Fluid space - introducing an elastic activator substantiated by an intuitive exploration of finding forms in Liège

Urban Architecture Graduation Studio

Inez Van Oeveren - graduation project
04.07.2023

Architecture, art and literature are all forms that often find a way to live on forever and inspire people.

One of the first sentences I wrote in my graduation journal.
A sentence I wanted to hold on to, designing my graduation project.

A Stage - as the site

A city landscape yet to be discovered
A barren landscape
Scarred city - divided

A Metropolitan Relic - post industrial city

Cars are the most important transport
Bridges, tram and train - connects
Sensitive surrounding - noise pollution
History of multi cultural inhabitants
An influx of visitors/new inhabitants

Liège at first glance

So fluid space what does it stand for?

Non - places (Marc Augé)
Empty spaces (Franck, K.A.)
Informal space (Hudson, J.)
Wastelands (Gandy, M.)
Inbetween spaces (Ghel, J.)
Terrain vague (Solà - Morales, Ignasi de)

Fluid spaces - Van Oeveren, I.M.
The type of urban space I have observed in Liège.

As for me as a researcher:
Fluid spaces refer to empty, overgrown, or neglegted spaces within the city, but most important, with a certain amount of visible potential fluidity.

So **fluid spaces** have the potency to be highly mouldable and dynamic environments.

(un)productive - monofunction (productive for its function, non for its surroundings)

empty space - available for the unintended

abandoned - no visible ownership

indeterminate - no visible relationship between activities

fluctuating - visible activity change overtime

Spatial characteristics (Solà - Morales, Ignasi de. (1995). Terrain vague. In Cynthia Davidson (Ed.) Anyplace. Cambrige, MA: MIT Press.)

Map of identified **Fluid spaces**

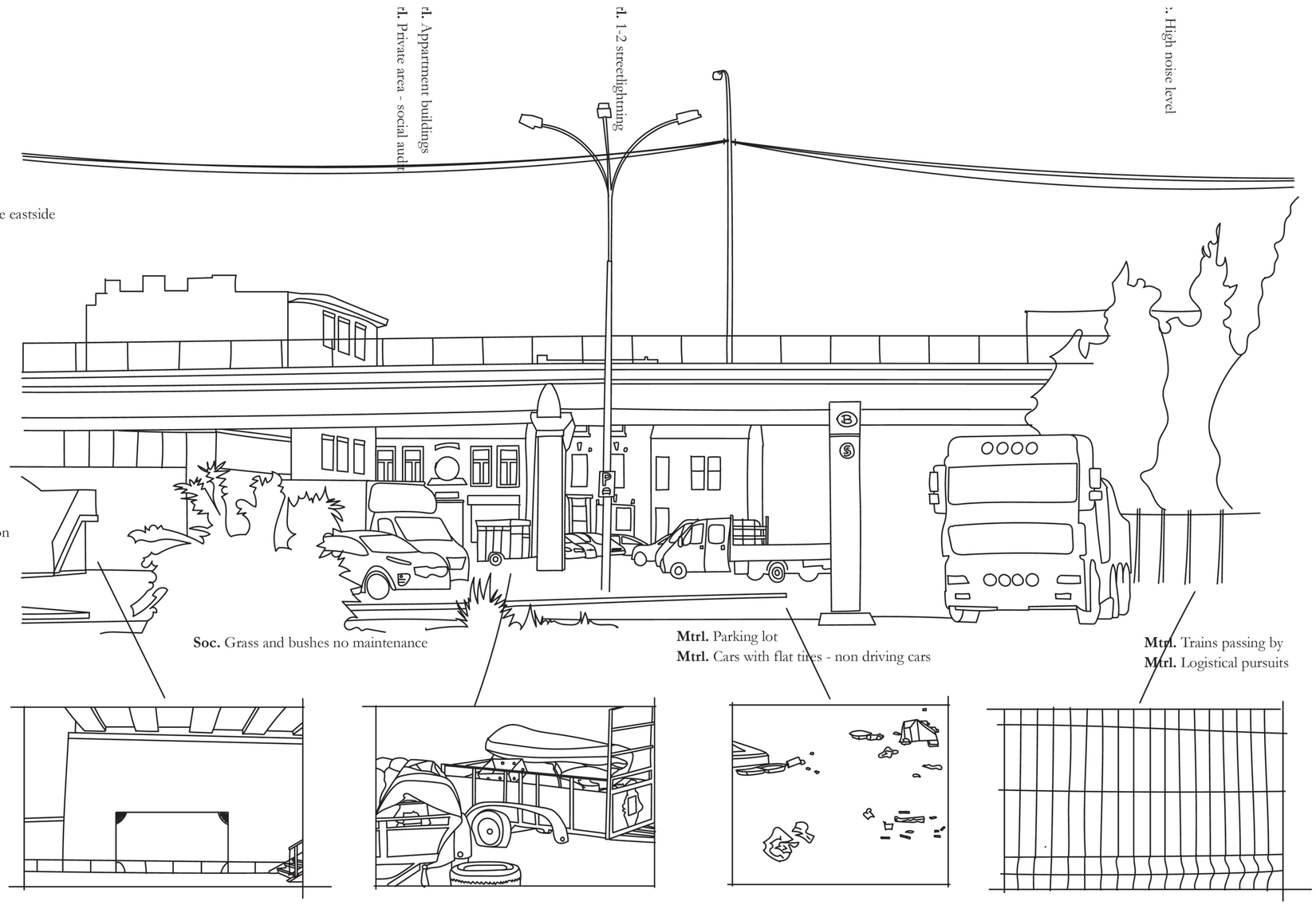
Nr. 1 - (un)productive parkinglot under bridge
Nr. 2 - empty space inbetween tramdepot and bridge
Nr. 3 - flucuating space underconstruction
Nr. 4 - abandoned space inbetween buildings
Nr. 5 - fluctuating space underconstruction inbetween buildings
Nr. 6 - unproductive space closedoff
Nr. 7 - (inderterminate) non maintained space
Nr. 8 - flucuating space inbetween buildings
Nr. 9 - (un)productive garage space inbetween buildings
Nr. 10 - time (un)productive space supermarket parking
Nr. 11 - time (un)productive space tunnel
Nr. 12 - unproductive space closedoff
Nr. 13 - empty space
Nr. 14 - (un)productive garages inbetween buildings
Nr. 15 - empty unproductive space
Nr. 16 - abandoned non used venue
Nr. 17 - indeterminate space on a corner
Nr. 18 - abandoned building
Nr. 19 - (un)productive garage space
Nr. 20 - fluctuating space under construction
Nr. 21 - (un)productive space parkinglot
Nr. 22 - time unproductive space parking supermarket
Nr. 23 - flucuating entrance space to innercourt
Nr. 24 - (un)productive garage space inbetween buildings
Nr. 25 - indeterminate space
Nr. 26 - abandoned house
Nr 27. (un)productive reclycle lot

Spatial characteristics (Solà - Morales, Ignasi de. (1995). Terrain vague. In Cynthia Davidson (Ed.) Anyplace. Cambrige, MA: MIT Press.)

Social lens - mapping activities or possible activites	**Soc.** (abbreviation in drawing)
Ecological lens - mapping different gradations in an ecological perspective	**Eco.**
Material lens - mapping of external features (visual)	**Mtrl.**

Mapping dimensions by cartopology method (Dearhunter (2018), method cartopologie)

Nr. 1 - (un)productive parkinglot under bridge

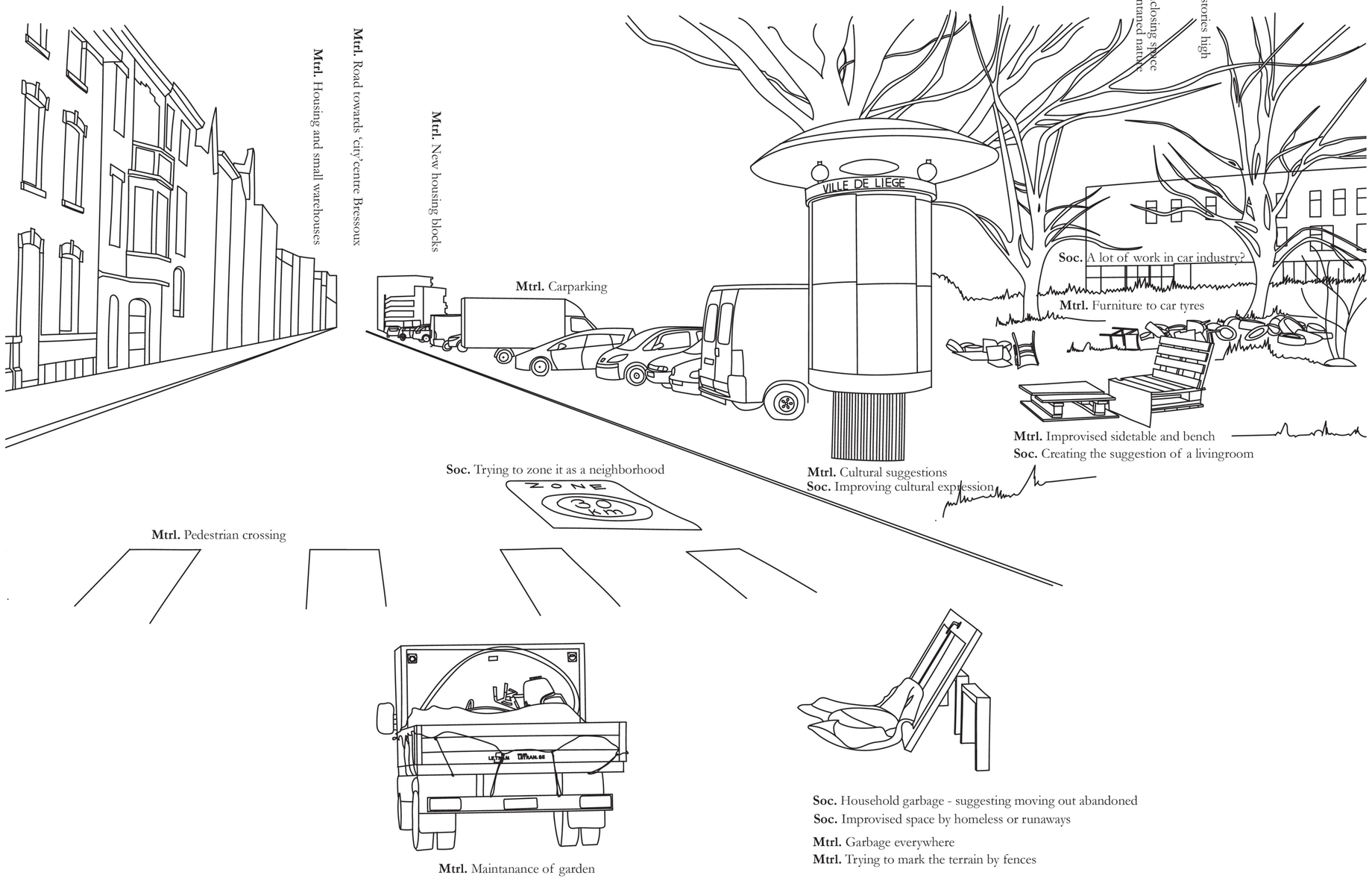


Nr. 1 - (un)productive parkinglot under bridge

Nr. 2 - empty space inbetween tramdepot and bridge

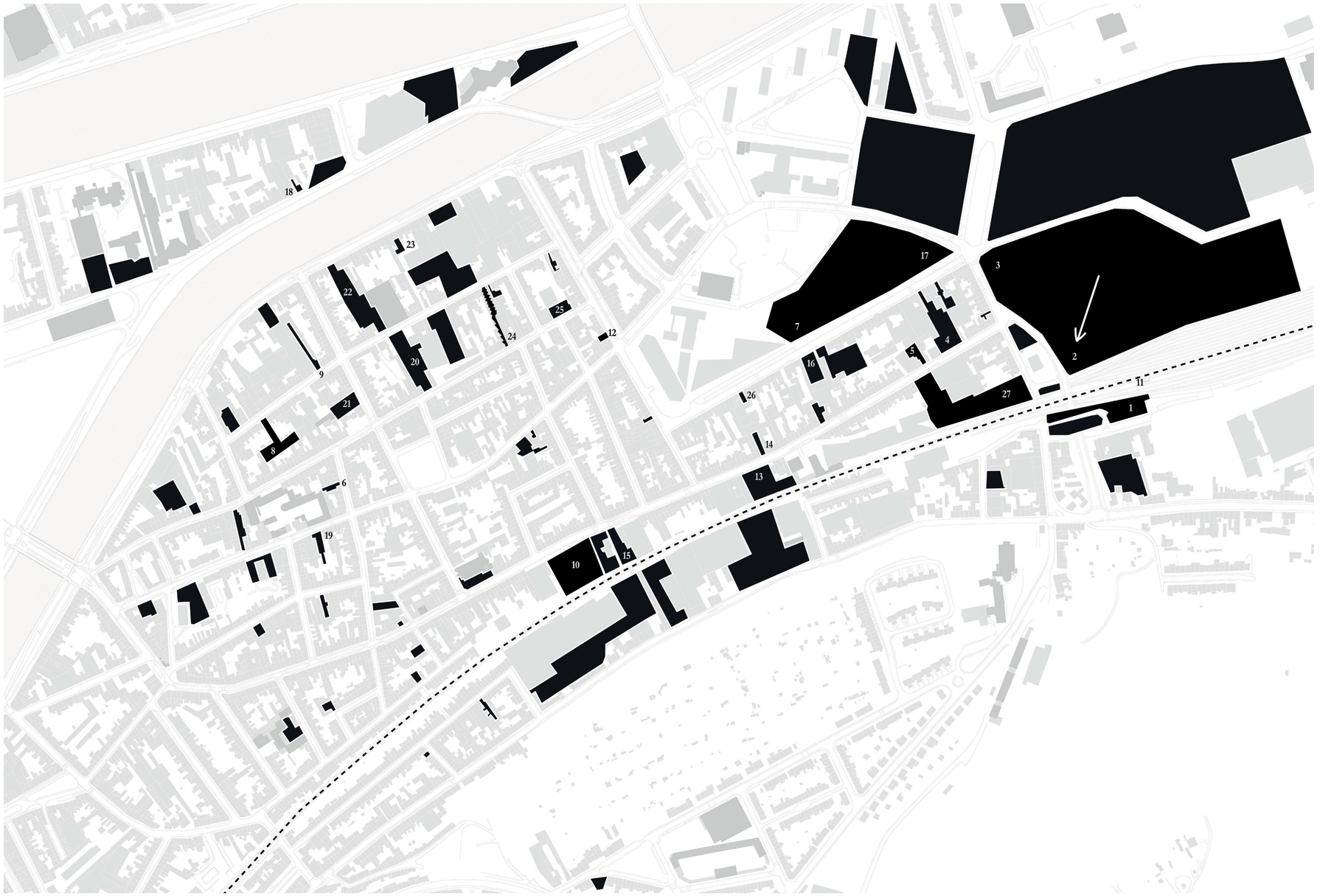
Nr. 2 - empty space inbetween tramdepot and bridge

Nr. 17 - indeterminate space on a corner



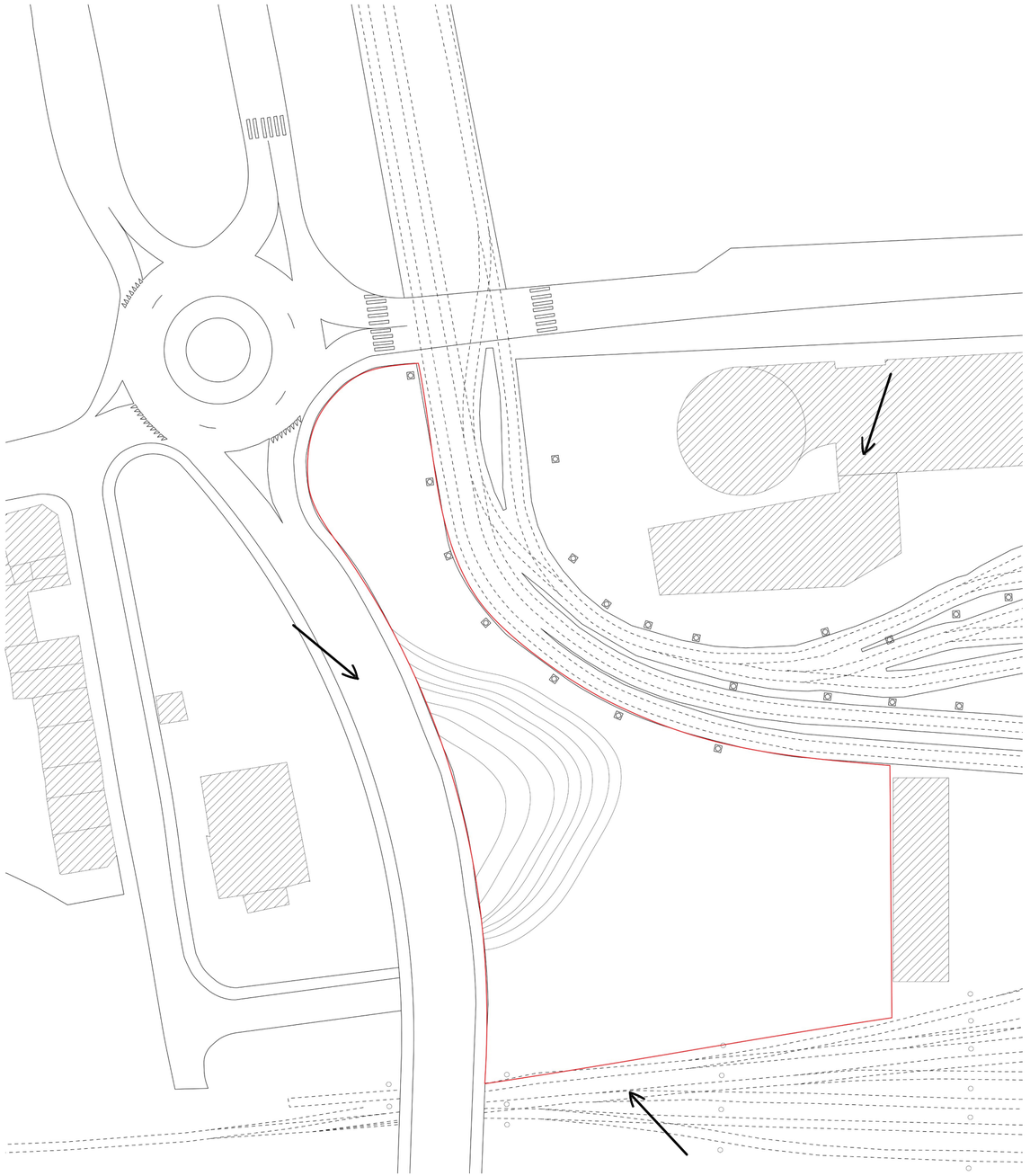
Nr. 17 - indeterminate space on a corner

Summery of analyzed spatial characteristics in Liège



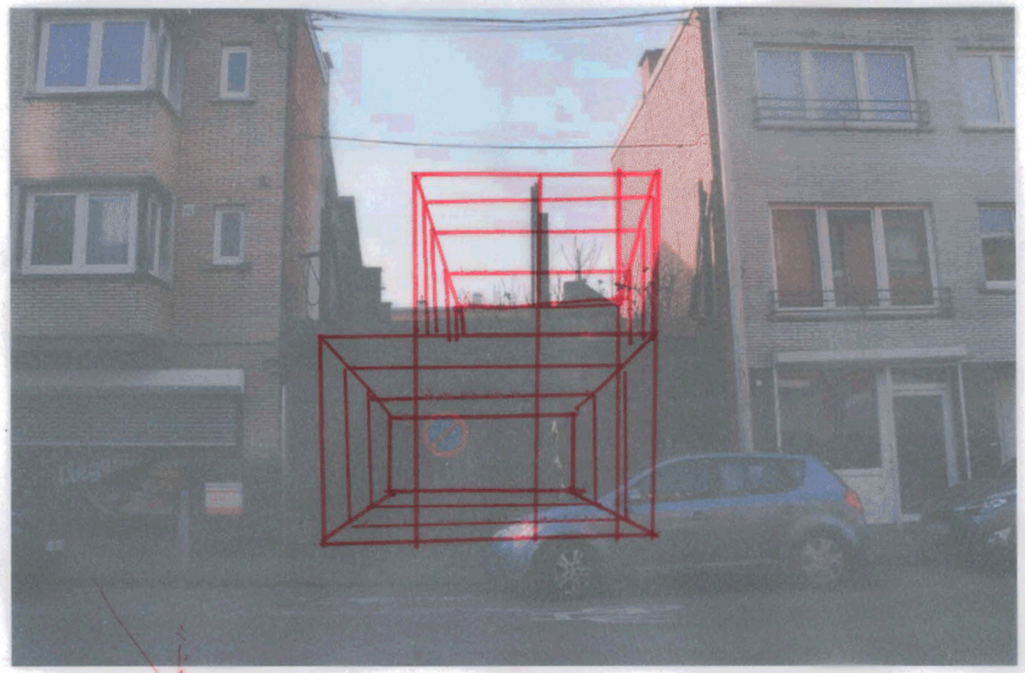
One of these sites became the graduation project site: nr 2 empty space inbetween tramdepot and bridge. A site with potential but also a lot of challenge.

1:2000



Major influences of the tram, train and bride. The site is about 4450 m2. About the size of a footbal field.

0 4.5 9

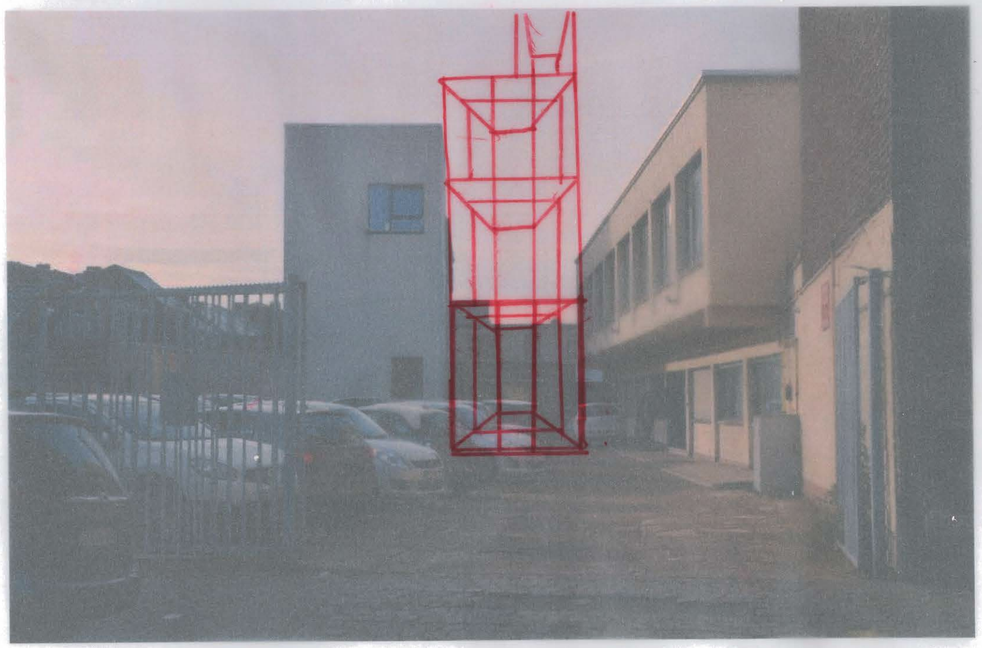


Nr. 12 - unproductive space closedoff

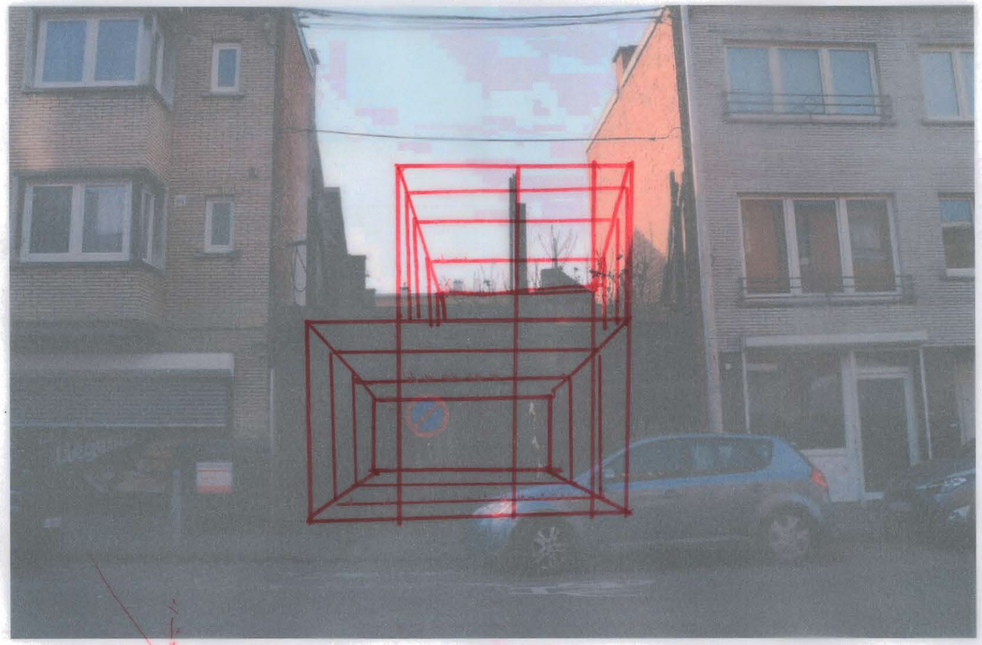
A kineograph of exploring an elastic activator -
hand-drawn wire models on chalk paper and photo presented in a flipbook

Followed by a selection of exploring an elastic activator -

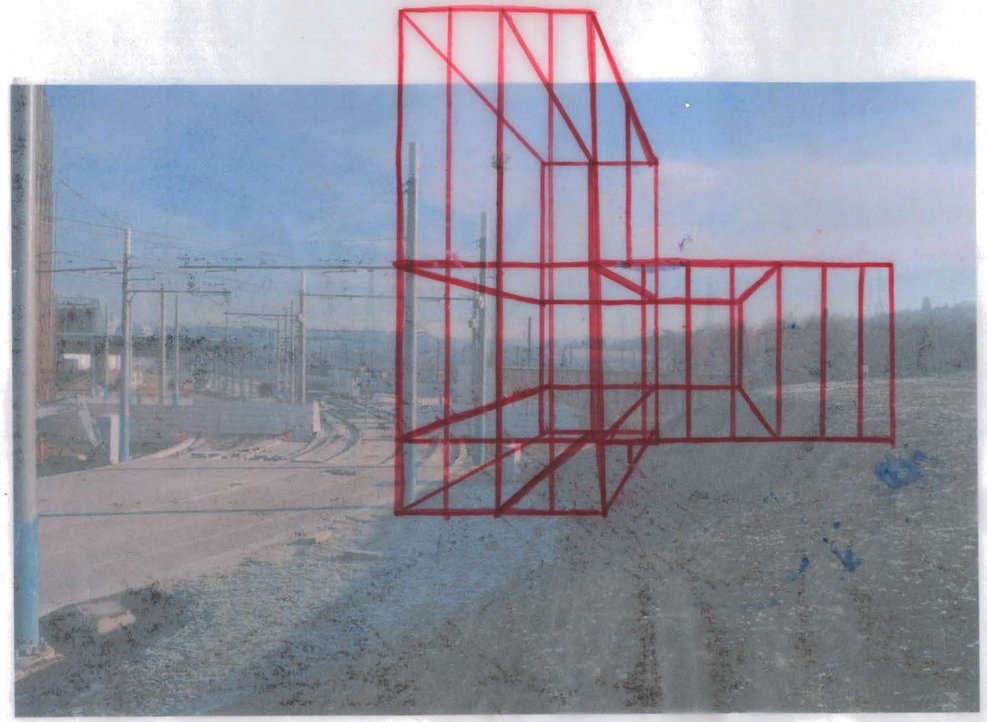
hand-drawn wire models on chalk paper and photo



Nr. 21 - (un)productive space parkinglot



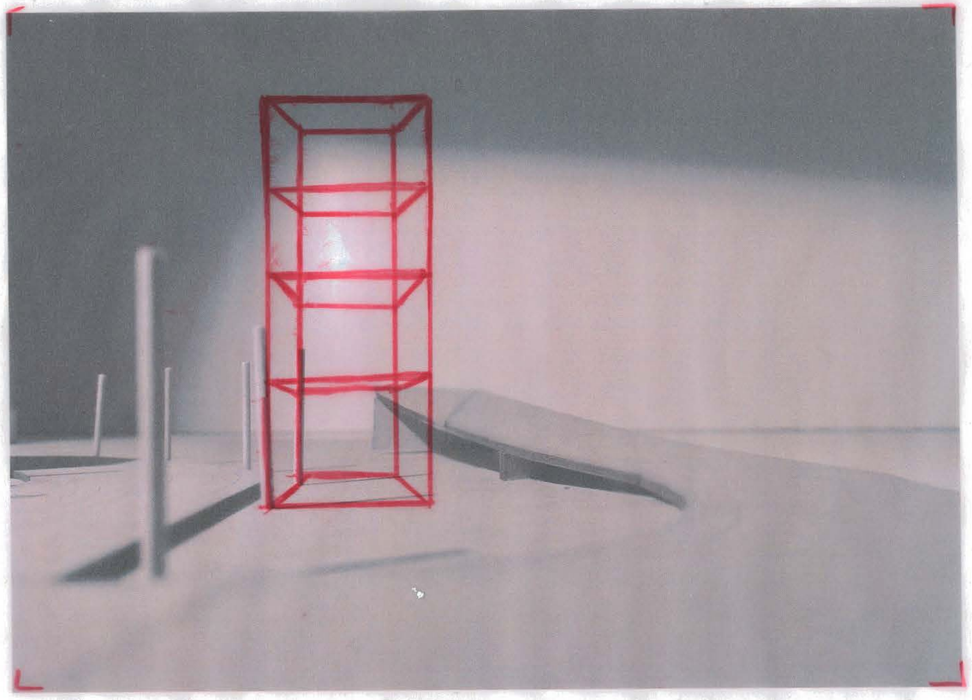
Nr. 12 - unproductive space closedoff

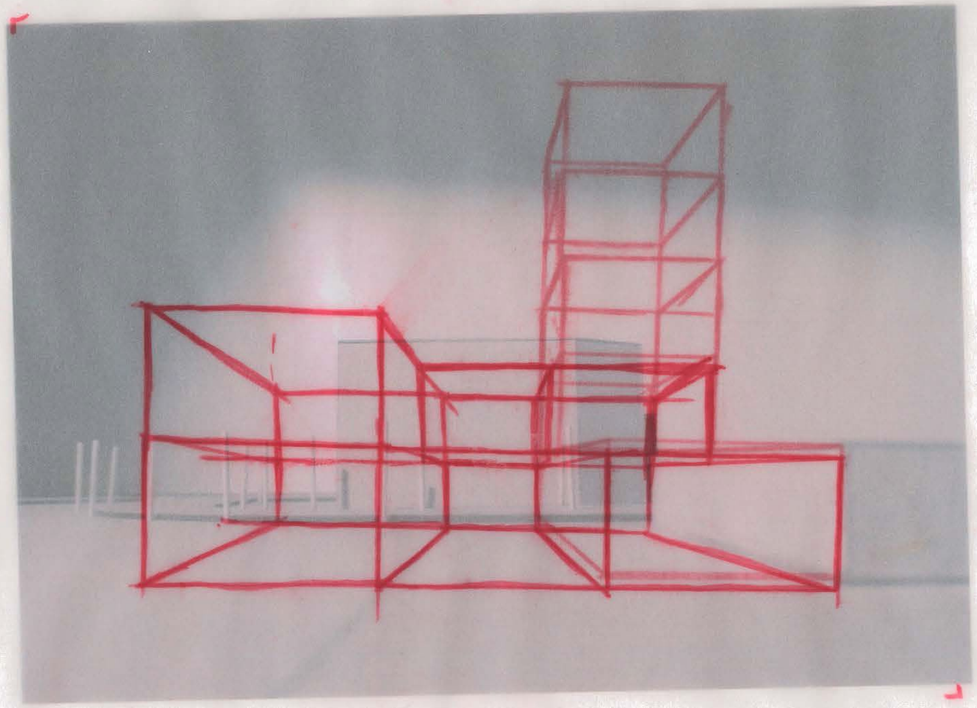


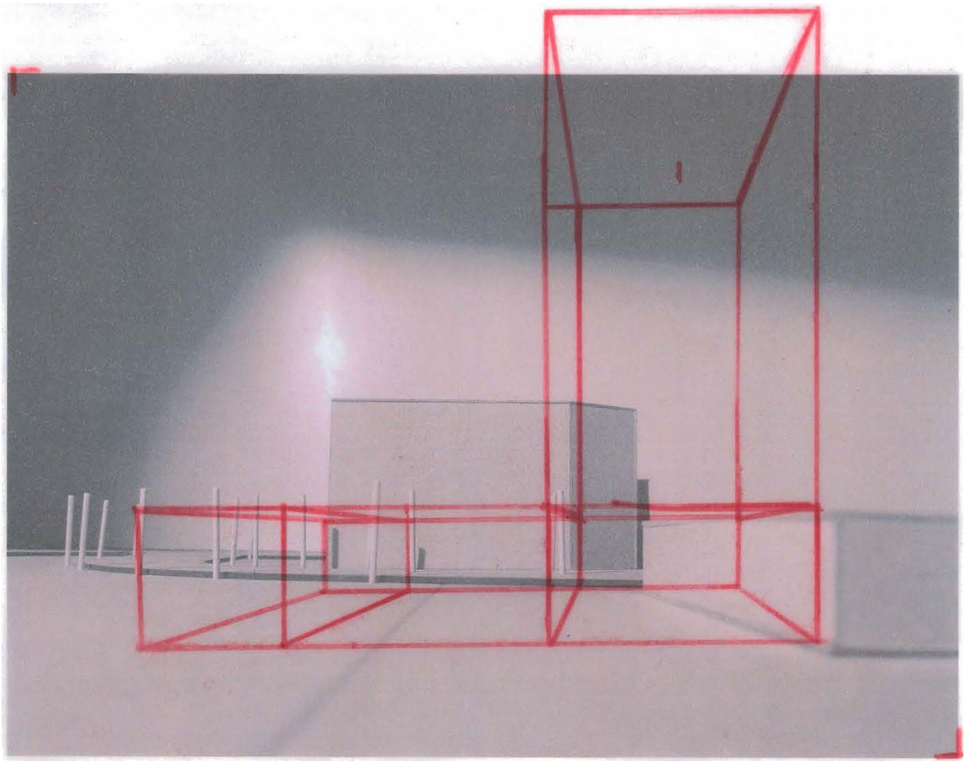
Nr. 2 - empty space inbetween tramdepot and bridge

What culminated in a follow-up of a 1:200 model of the site -

a selection of where hand-drawn wire models could be fitted into the site

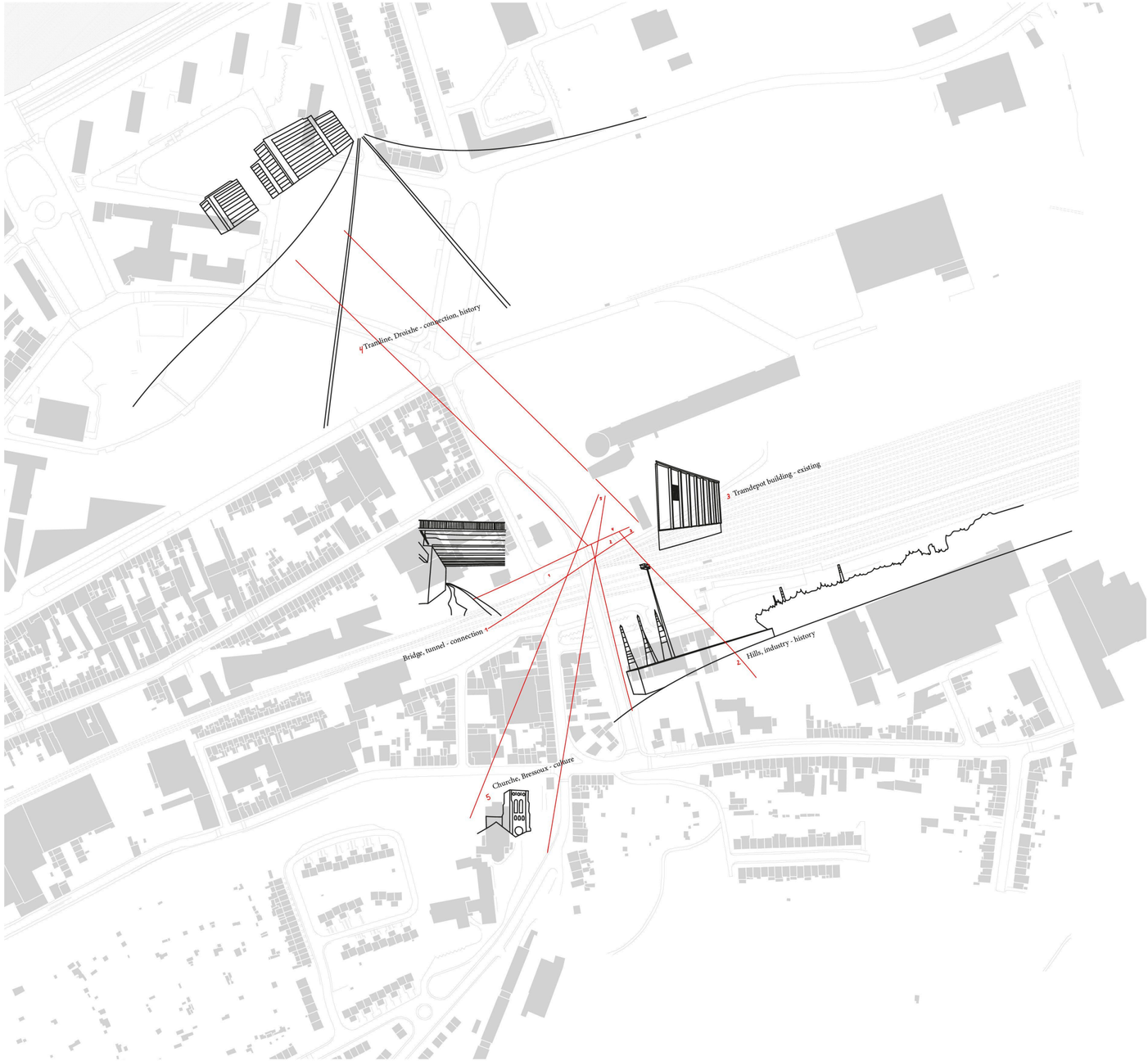






As I was drawing :

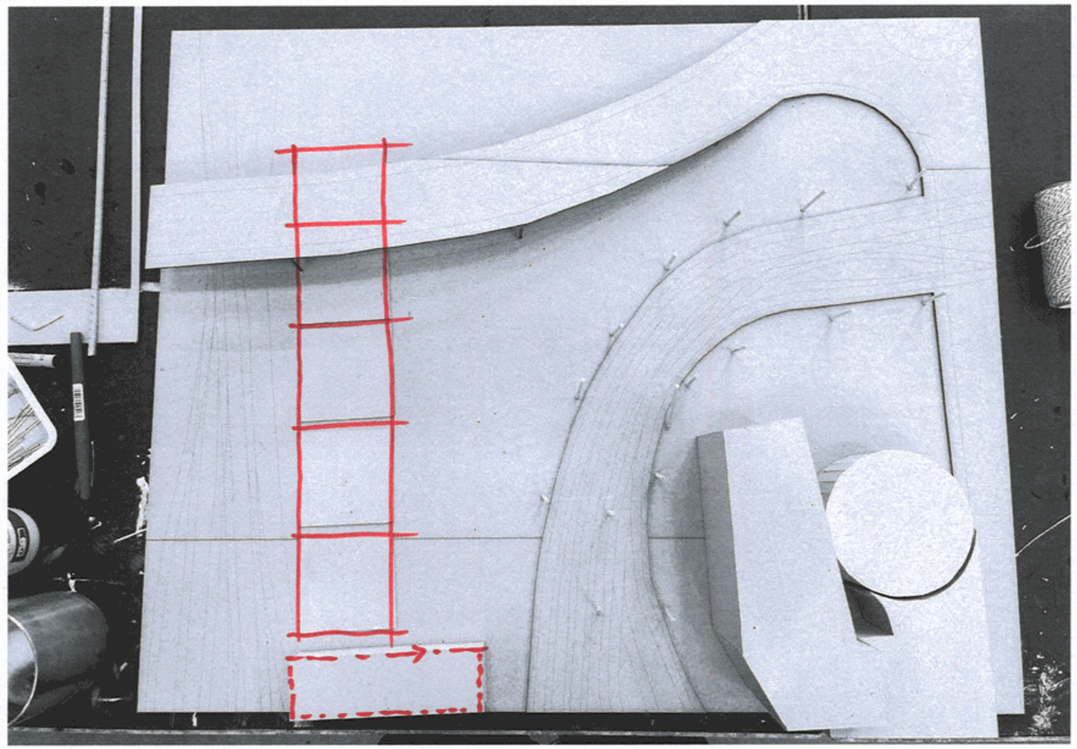
I felt two elements having influence on these grids; physical elements, and non-physical.
My intuition.



(Asking the question "What did I see on sight, which could be an important visual in the design?") Sight lines in the **Fluid space**

Going from an red wire model to something with dimensions -

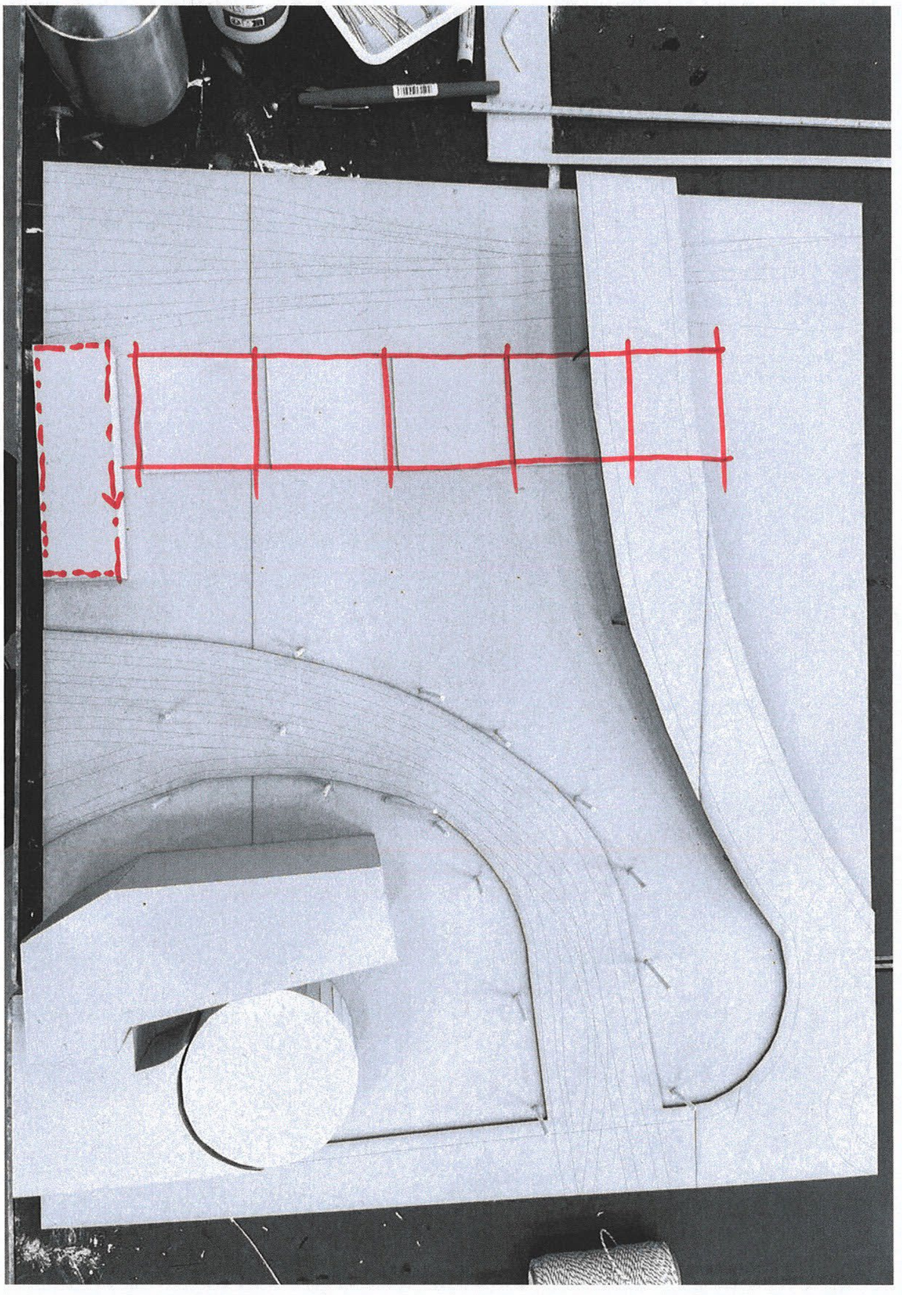
2D grid test to help grasp proportions, depth and the influence of the context on the site.

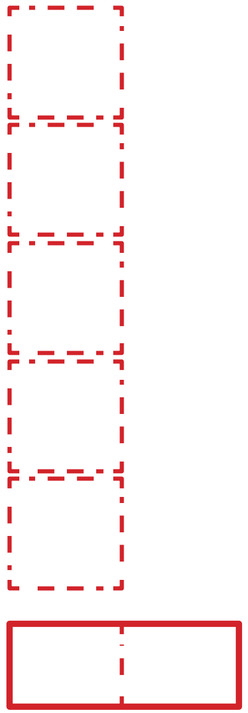


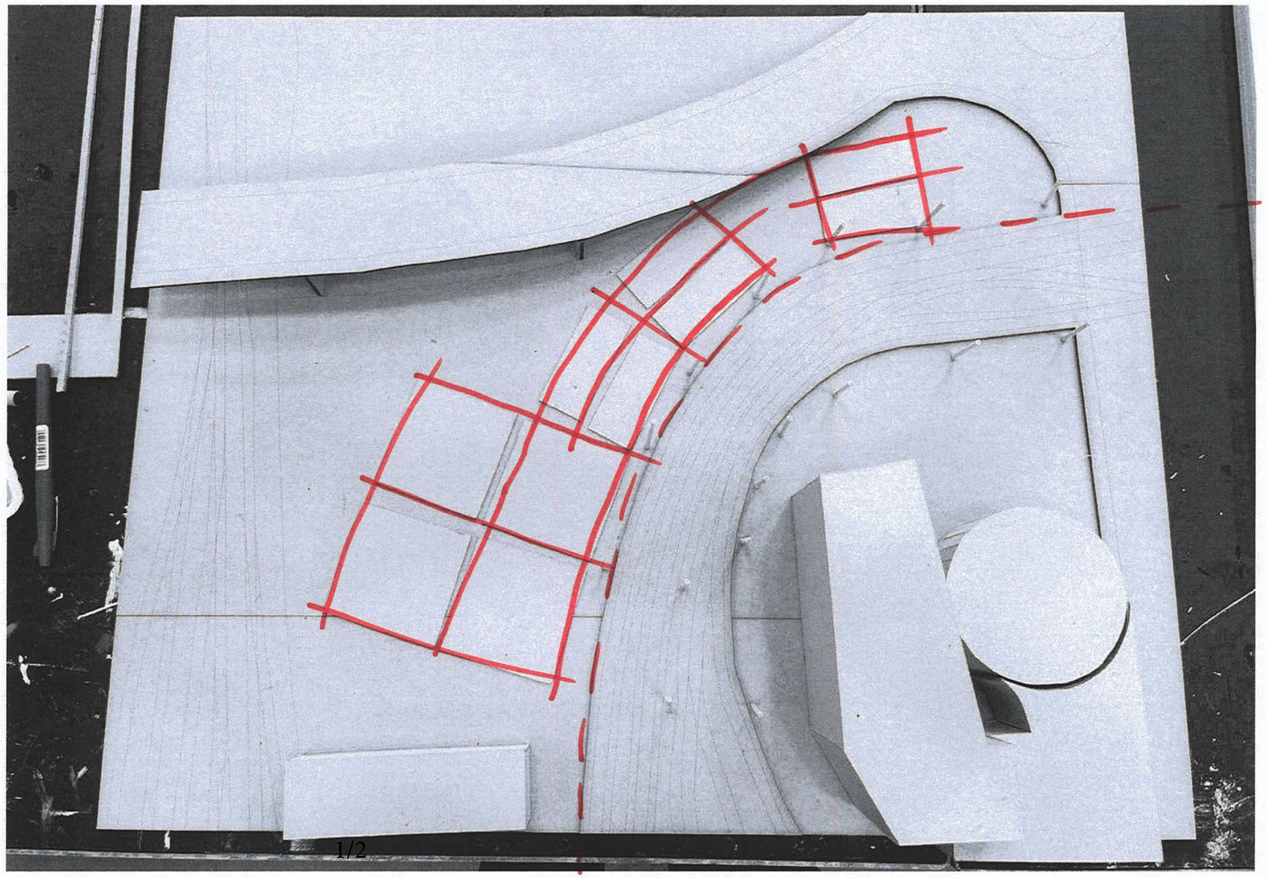
2D grid study

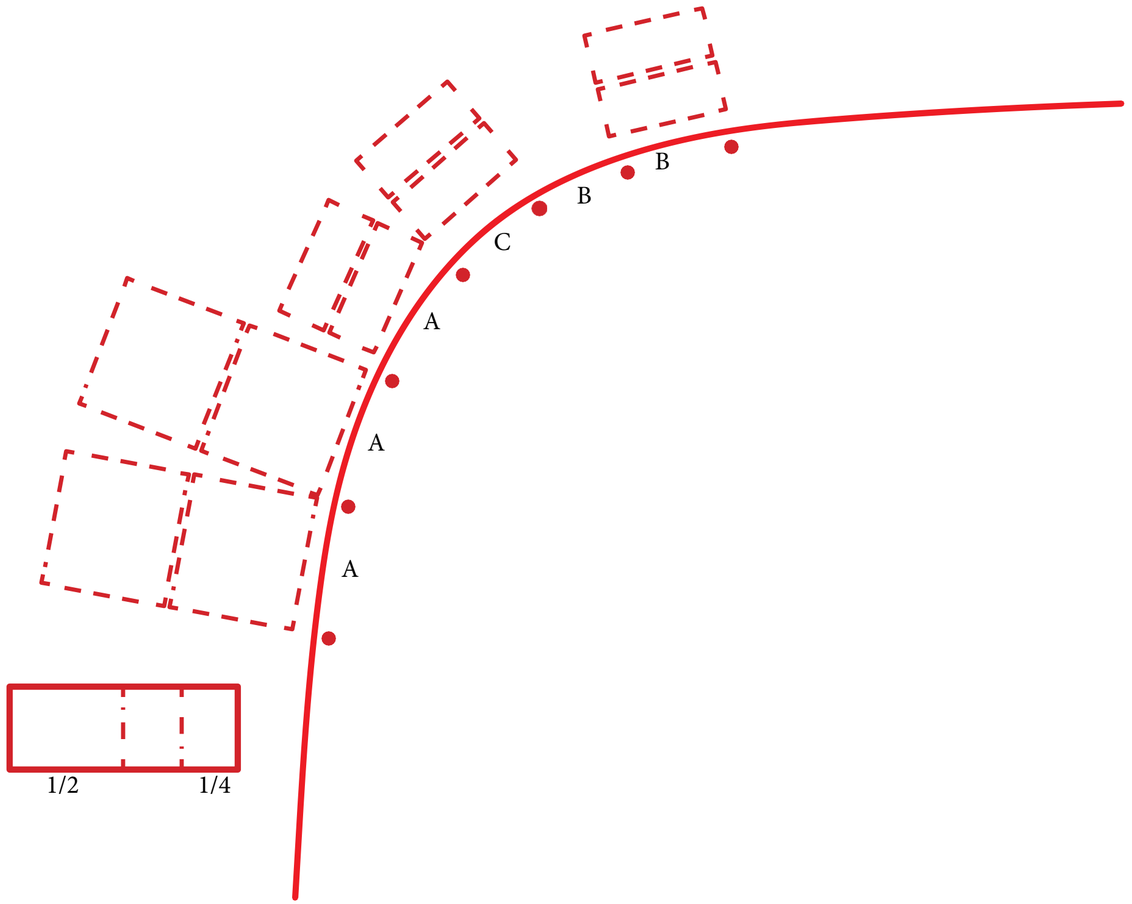
A kineograph of an intuitive grid -
hand-drawn and physically formed cards and blocks grids on photos presented in a flipbook

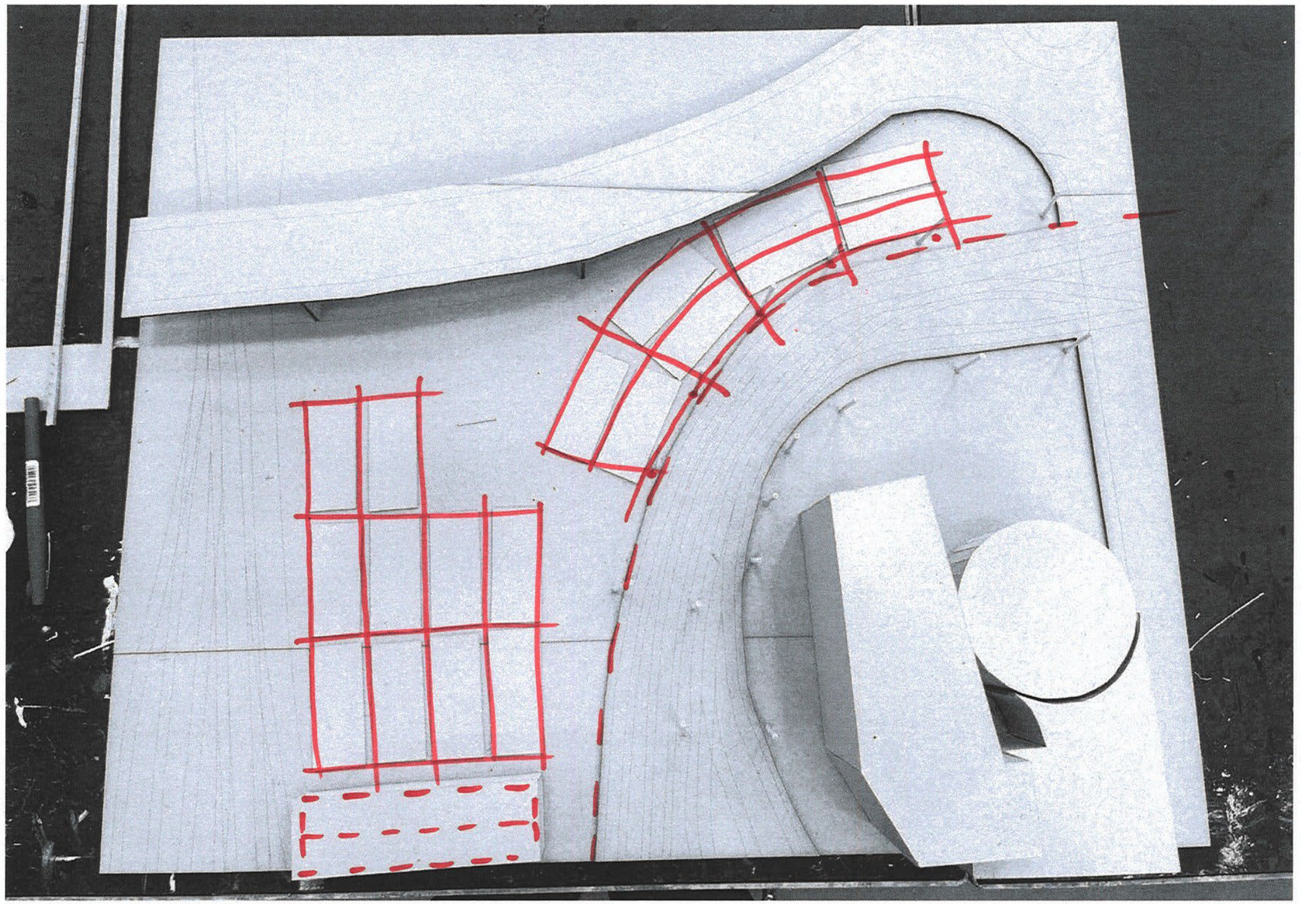
Followed by a selection of introducing an elastic activator -
representing potential proportions to form a grid

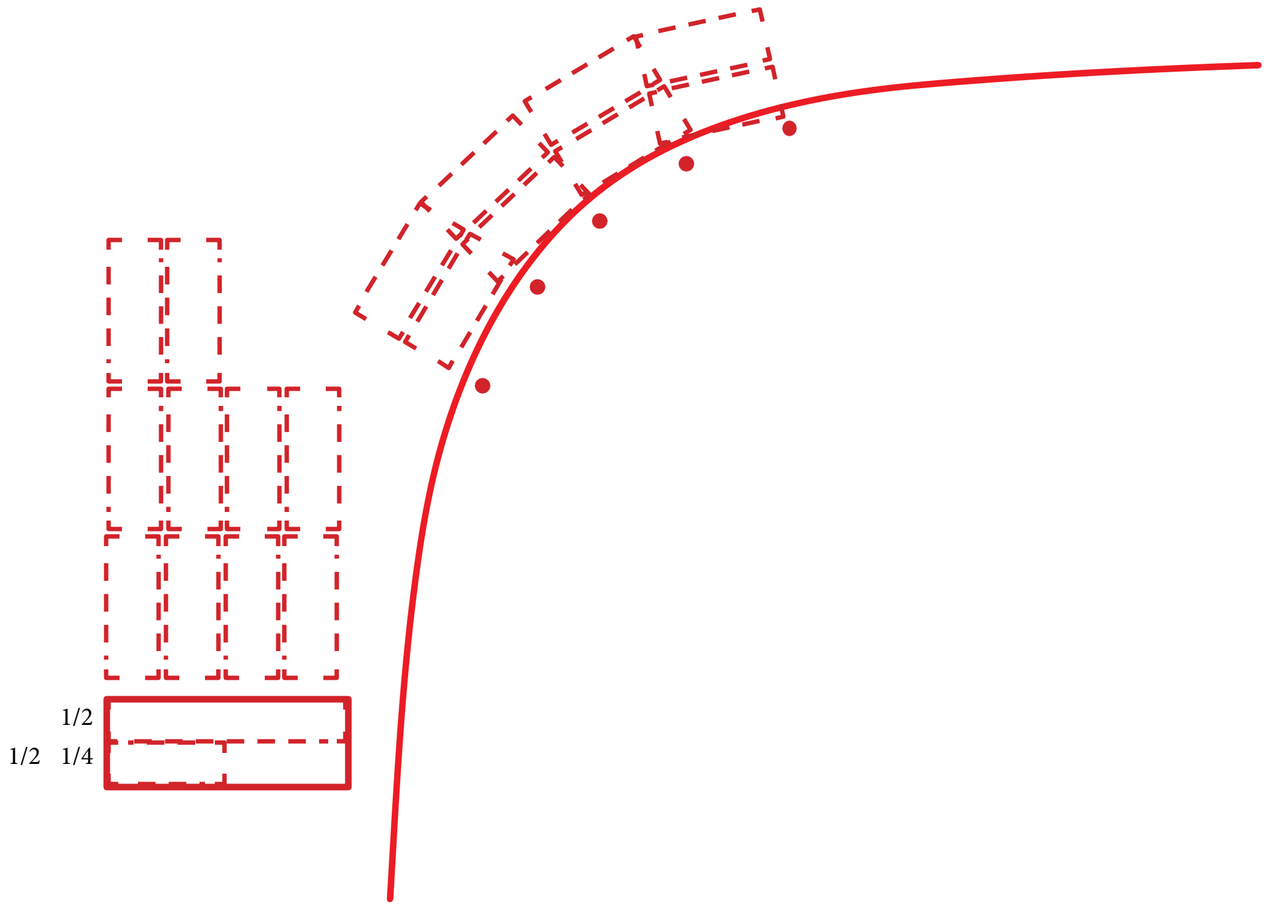


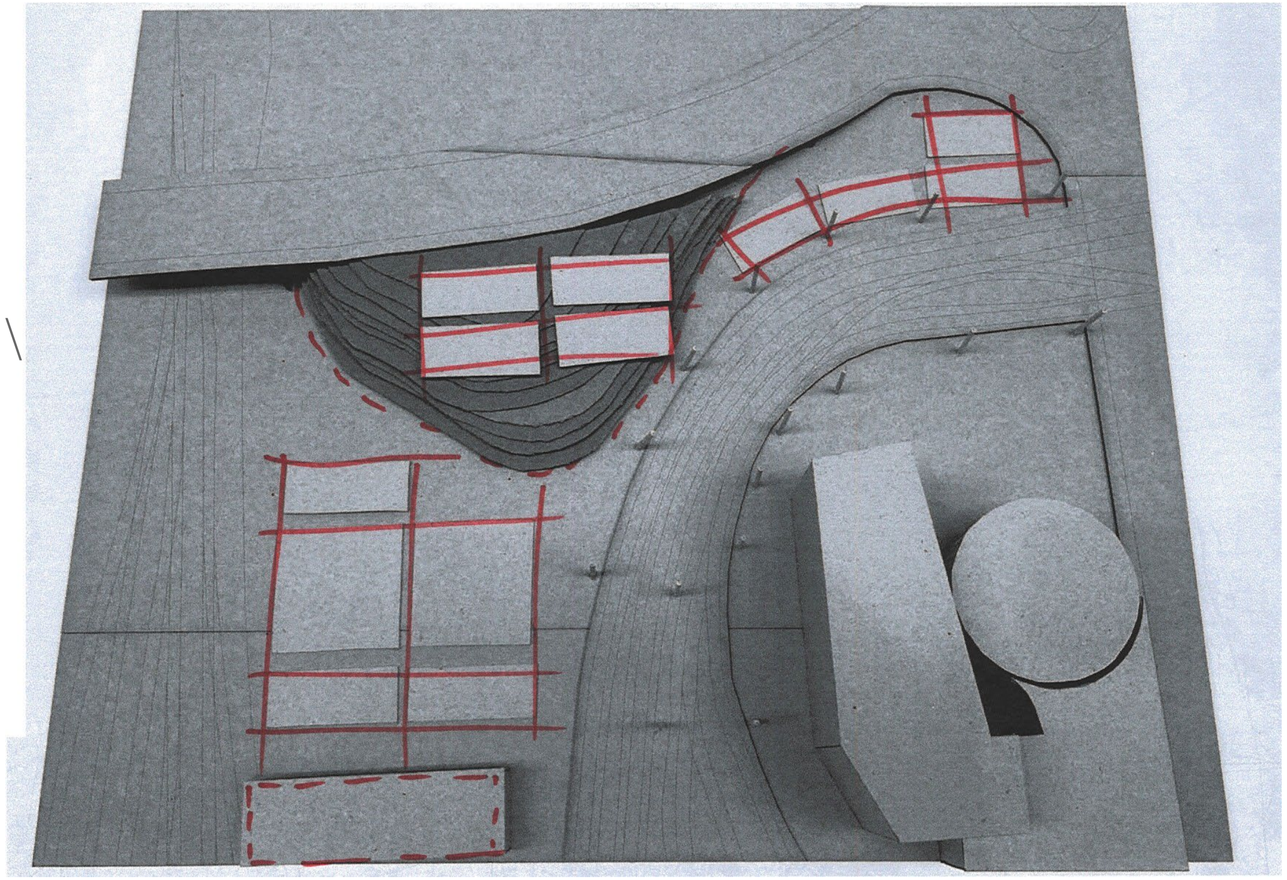


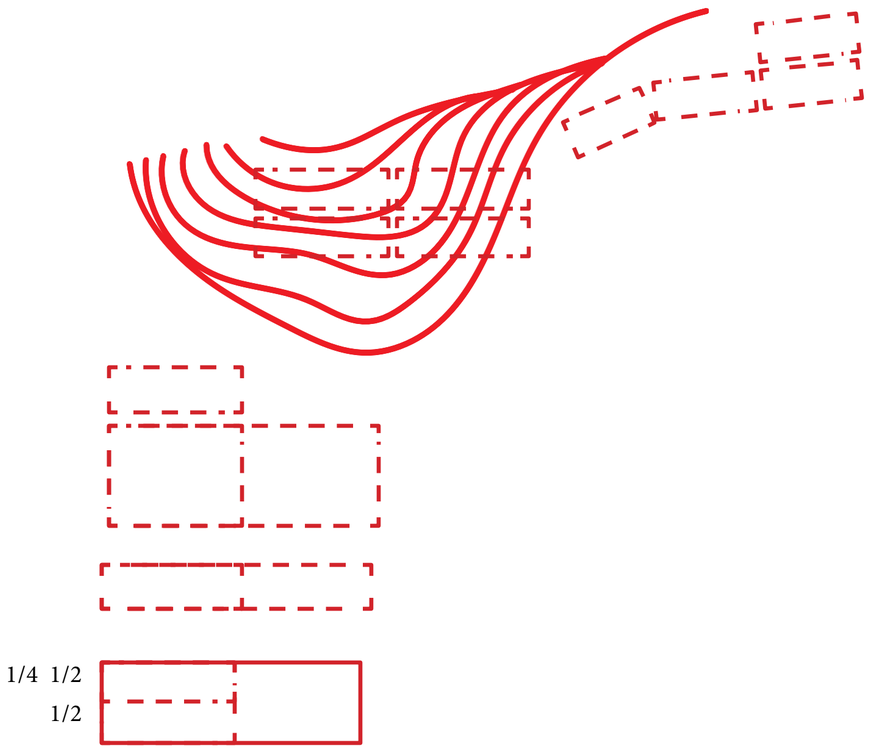


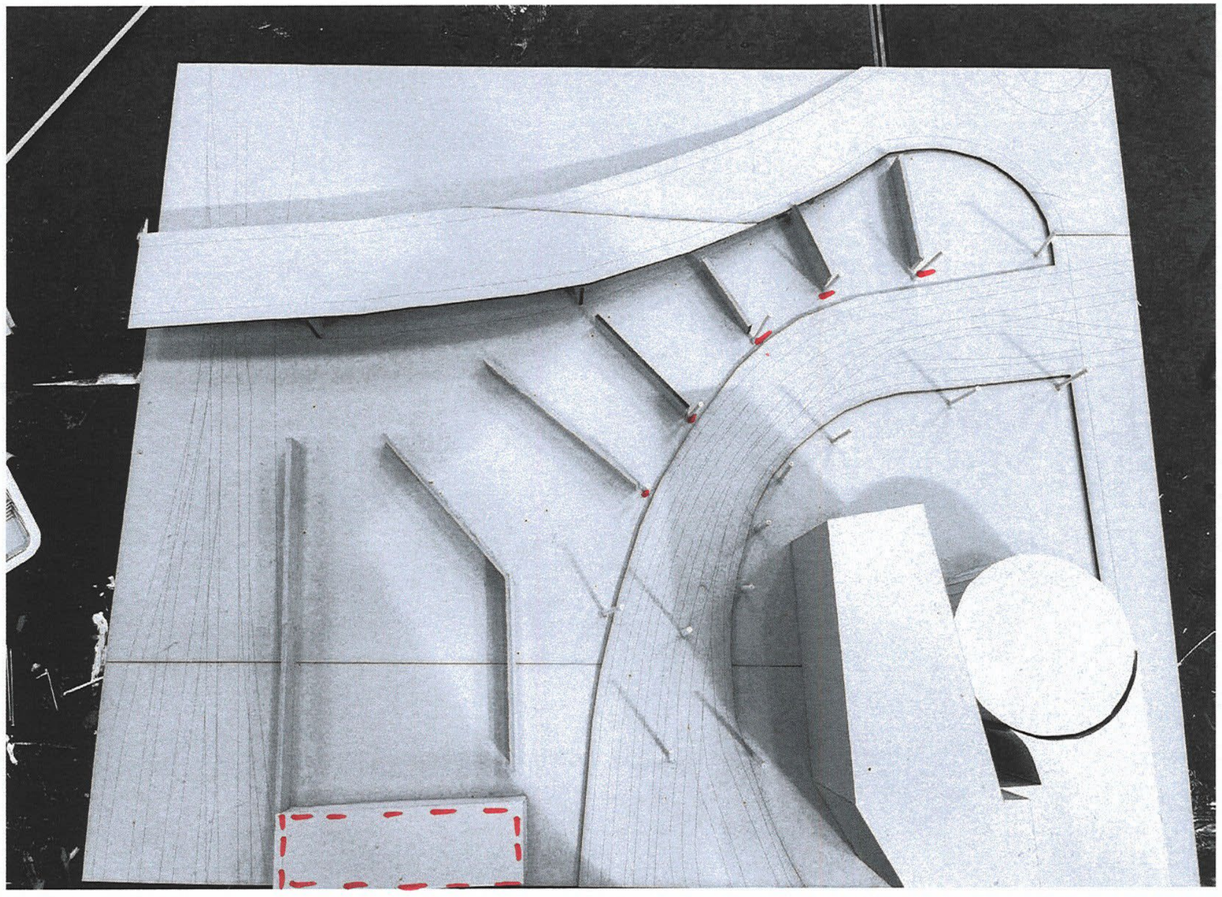

A
A
A
C
B
B
1/2
1/4

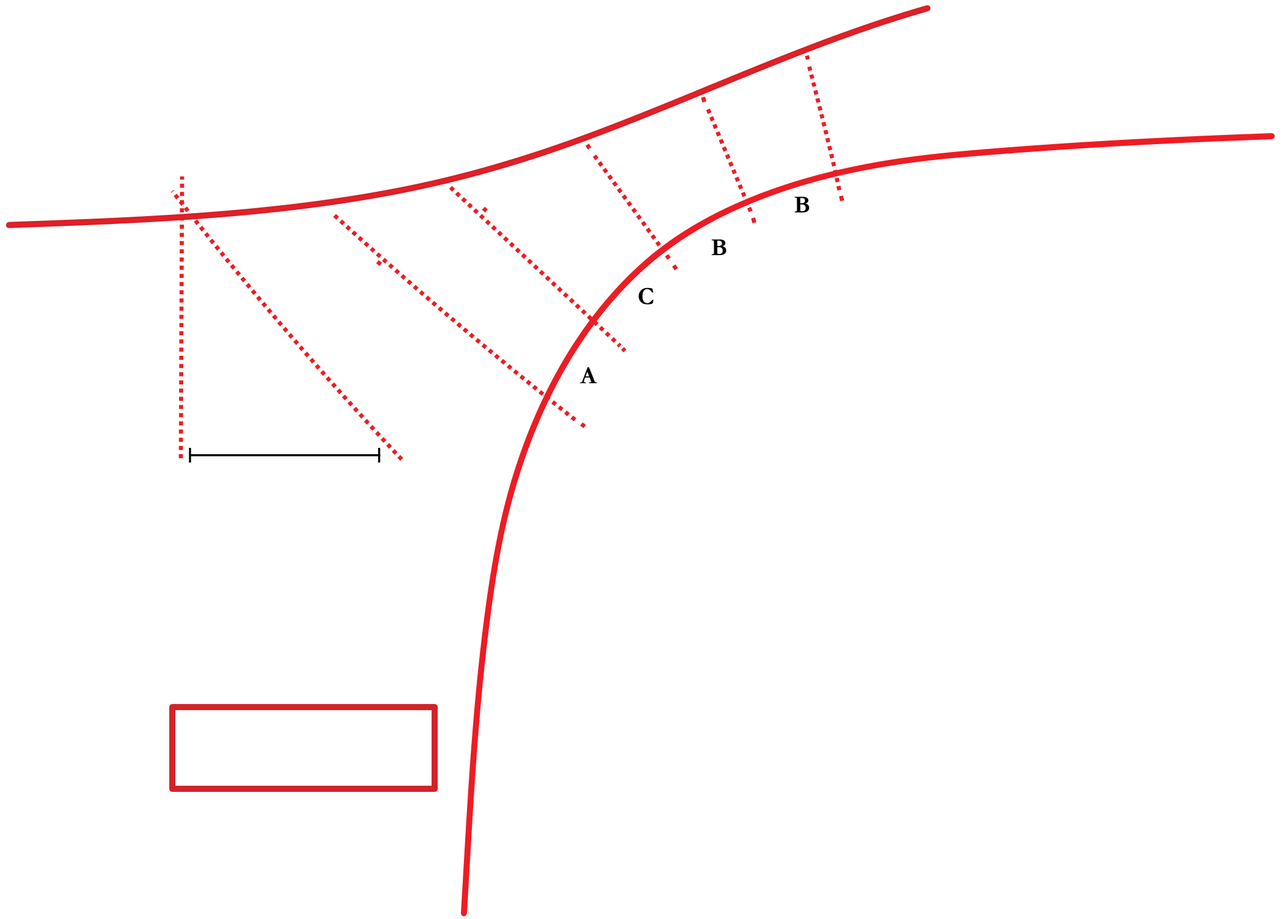


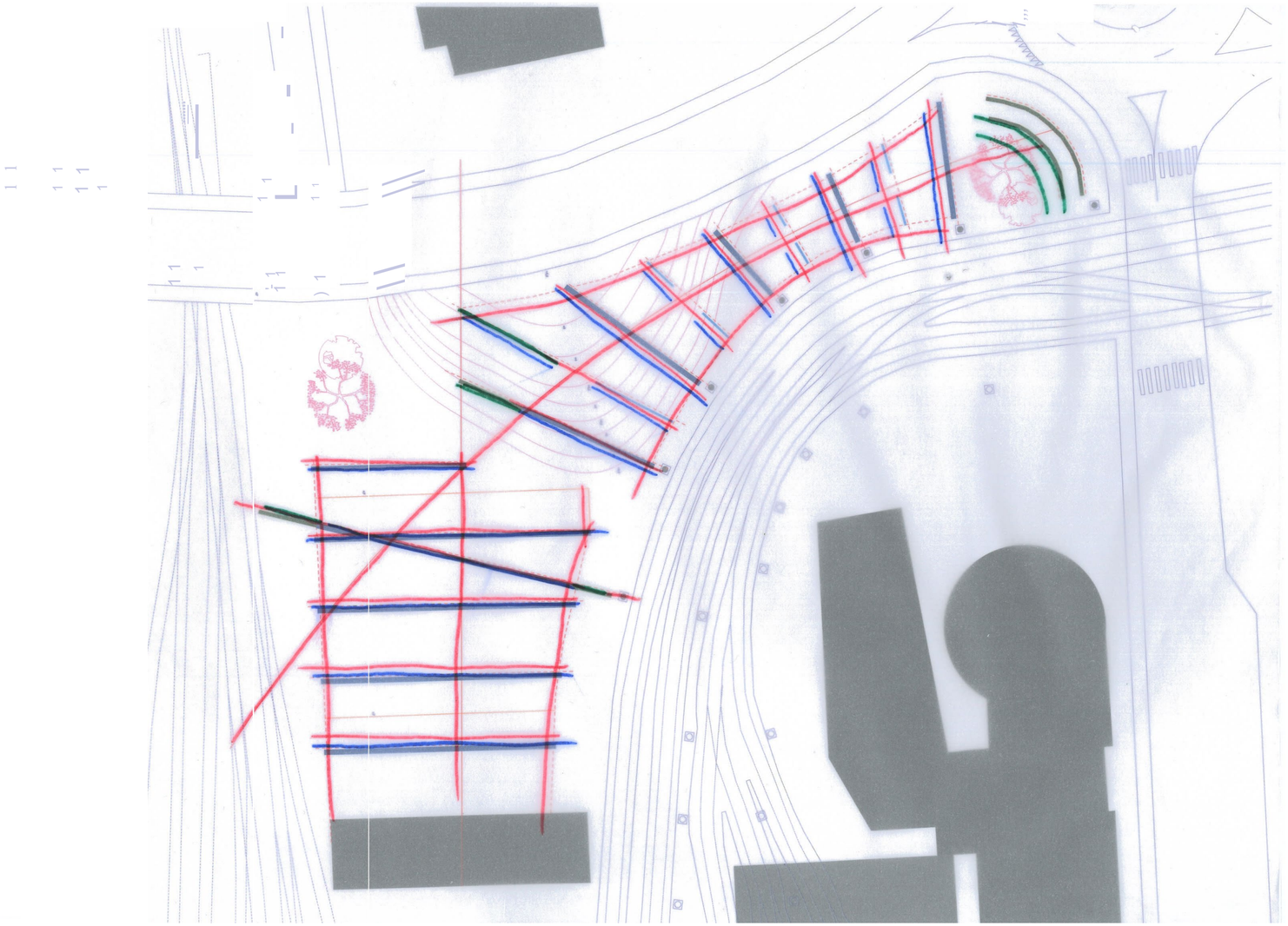

1/2
1/2
1/4

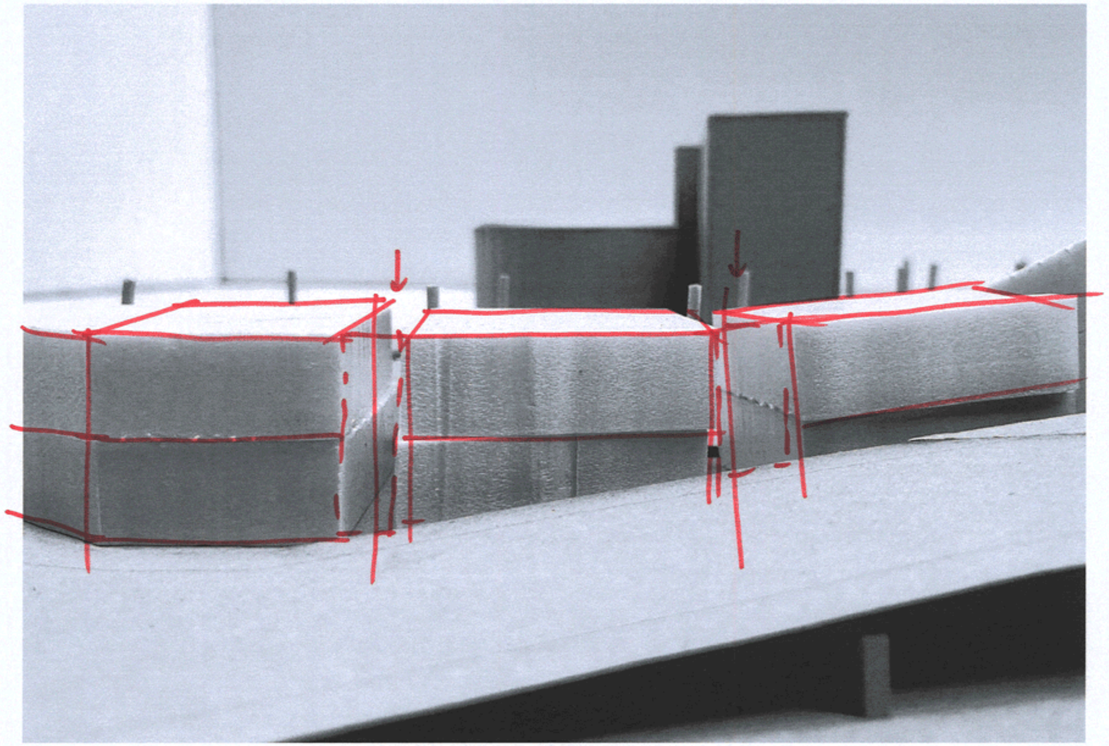



1/4 1/2
1/2



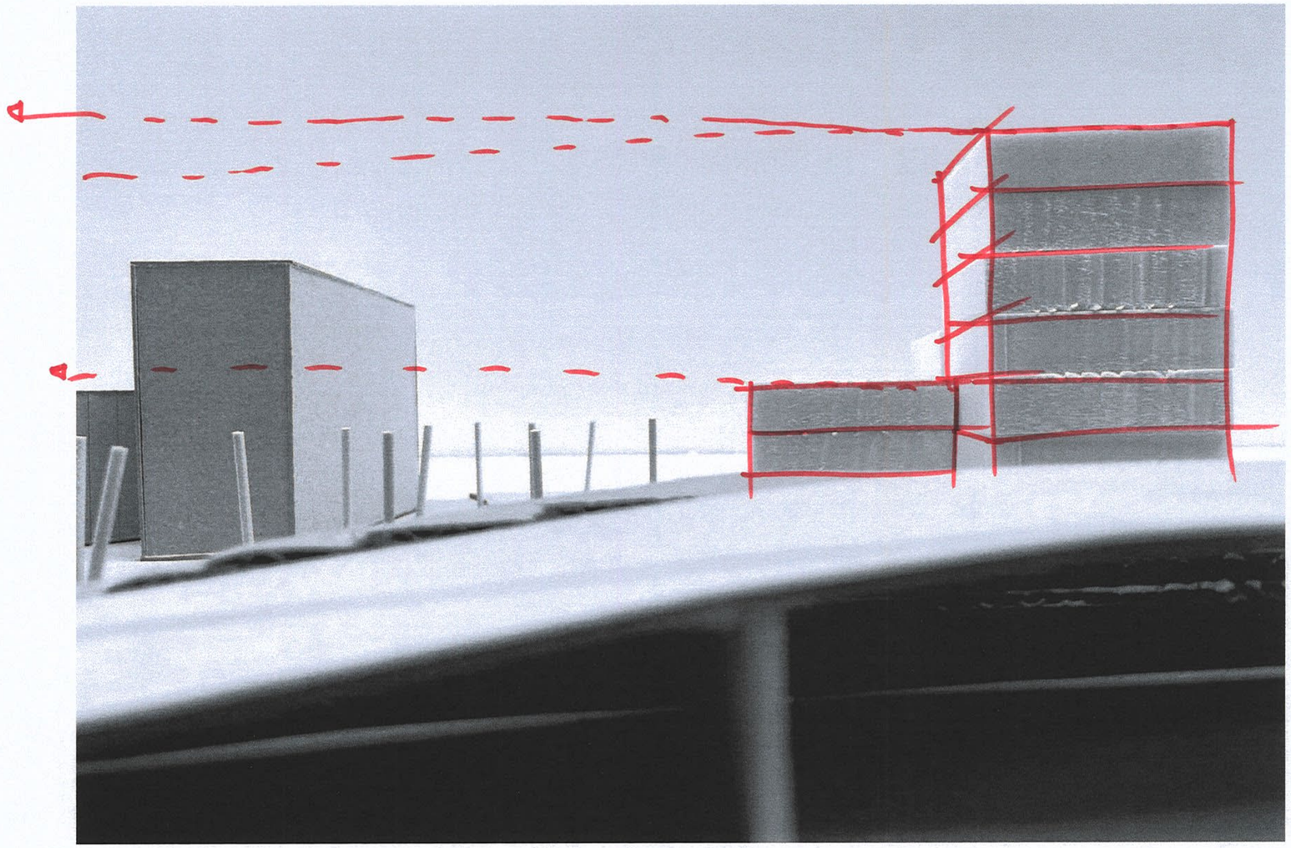

B
B
C
A



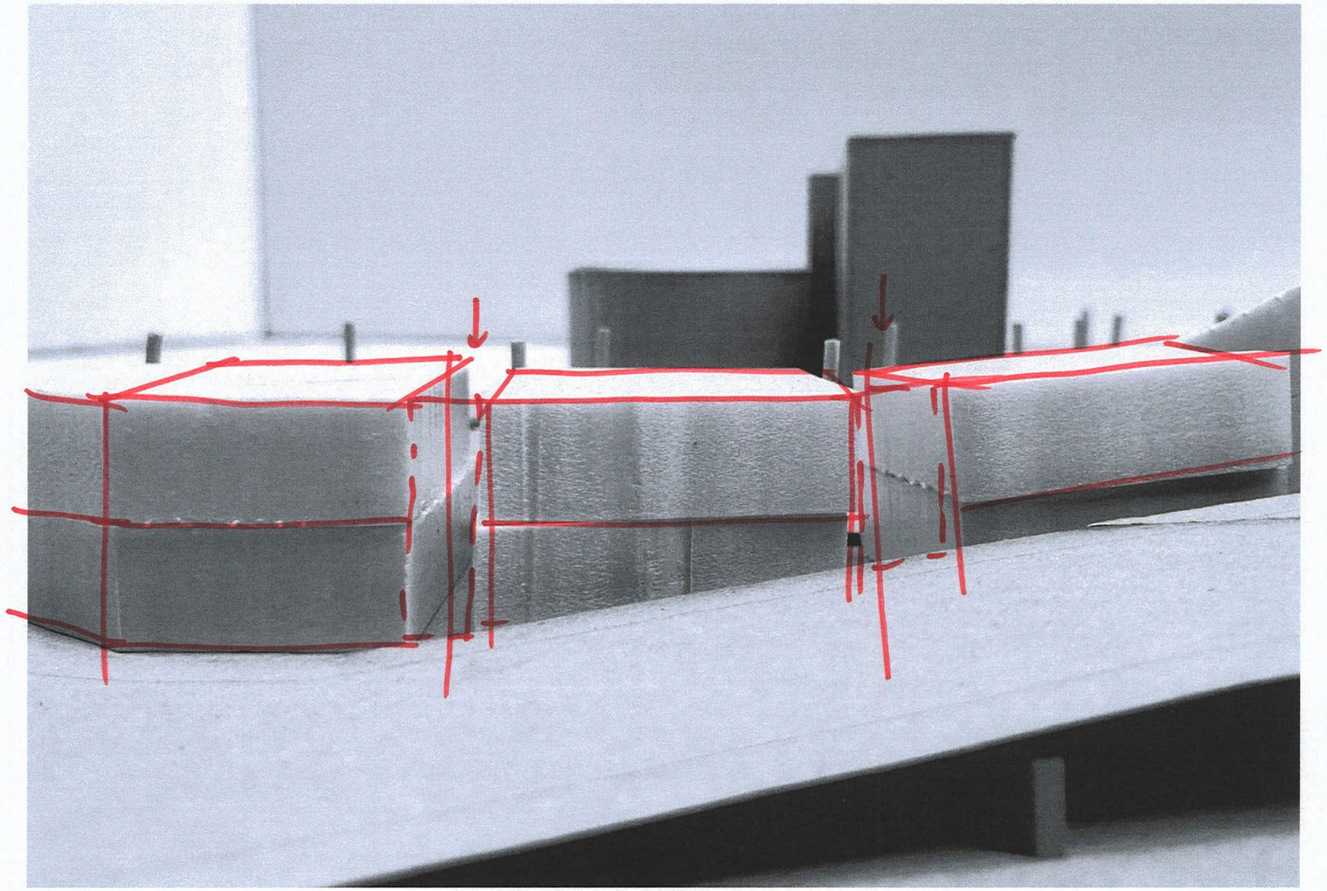


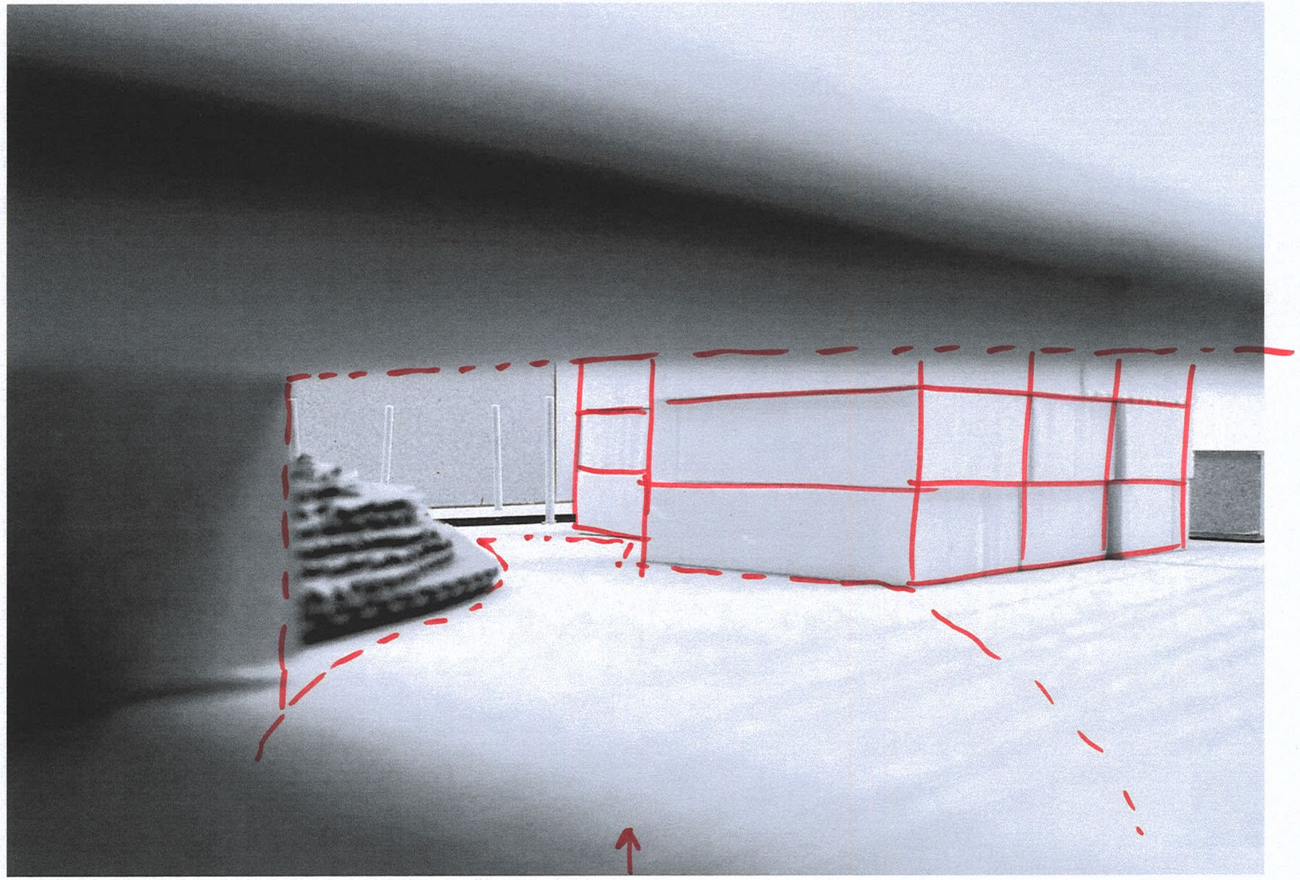
Influence on existing

A kineograph of finding forms -
a 3D study on how the form of physical and non-physical elements effect a building design



Influence on existing





Influence on existing

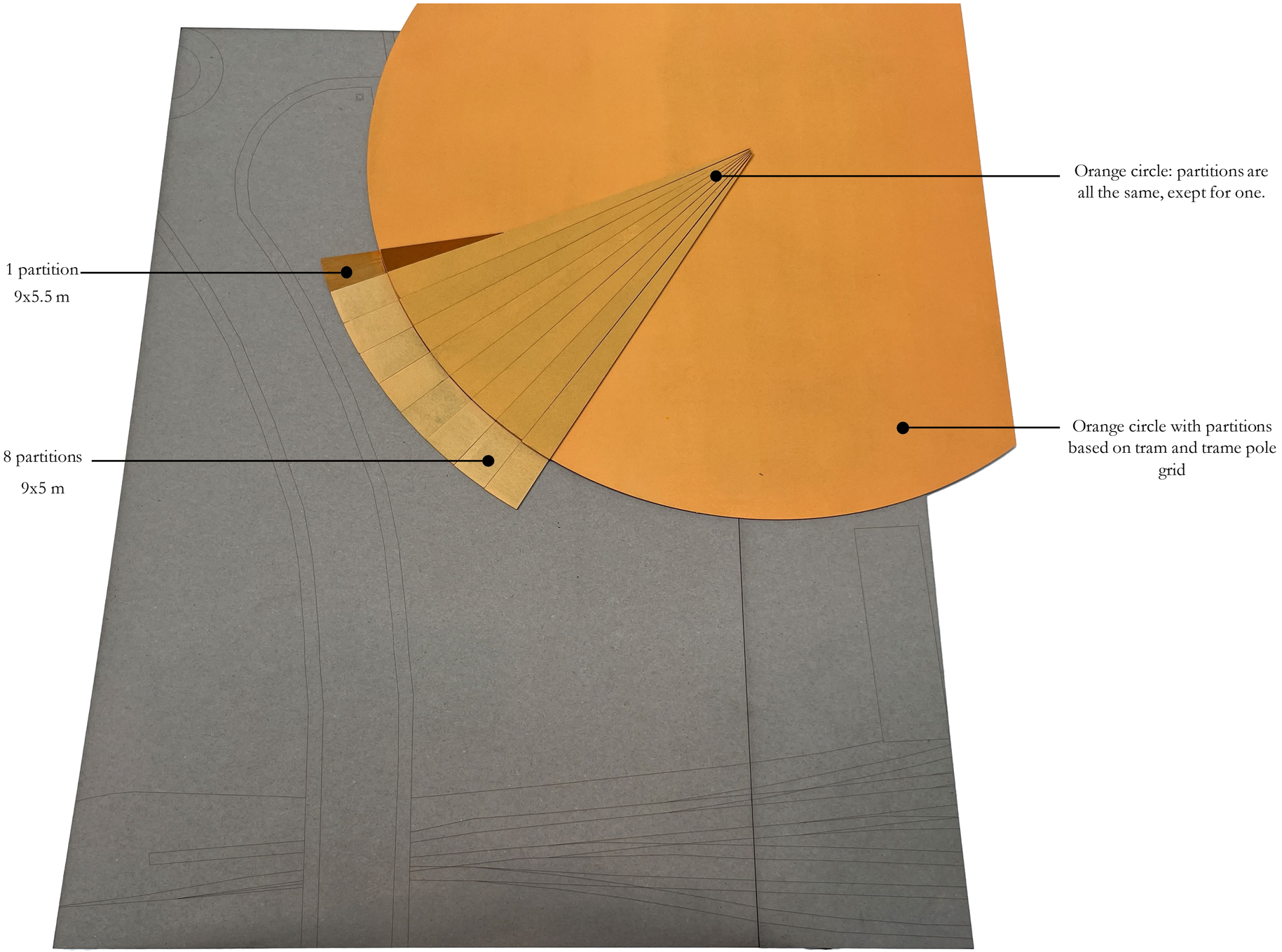
After all this research and designing the goal became more and more clear:

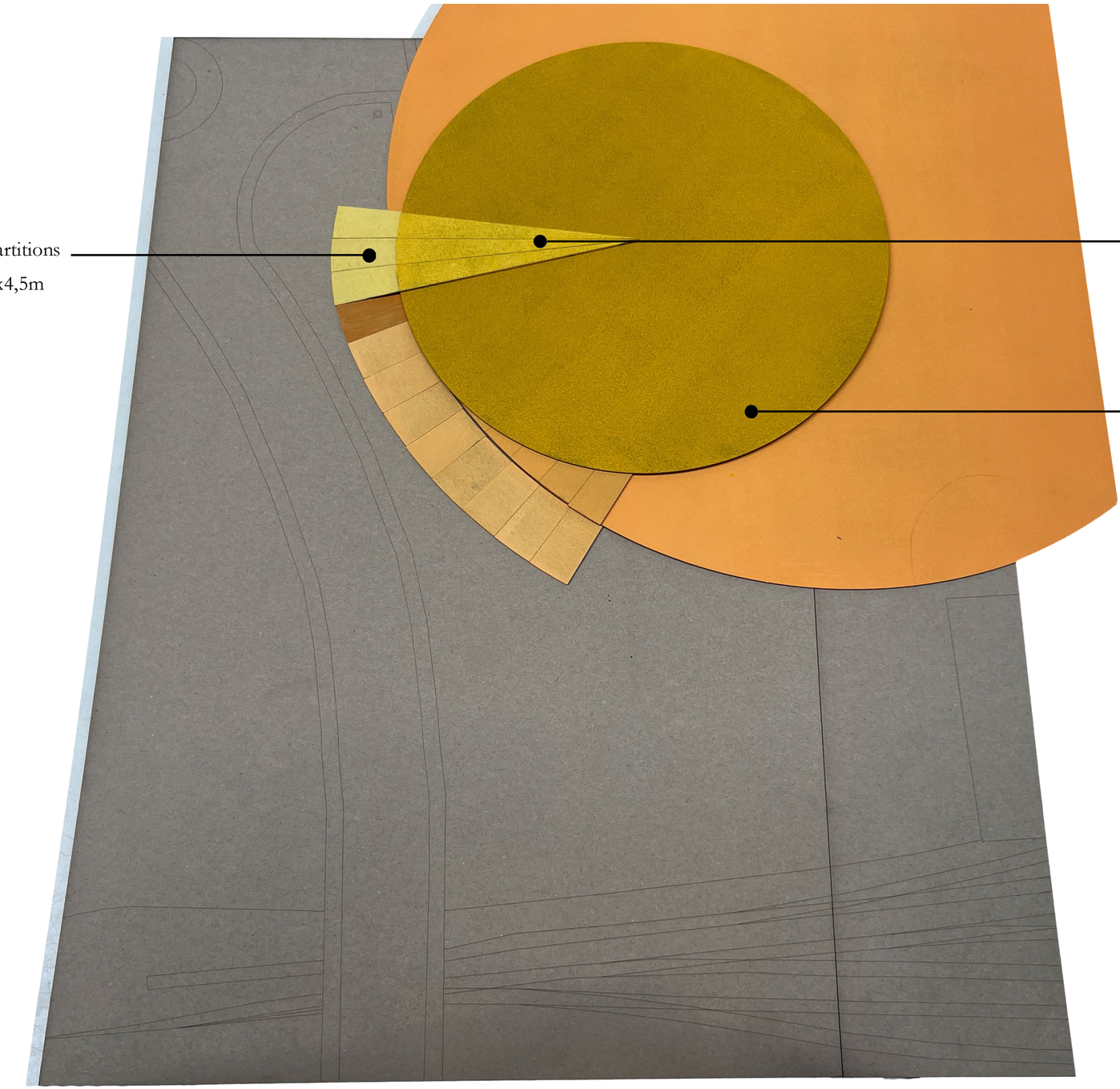
Creating architecture that harmonizes with the context (surroundings of the site), but to accomplish it needed to have the right proportions to relate to the site and select the minimum and maximum sizes of the grid.

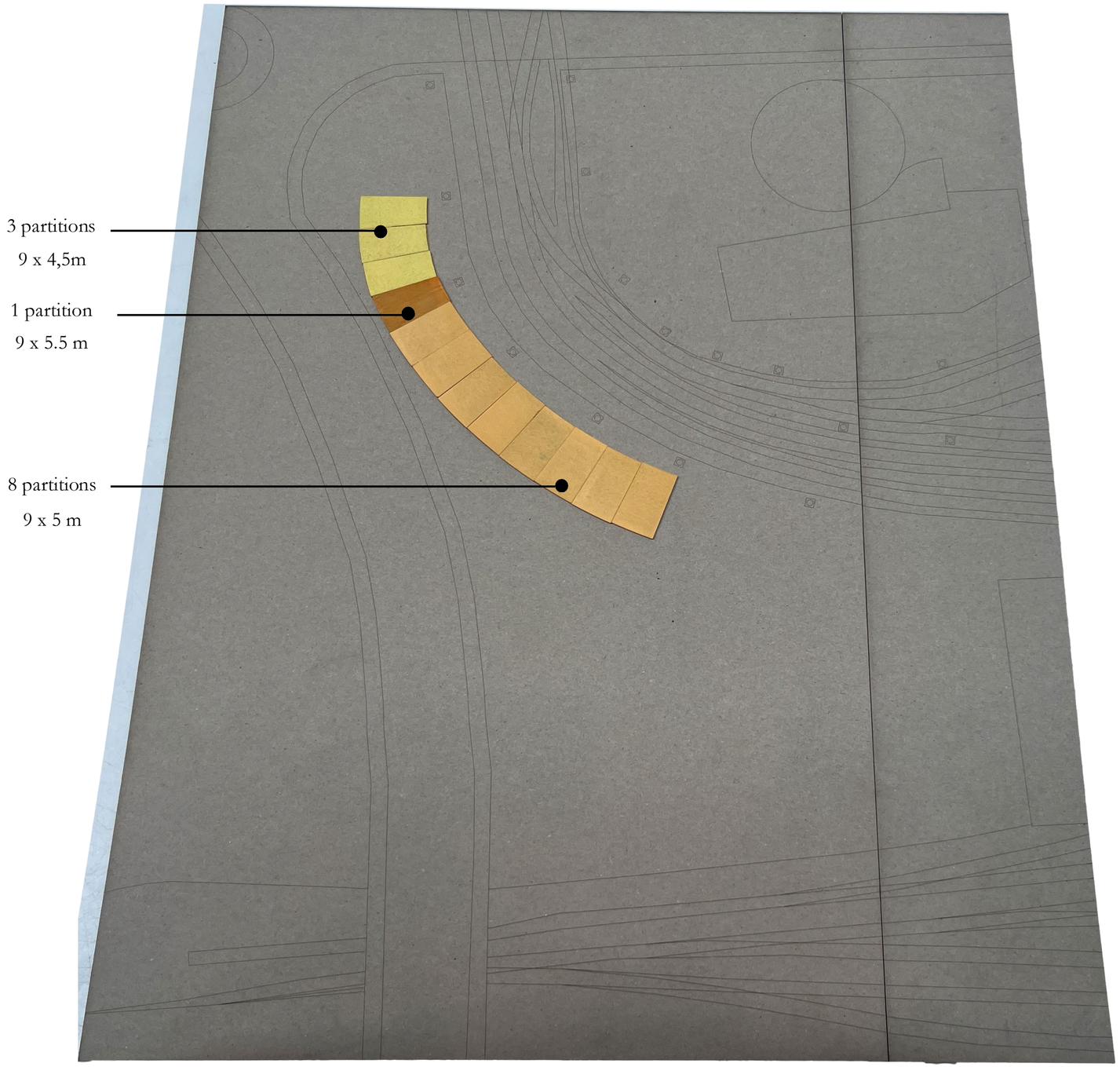
Going back to the sentence I started this presentation with:

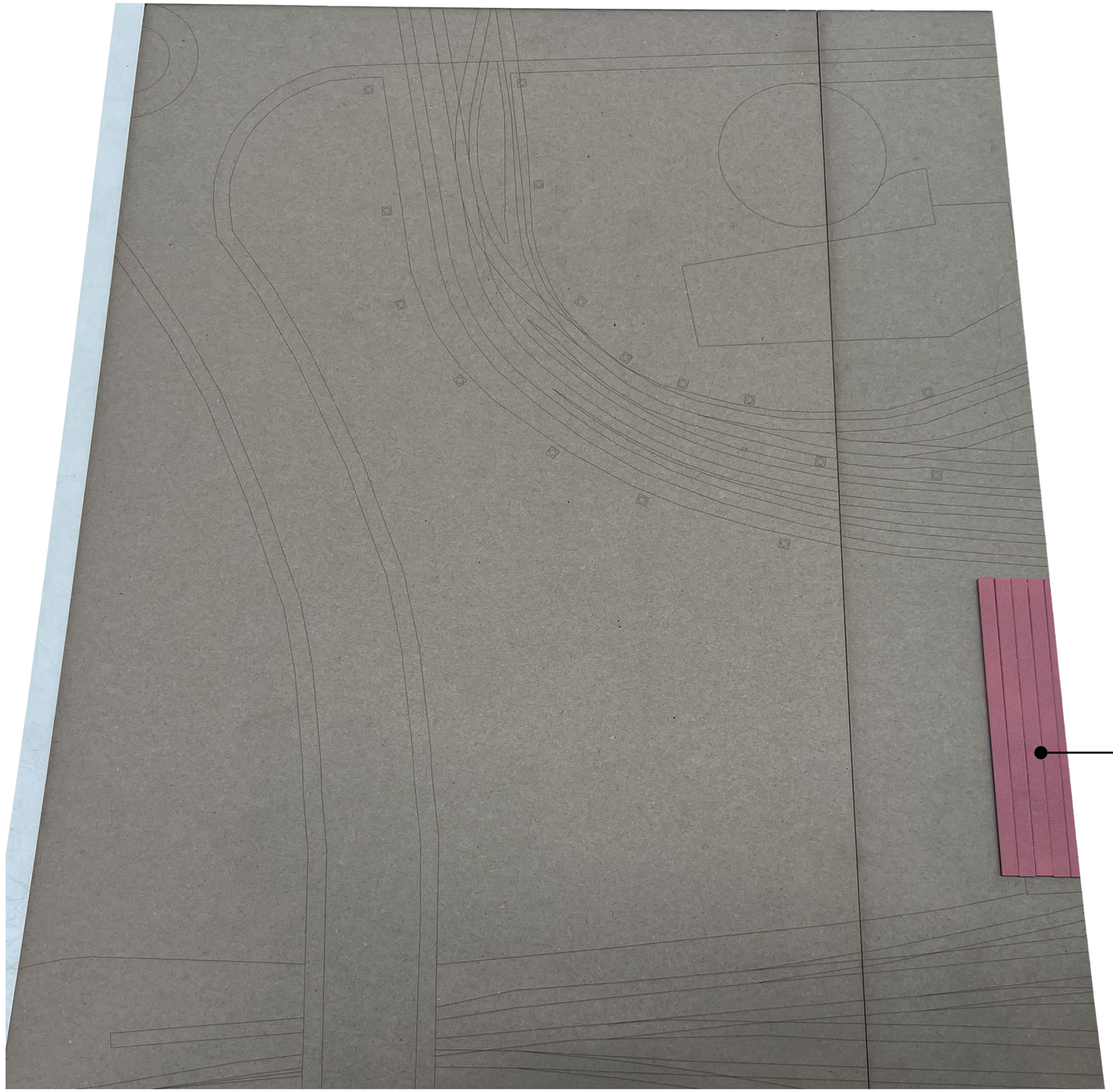
Architecture, art and literature are all forms that often find a way to live on forever and inspire people.

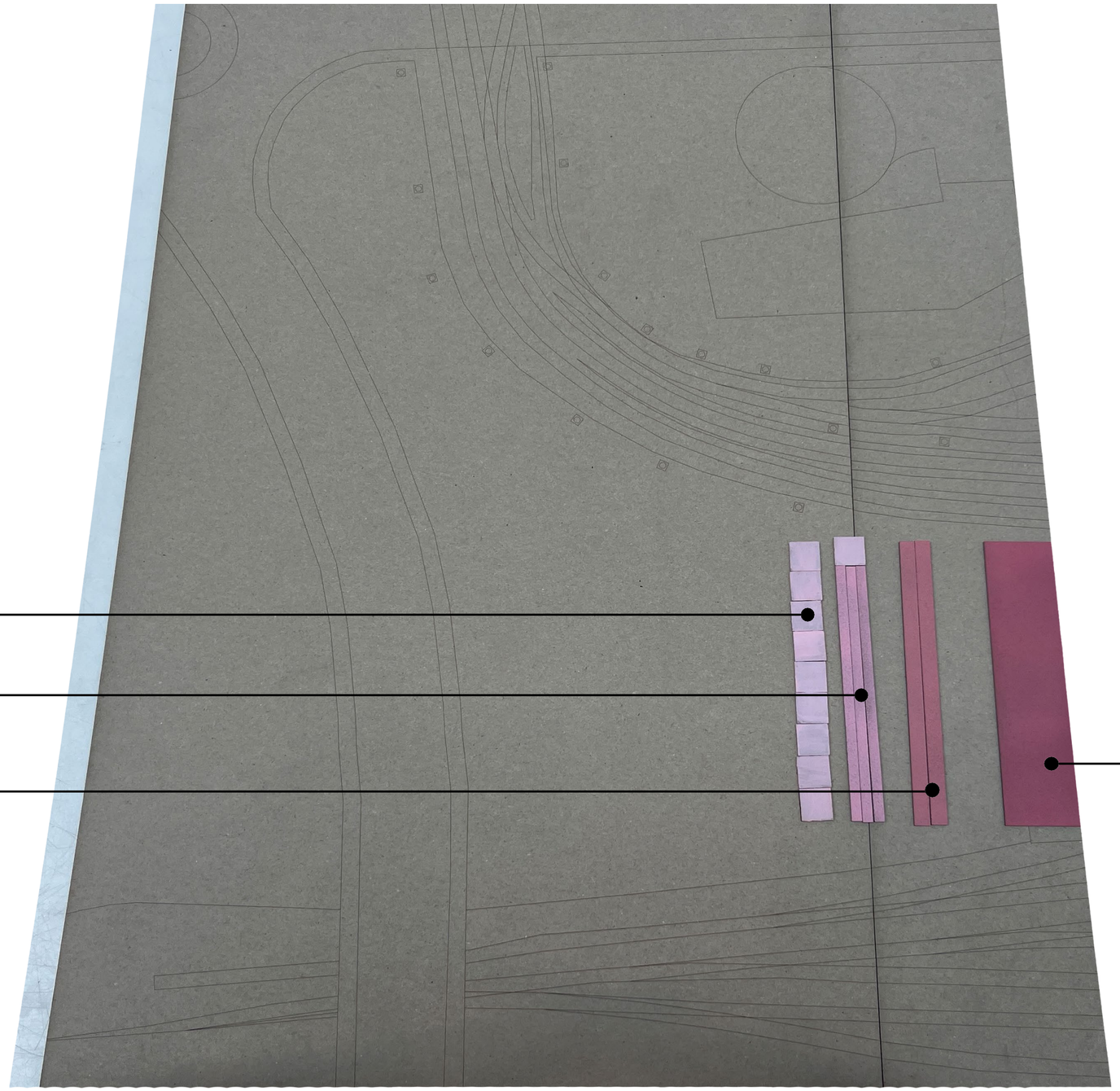
An other goal is to integrate the form of the building into the environment and let the form of the interior be shaped by the future user, and to not define the function on forhand.

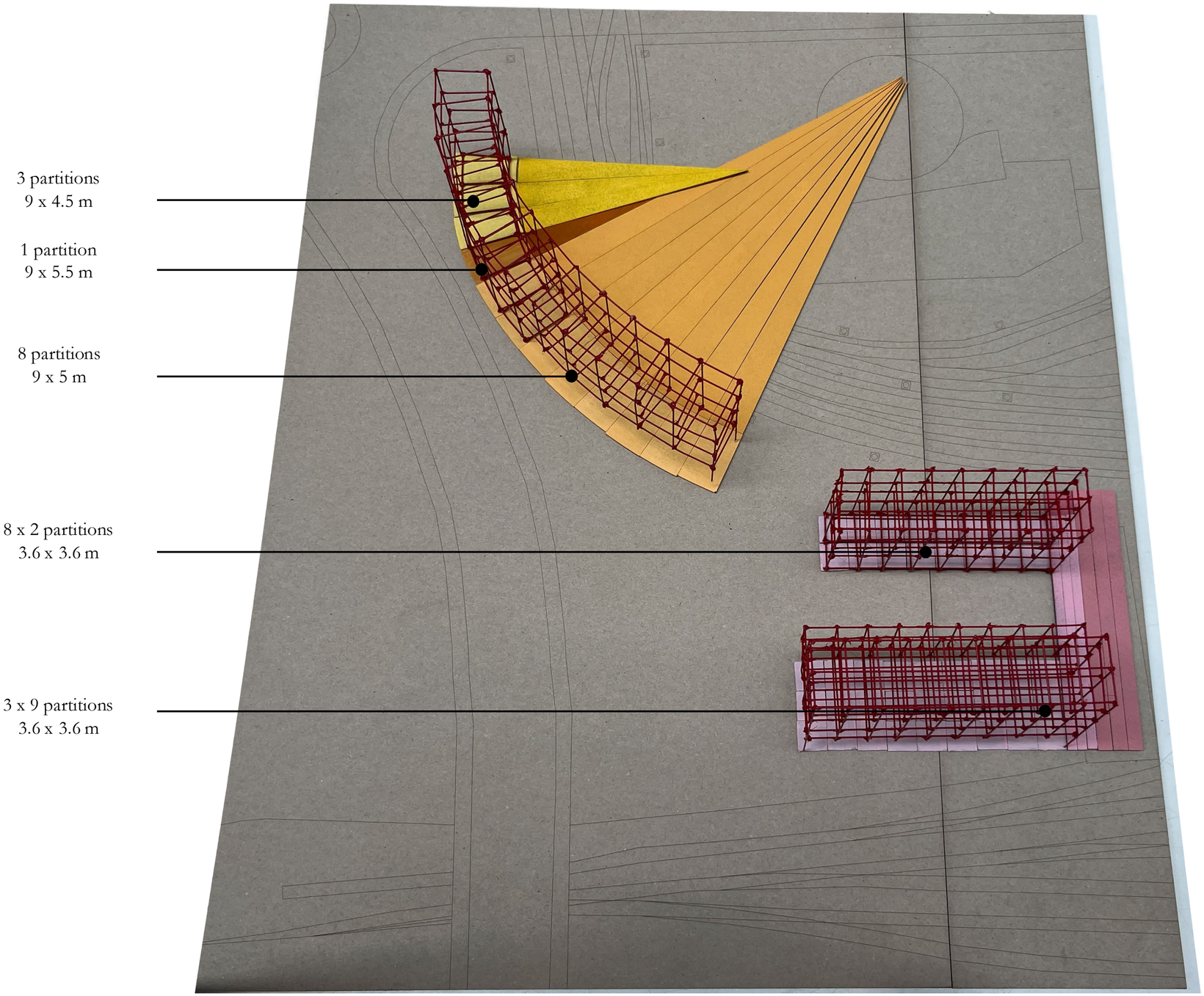

1 partition
9x5.5 m
8 partitions
9x5 m
Orange circle: partitions are all the same, exept for one.
Orange circle with partitions based on tram and trame pole grid

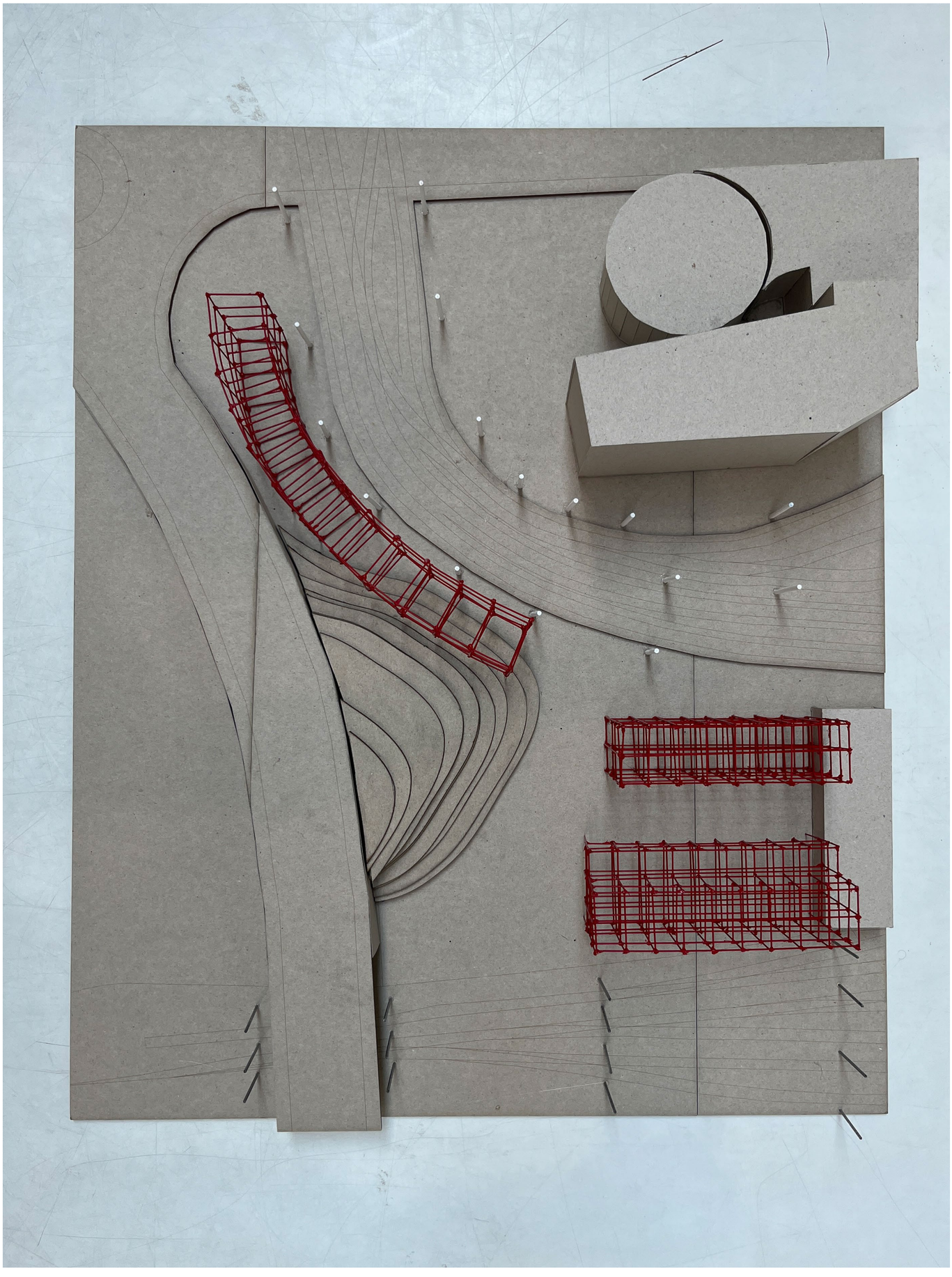

3 partitions
9x4,5m
Yellow circle: the same partitions
To finnisch the half of the tramline, the other circle with a different size filled the grid

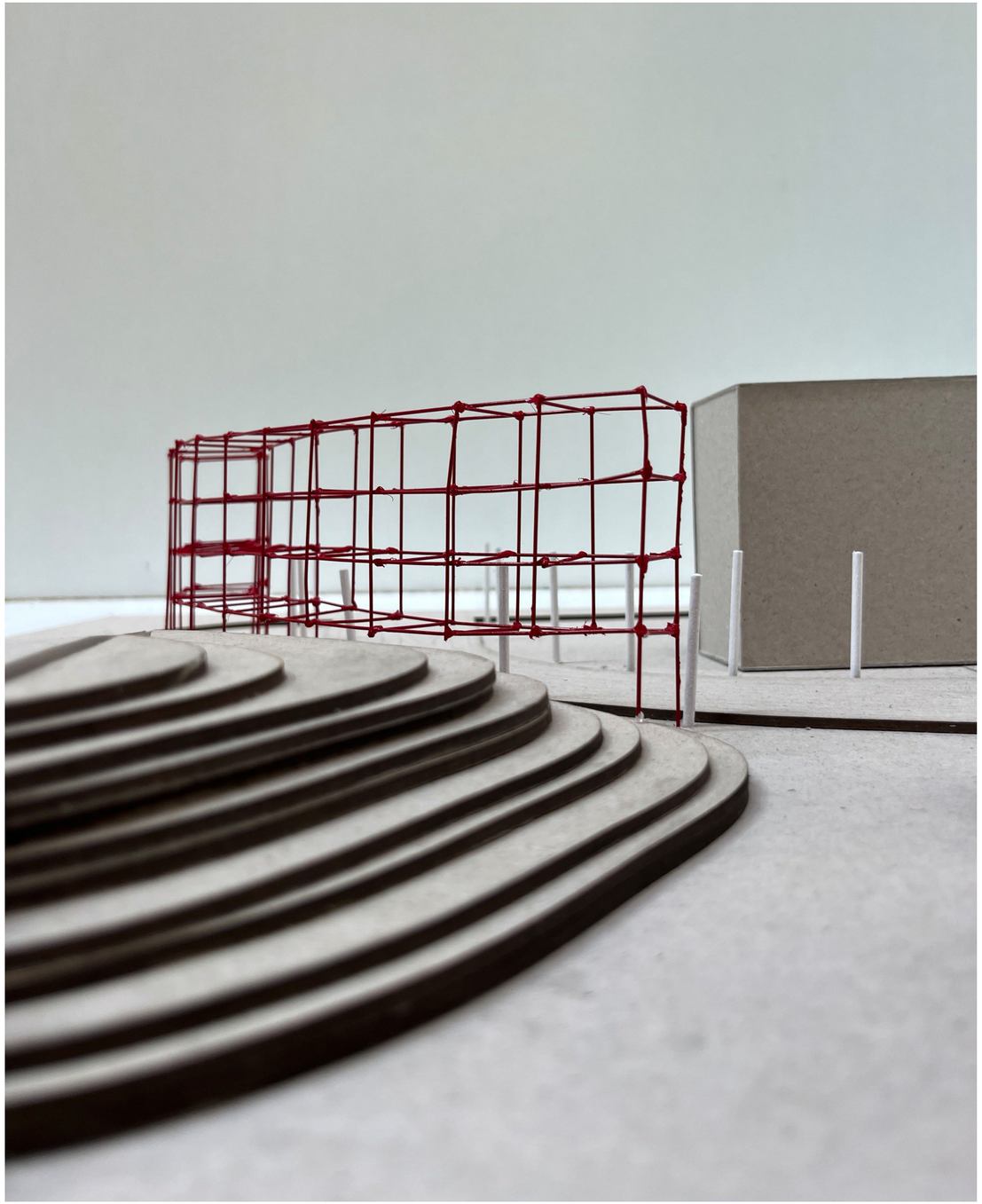

3 partitions
9 x 4,5m
1 partition
9 x 5.5 m
8 partitions
9 x 5 m

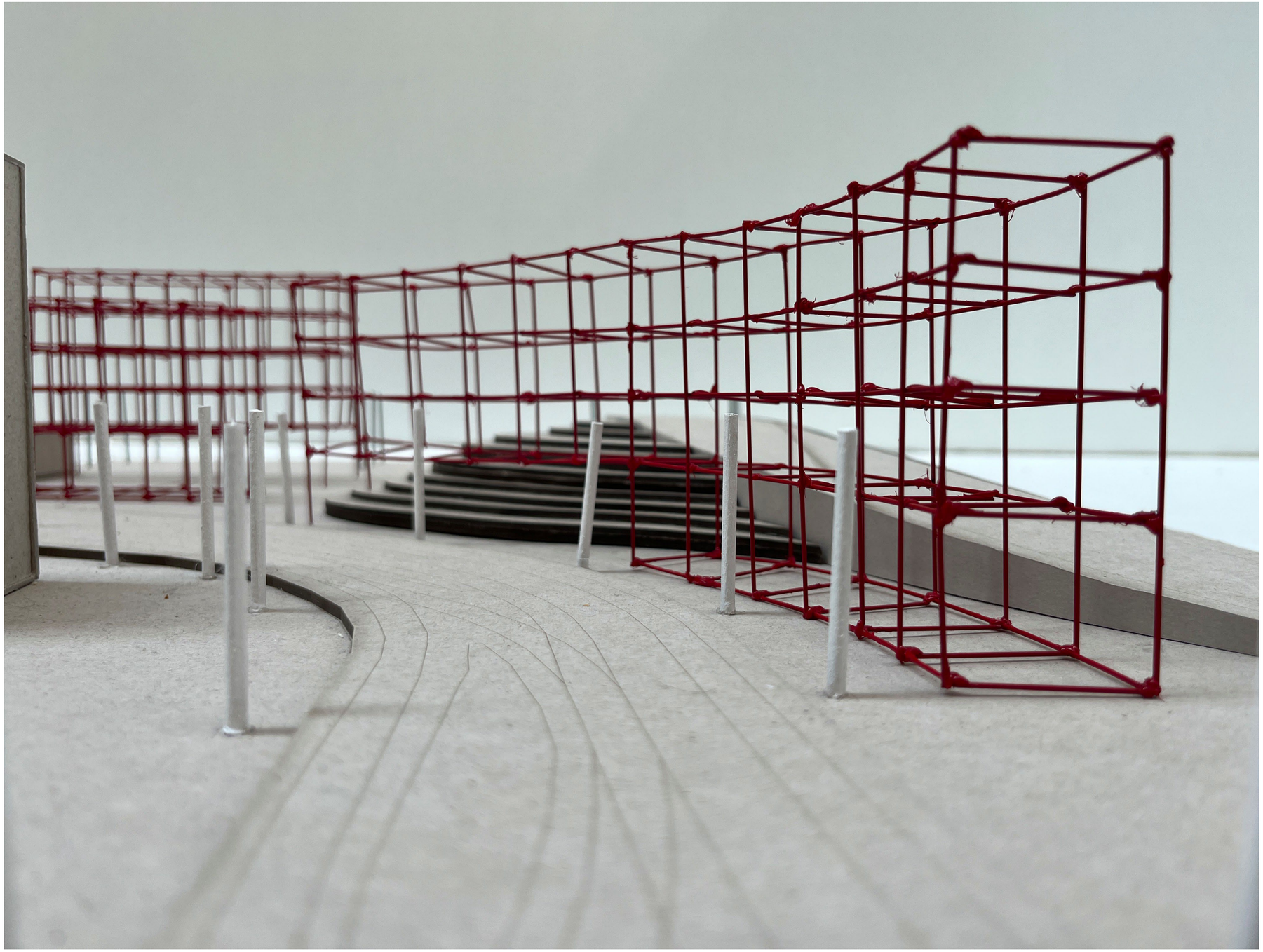

Five strokes from 9/5
1.8 x 32 m

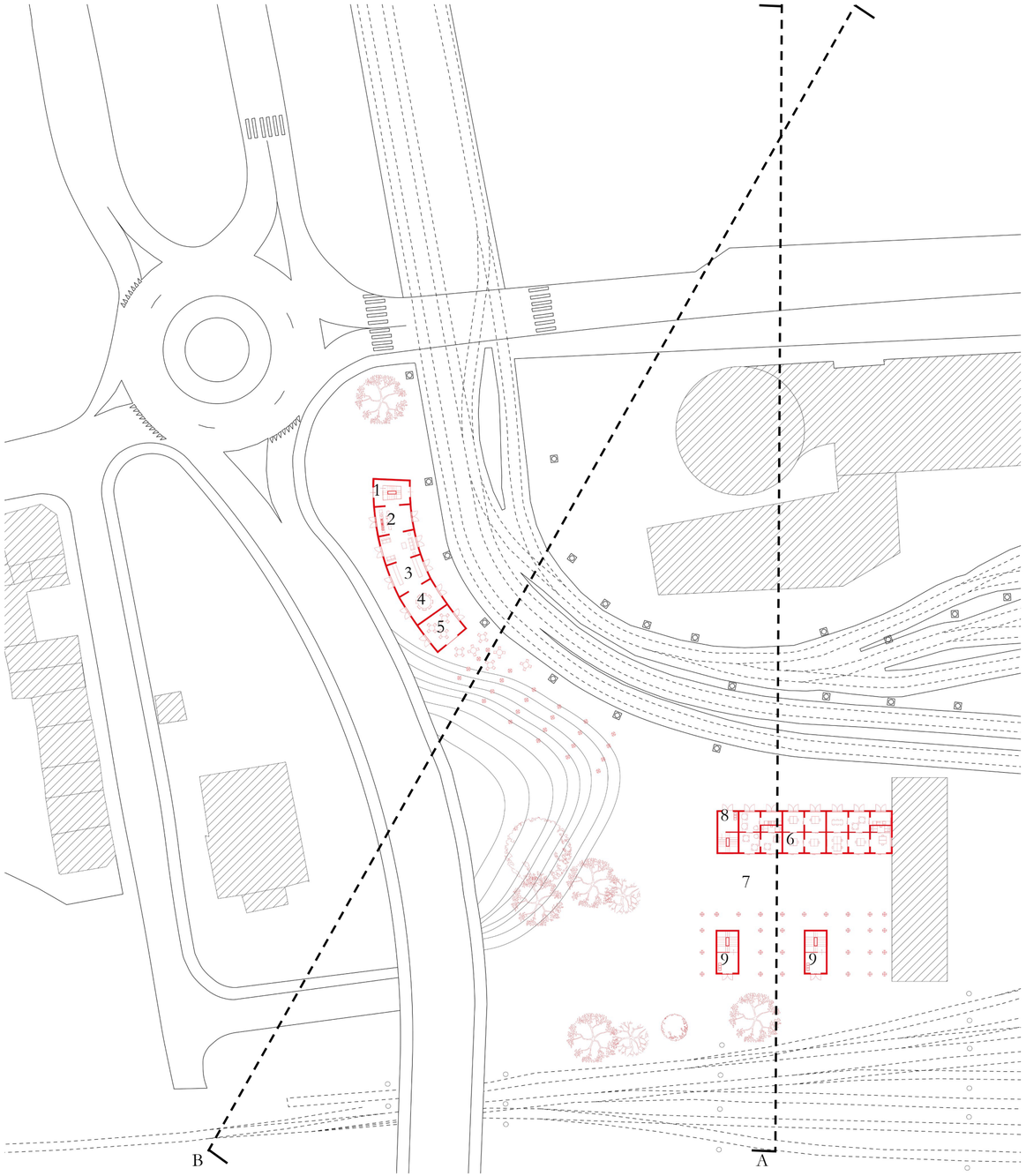

9 partitions
3.6 x 3.6 m
3 partitions
1.2 x 32 m
2 partitions
1.8 x 32 m
Five strokes from 9/5
1.8 x 32 m


3 partitions
9 x 4.5 m
1 partition
9 x 5.5 m
8 partitions
9 x 5 m
8 x 2 partitions
3.6 x 3.6 m
3 x 9 partitions
3.6 x 3.6 m







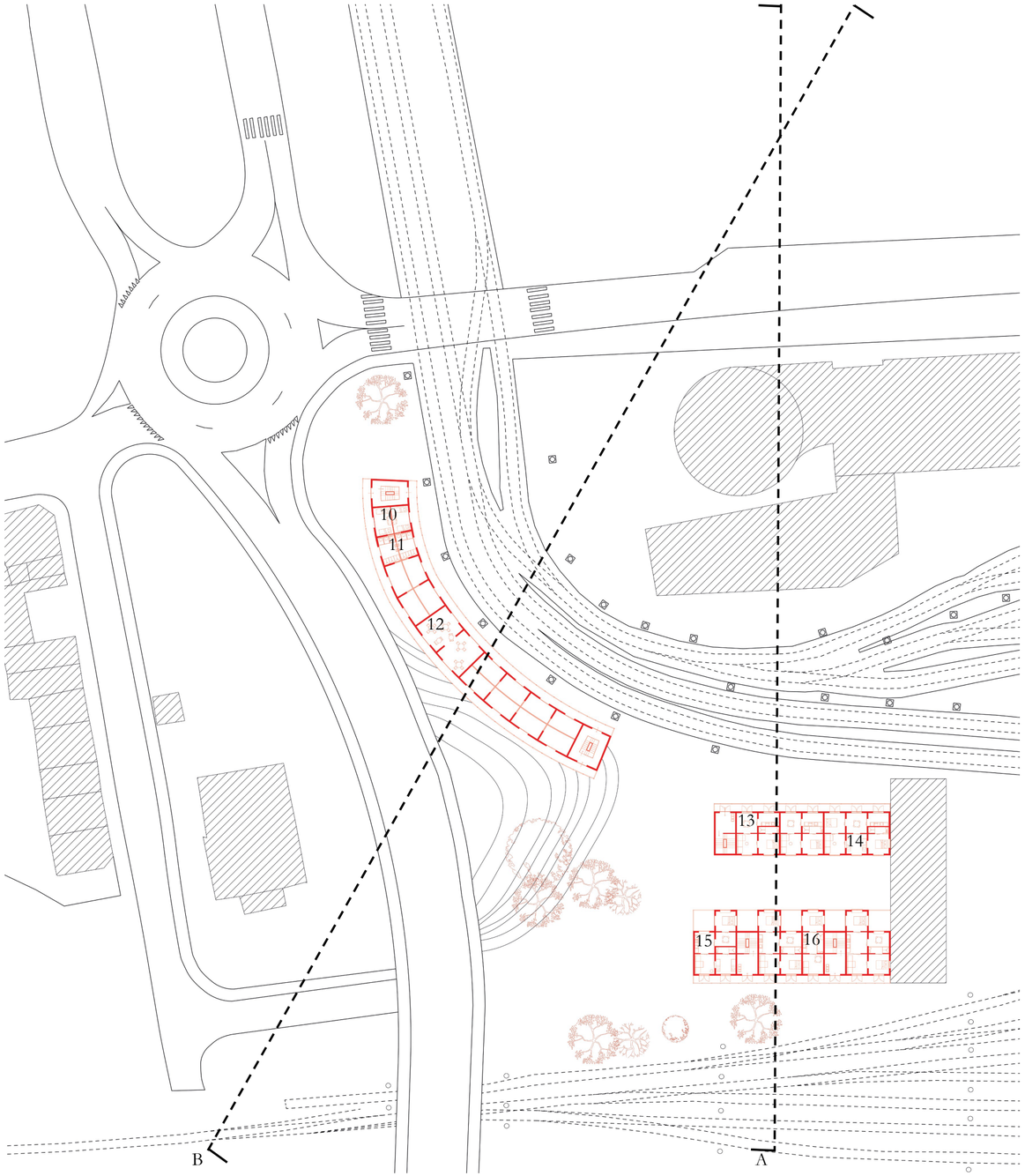


1 Entrance
2 Service desk
3 Lobby
4 Bar/cafe
5 Gathering space
6 Open social plint / free infill (offices, restaurant, café etc.)
7 Extention public space
8 Entrance blok 2
9 Entrance blok 3

Ground floor

0 4.5 9

1:200

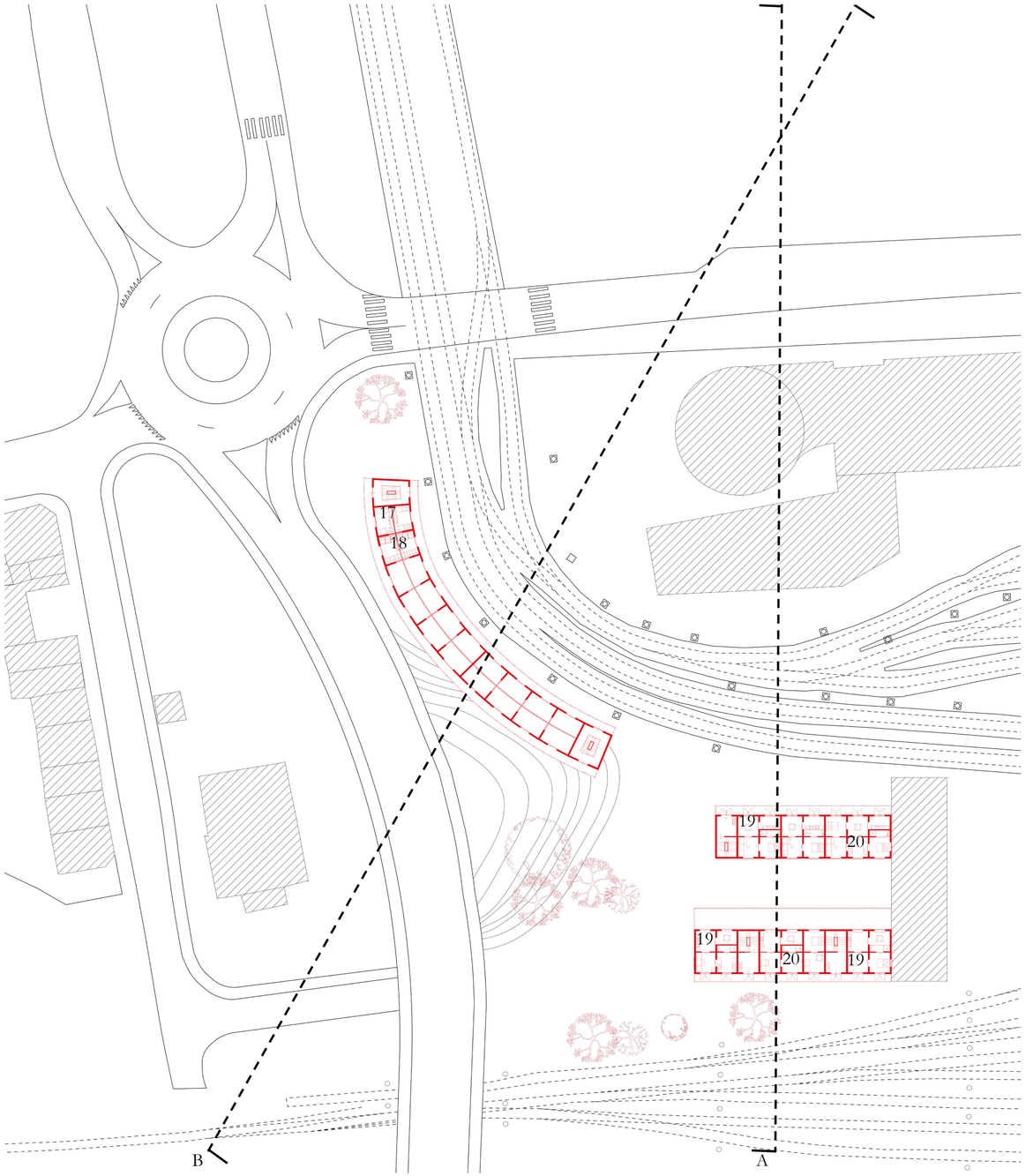


10 Hostel fill-in
11 Shared bathroom fill-in
12 Public room - common
13 Apartment 52 m2
14 Apartment 78 m2
15 Apartment 65 m2
16 Apartment 39 m2

1st, 2nd floor

0 4.5 9

1:200



17 Hostel fill-in
18 Shared bathroom fill-in
19 Apartment 52 m2
20 Apartment 78 m2
21 Apartment 18 m2

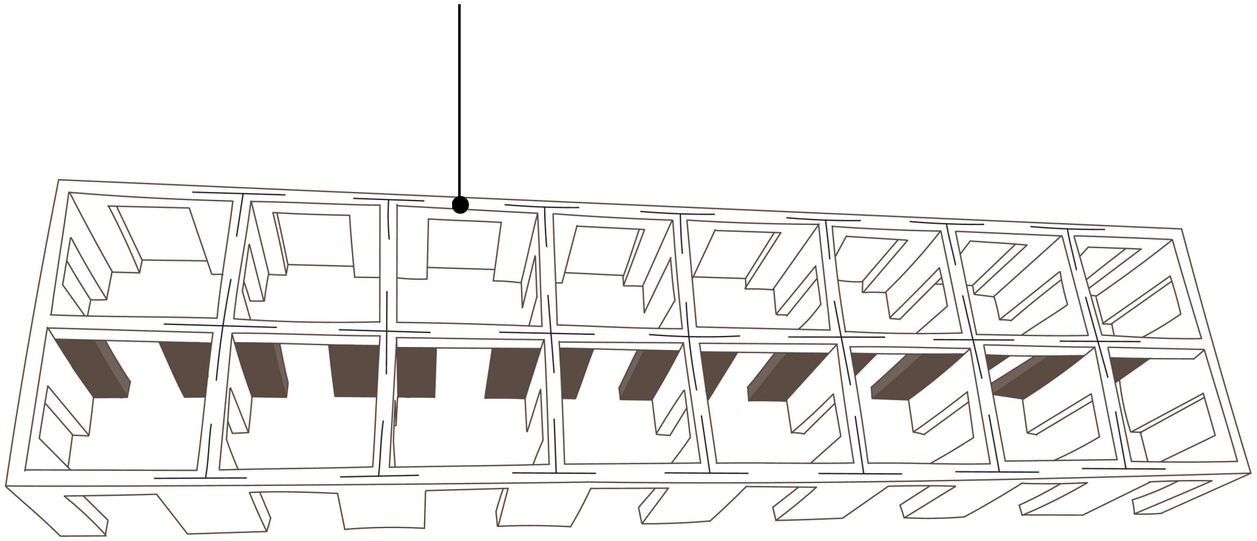
3rd, 4th (5th) floor

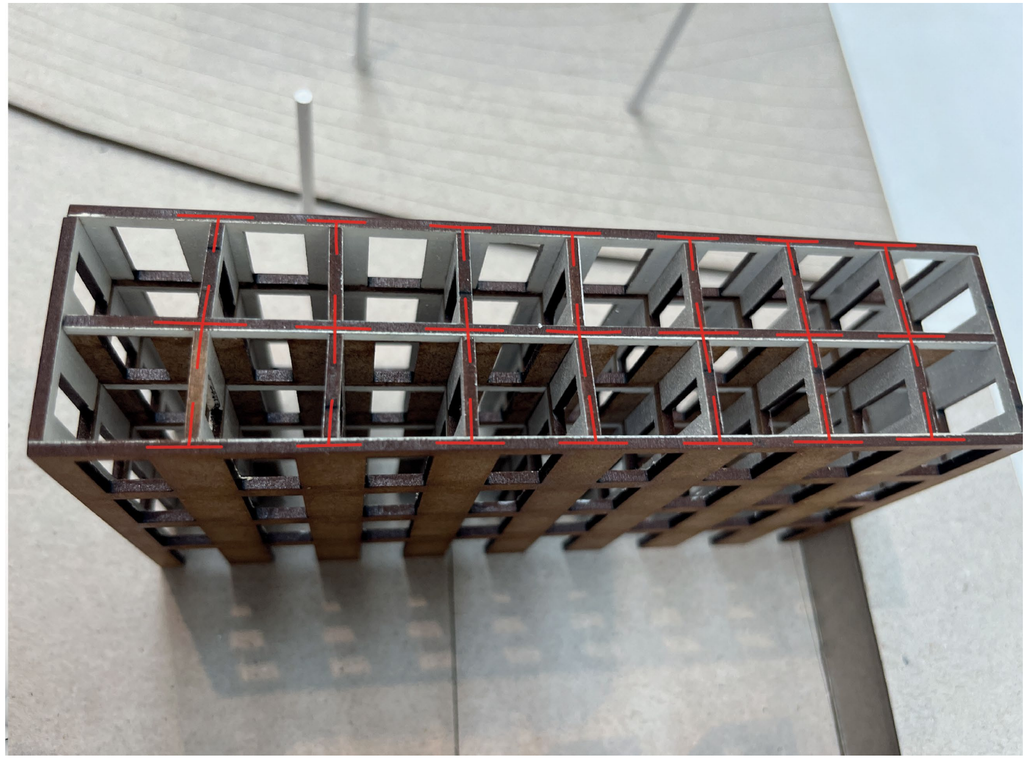
0 4.5 9

1:200

9 partitions
3.6 x 3.6 m

rooms divided with door
1.2m





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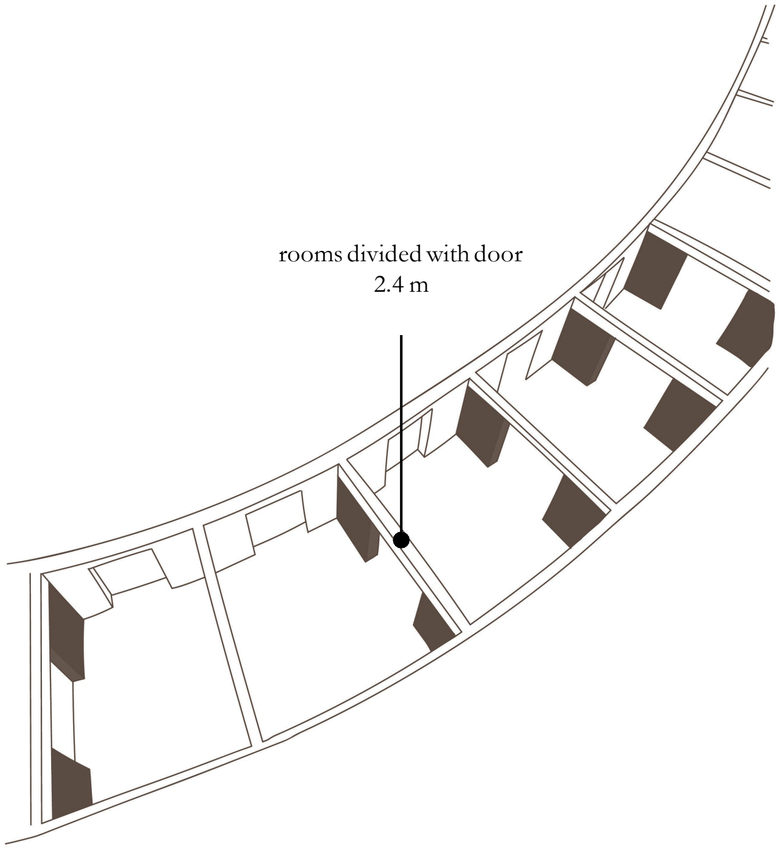
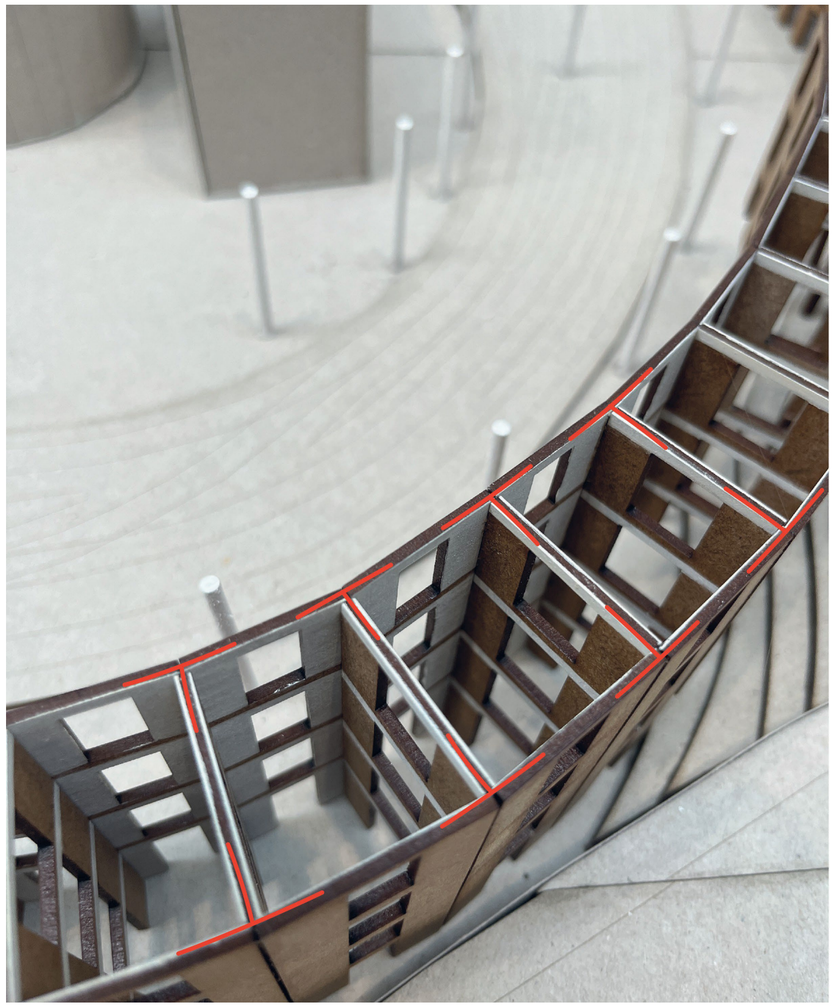
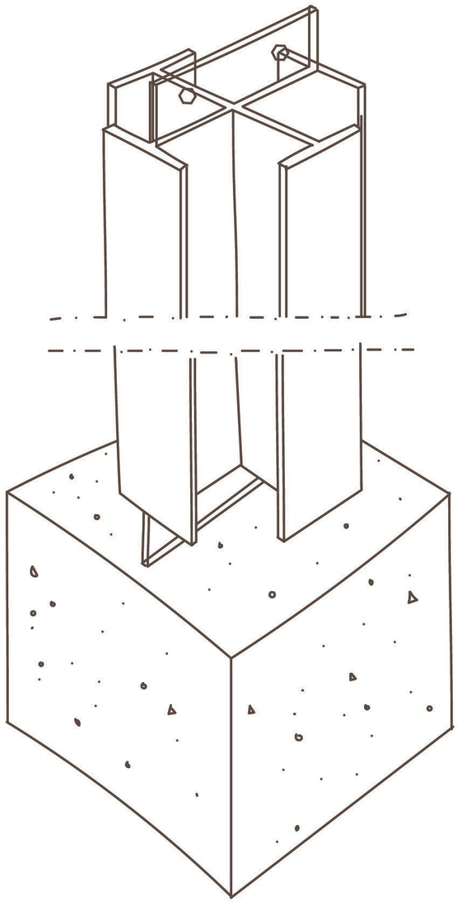

rooms divided with door
2.4 m



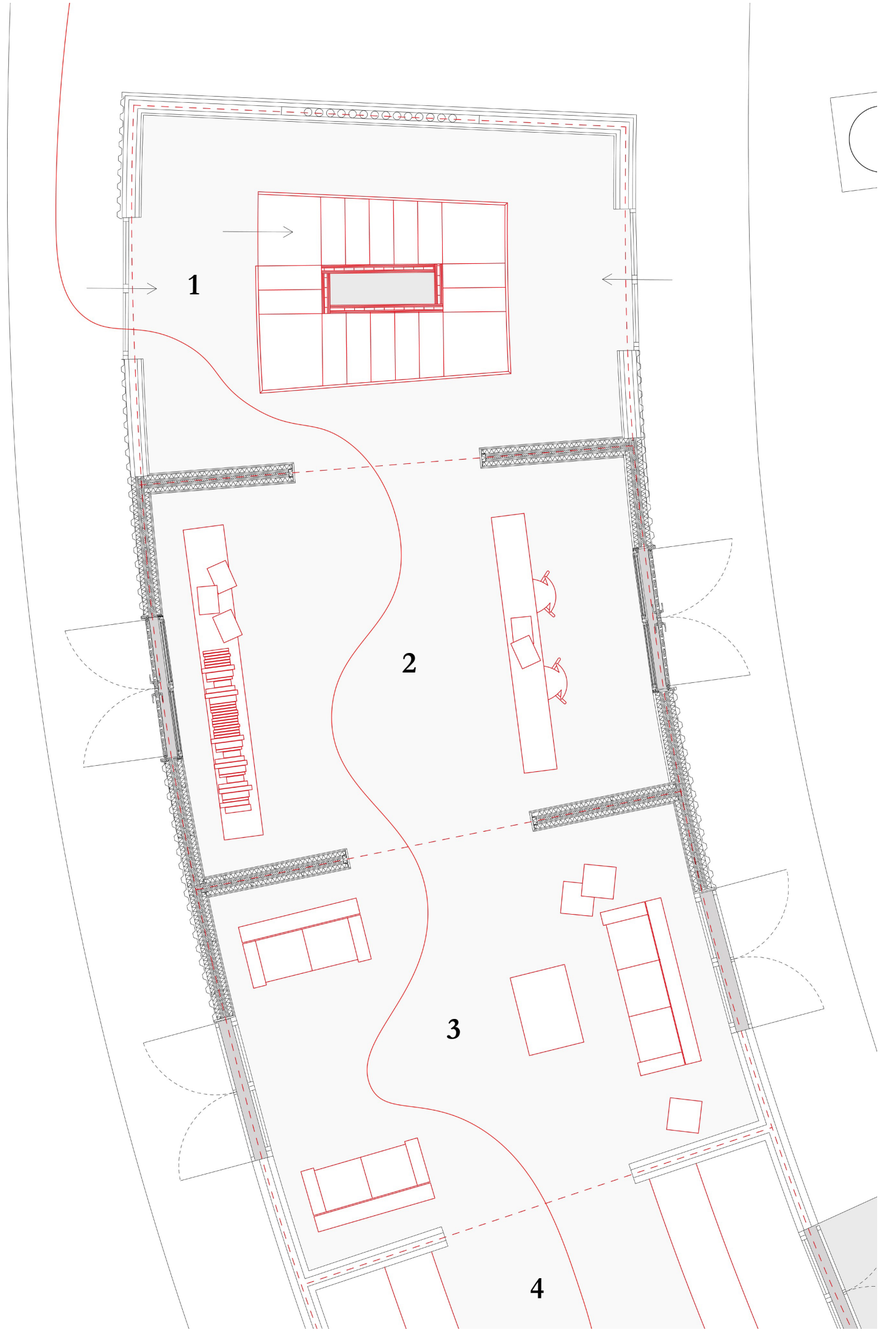


Load bearing
CLT walls
100 mm

CLT floors 3,6 x 3,6
150 mm

Steel columns
400 mm

Concrete foundation



1 Entrance - stairway
2 Service desk
3 Lobby
4 Bar

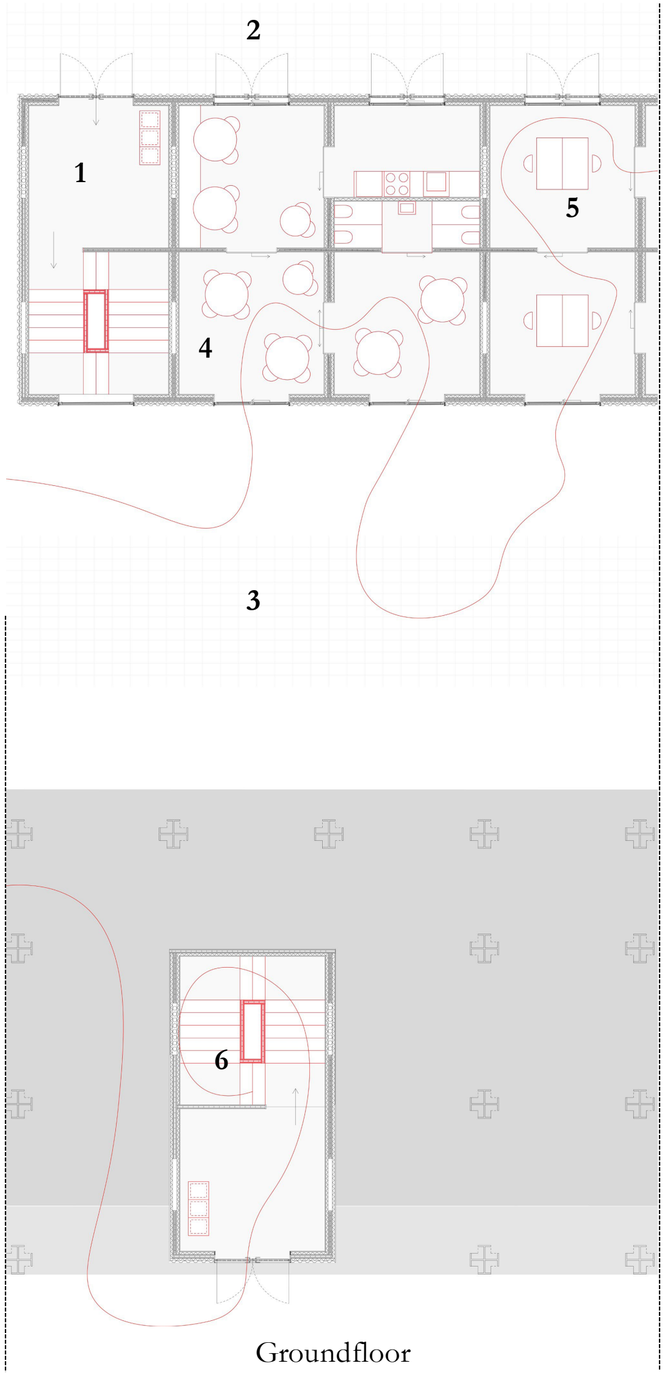
Groundfloor

1:20

1 Entrance - stairway
2 Gallary - entrances partitions
3 Hotel/hostal room
4 Shared bathroom

1st, 2nd, 3rd floor

1:20

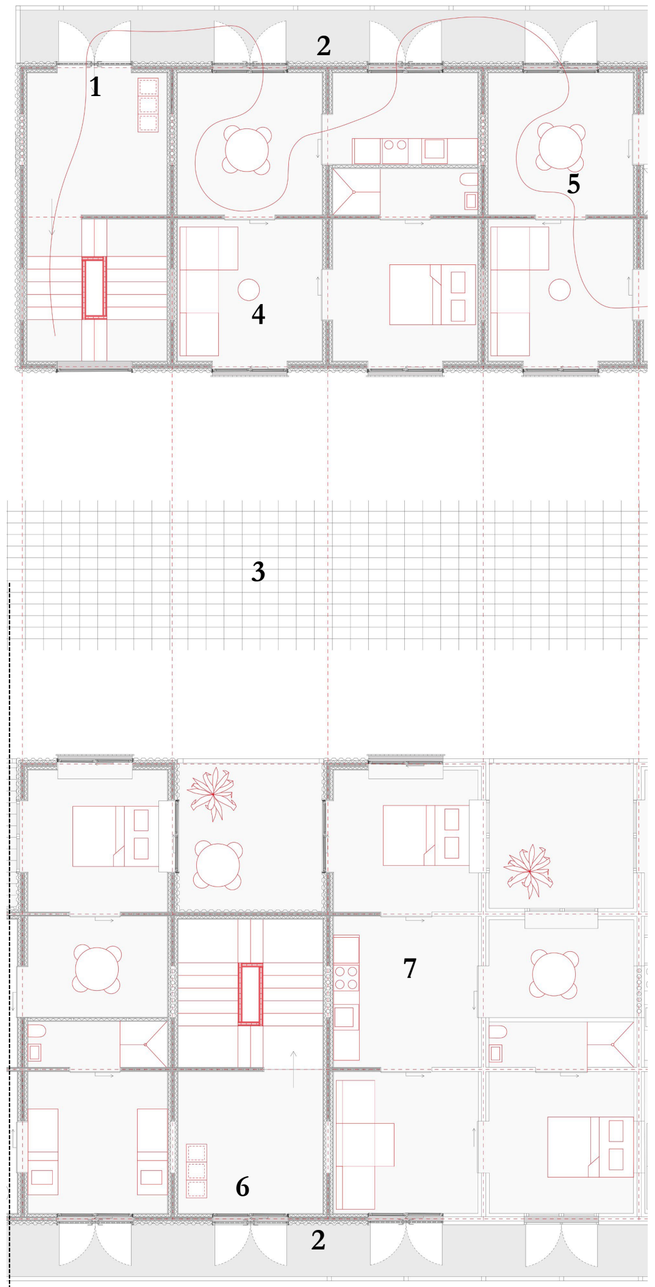


1 Entrance - stairway
2 Gallary - entrances partitions
3 Inner courtyard - open plinth
4 Cafe/restaurant
5 Work hub
6 Entrance blok 3 - stairway

Groundfloor

1:20

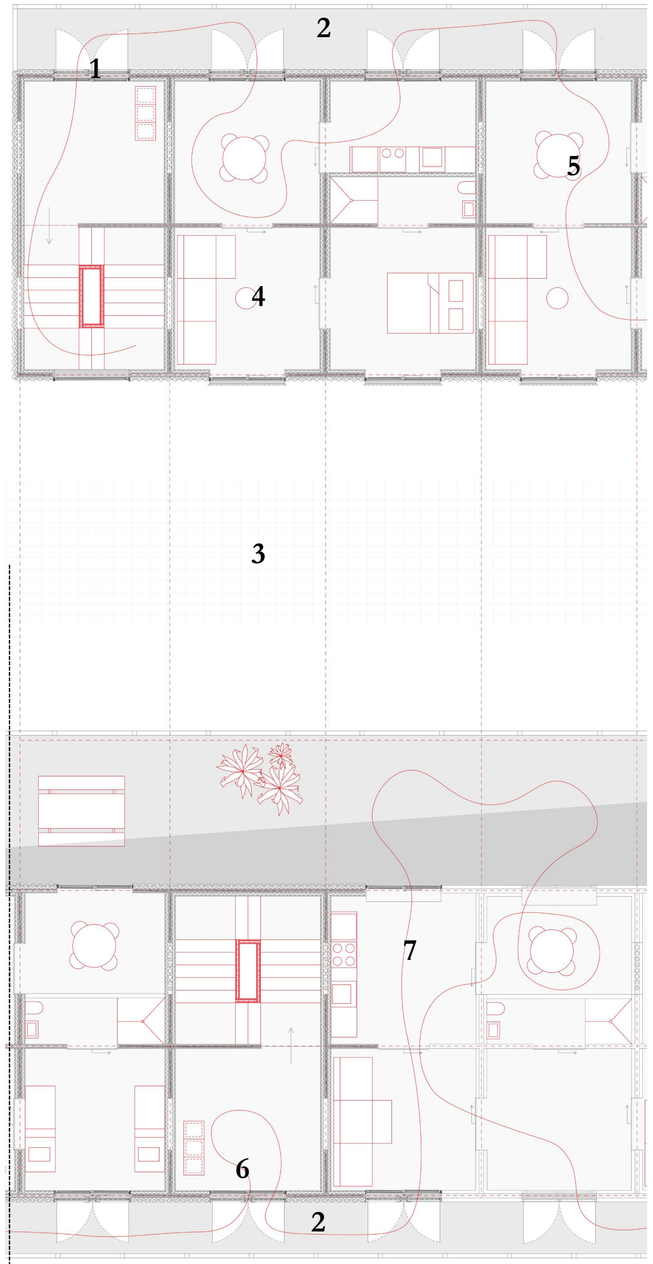
1 Entrance - stairway
2 Gallary - entrances partitions
3 Inner courtyard - open plinth
4 Appartment 52 m2
5 Student appartment 77m2
6 Entrance blok 3 - stairway
7 Appartment 65 m2 with inner balcony



1st, 2nd floor

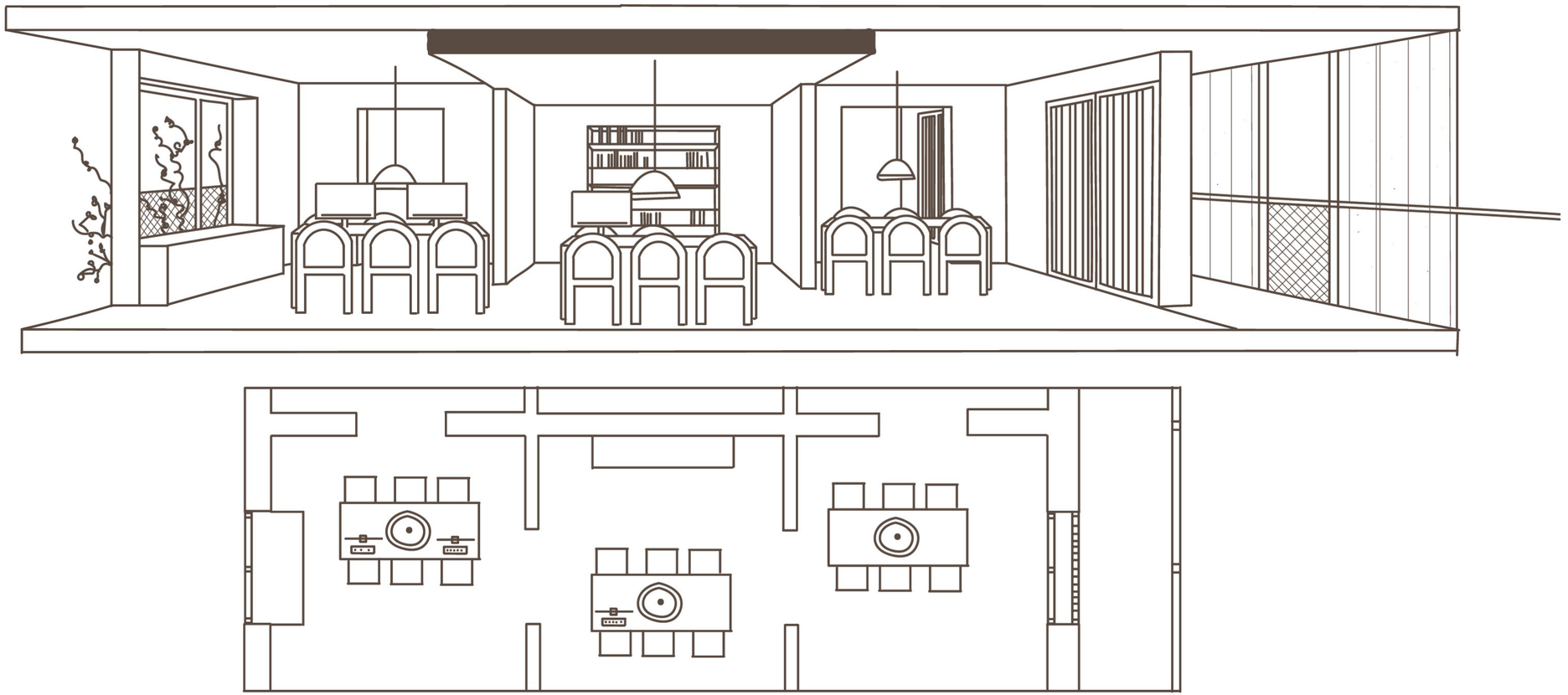
1:20

1 Entrance - stairway
2 Gallary - entrances partitions
3 Inner courtyard - open plinth
4 Appartment 52 m2
5 Student appartment 77m2
6 Entrance blok 3 - stairway
7 Appartment 78 m2 with shared terras

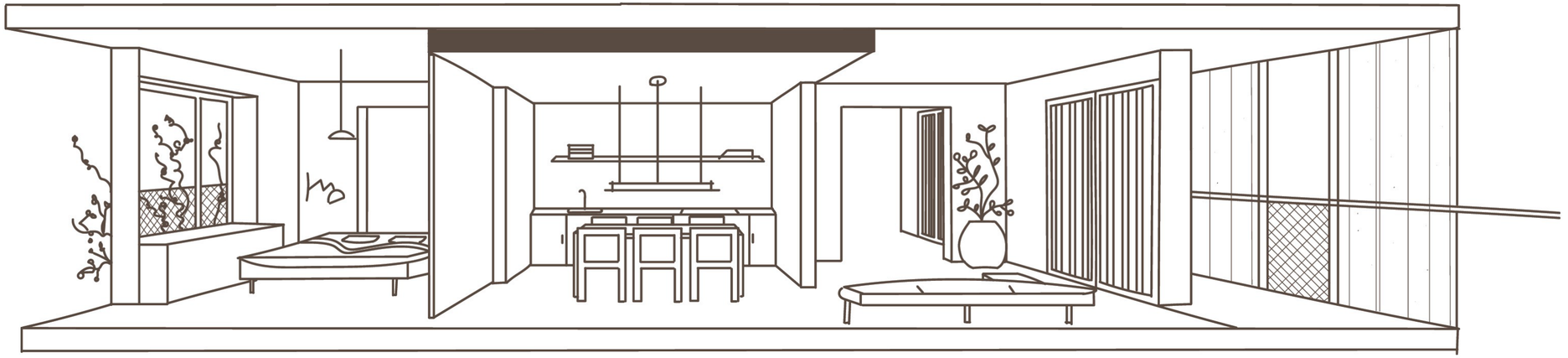


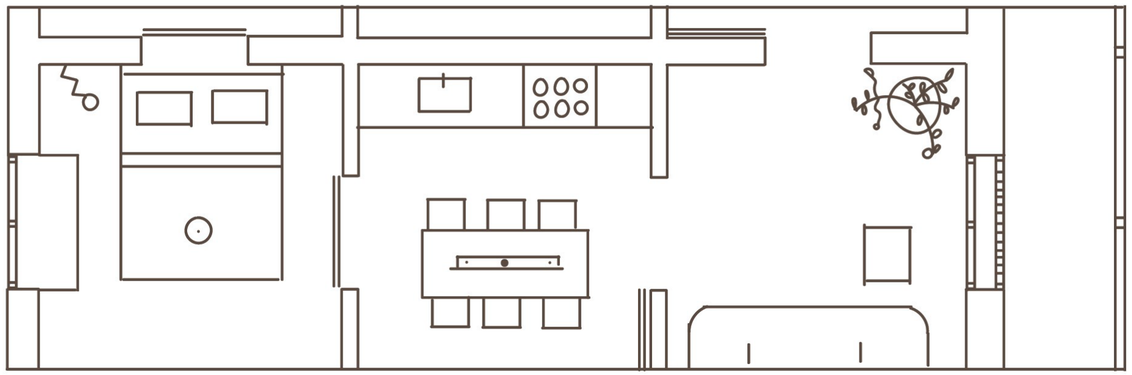
3rd and (4th) floor

1:20

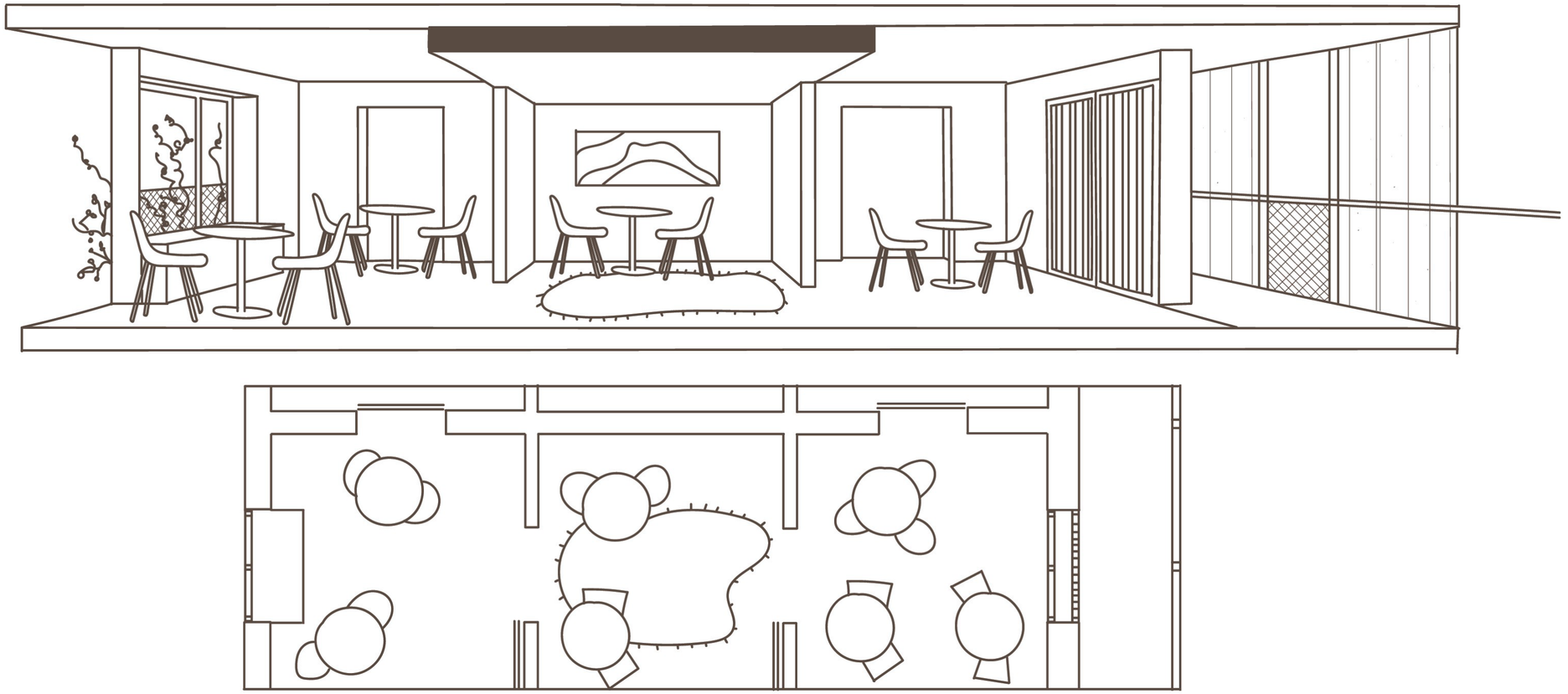


layout flexibility - work hub





layout flexibility - appartment



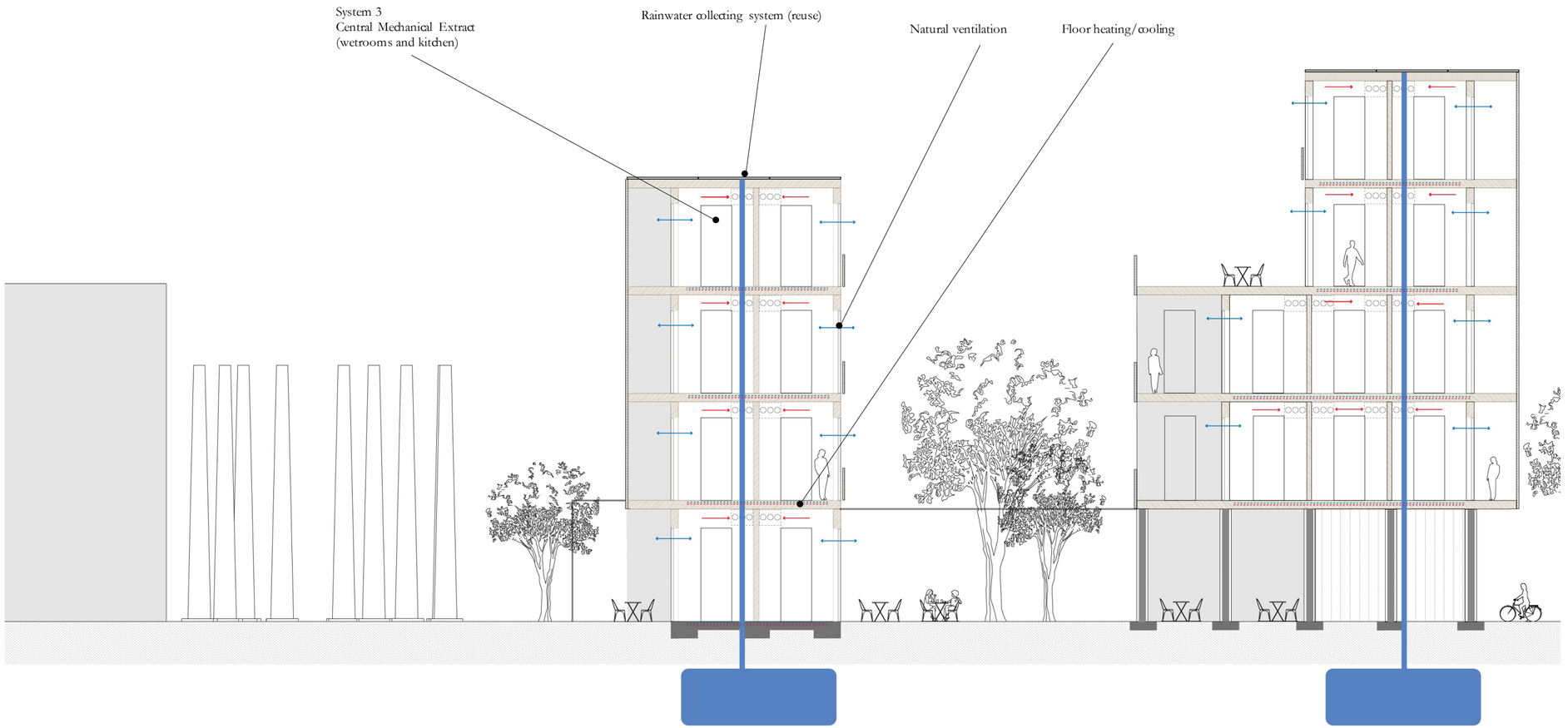
layout flexibility - cafe/restaurant

Cross section ‘A (blok 2&3)

0 3.6 7.2

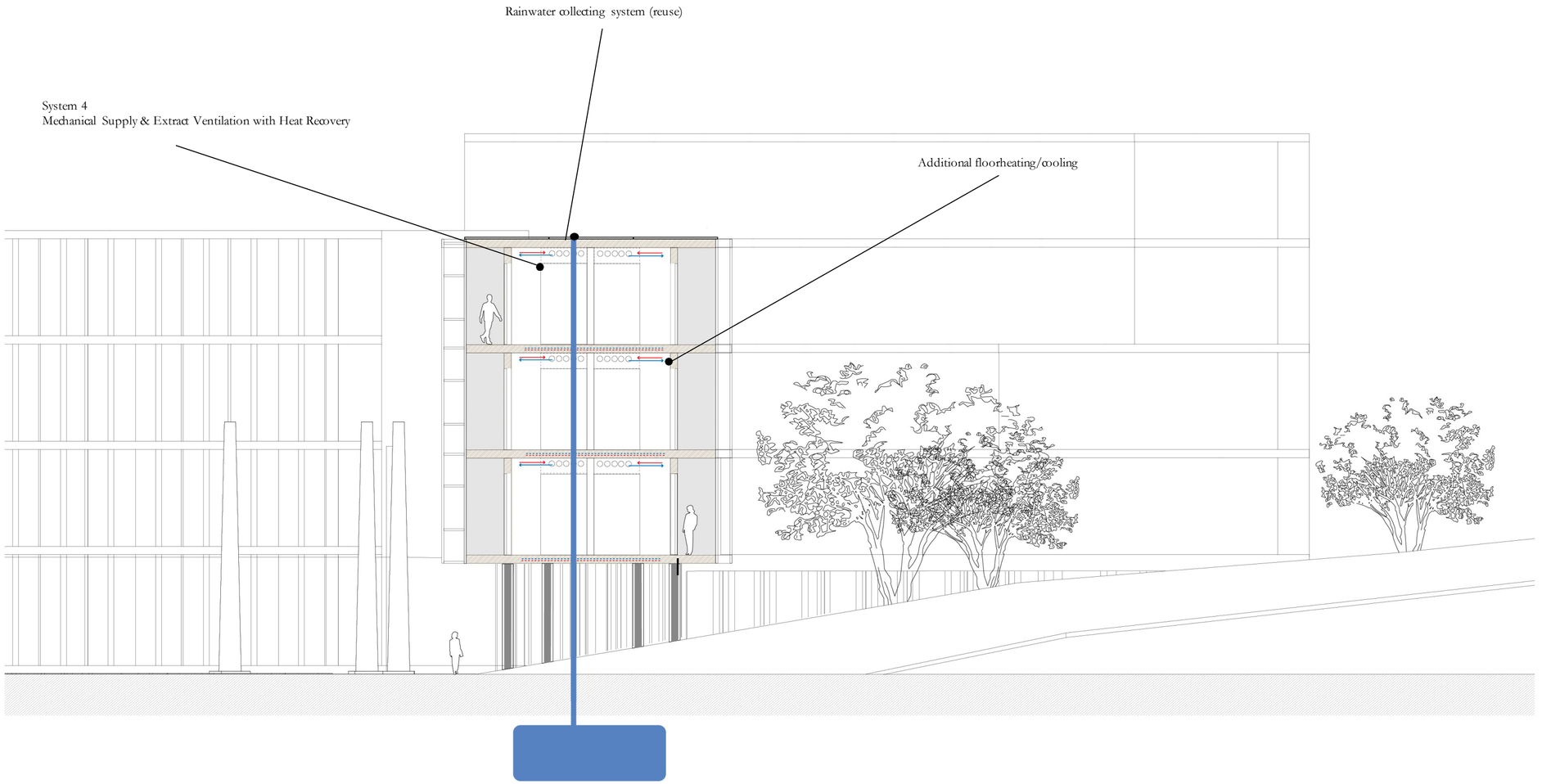
Cross section 'B (blok 1)

0 3.3 4.5



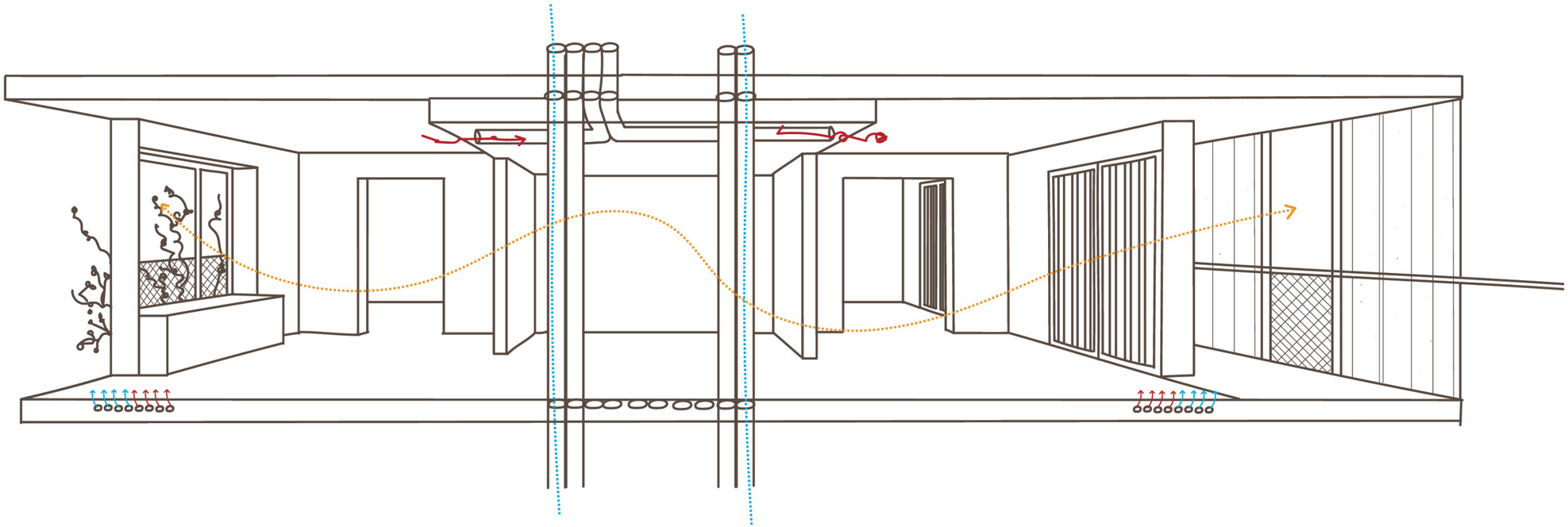
Cross section 'A (blok 2&3)

0 3.6 7.2

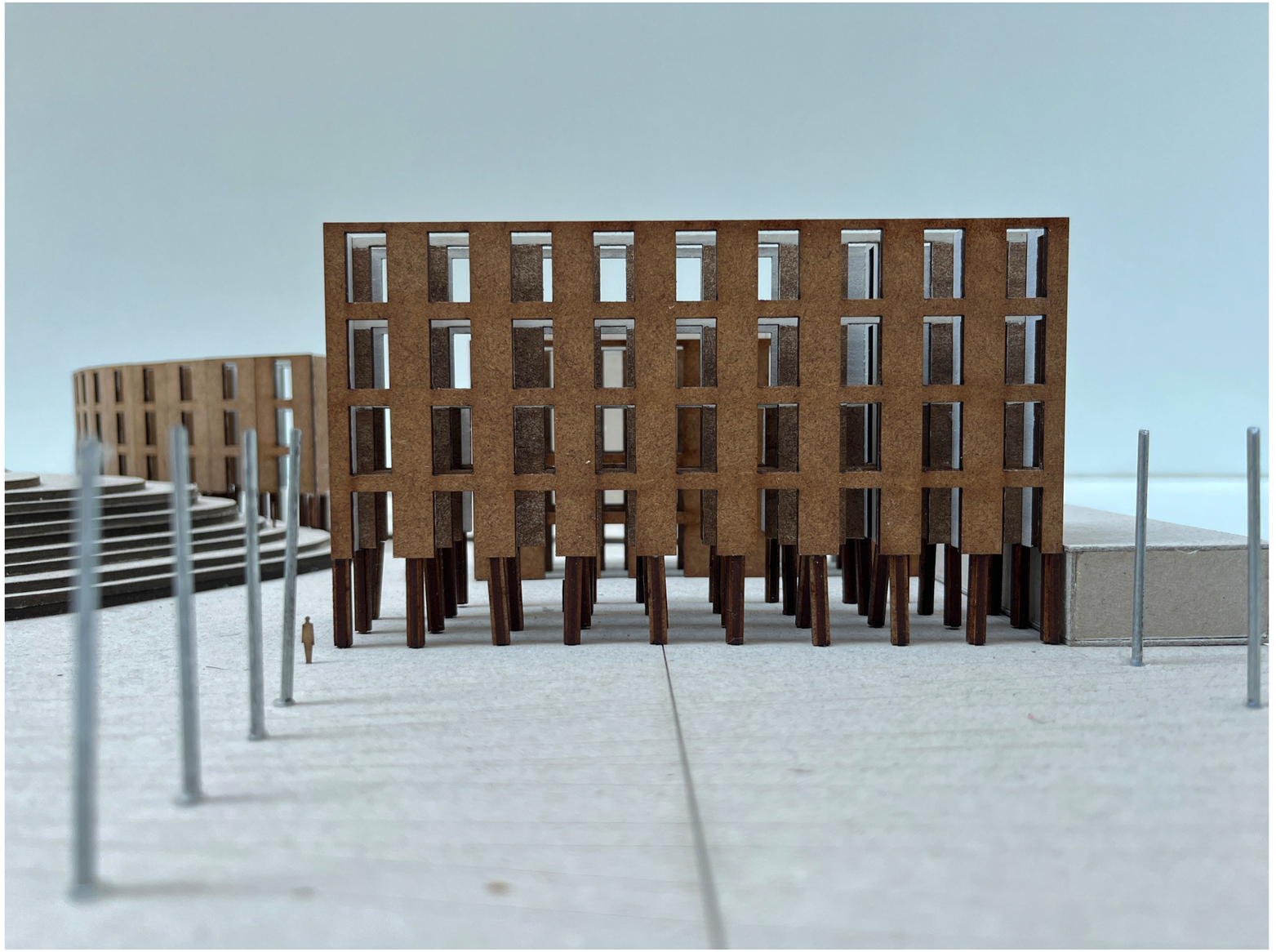


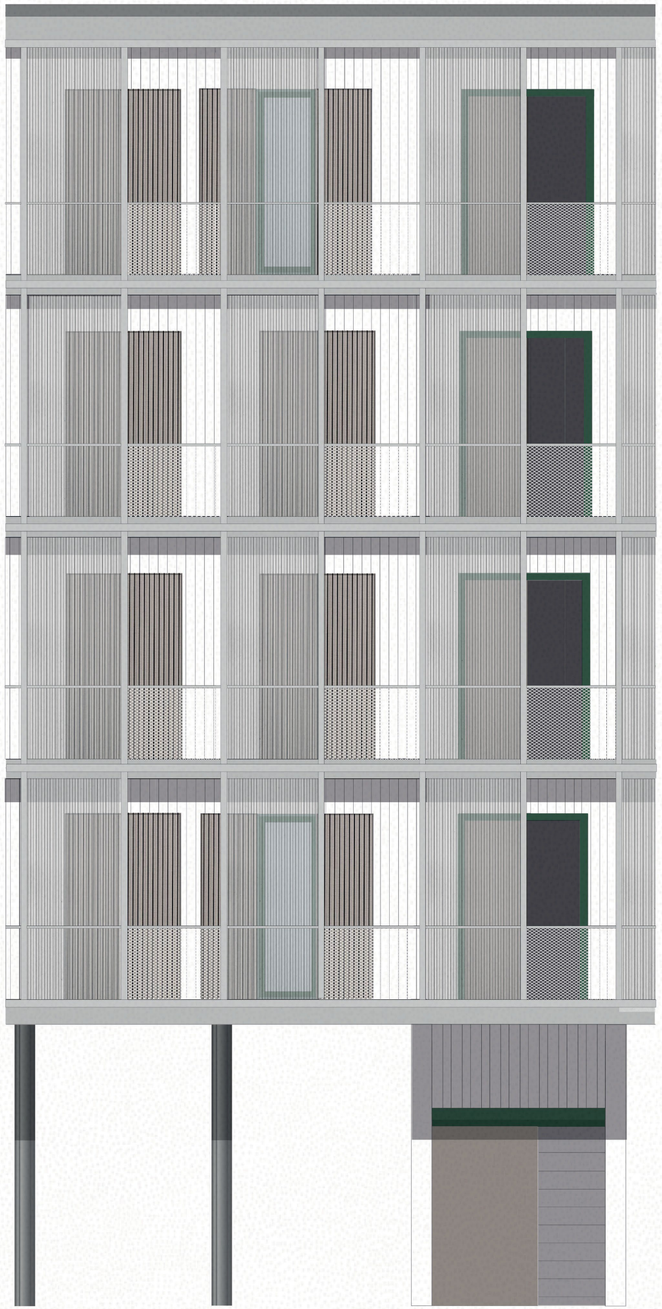
Cross section 'B (blok 1)

0 3.3 4.5

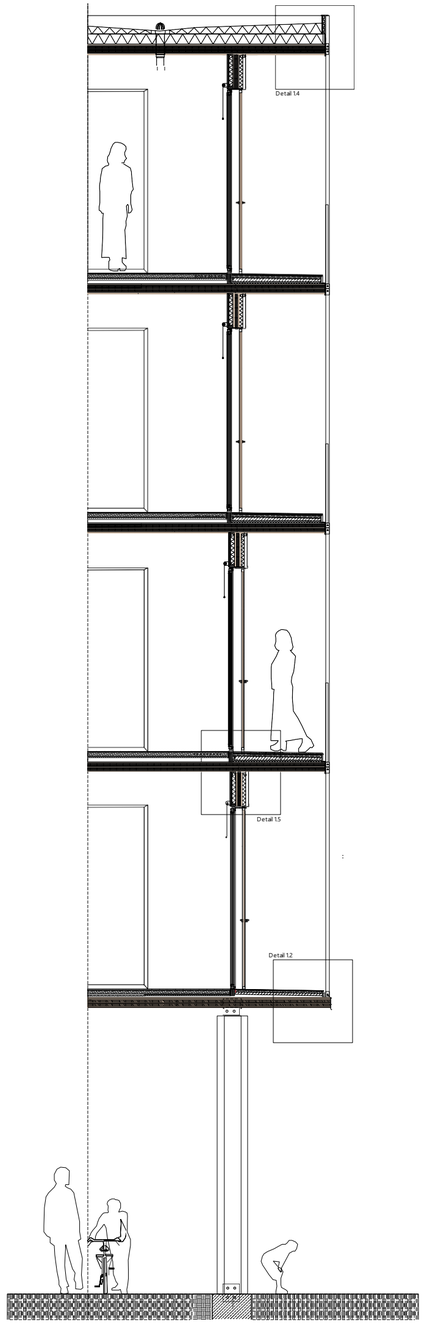


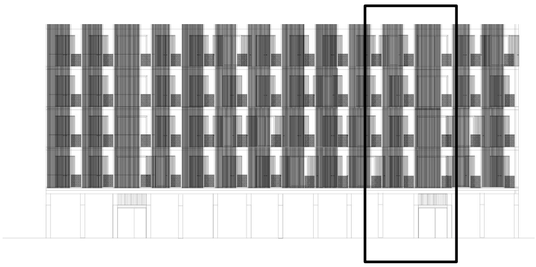
climate





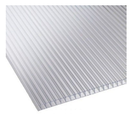
1/20 detail - blok 3 - trainside



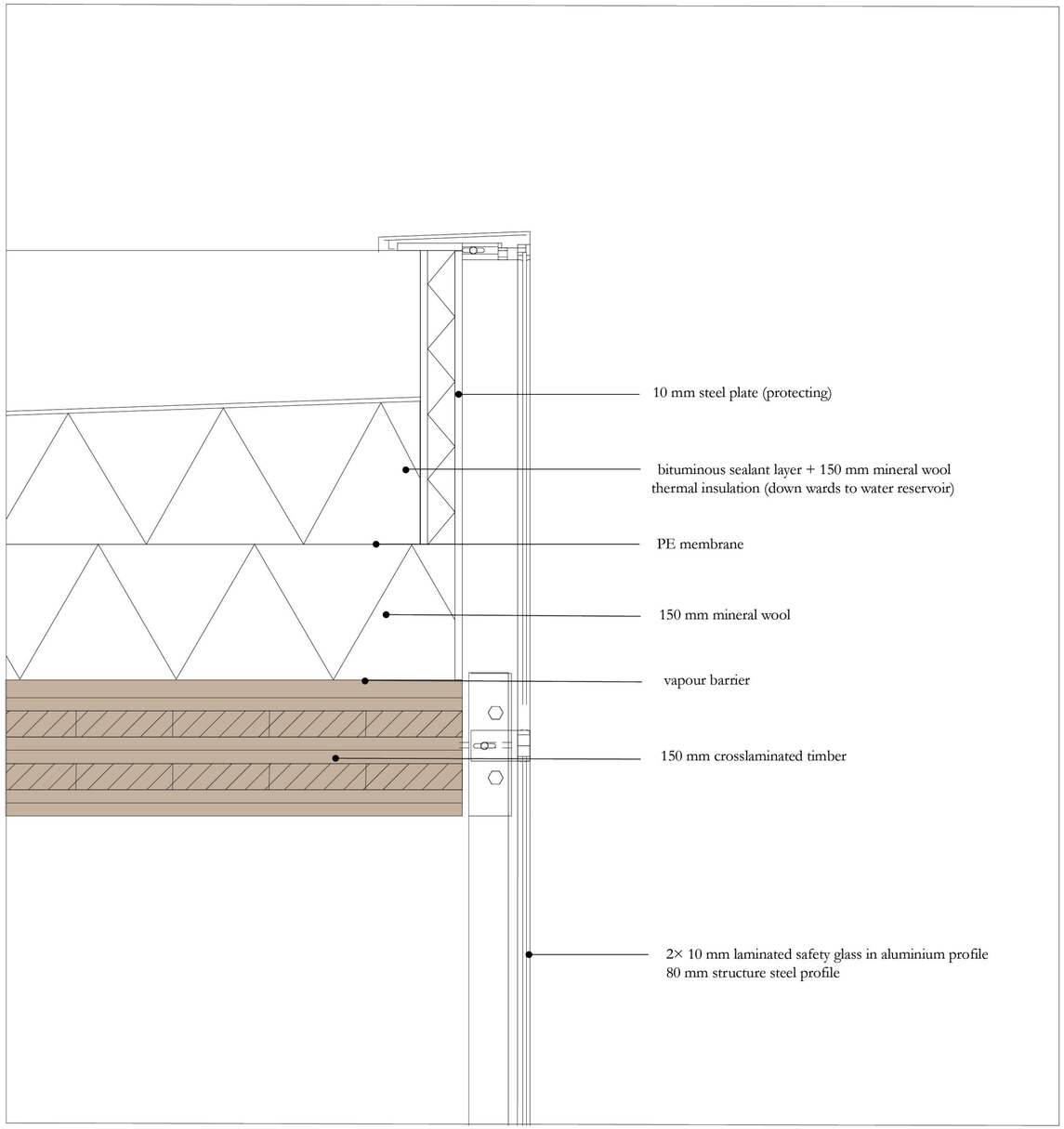


Wooden slats

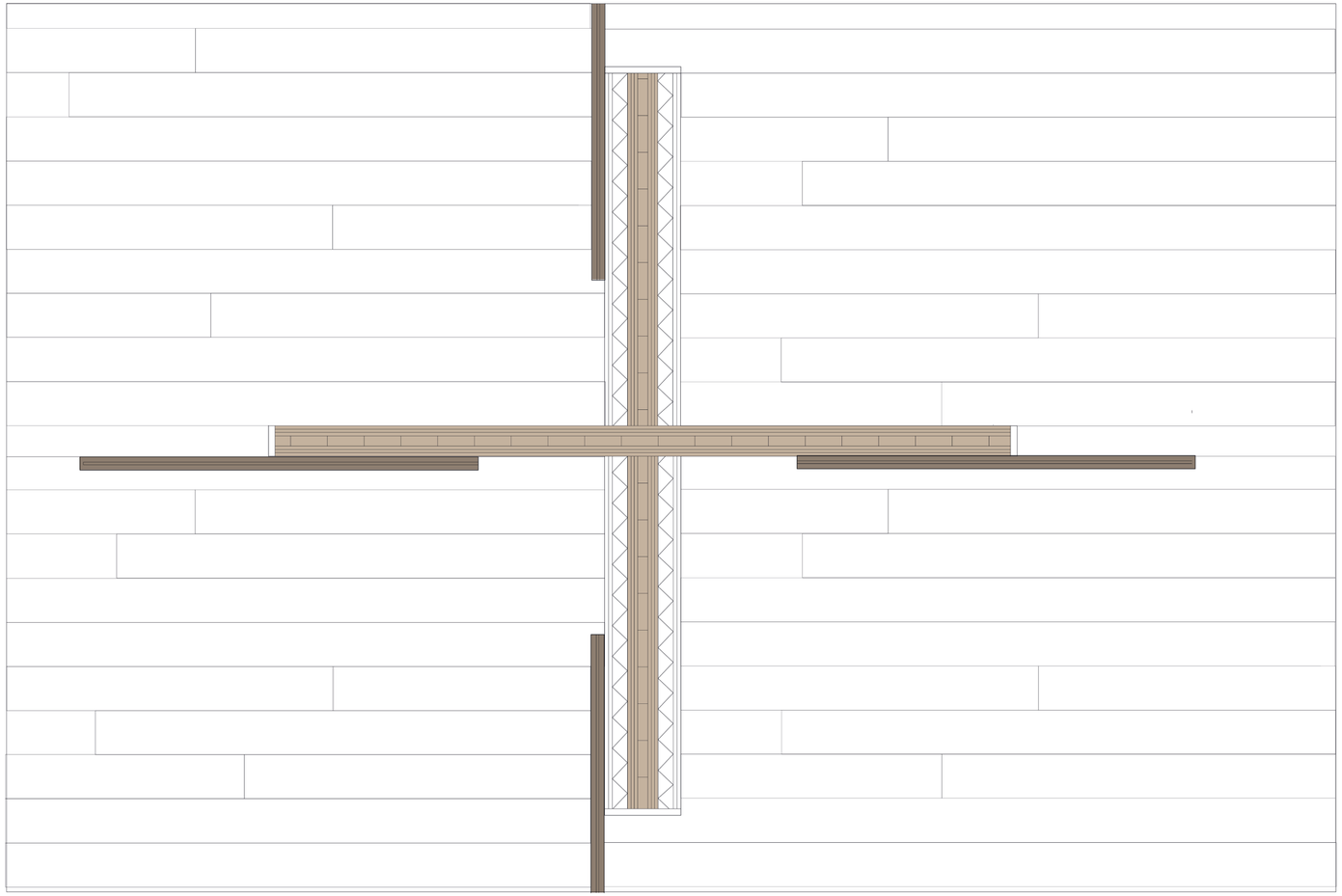
Sheet pile
- corrugated sheet-metal



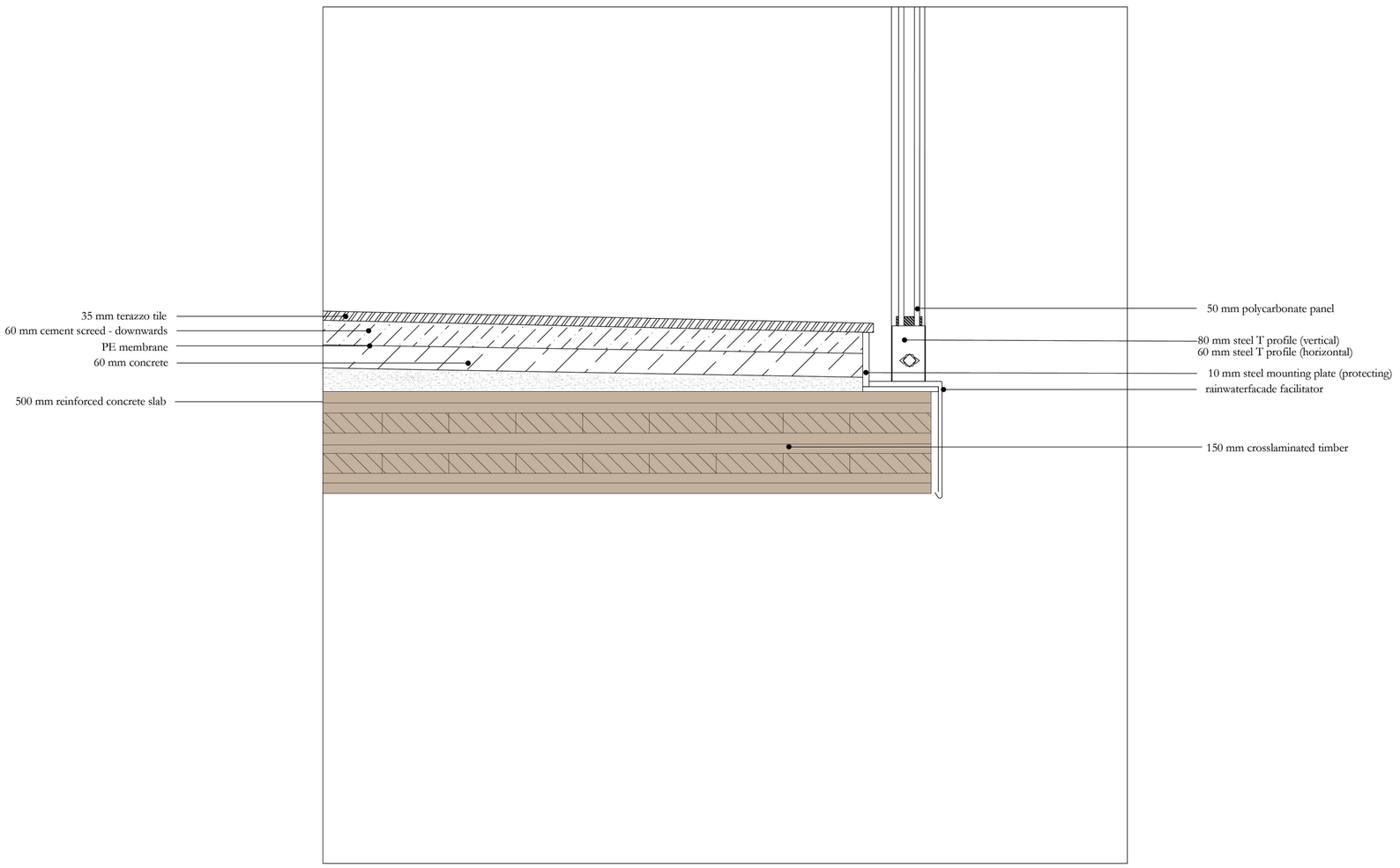
Polycarbonate sheet



1/5 detail - roof

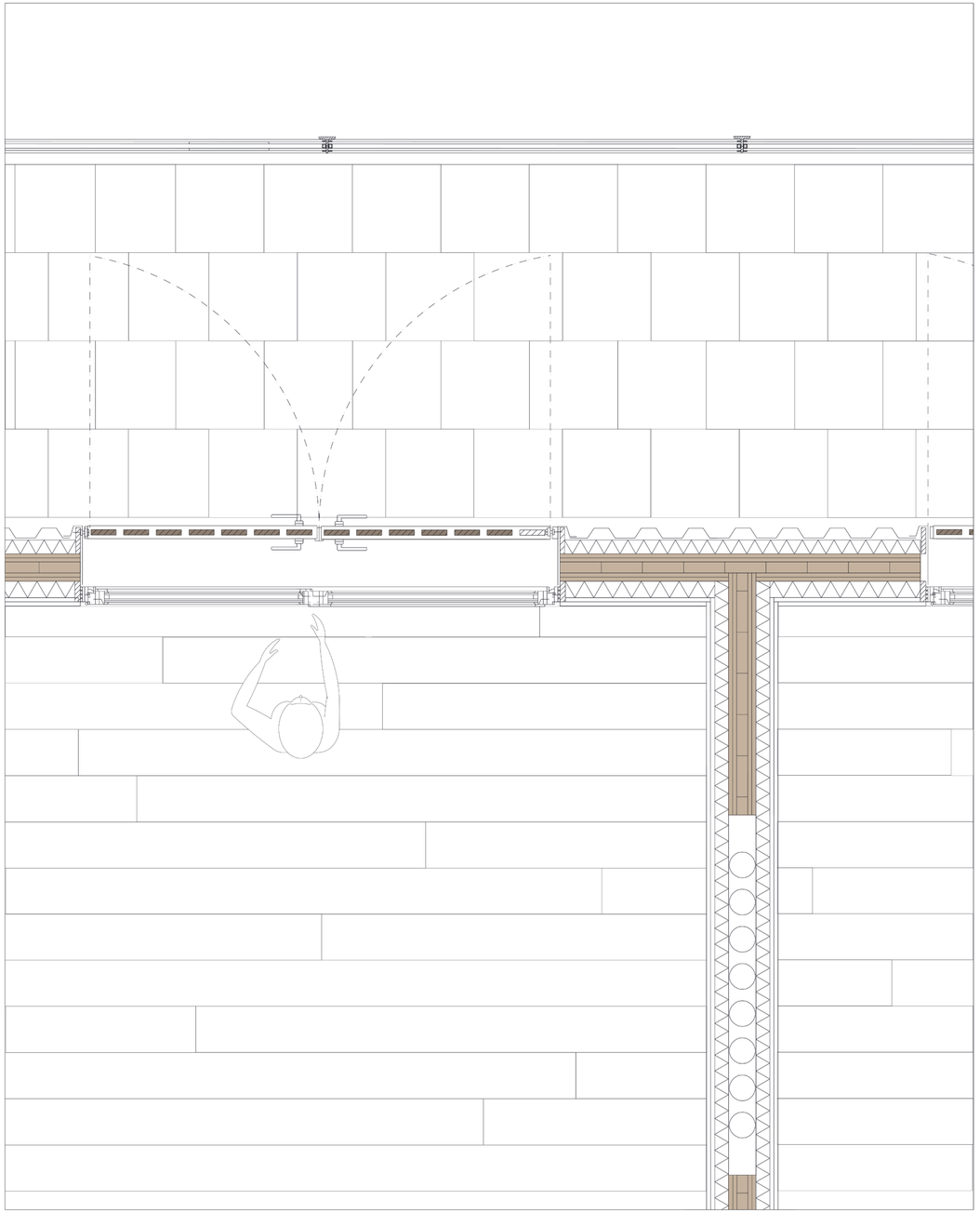


1/5 detail - sliding doors interior

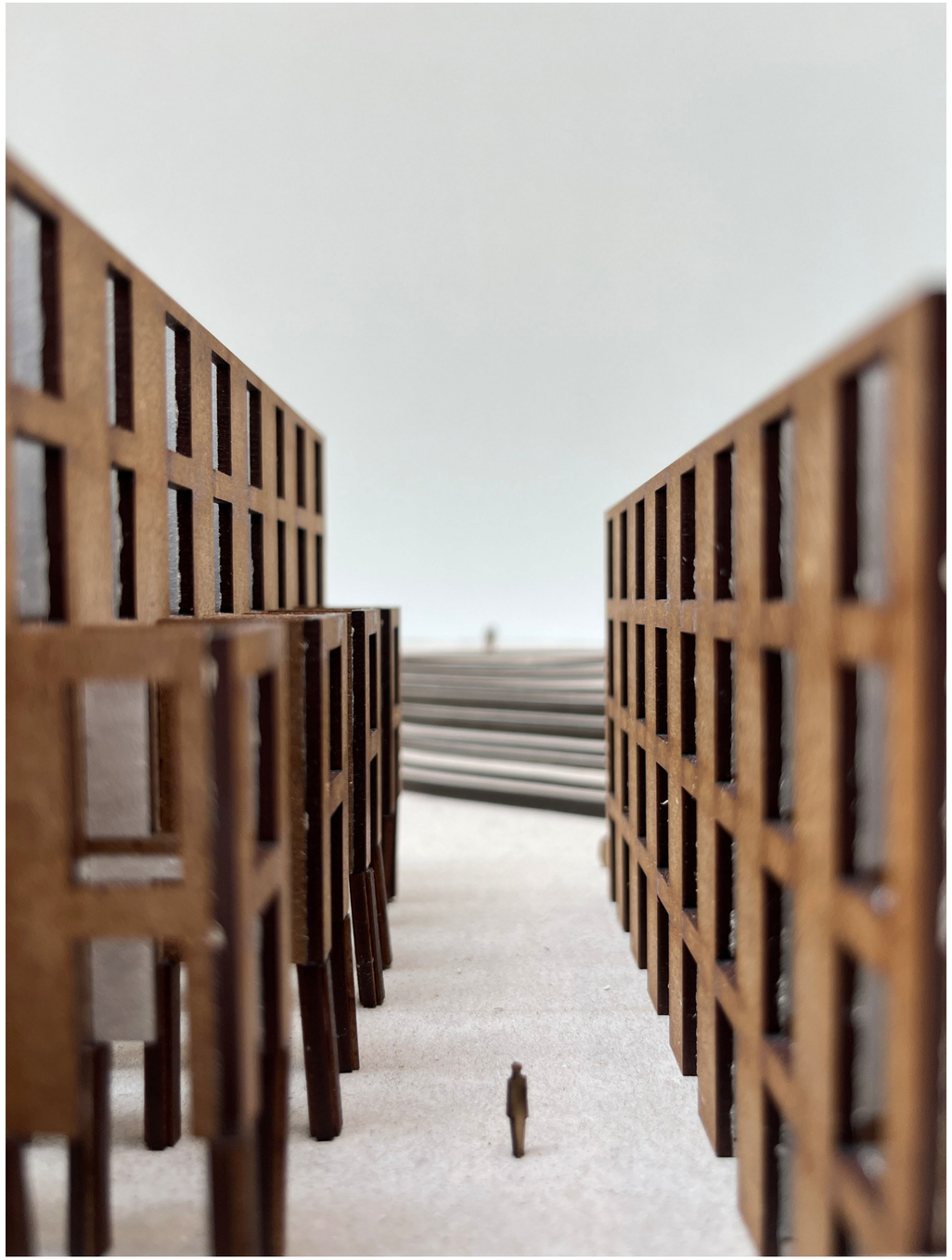


Detail 1.2

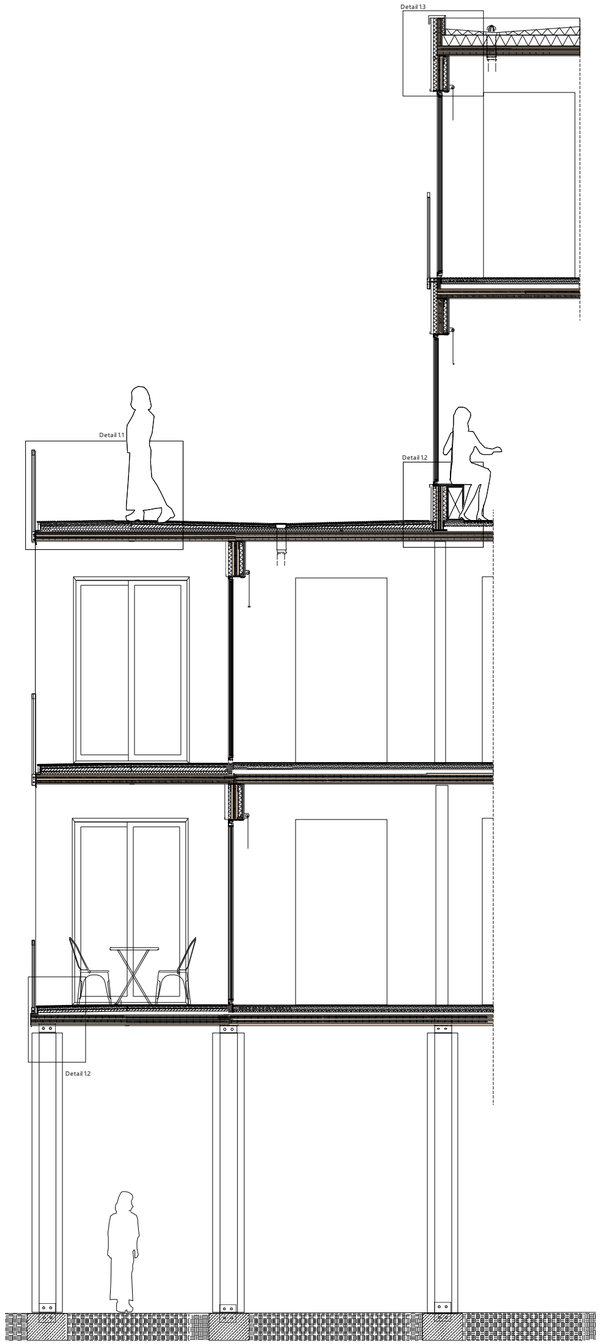
1/5 detail - outside gallary



1/5 detail - acoustic facade (train and tram side)

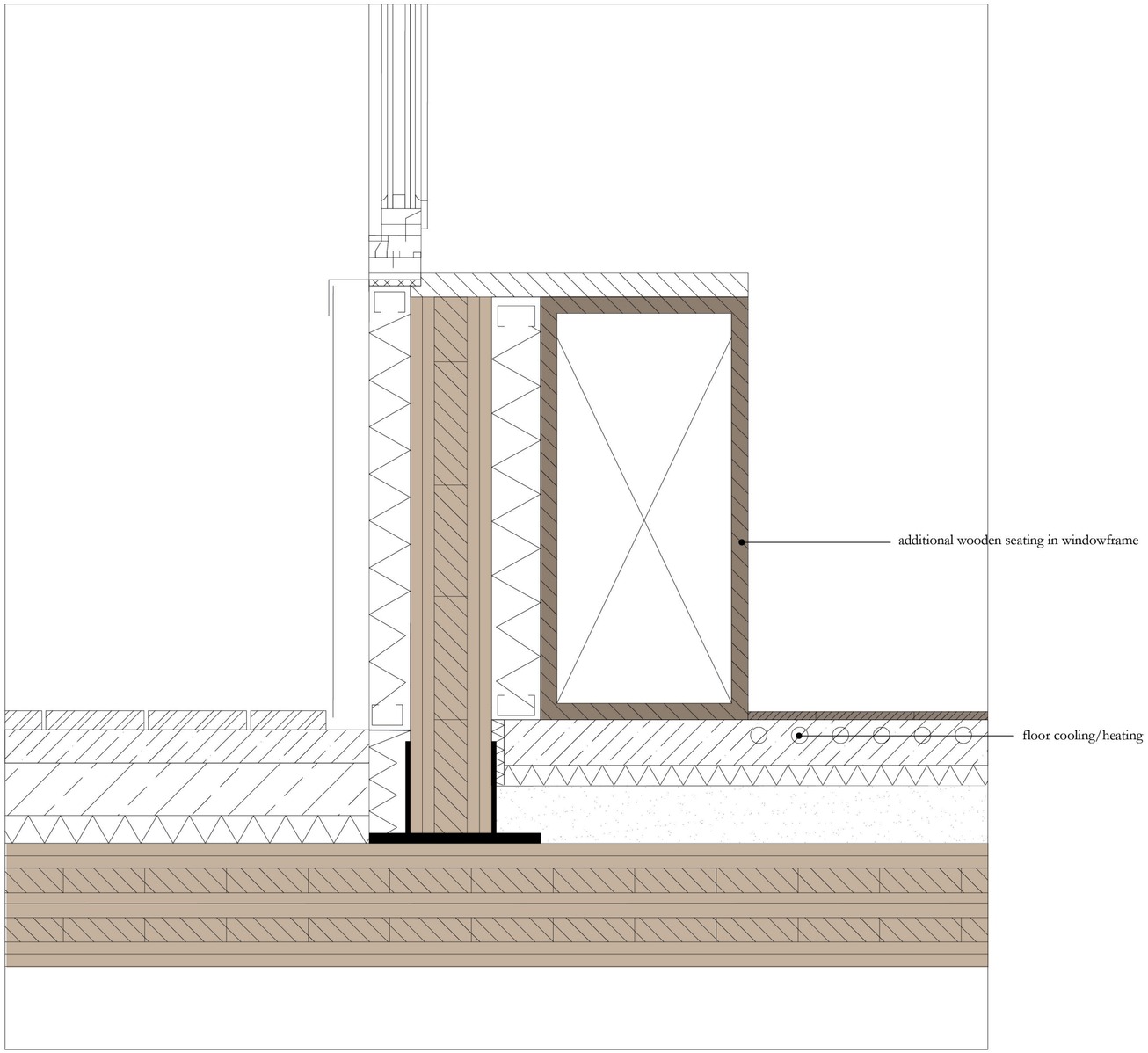


1/20 detail - inner facade blok 3



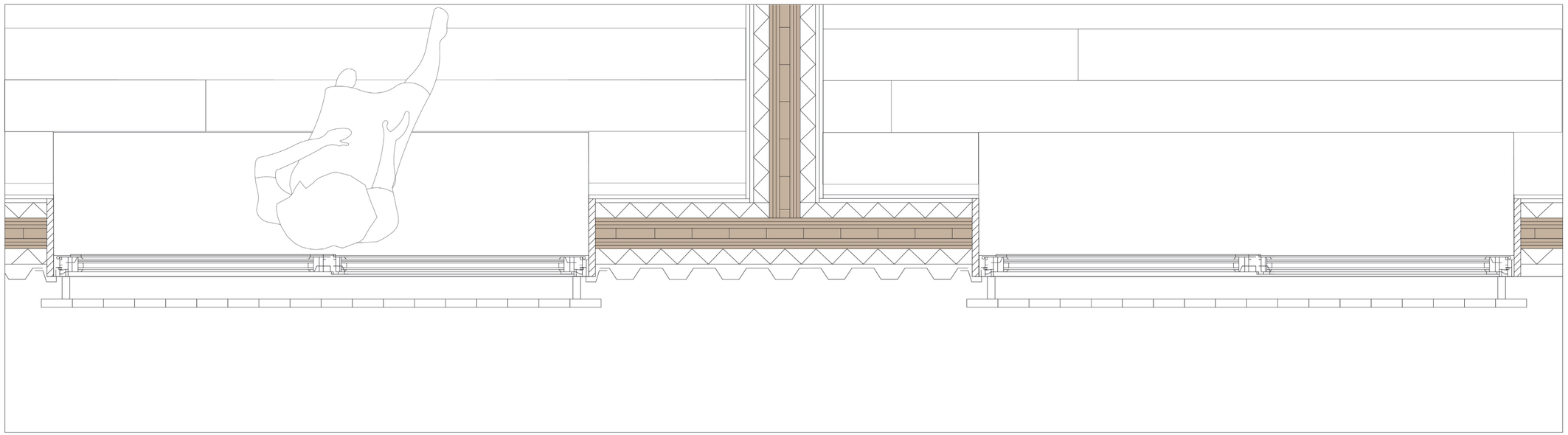
RVS steel - mesh
(balconies)

Sheet pile
- corrugated sheet-metal

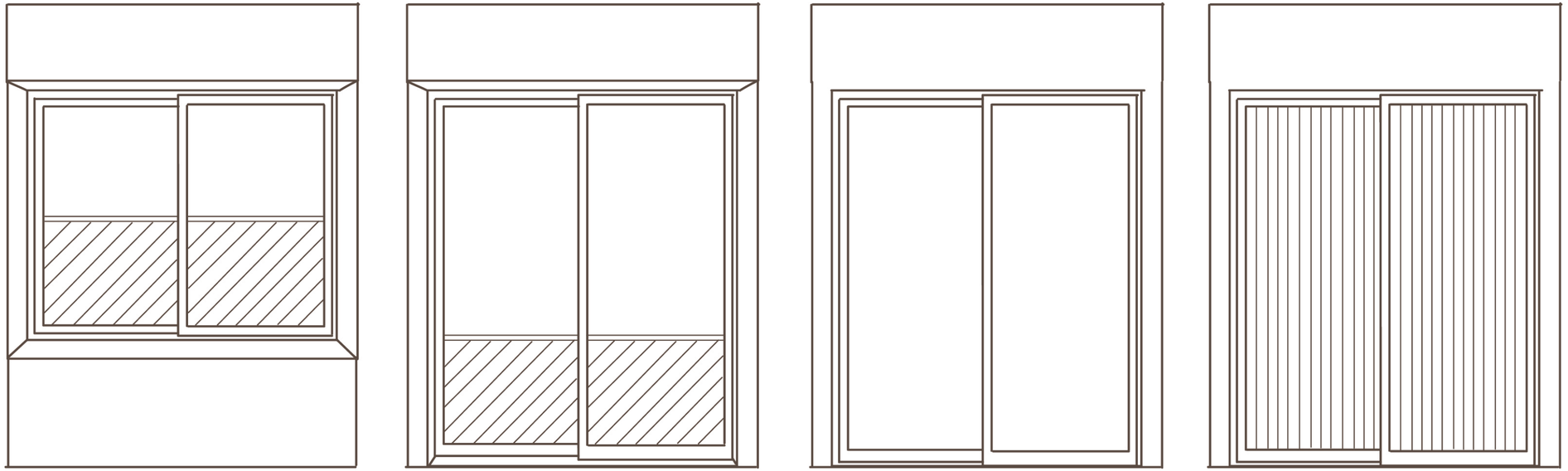


Detail 1.2

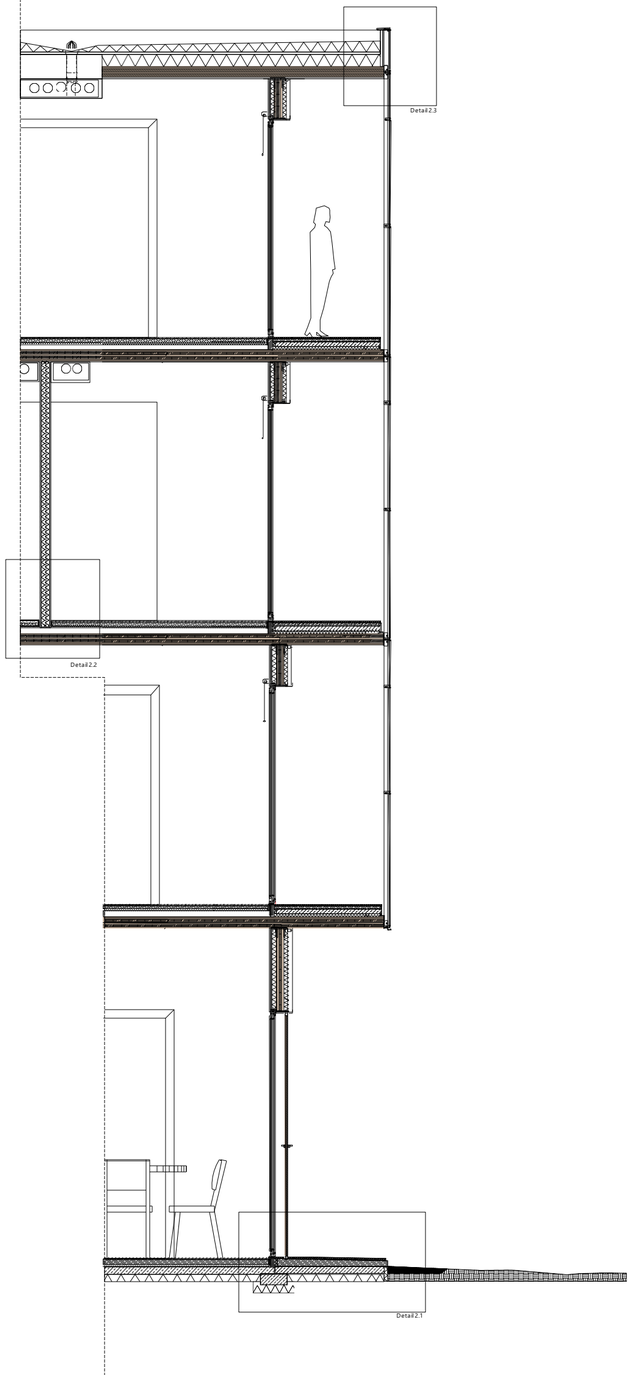
1/5 detail - seating detail



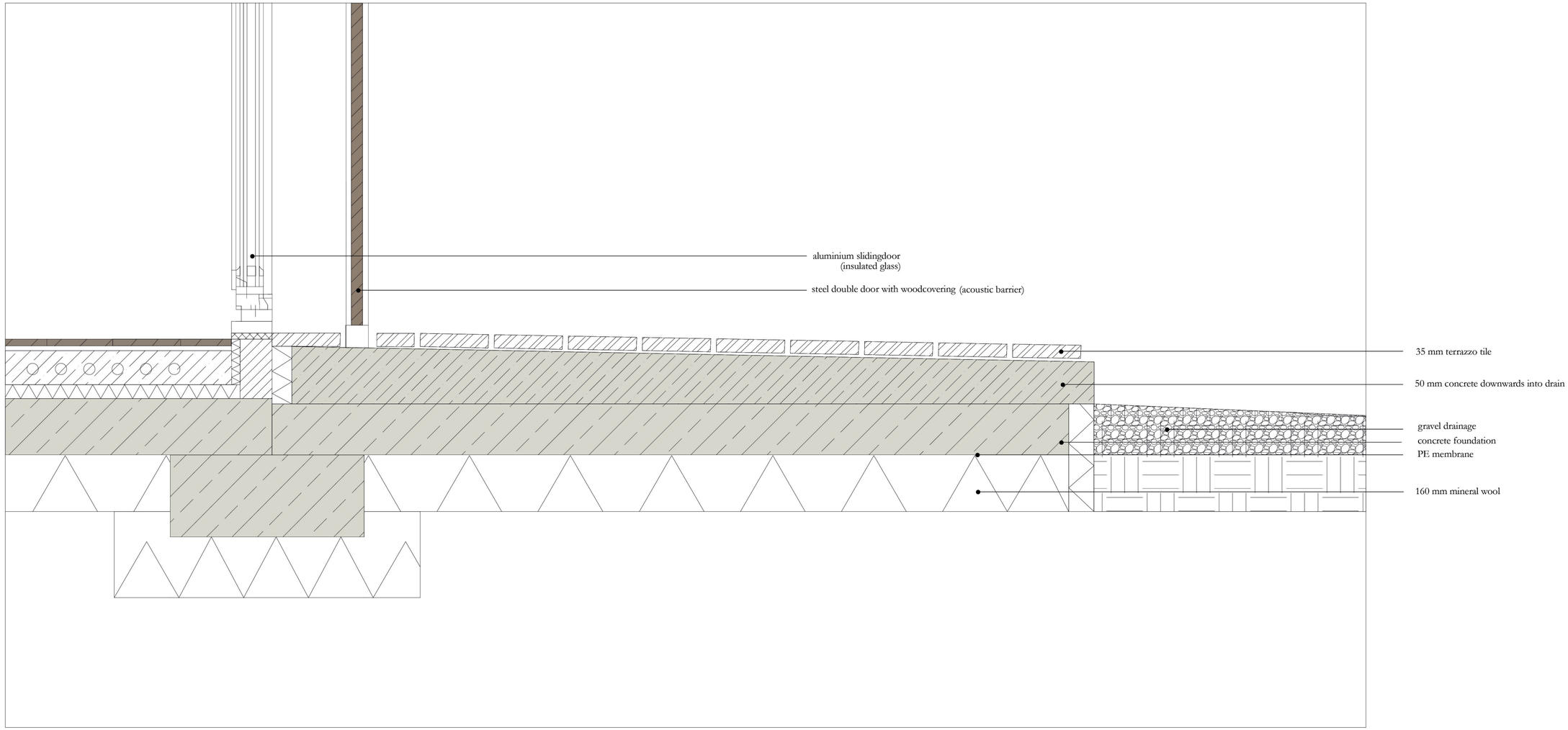
1/5 detail - seating detail



windows - differentiated by the noise source

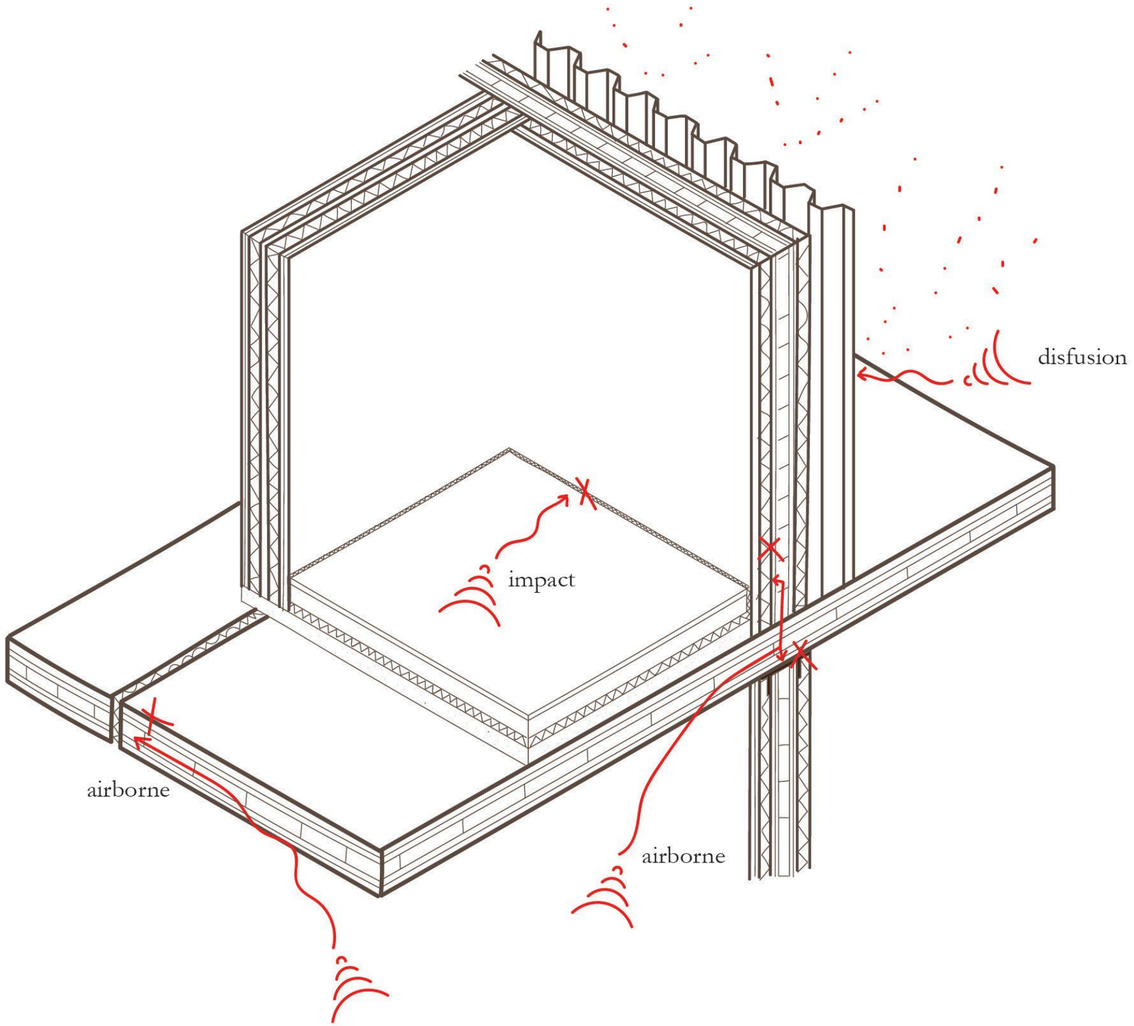


1/20 detail - blok 1 (half circle)

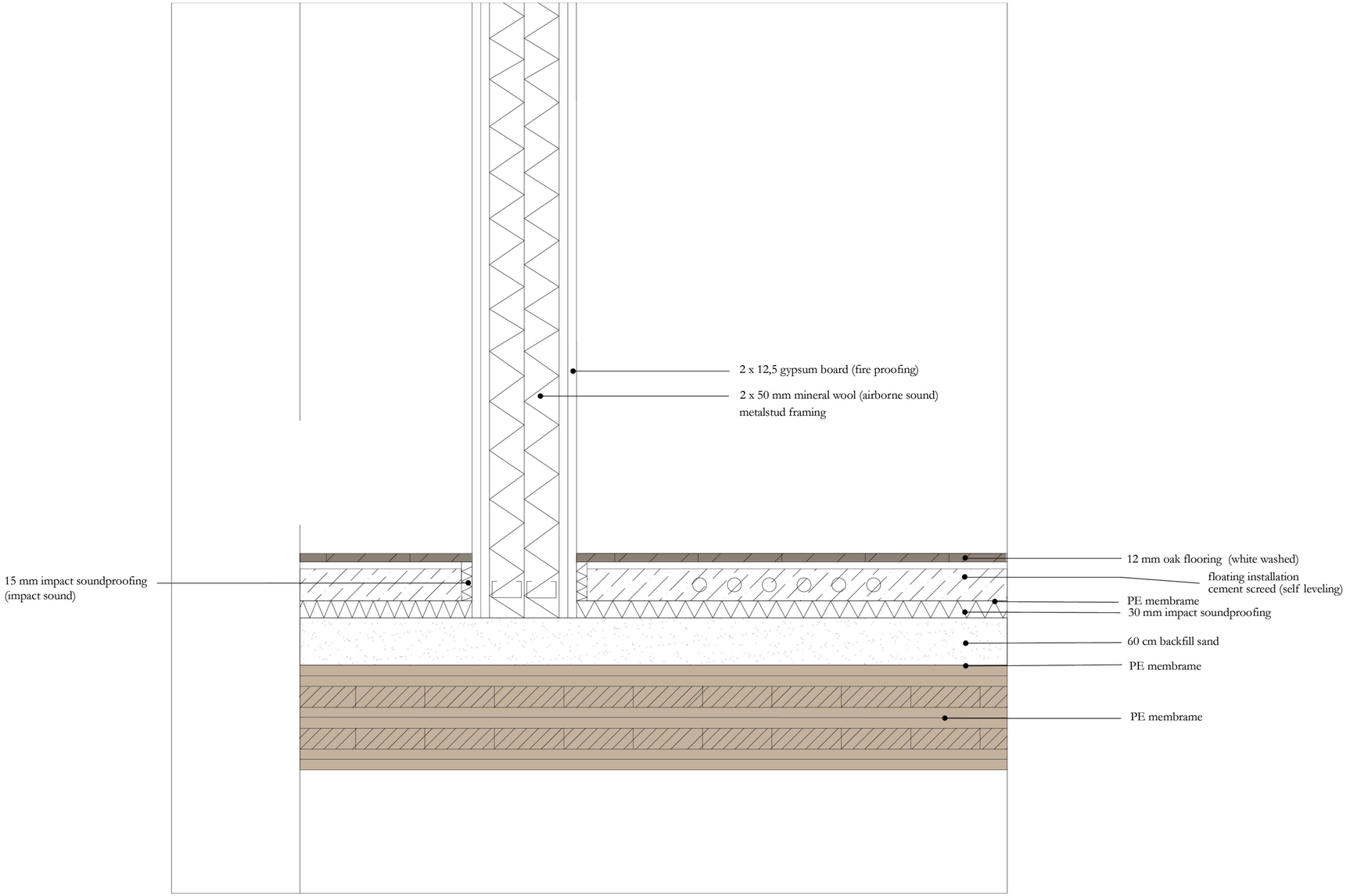


Detail 2.1

1/5 detail - groundfloor

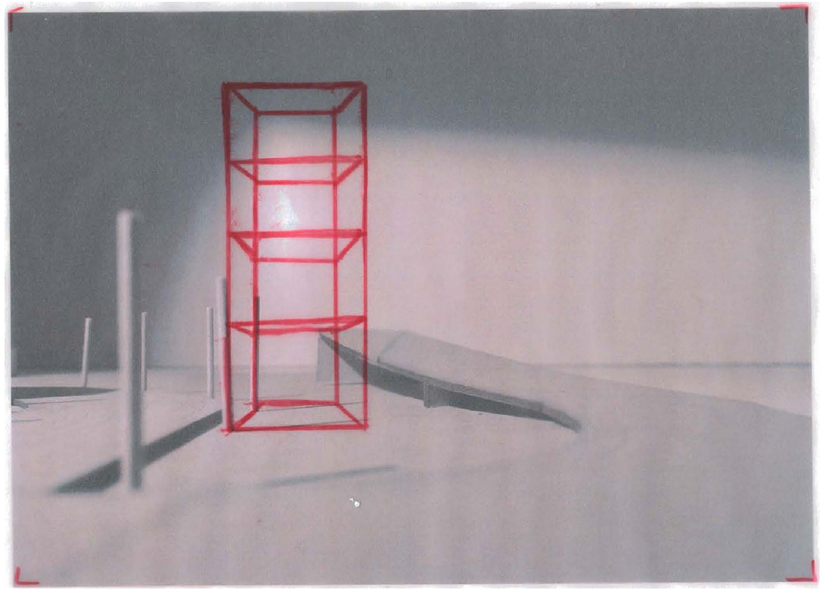


acoustic guarantee



Detail 2.2

1/5 detail - blok 1 (half circle)



Fluid spaces refer to empty, overgrown, or neglegted spaces within the city, but most important, with a certain amount of visible potential fluidity.

So **fluid spaces** have the potency to be highly mouldable and dynamic environments.