olivia lensen - 4882857
P5 - 28th of october 2025

Willemijn Wilms Floet
Niels Tilanus
Willie Vogel

ECHOES IN TIMBER

developing park-like architecture bridging cultural and historical heritage

Noblessneri Redevelopment
Large Apartment Complex



Fahle House Redevelopment
Former paper factory topped up





Rottermanni Quarter
New large scaled public plots











Echoes in Timber // METHODS OF ANALYSIS
reimagining the future

former kopli 93 plot

Süsta

Kopli

Kelta

demolished plot ready for redevelopment

culture house kopli 93

current kopli 93 plot

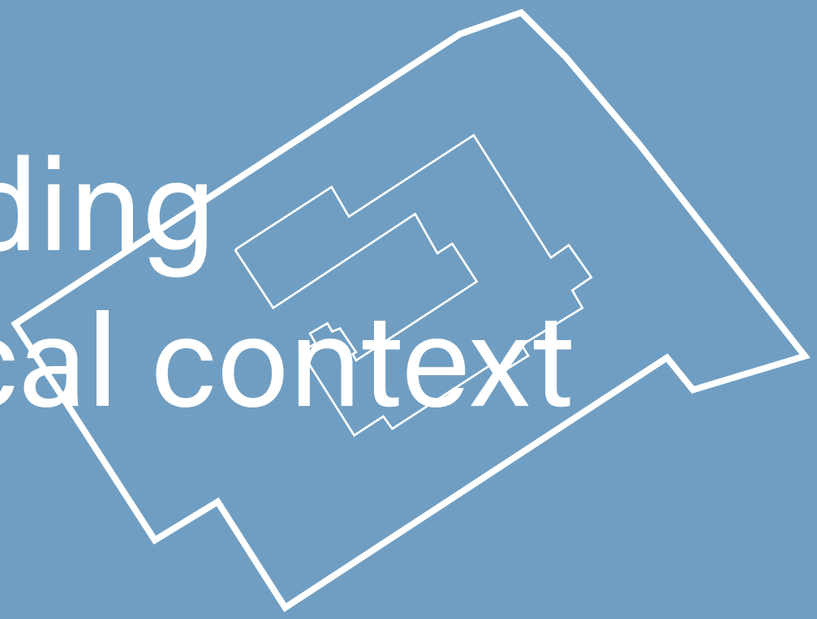
n

1:1000

urban situation

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understanding the historical context



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archive photos of former situation in Kopli

preserved oak forrest in the Kopli Peninsula in 1926



current location of the plot of Kopli 93

the Russo-Baltic Shipyard



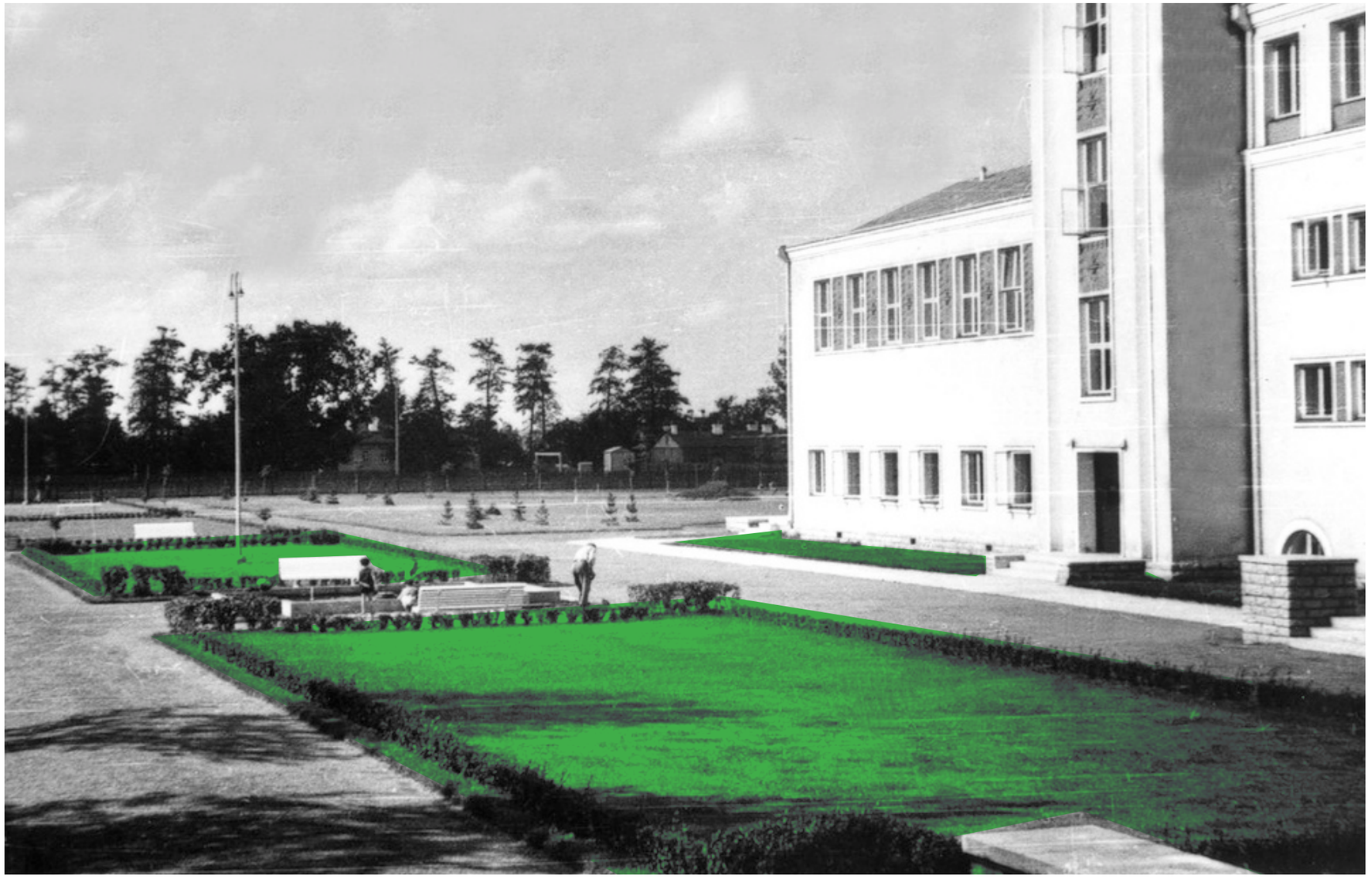
small harbour of Kopli with wooden docks





kopli 93 being the centre for meeting:
intimate park public yet private

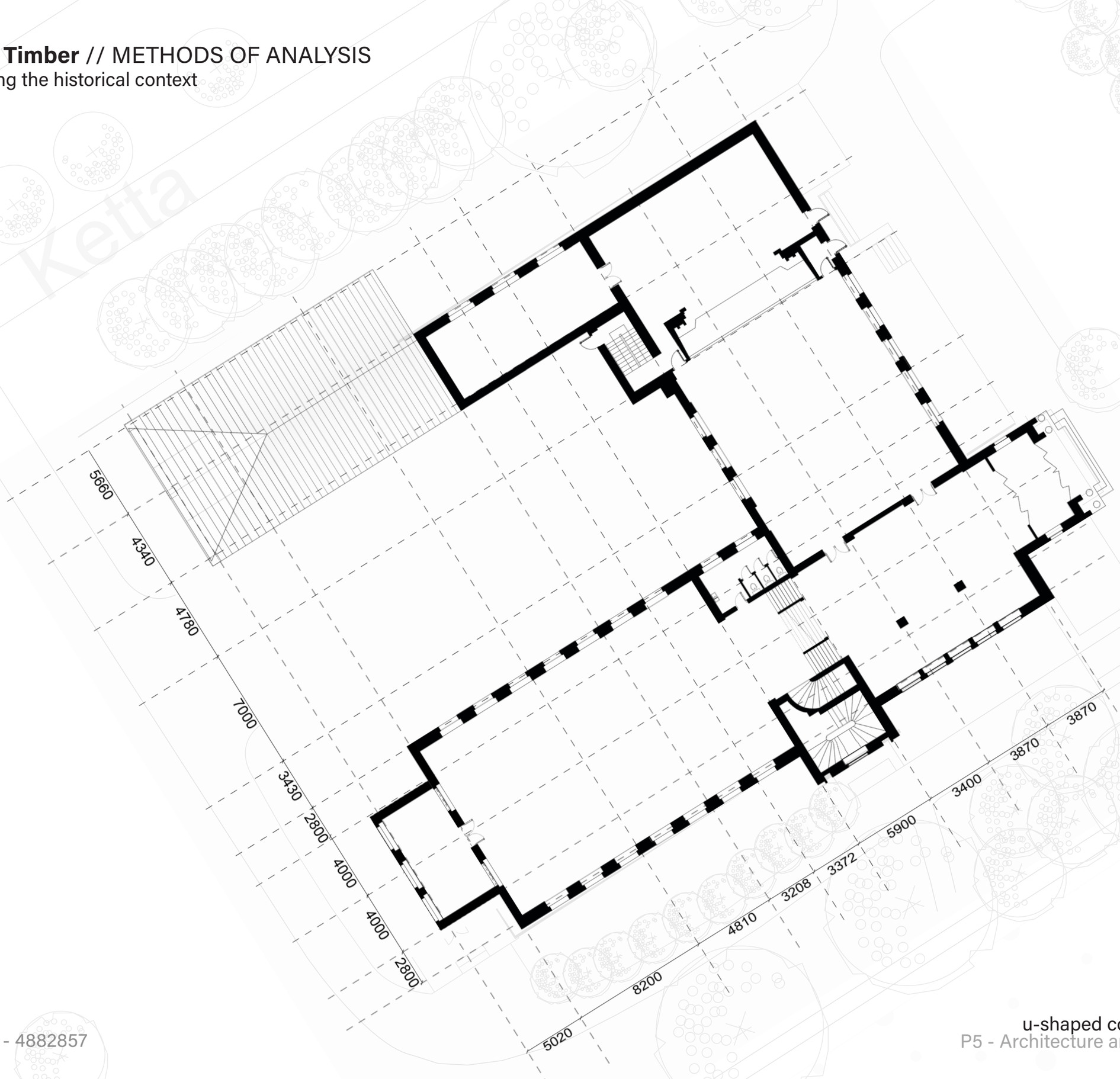
former kopli 93 with surrounded park



the park that surrounded the cultural centre while connecting people with nature

green extensions with different flora

Kopli 93 floorplan

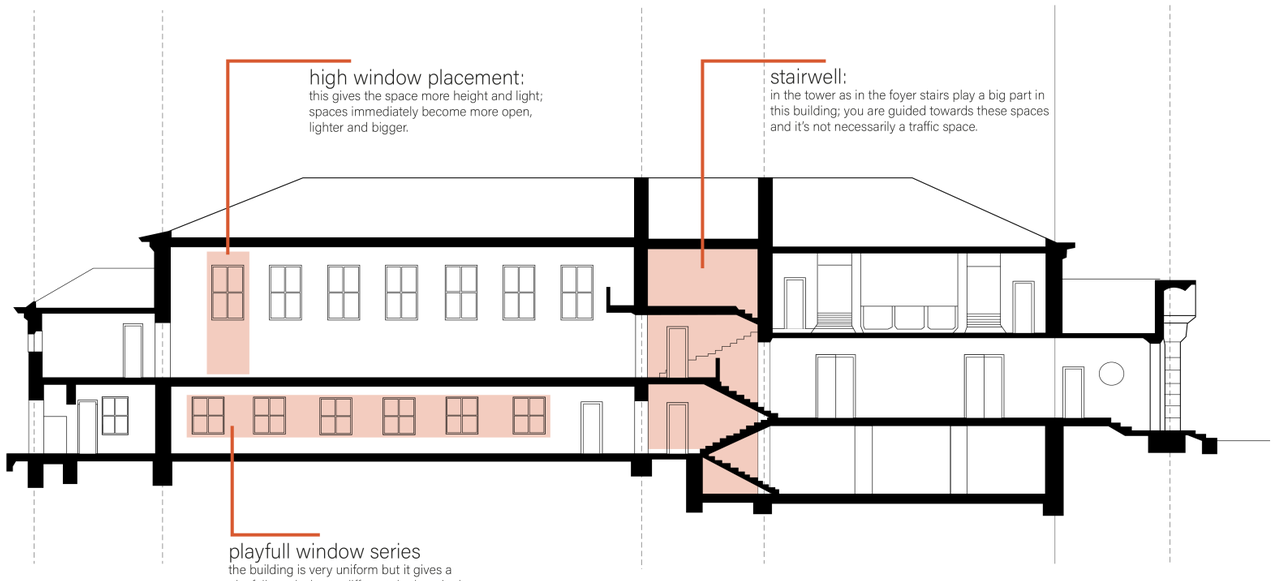


u-shaped courtyard with clocktower

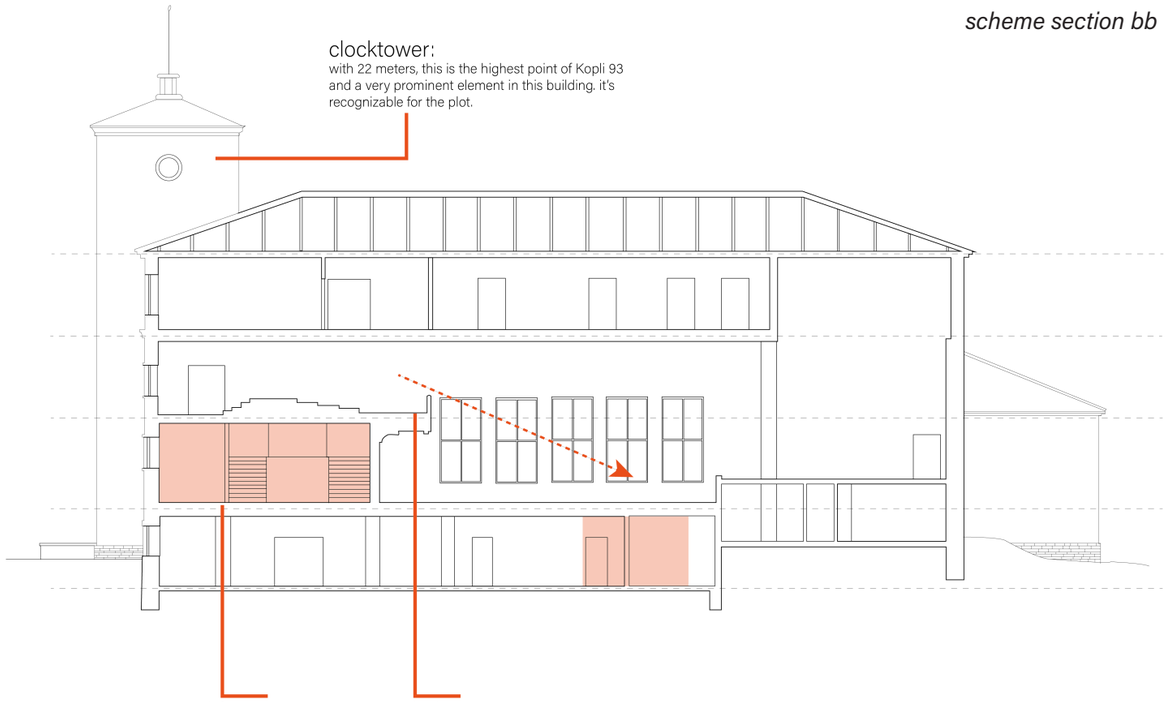
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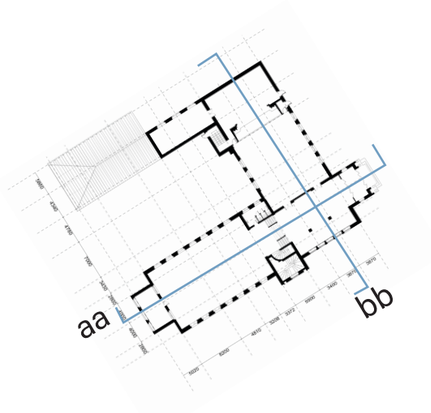
scheme sections of kopli 93

scheme section aa



scheme section bb





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yellow facade, window structure and sculpture decorative elements



yellow facade, window structure and sculpture decorative elements

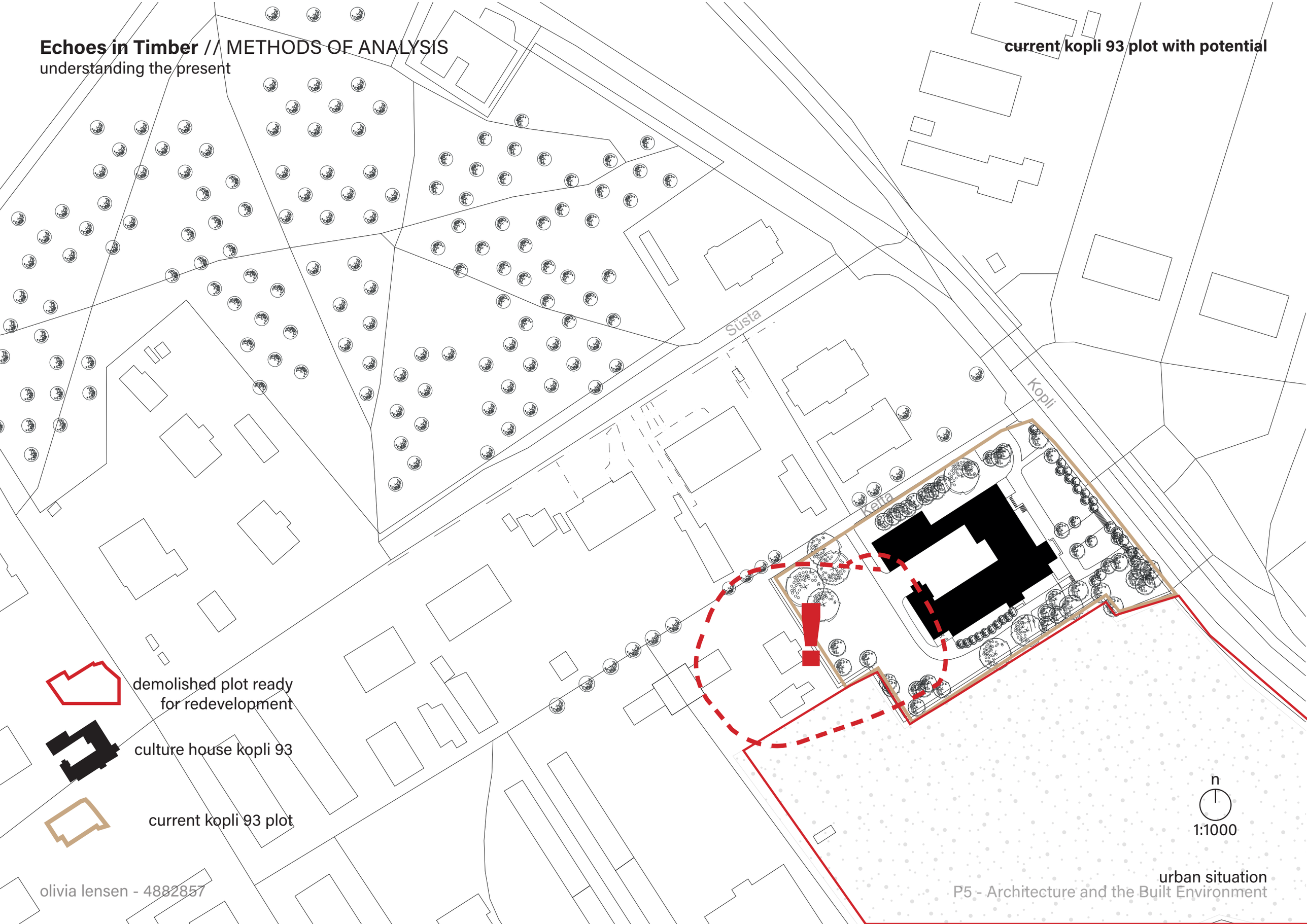
kopli's redevelopment scale



current schematic urban situation

Echoes in Timber // METHODS OF ANALYSIS
understanding the present

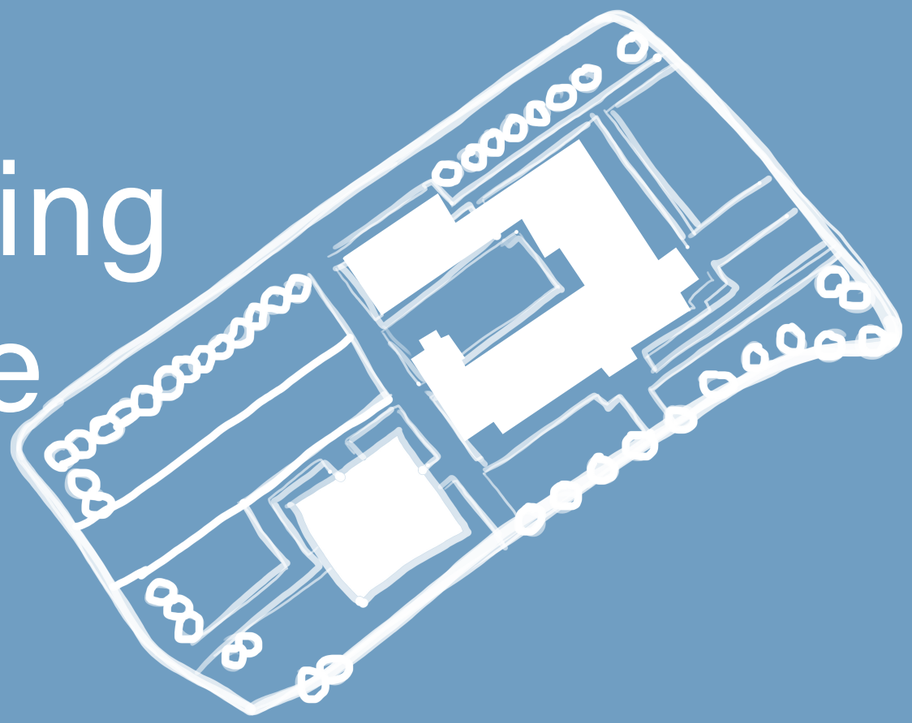
current kopli 93 plot with potential



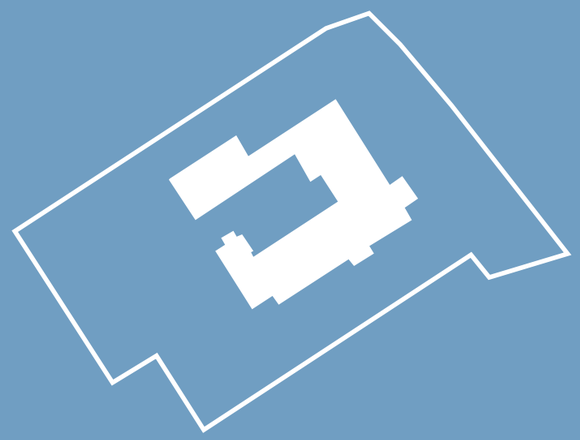
urban situation

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reimagining the future



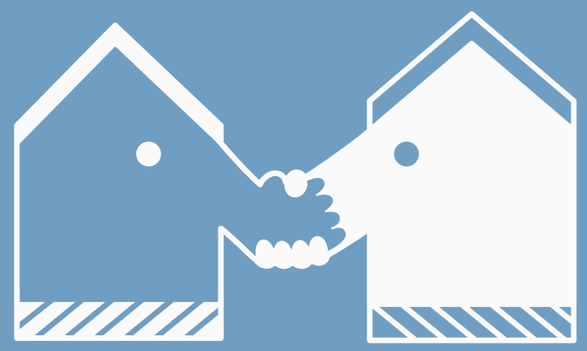
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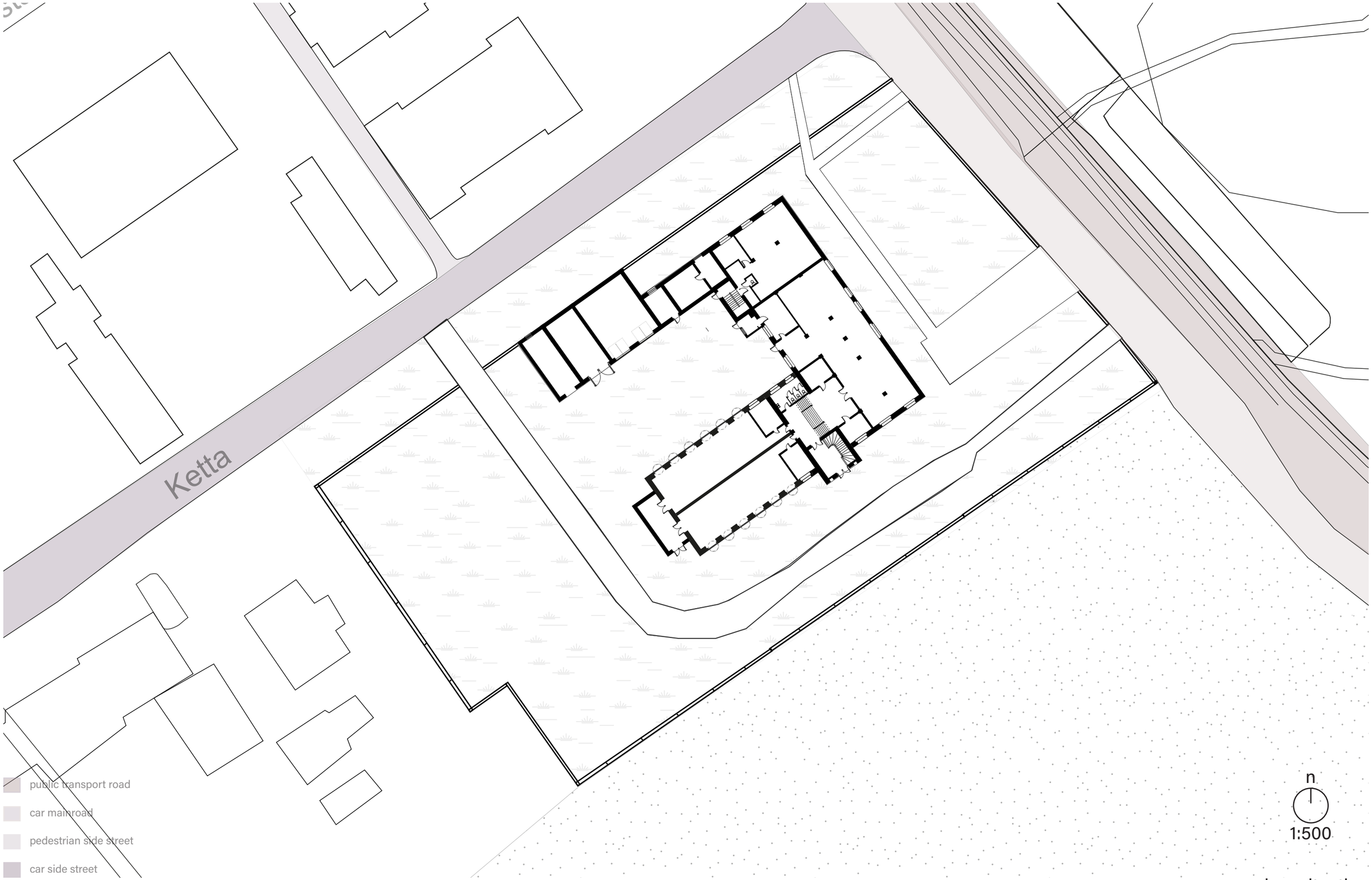
kopli 93 and plot



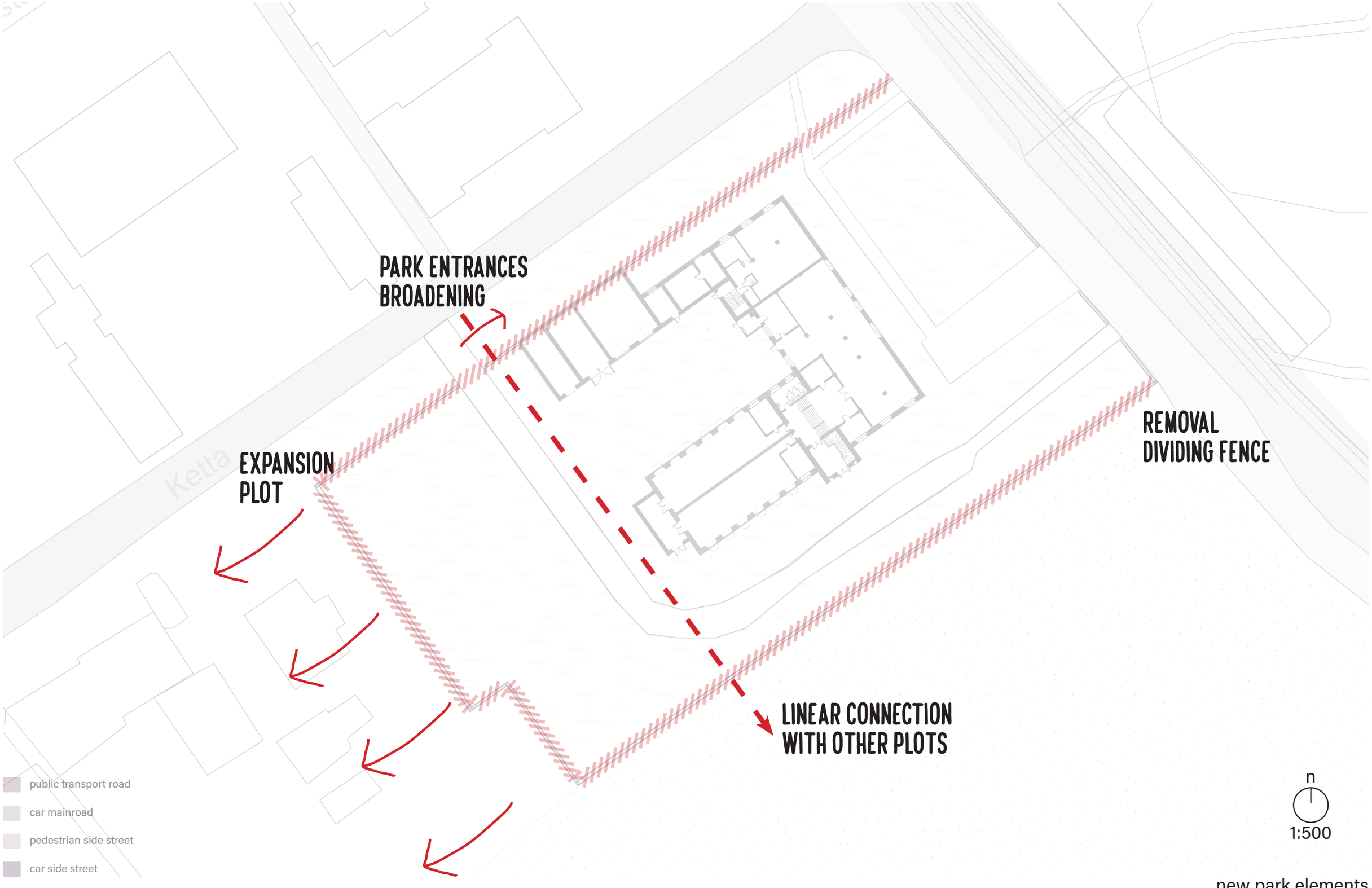
open, active & meaningful

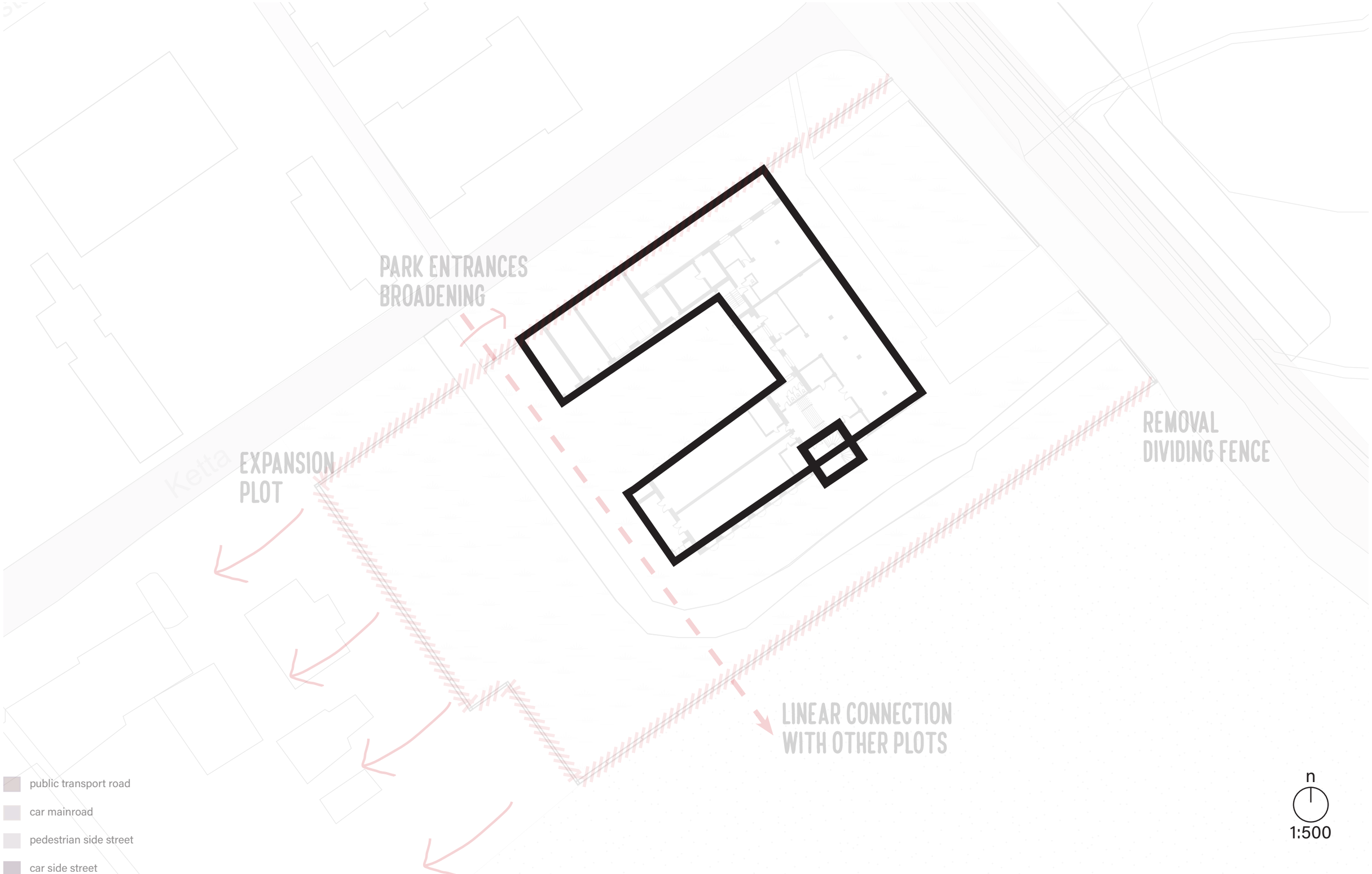


part of neighbourhood



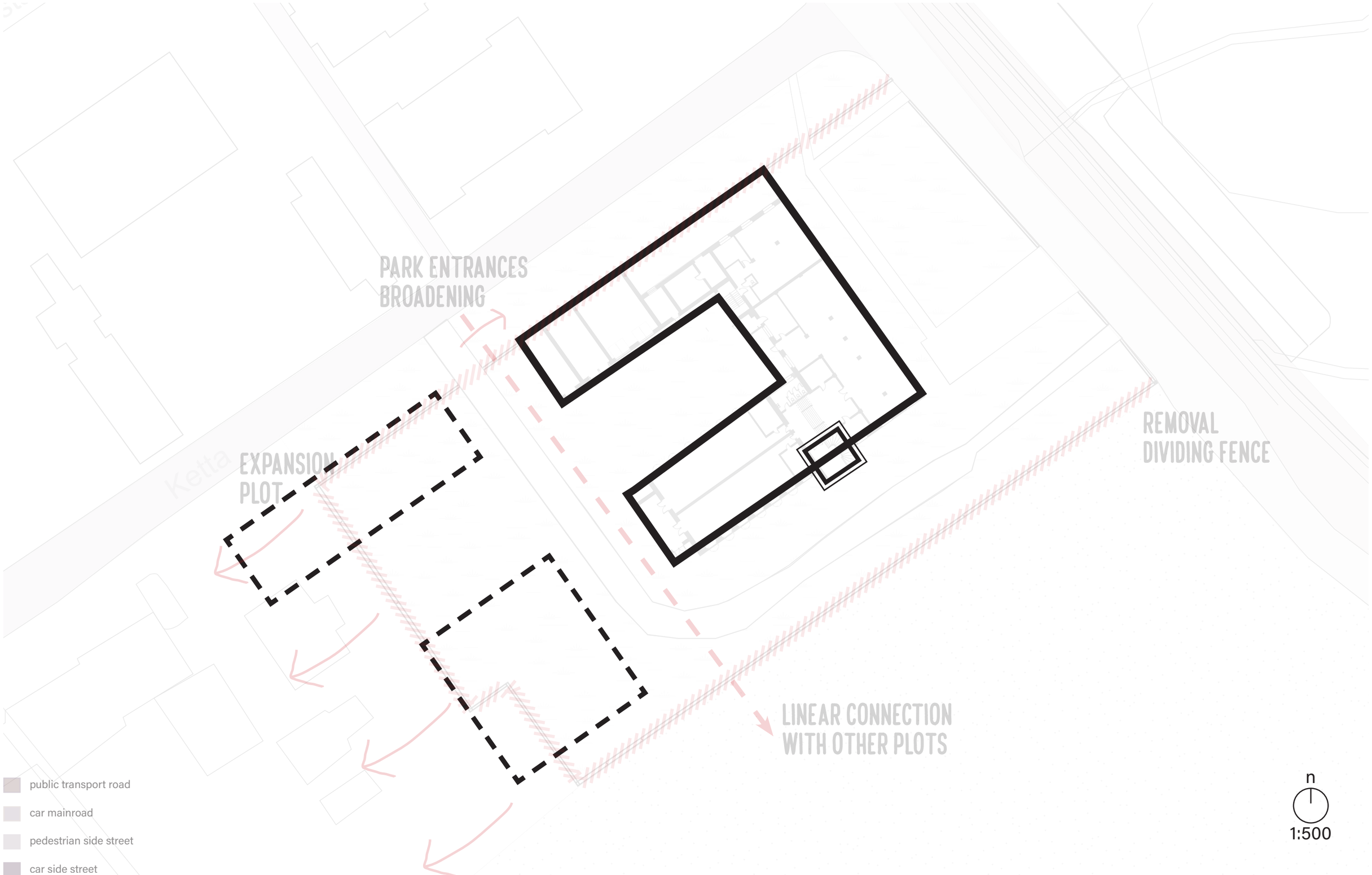
urban situation


PARK ENTRANCES
BROADENING
EXPANSION
PLOT
REMOVAL
DIVIDING FENCE
LINEAR CONNECTION
WITH OTHER PLOTS
Ketta
public transport road
car mainroad
pedestrian side street
car side street
n
1:500

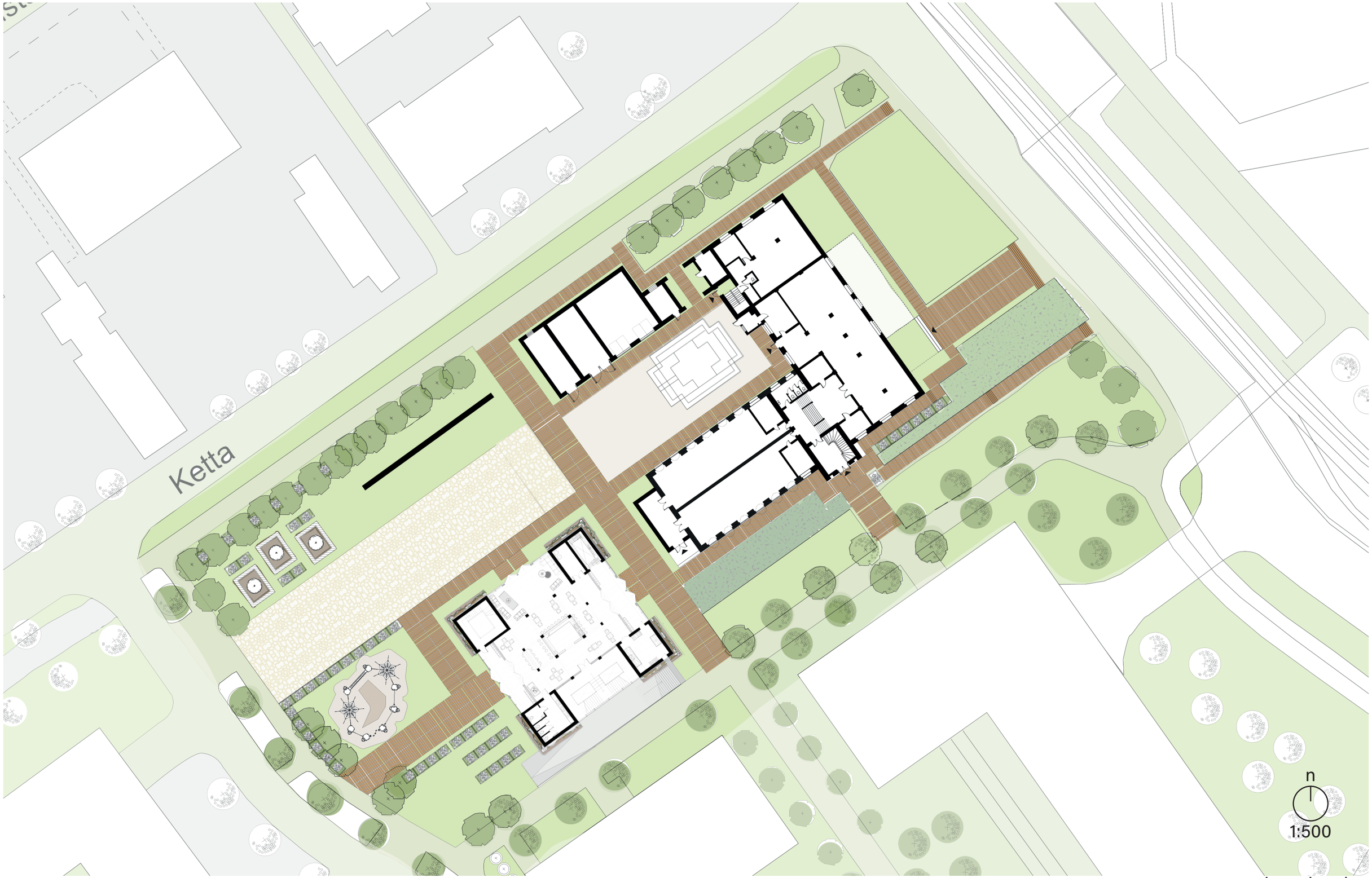


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mass structure: u-shaped building and clocktower
P5 - Architecture and the Built Environment



plot balance: extending the plot of Kopli 93



urban situation

cobblestone promenade
a long paved path in the middle of the plot for outdoor activities in summer and winter

freestanding wall
base for hosting public events at the cobble stone promenade

meet & greet green spaces
sun based meeting spots sheltered by green corridor

childrens playground
a place where children can put there energy in but also a place where other people meet

vegetable gardens
locally produced crops that can be used by locals but also the cafe in the musical heart

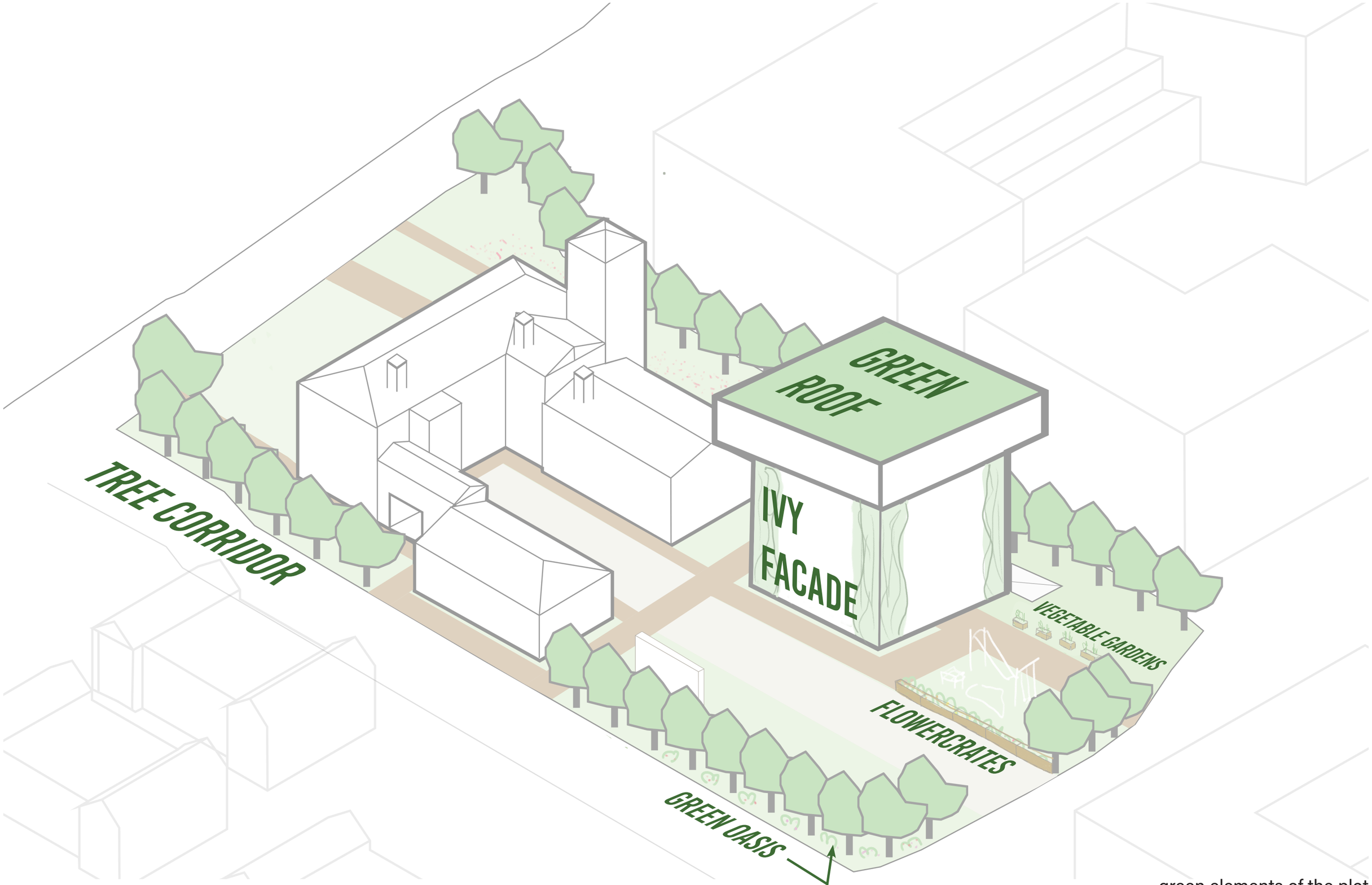
area for flower beds
creating opportunities for locals and animals; insect walhalla and community activity

n
1:500

urban situation with park elements



urban situation with entrances



green elements of the plot



walking routes

Echoes in Timber // METHODS OF ANALYSIS
reimagining the future

new musical building



timber building with park-like features
P5 - Architecture and the Built Environment

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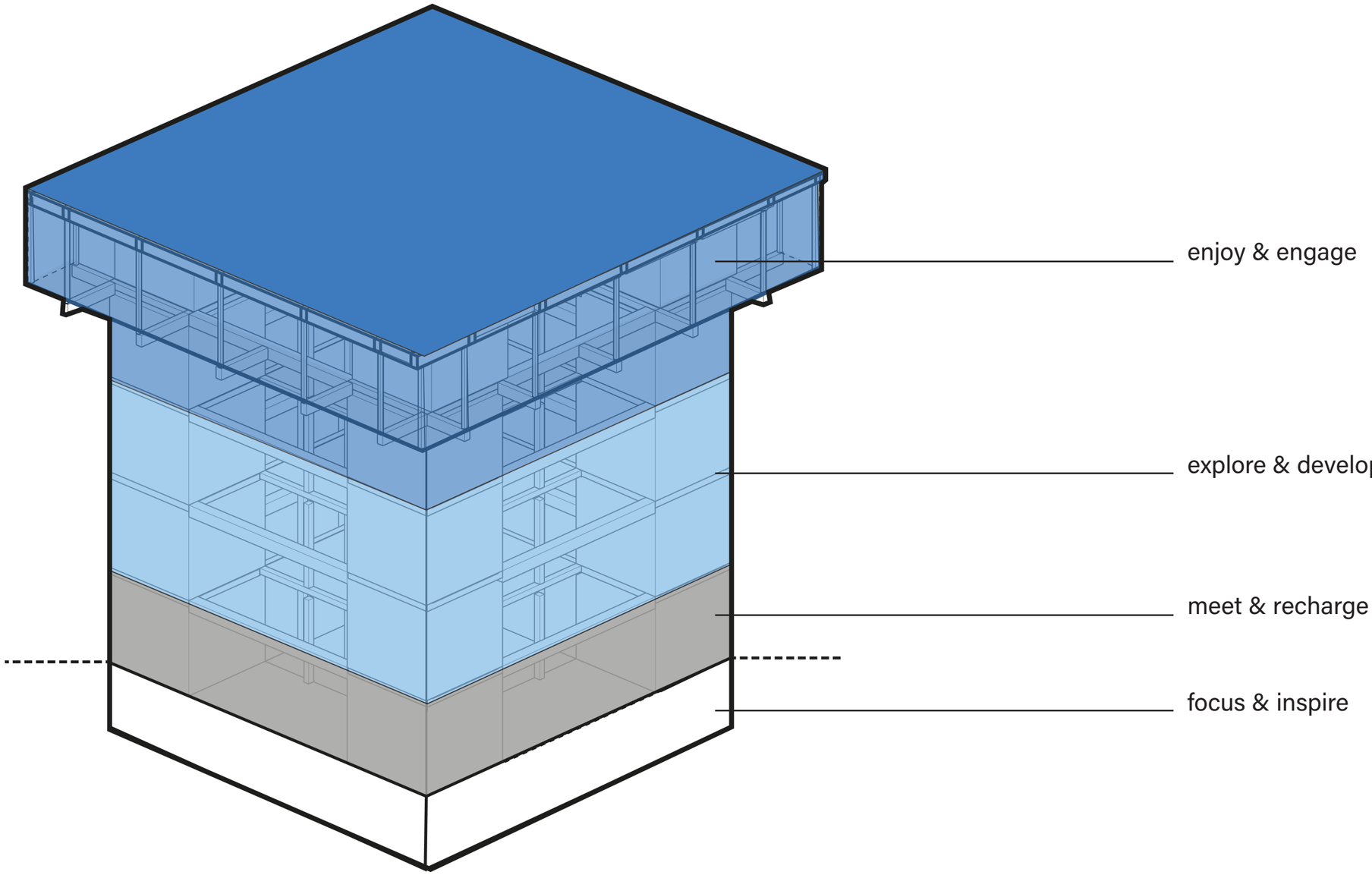


laulupidu music festival in Tallinn an UNESCO-recognized tradition
(Ken Mürk/ERR)

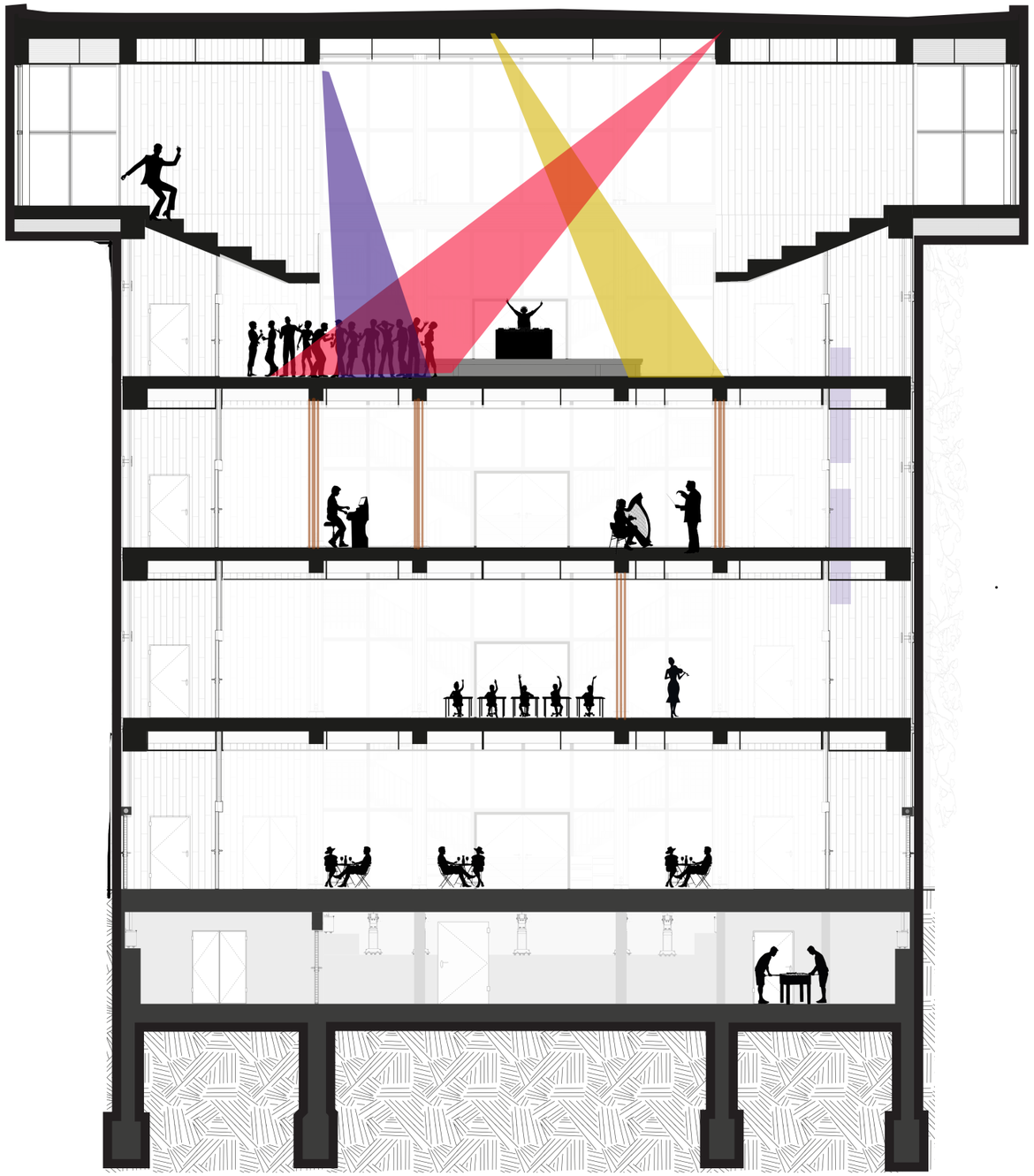


singing revolution in Estonia in 1988,
(Universal Images Group via Getty)

combining theatre and music as a cultural heart



scheme of different functions per floor



The Atrium

A place for art, merchandise, views, drinks with food and chill seating tribune that can be changed into a dancefloor. Performance stage on the bottom where tribune ends up to.

Musical Exploration Hubs

Flexible big space that can be made smaller by shoving foldable walls with railings between columns. The walls can be adjusted to liking and needed functions per time. Smaller “growth” rooms in the traffic spaces.

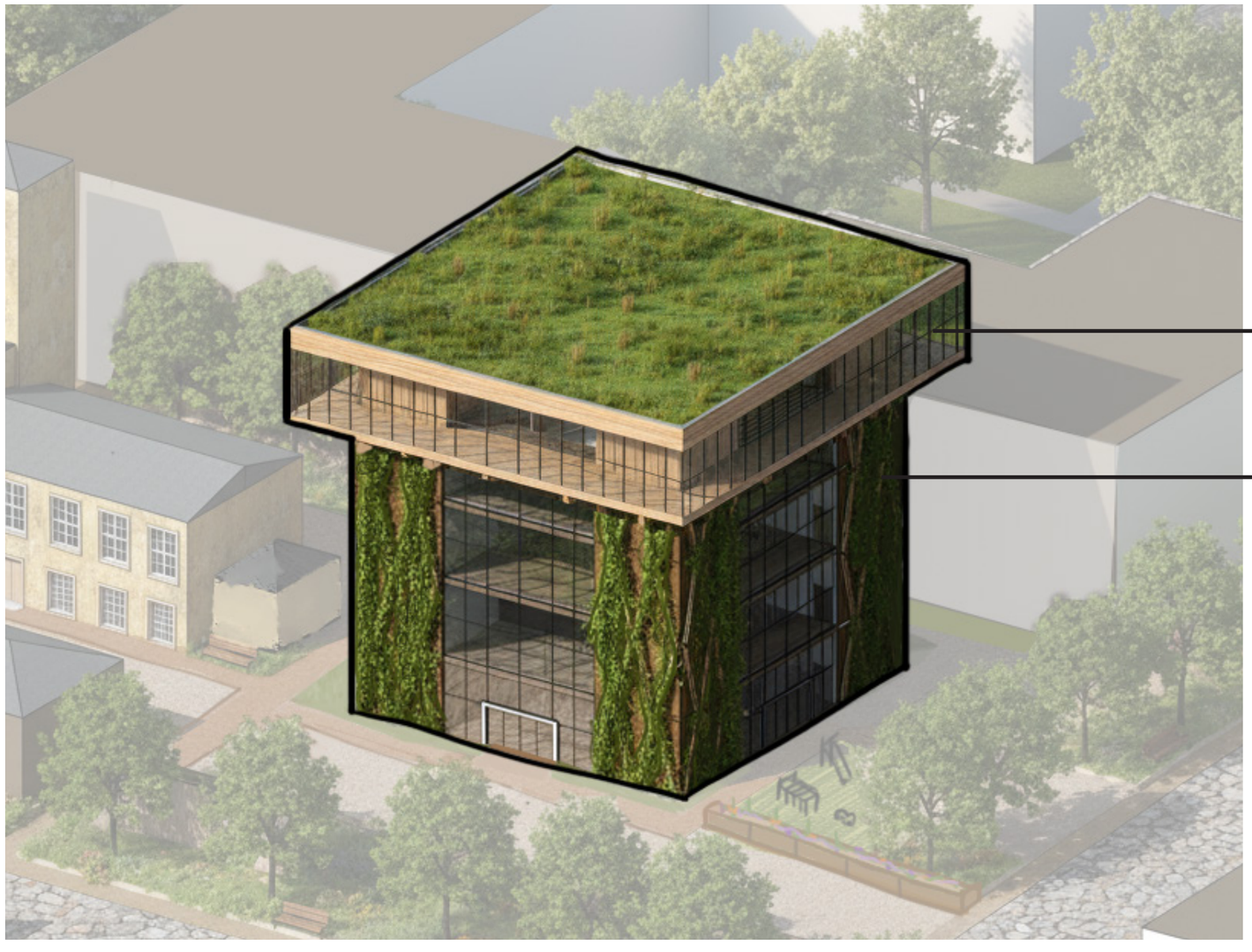
The Welcome

Big entrance that is connected easily accesible. Grand foyer that invites the people to come in and meet or rest in the restaurant.

Basement Booths

The basement is more closed off than the other floors; it suggest less distraction and therefore: focus. Here are the produce booths, (teenage) hang area with foosball and the technical spaces.

scheme section of functions



cantilever: 29200x31600
with 2800mm and 4000mm timber overhang

4 clt cores: 5900x5900

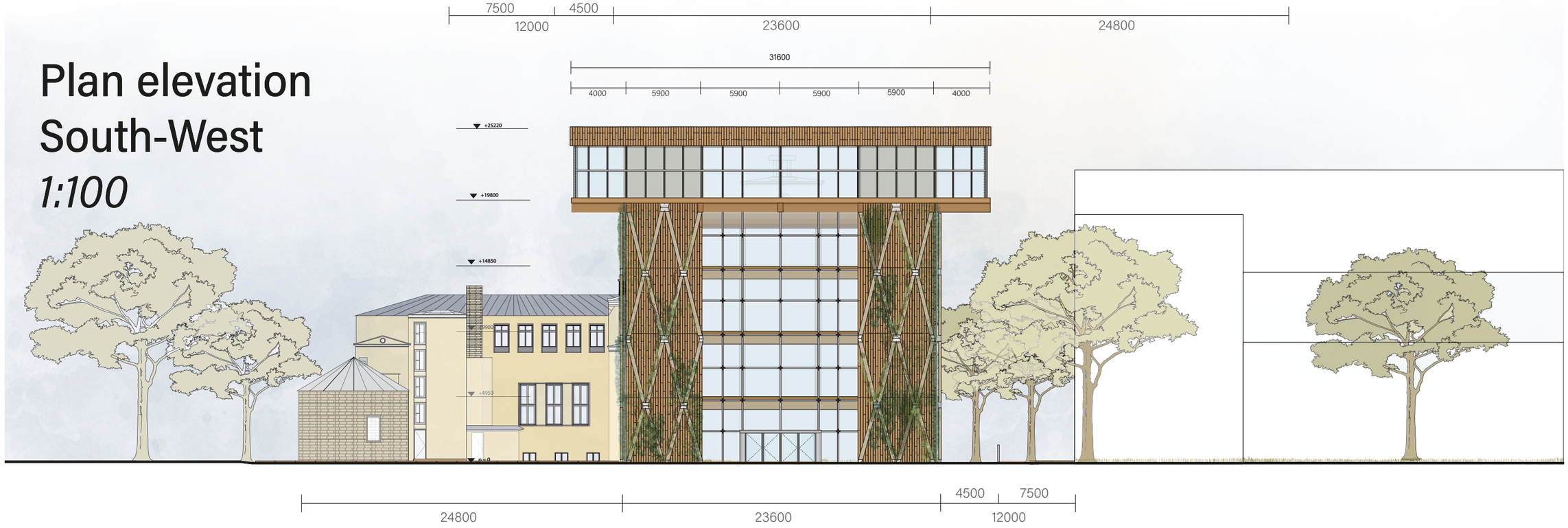
building made out of timber elements



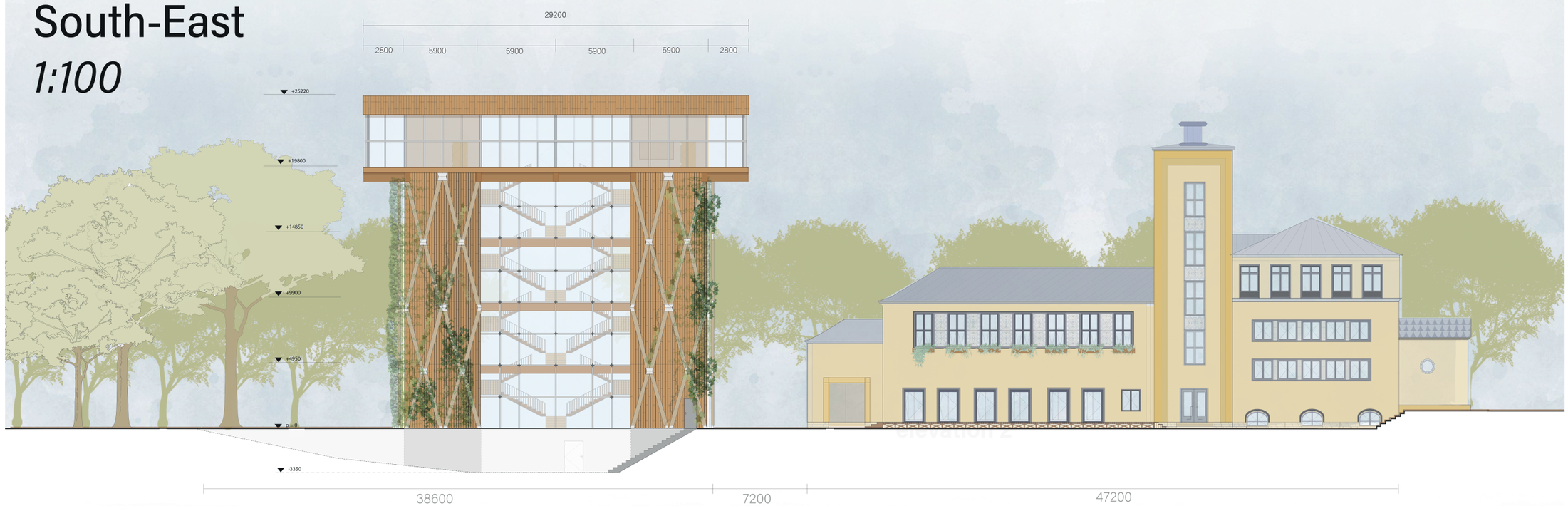
Plan elevation
North-East
1:100



Plan elevation
South-West
1:100

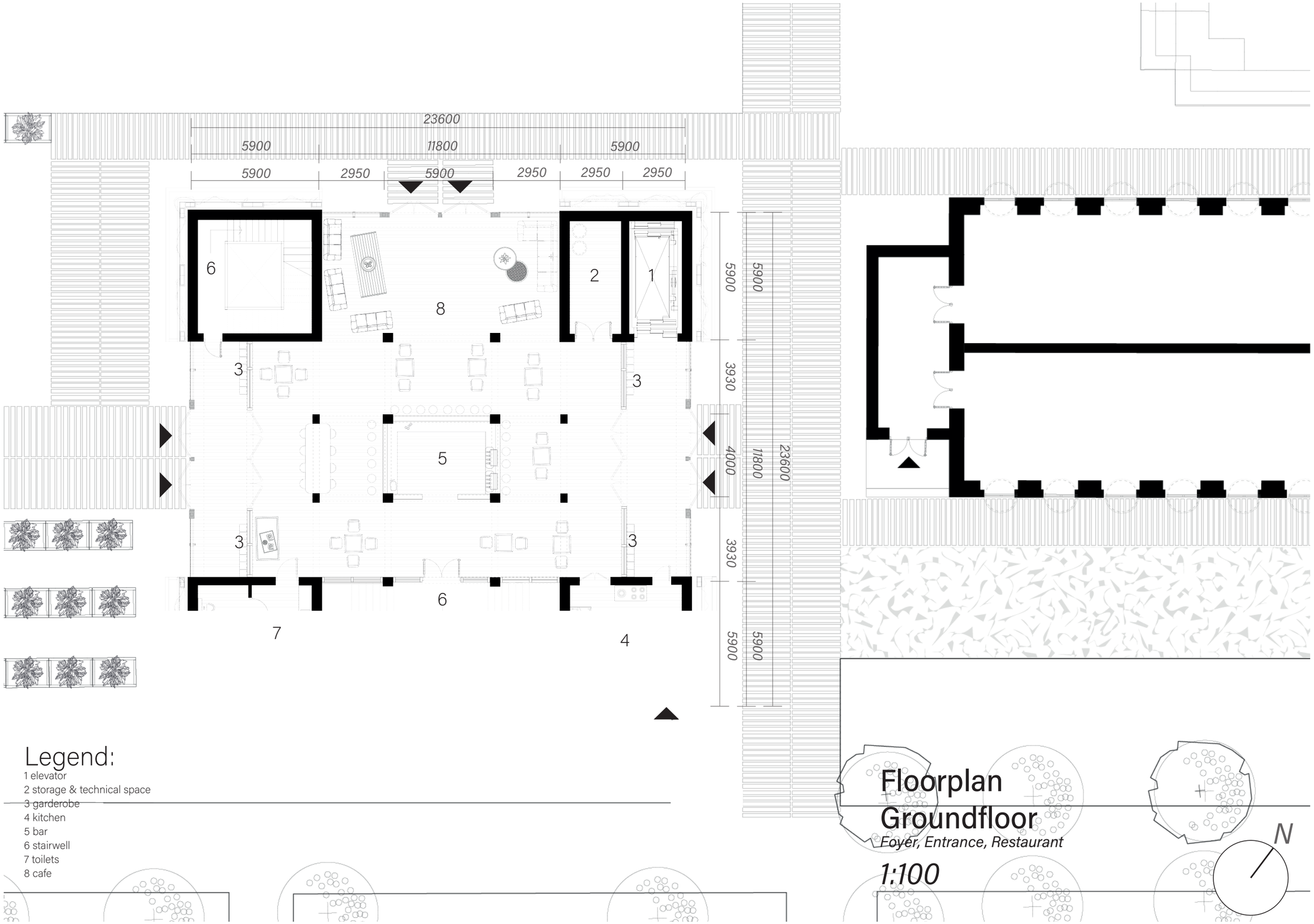


Plan elevation
South-East
1:100



Plan elevation
North-West
1:100





Legend:

1 elevator
2 storage & technical space
3 garderobe
4 kitchen
5 bar
6 stairwell
7 toilets
8 cafe

Floorplan Groundfloor

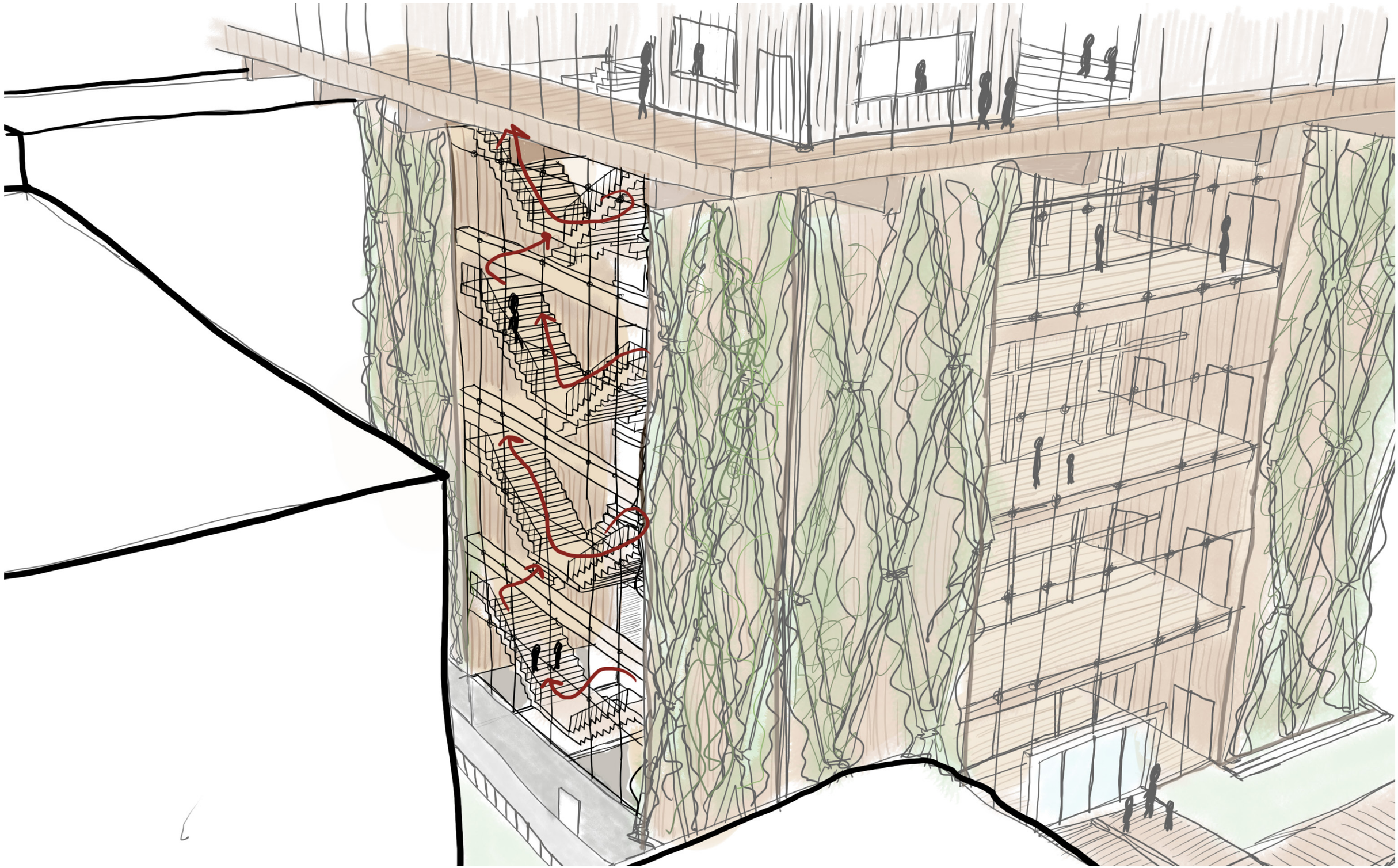
Foyer, Entrance, Restaurant

1:100

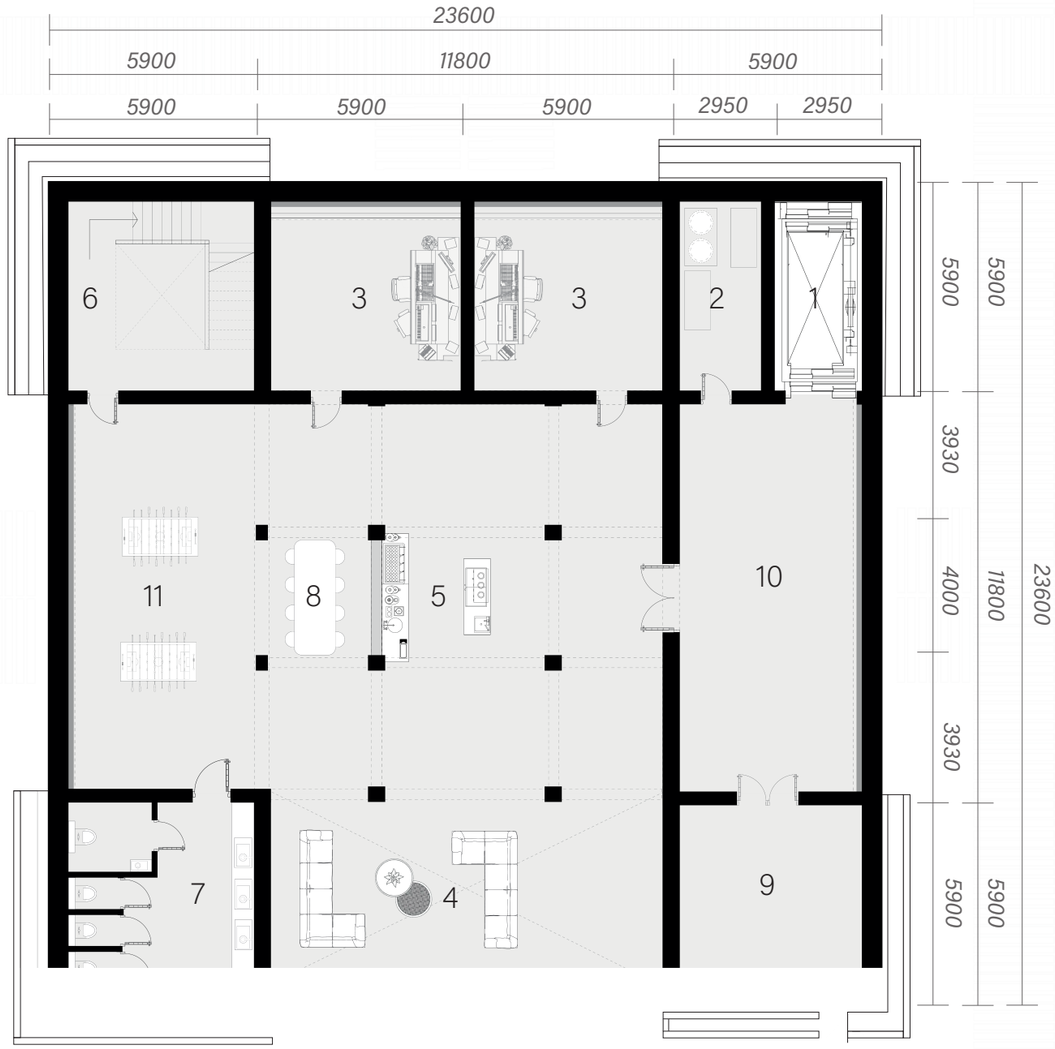
N

groundfloor





building flow: graceful staircase



Legend:

1 elevator
2 storage & technical space
3 producer studio
4 inspiration lounge
5 pantry and coffee
6 stairwell
7 toilets
8 eating area
9 technical space
10 storage
11 'stress free' zone

Floorplan
Basement

Basement Booths and technical spaces

1:100

N

basement



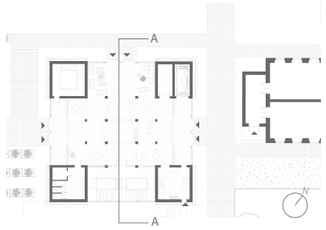
basement booths and focus area

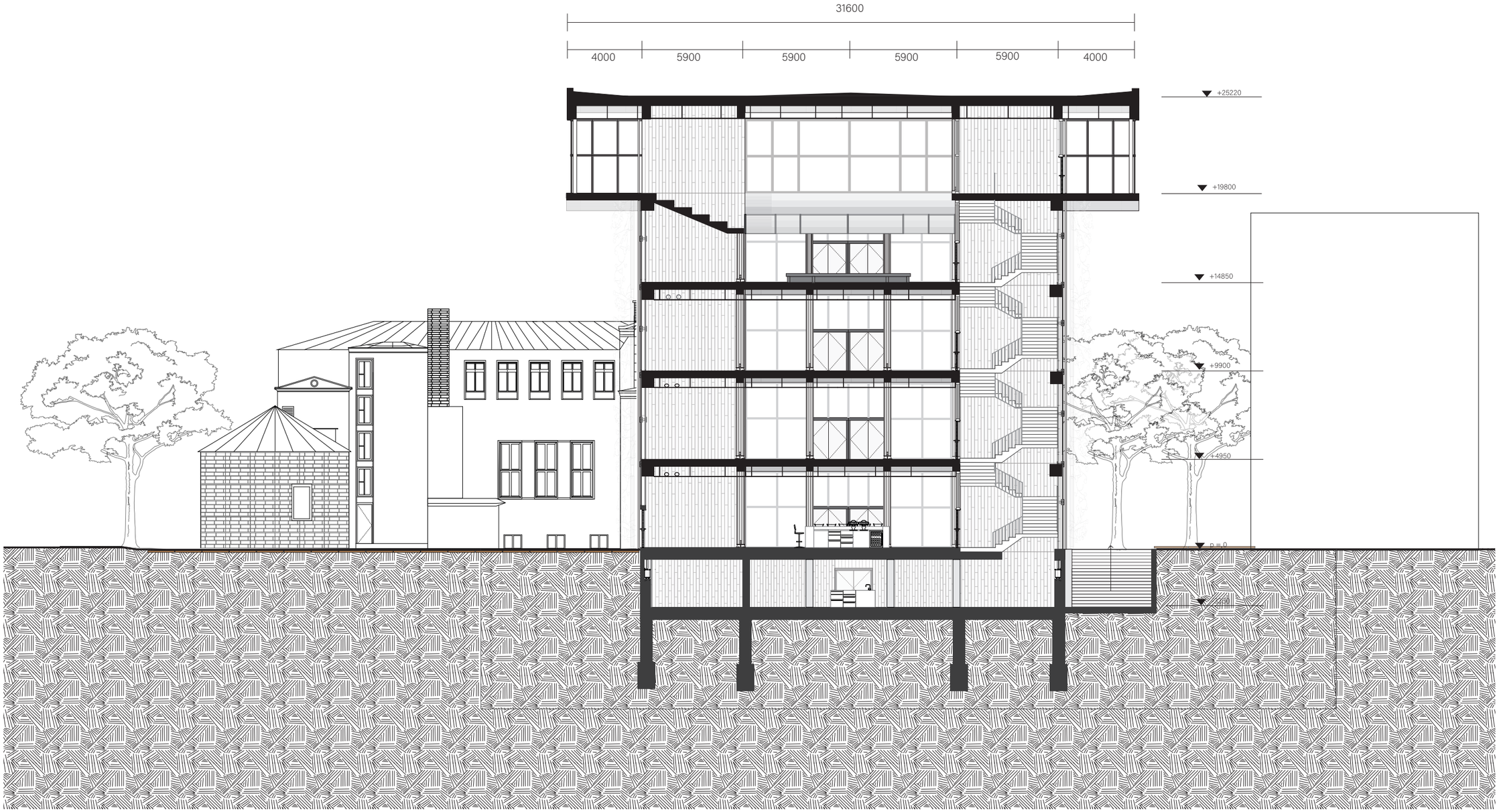
Echoes in Timber // METHODS OF ANALYSIS

reimagining the future

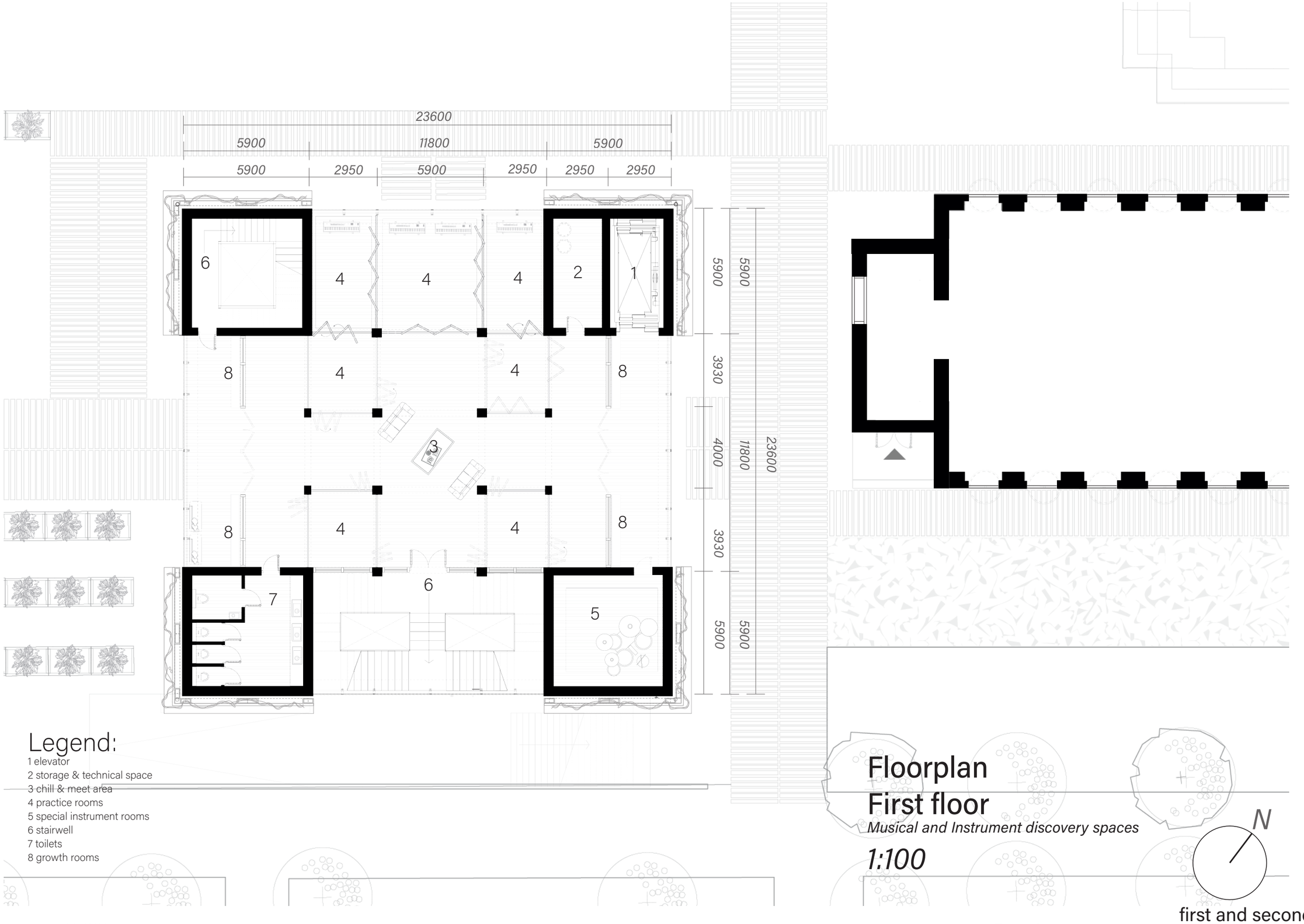
section aa of musical building

1:100





situation of plot



Legend:

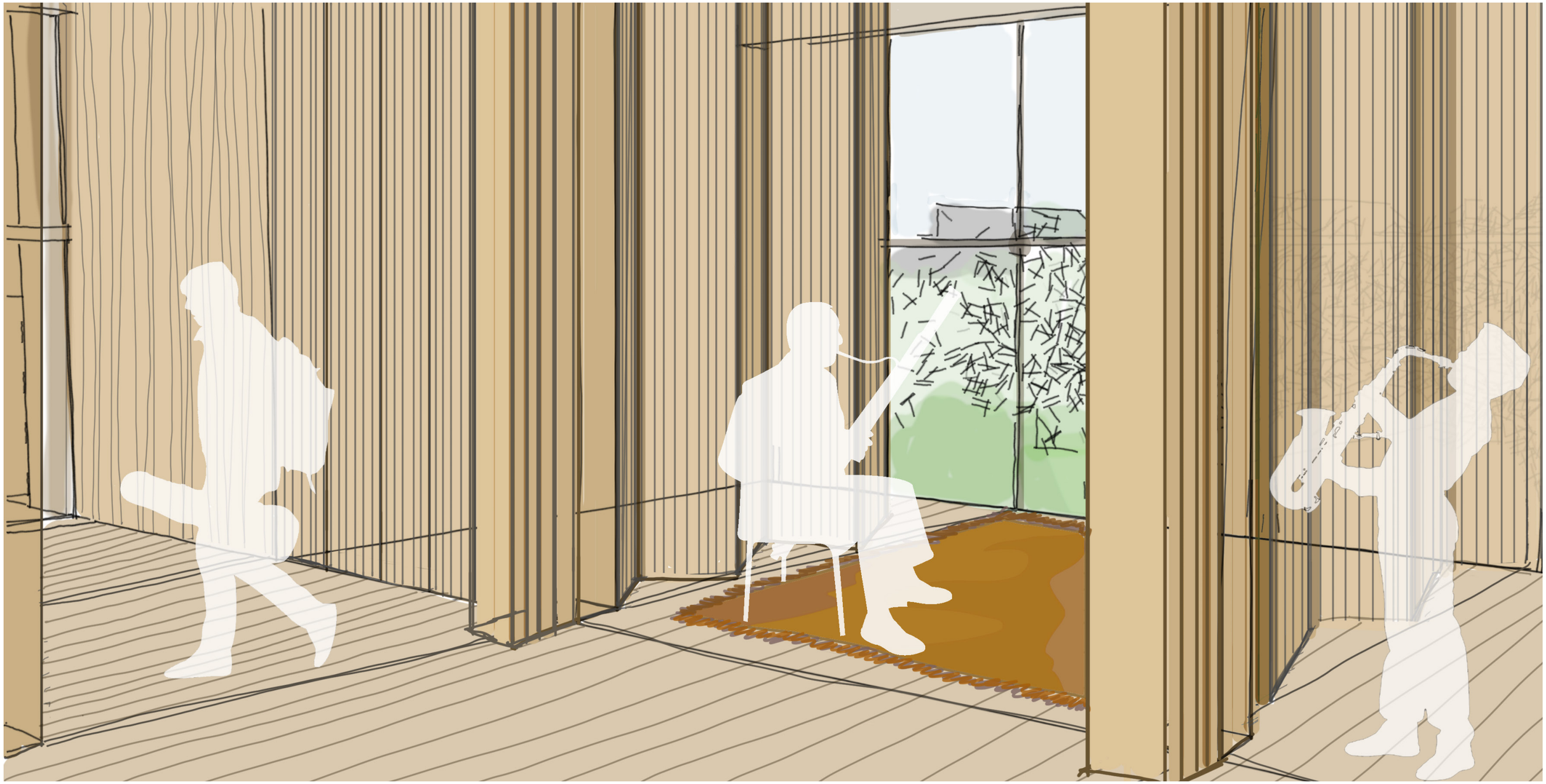
1 elevator
2 storage & technical space
3 chill & meet area
4 practice rooms
5 special instrument rooms
6 stairwell
7 toilets
8 growth rooms

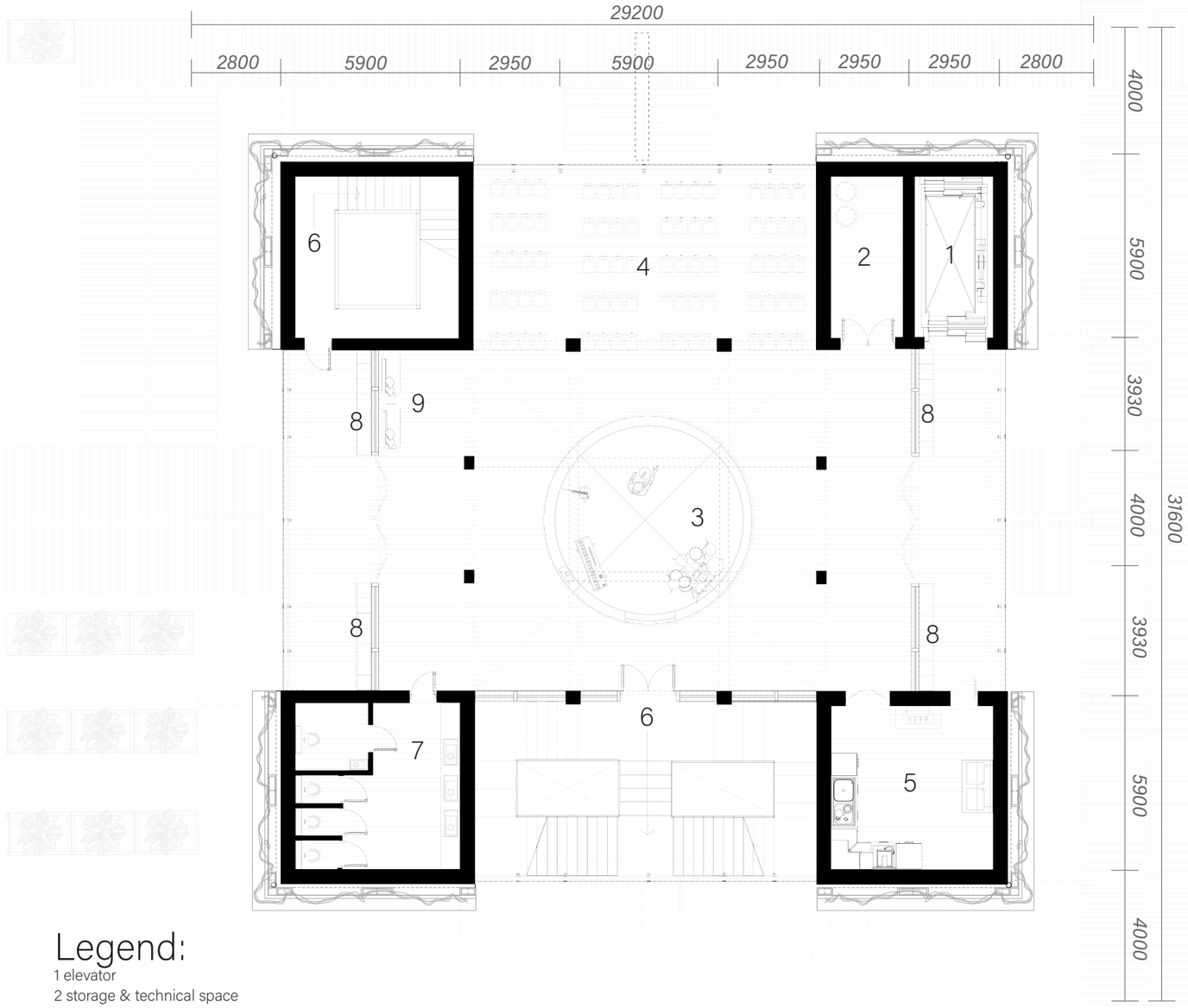
Floorplan
First floor
Musical and Instrument discovery spaces

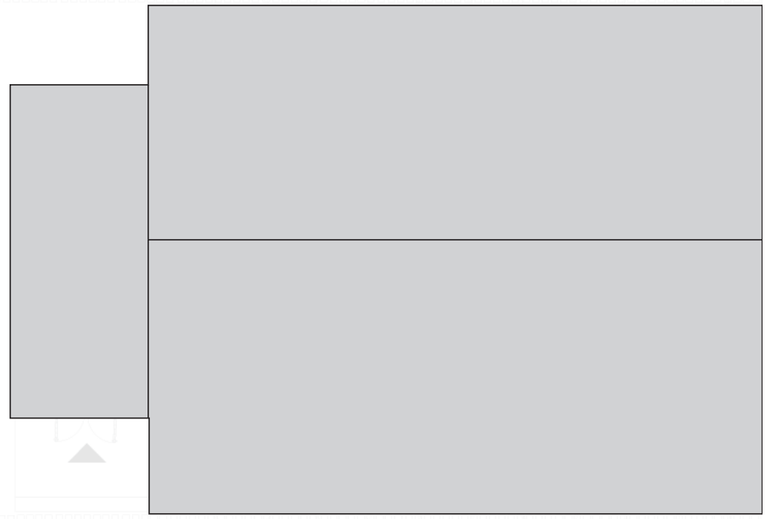
1:100

N

first and second floor







Legend:

1 elevator
2 storage & technical space
3 performance stage
4 open seating space
5 pantry/kitchen
6 stairwell
7 toilets
8 garderobe
9 'enjoy area' space to dance or watch

Floorplan
Third Floor

The Performance Atrium; podium for bands, singers and other musical performances

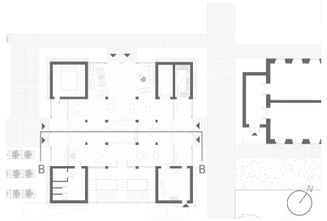
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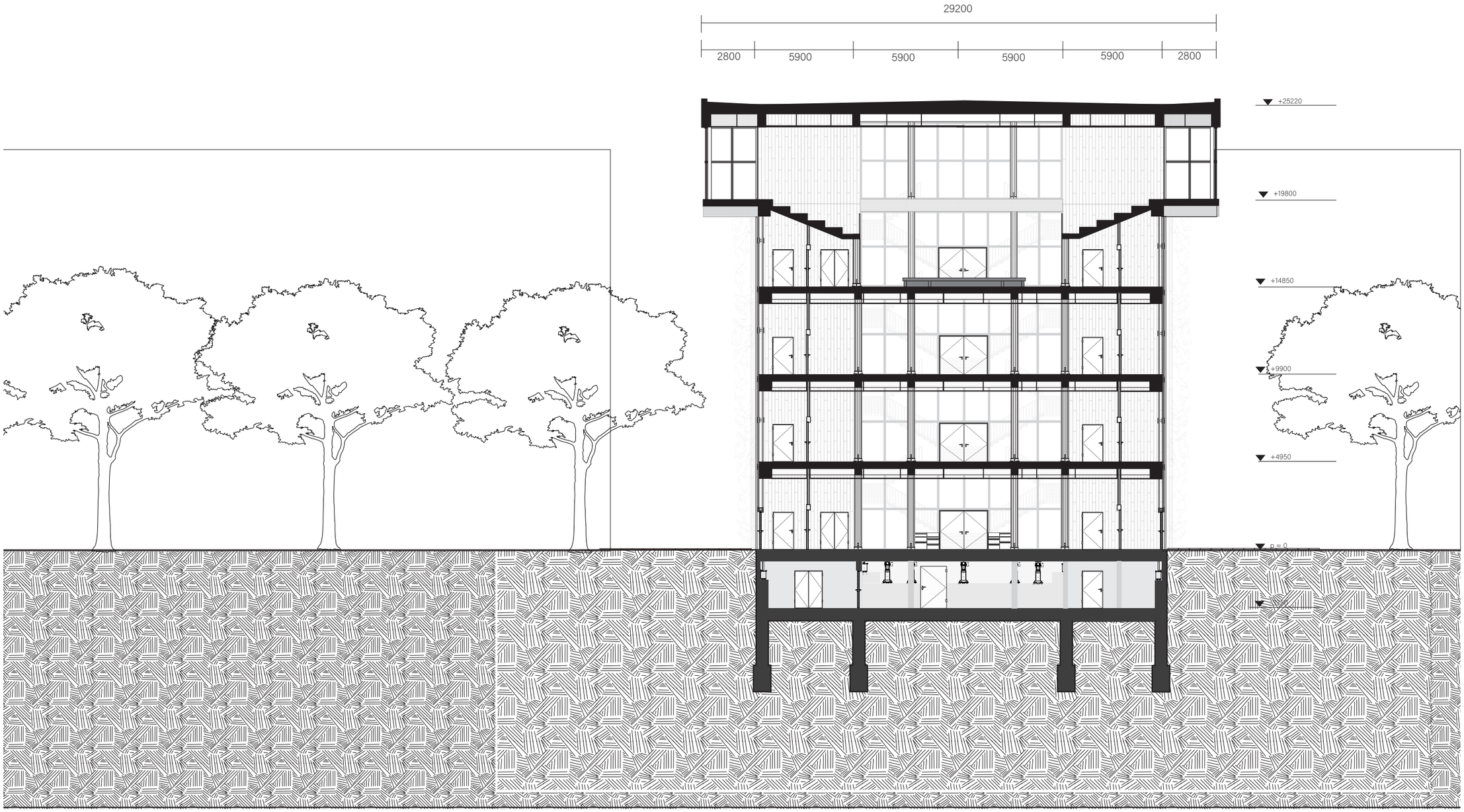
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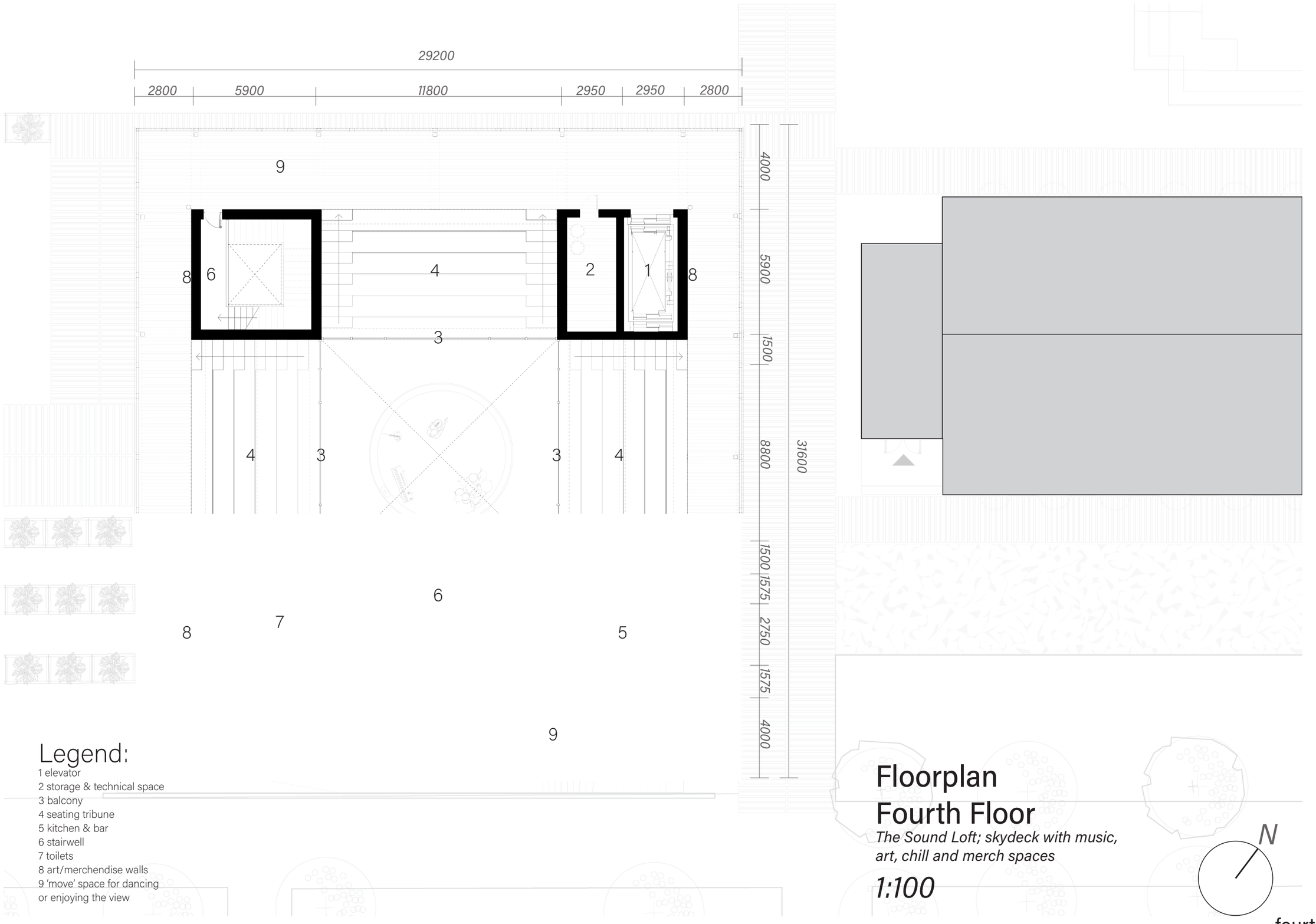
third floor

section bb of musical building

1:100







Legend:

1 elevator
2 storage & technical space
3 balcony
4 seating tribune
5 kitchen & bar
6 stairwell
7 toilets
8 art/merchendise walls
9 'move' space for dancing
or enjoying the view

Floorplan
Fourth Floor

The Sound Loft; skydeck with music, art, chill and merch spaces

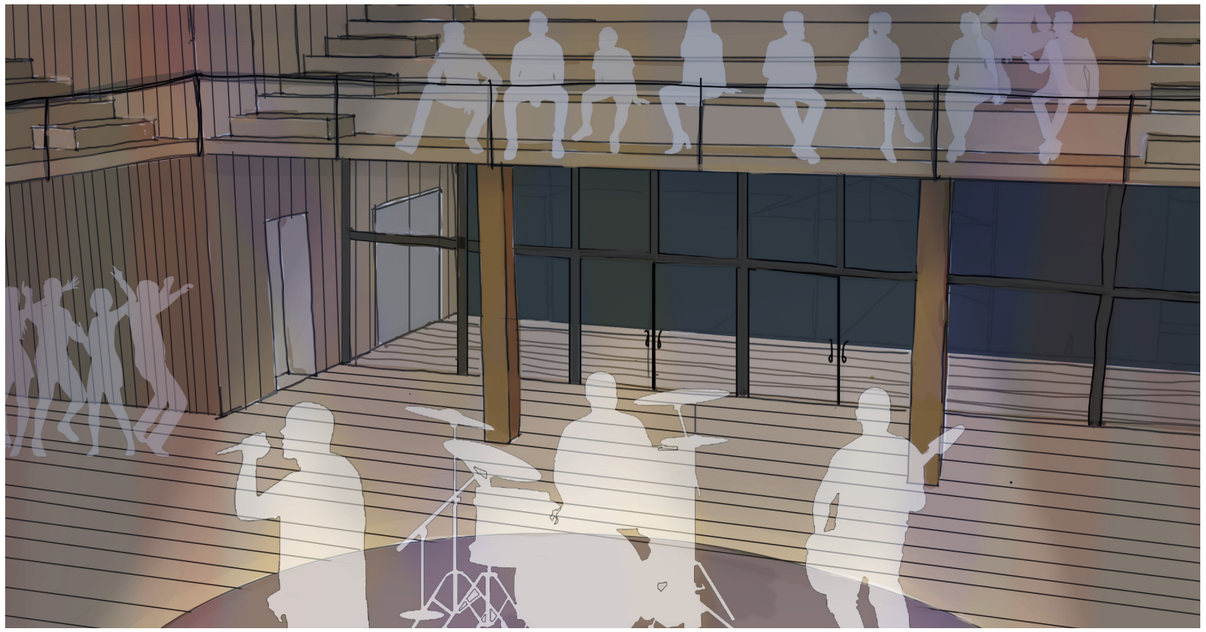
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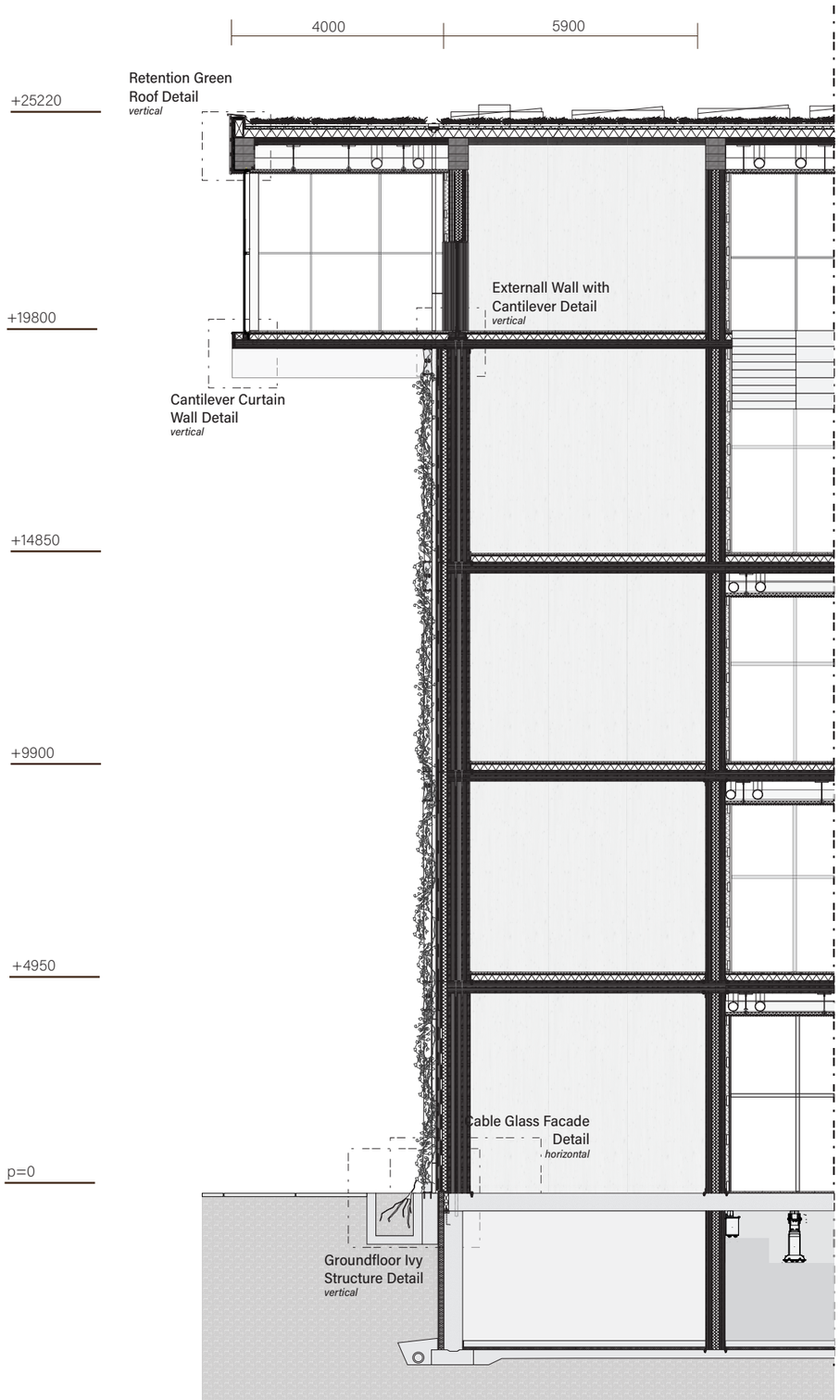
fourth floor

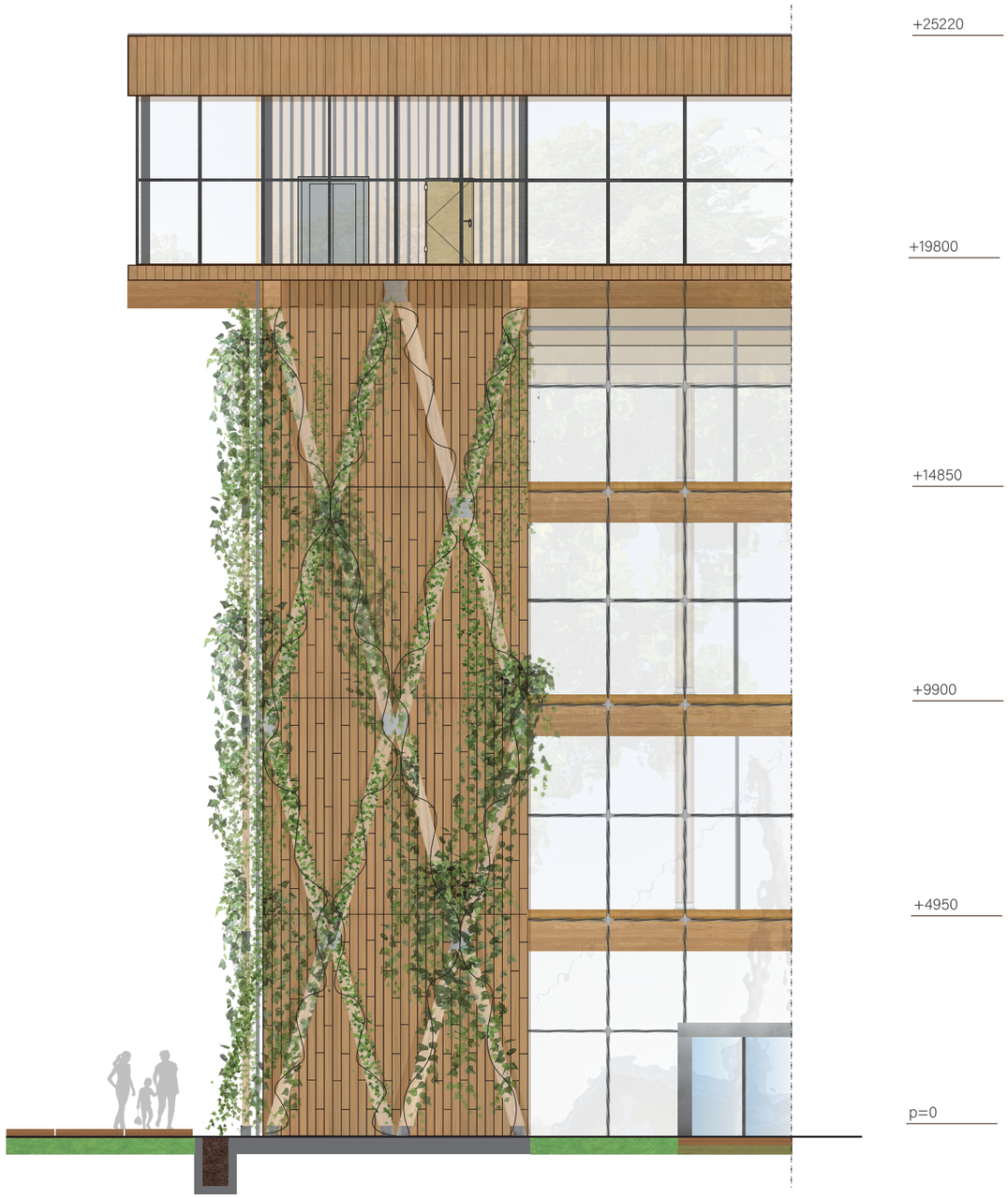






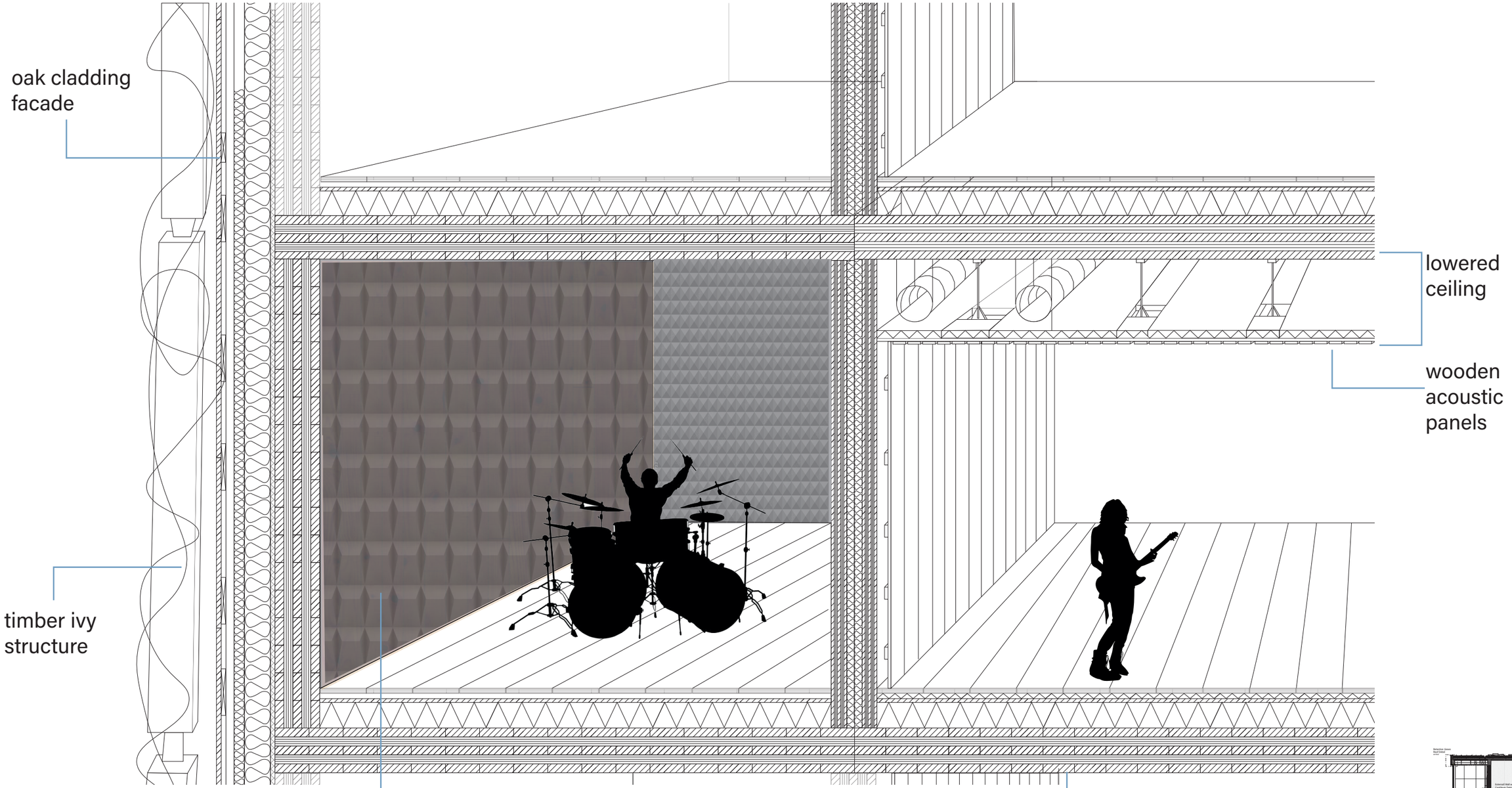
top floor: eyecatcher of the building

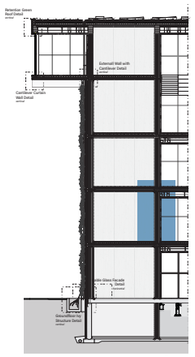




1:20 scaled to 1:40

facade fragment





3d section of building construction

1:5, Vertical

80 mm Yellow Colored Rainpipe

ASTRATA® COUSTICS WALL PANELS

200mm CLT panel

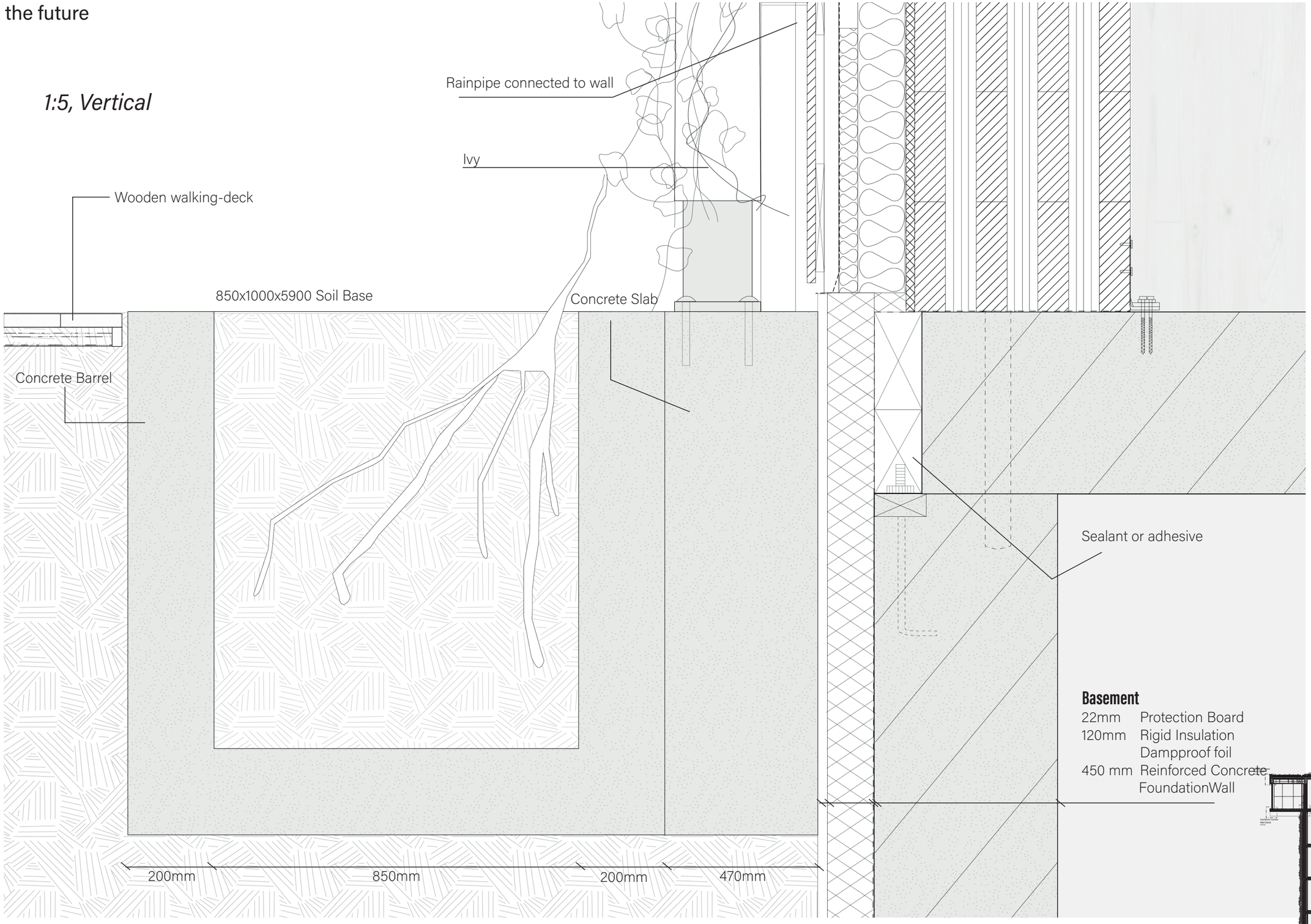
External Wall Rc: 6,5

195 mm	Steel Base with Wooden Slats in combination with Ivy
20 mm	Oak Facade Boards
22 mm	Framework
34 mm	Battens
	Waterrestistant foil
45 mm	Studs and insulation
110 mm	Insulation
	Vapour retarder
20 mm	Fireboard
500 mm	CLT panel



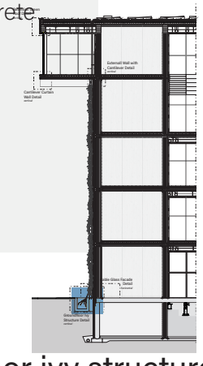
detail of external wall construction with cantilever

1:5, Vertical

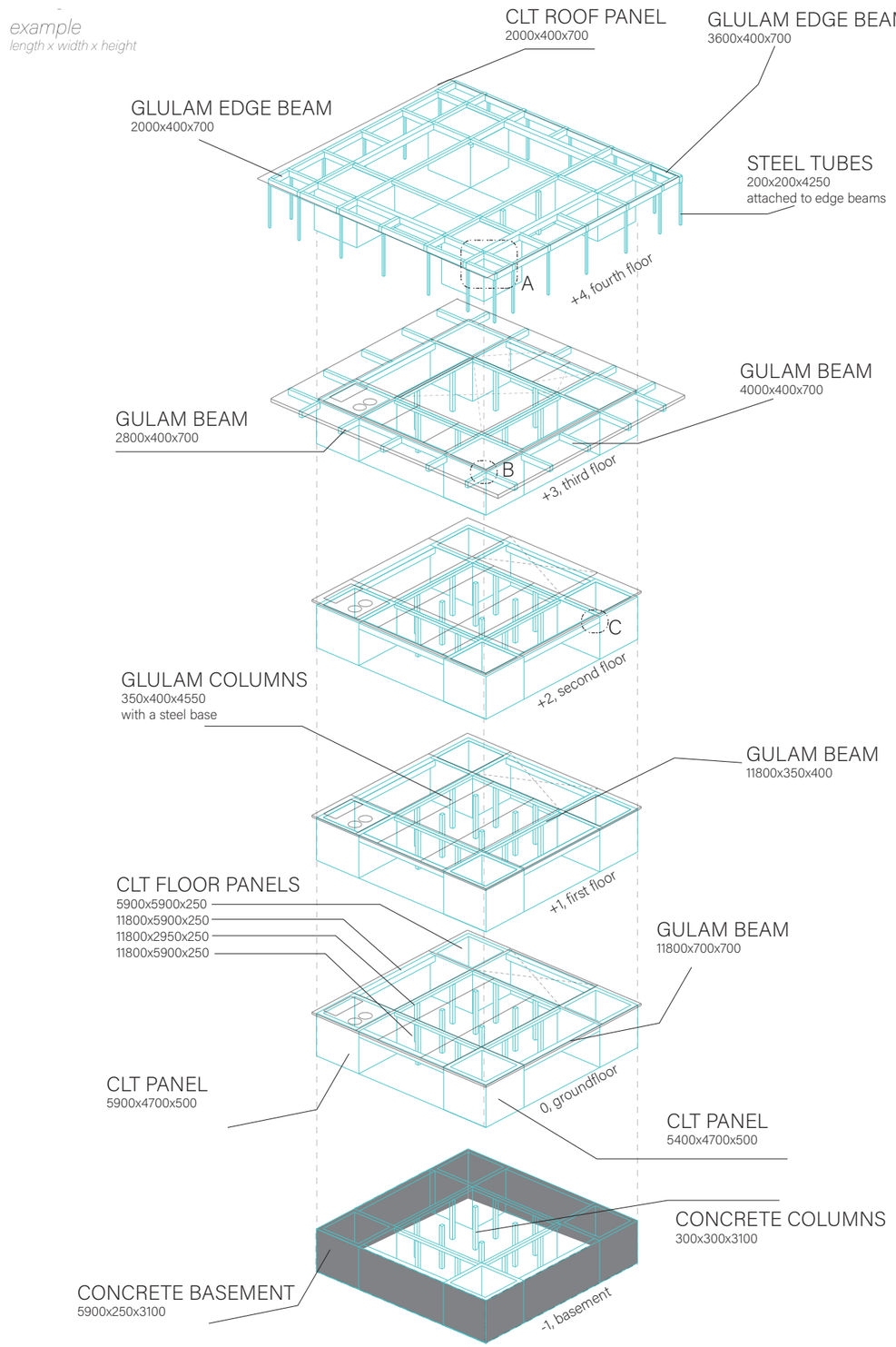


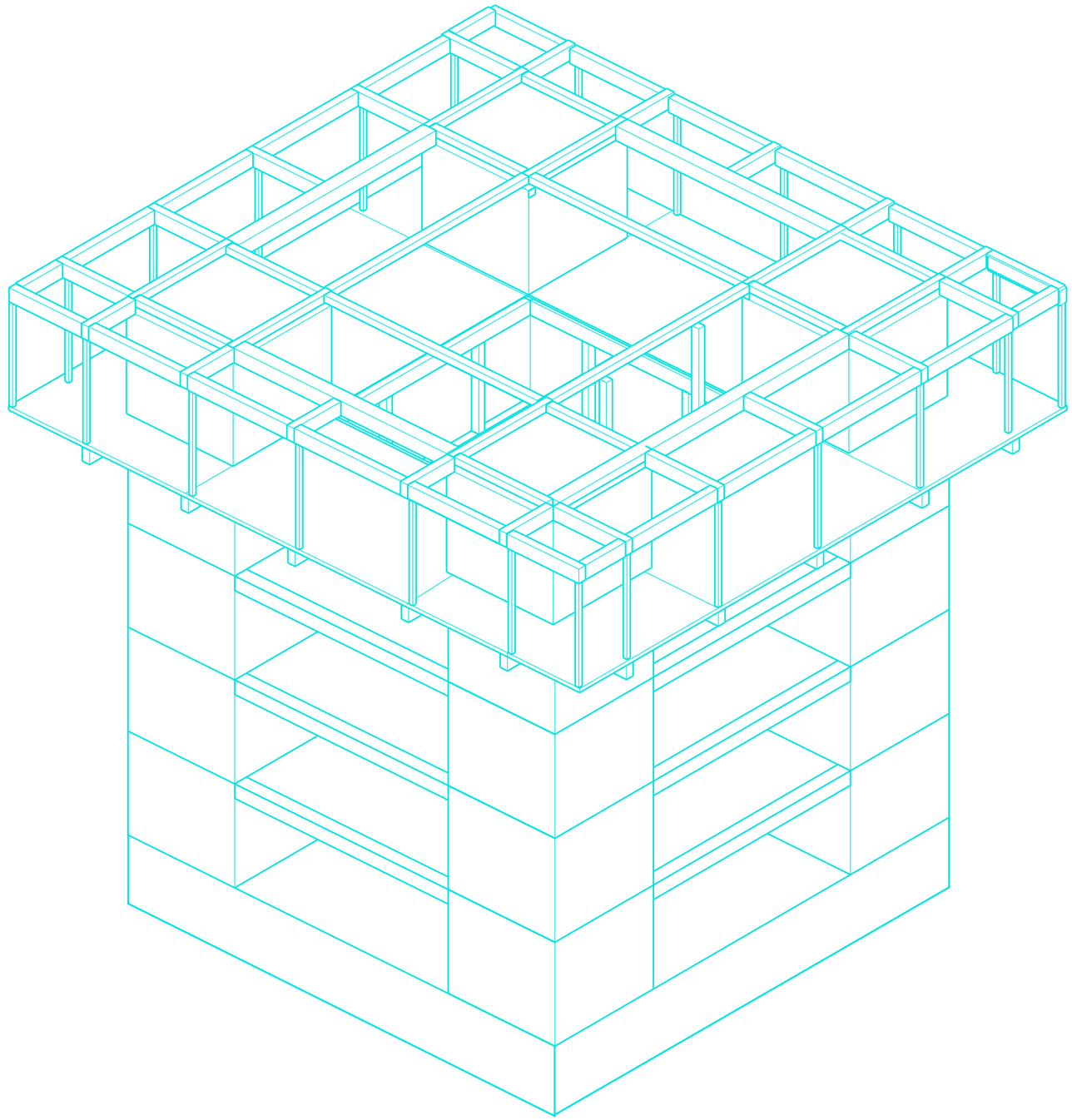
Basement

22mm	Protection Board
120mm	Rigid Insulation
	Dampproof foil
450 mm	Reinforced Concrete
	FoundationWall



detail of groundfloor ivy structure



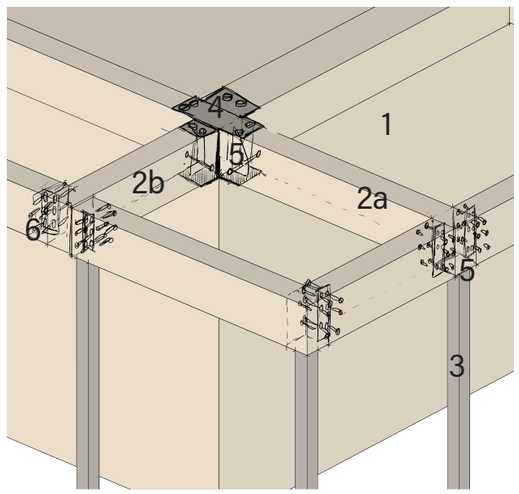


axo of load bearing structure

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Connections

Connection A: roof



1.CLT Panel
500mm

2.Glulam beams
a.4000x400x700 with pre-drilled holes
b.2800x400x700 with pre-drilled holes

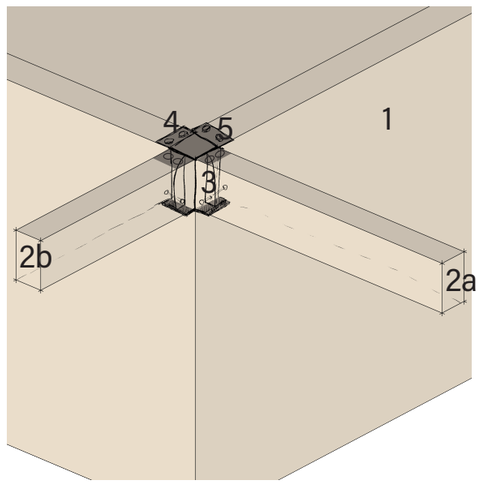
3.Steel tubes
200x200x4250

4.Steel casing
connects CLT with roof overhang beams

5.Steel plates
slotted in CLT

6.Dowelpins

Connection B: cantilever corner



1.CLT Panel
500mm

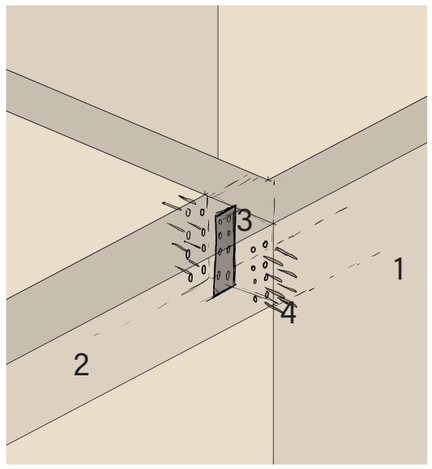
2.Glulam beams
a.4000x400x700
b.2800x400x700

3.Steel plates
slotted in CLT

4.Steel casing
connects CLT with overhang beams

5.Bolts & Screws
through casing in CLT and through beams

Connection C: glulam beam & clt



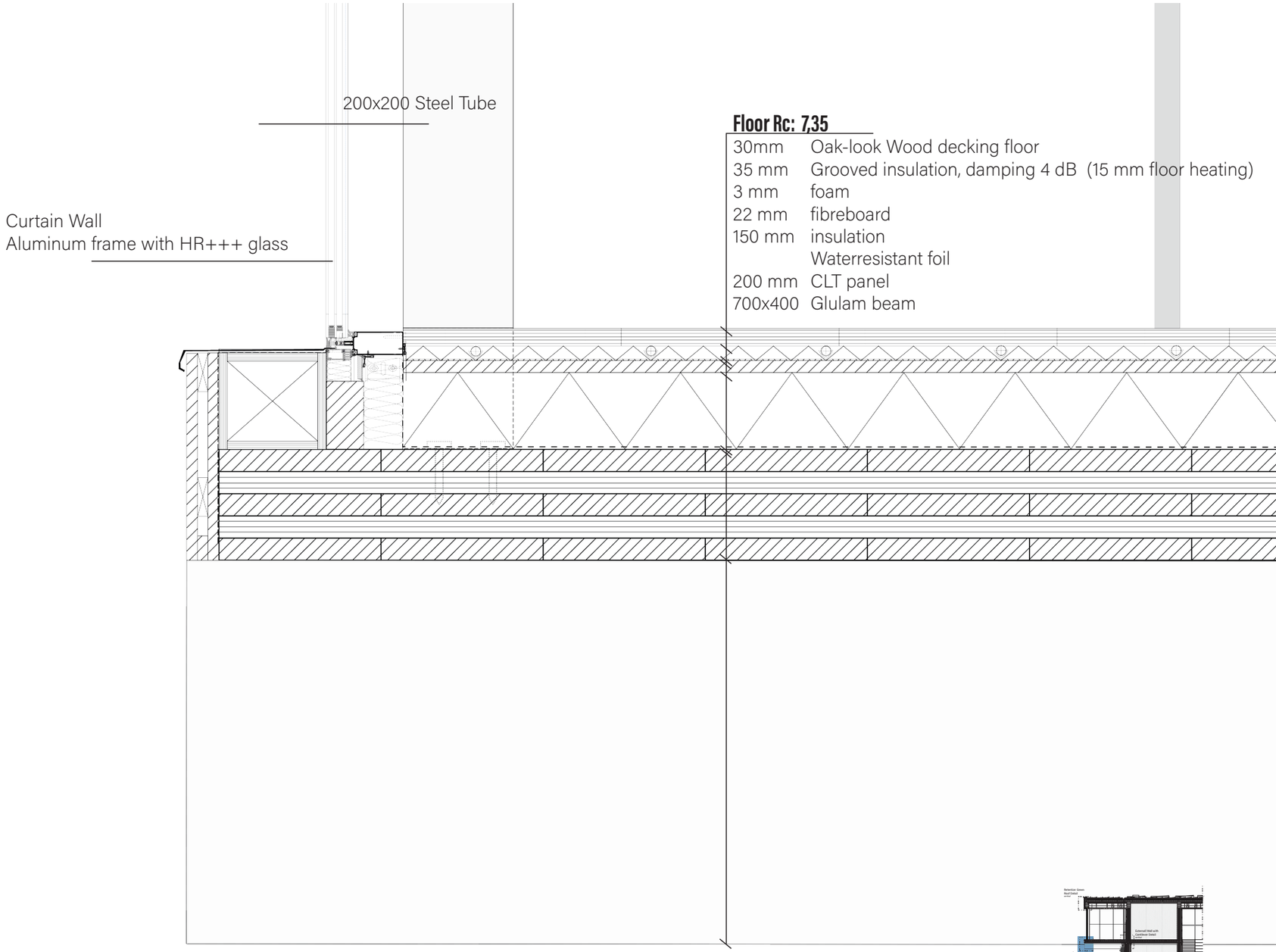
1.CLT Panel
500mm

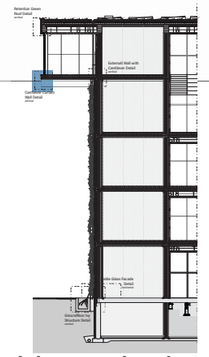
2.Glulam beam
700x700mm
with pre-drilled holes

3.Steel plates
slotted in CLT

4.Dowelpins

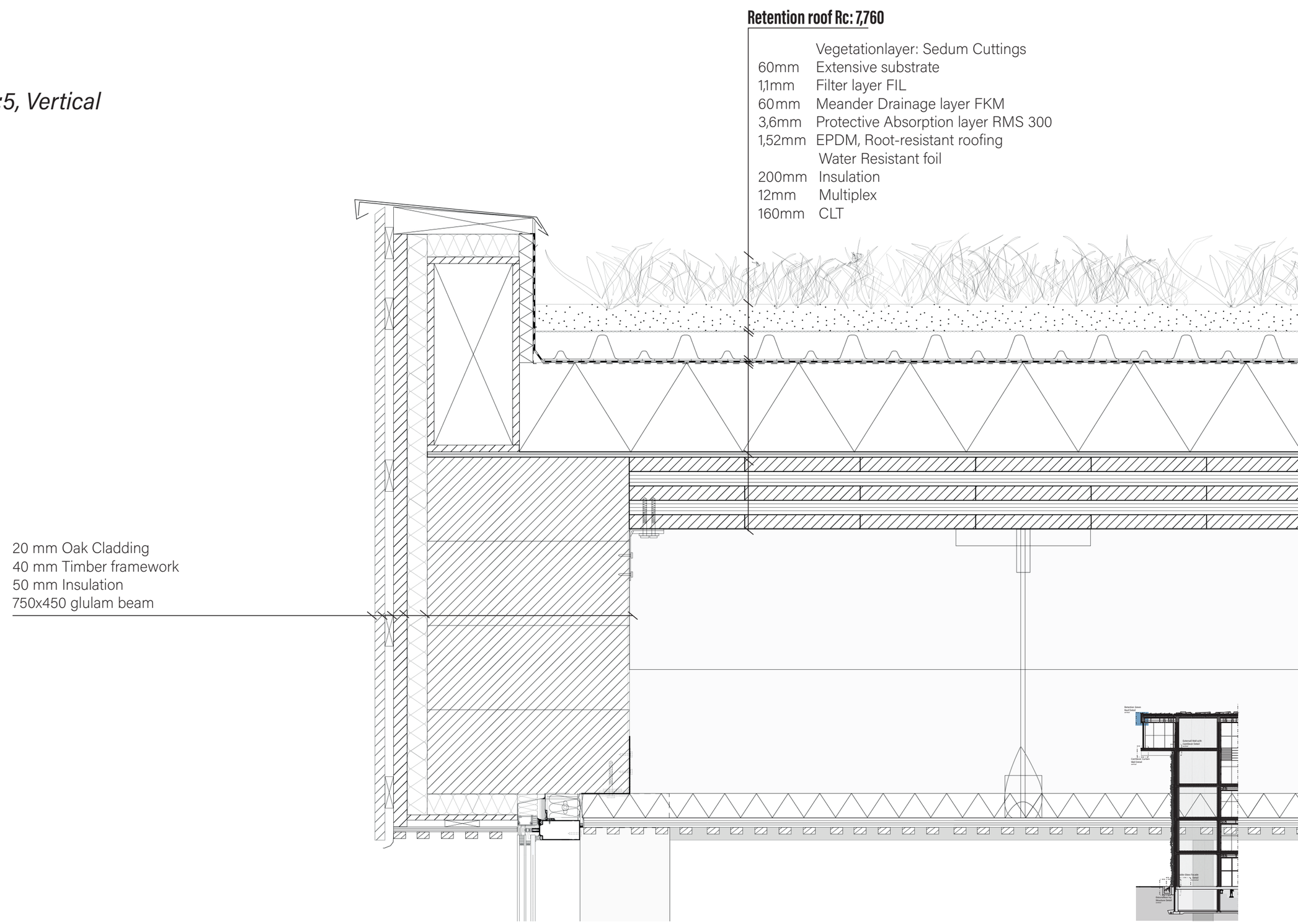
1:5, Vertical



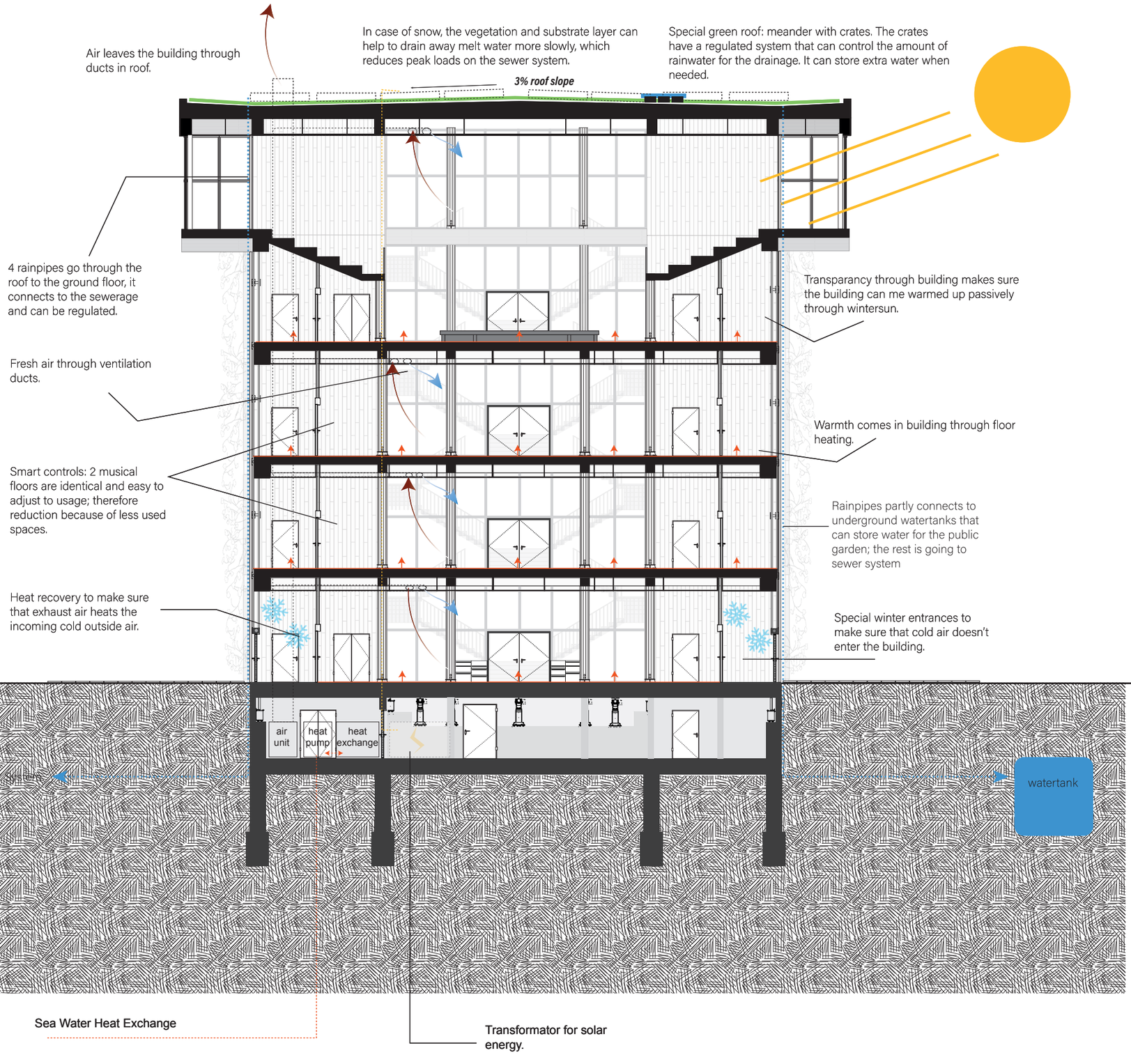


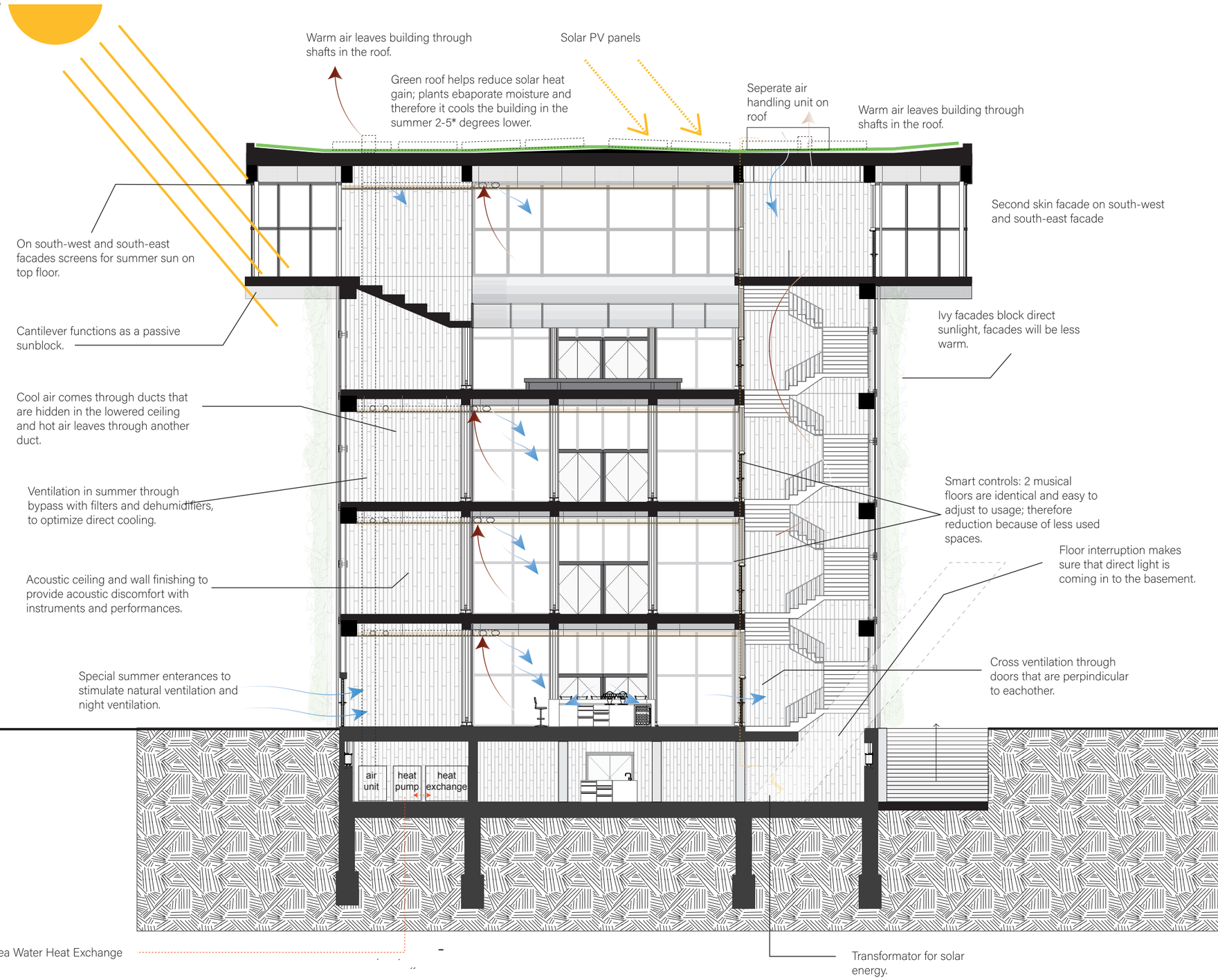
detail of cantilever construction with steel tubes

1:5, Vertical



detail of roof


Air leaves the building through ducts in roof.
In case of snow, the vegetation and substrate layer can help to drain away melt water more slowly, which reduces peak loads on the sewer system.
Special green roof: meander with crates. The crates have a regulated system that can control the amount of rainwater for the drainage. It can store extra water when needed.
3% roof slope
4 rainpipes go through the roof to the ground floor, it connects to the sewerage and can be regulated.
Transparancy through building makes sure the building can me warmed up passively through wintersun.
Fresh air through ventilation ducts.
Warmth comes in building through floor heating.
Smart controls: 2 musical floors are identical and easy to adjust to usage; therefore reduction because of less used spaces.
Rainpipes partly connects to underground watertanks that can store water for the public garden; the rest is going to sewer system
Heat recovery to make sure that exhaust air heats the incoming cold outside air.
Special winter entrances to make sure that cold air doesn't enter the building.
air unit
heat pump
heat exchange
watertank
Sea Water Heat Exchange
Transformator for solar energy.


Warm air leaves building through shafts in the roof.
Solar PV panels
Green roof helps reduce solar heat gain; plants ebaporate moisture and therefore it cools the building in the summer 2-5* degrees lower.
Seperate air handling unit on roof
Warm air leaves building through shafts in the roof.
Second skin facade on south-west and south-east facade
On south-west and south-east facades screens for summer sun on top floor.
Cantilever functions as a passive sunblock.
Ivy facades block direct sunlight, facades will be less warm.
Cool air comes through ducts that are hidden in the lowered ceiling and hot air leaves through another duct.
Ventilation in summer through bypass with filters and dehumidifiers, to optimize direct cooling.
Smart controls: 2 musical floors are identical and easy to adjust to usage; therefore reduction because of less used spaces.
Floor interruption makes sure that direct light is coming in to the basement.
Acoustic ceiling and wall finishing to provide acoustic discomfort with instruments and performances.
Special summer enterances to stimulate natural ventilation and night ventilation.
Cross ventilation through doors that are perpindicular to eachother.
air unit
heat pump
heat exchange
Sea Water Heat Exchange
Transformator for solar energy.



conclusion and reflection

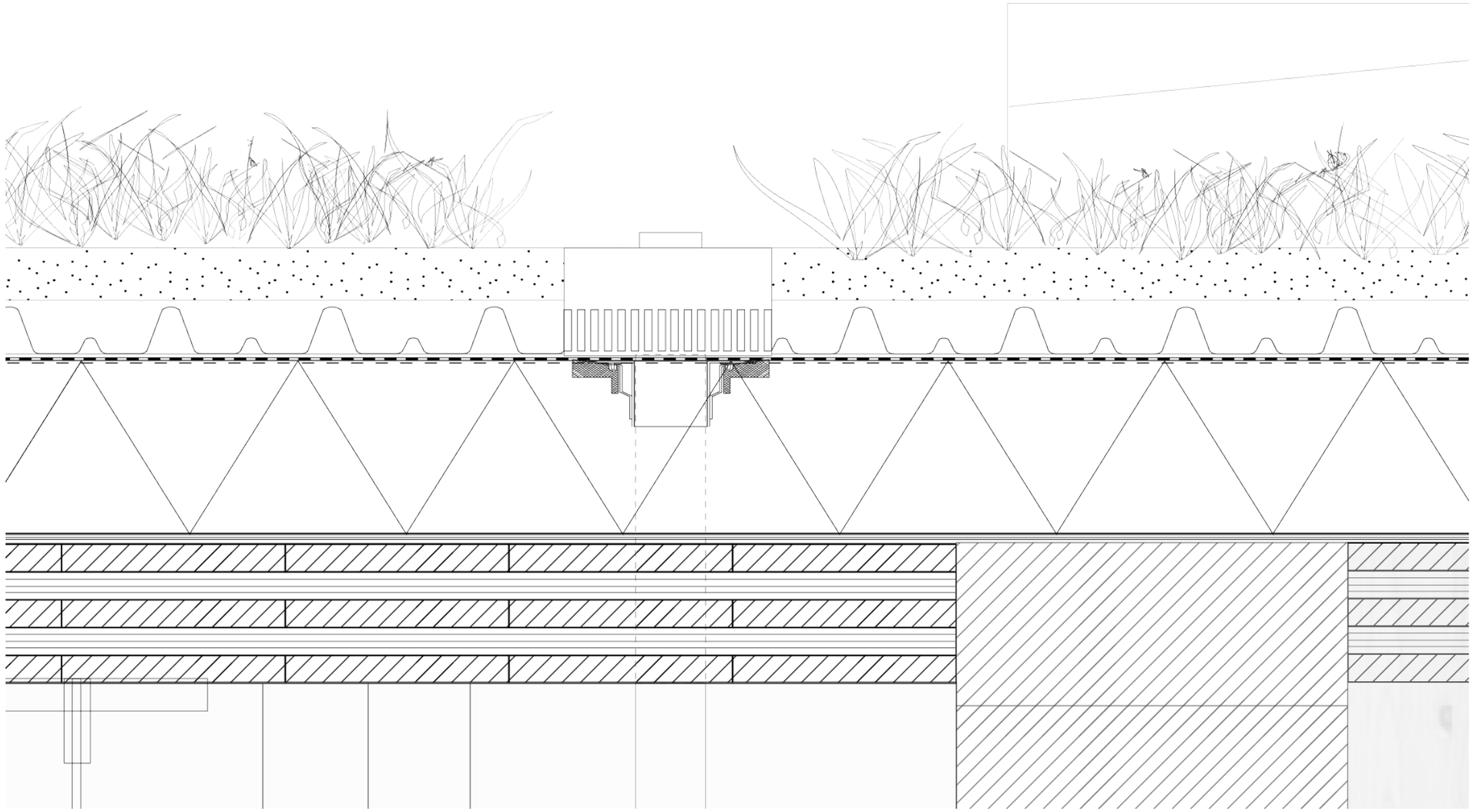
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P5 - 28th of october 2025

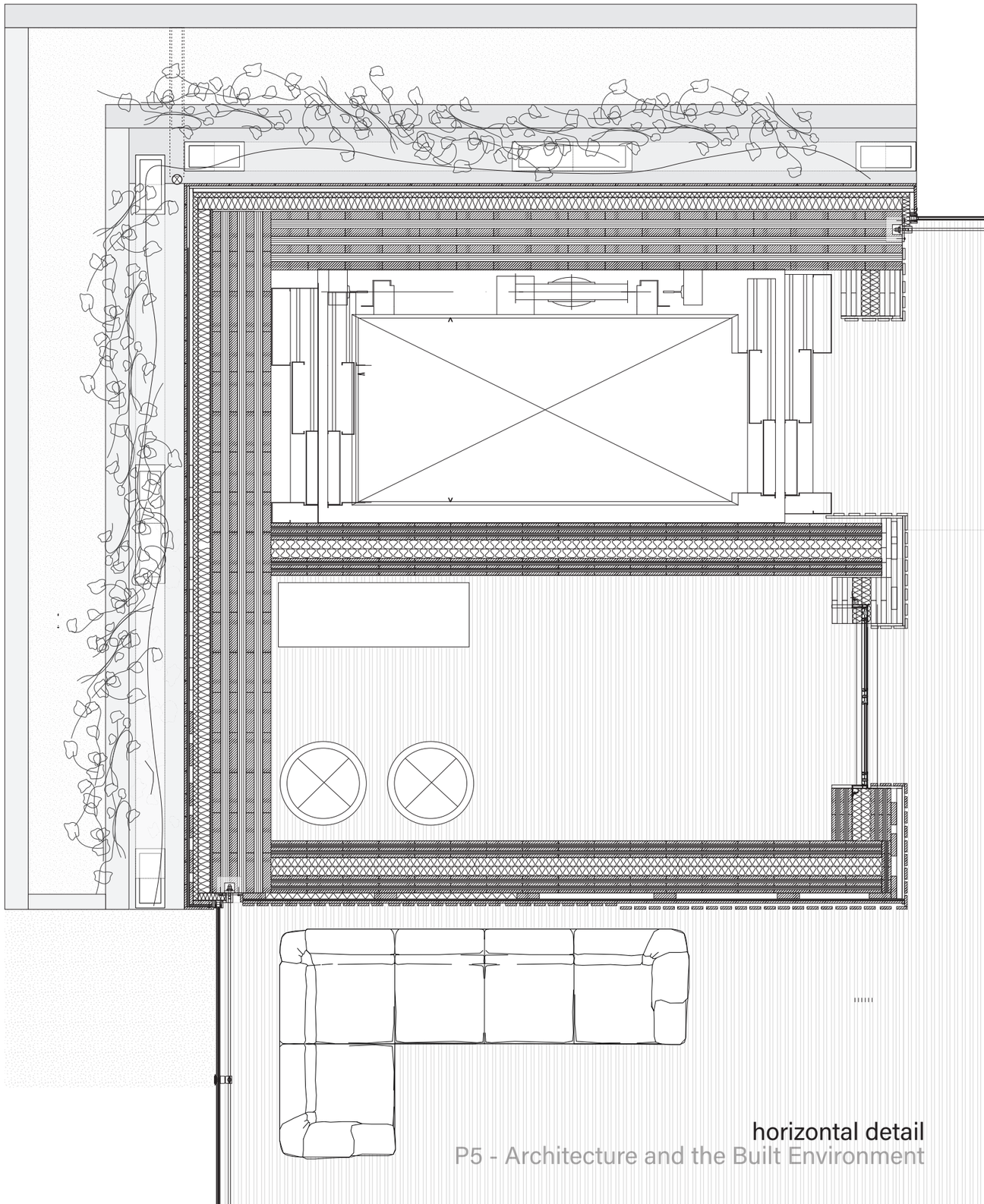
Willemijn Wilms Floet
Niels Tilanus
Willie Vogel

ECHOES IN TIMBER

developing park-like architecture bridging cultural and historical heritage







horizontal detail
P5 - Architecture and the Built Environment

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