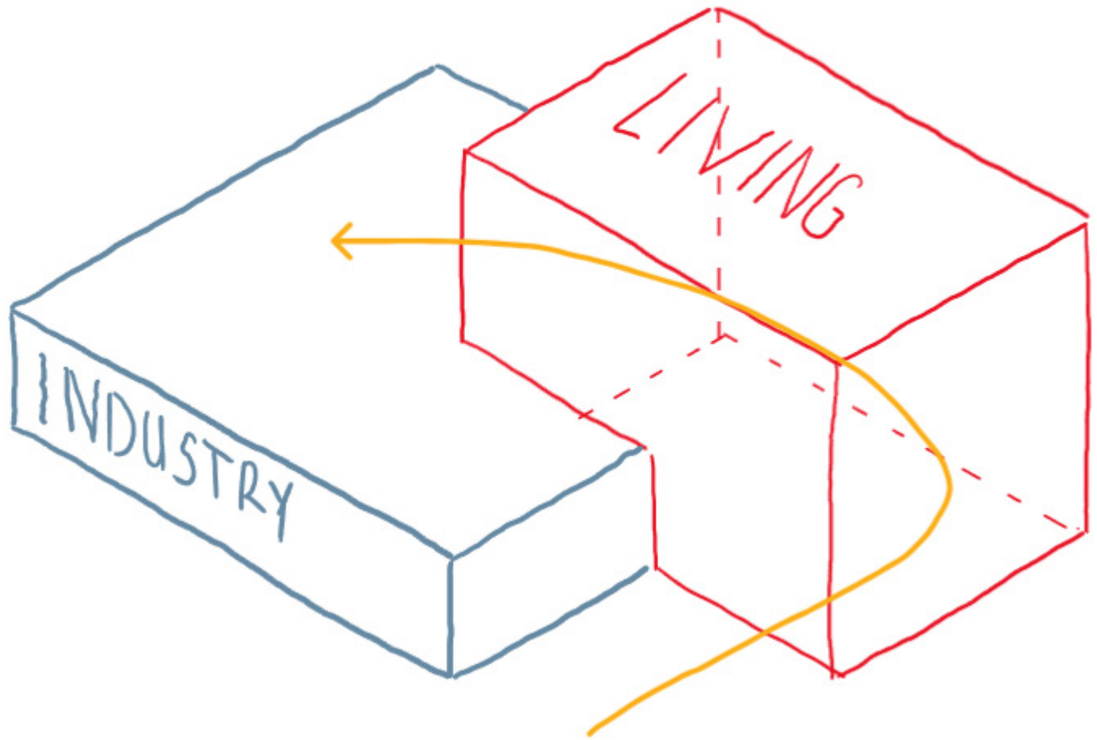
Research

Casestudy: Vindmøllebakken

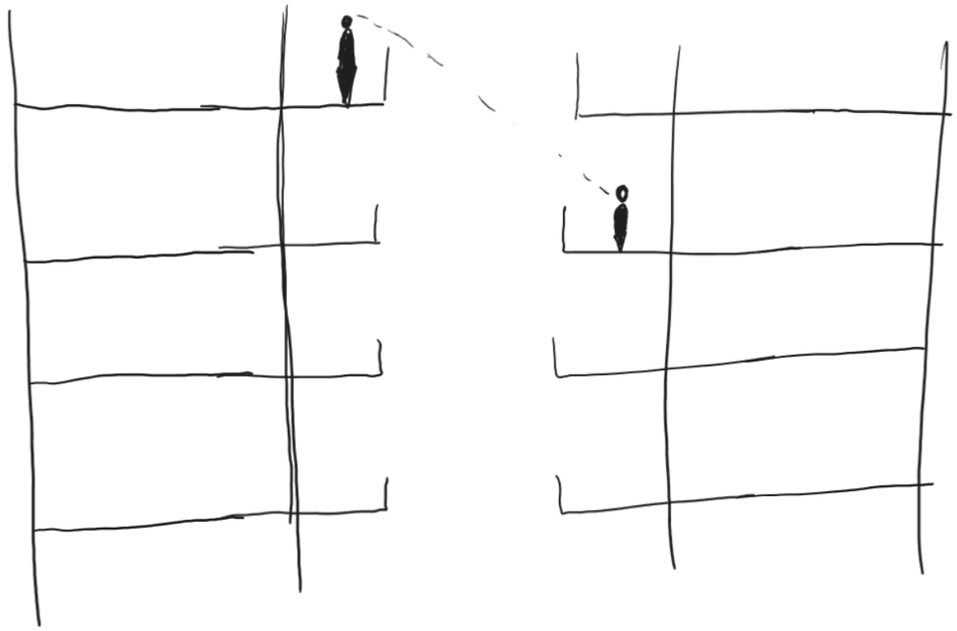
Research

Casestudy: Vindmøllebakken



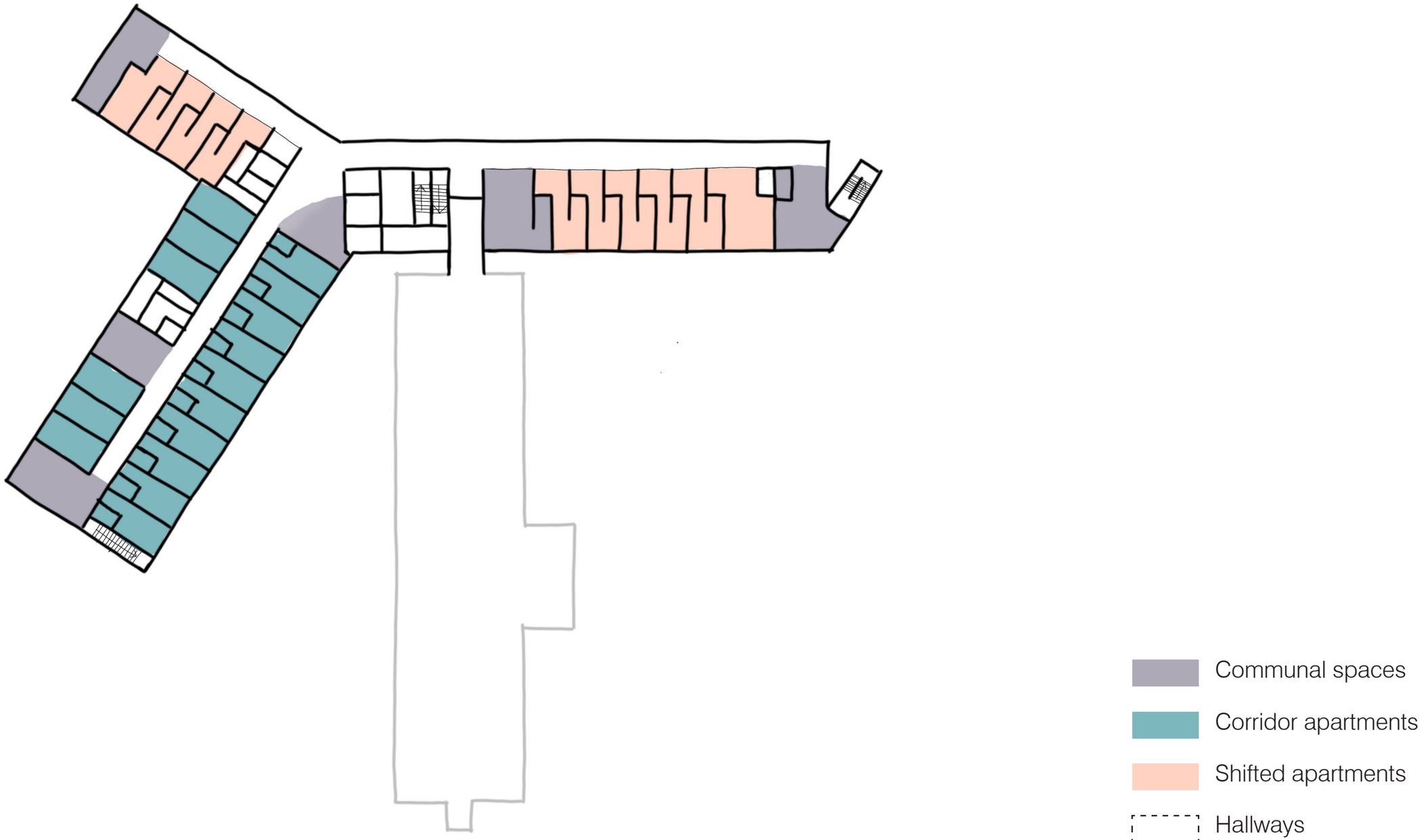


Research

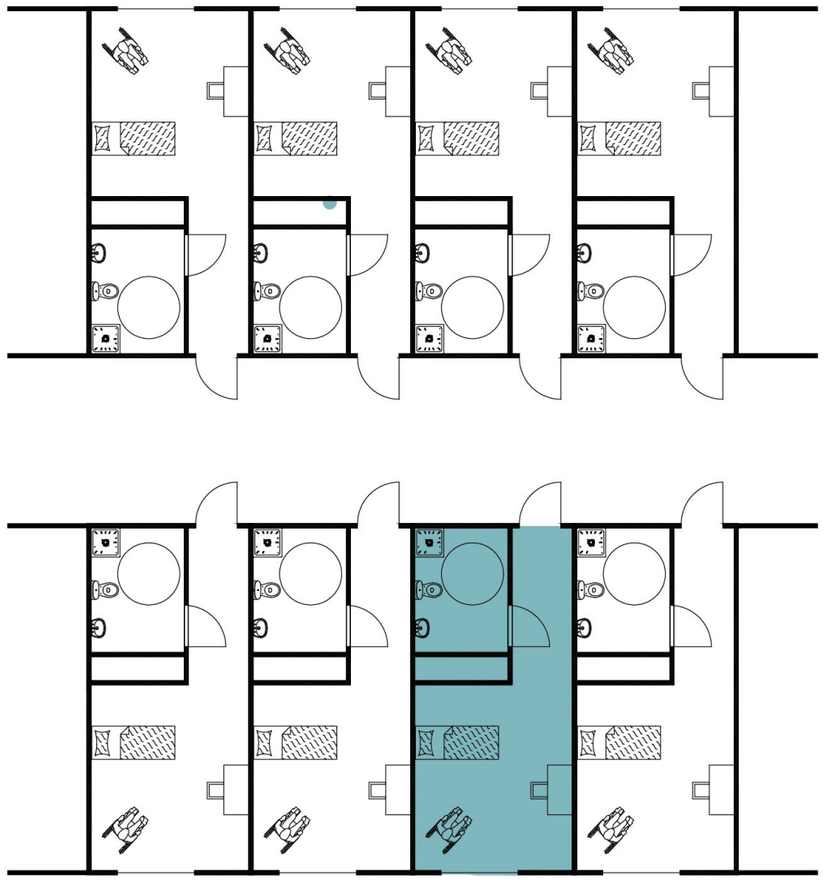


Reserach

Casestudy: OCMW Nevele

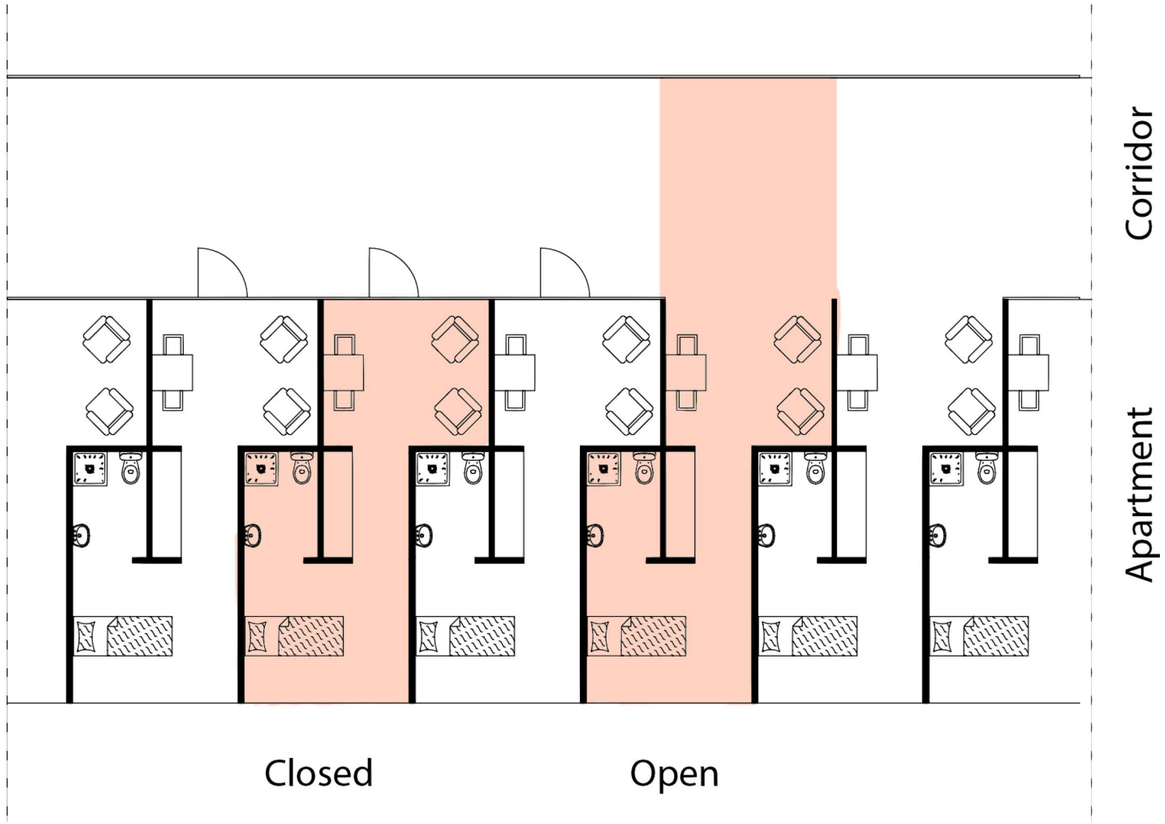


Research



Corridor

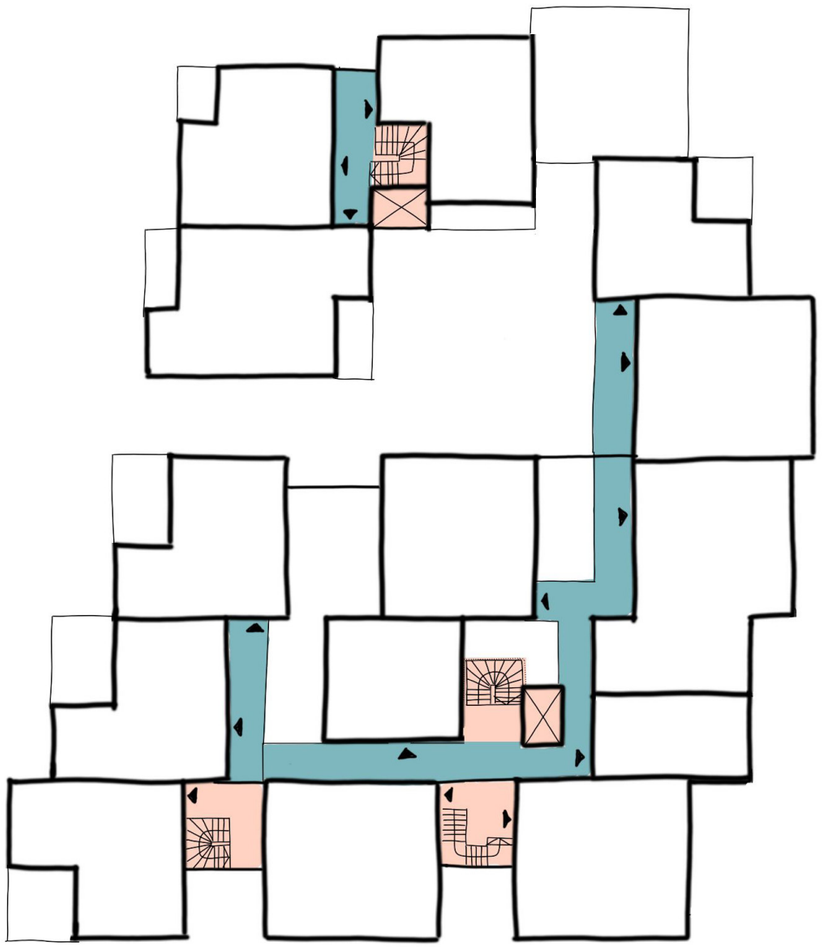
Apartment



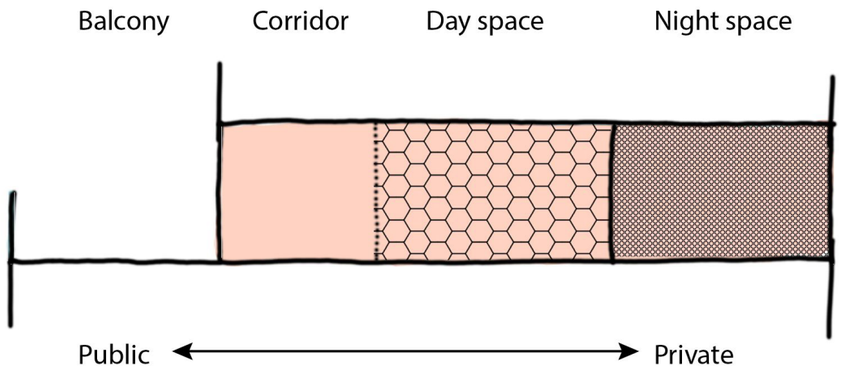
Research

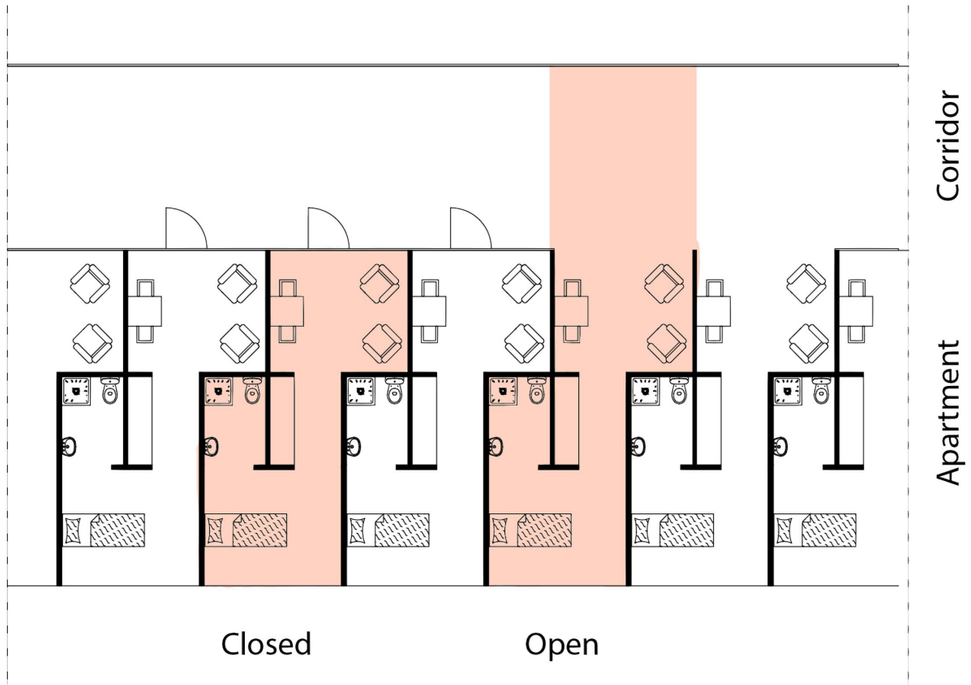
Transition of privacy

Vindmøllebakken



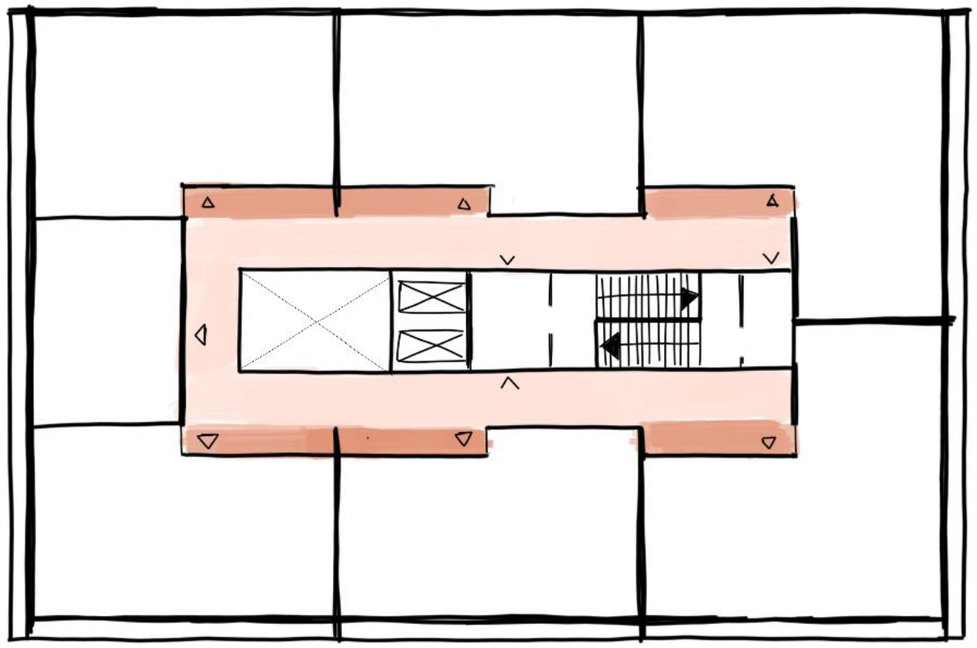
OCMW Nevele



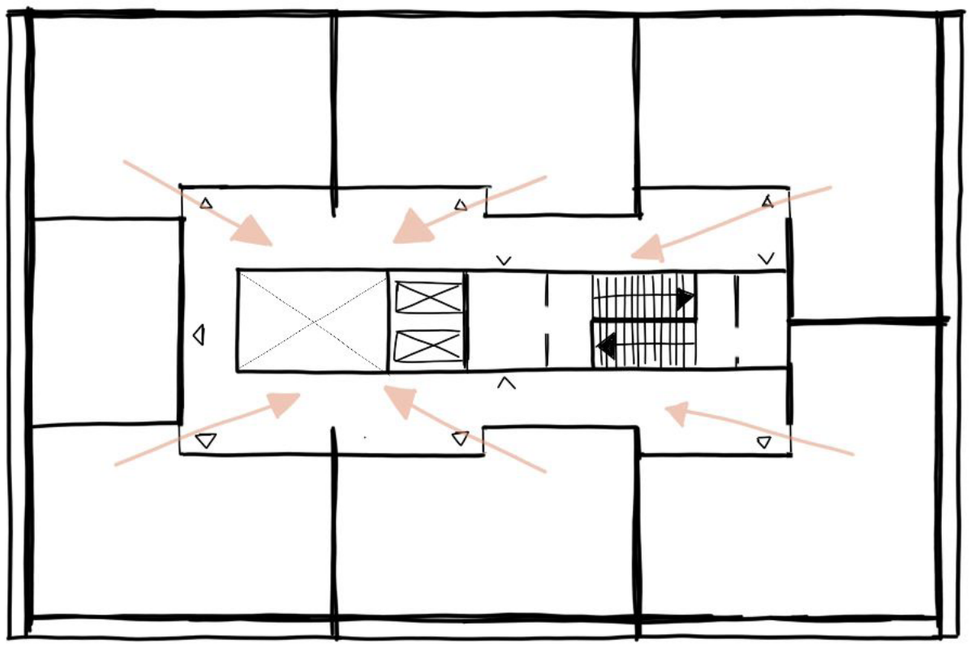


Research

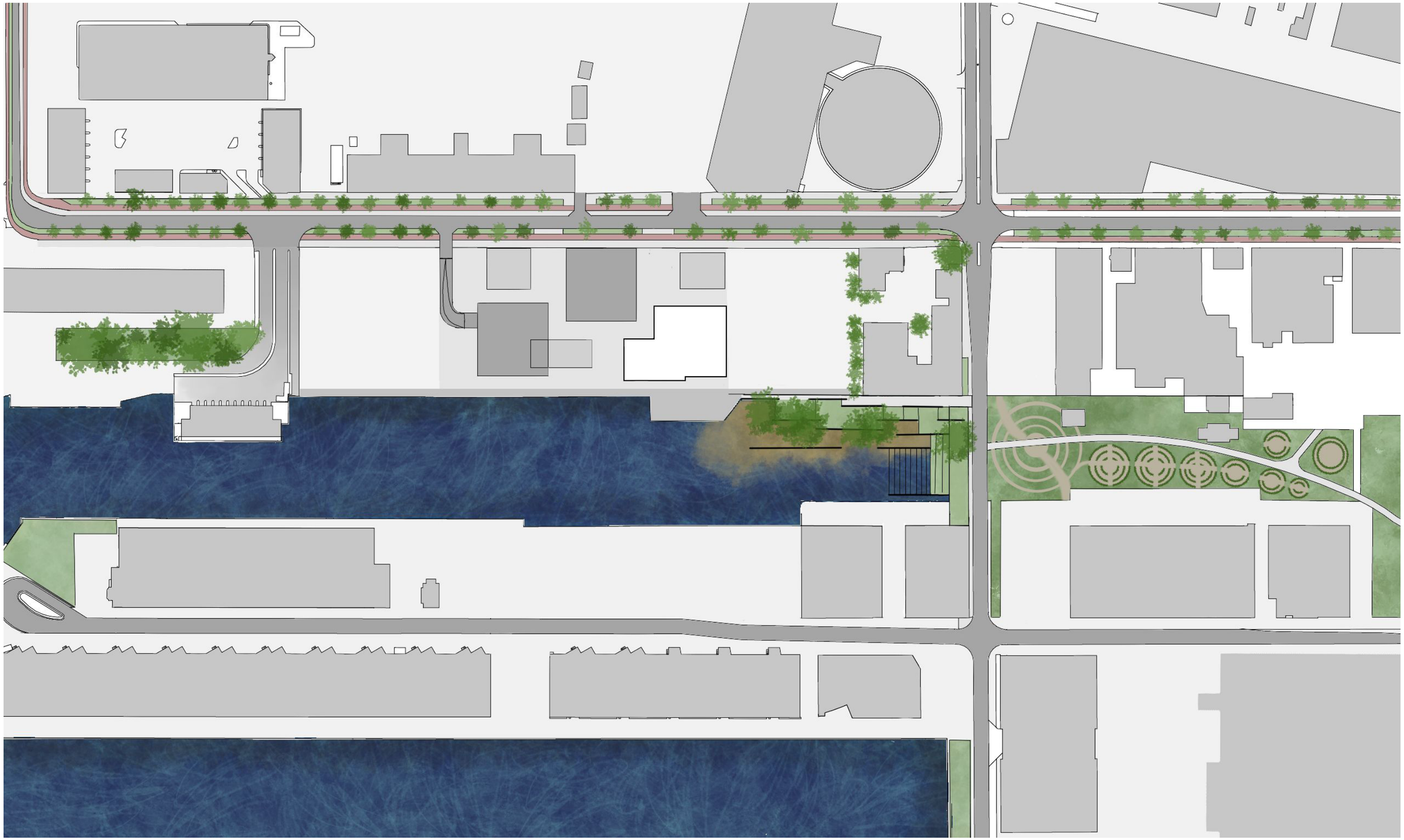
Private parts of the hallway



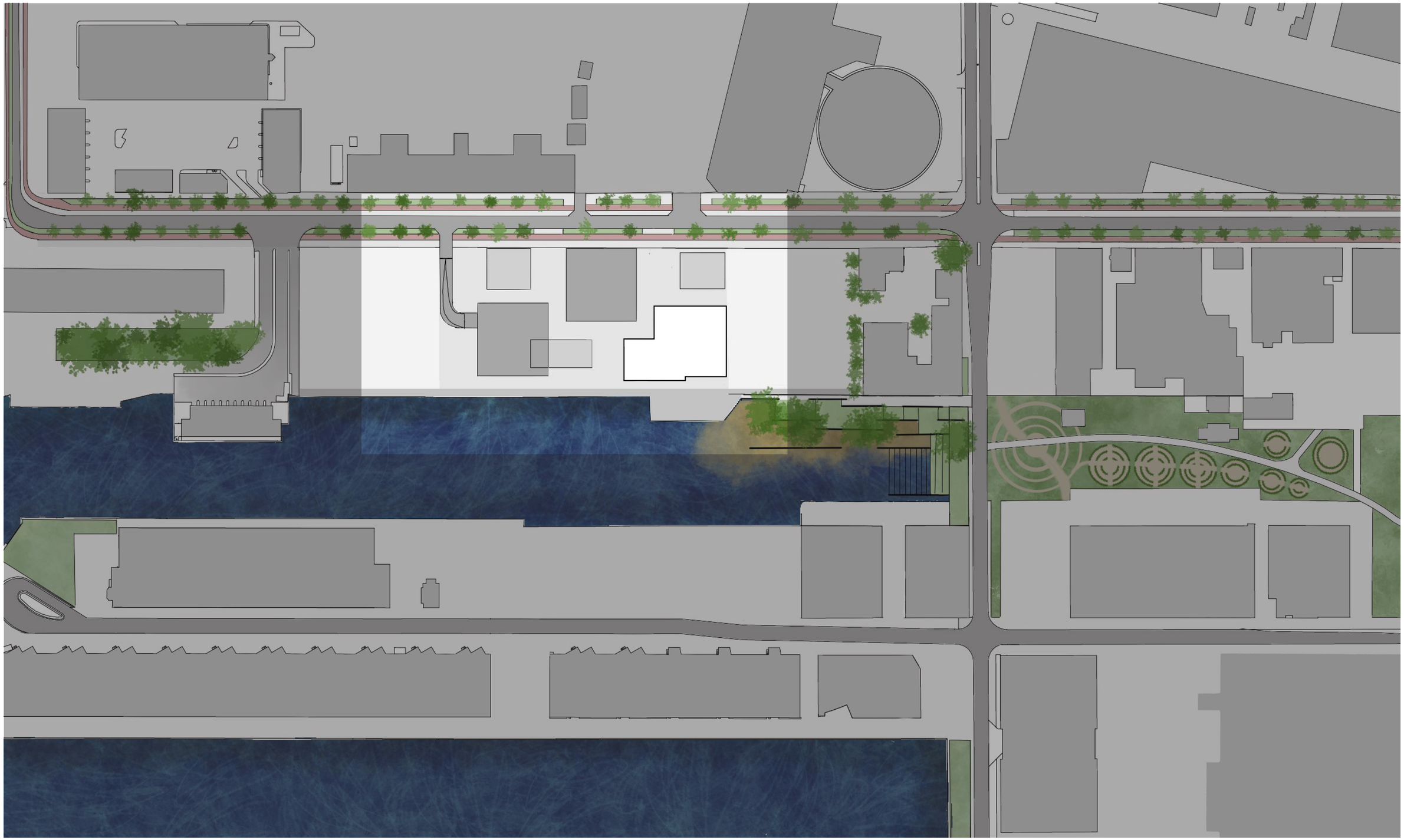
Sightlines into the hallway



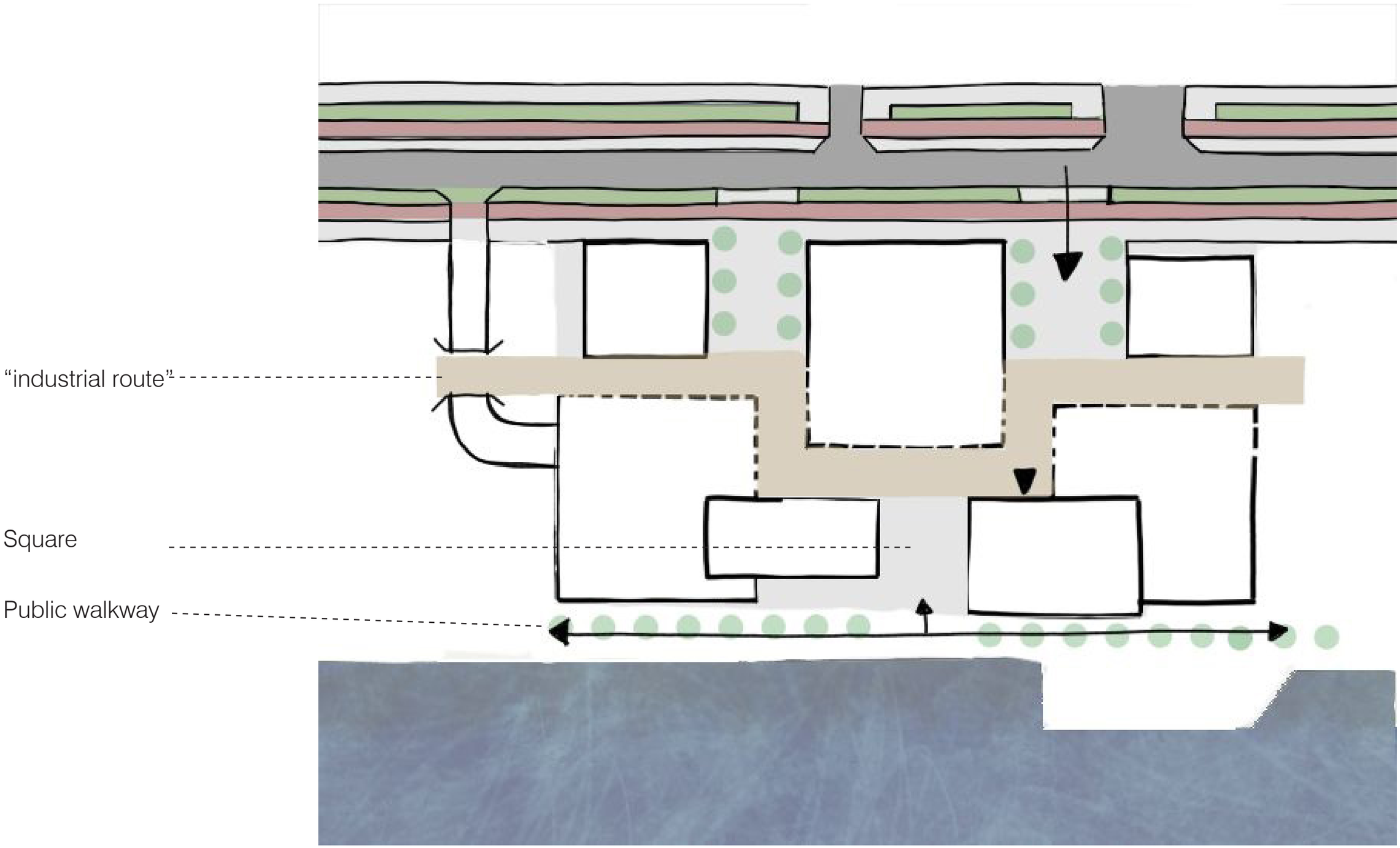
The buidling



The building



The building



The building - the neighborhood

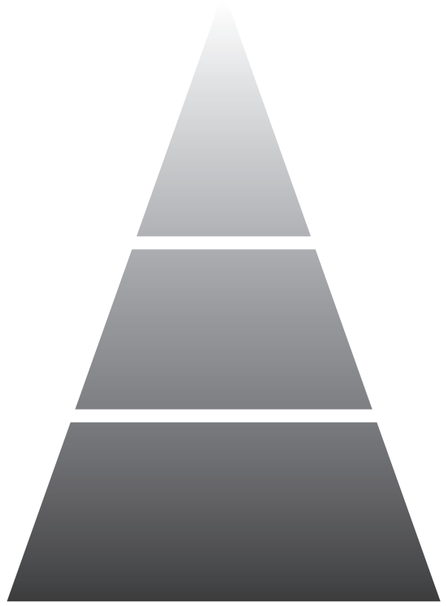
Users of the buidling

Residents

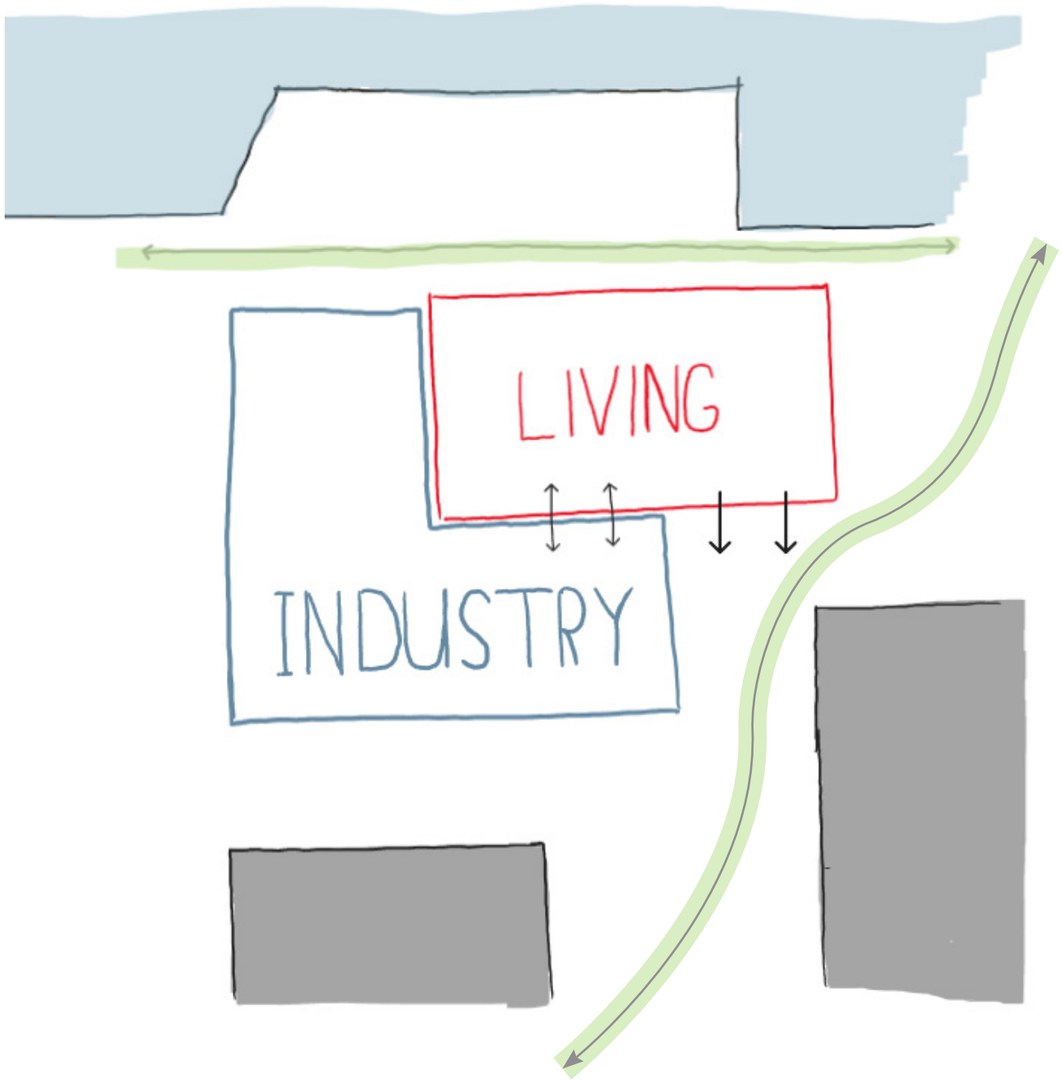
Workers

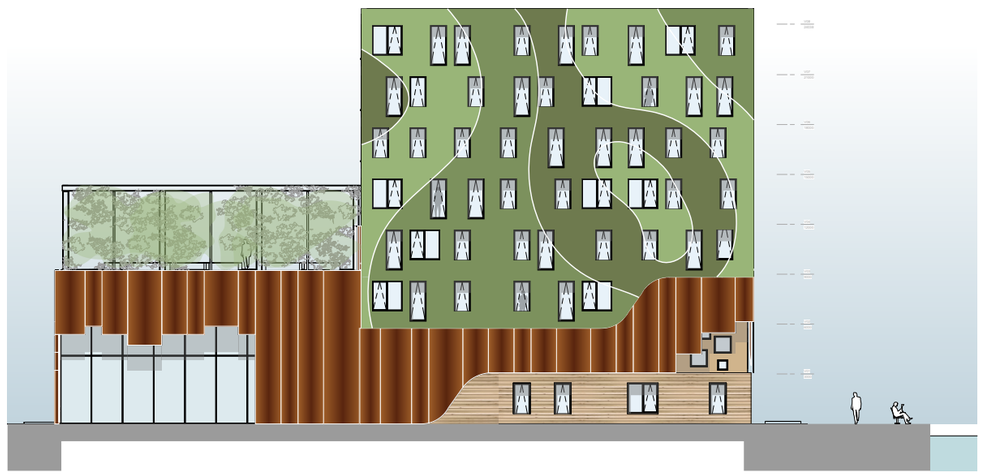
Neighbors

Level of privacy



The building - the neighborhood





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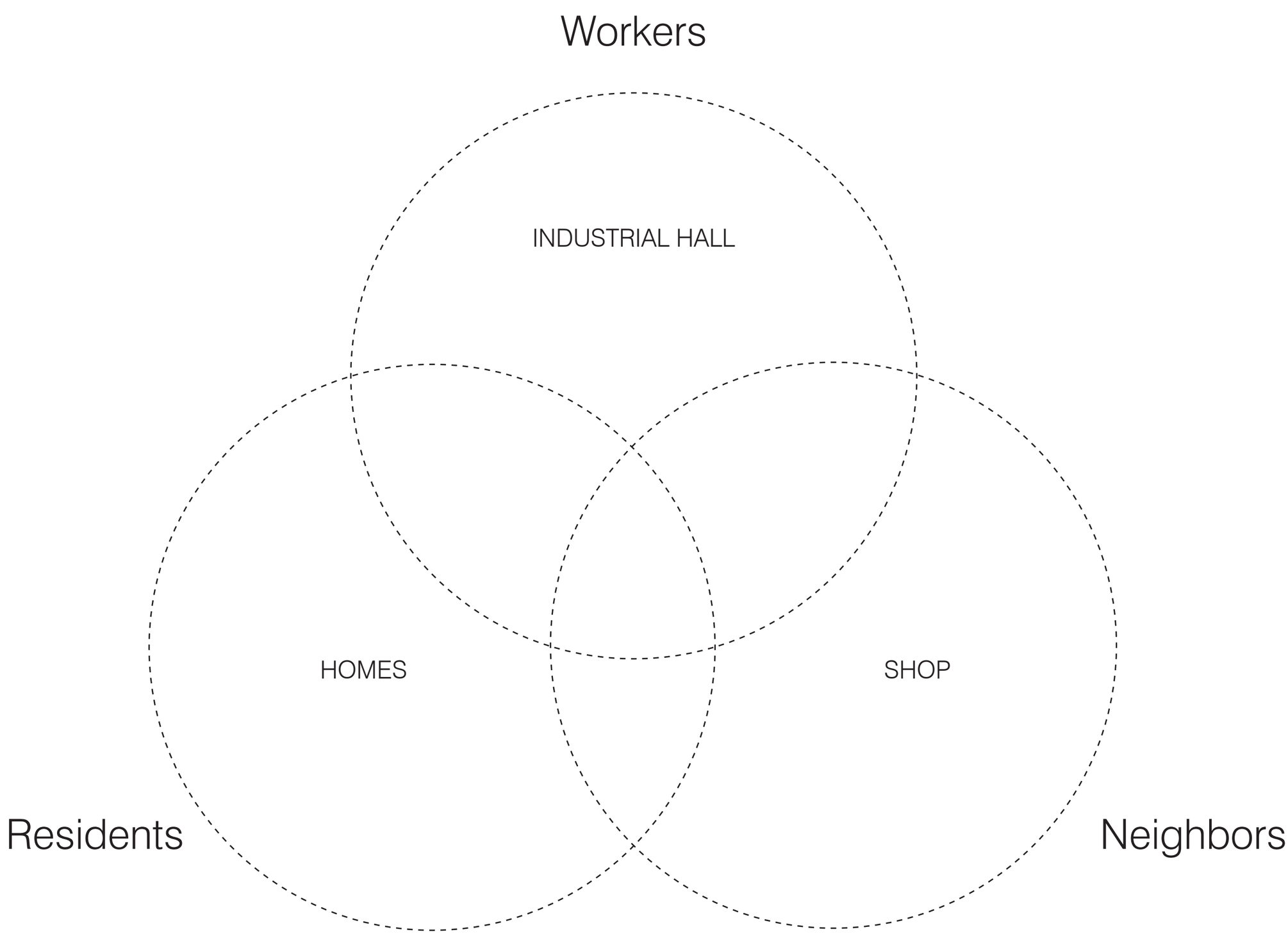


Workers

INDUSTRIAL HALL

GARDEN

CAFÉ

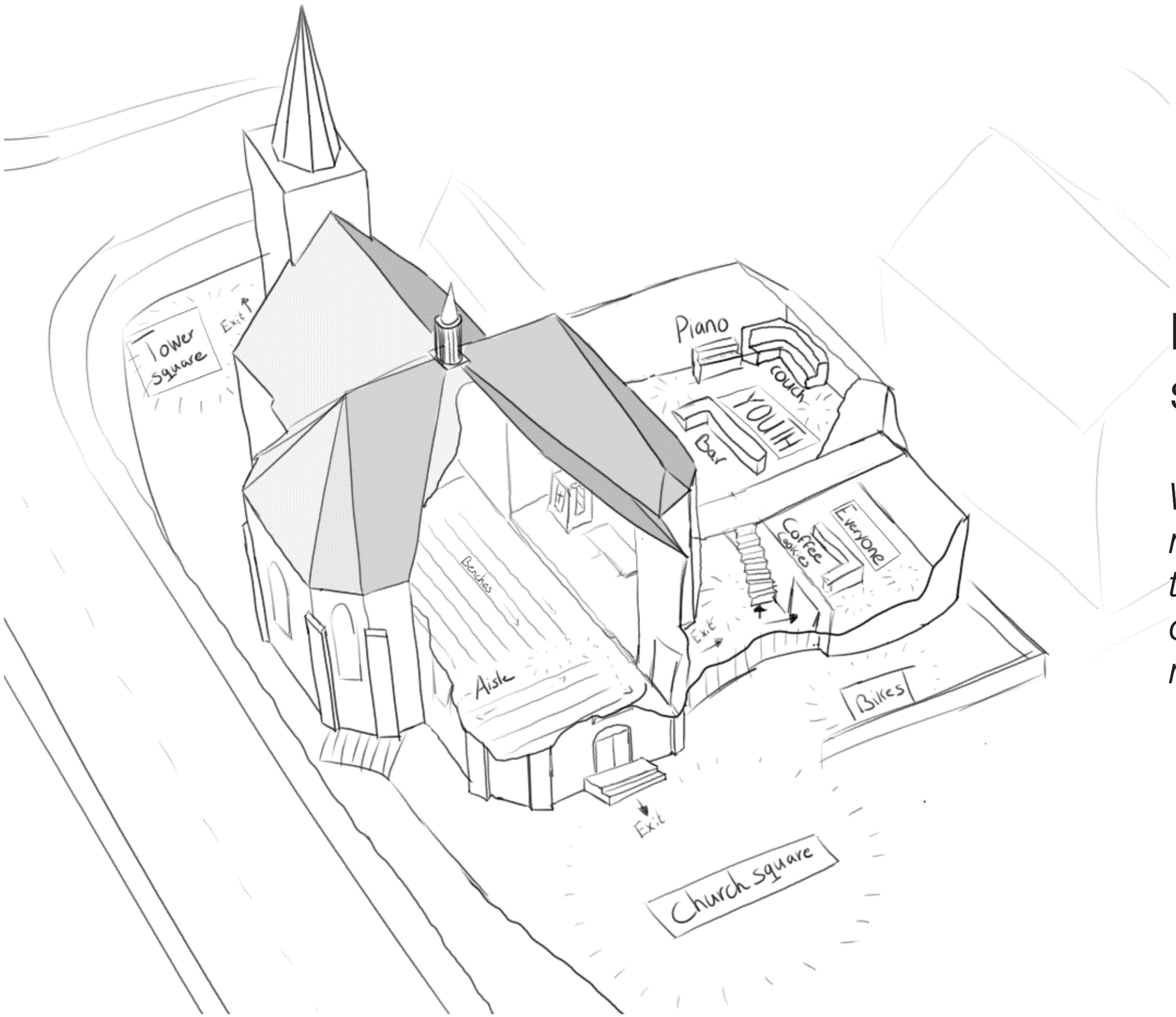
HOMES

SHOP

COMMUNAL SPACE

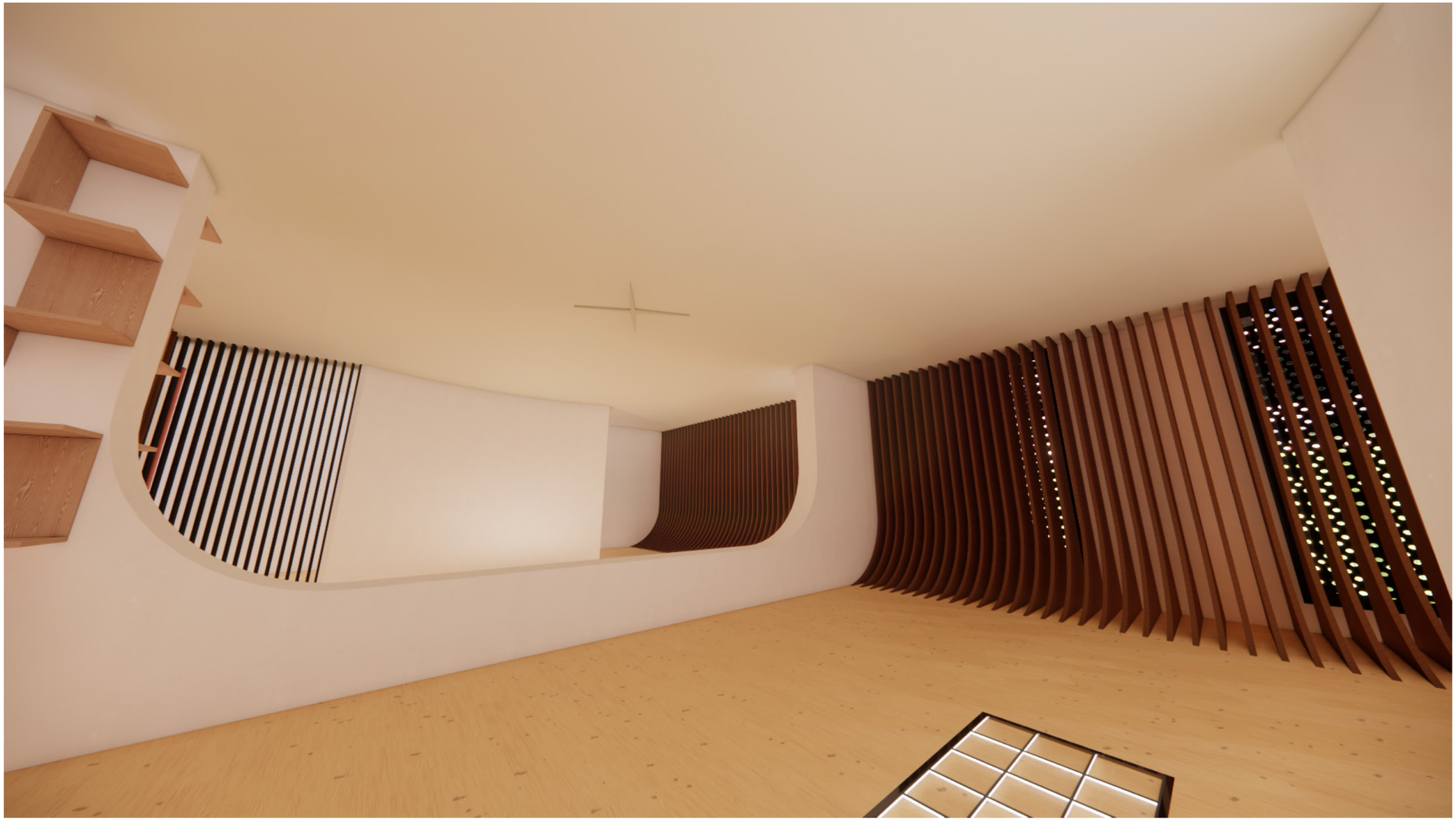
Residents

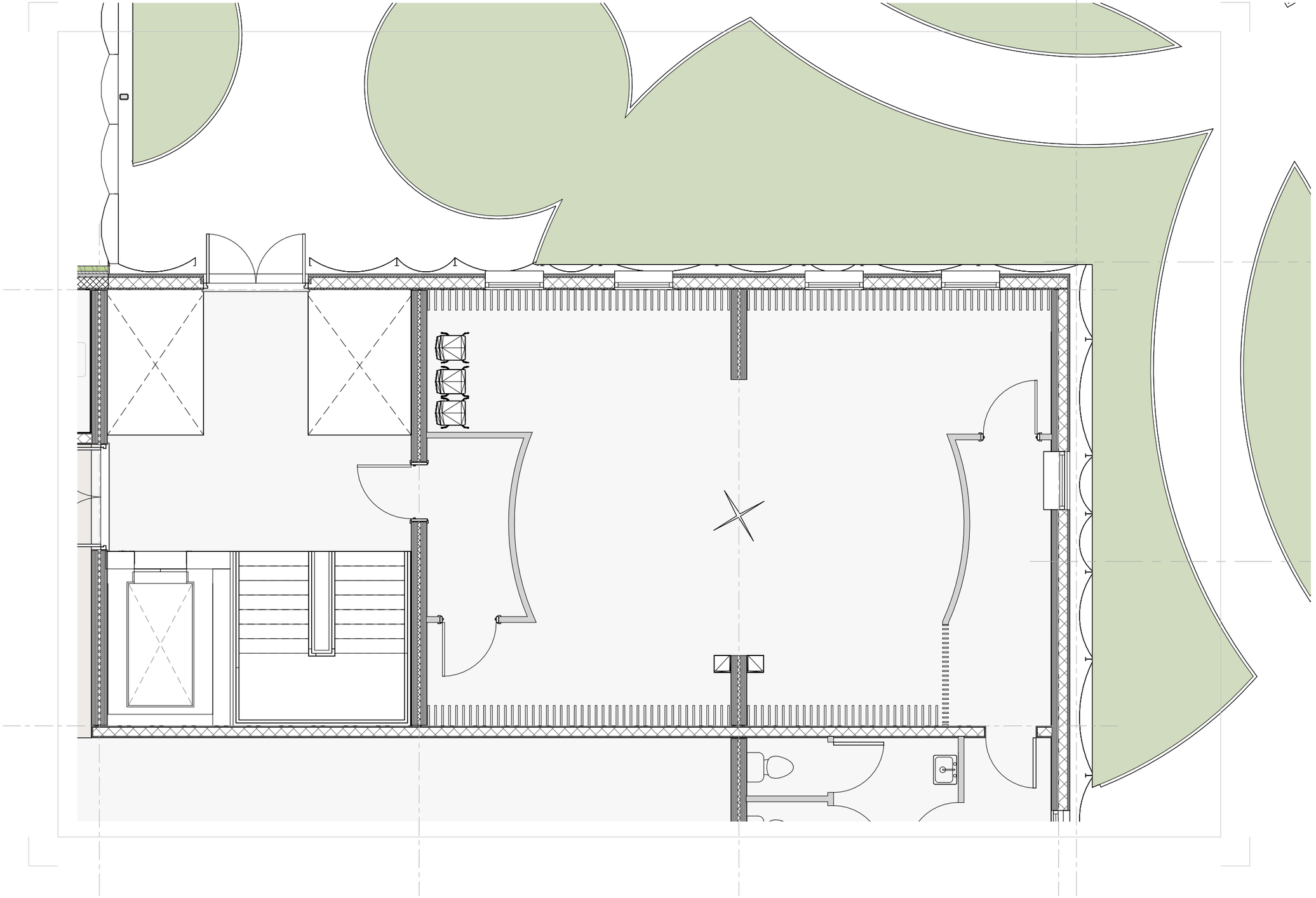
Neighbors

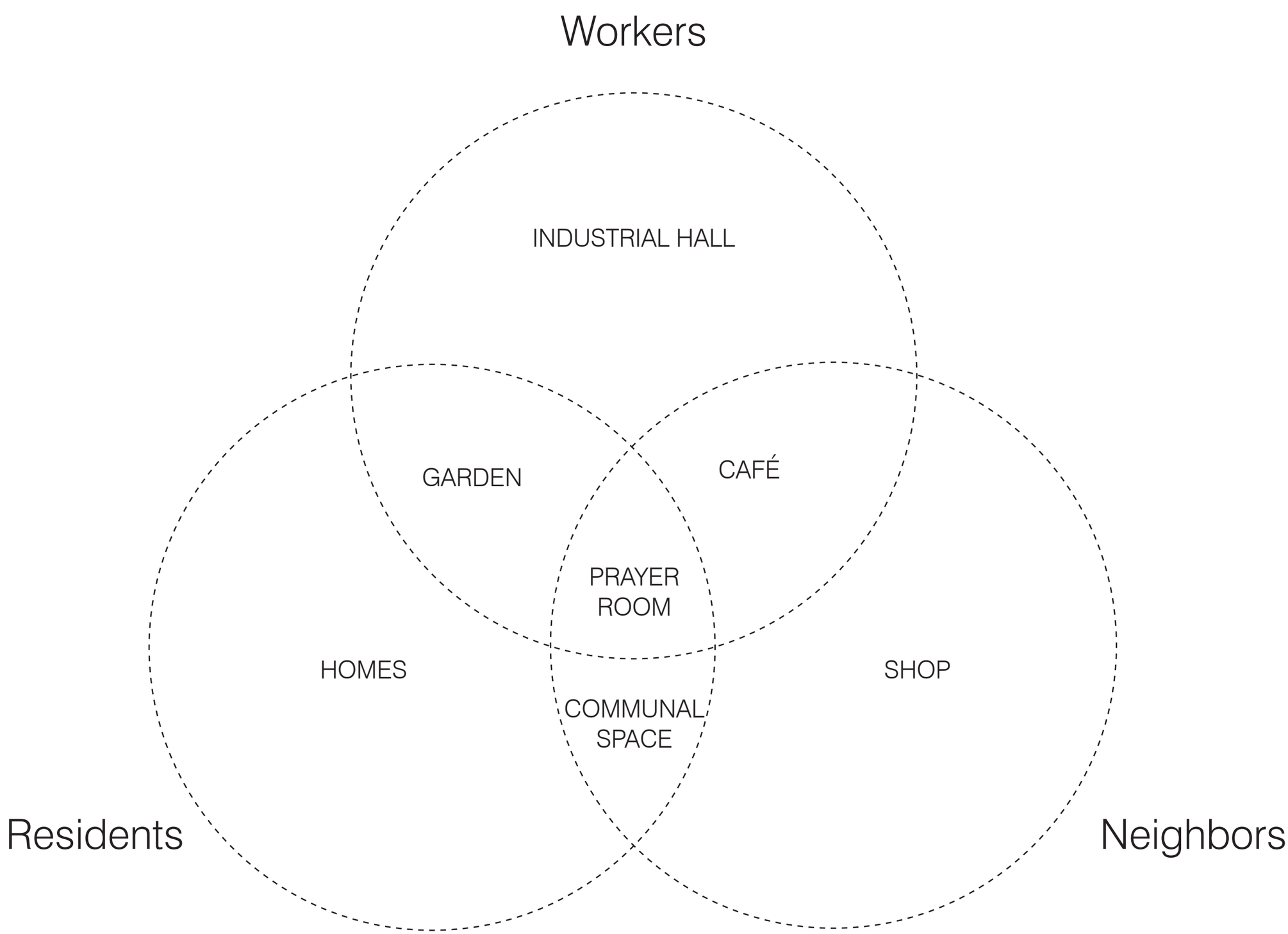


Mapping a space of social encounter

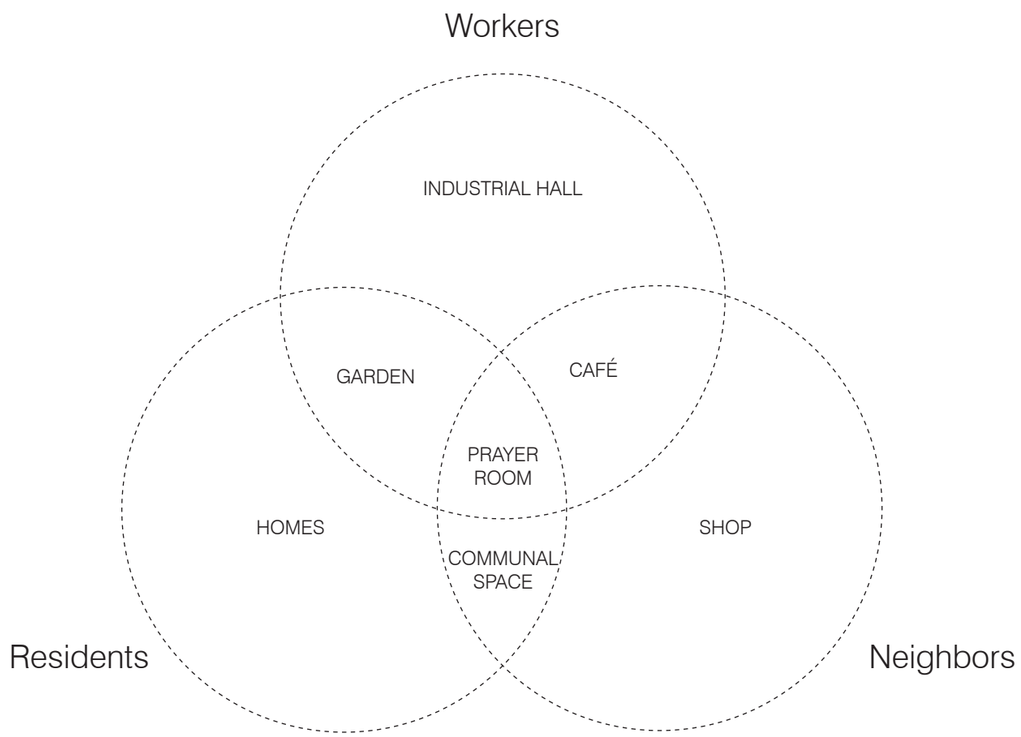
Where do different people meet each other – at what time, on which grounds and due to which architectural means?

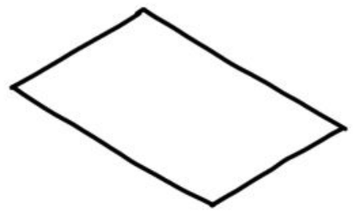




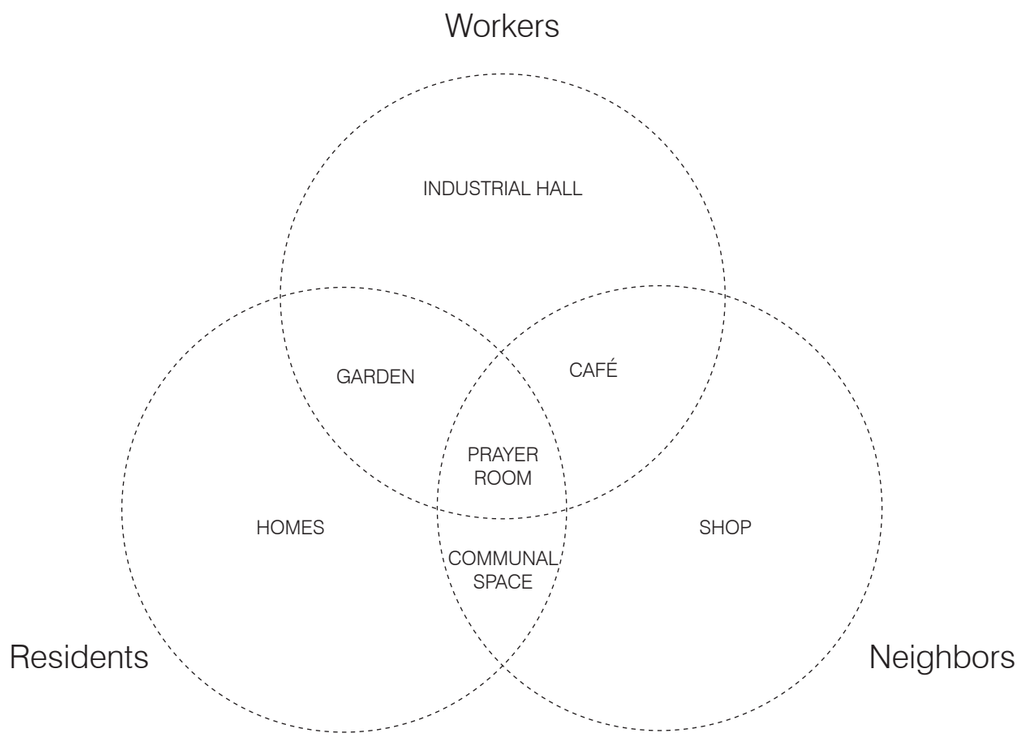

Workers
INDUSTRIAL HALL
GARDEN
CAFÉ
PRAYER ROOM
HOMES
SHOP
COMMUNAL SPACE
Residents
Neighbors

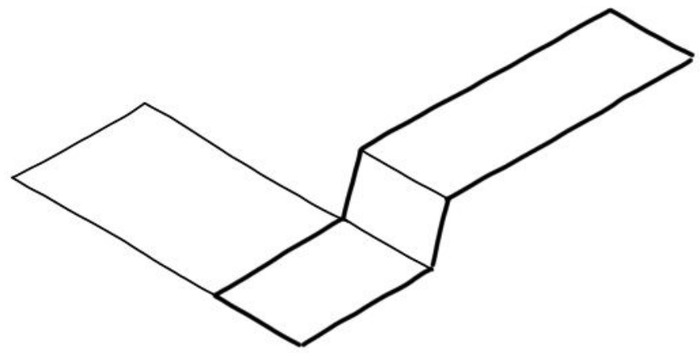
The entrance



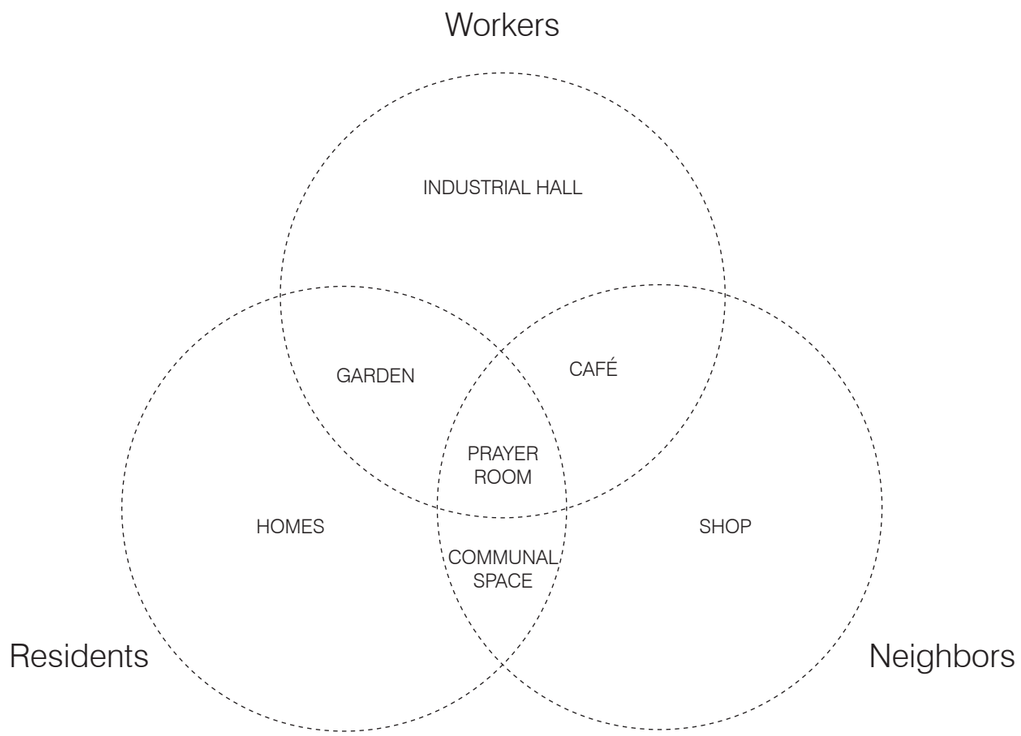


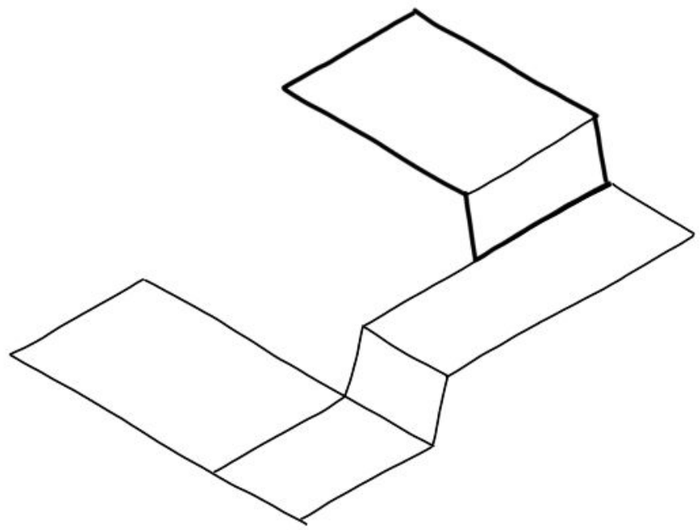
The shop


Workers
INDUSTRIAL HALL
GARDEN
CAFÉ
PRAYER ROOM
HOMES
SHOP
COMMUNAL SPACE
Residents
Neighbors

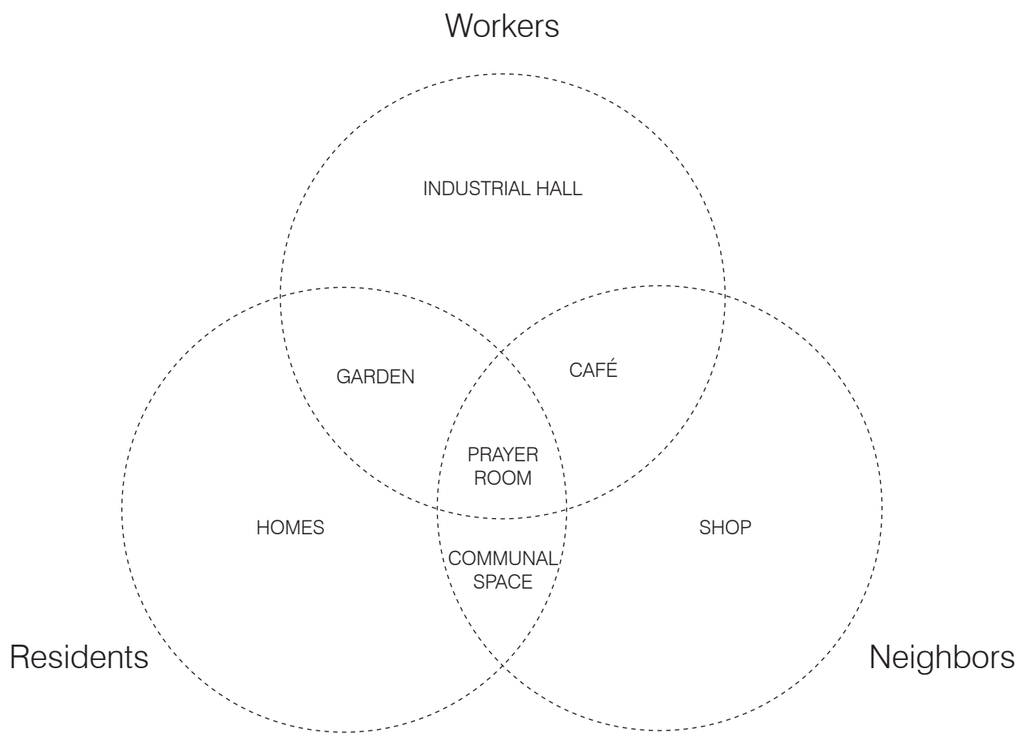


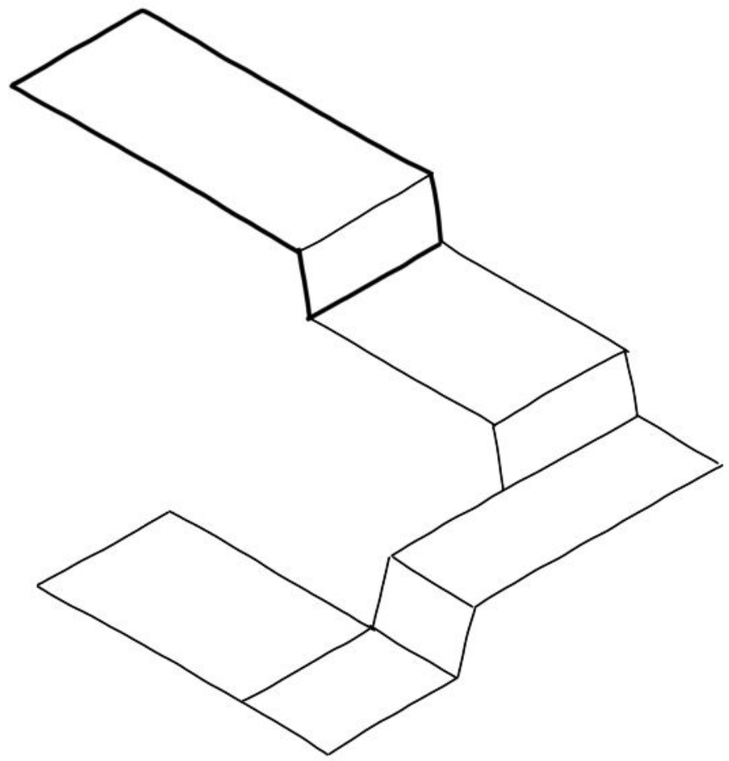
Communal space



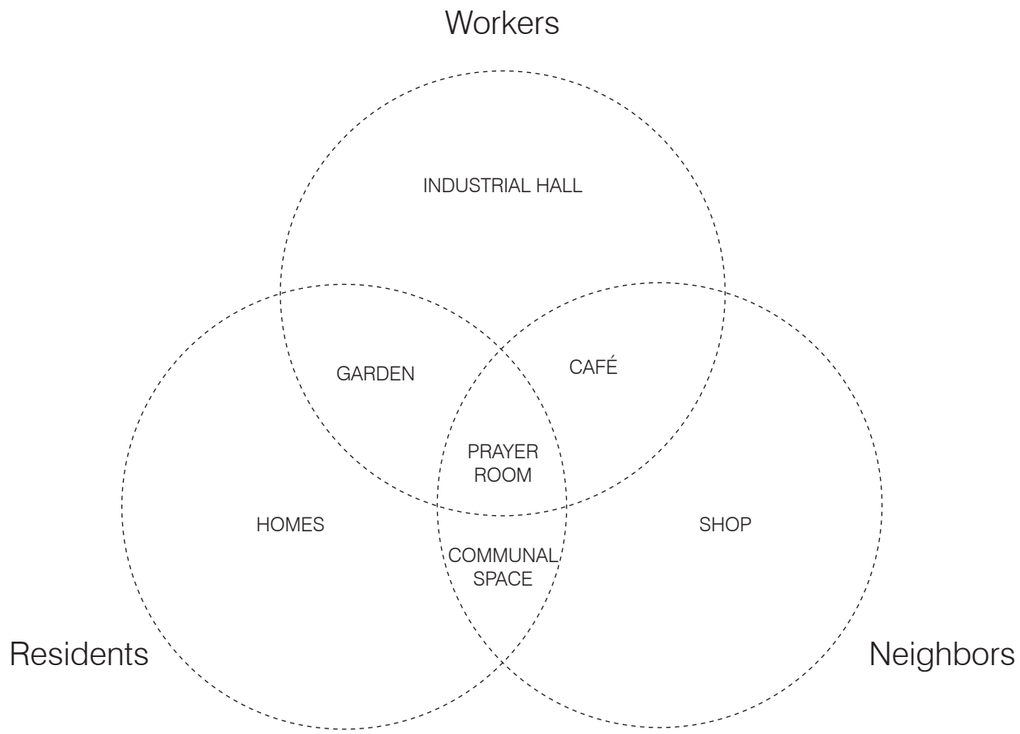


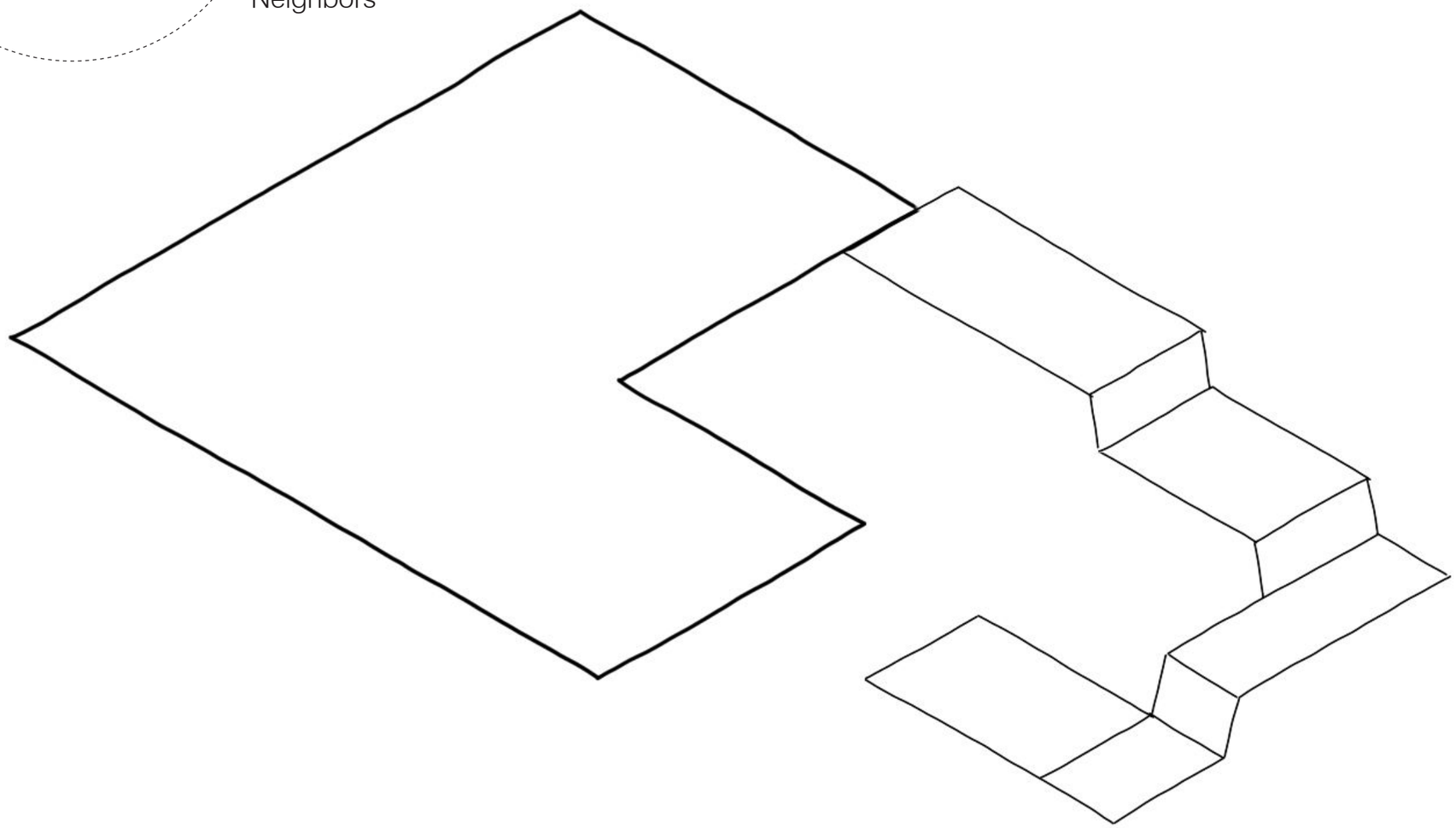
Café


Workers
INDUSTRIAL HALL
GARDEN
CAFÉ
PRAYER ROOM
HOMES
SHOP
COMMUNAL SPACE
Residents
Neighbors

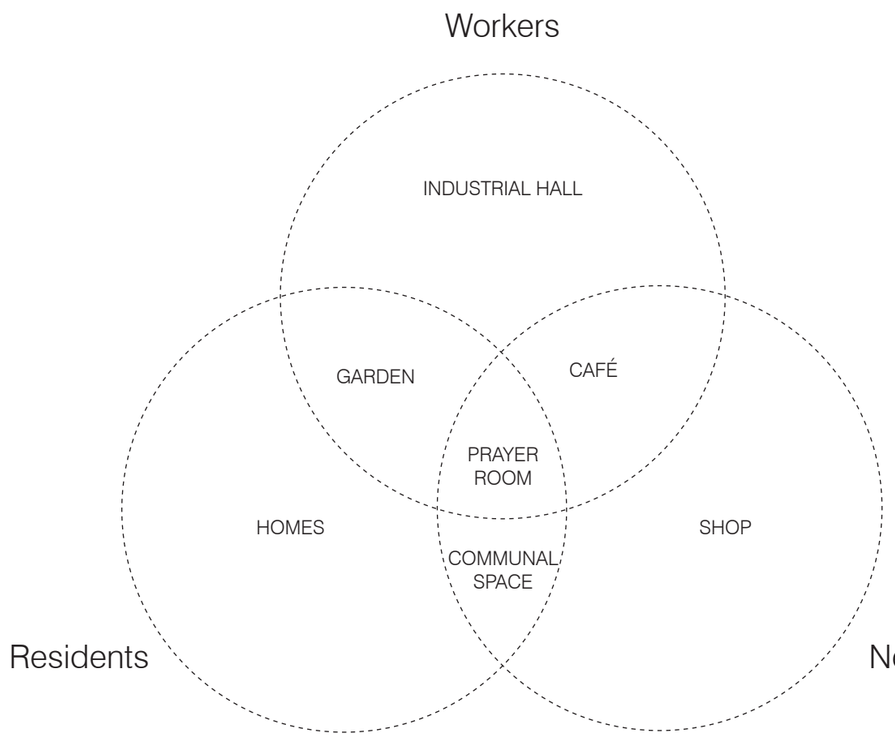


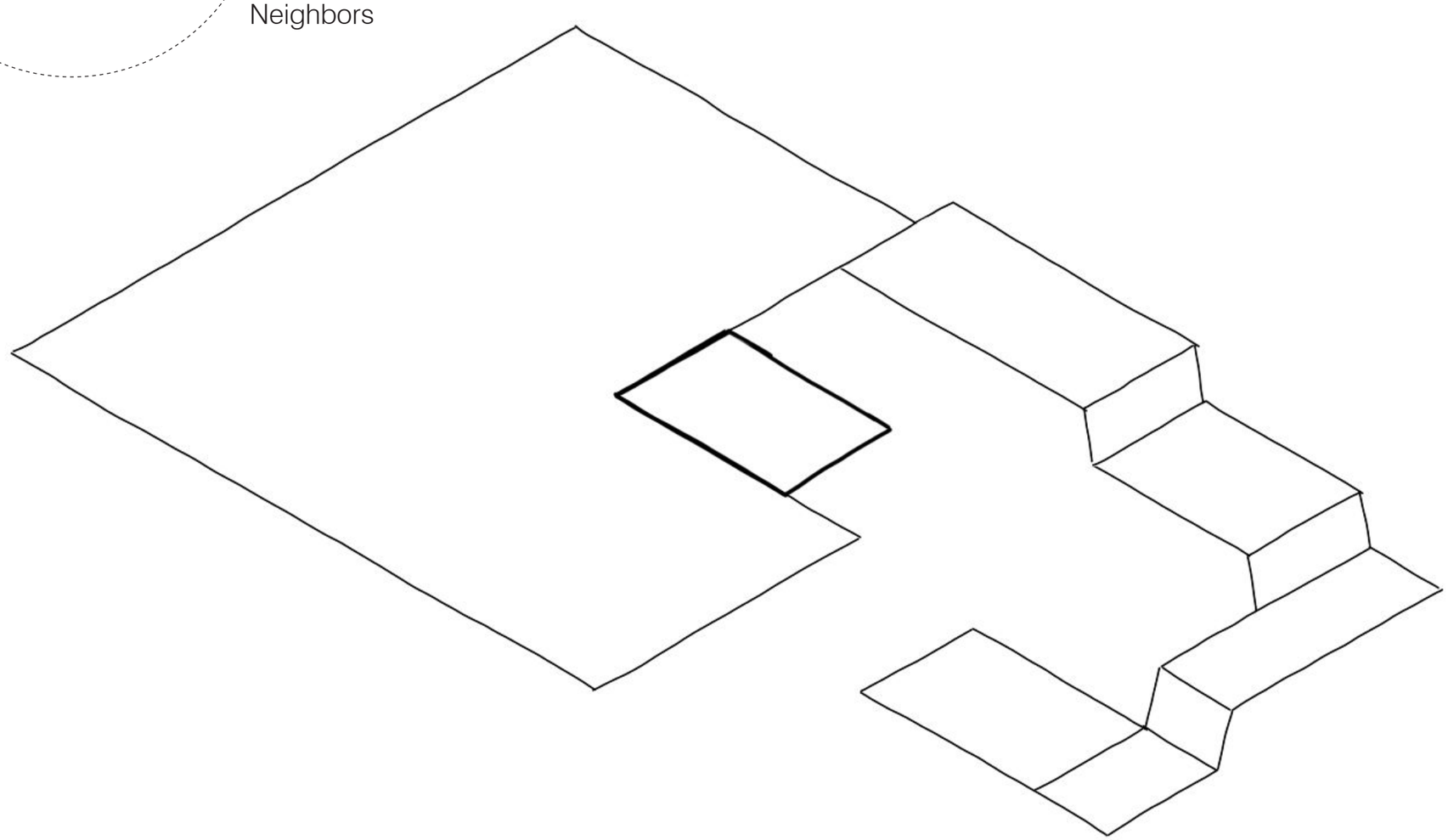
Rooftop garden



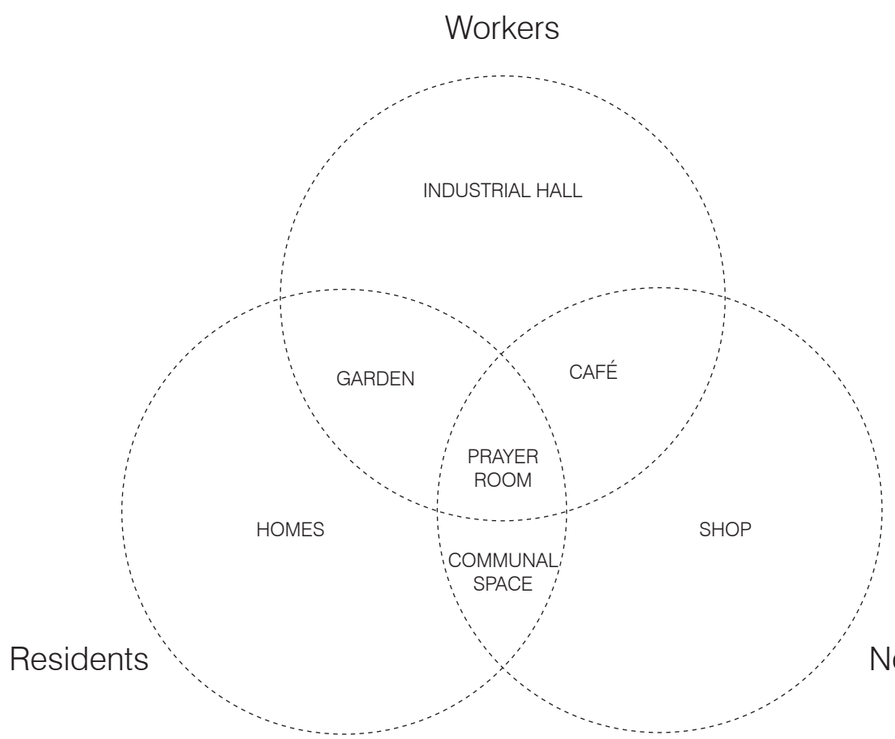


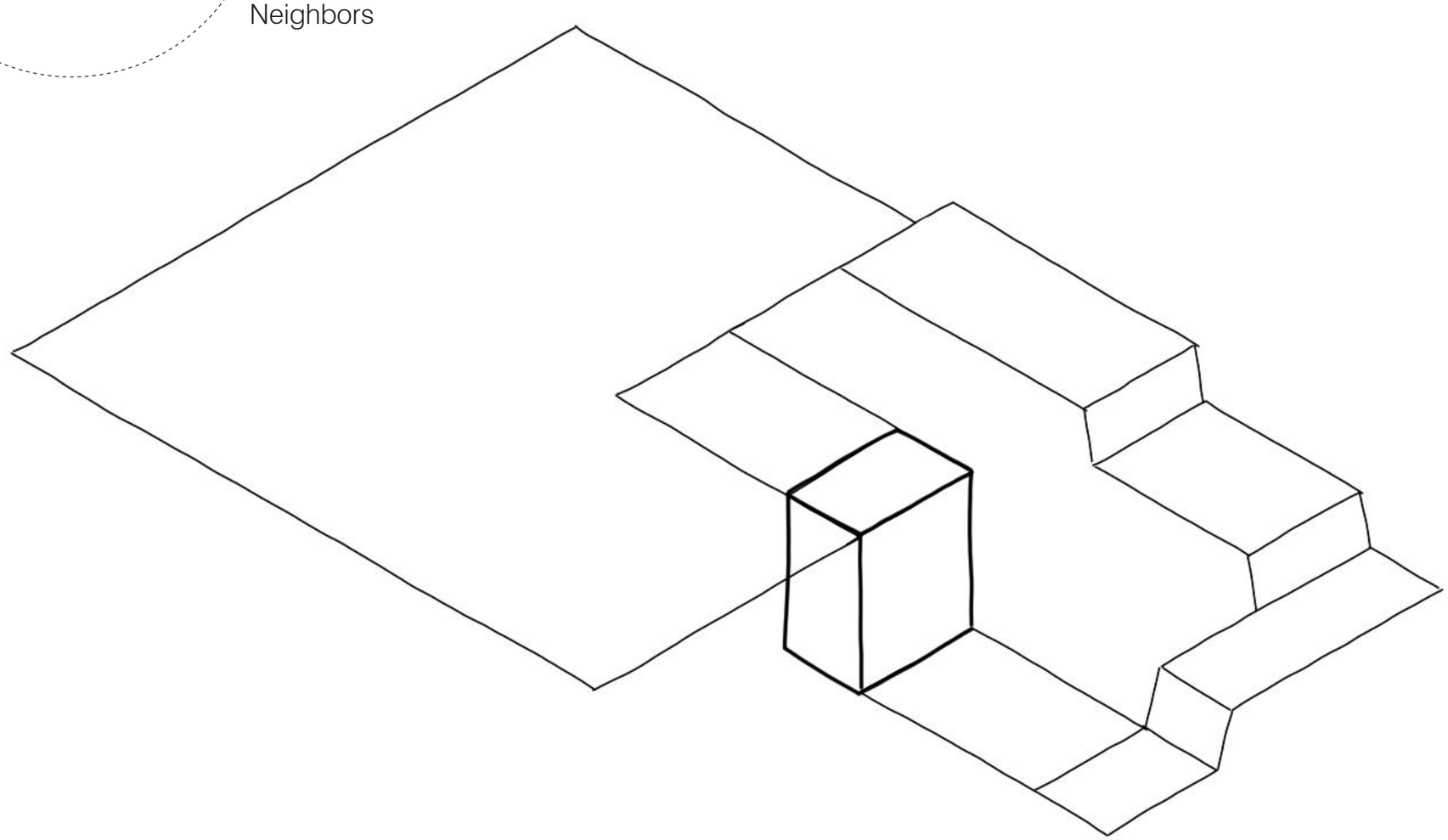
Prayer room

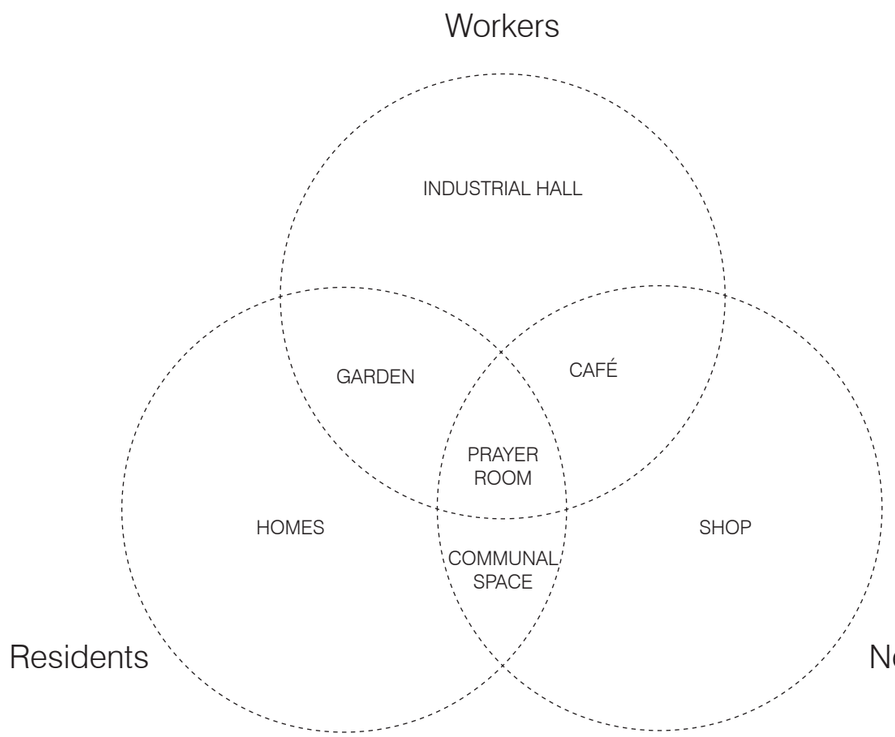

Workers
INDUSTRIAL HALL
GARDEN
CAFÉ
PRAYER ROOM
HOMES
SHOP
COMMUNAL SPACE
Residents
Neighbors

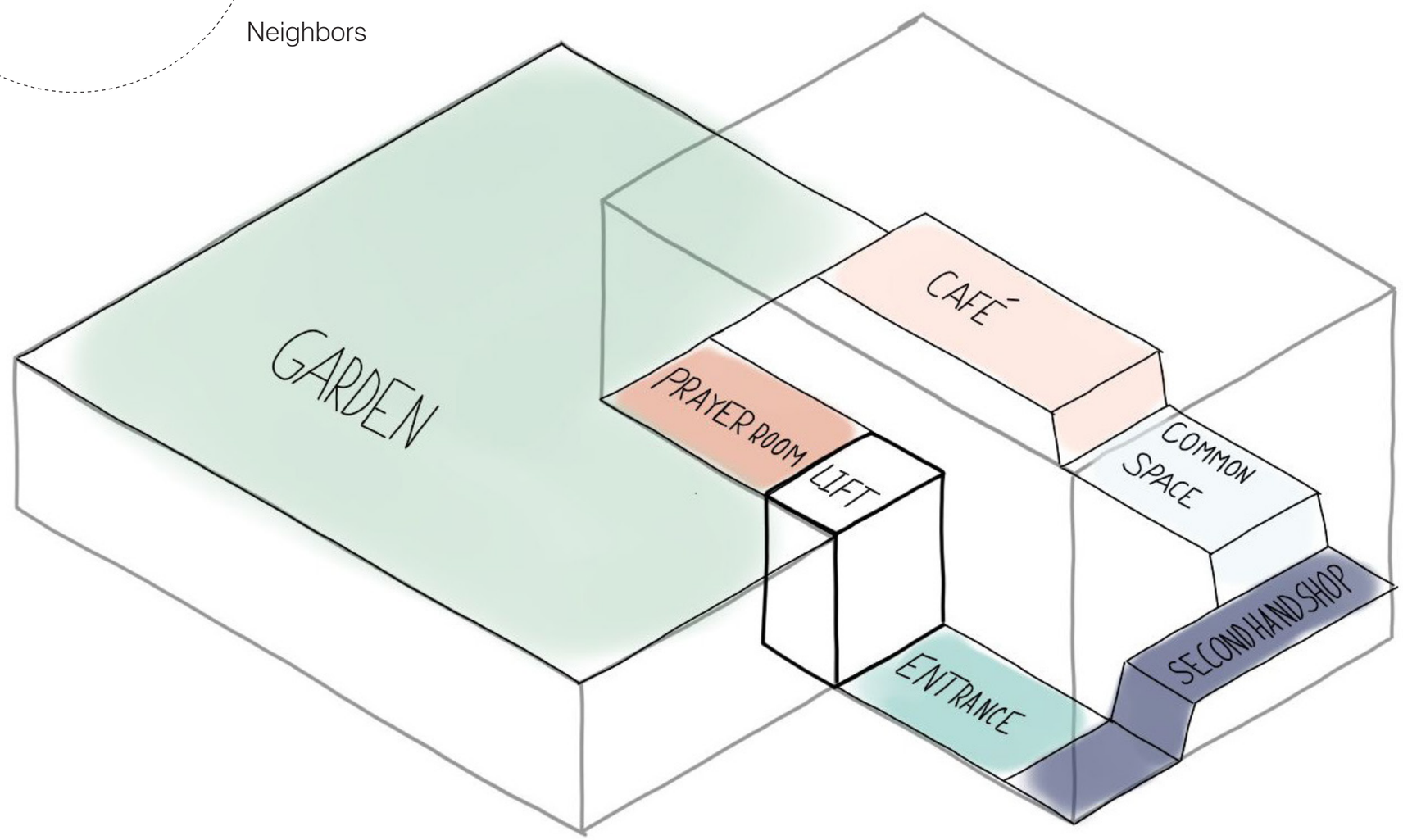


Elevator

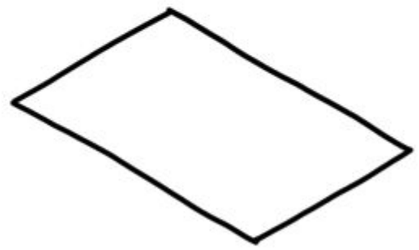

Workers
INDUSTRIAL HALL
GARDEN
CAFÉ
PRAYER ROOM
HOMES
SHOP
COMMUNAL SPACE
Residents
Neighbors



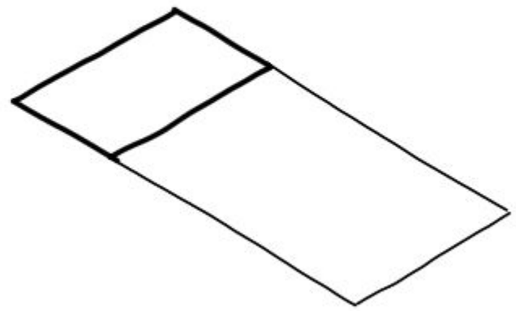

Workers
INDUSTRIAL HALL
GARDEN
CAFÉ
PRAYER ROOM
HOMES
SHOP
COMMUNAL SPACE
Residents
Neighbors


GARDEN
CAFÉ
PRAYER ROOM
LIFT
COMMON SPACE
SECONDHAND SHOP
ENTRANCE

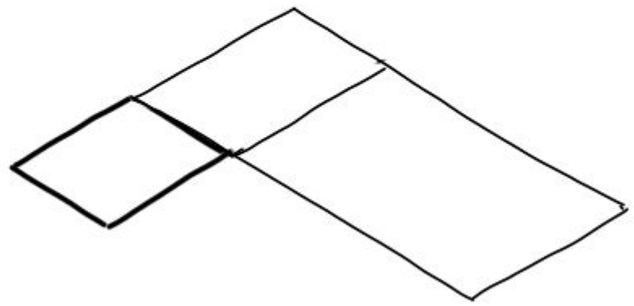
The entrance



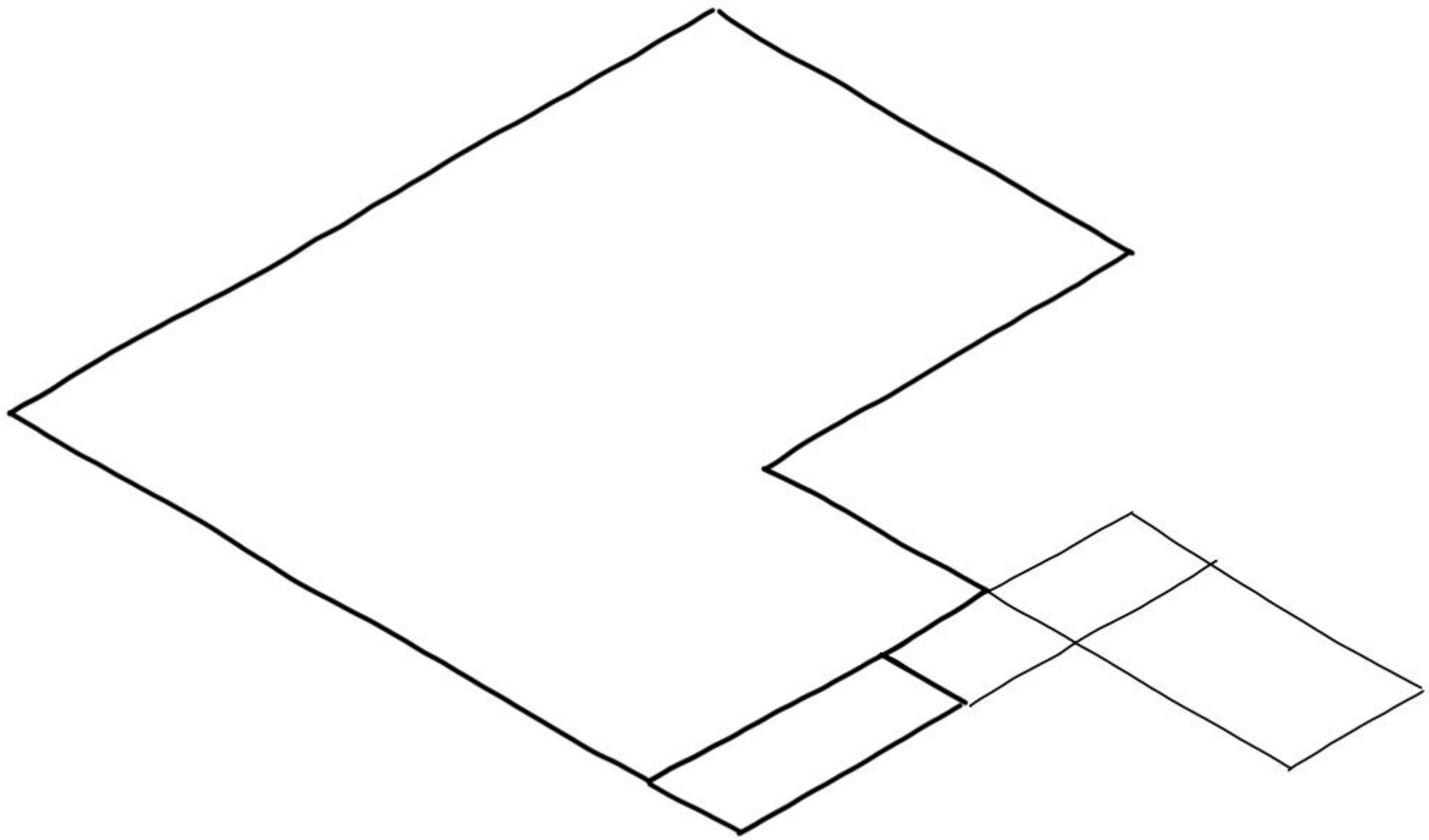
Hallway



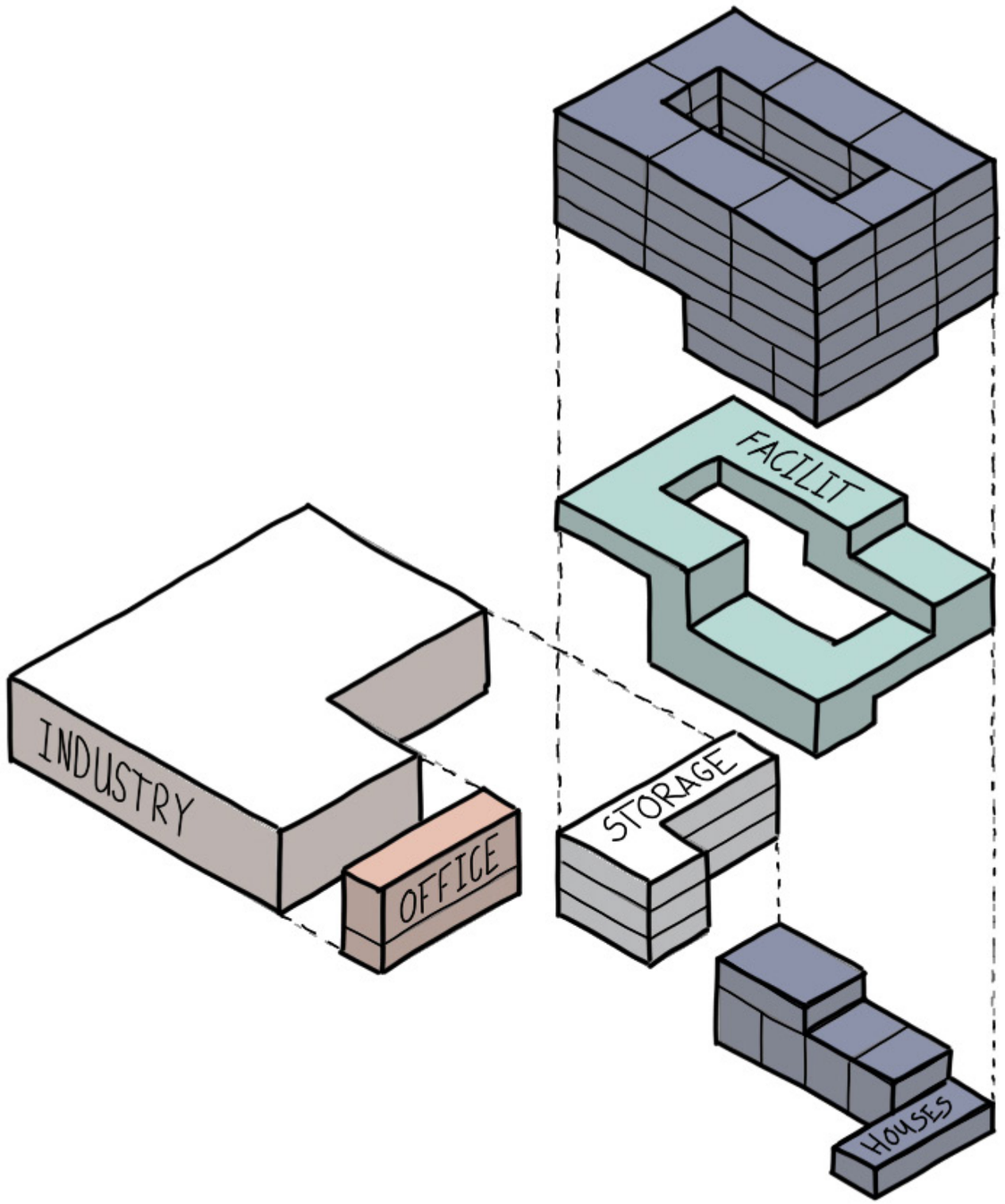
Private workers space

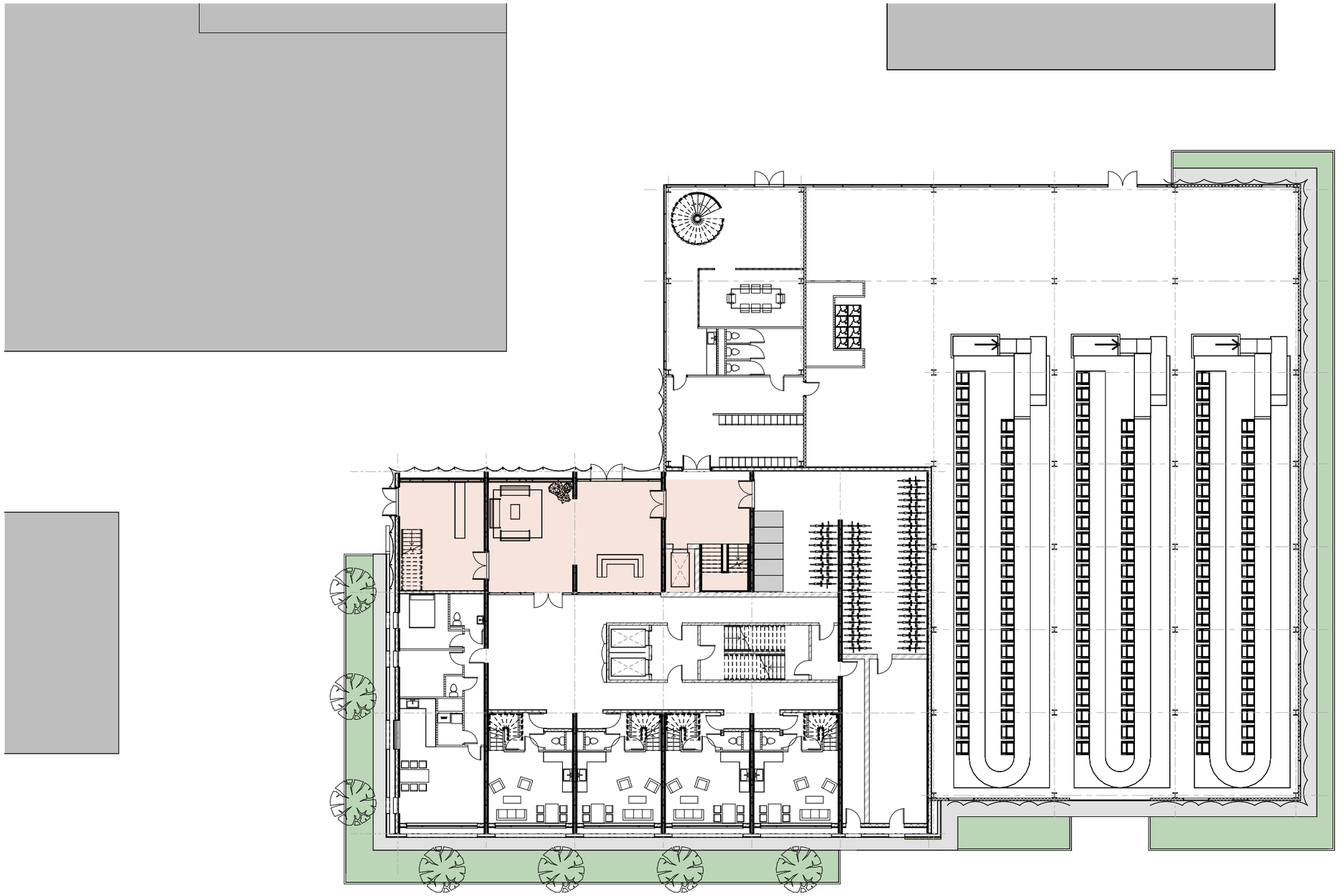


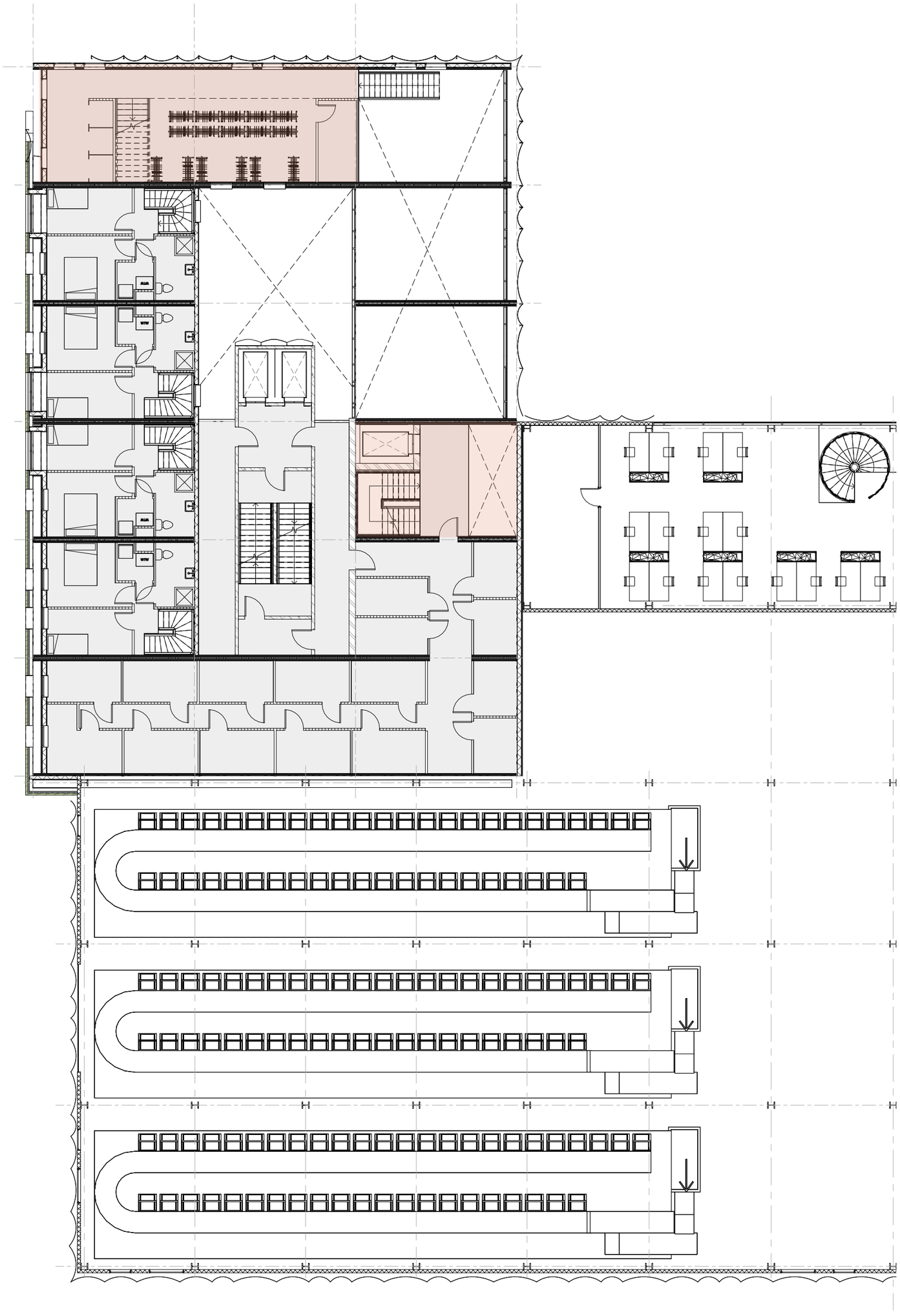
Office and industrial hall

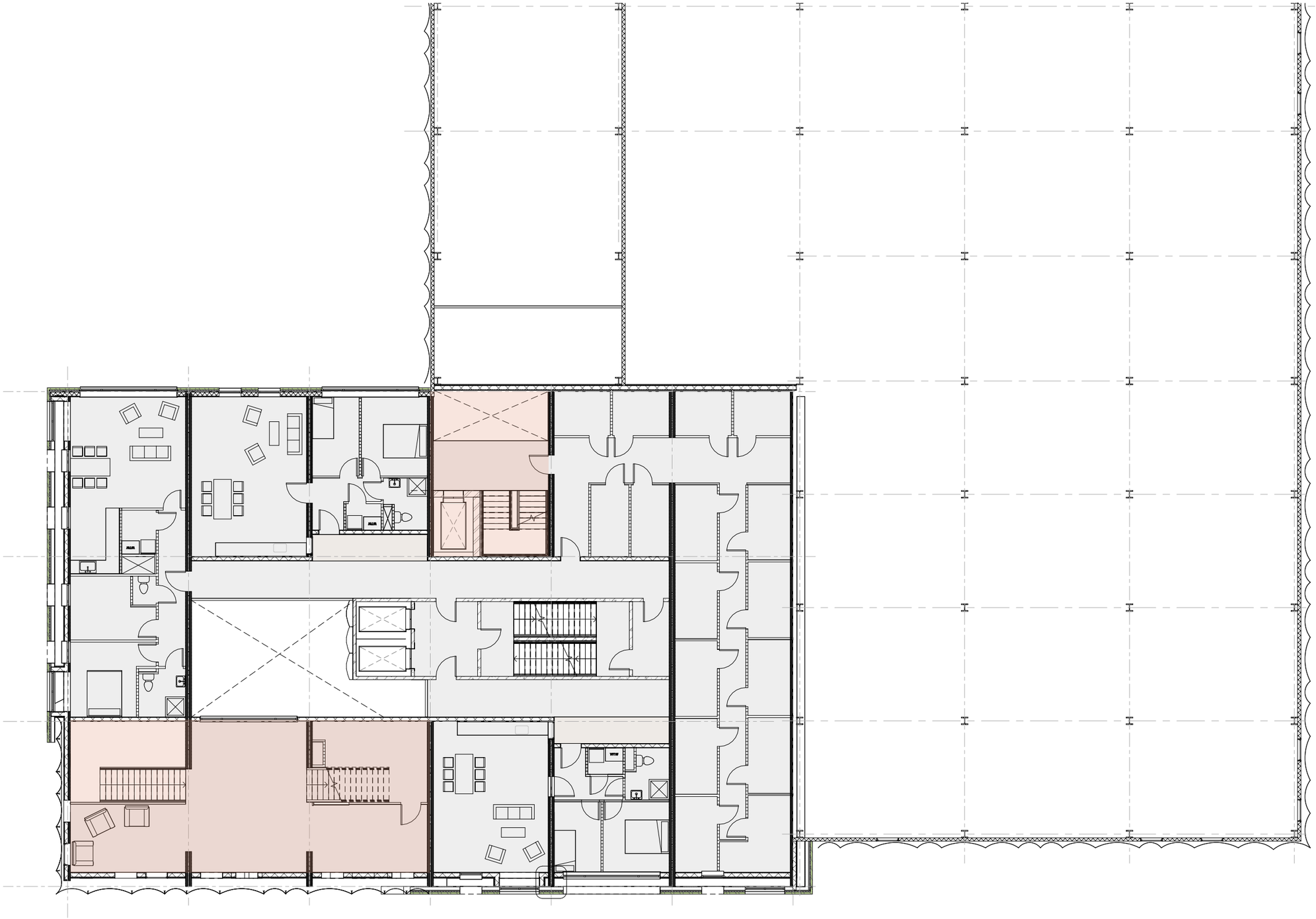


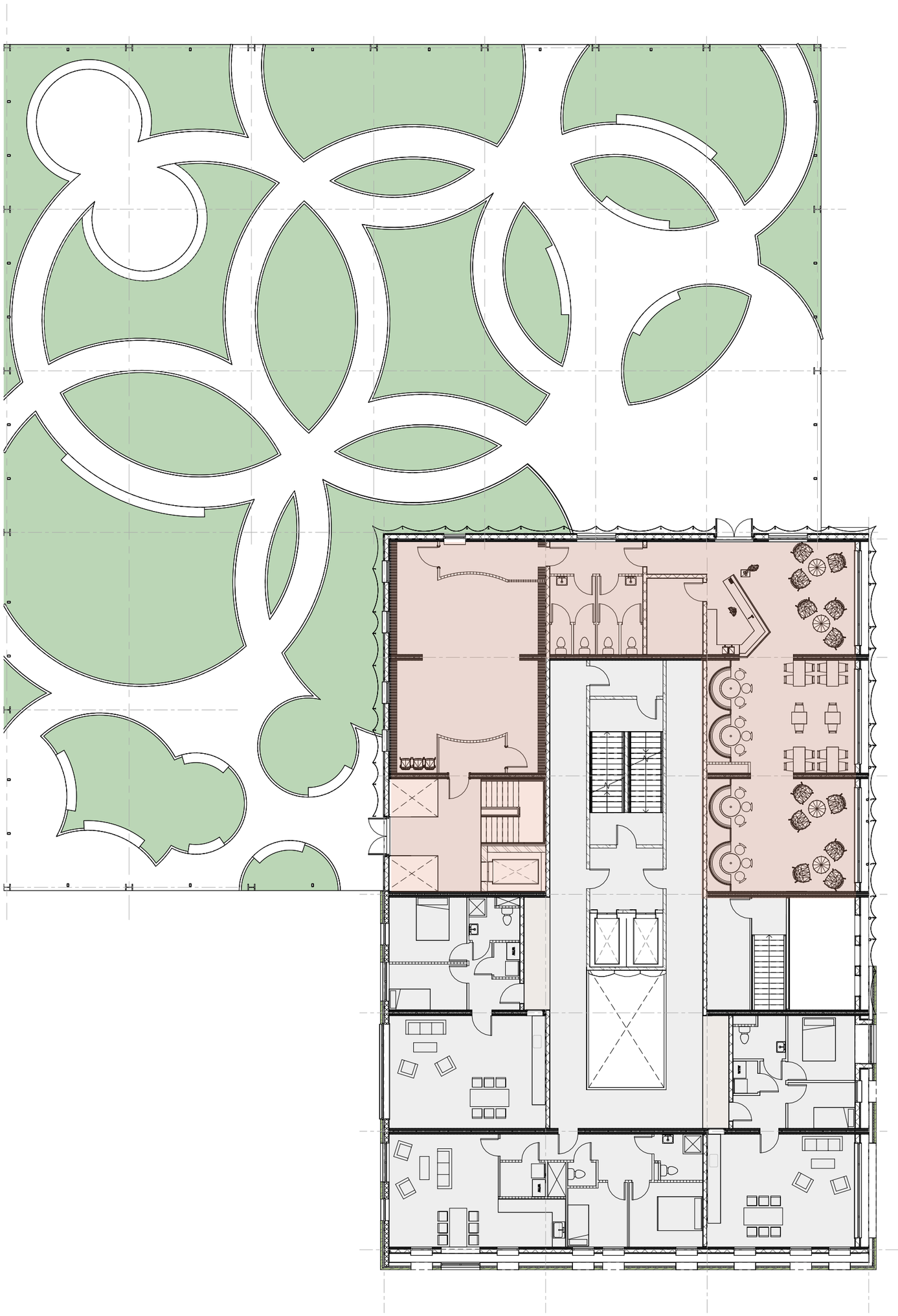
Program



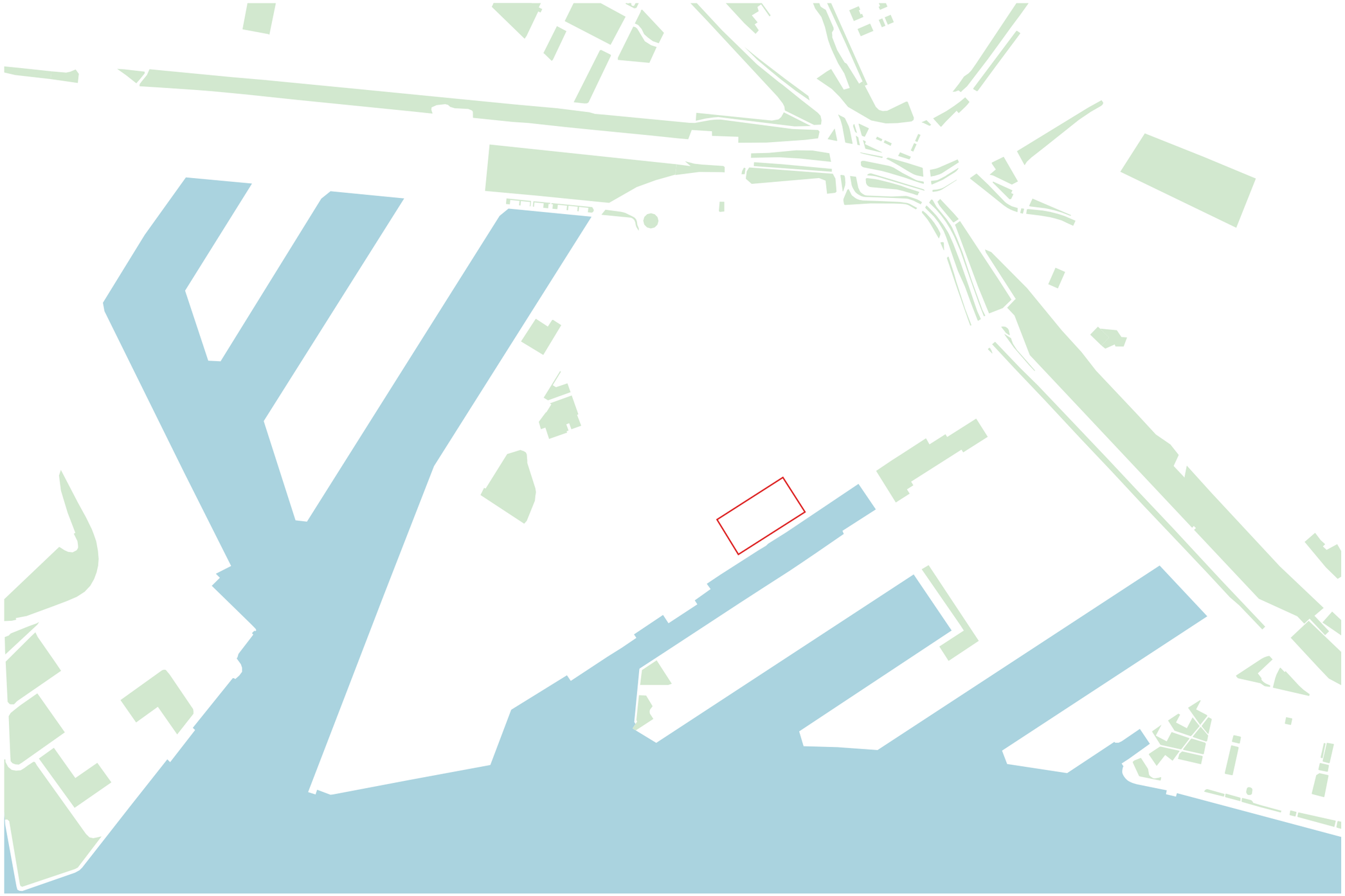



MAN
WW
MAN
WW





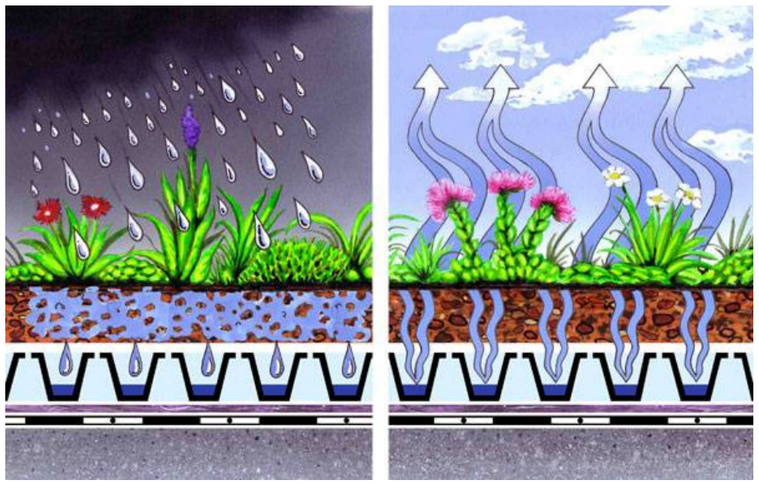
Rooftop garden

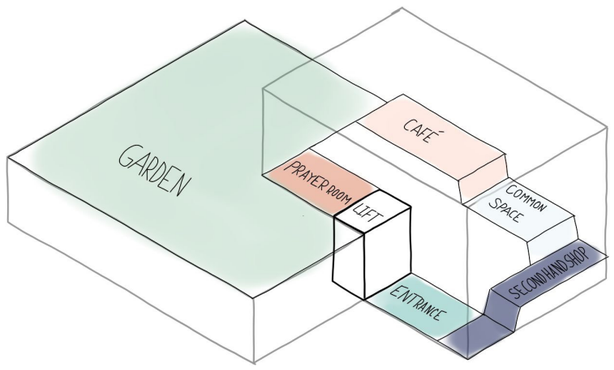


Rooftop garden

Life on Roofs

ZinCo





Rooftop garden

Aster dumosus
Apollo

Aug - Sep AA

Echinacea
Virgin

Jul - Sep EV

Selinum
Wallichianum

Jul - Sep SW

Veronica
Lila Karinka

Jul - Aug VL

Astilbe
Drum and bass

Jul - Sep AS

Echinacea
Pink passion

Jul - Sep EP

Filipendula Rubra
Venusta Magnifica

Jul - Aug FI

Geranium
Rose Clair

Jun - Aug GE

Buddleja
Miss Ruby

Jul - Okt B

Duizendknoop
Persicaria

Jun - Okt DP

Lytherum
Happiness

Jul - Aug LY

Aconitum
Napellus

Jul - Sep AN

Iris Germanica
Empress of India

Mei - Juni I

Allium
Globemaster

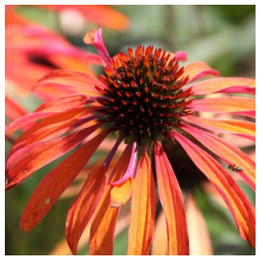
Mei - Jun A

Lavendula
Angustifolia

Jun - Sep L

Limonium
Latifolium

Jul - Aug LL



Echinacea
Summer sun

Jul - Okt ES

Helenium
Moerheim beauty

Jul - Sep HE

Heliopsis
Helianthoides

Jun - Sep HH

Molinia
Swirl

Jun - Okt MS

Pennisetum
Viridescens

Jun - Okt P

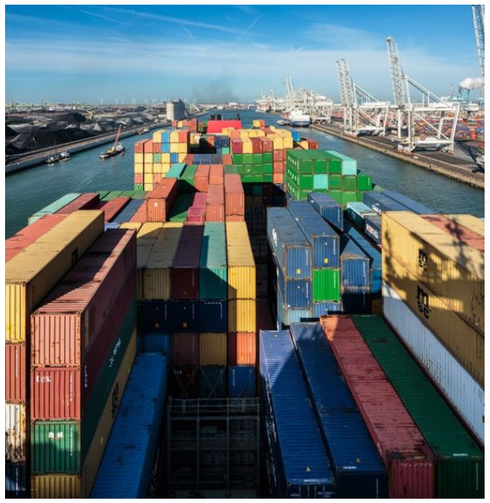
Sporobolus
Heterolepis

Jun - Okt SH

Rooftop garden

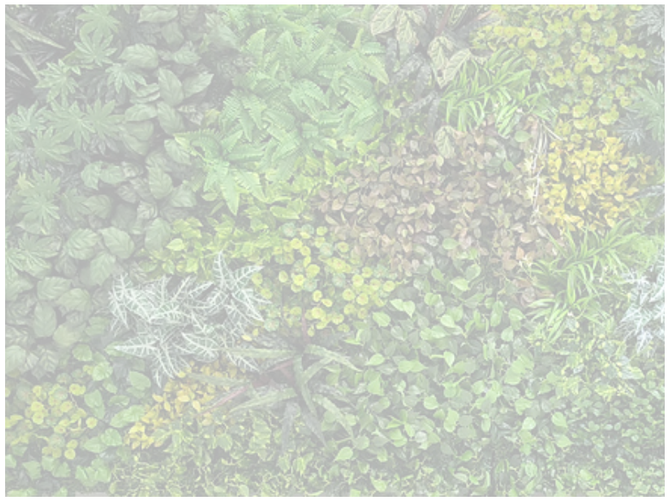
The building - materialization

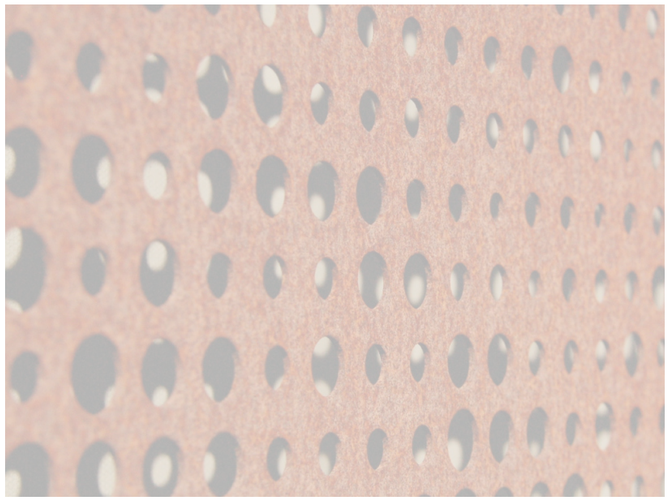
The inspiration



Local improvements

The material choice





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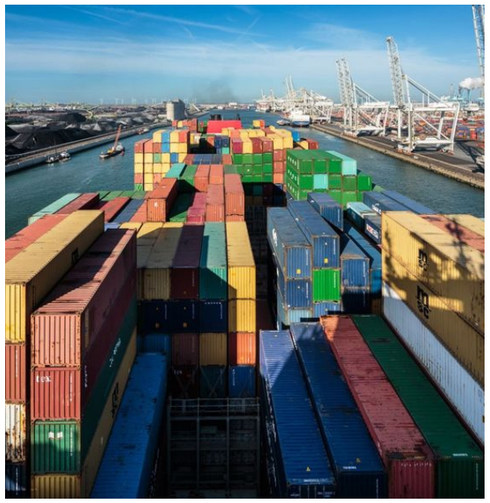

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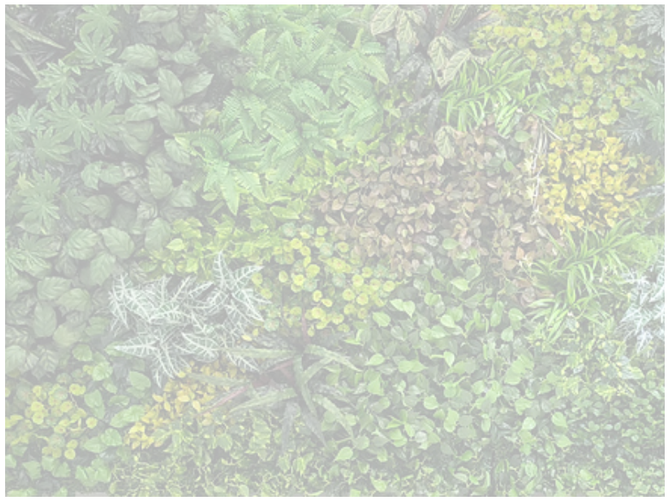

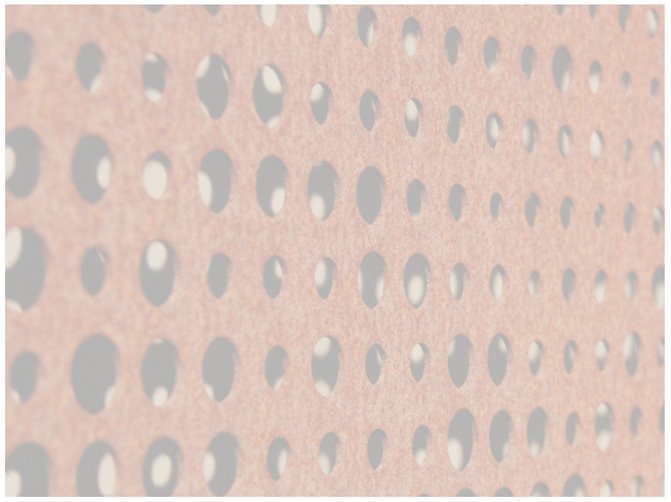

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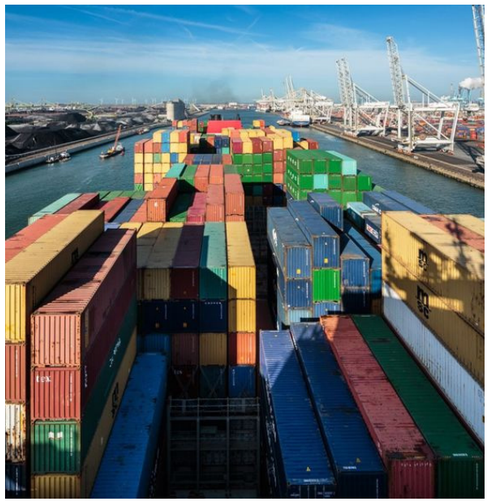

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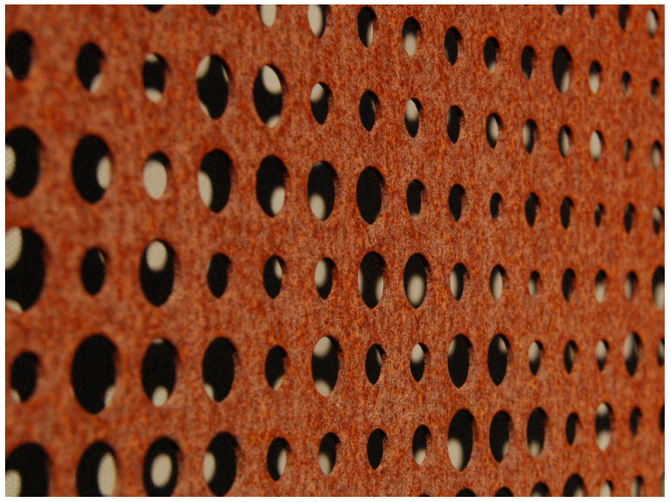
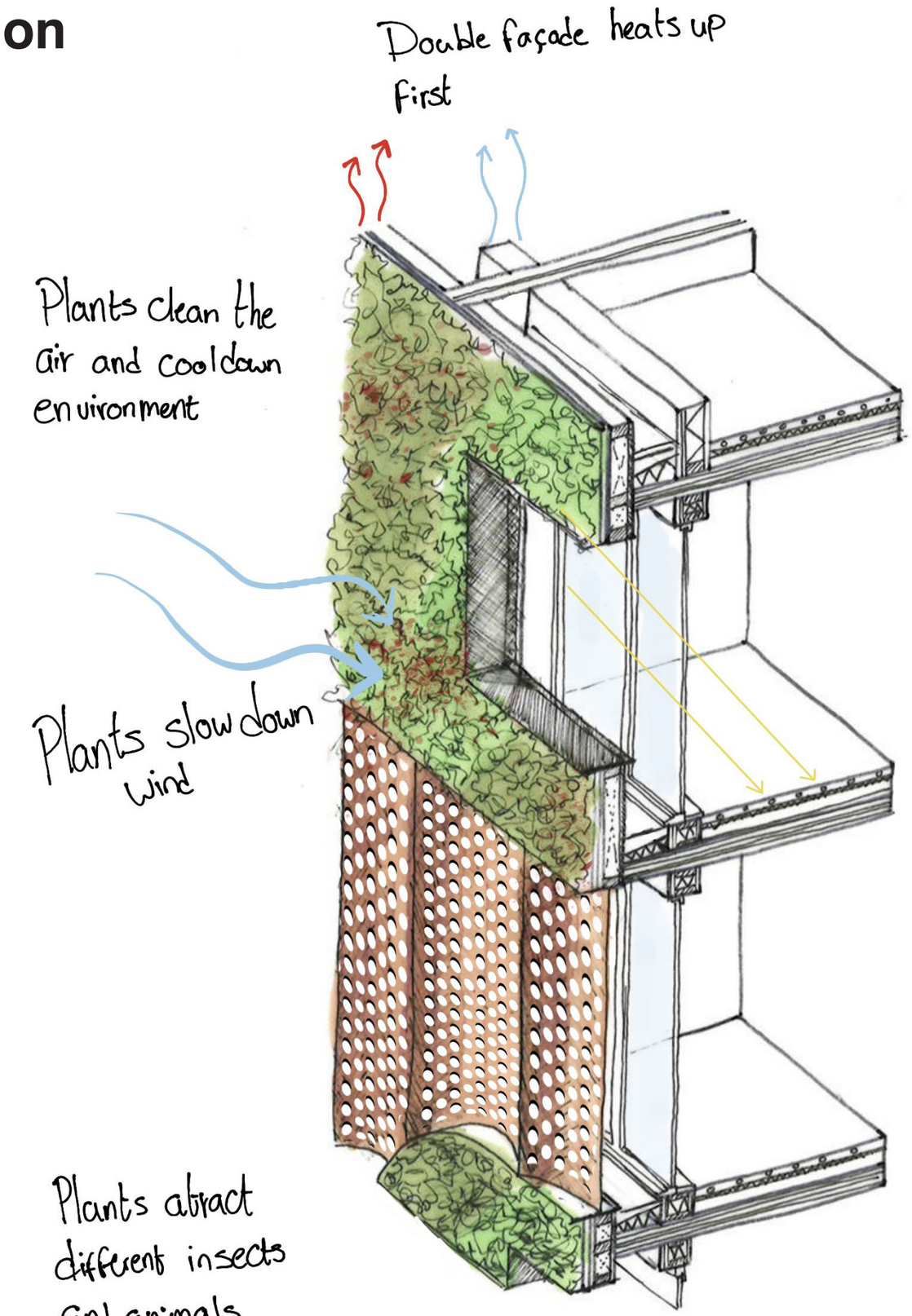
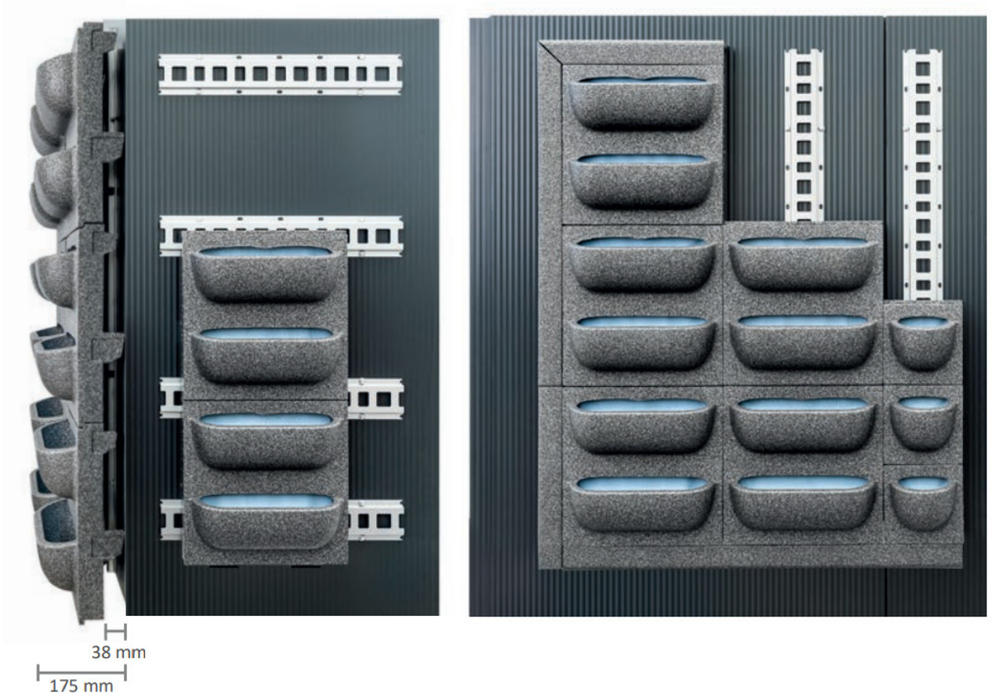


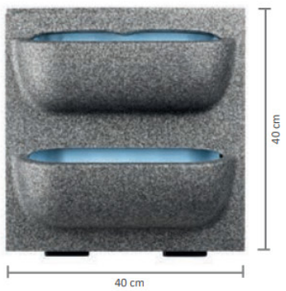
The building - materialization

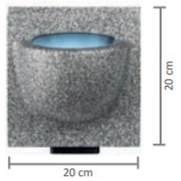
Plants



The building - materialization







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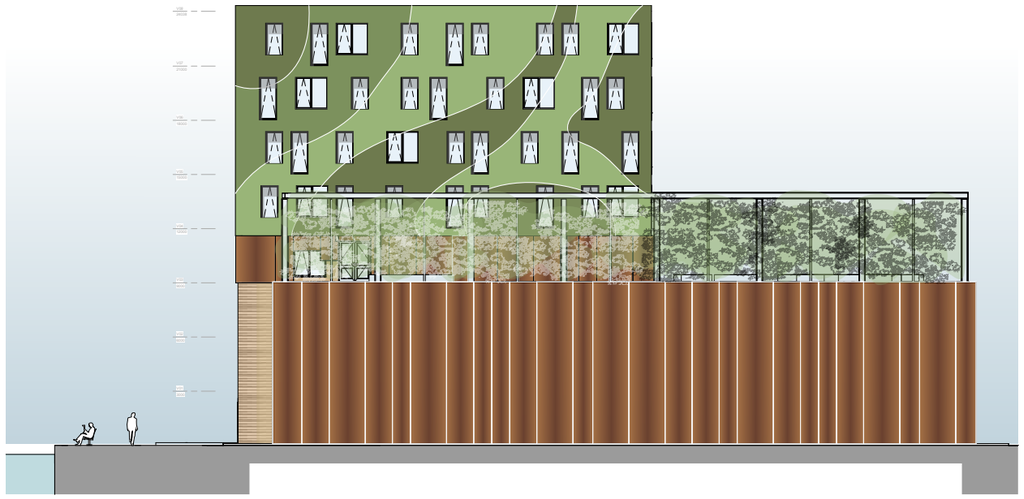
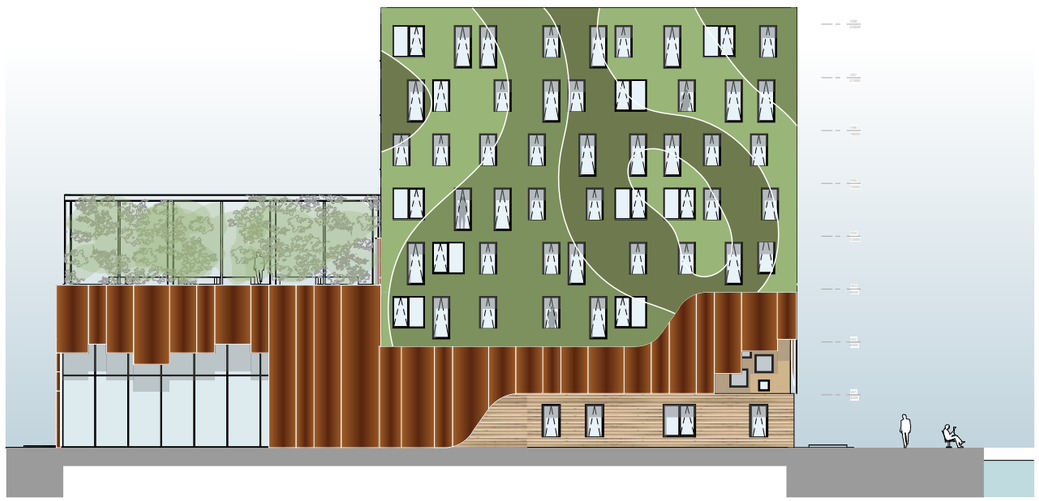
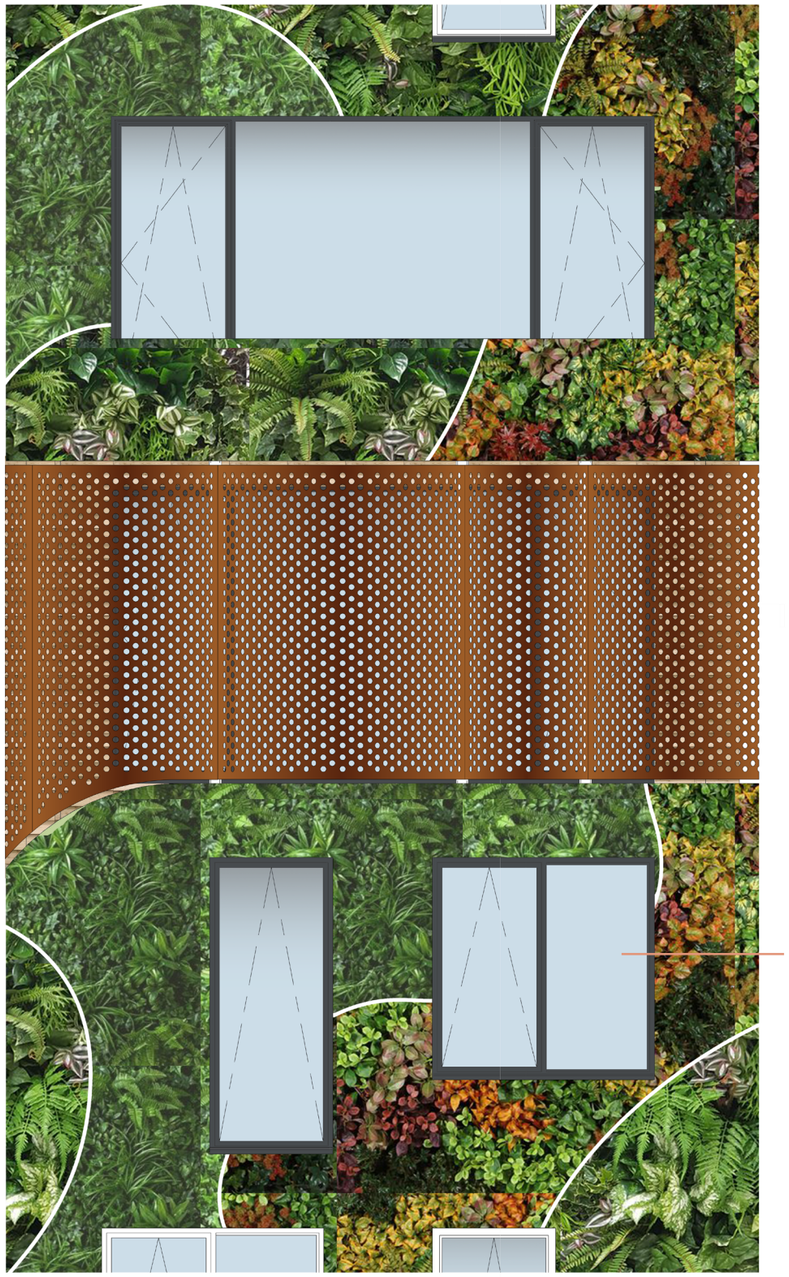
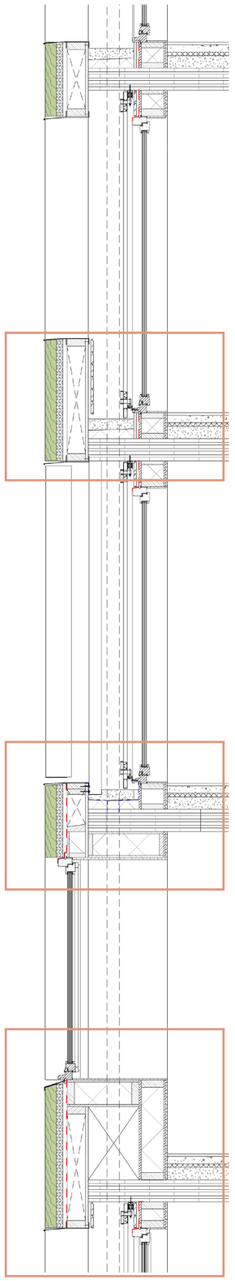
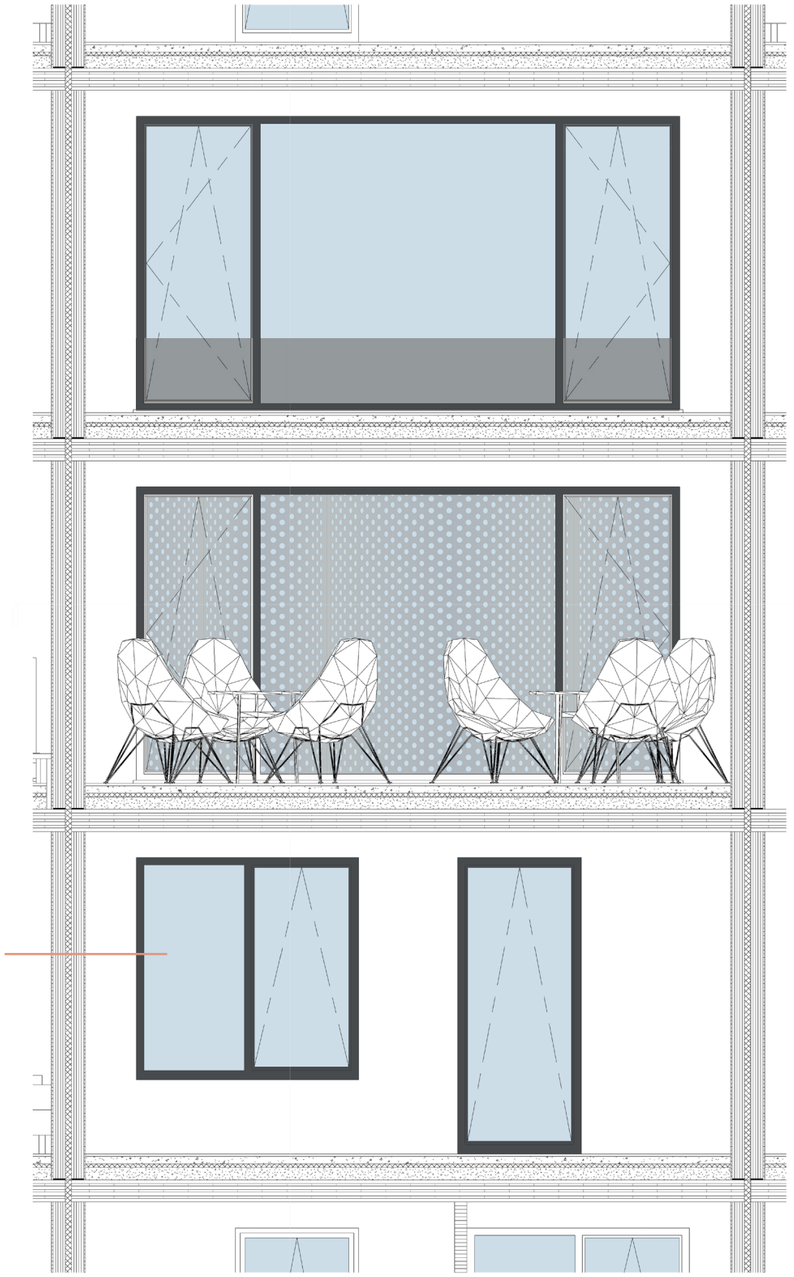
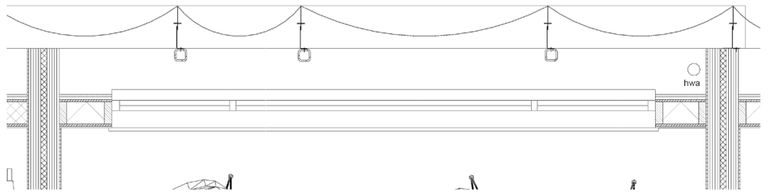






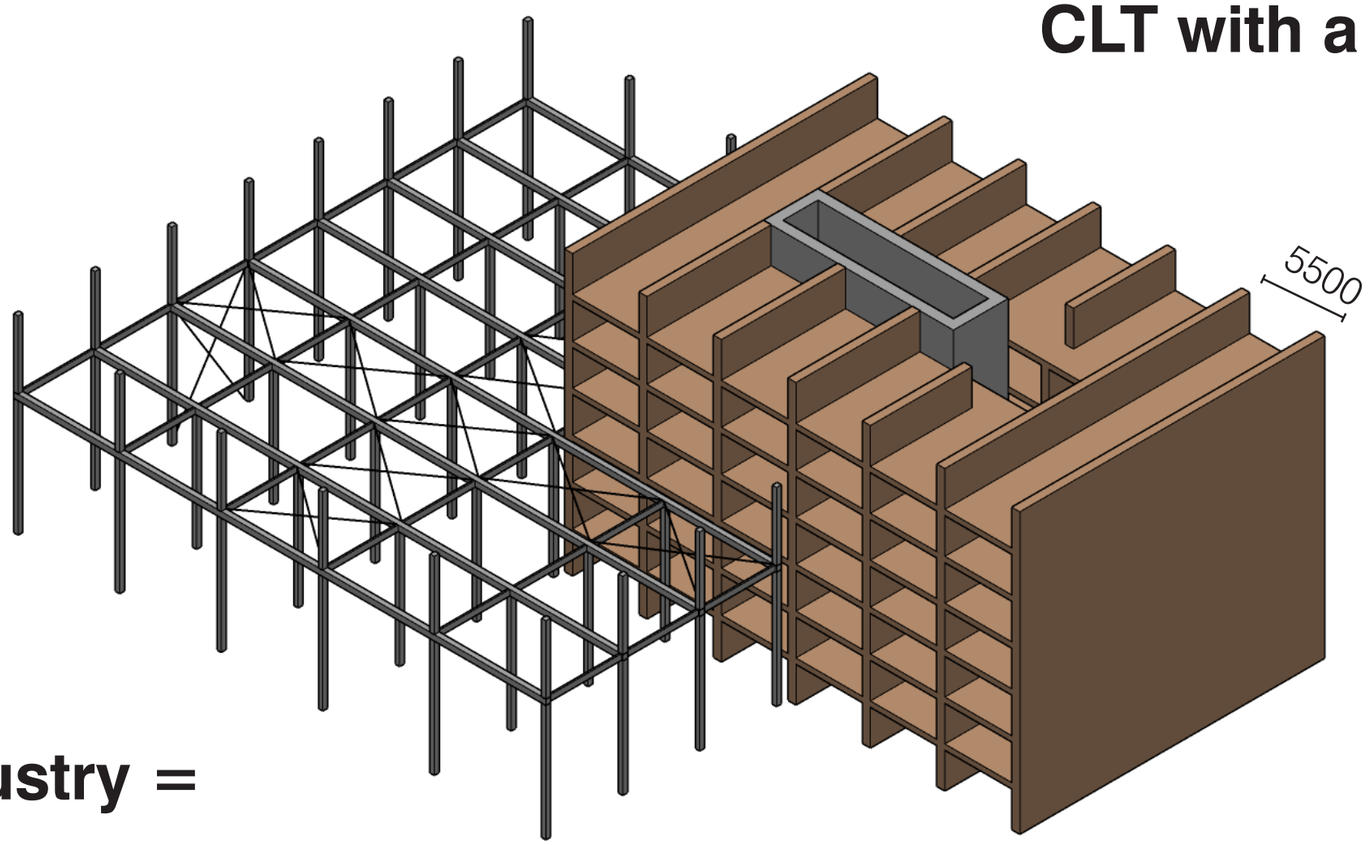





hwa

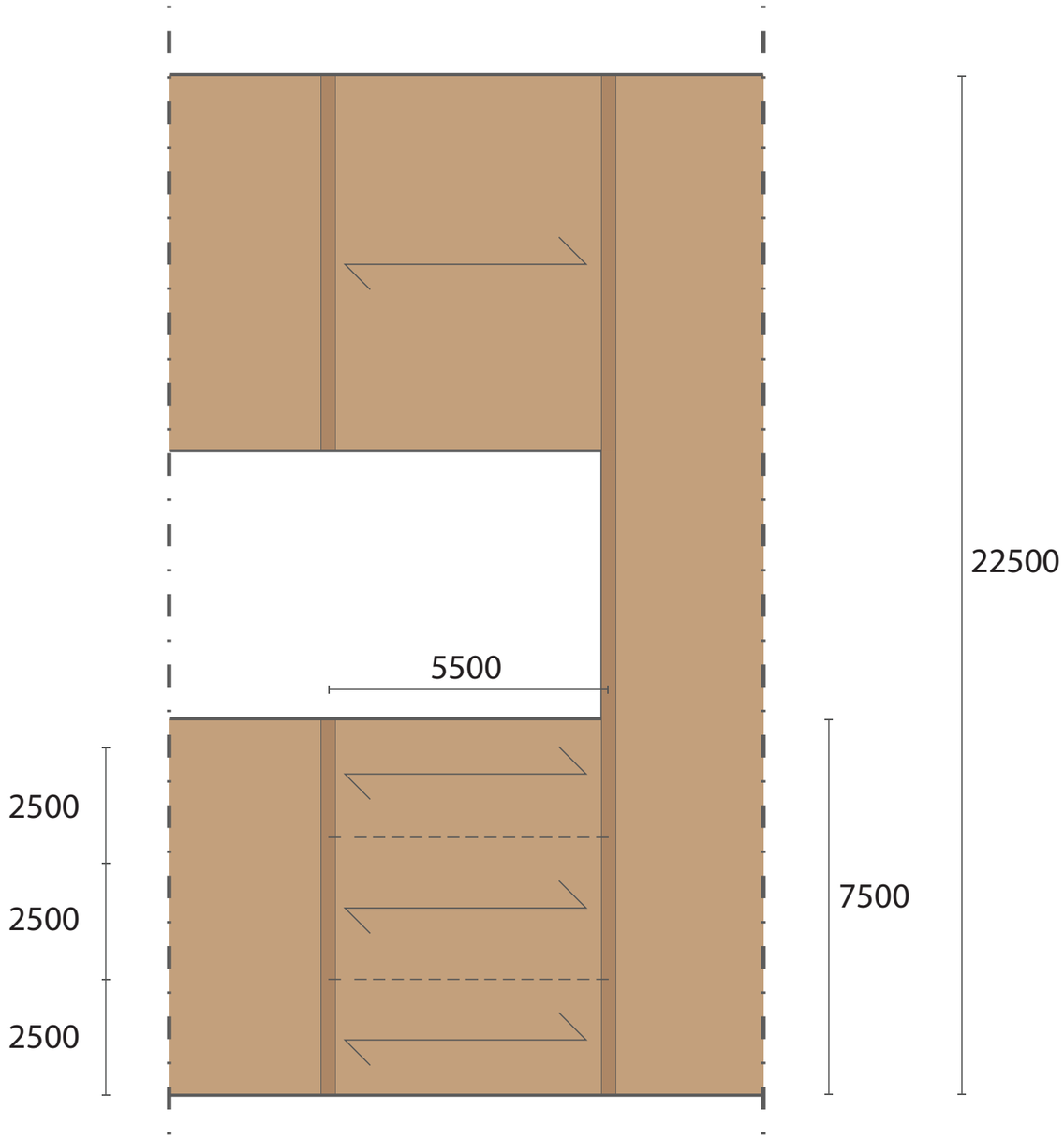
The building - structure

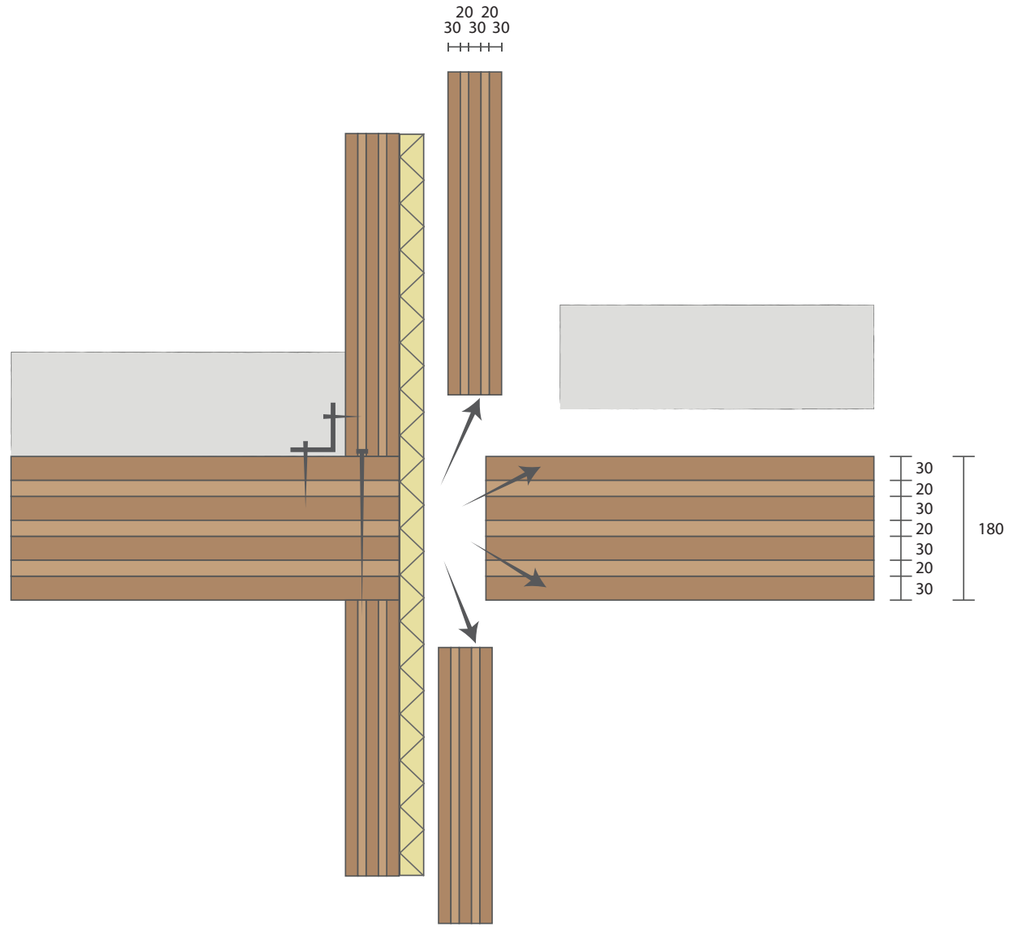
Structure residential =
CLT with a concrete core



Structure industry =
Steel

The building - materialization

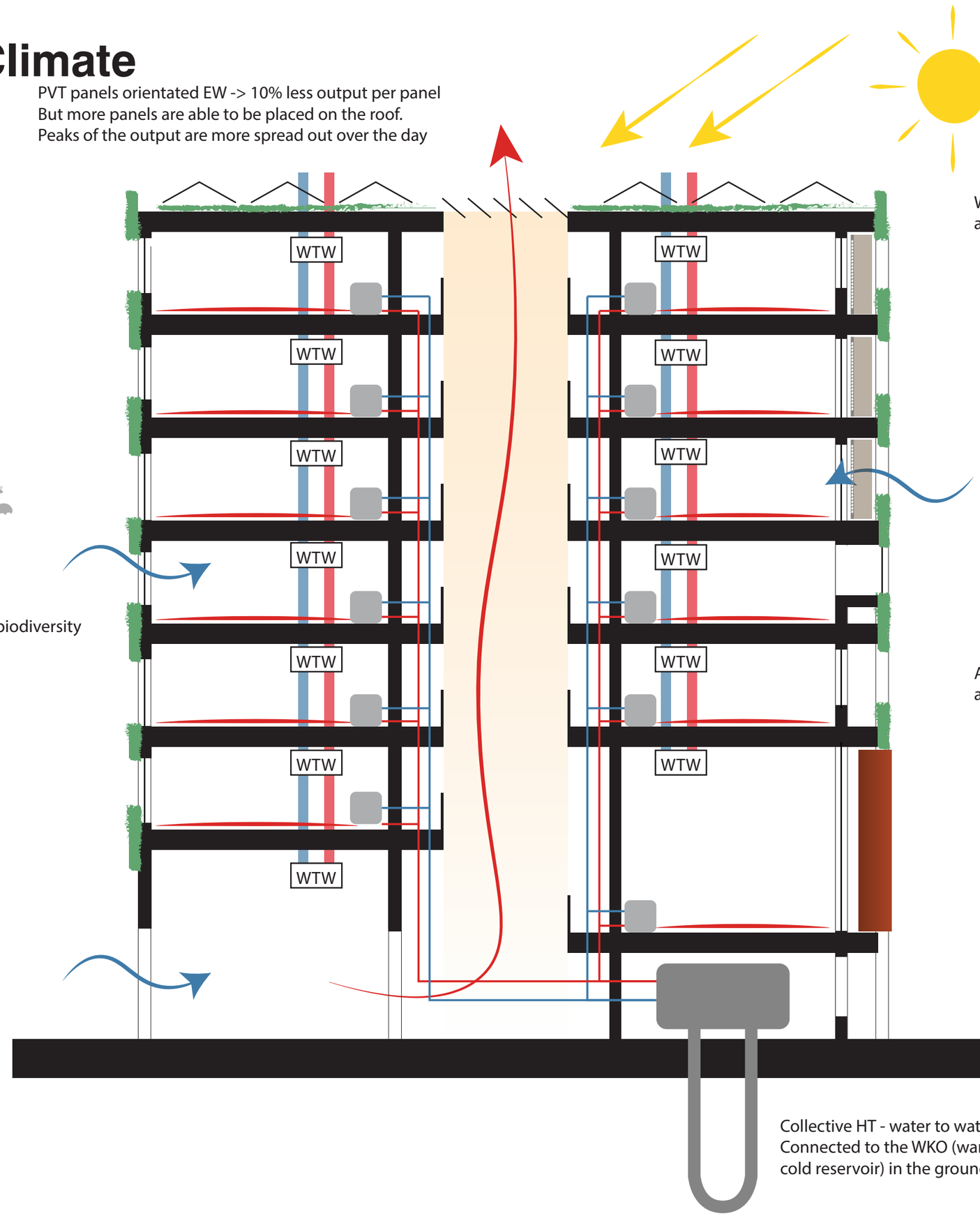




The building - Climate

PVT panels orientated EW -> 10% less output per panel
But more panels are able to be placed on the roof.
Peaks of the output are more spread out over the day

Plants on the facade enhances biodiversity



North facade had no double facade
-> more space inside
-> more light inside

Water retention roof --> Collects the water and reduces the heating of the building

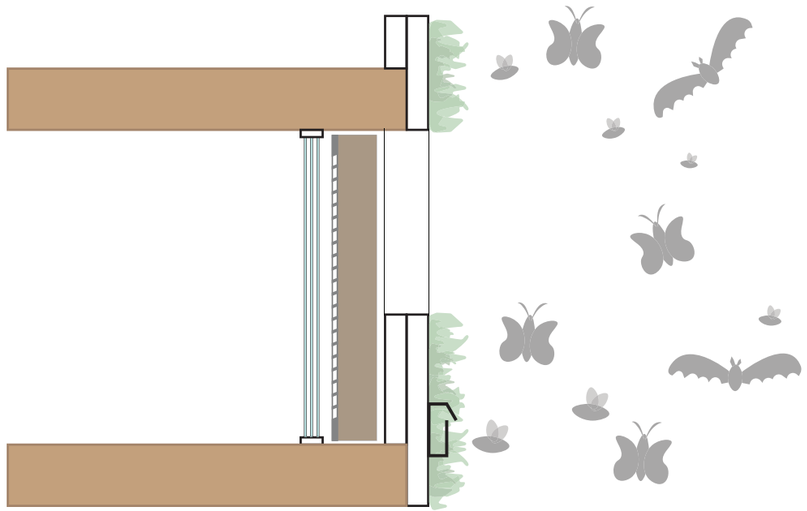
Apartments are heated with floor heating and fresh air is let in with individual WTW units

Collective HT - water to water heat pump. Connected to the WKO (warmth and cold reservoir) in the ground.

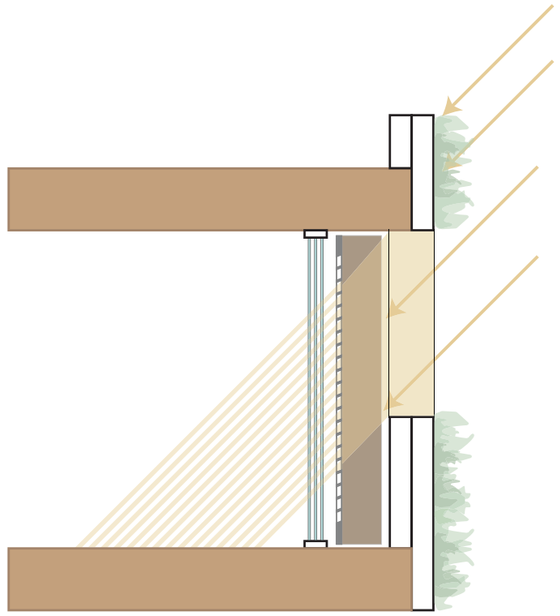
North

South

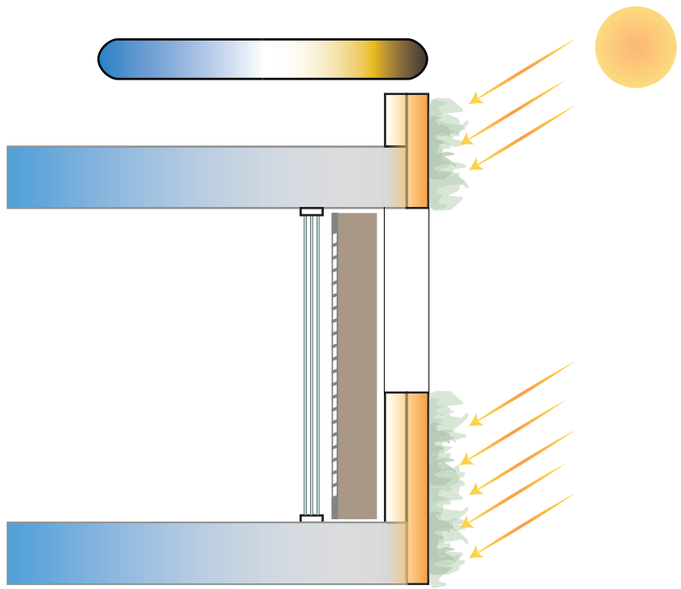
Biodiversity



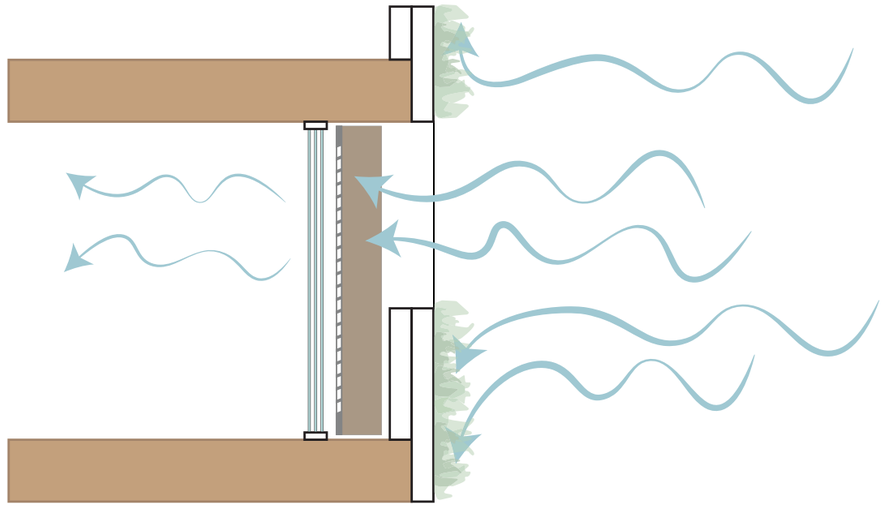
Shade



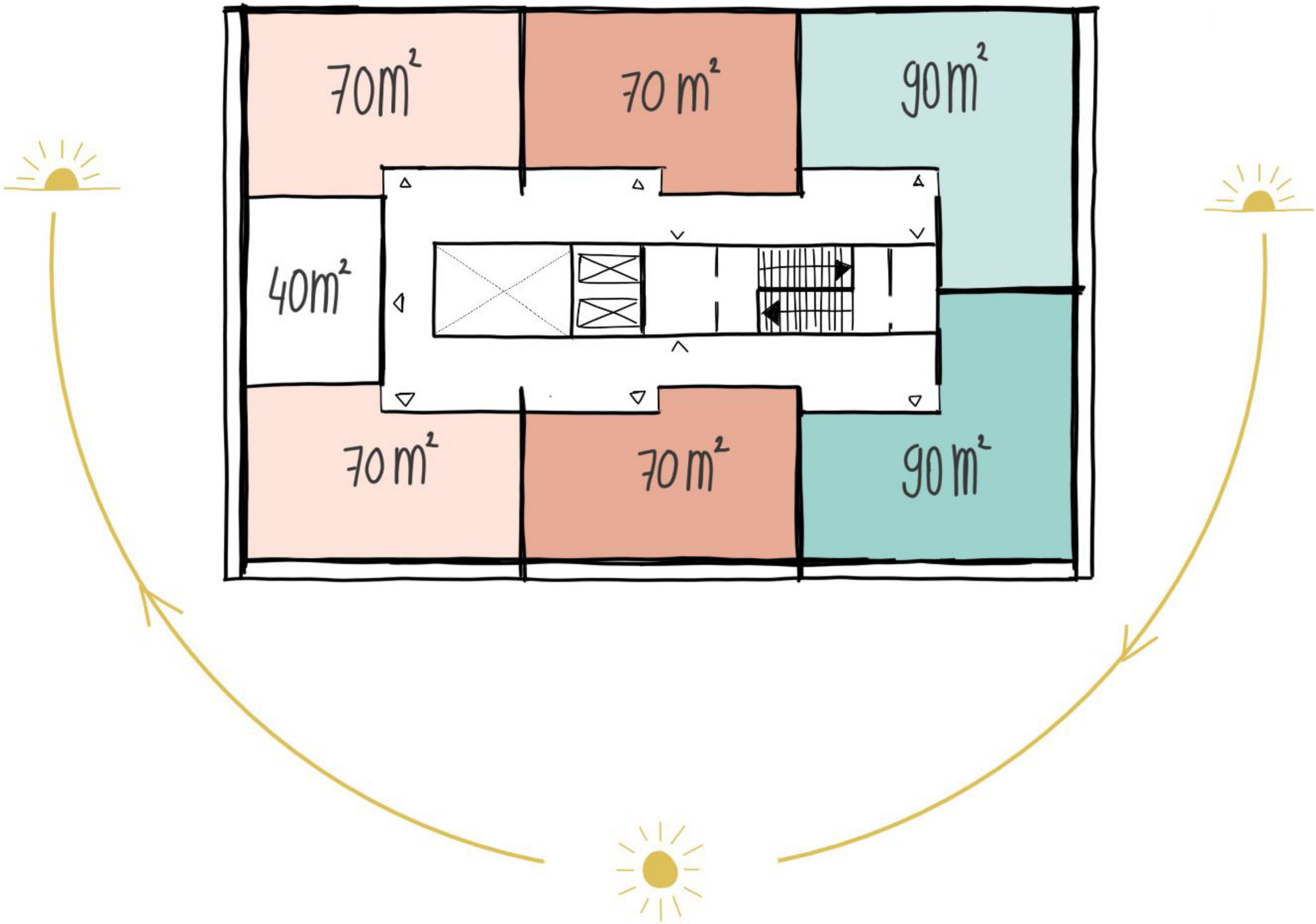
Cooling



Wind



The building - apartments



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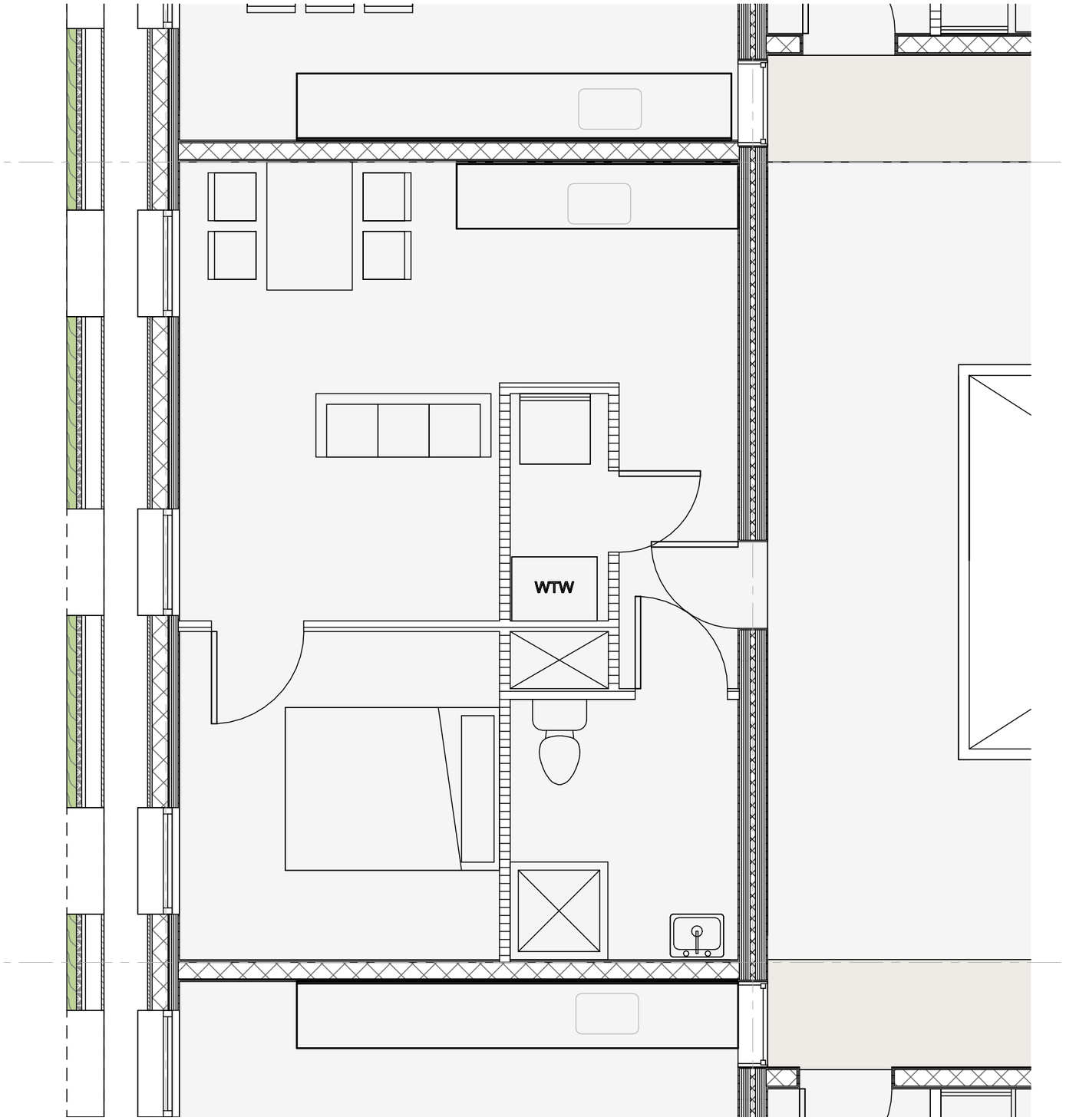

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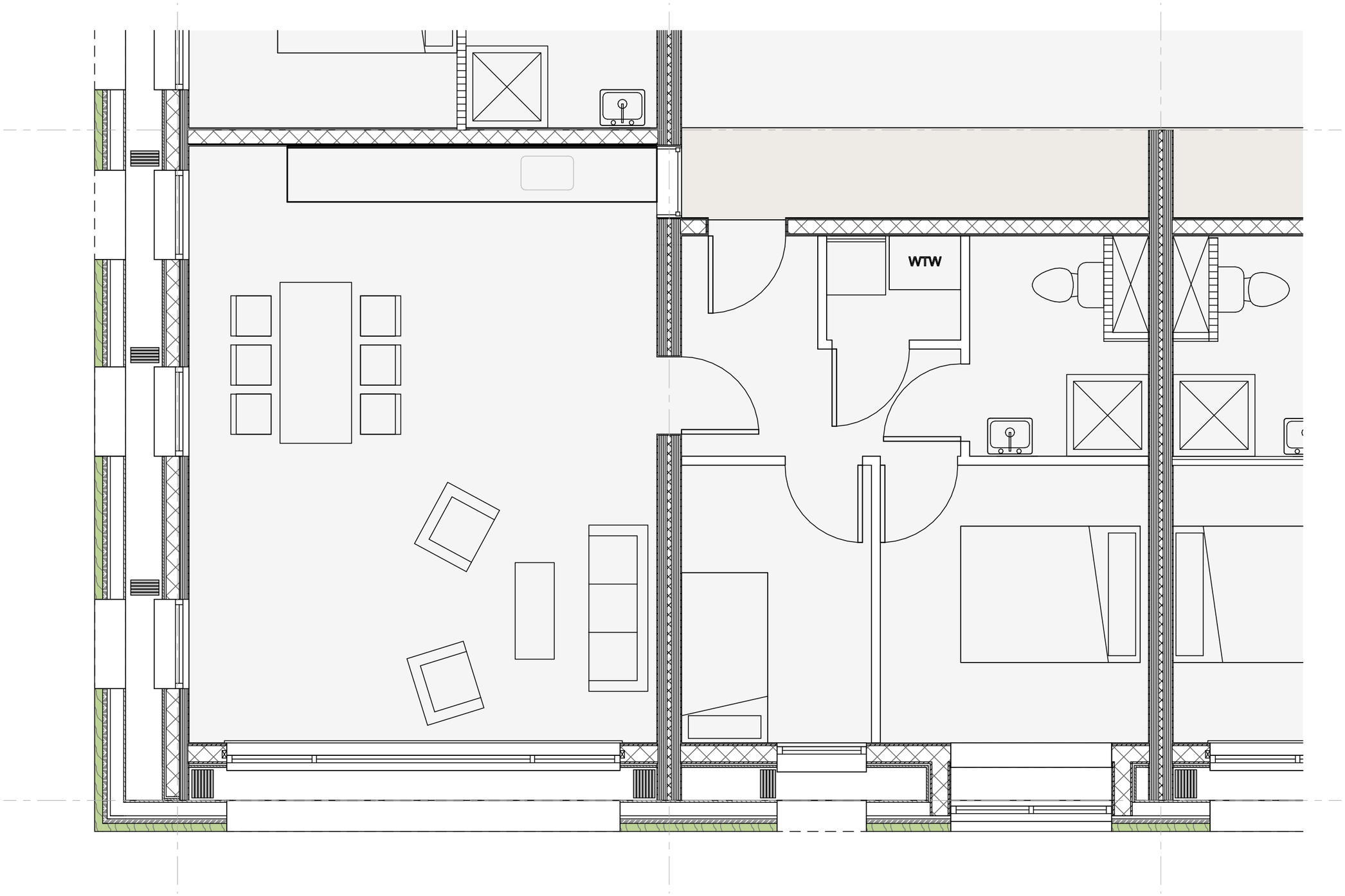

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