

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

A compendium of the search to an architectural reaction on a fluid space.

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Art and literature are forms that find a way to live on forever and inspire people.

I consider architecture to be such a form as well. Architectural objects that fit harmoniously into their surroundings often find a way to house something or someone. However, there are also architectural objects that initially serve a functional role but over time lose their function and cannot change.

Sentence found in my first journal.

Fluid space or?

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)

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

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

Social lens - mapping activities or possible activities

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)



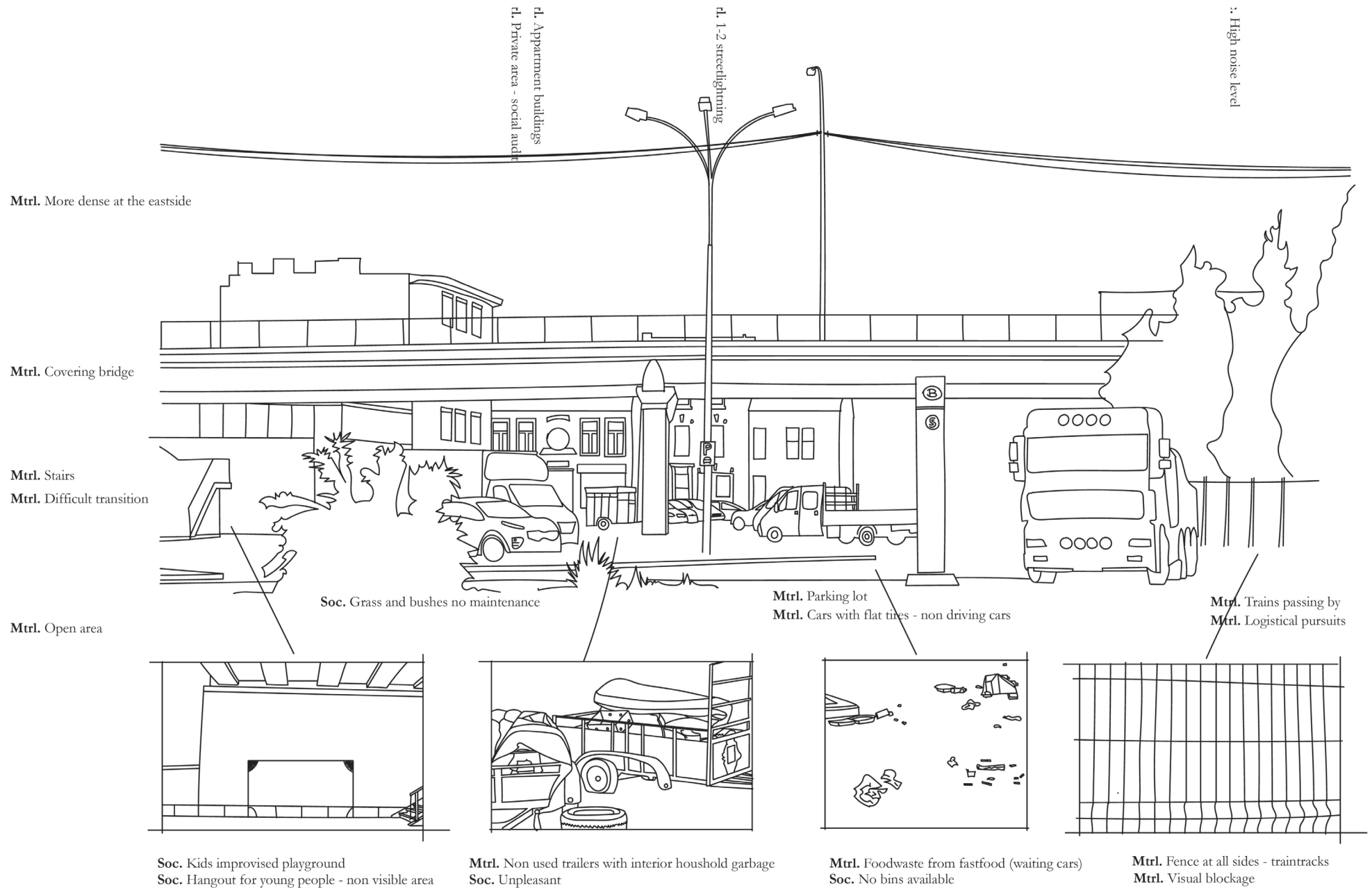
Summary of analyzed spatial characteristics in Liège



Nr. 1 - (un)productive parkinglot under bridge



Nr. 1 - (un)productive parkinglot under bridge



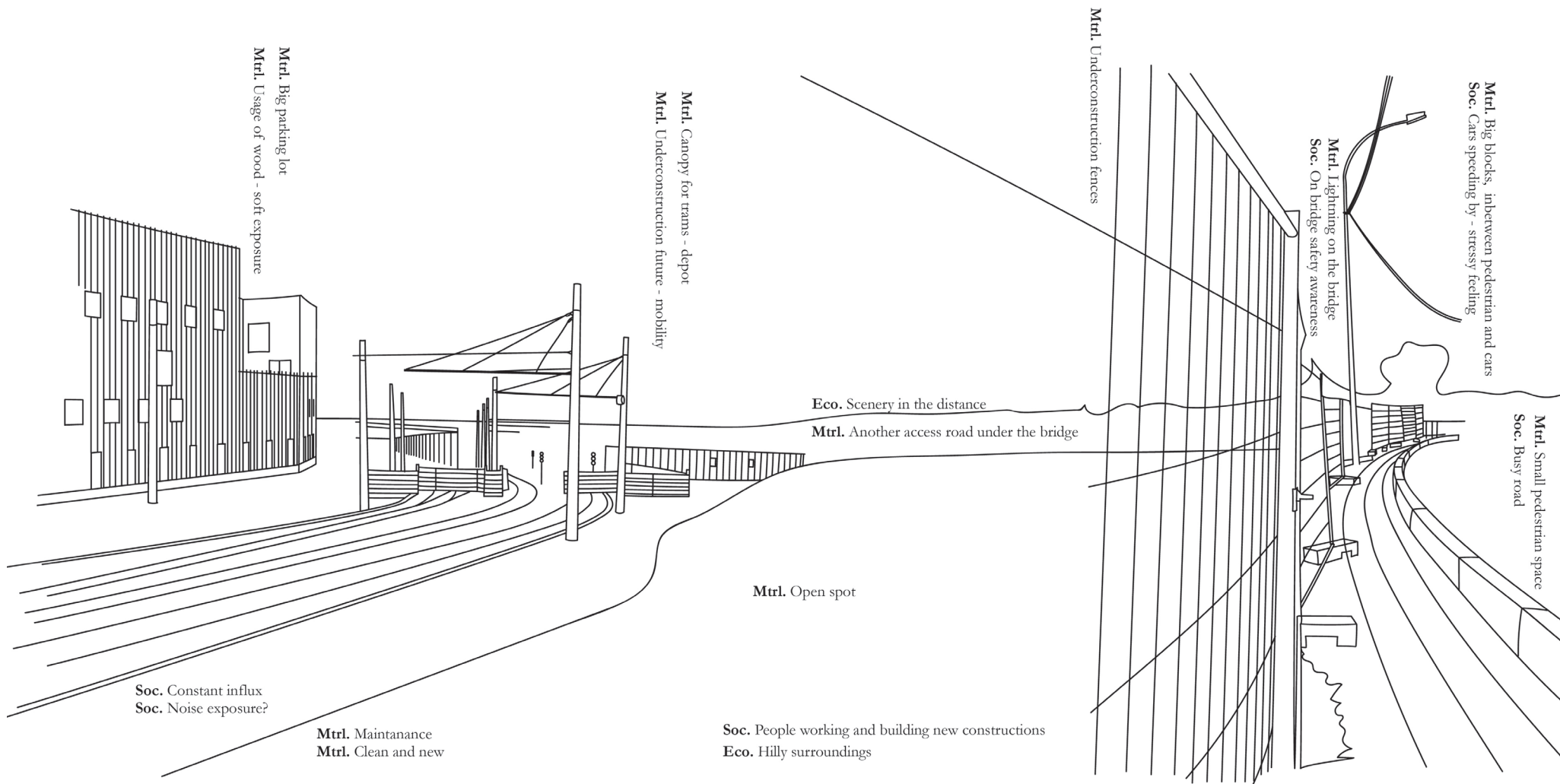
Nr. 1 - (un)productive parkinglot under bridge



Nr. 2 - empty space inbetween tramdepot and bridge



Nr. 2 - empty space inbetween tramdepot and bridge



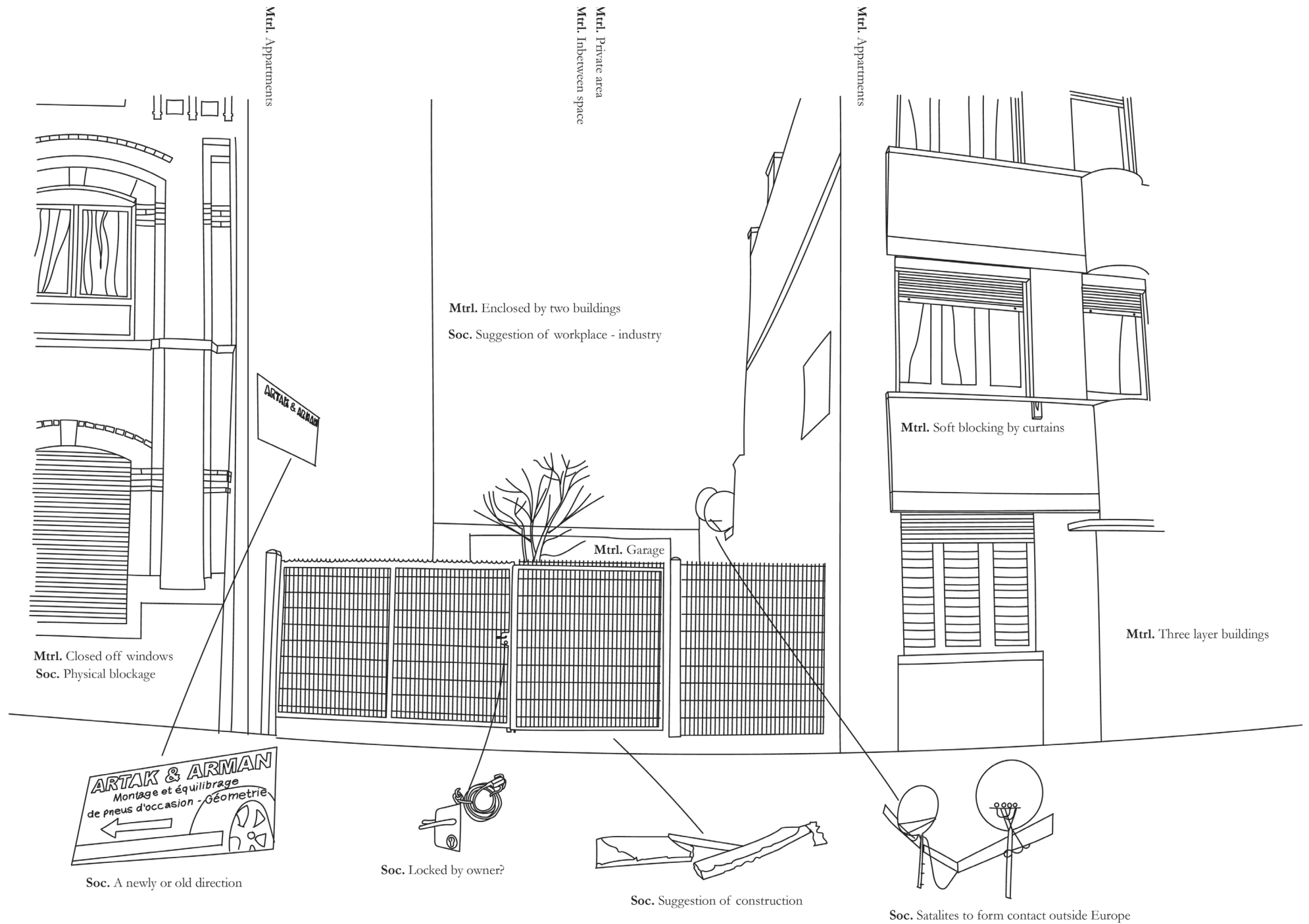
Nr. 2 - empty space inbetween tramdepot and bridge



Nr. 5 - fluctuating space underconstruction inbetween buildings



Nr. 5 - fluctuating space underconstruction inbetween buildings



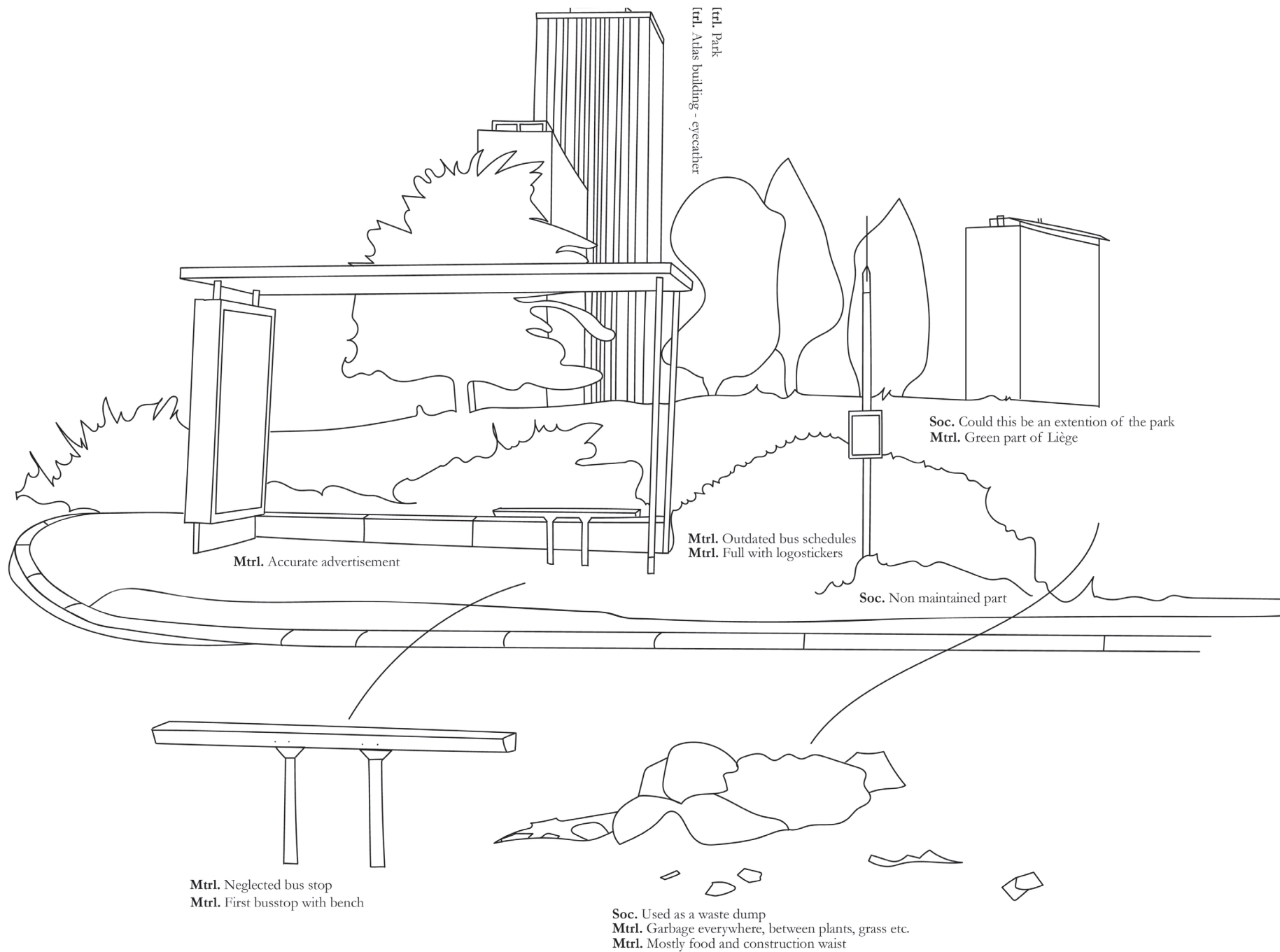
Nr. 5 - fluctuating space underconstruction inbetween buildings



Nr. 7 - (indeterminate) non maintained space



Nr. 7 - (inderterminate) non maintained space

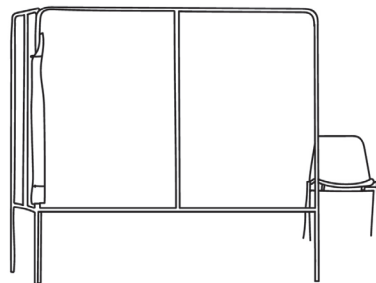
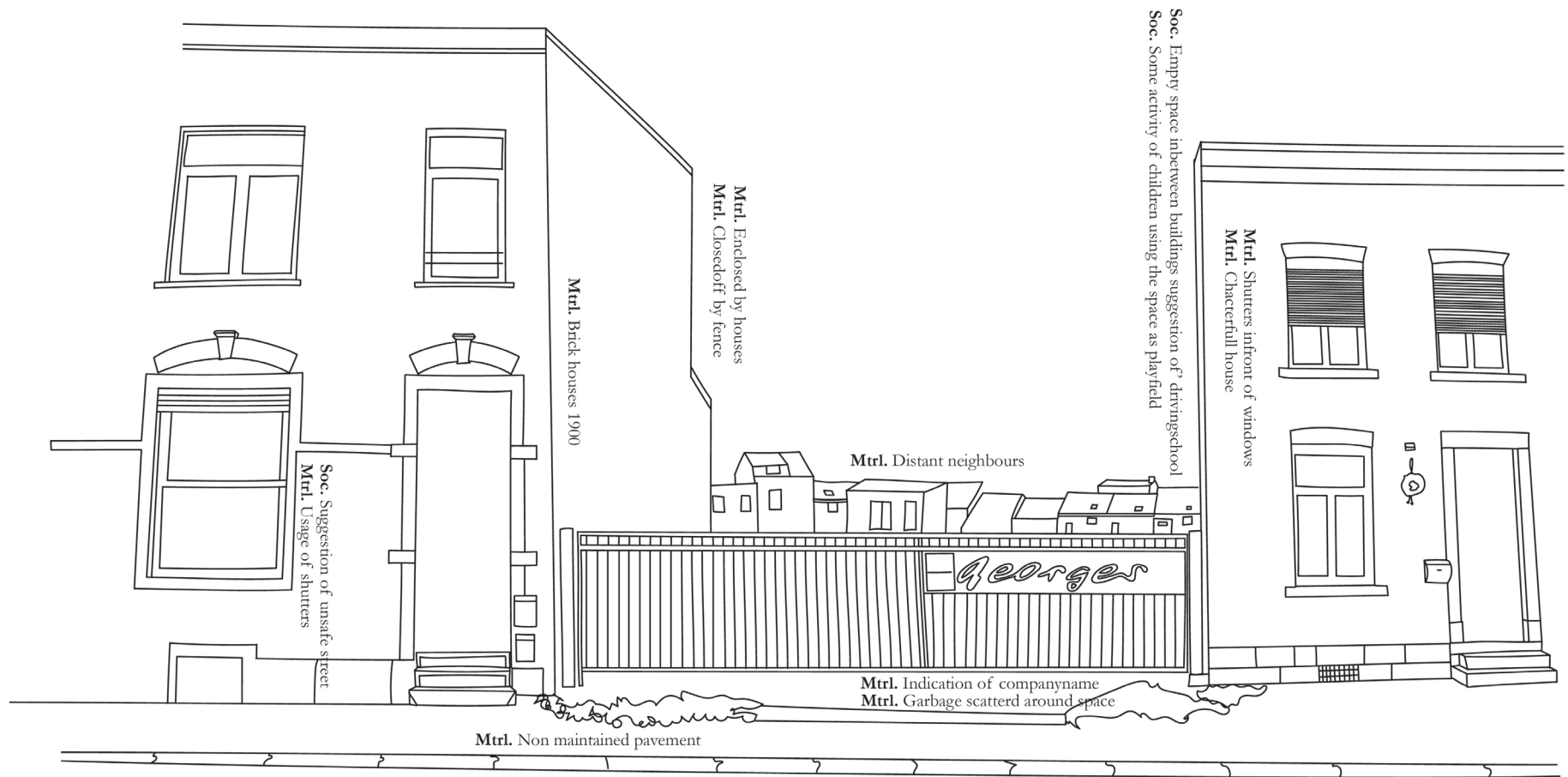




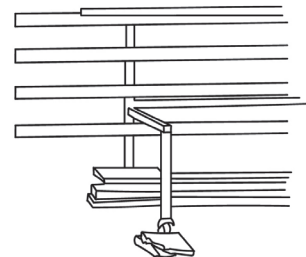
Nr. 8 - fluctuating space inbetween buildings



Nr. 8 - fluctuating space inbetween buildings



Soc. Questions about how they use their equipment
Mtrl. Random attributes not reminiscent of traffic school



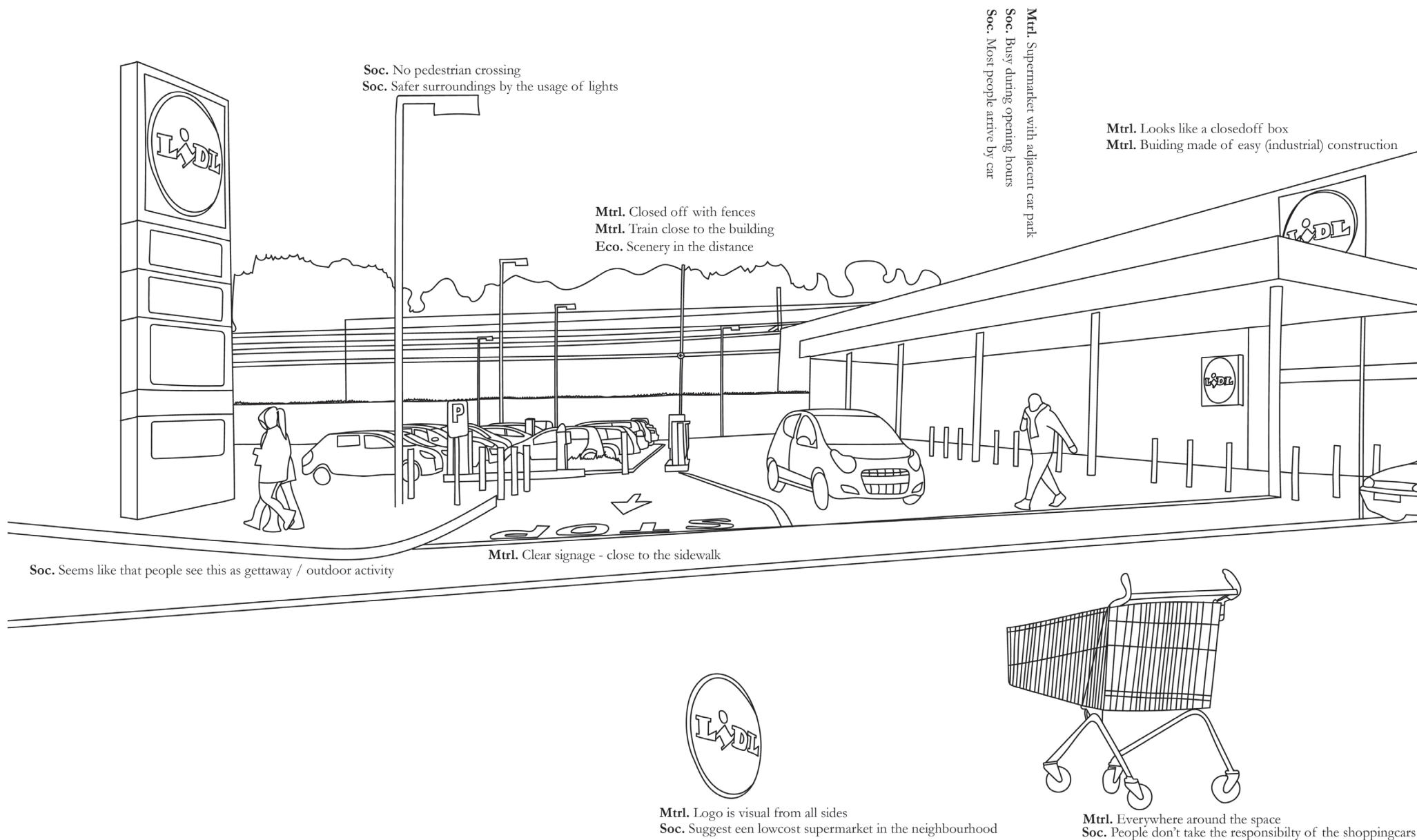
Soc. Poorly maintained equipment indicates something about (no longer existing) business
Mtrl. Non maintained equipment



Nr. 10 - time (un)productive space



Nr. 10 - time (un)productive space

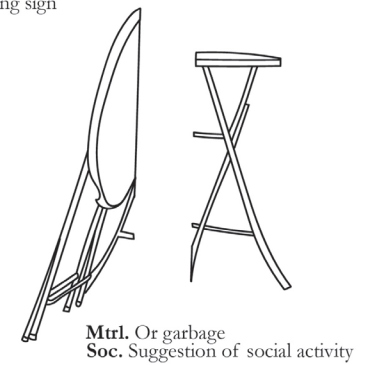
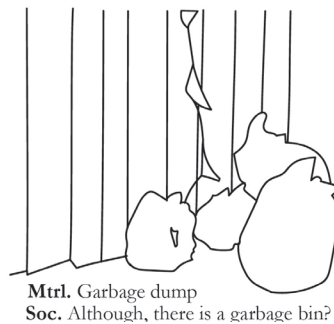
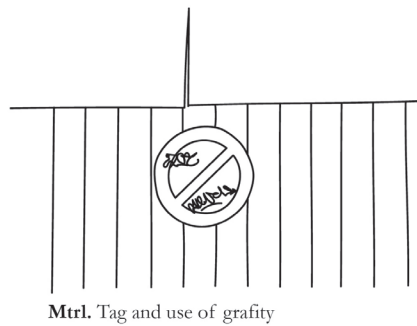




Nr. 12 - unproductive space closedoff



Nr. 12 - unproductive space closedoff

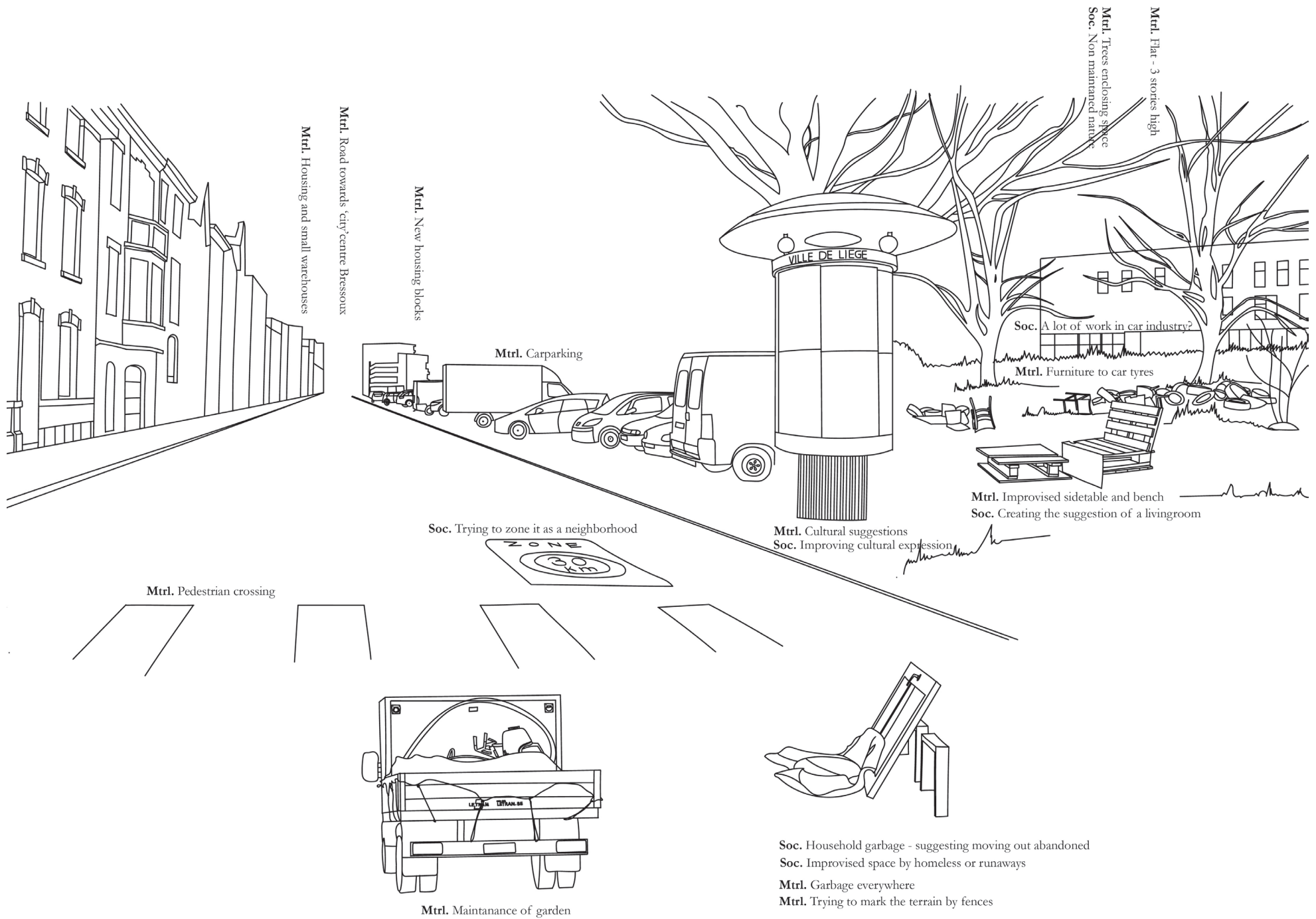




Nr. 17 - indeterminate space on a corner



Nr. 17 - indeterminate space on a corner

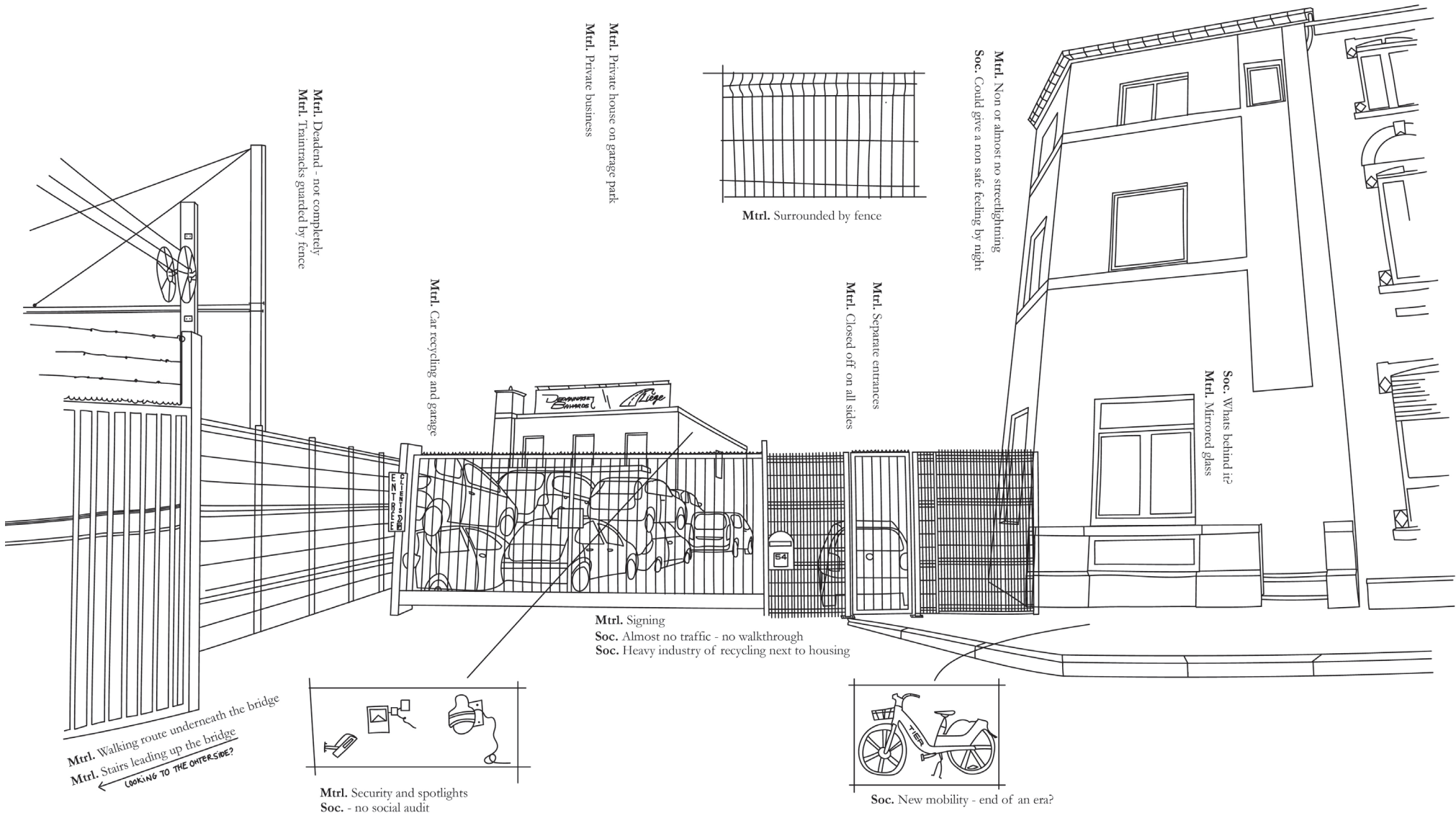




Nr. 27 - (un)productive recyle lot

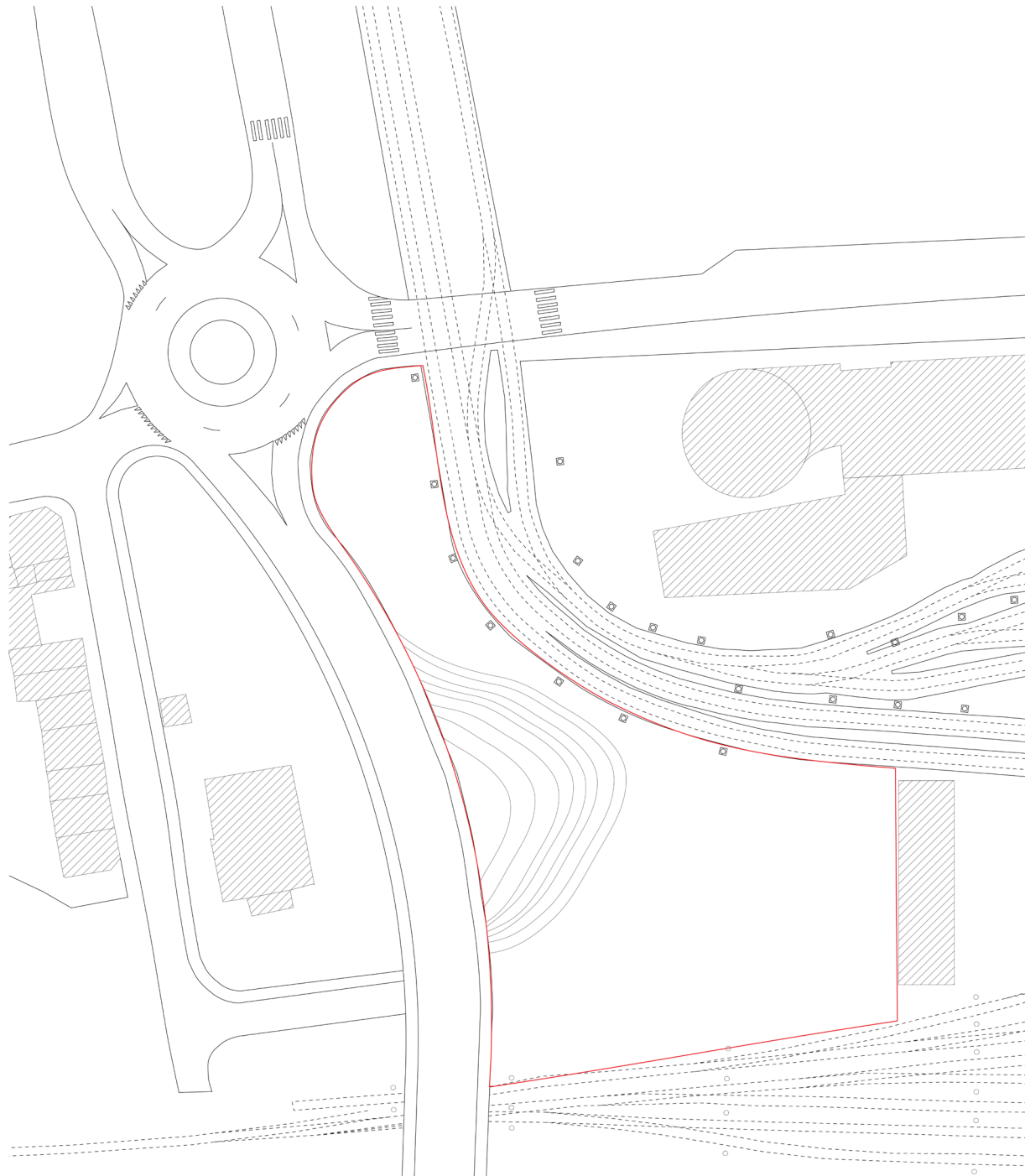


Nr. 27 - (un)productive recyle lot

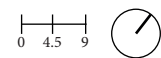




One of these sites became the graduation project site: nr 2 empty space inbetween tramdepot and bridge. A site with potential but also a lot of challenge.



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



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 neglected spaces within the city, but most important,
with a certain amount of visible potential fluidity.

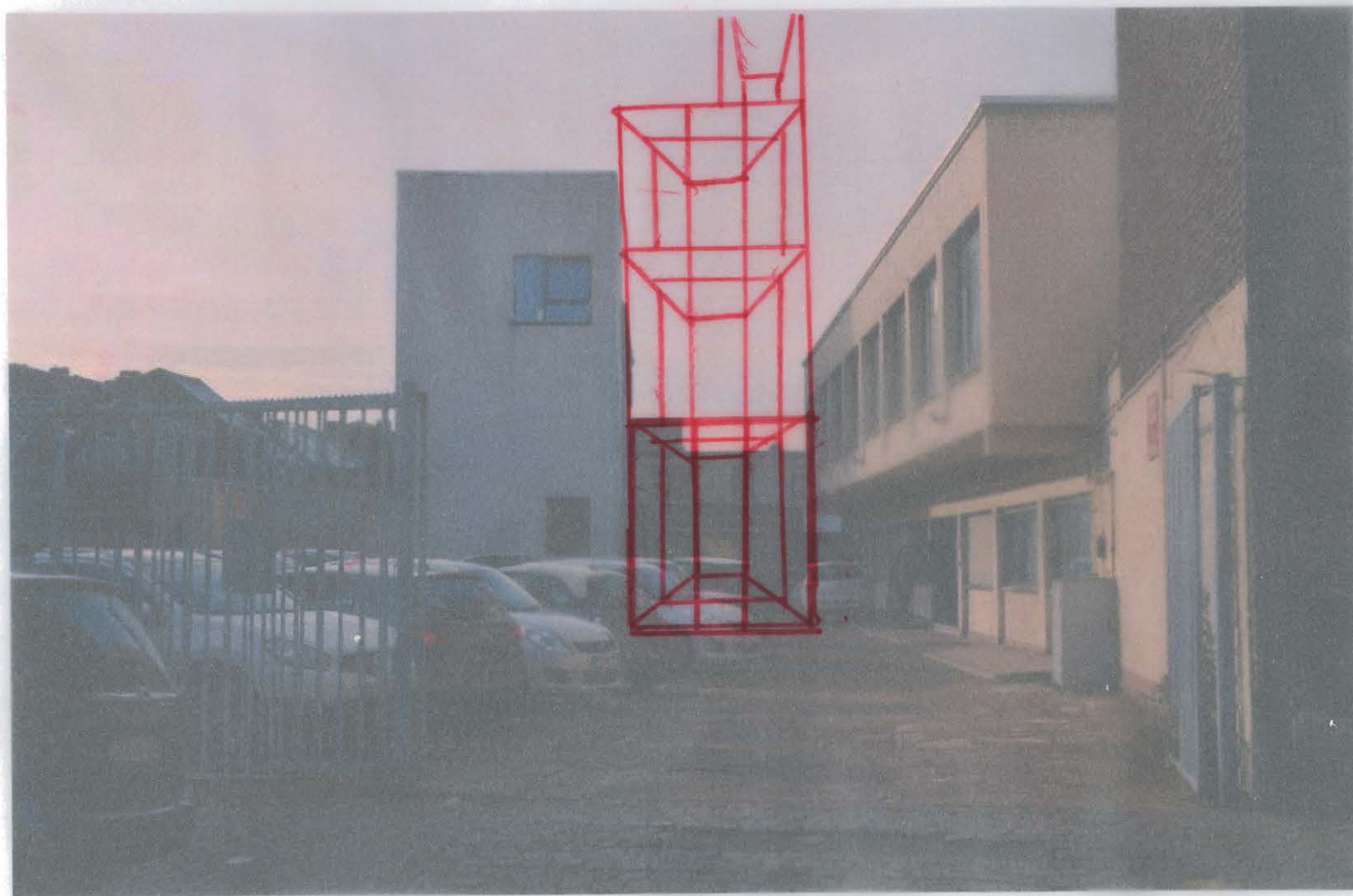
Fluid spaces have the potency to be highly malleable and dynamic environments.



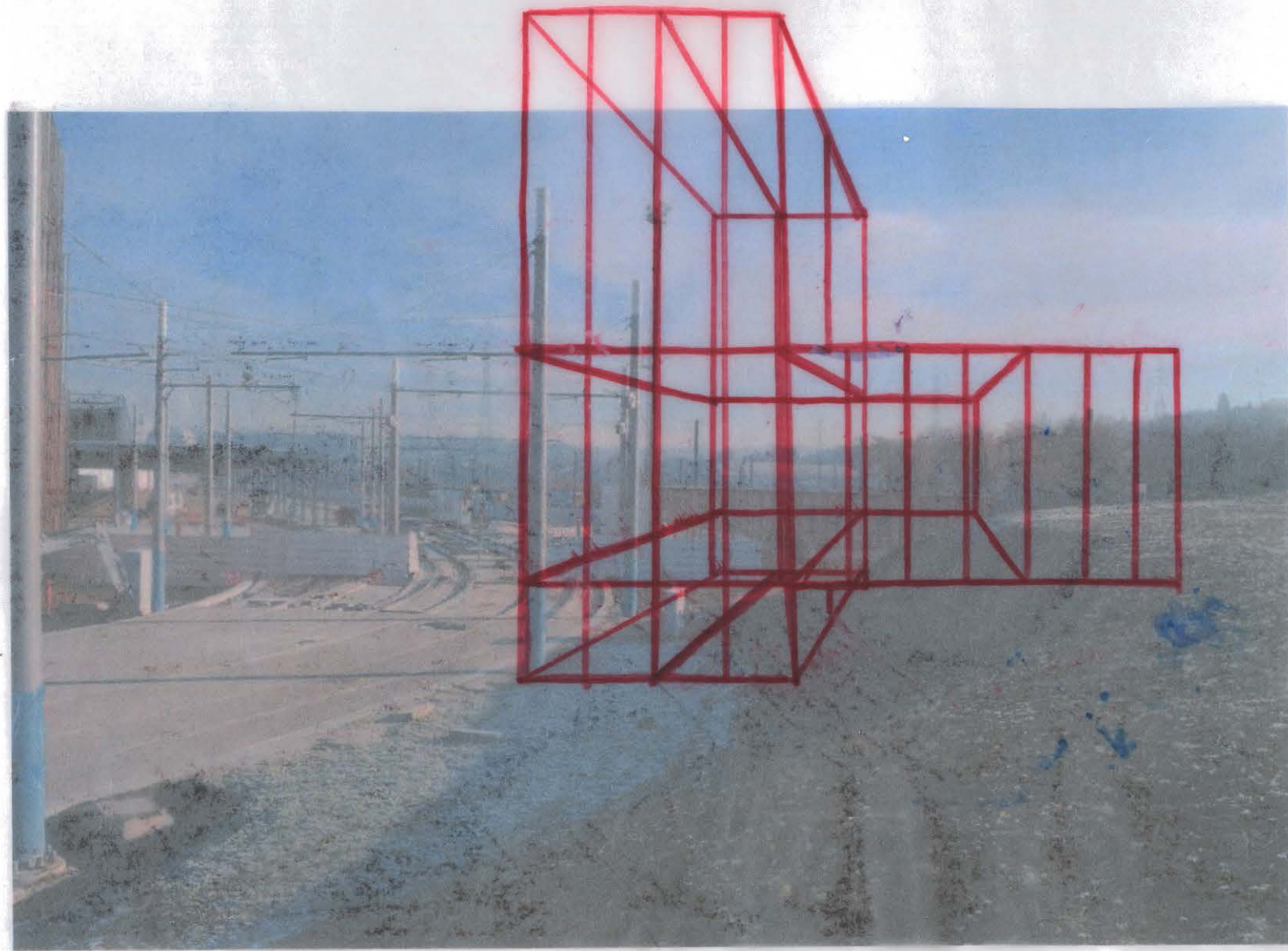
A kineograph of exploring an elastic activator -
hand-drawn wire models on chalk paper and photo presented in a flipbook

A selection of exploring an elastic activator -
hand-drawn wire models on chalk paper and photo

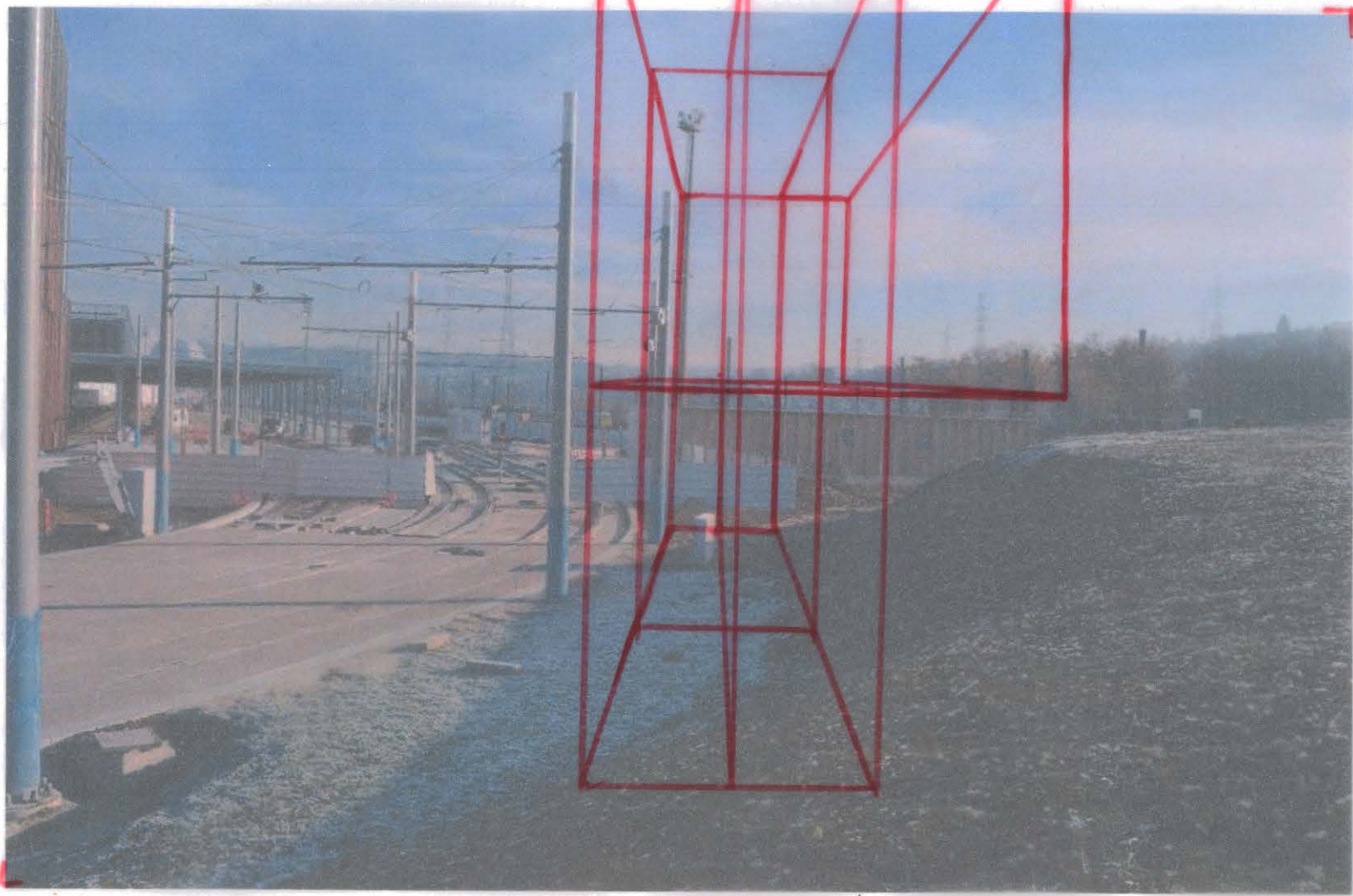
The intuitive approach to the project allowed me to let my initial thinking flow from form
rather than function .



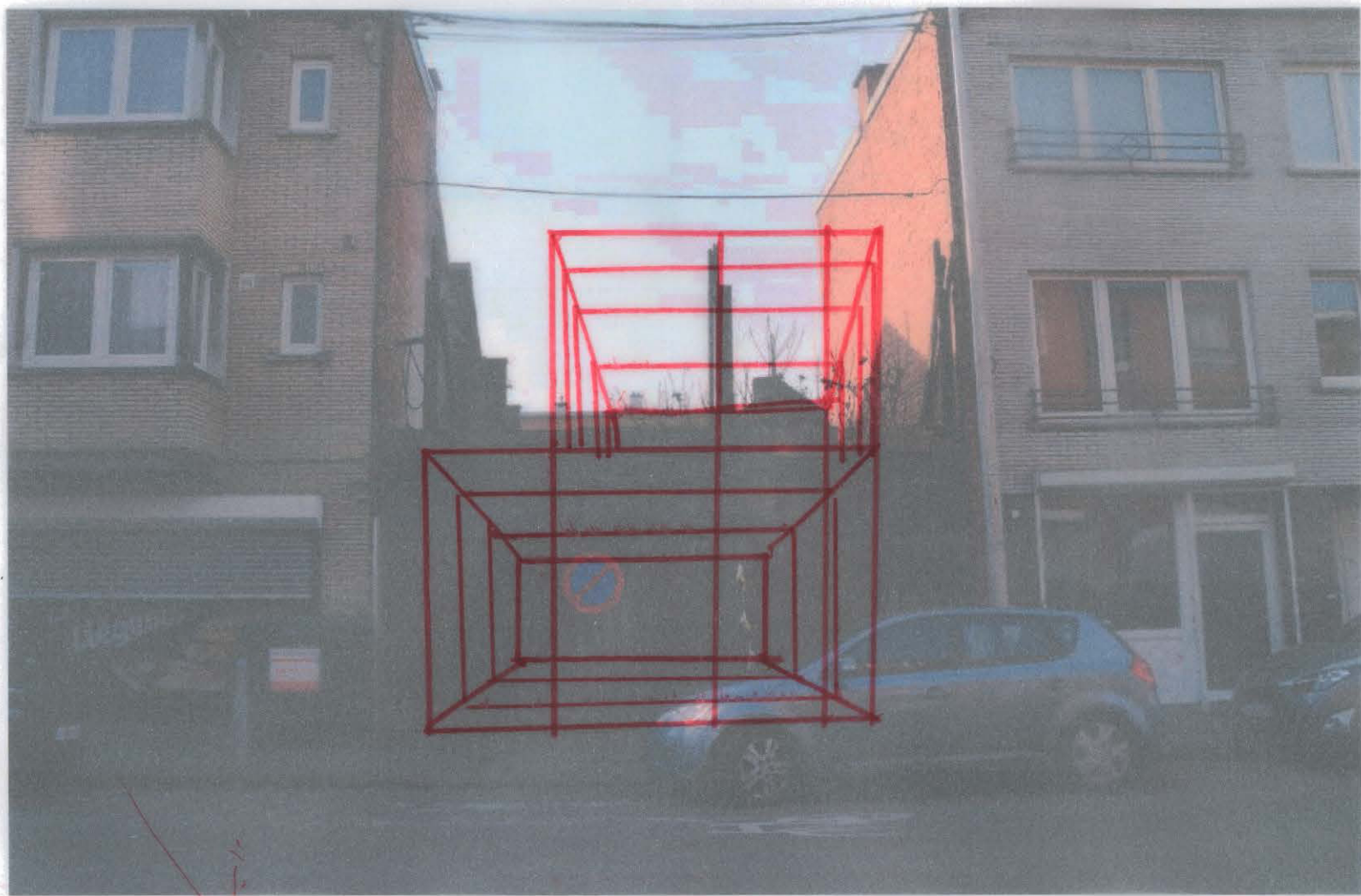
Nr. 21 - (un)productive space parkinglot



Nr. 2 - empty space inbetween tramdepot and bridge

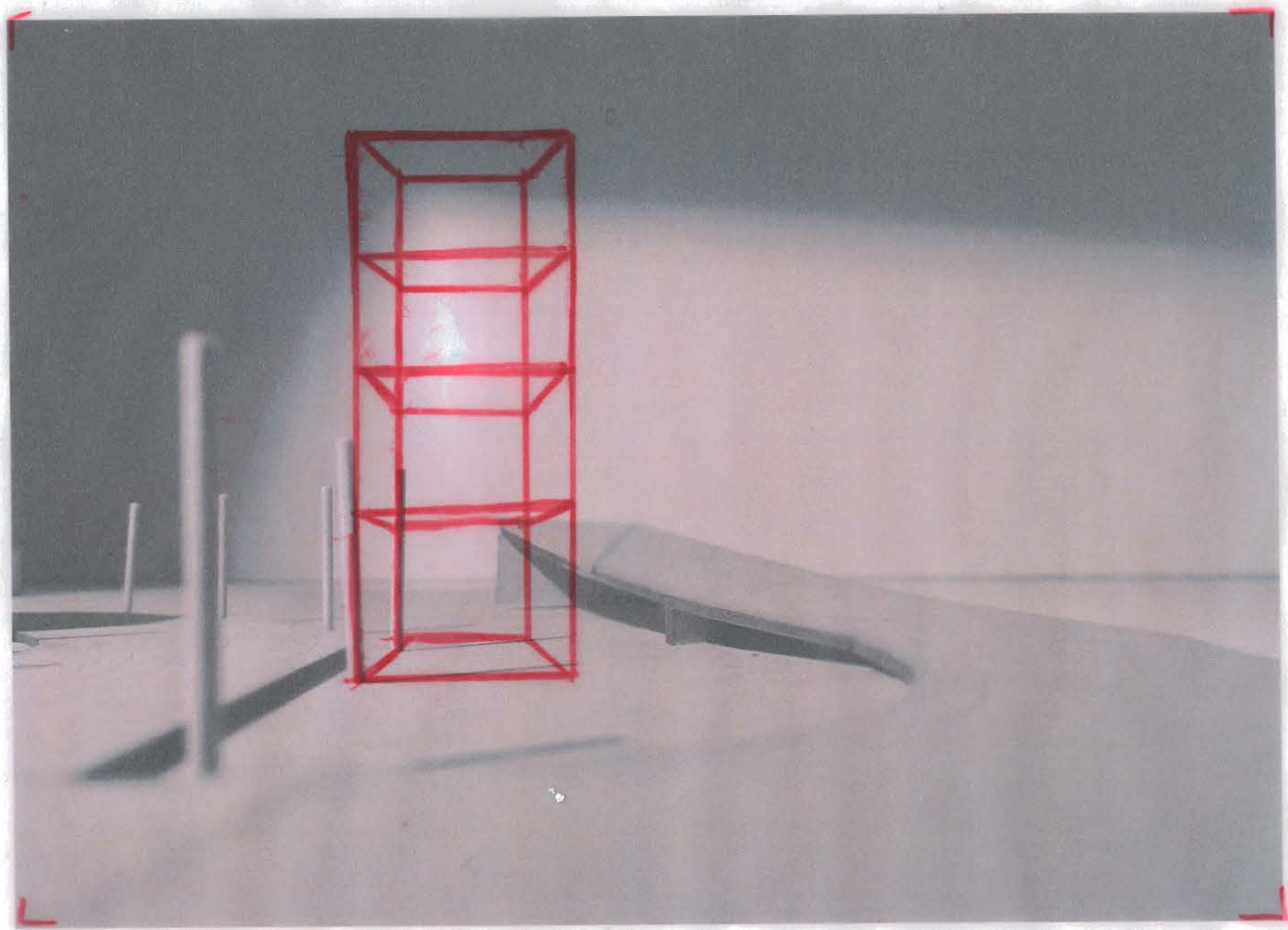


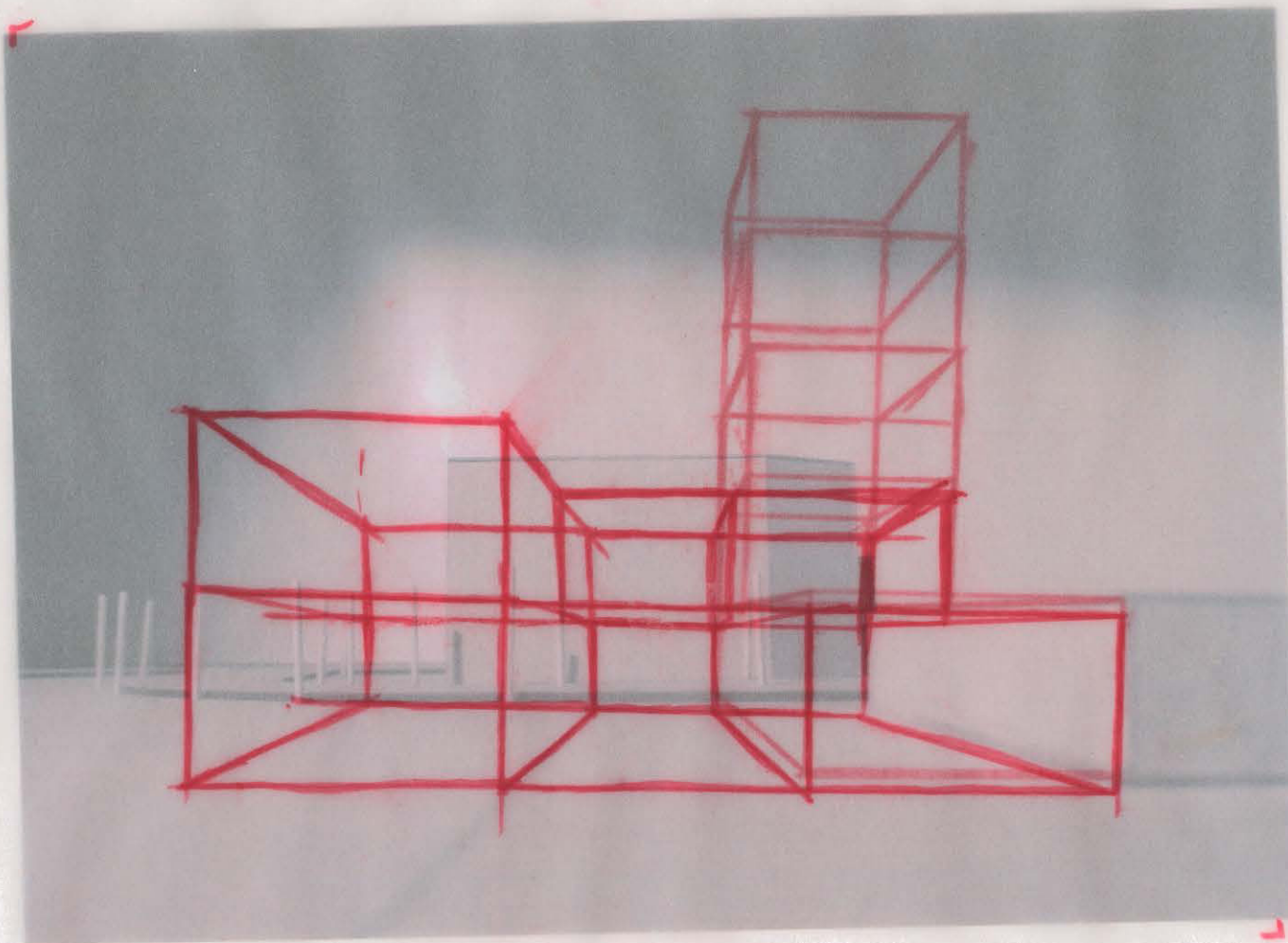
Nr. 2 - empty space inbetween tramdepot and bridge

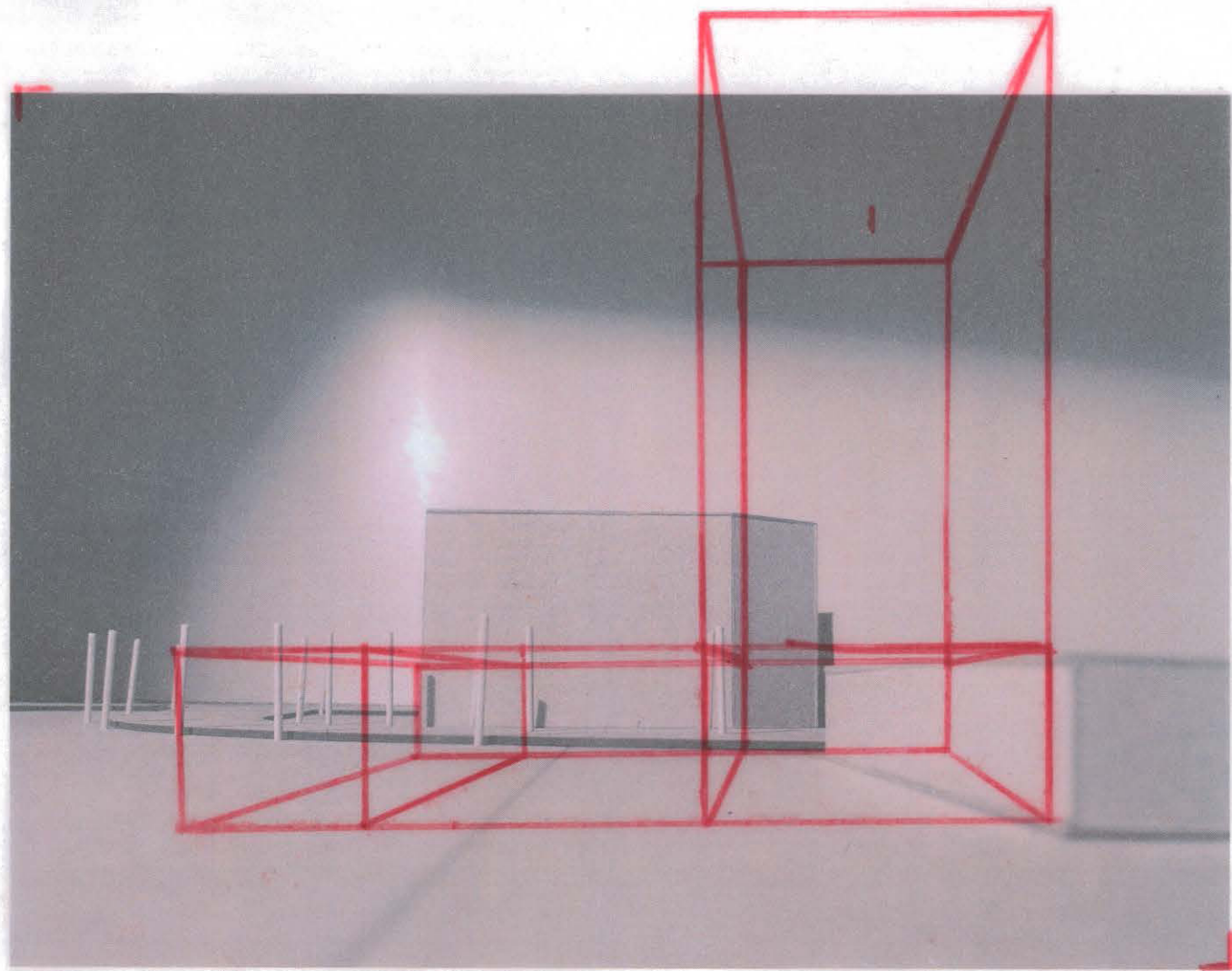


Nr. 12 - unproductive space closedoff

What culminated in a follow-up in a 1:200 model of the site -
a selection of where hand-drawn wire models could be fitted into the site

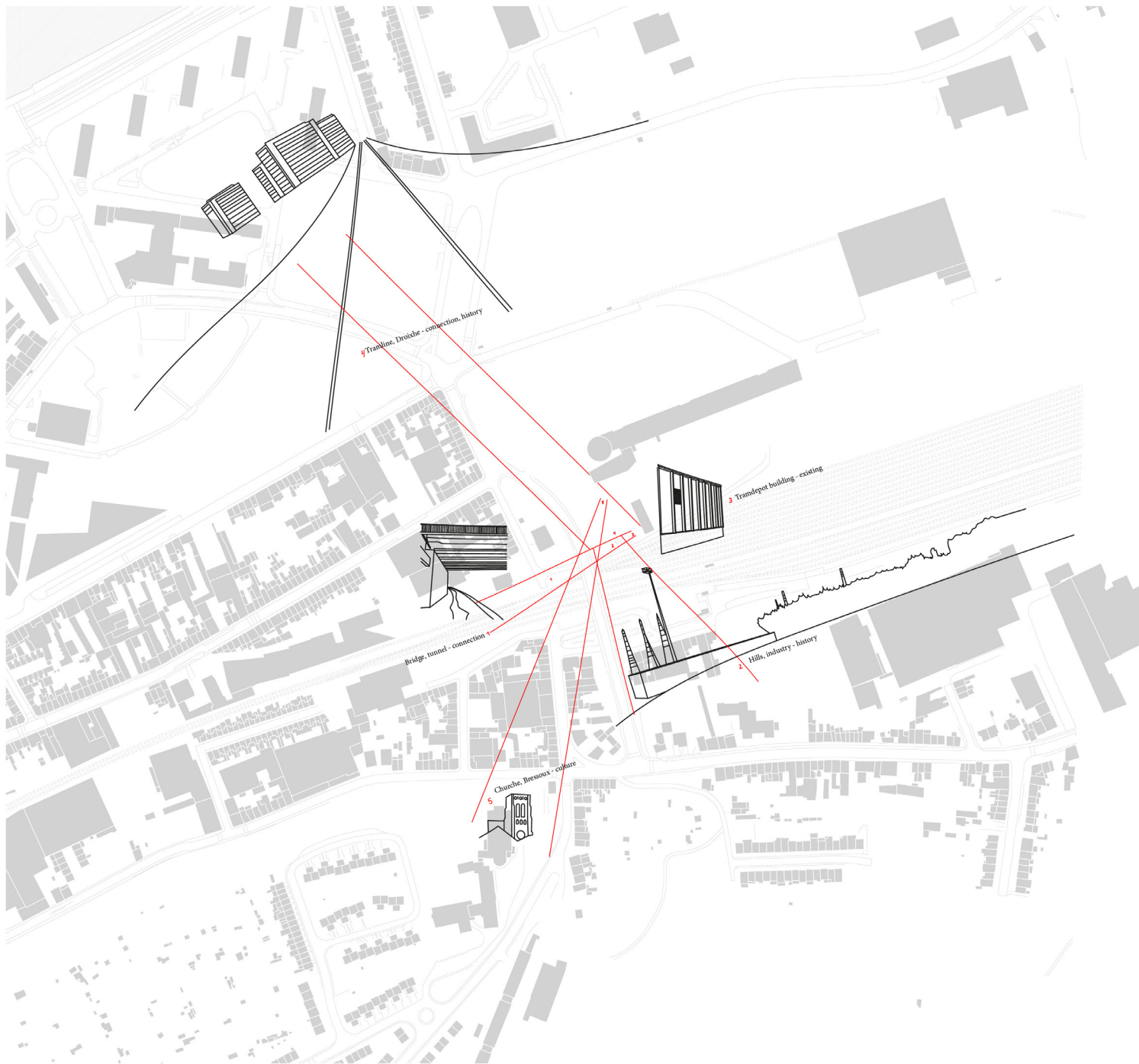






Context in architectural design means using external elements to influence the design process.

These elements can be divided into physical and non-physical elements. Physical elements include things like roads, land contours, and sight lines, while non-physical elements encompass intuitive constraints and the sense of shapes.



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

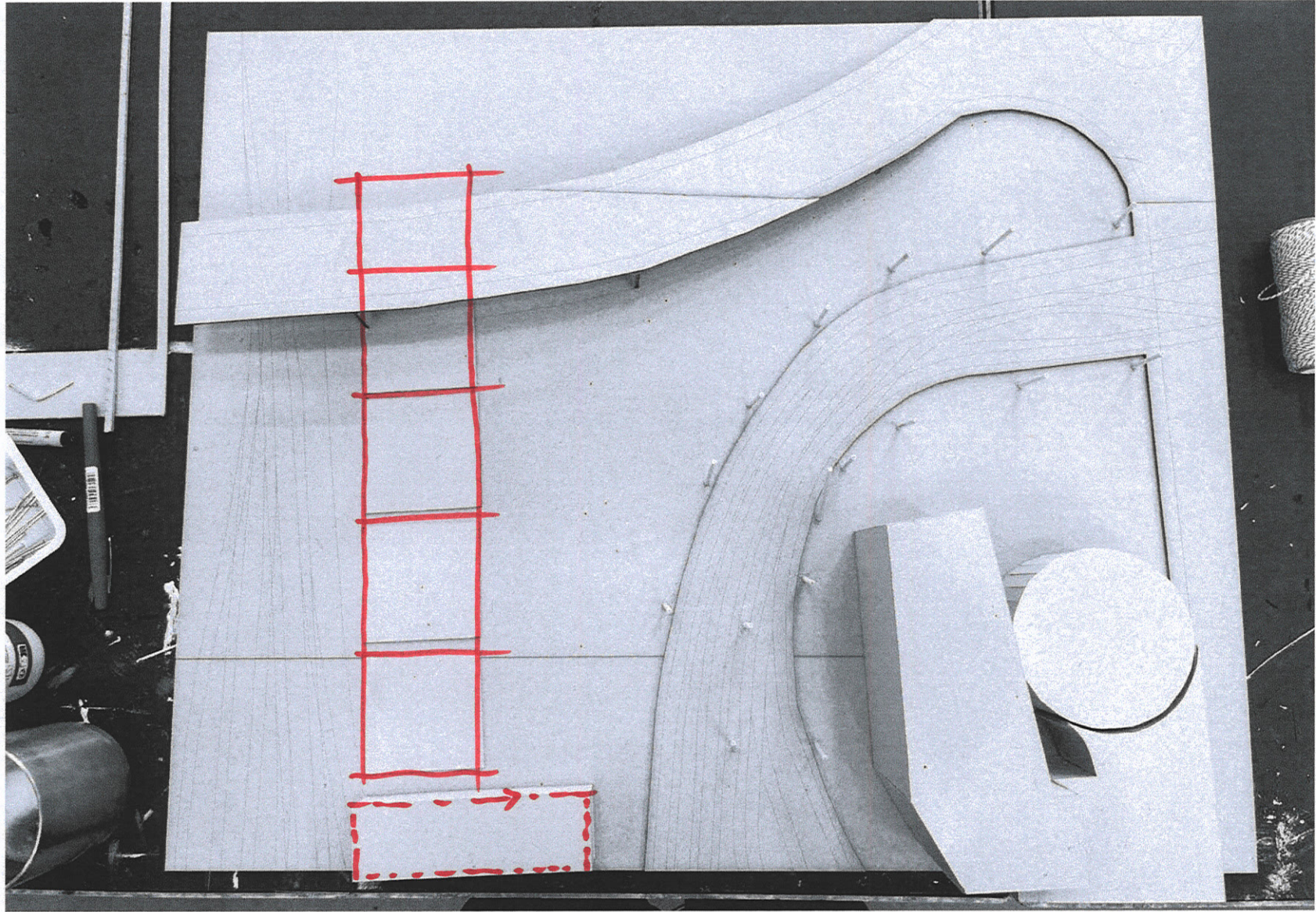
Using external elements on site made it crucial to have a good understanding of the site. Experimenting with different proportions and sizes, starting with a 2D representation of a grid and later to a 3D grid.

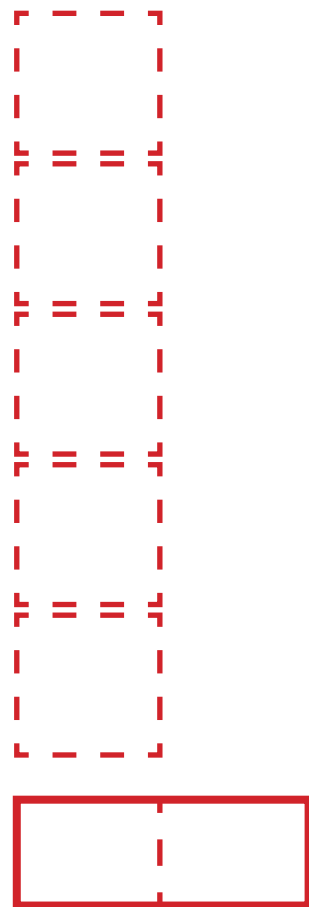
These tests helped me grasp the dimensions, depth, and overall environment. I focused on identifying the key elements in the surroundings and instinctively gravitated towards them when making design decisions and establishing proportions.



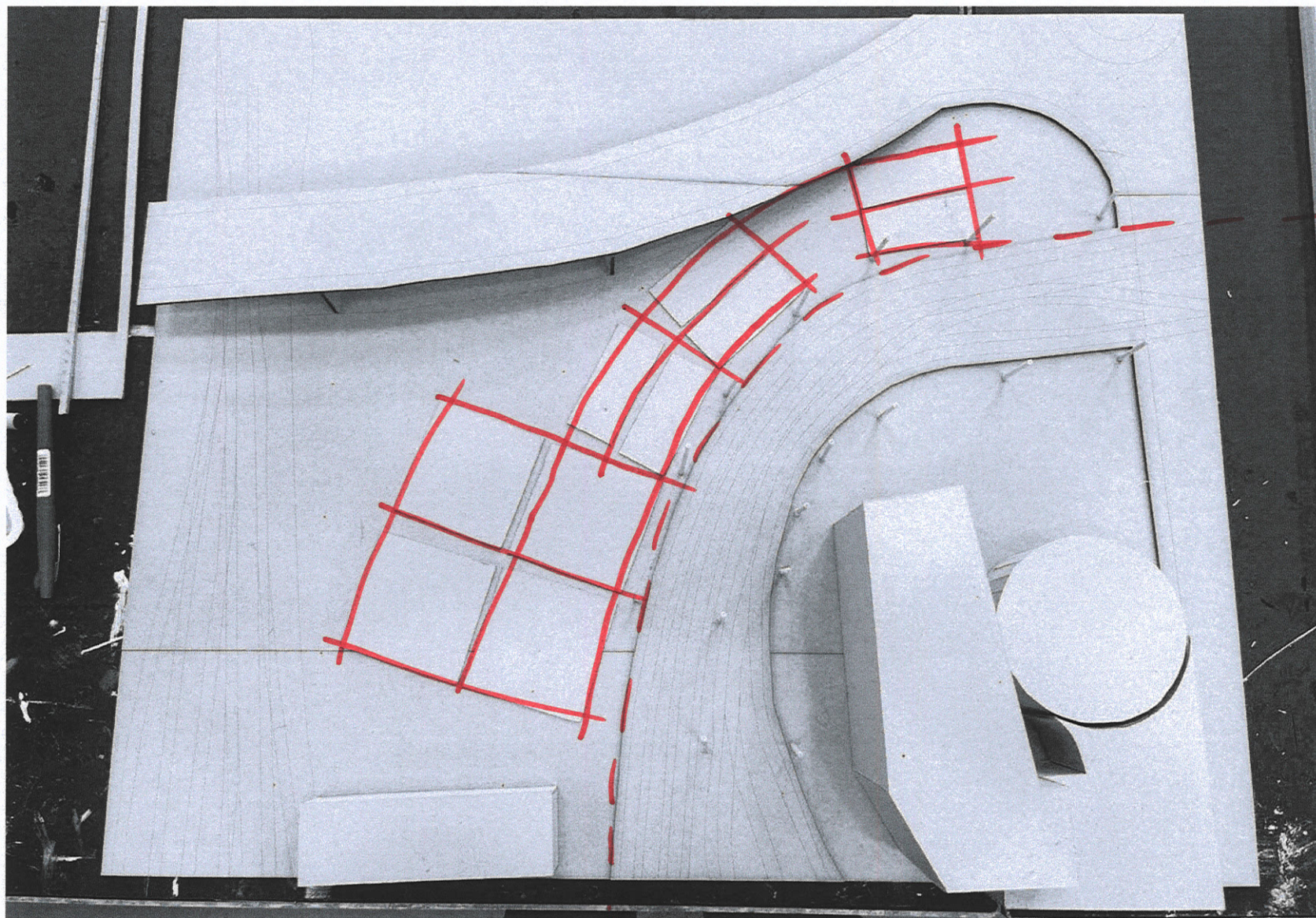
A kineograph of an intuitive grid -
hand-drawn and physically formed cards and blocks grids on photos presented in a flipbook

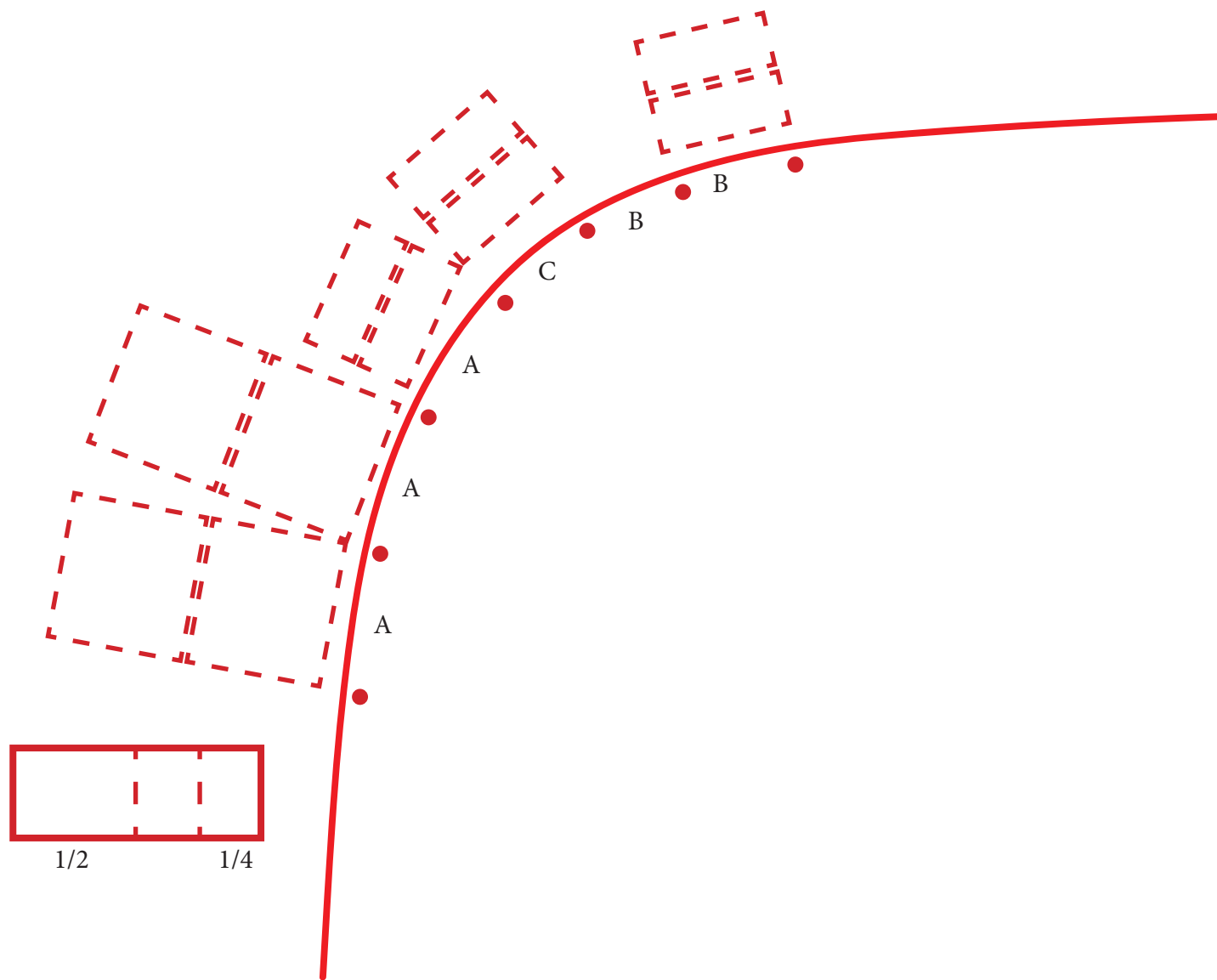
A selection of introducing an elastic activator -
representing potential proportions to form a grid

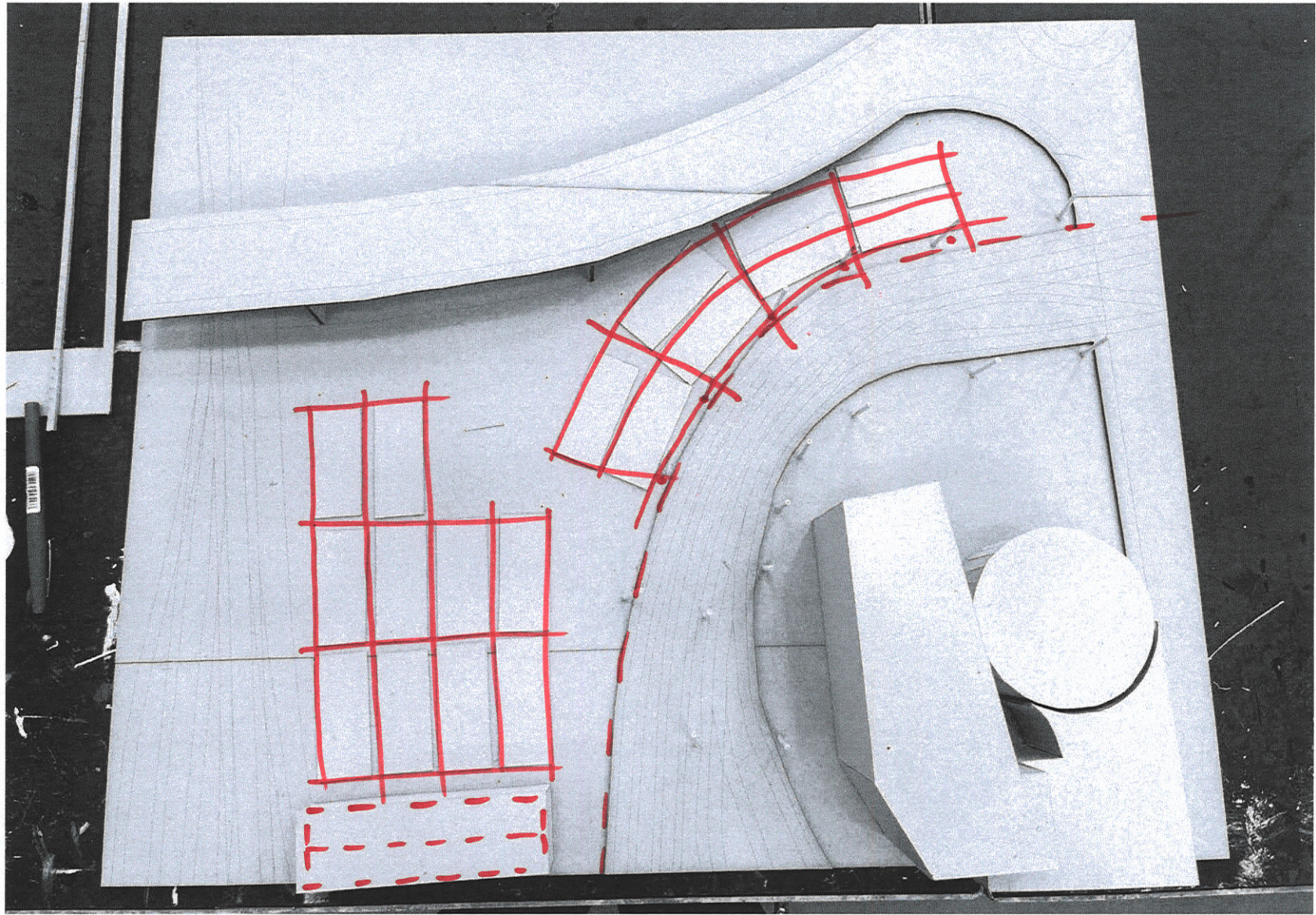


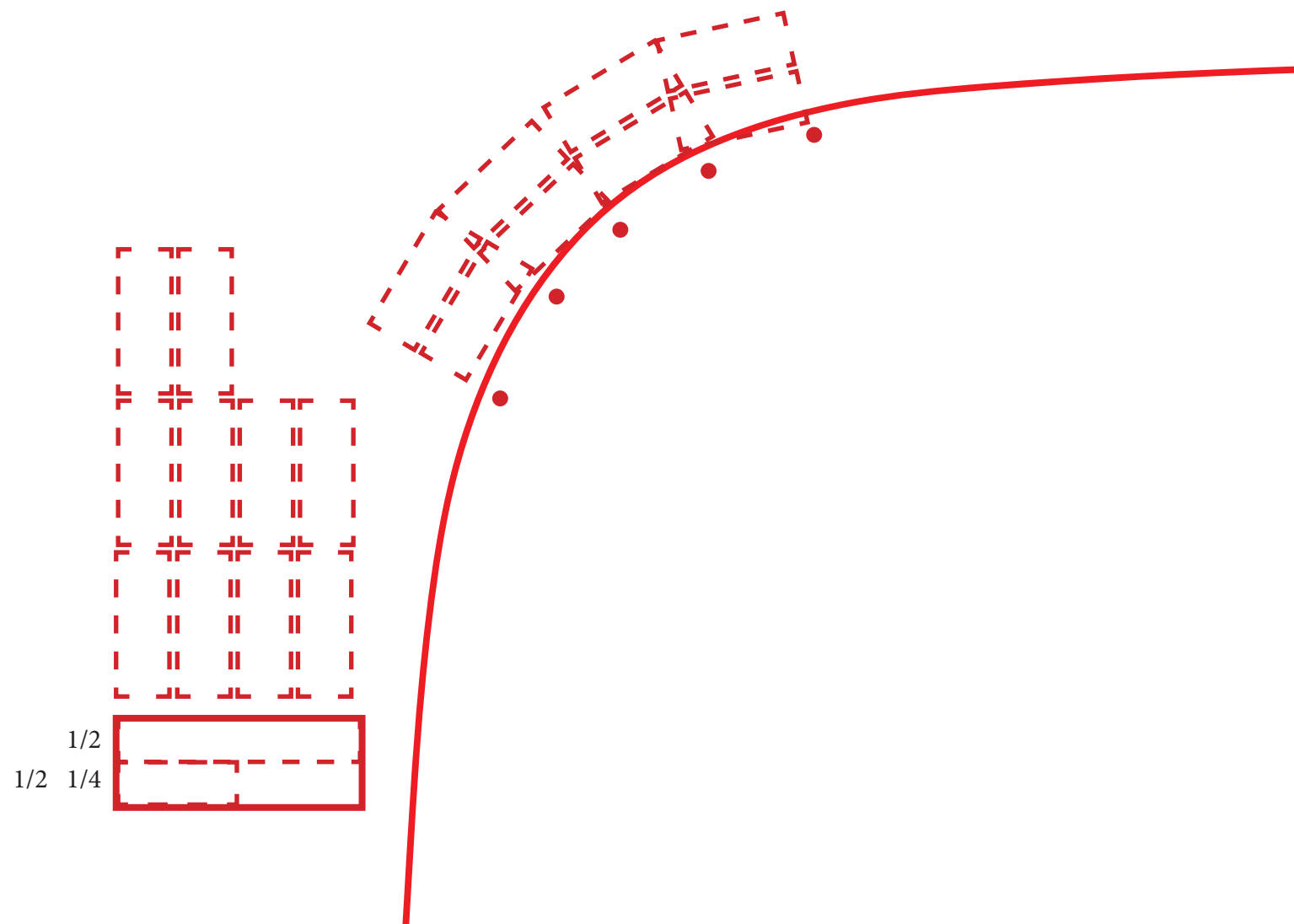


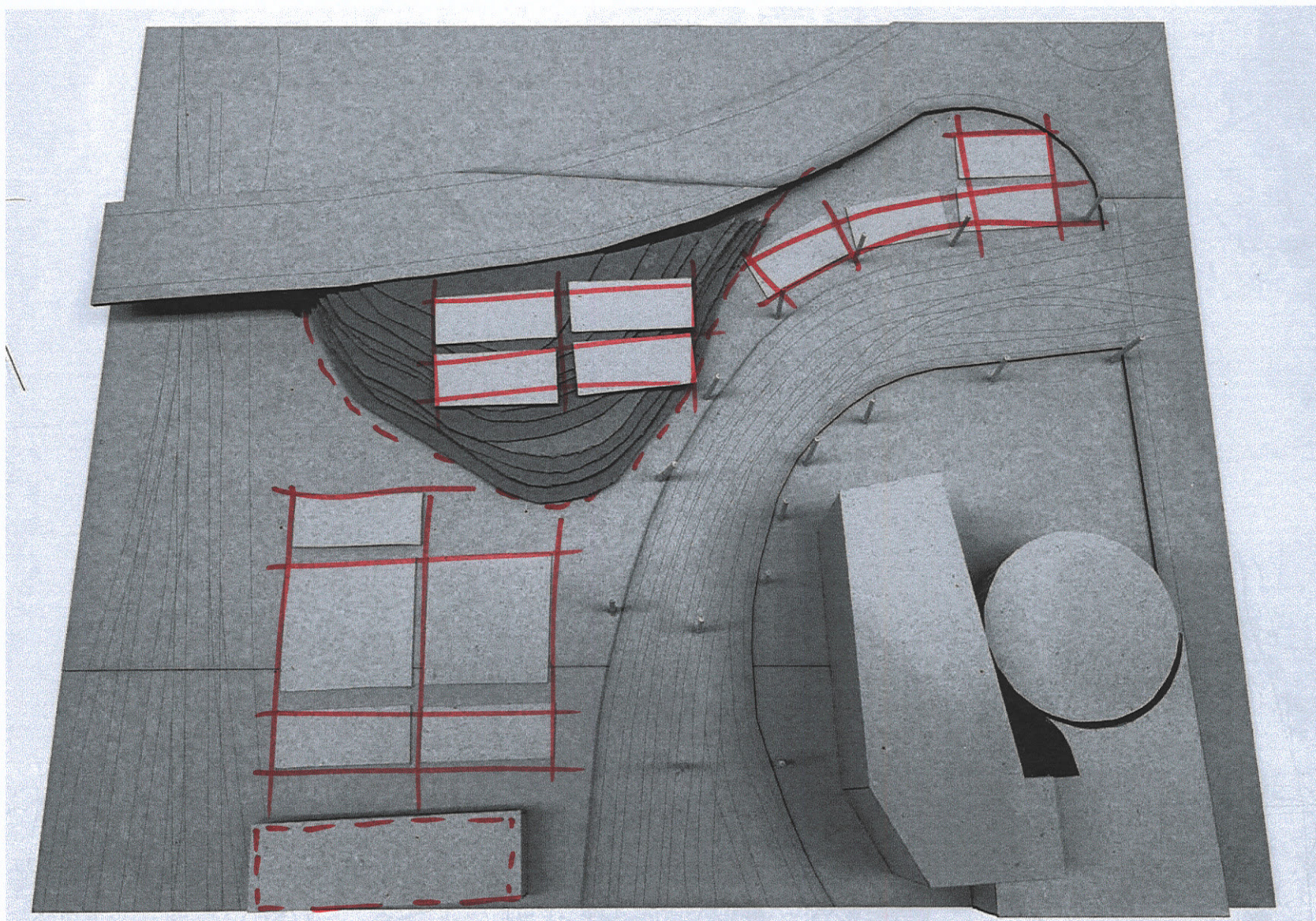
1/2

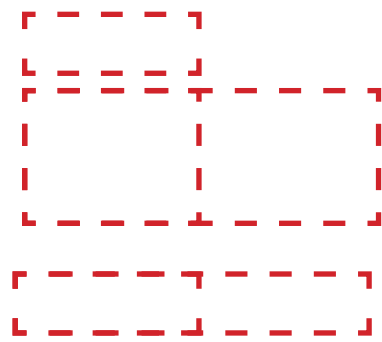
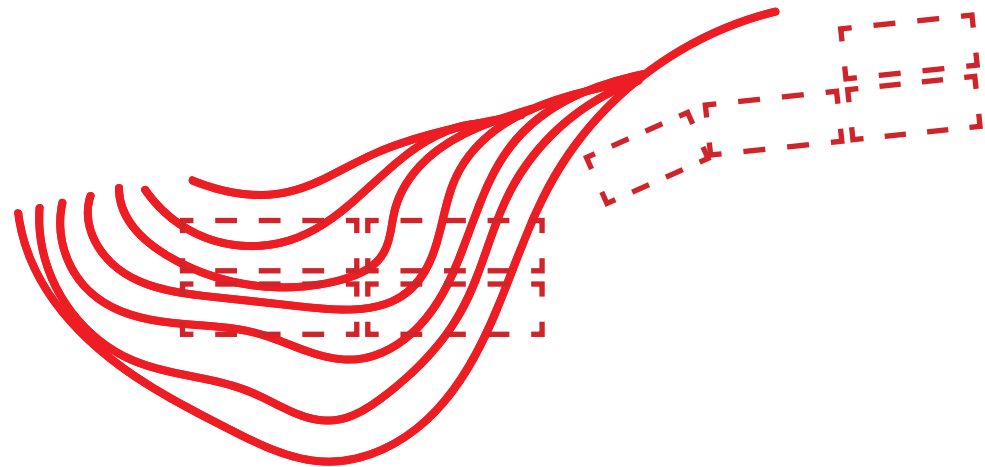


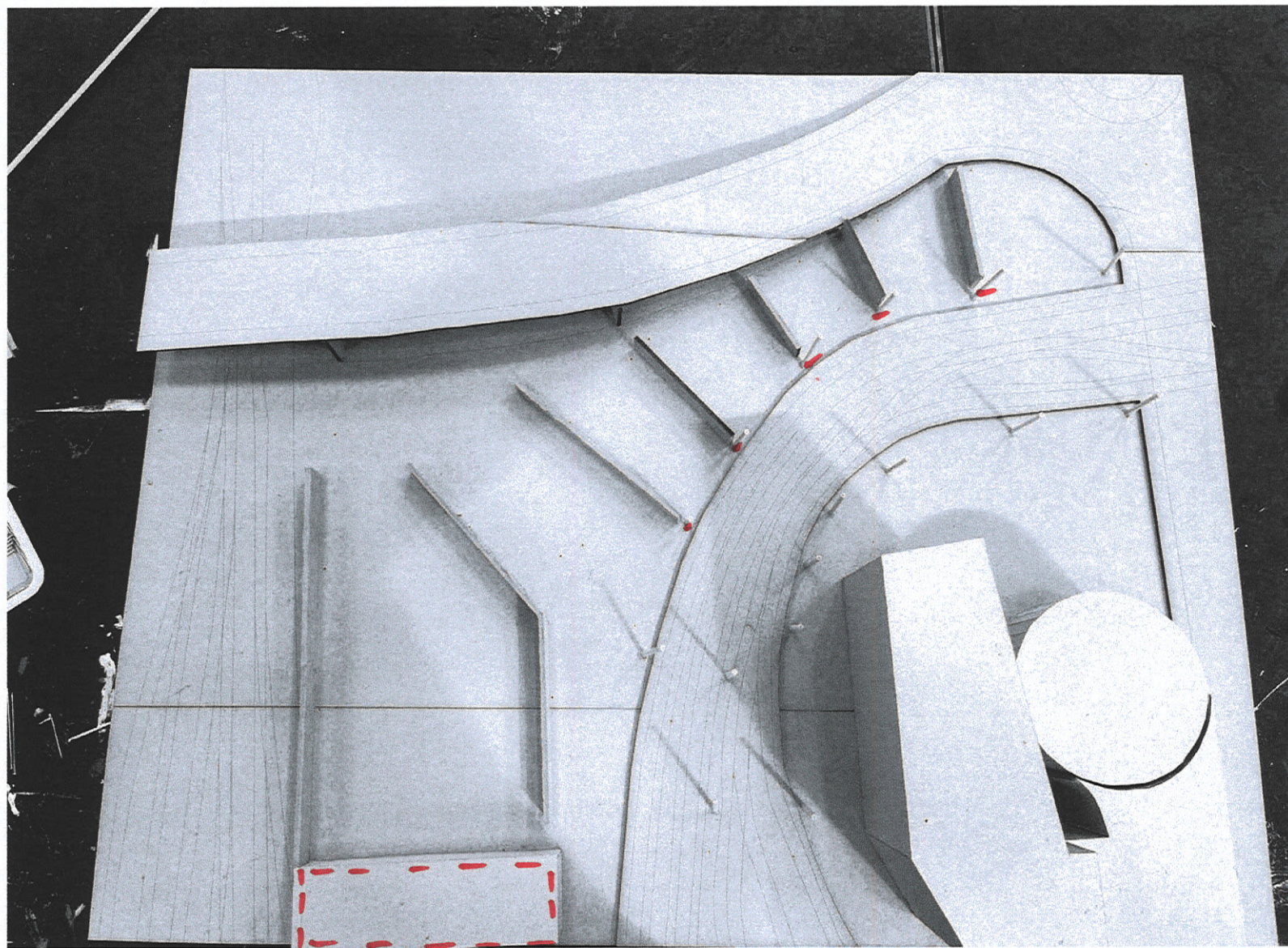


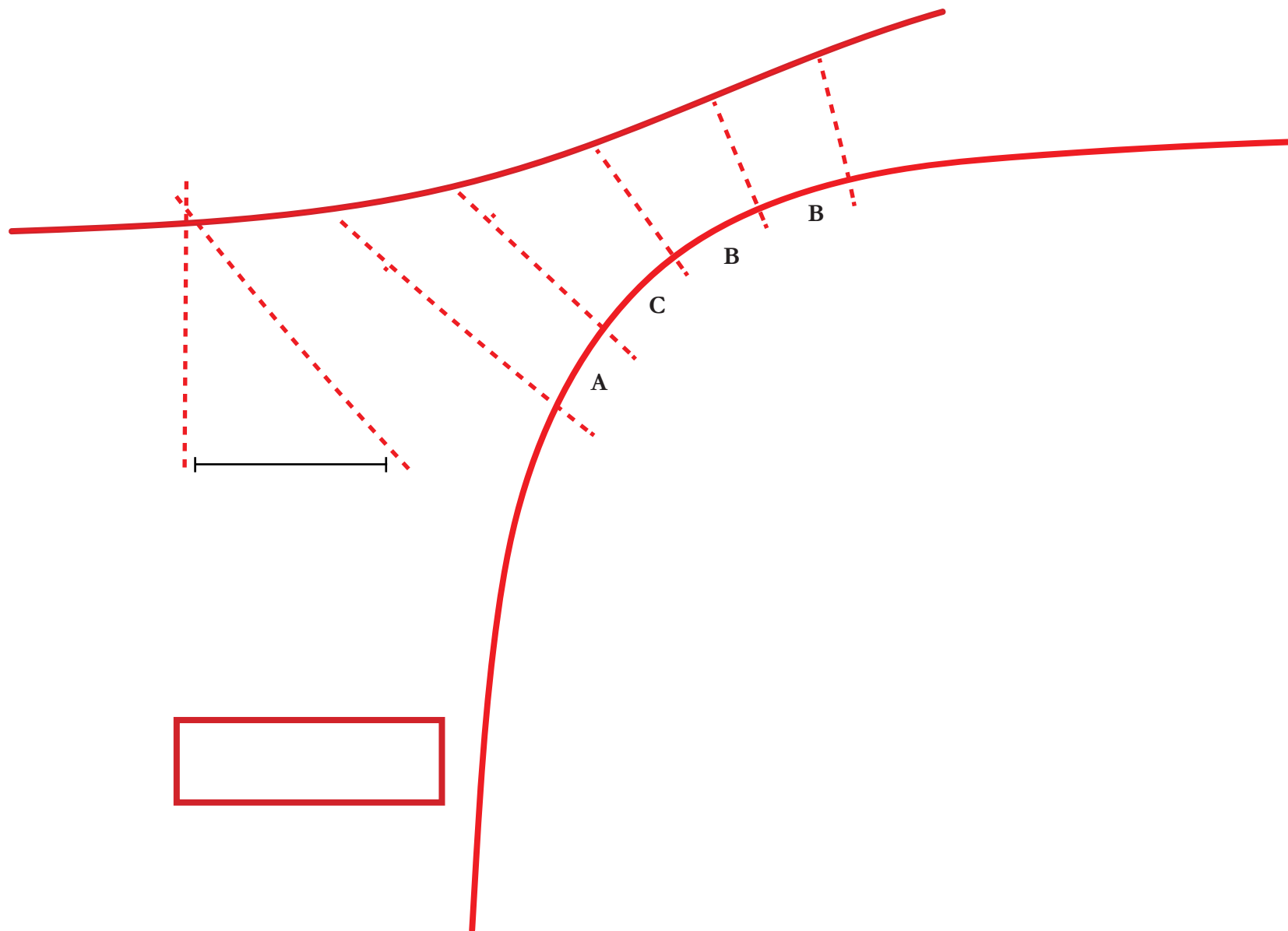


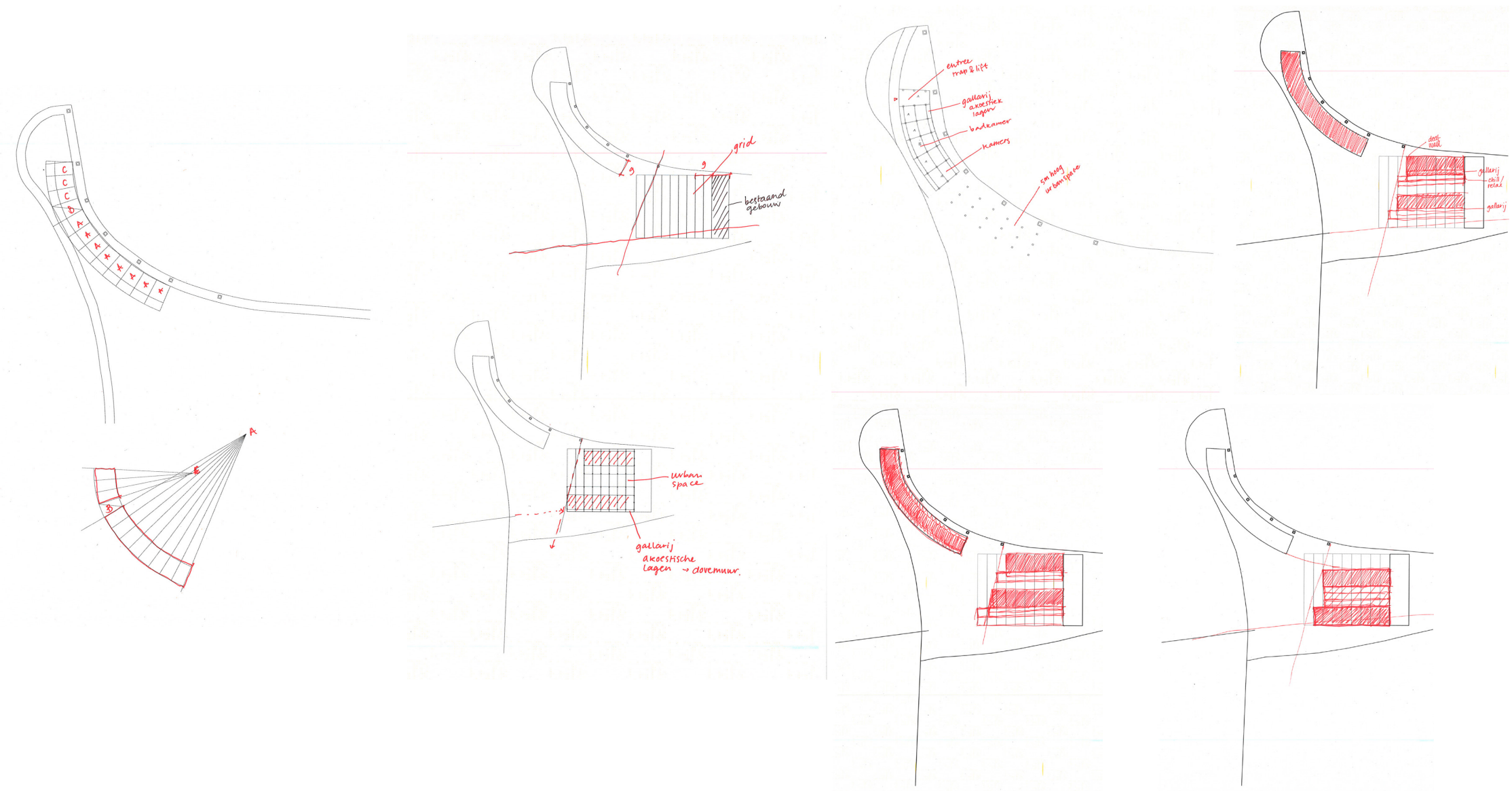




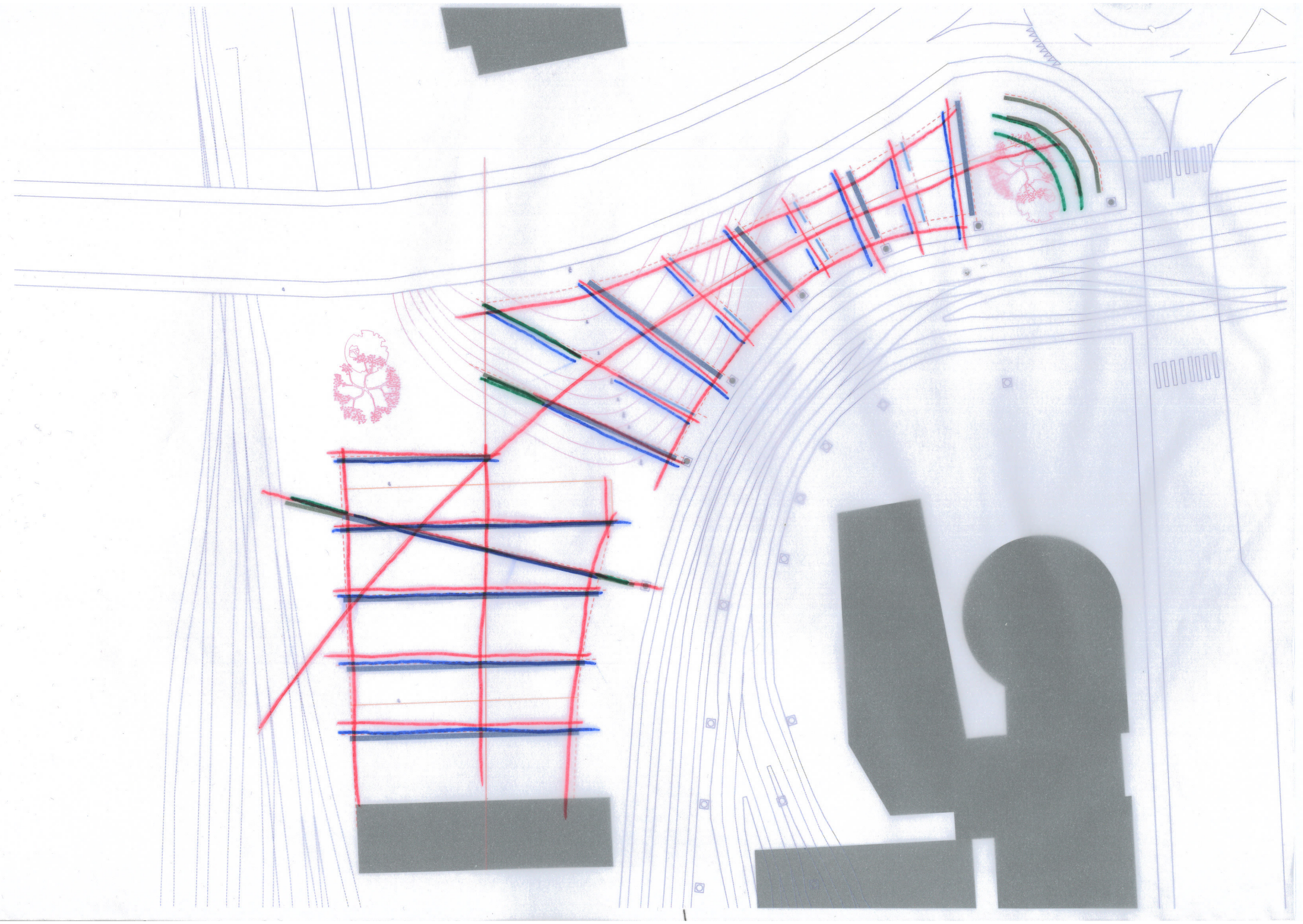








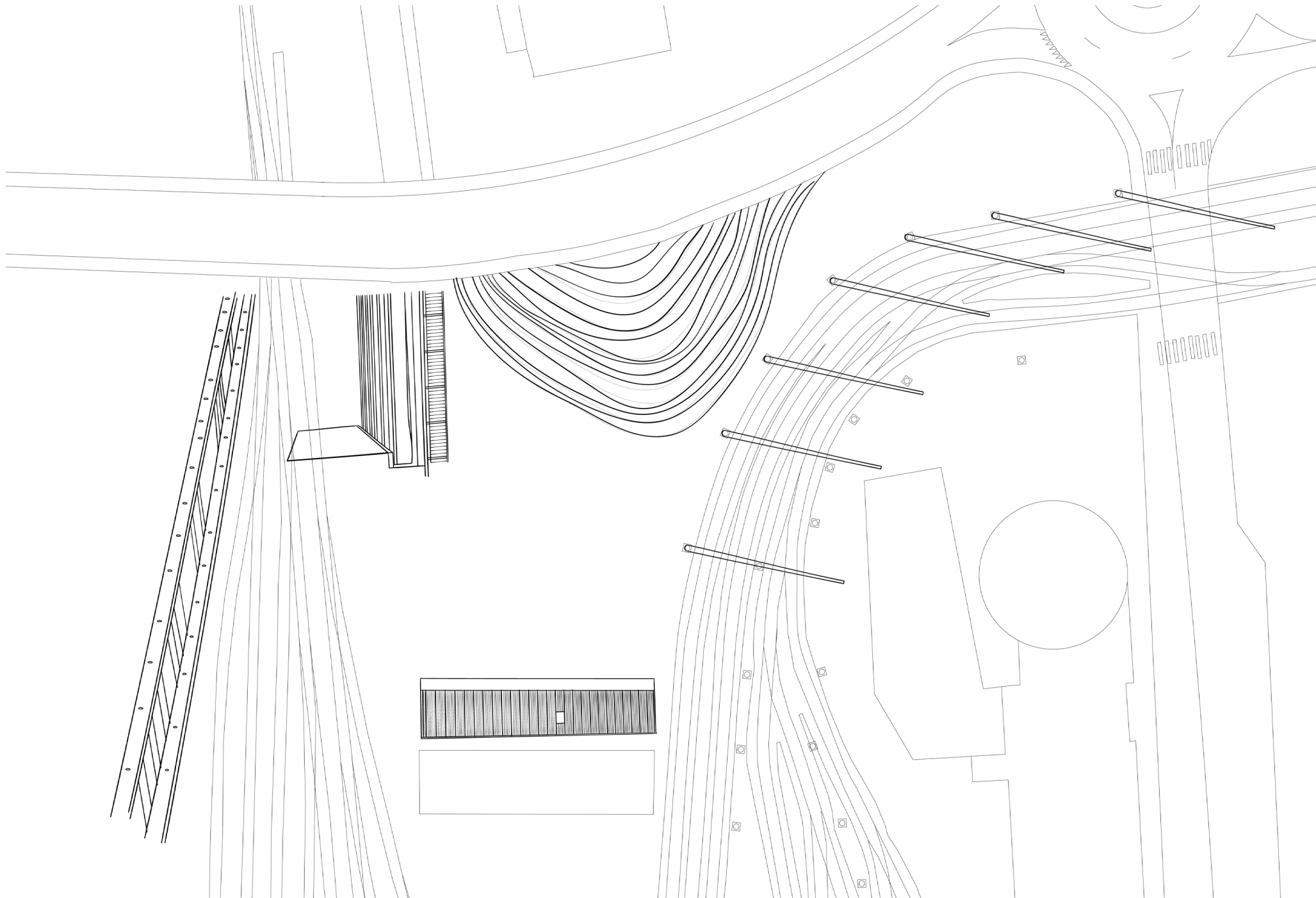
Further exploration of the site, and building a grid fitted into the environment.



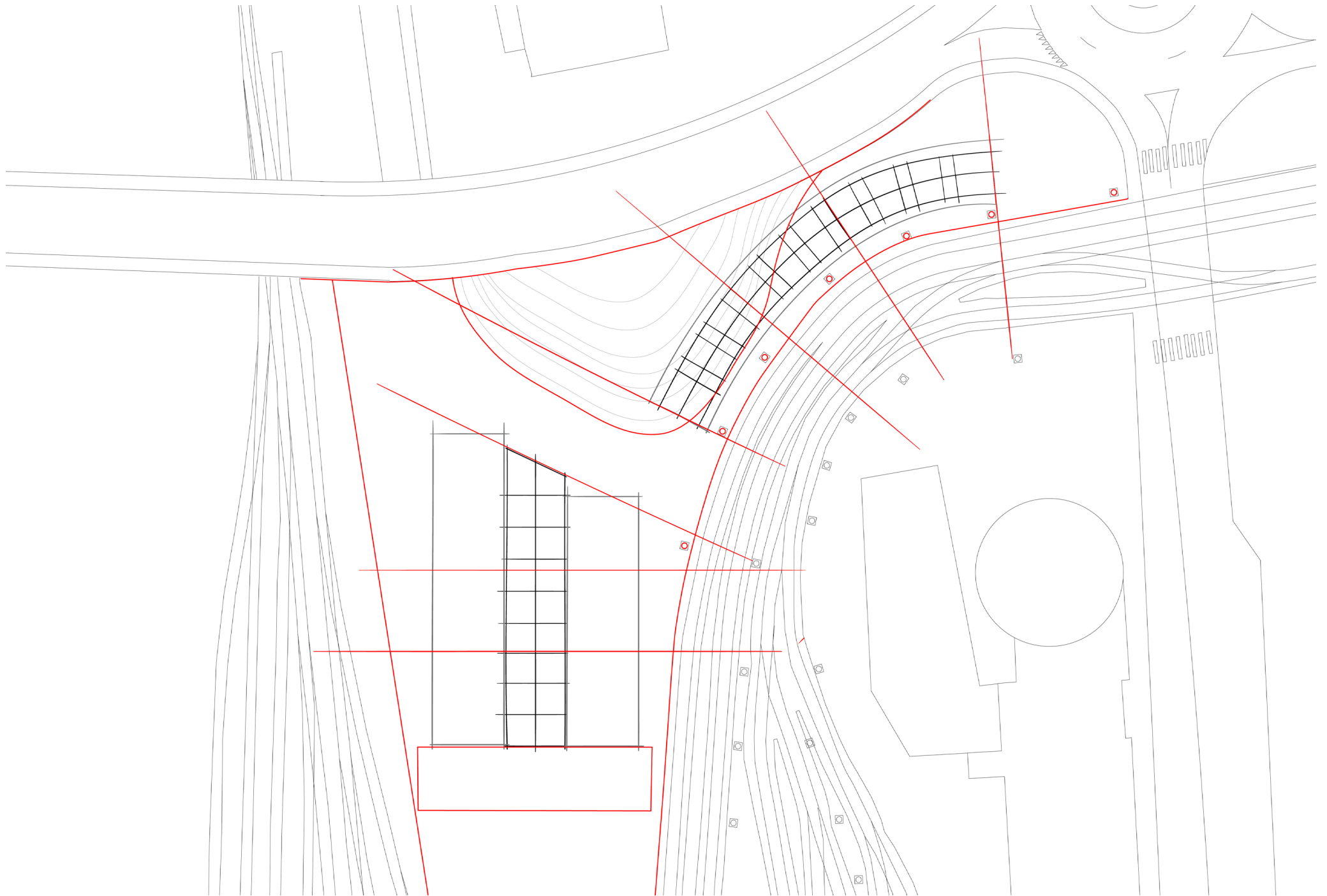
This 2D grid exploration is considered as a new proportion system of the site -
the following summery showed how the 3D versions could have more infuence on the grid and
are explored the next phase.

The grid should be designed to match the specific urban and natural environment.

Instead of reflecting the architectural style of the surroundings, the grid takes into account both the immediate and broader context of the urban setting. It incorporates the high potential characteristics of the surrounding area into its design (*researched in the qualities of a fluidsplace*).



Physical and non-physical elements in the site were observed

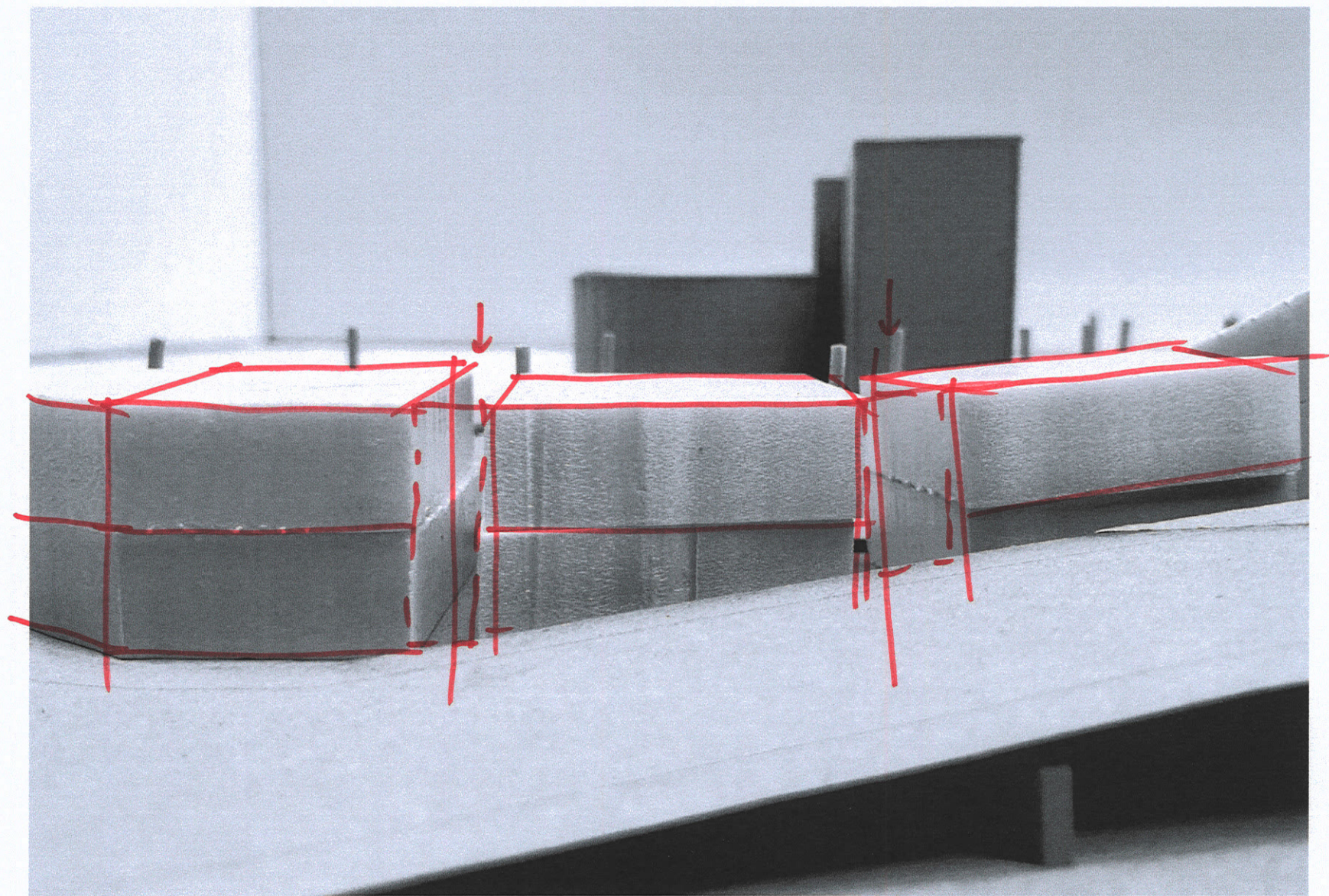


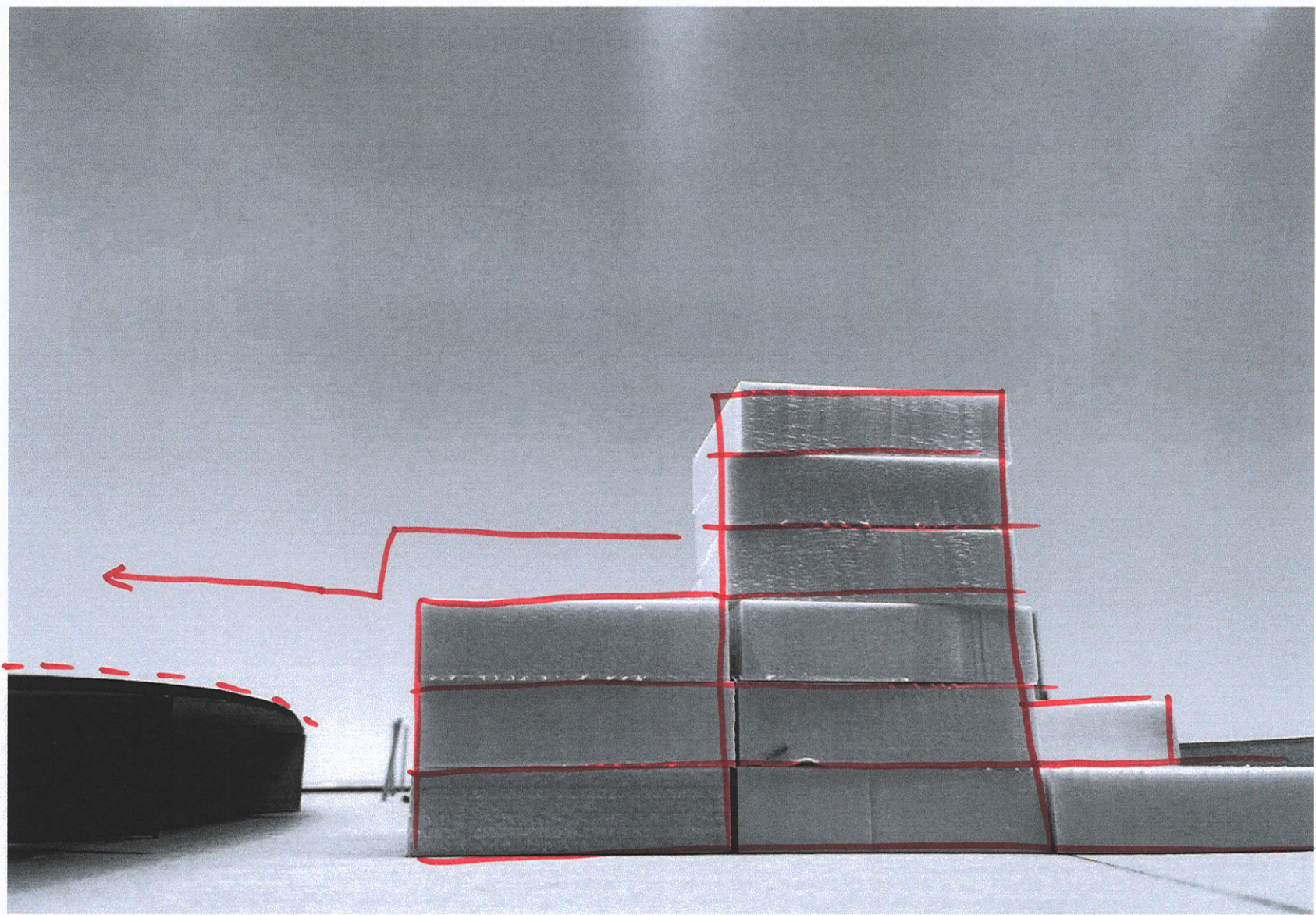
Forms and elements considered to be taken into the grid.

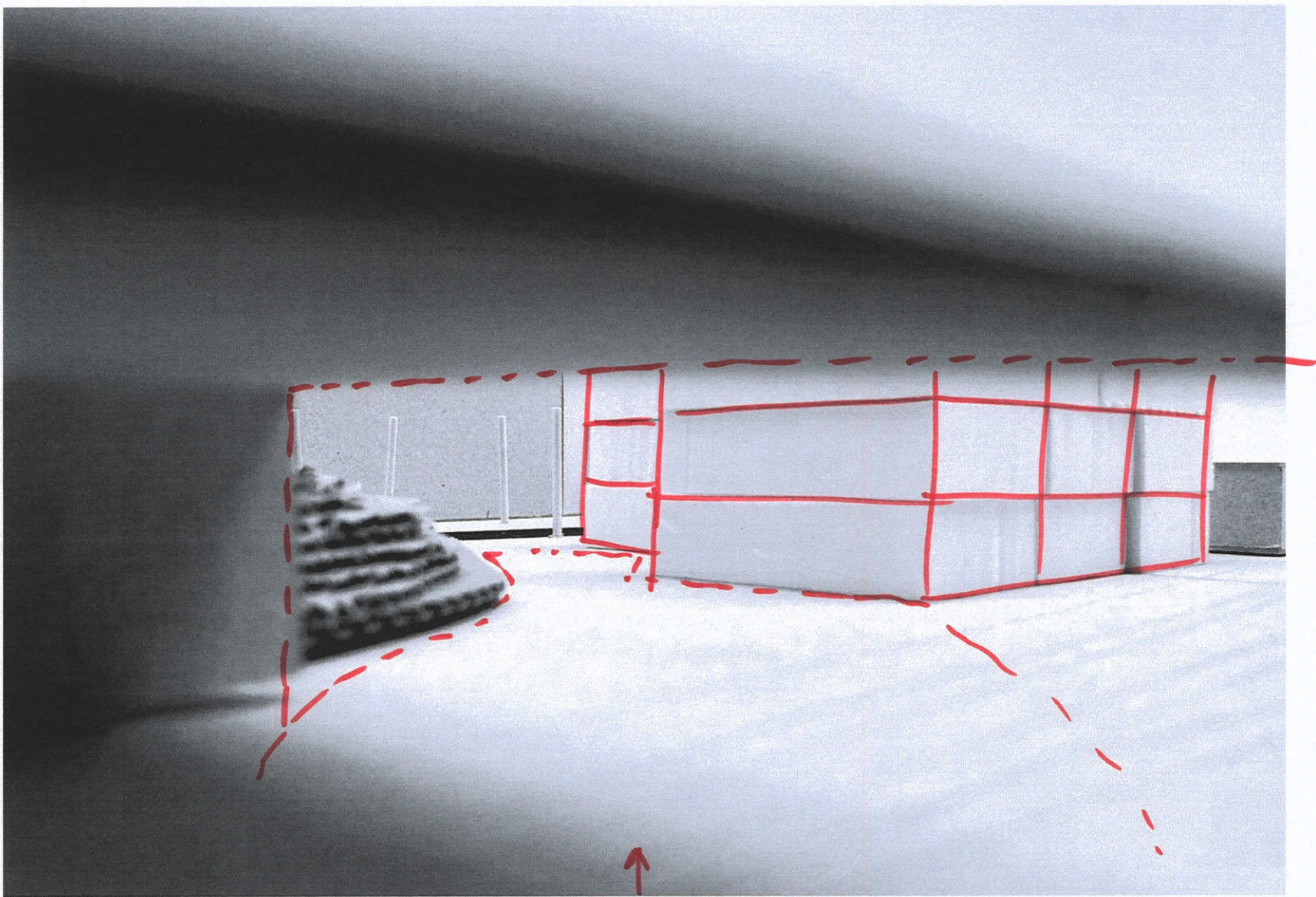


A kineograph of finding forms -
a 3D study on how the form of physical and non-physical elements effect a building design

A selection of finding forms -
foam blocks with red hand-drawing to represent potential influential forms in the site







To create architecture that harmonizes with its surroundings, it is important to consider the proportions that relate to the environment. These proportions can determine the minimum and maximum sizes of the grid used in the design.

The goal is to ensure that the new architecture communicates effectively through its presence. It should establish a strong connection with the surrounding space, forming a cohesive and integrated relationship.

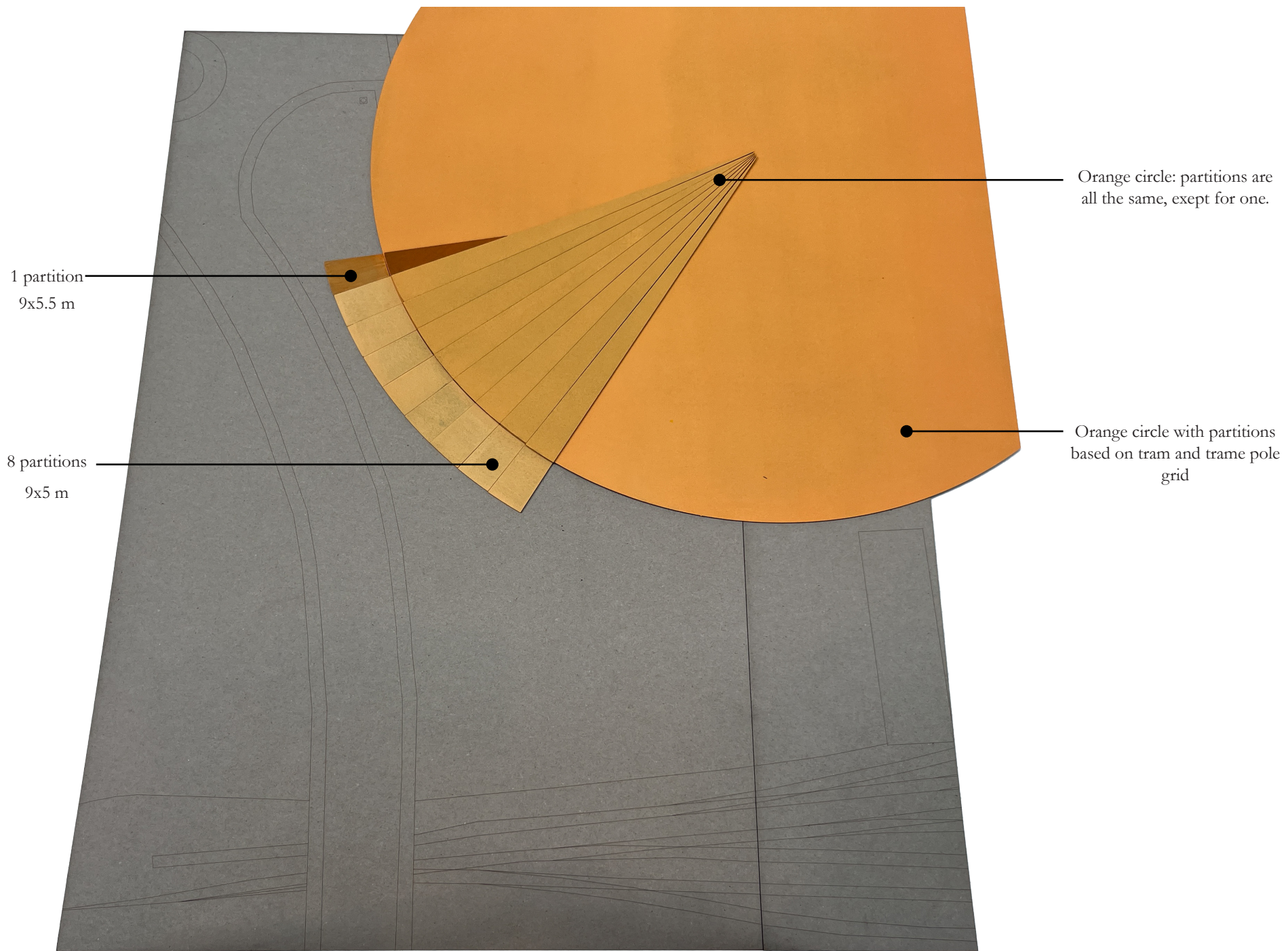
The next step is to incorporate the grid into a easier proportion system due to the fact that some proportions didn't match with the technical requirements. Think of too large spans or too many different sizes.

To look back on the insights learned from '*the elastic activator, intuitive grid exploration and finding forms*', I can state that the interesting exploration lead to a grip on the proportions of the site and definitely formed a basis.

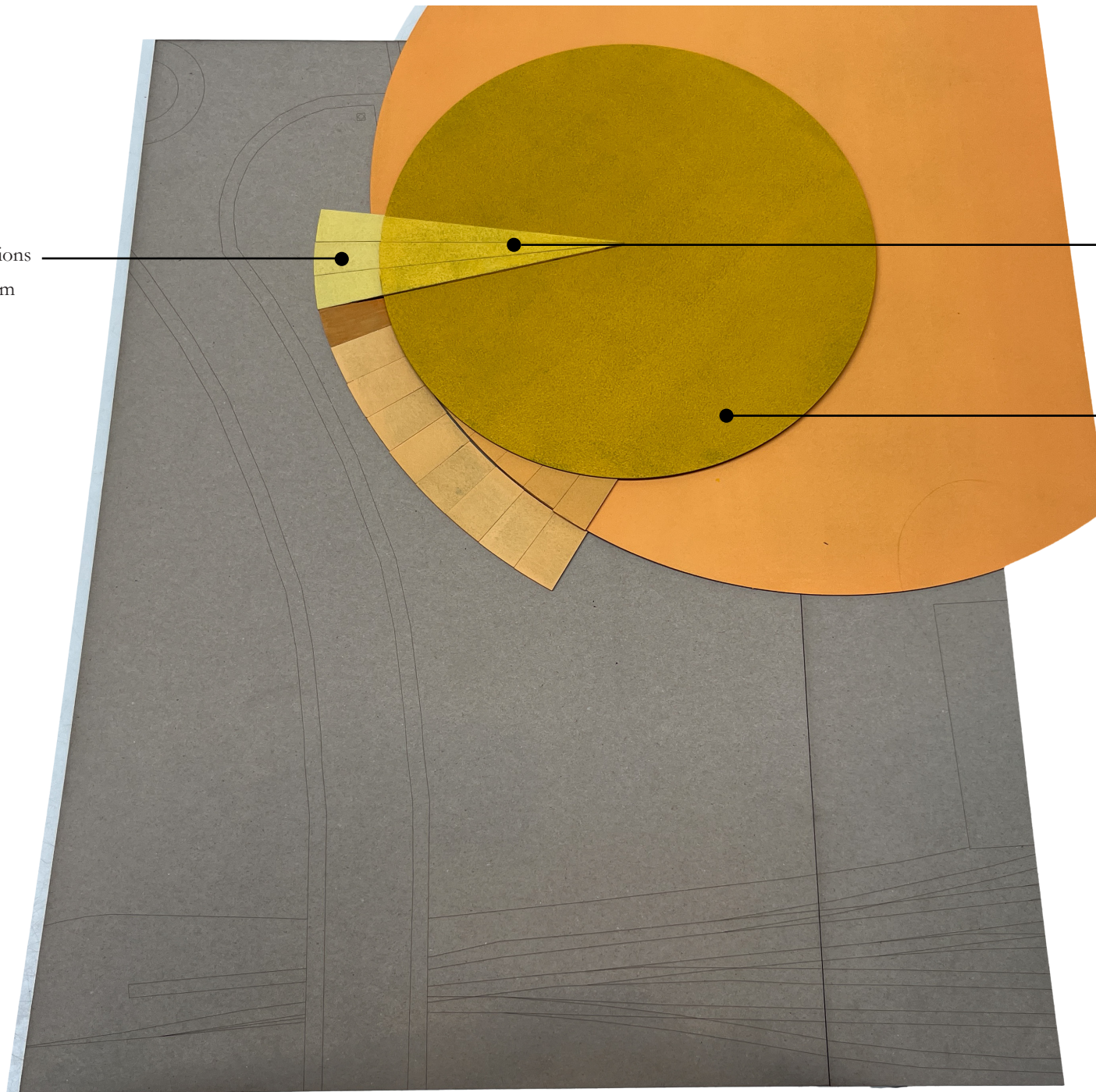
This posed the project's greatest challenge: maintaining sight of the experiments despite the guidelines of material and technical requirements and keeping choices constantly reflecting with intuition.

A new system combining the intuitive, with the technical requirements of CLT spans and rooms that can function for different infills.

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 user, and to not define the function on forhand.



3 partitions
9x4,5m



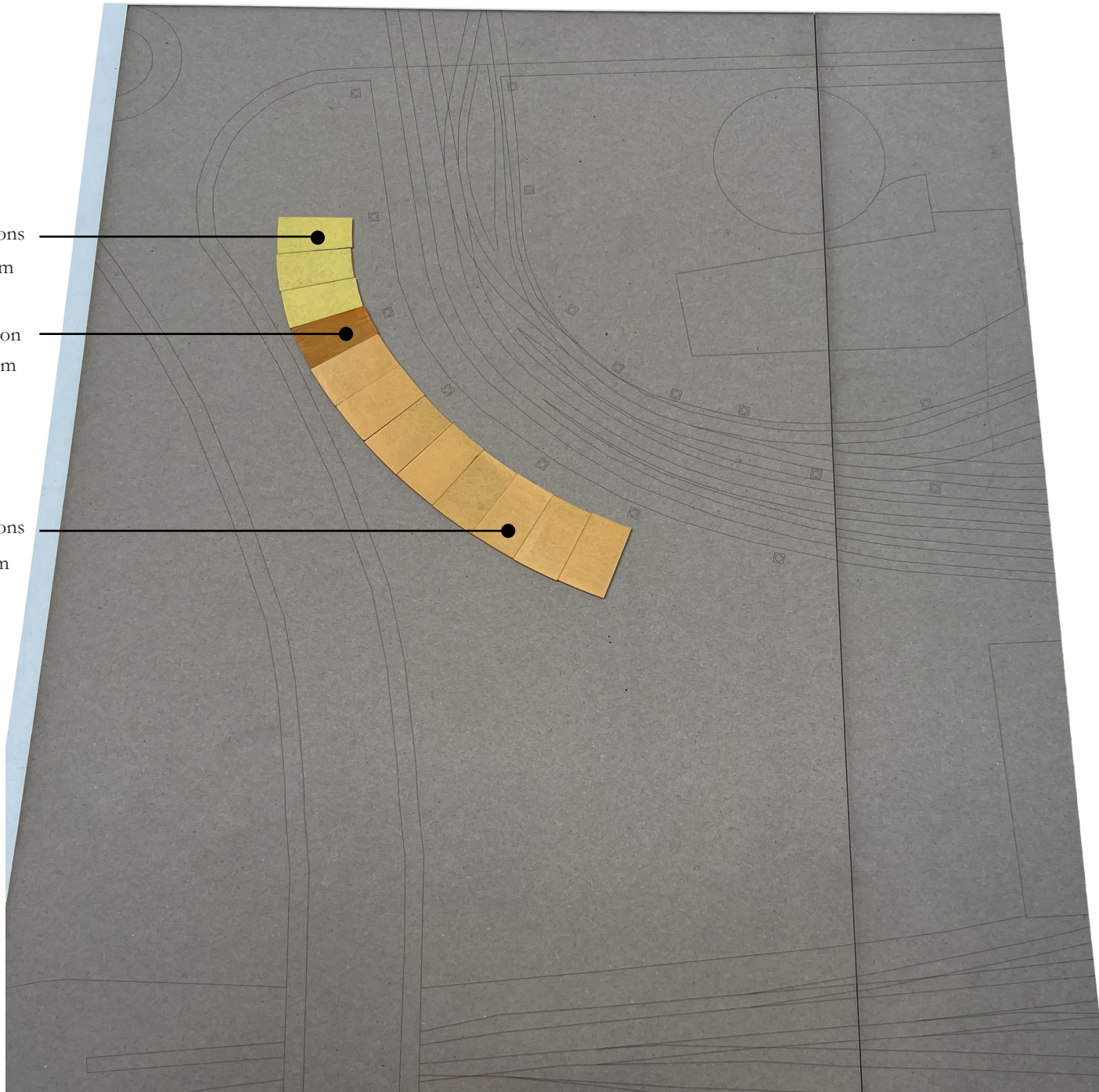
Yellow circle: the same
partitions

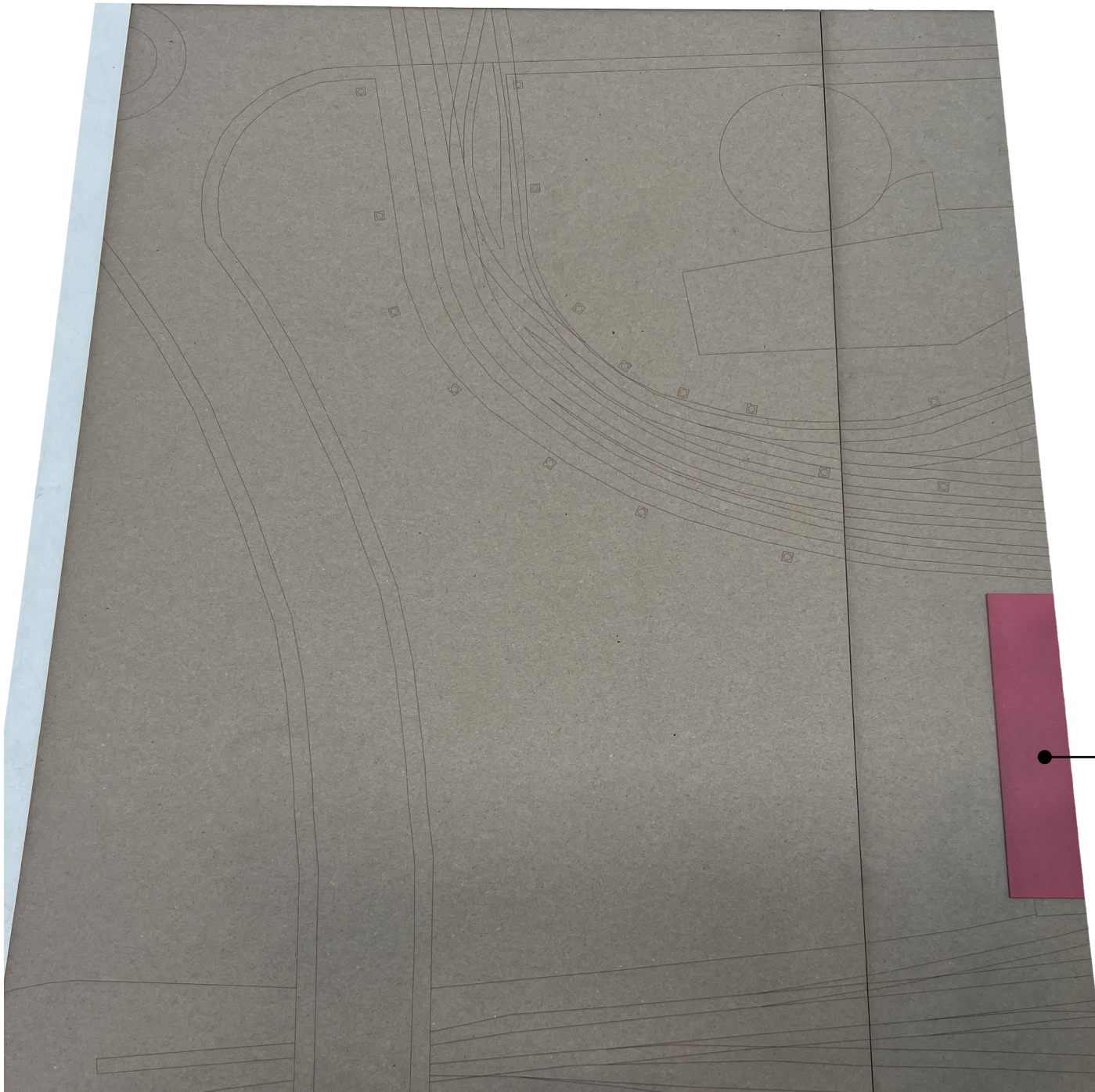
To finish the half of the
tramline, the other circle with
a different size filled the grid

3 partitions
9 x 4,5m

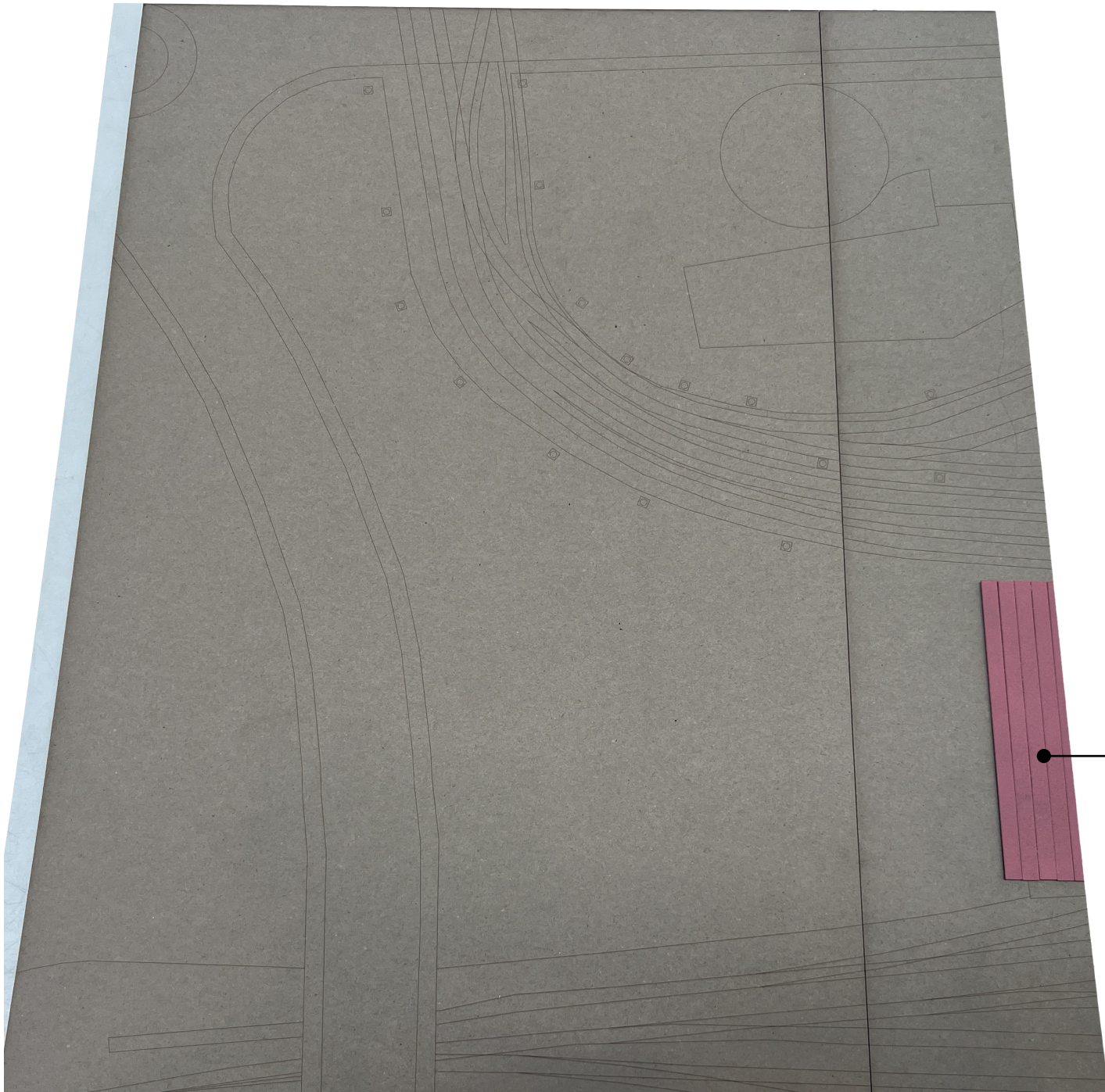
1 partition
9 x 5.5 m

8 partitions
9 x 5 m





Rectangular tram depot
building



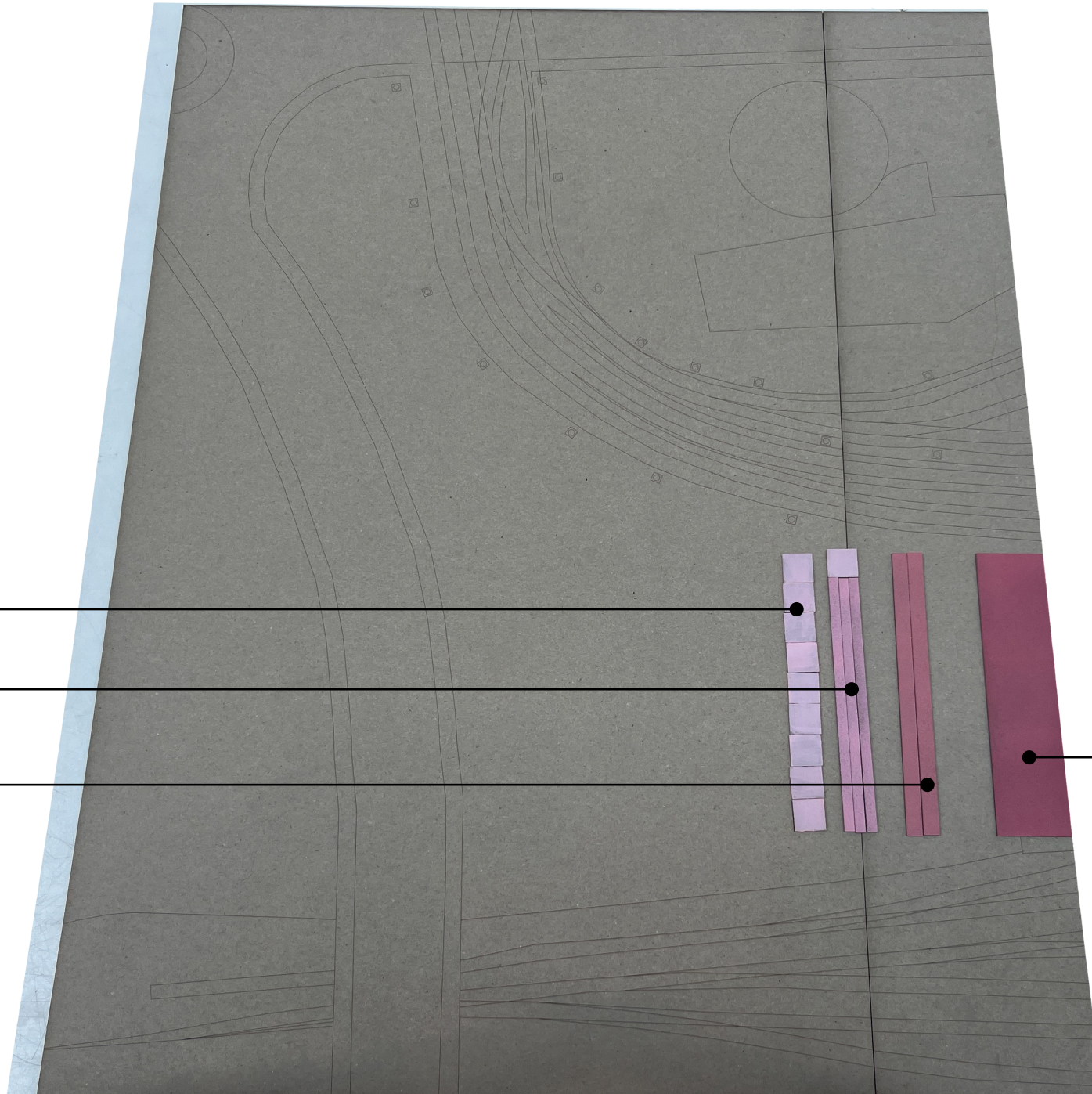
Five strokes from 9/5
1.8 x 32 m

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



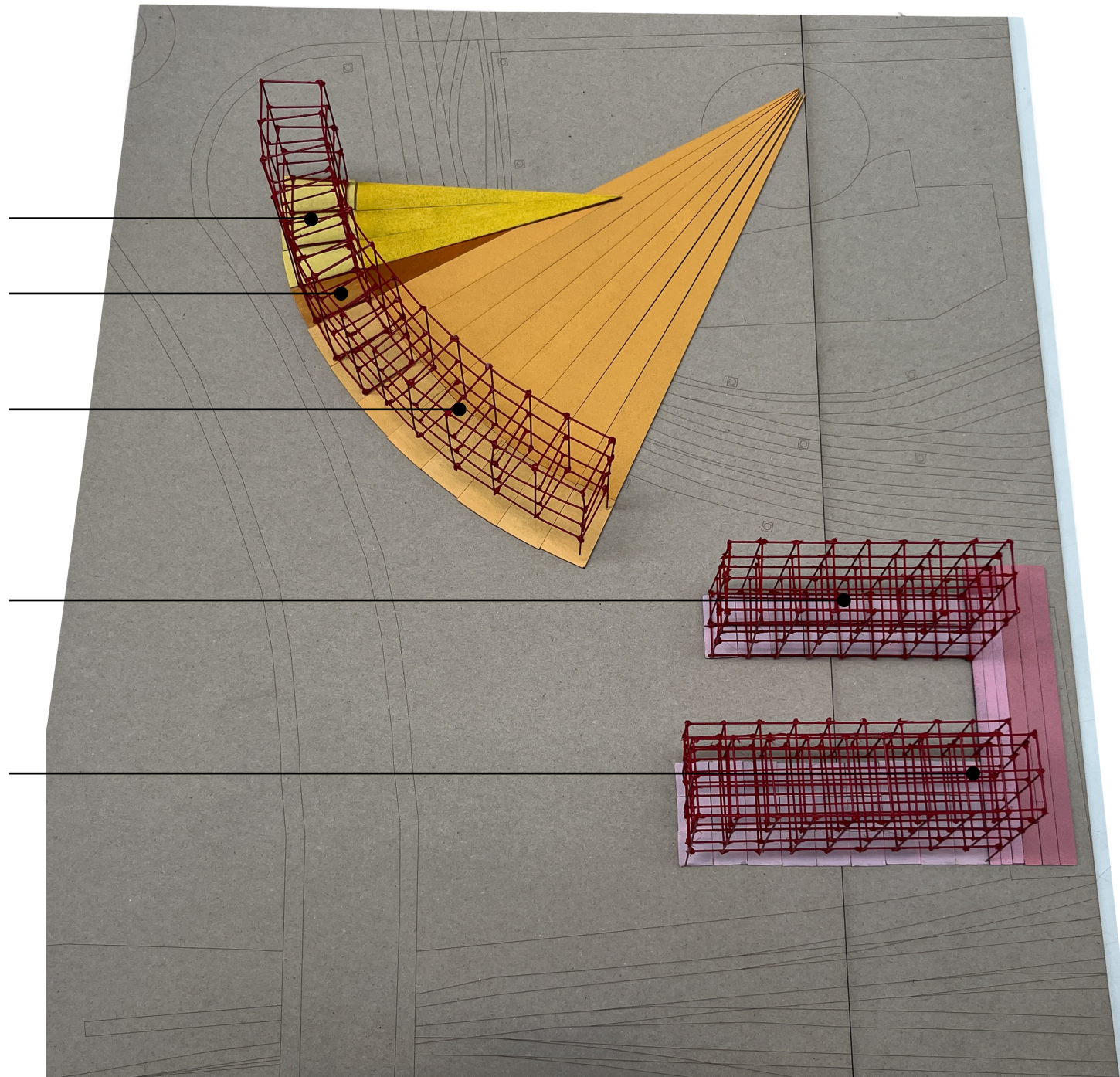
3 partitions
9 x 4.5 m

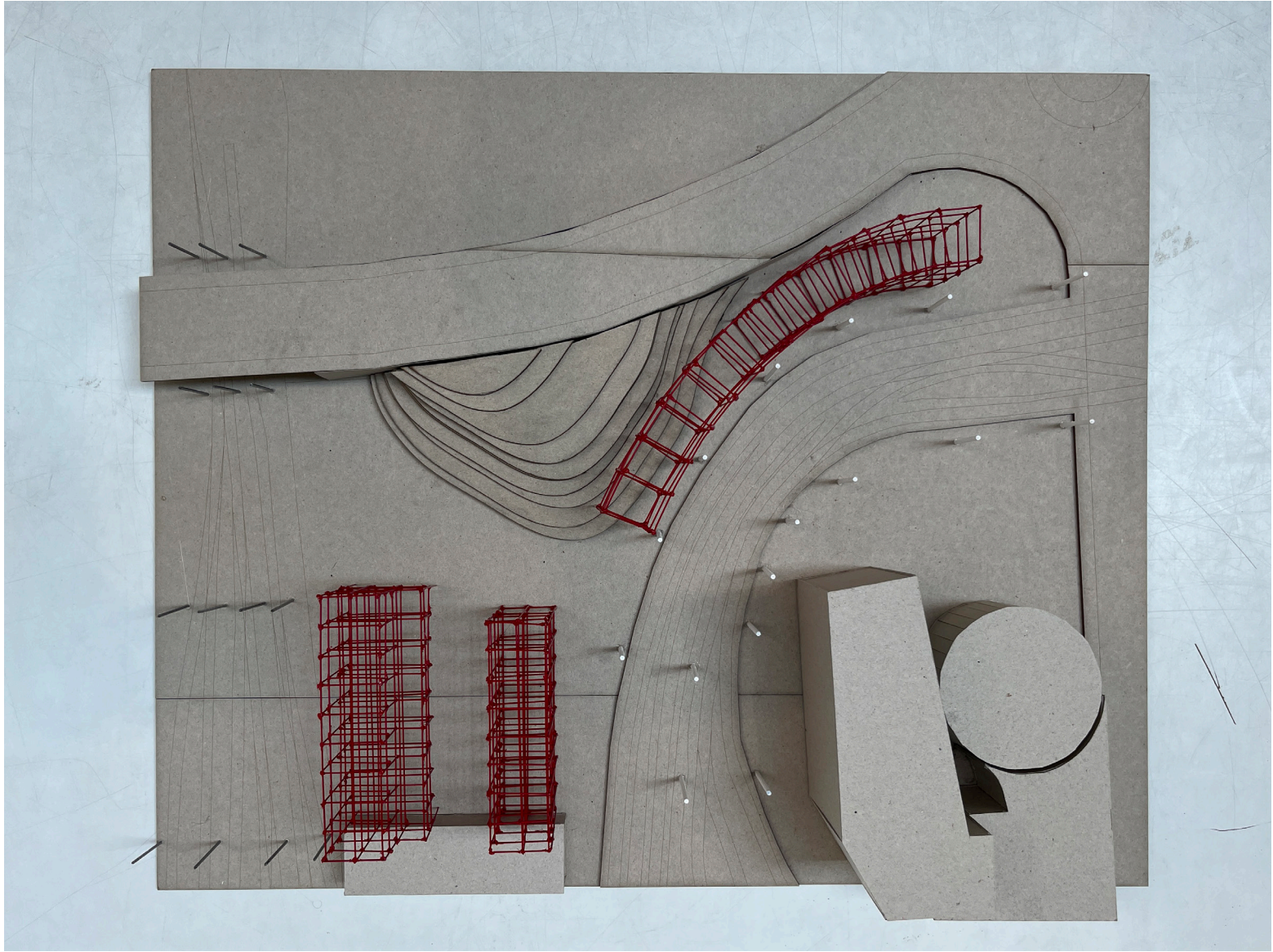
1 partition
9 x 5.5 m

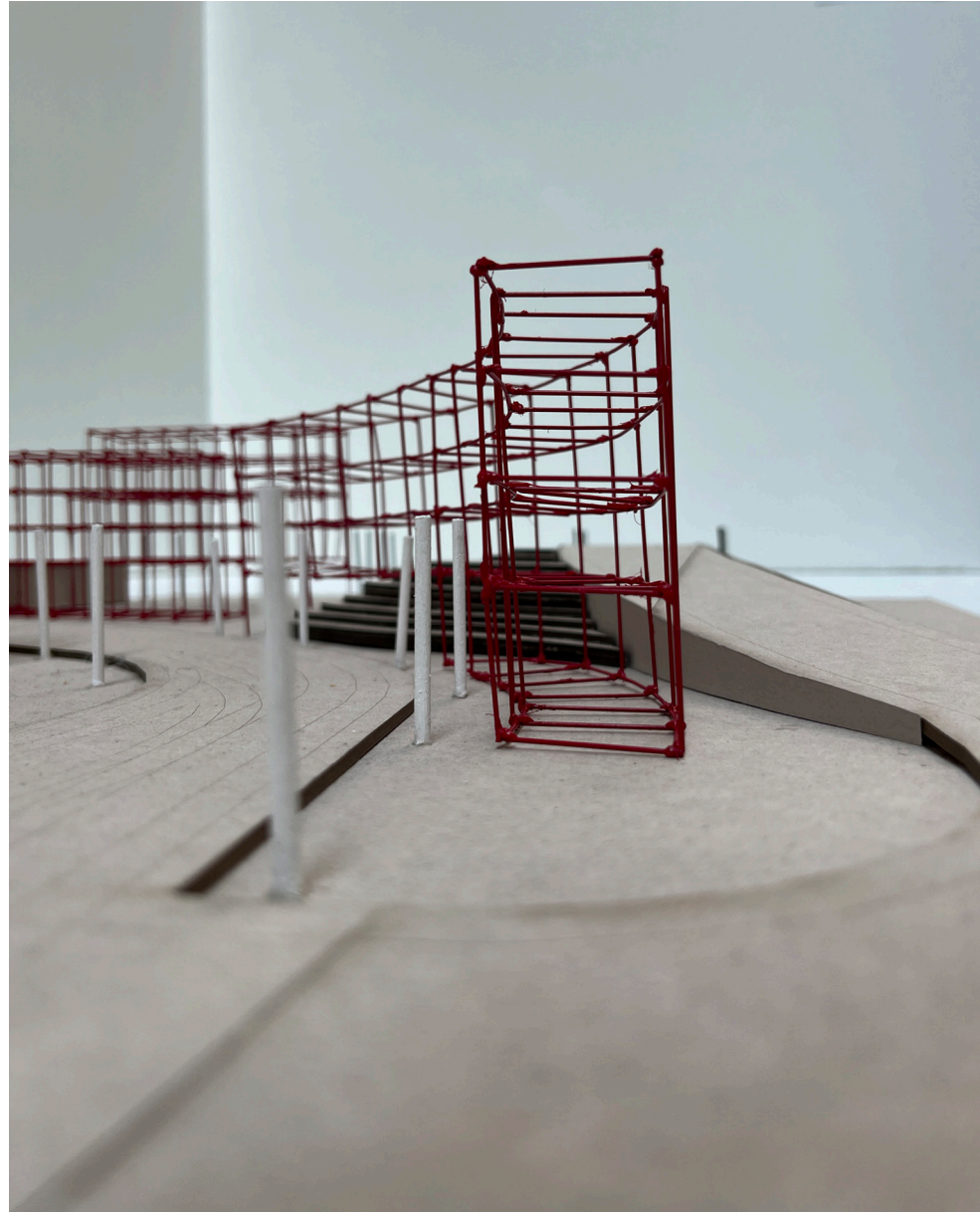
8 partitions
9 x 5 m

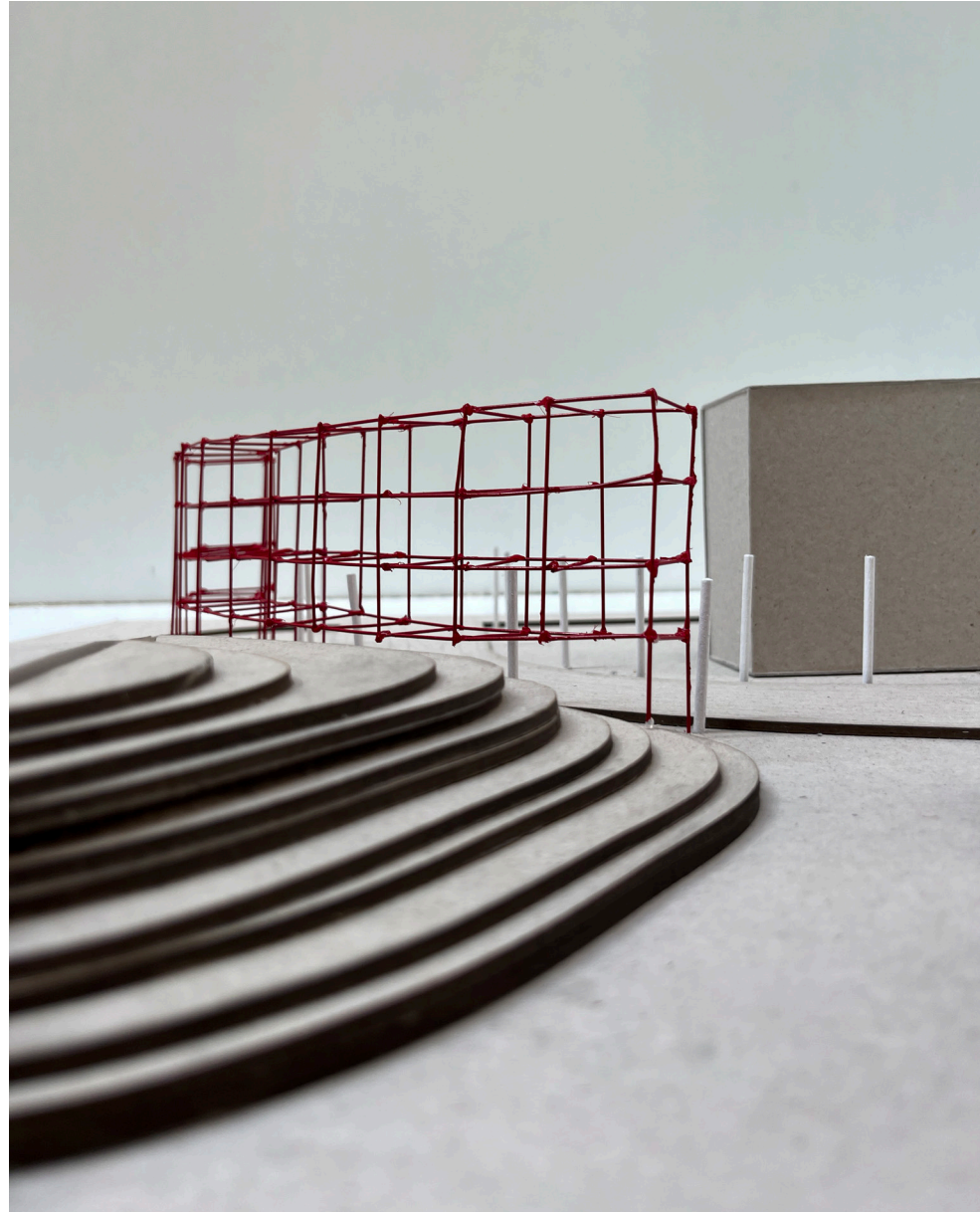
8 x 2 partitions
3.6 x 3.6 m

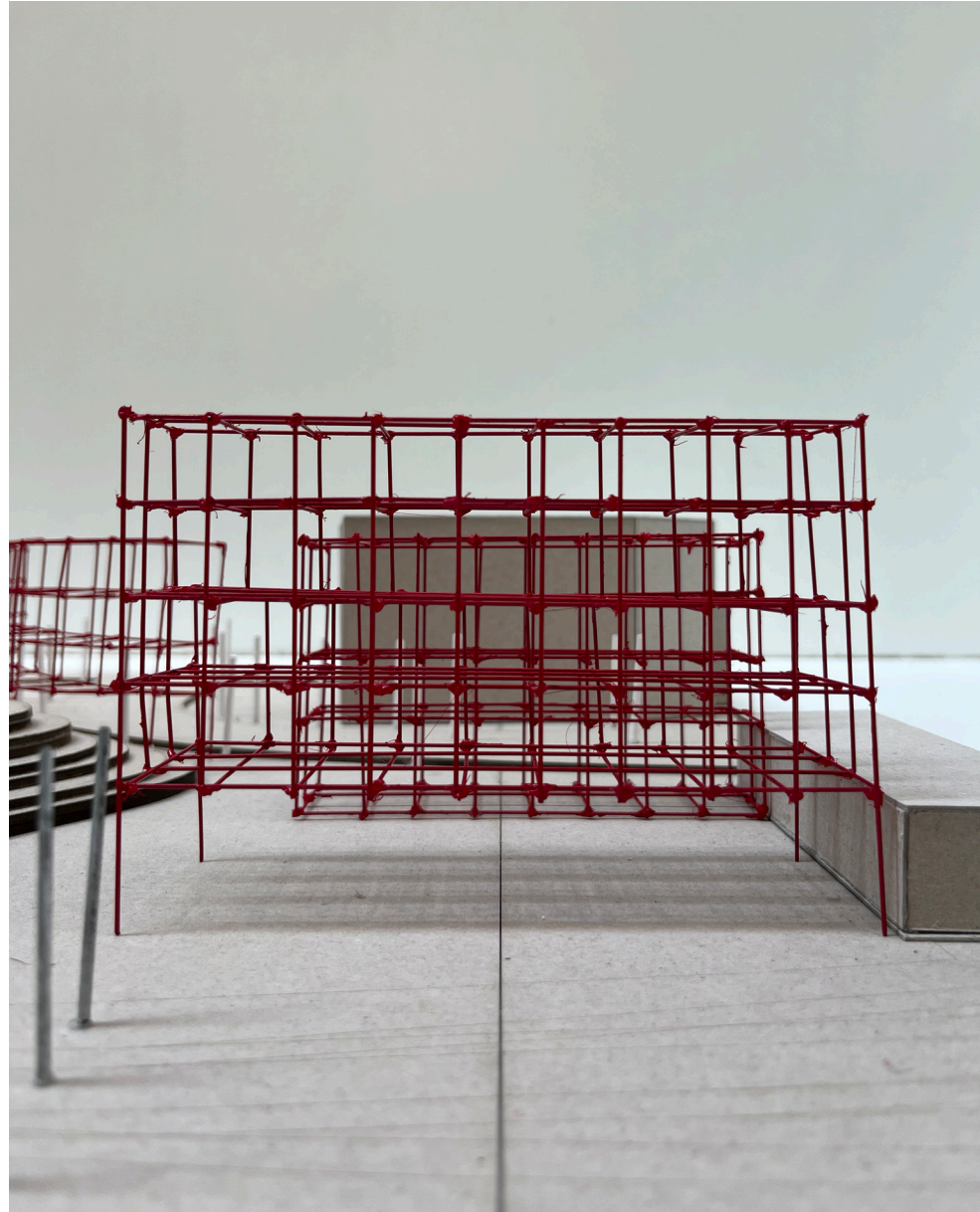
3 x 9 partitions
3.6 x 3.6 m

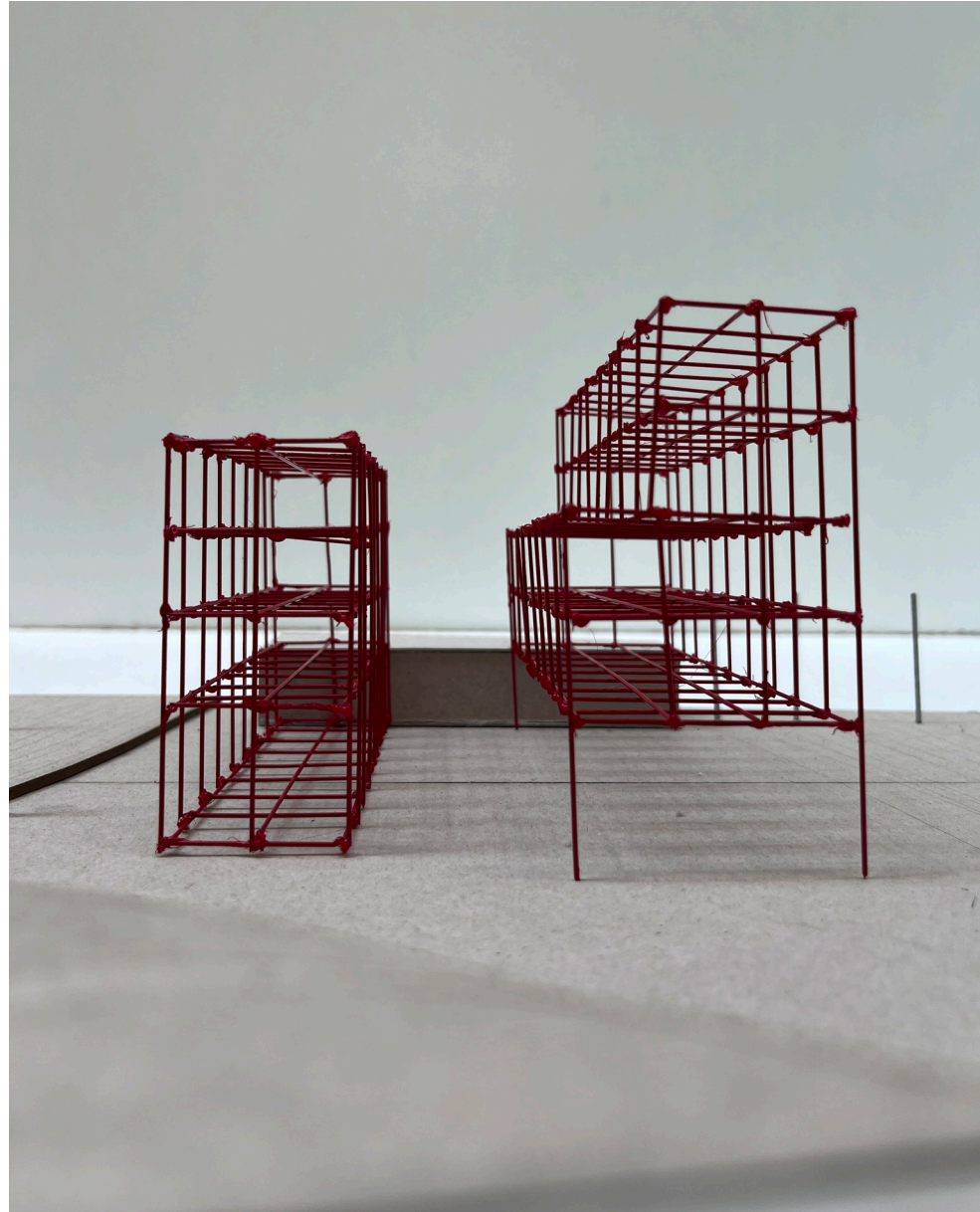


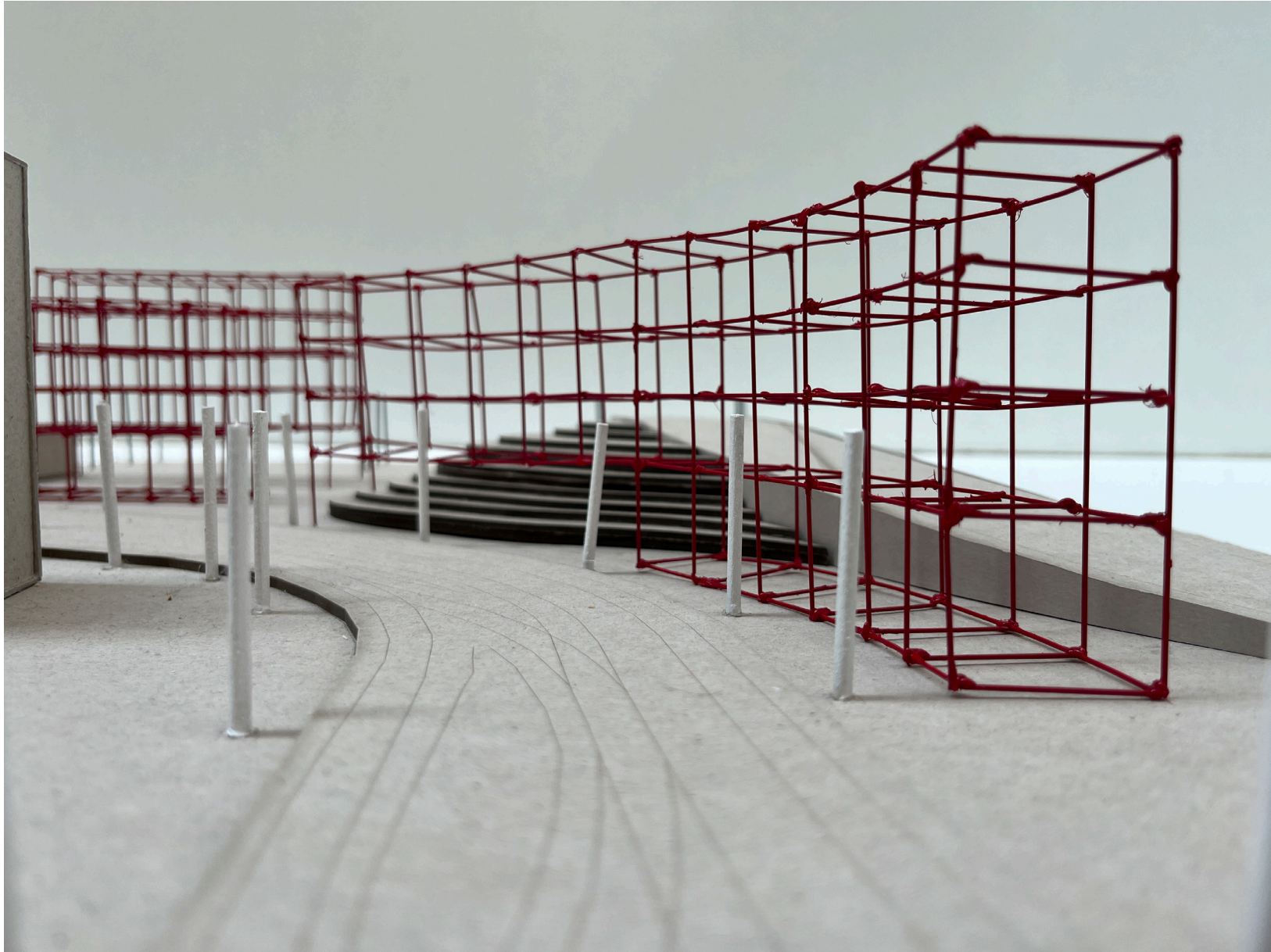






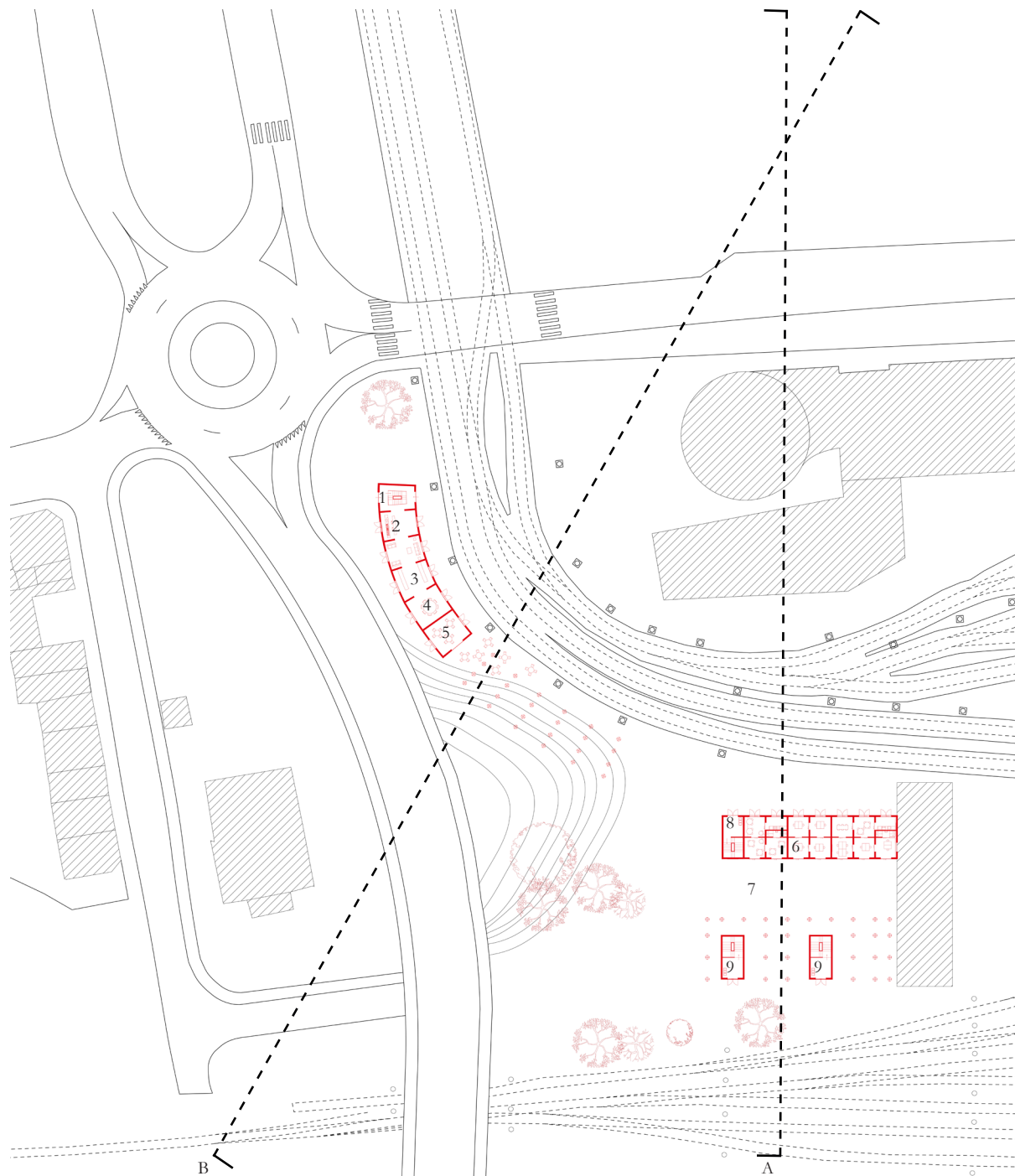






Visualisation of the details -
construction, facade, interior

- 1 Entrance
- 2 Service desk
- 3 Lobby
- 4 Bar/café
- 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

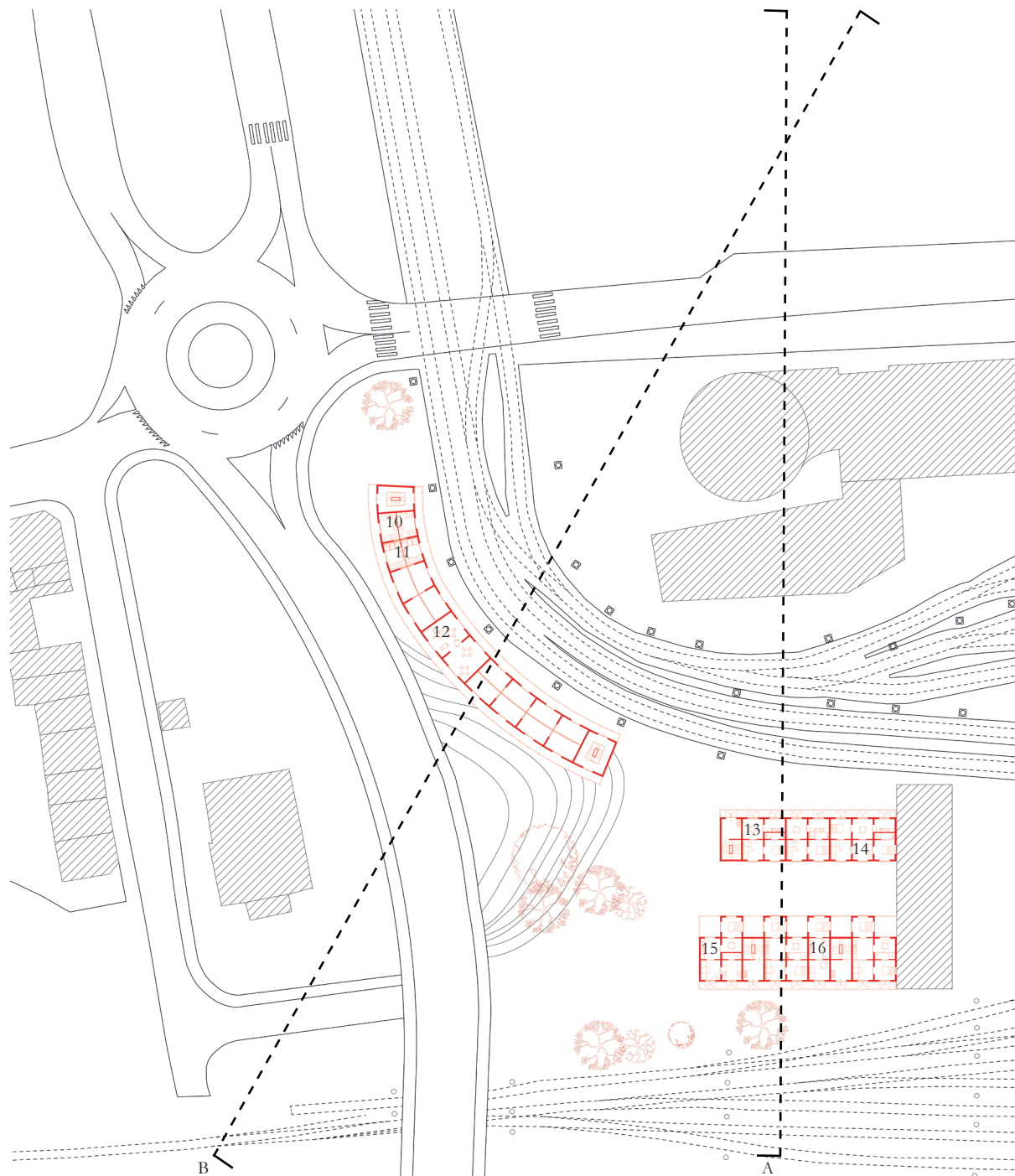


Ground floor



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

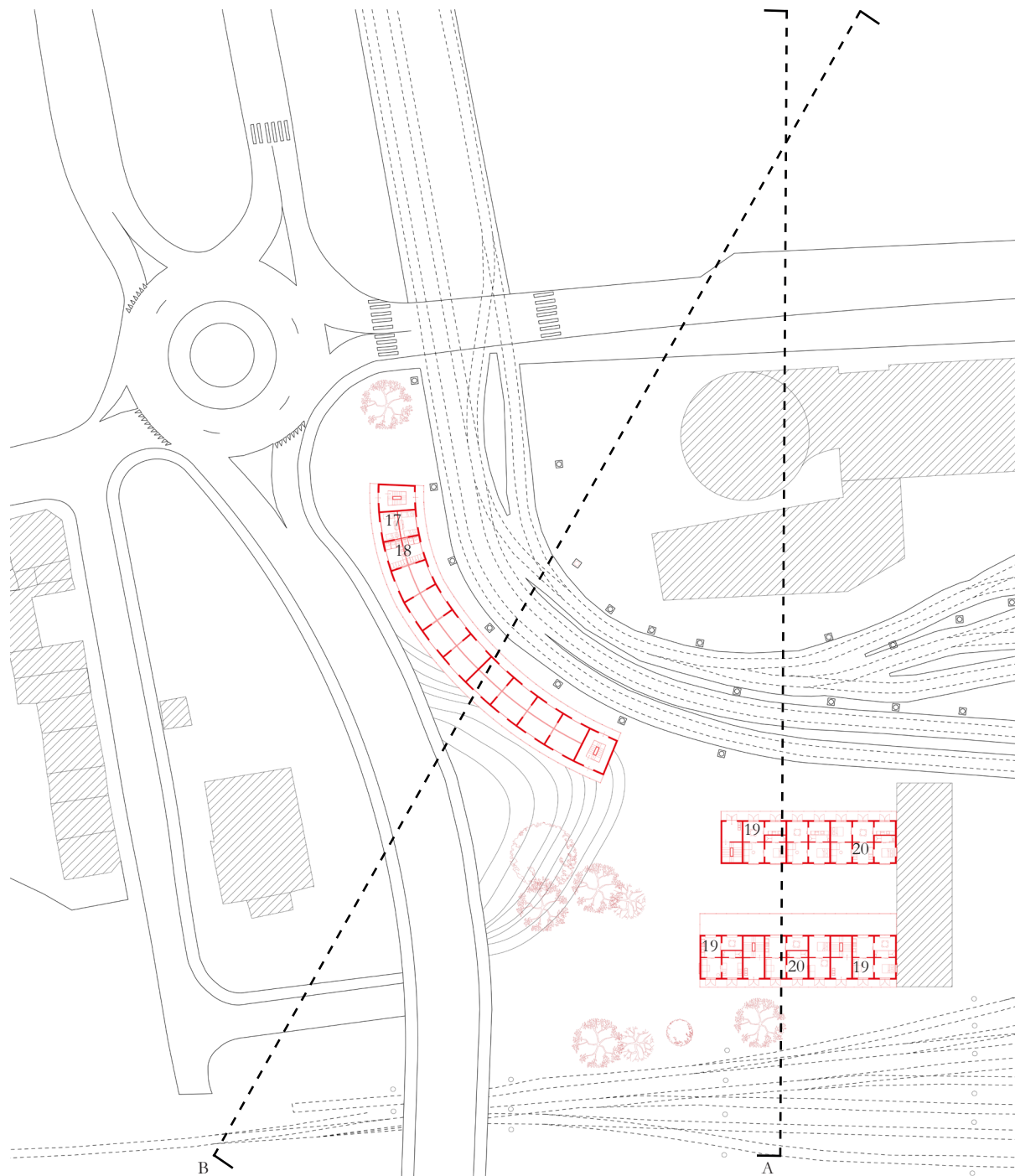


1st, 2nd floor



1:200

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



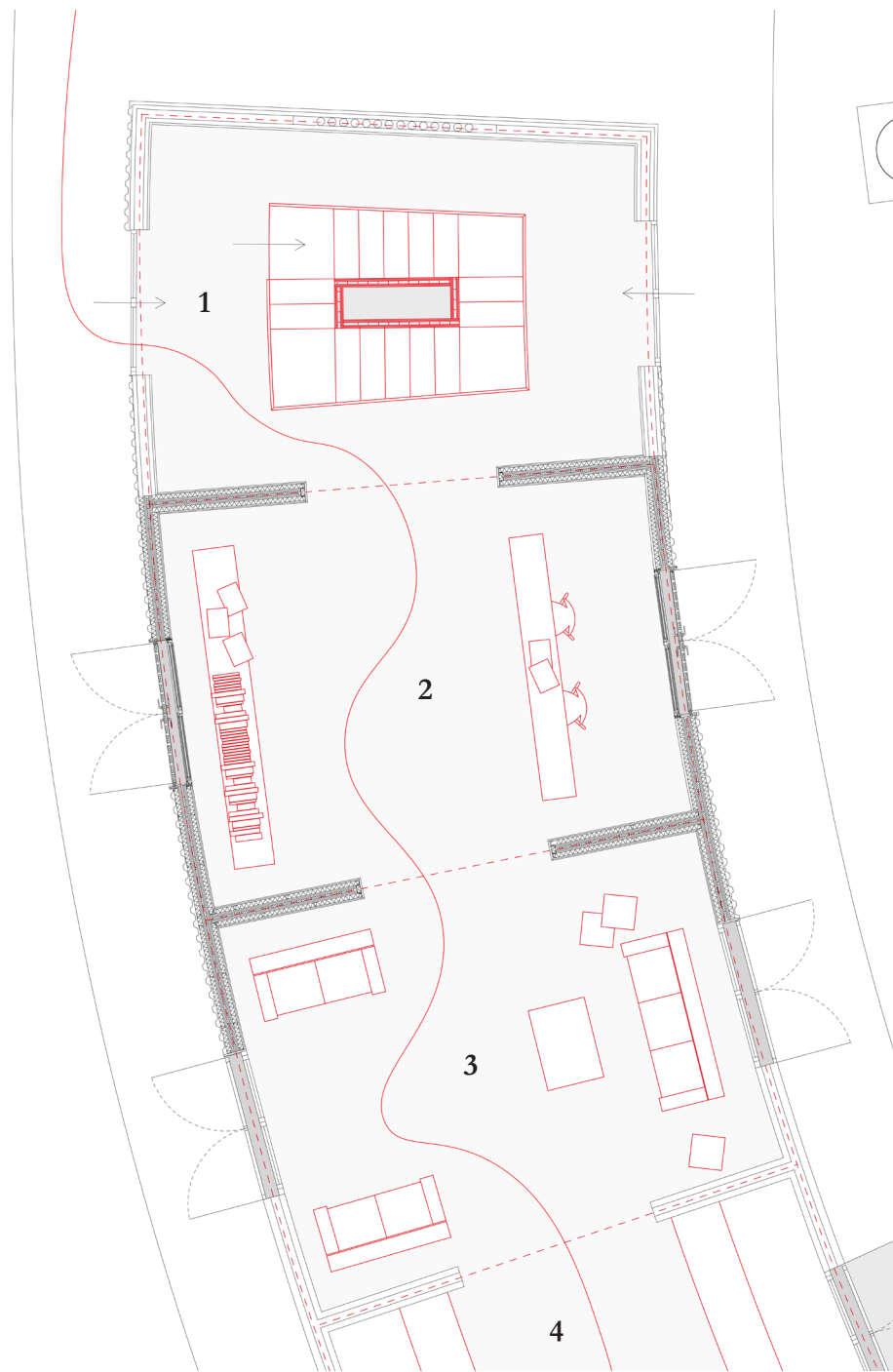
3rd, 4th (5th) floor

0 4.5 9



1:200

- 1 Entrance - stairway
- 2 Service desk
- 3 Lobby
- 4 Bar

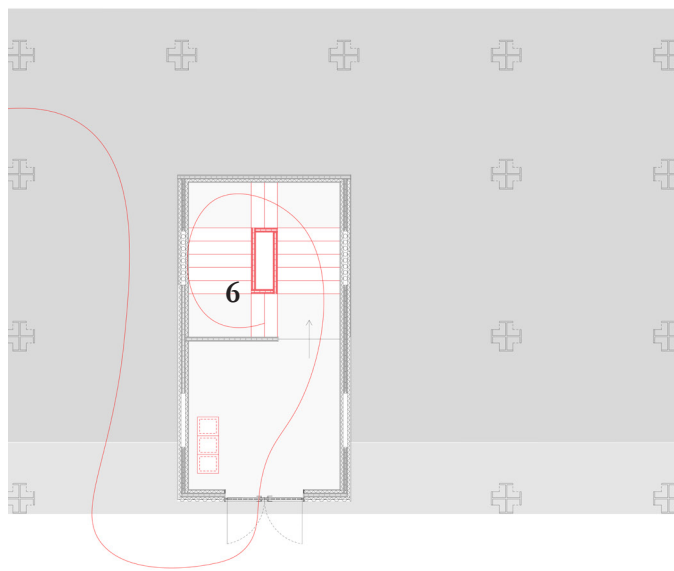
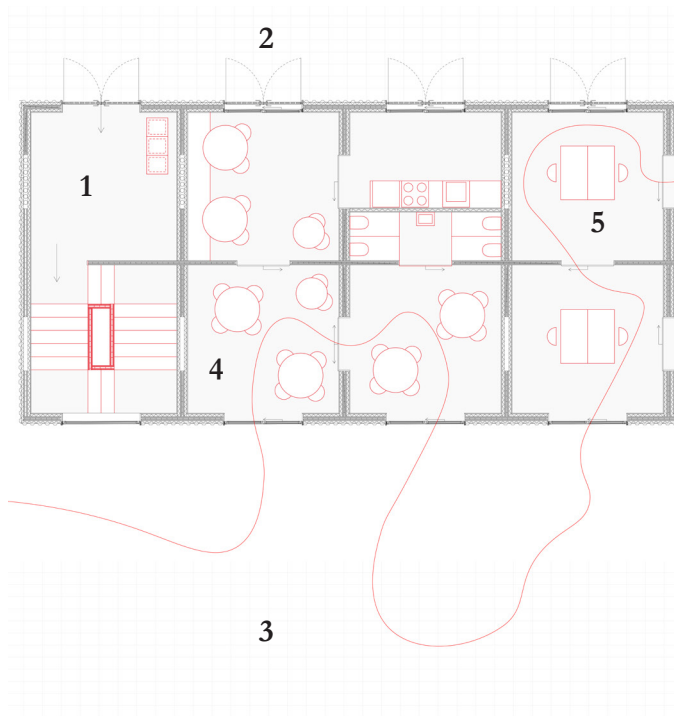


Groundfloor

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

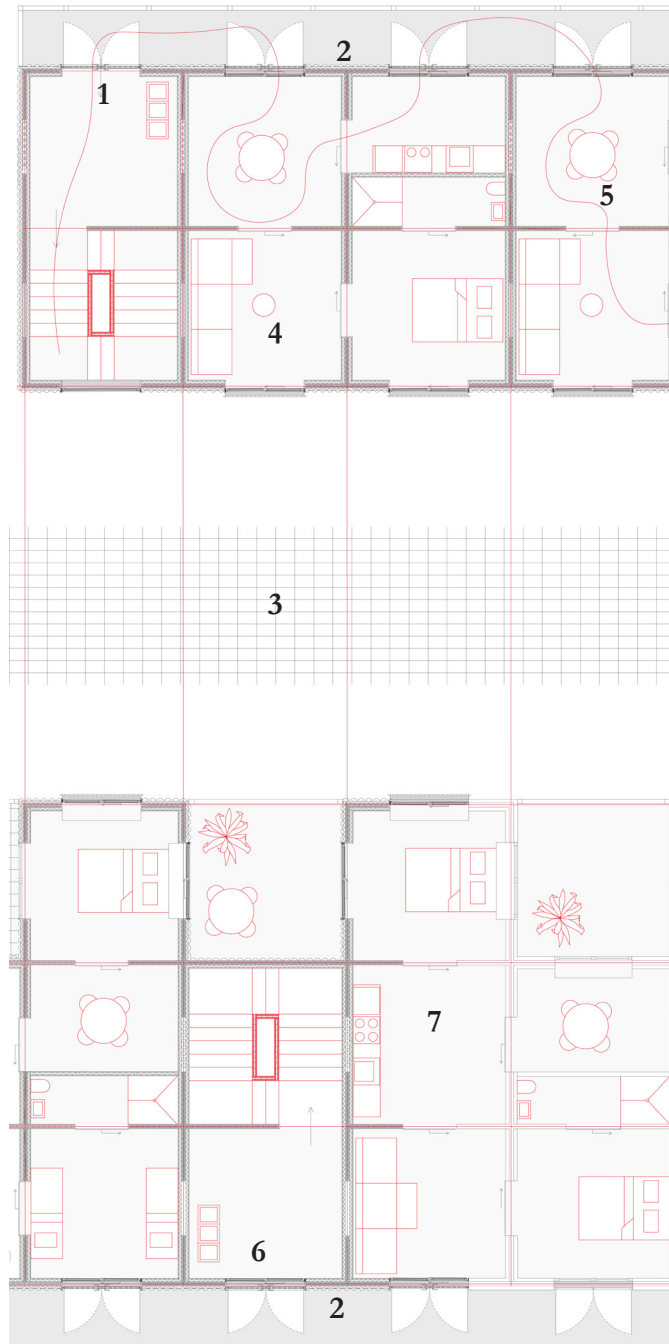


1st, 2nd, 3rd floor



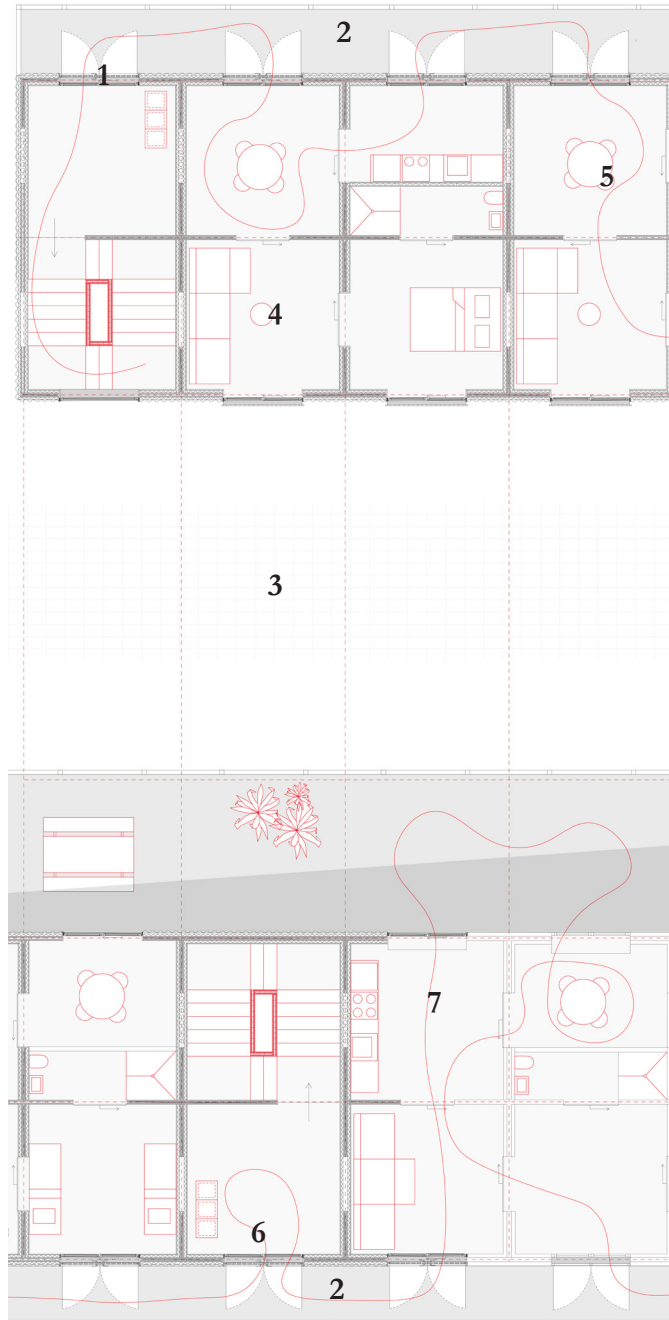
- 1 Entrance - stairway
- 2 Gallery - entrances partitions
- 3 Inner courtyard - open plinth
- 4 Cafe/restaurant
- 5 Work hub
- 6 Entrance blok 3 - stairway

Groundfloor



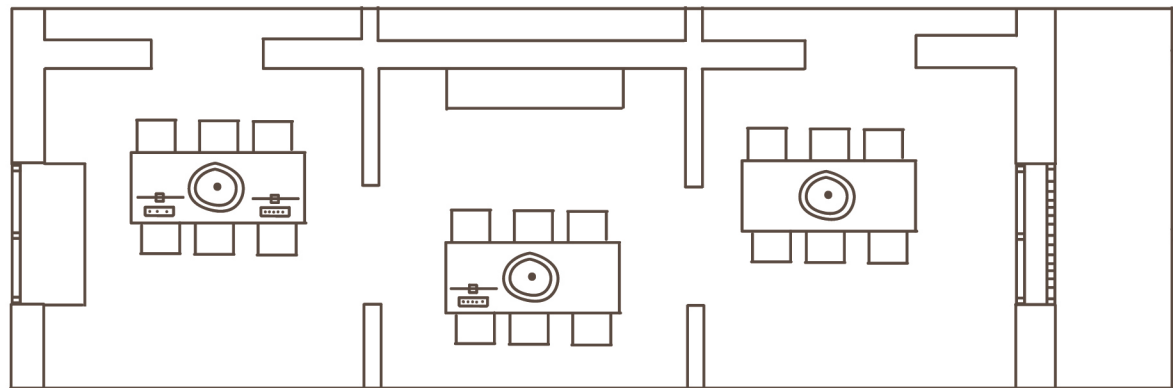
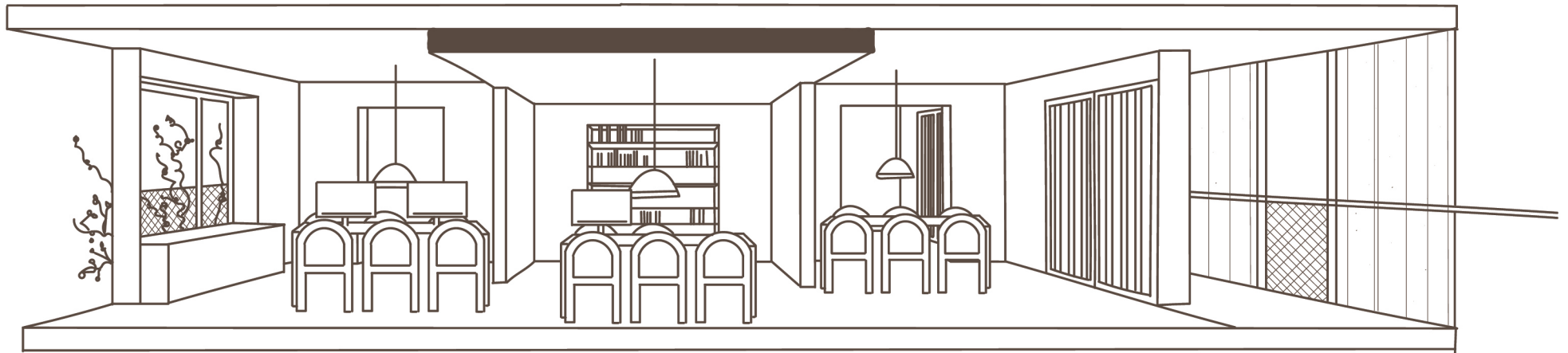
- 1 Entrance - stairway
- 2 Gallery - entrances partitions
- 3 Inner courtyard - open plinth
- 4 Apartment 52 m2
- 5 Student apartment 77m2
- 6 Entrance blok 3 - stairway
- 7 Apartment 65 m2 with inner balcony

1st, 2nd floor



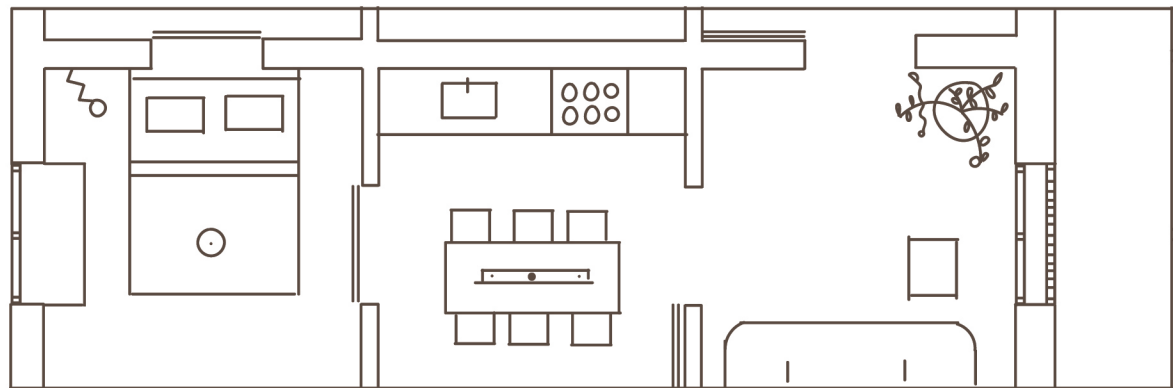
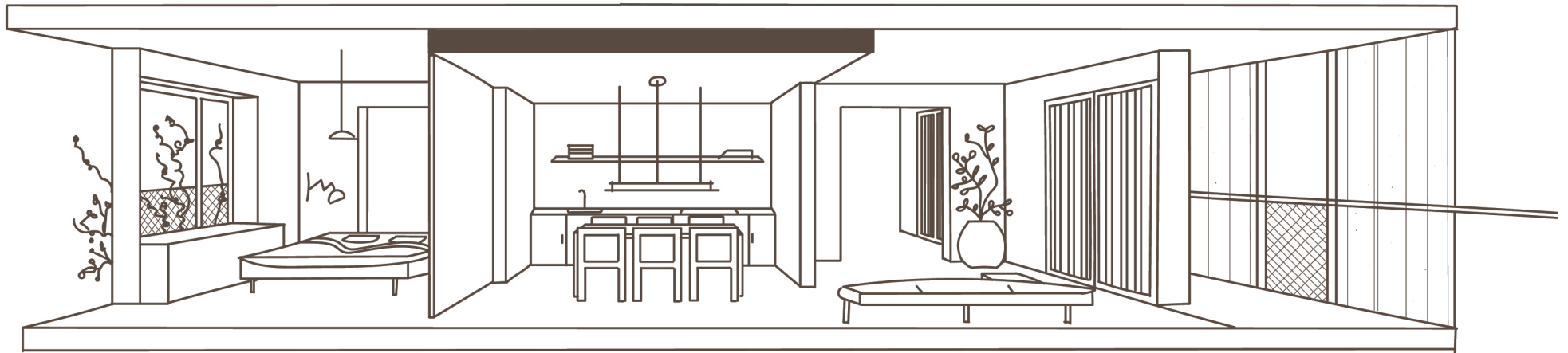
- 1 Entrance - stairway
- 2 Gallery - entrances partitions
- 3 Inner courtyard - open plinth
- 4 Apartment 52 m2
- 5 Student apartment 77m2
- 6 Entrance blok 3 - stairway
- 7 Apartment 78 m2 with shared terras

3rd and (4th) floor

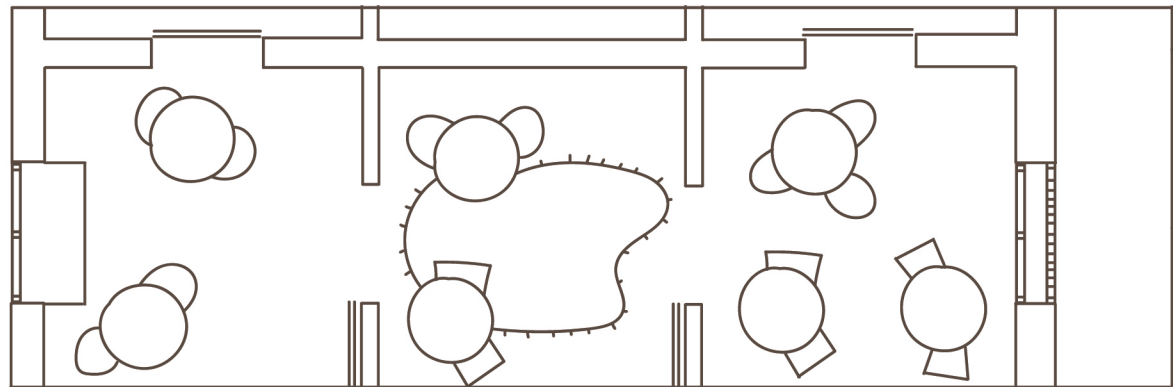
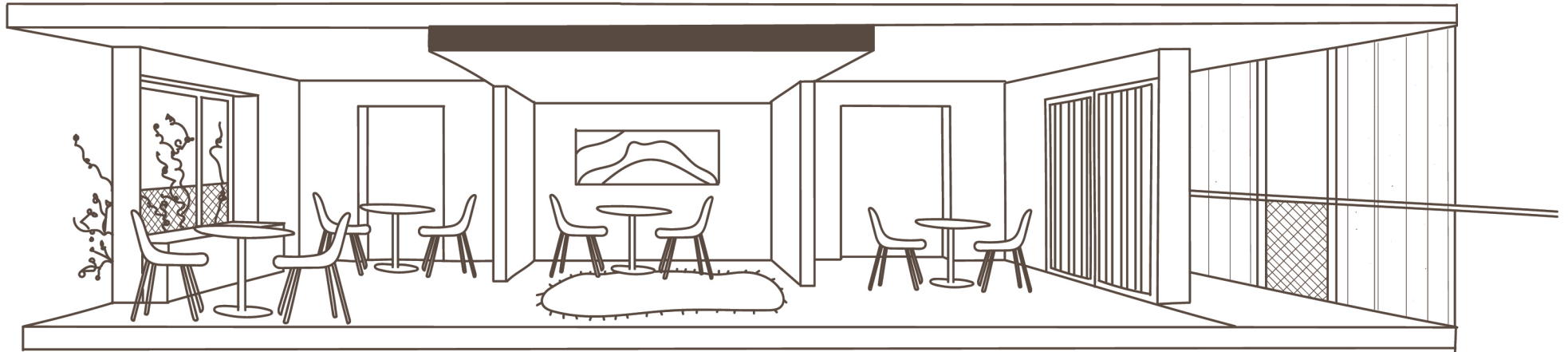


layout flexibility - work hub





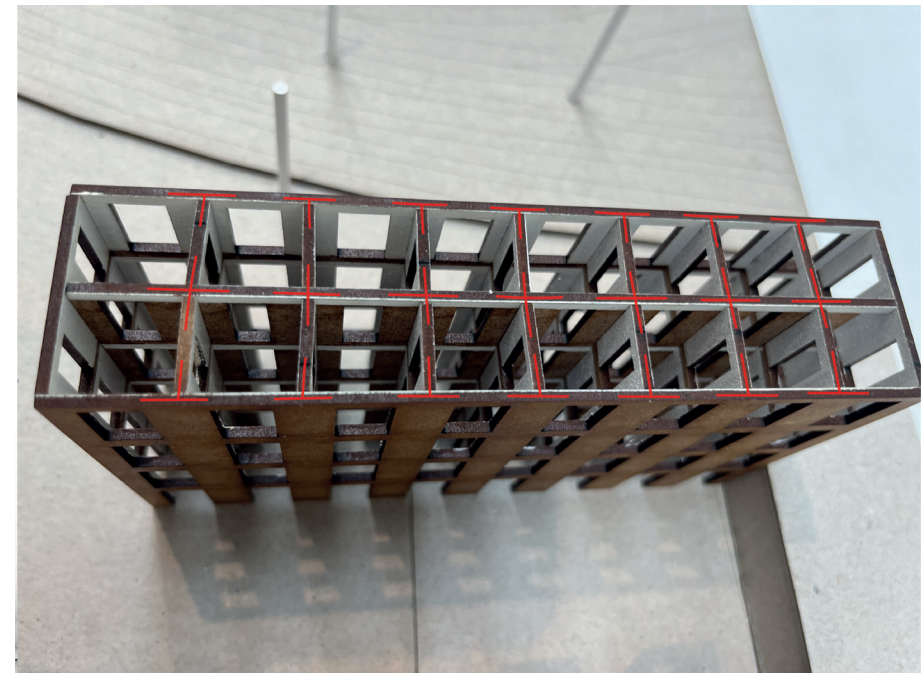
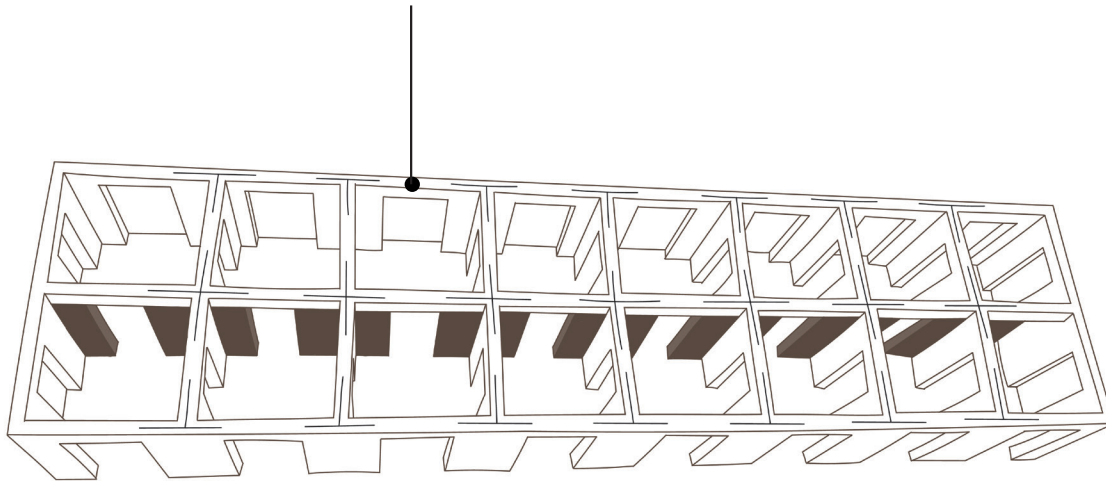
layout flexibility - apartment



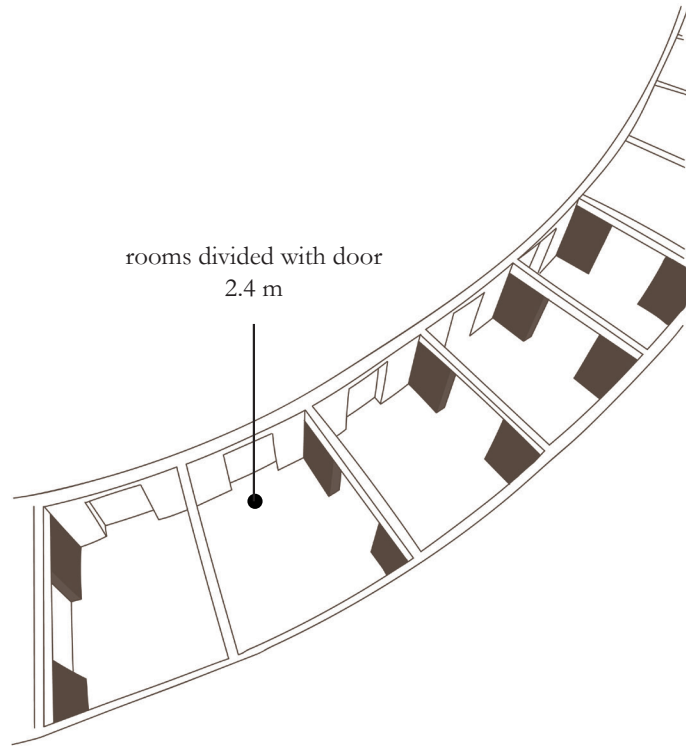
layout flexibility - cafe/restaurant

9 partitions
3.6 x 3.6 m

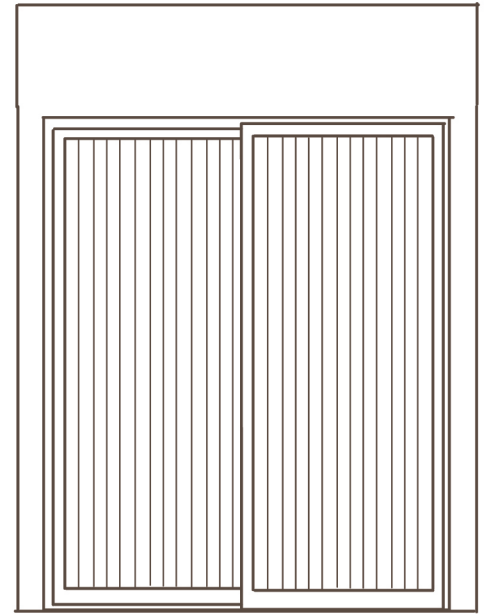
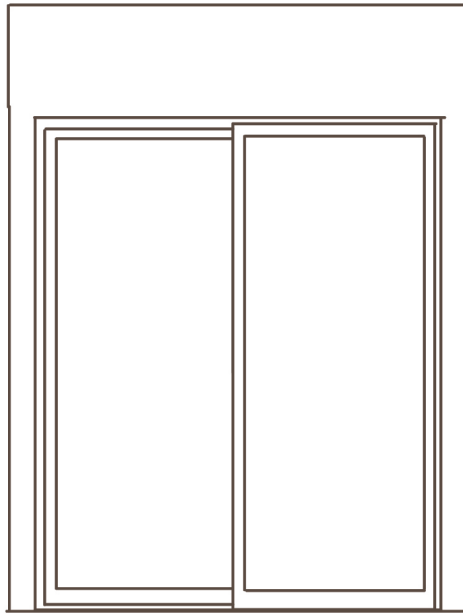
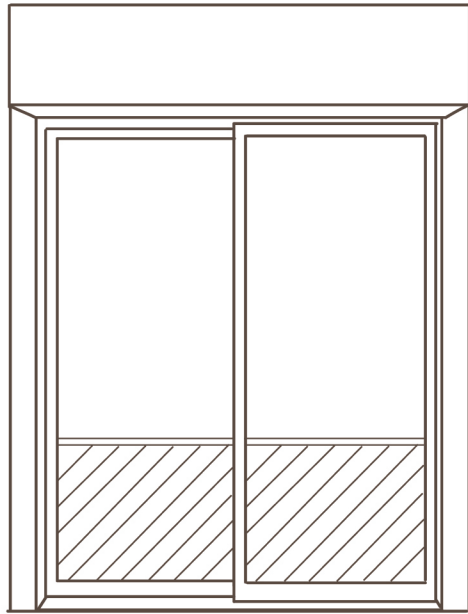
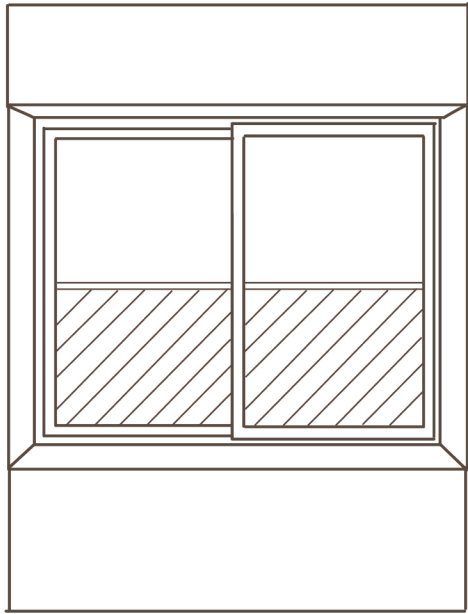
rooms divided with door
1.2m



structure + and t

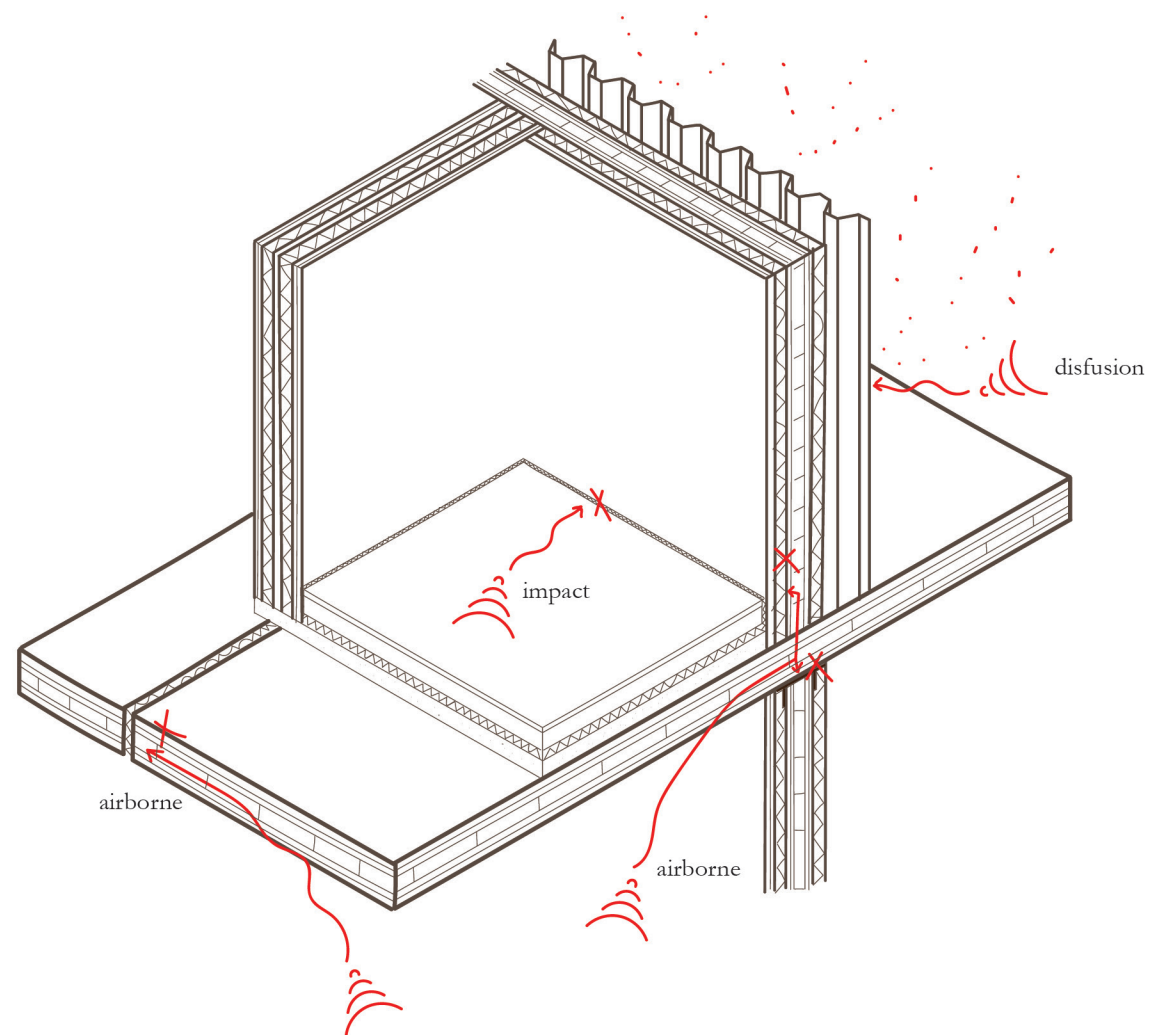


structure t

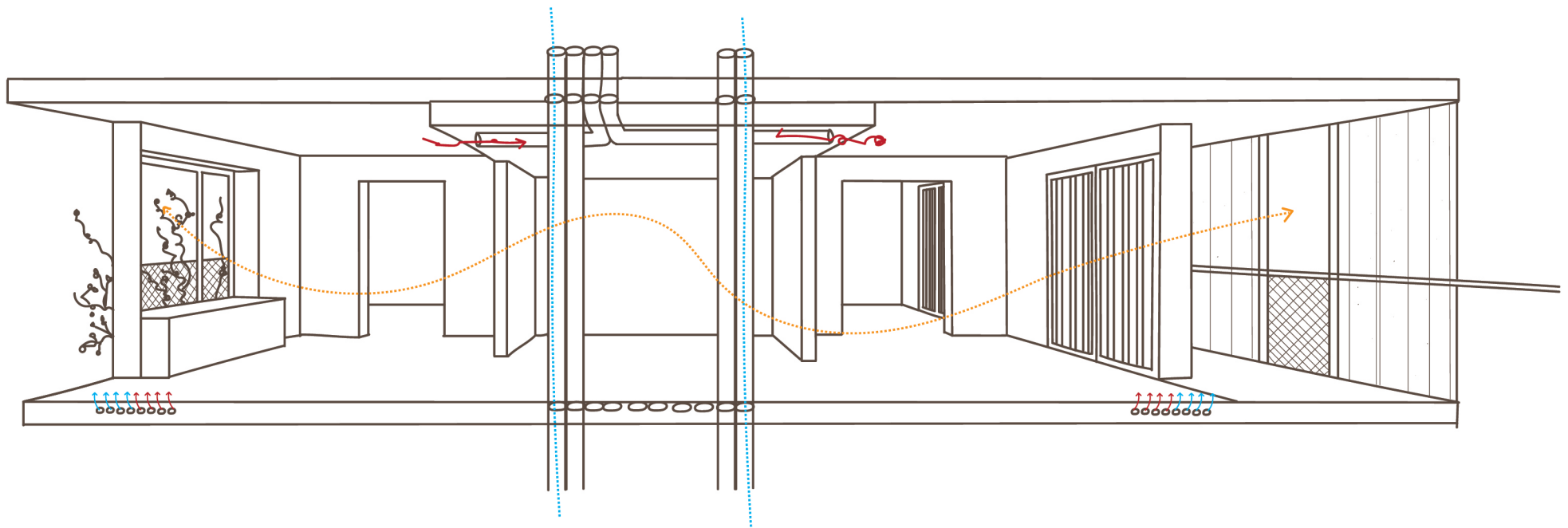


windows

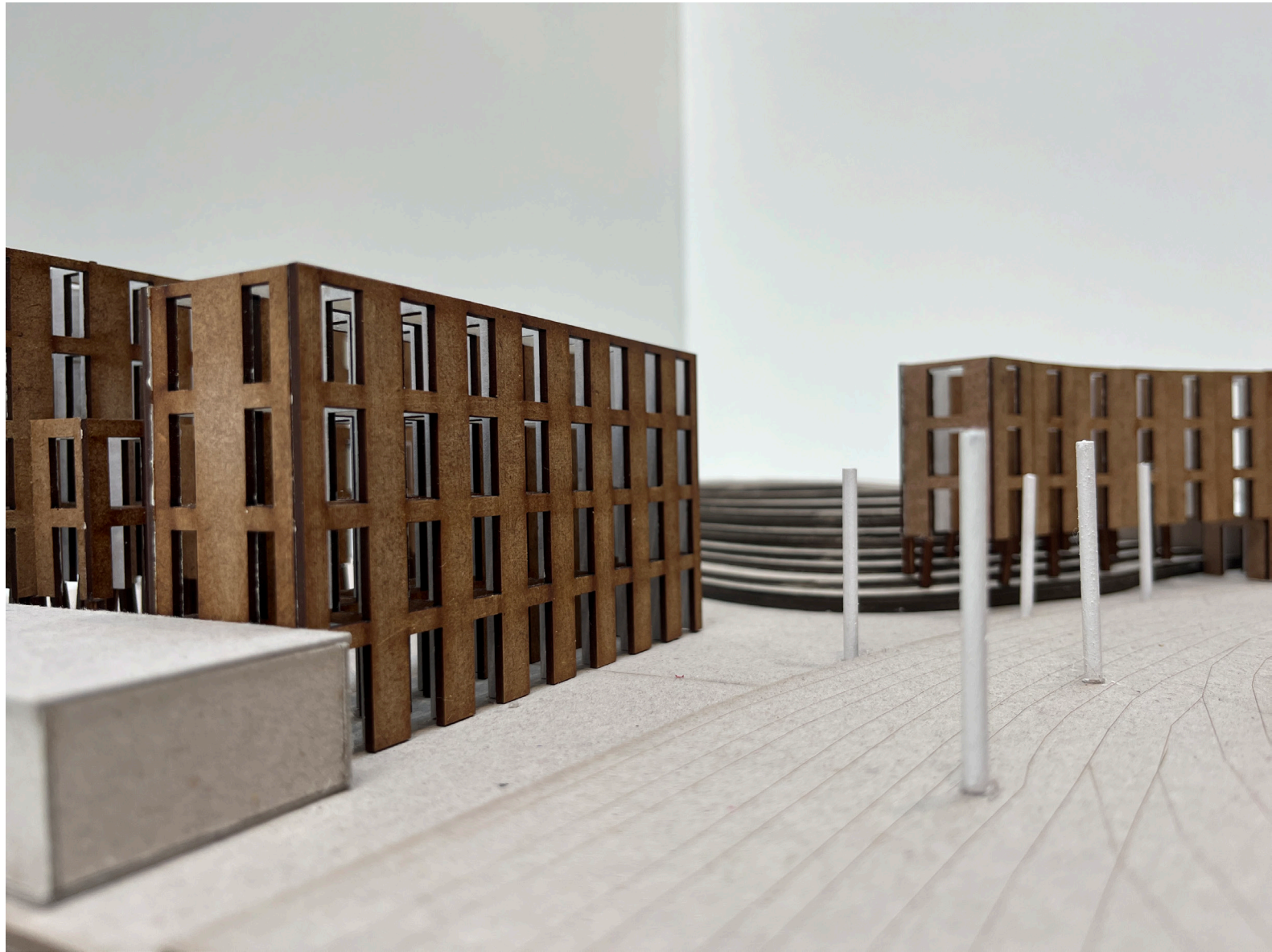


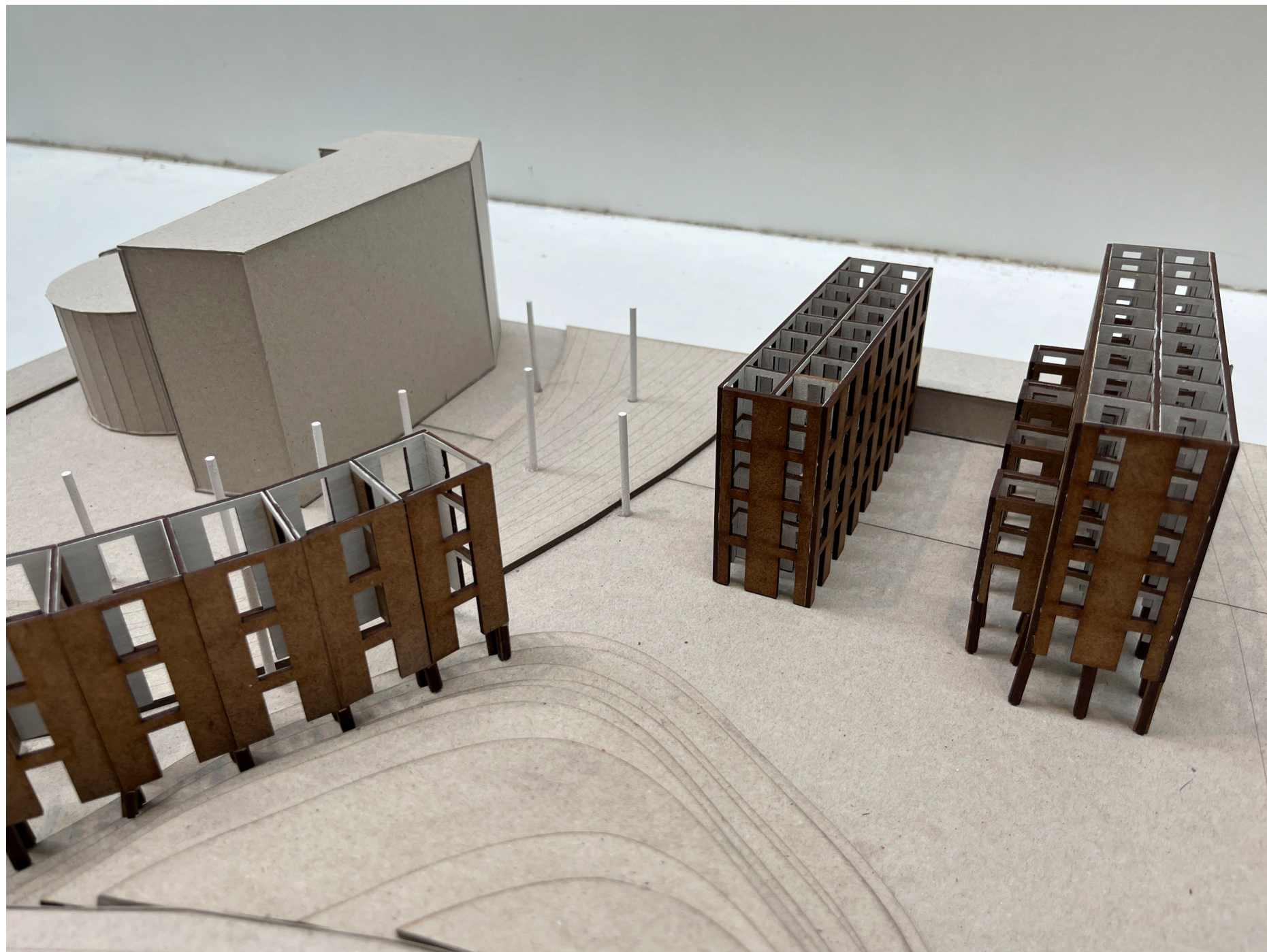




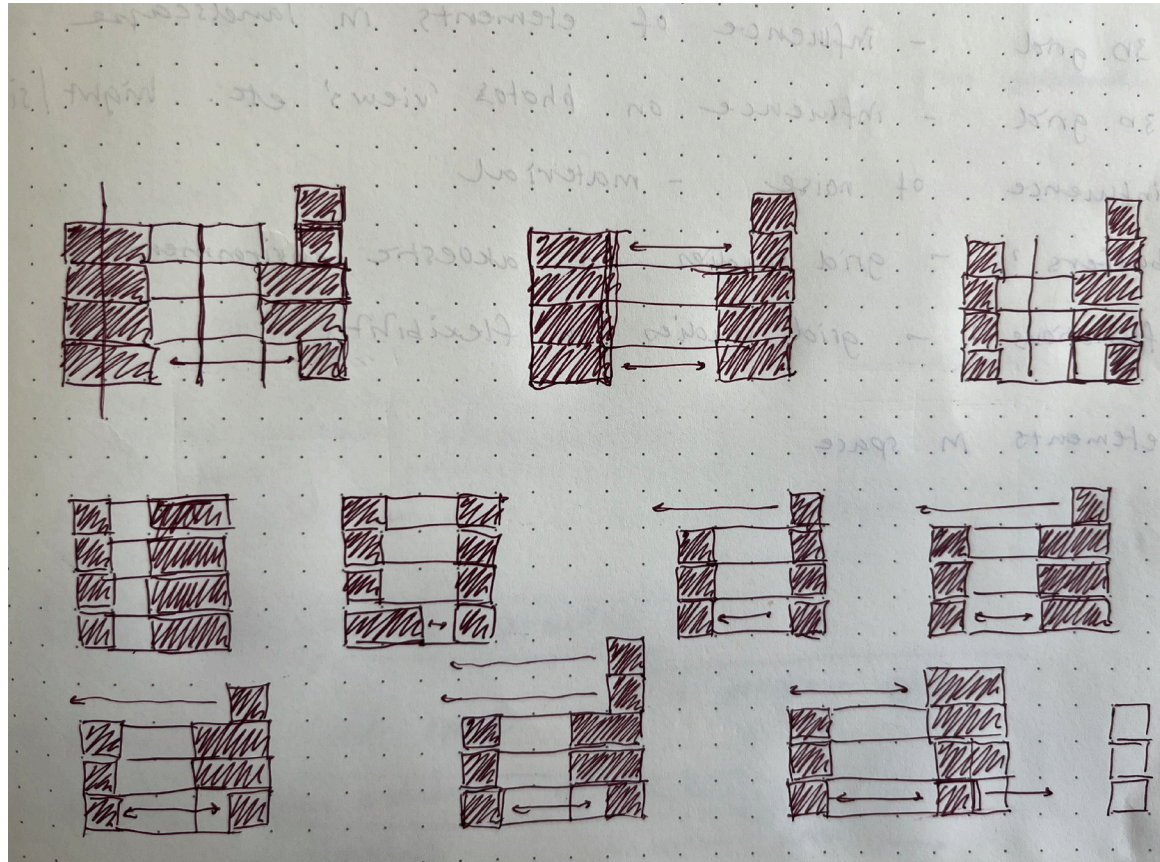




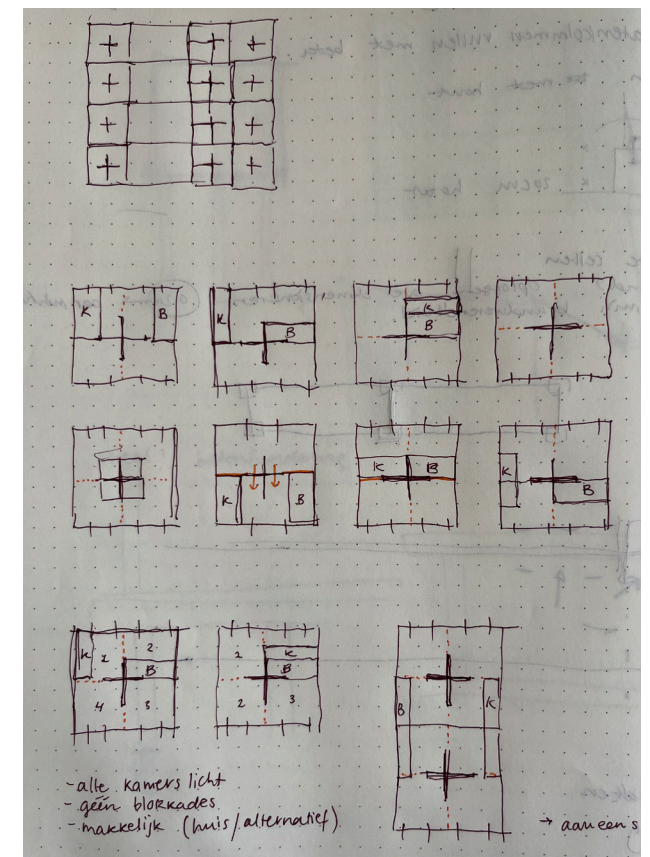


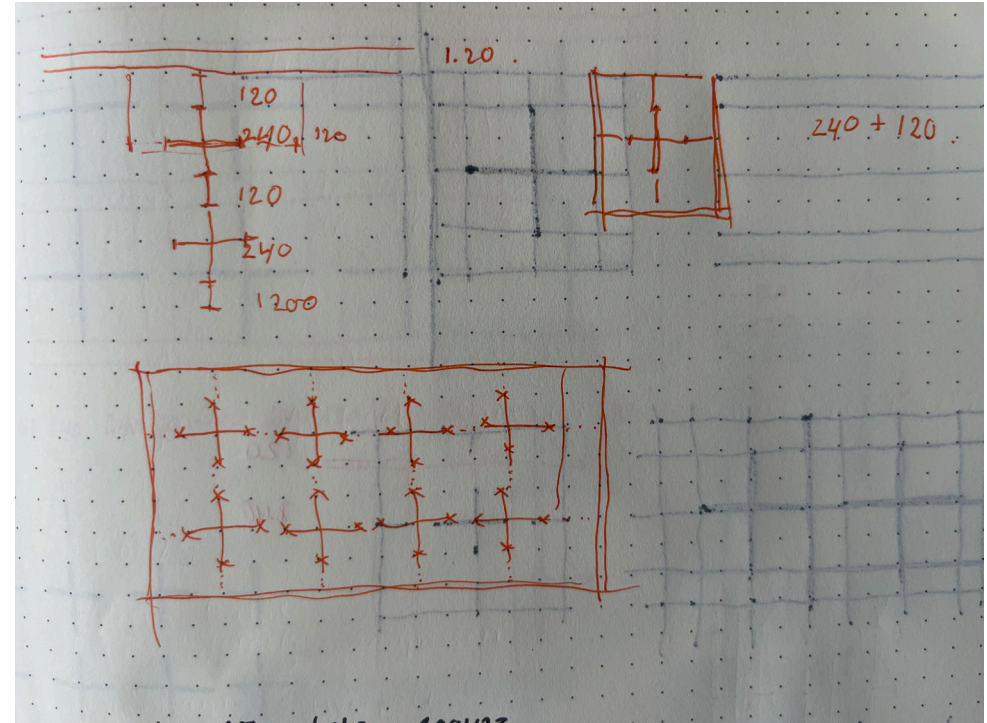
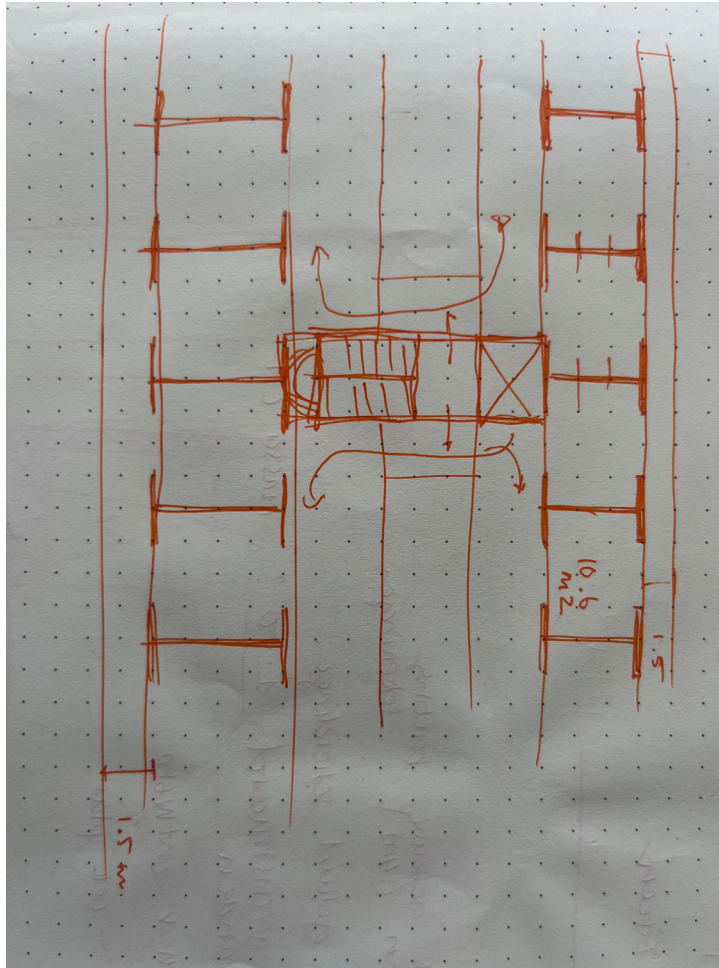


A sketch book of thoughts -
details in the grid

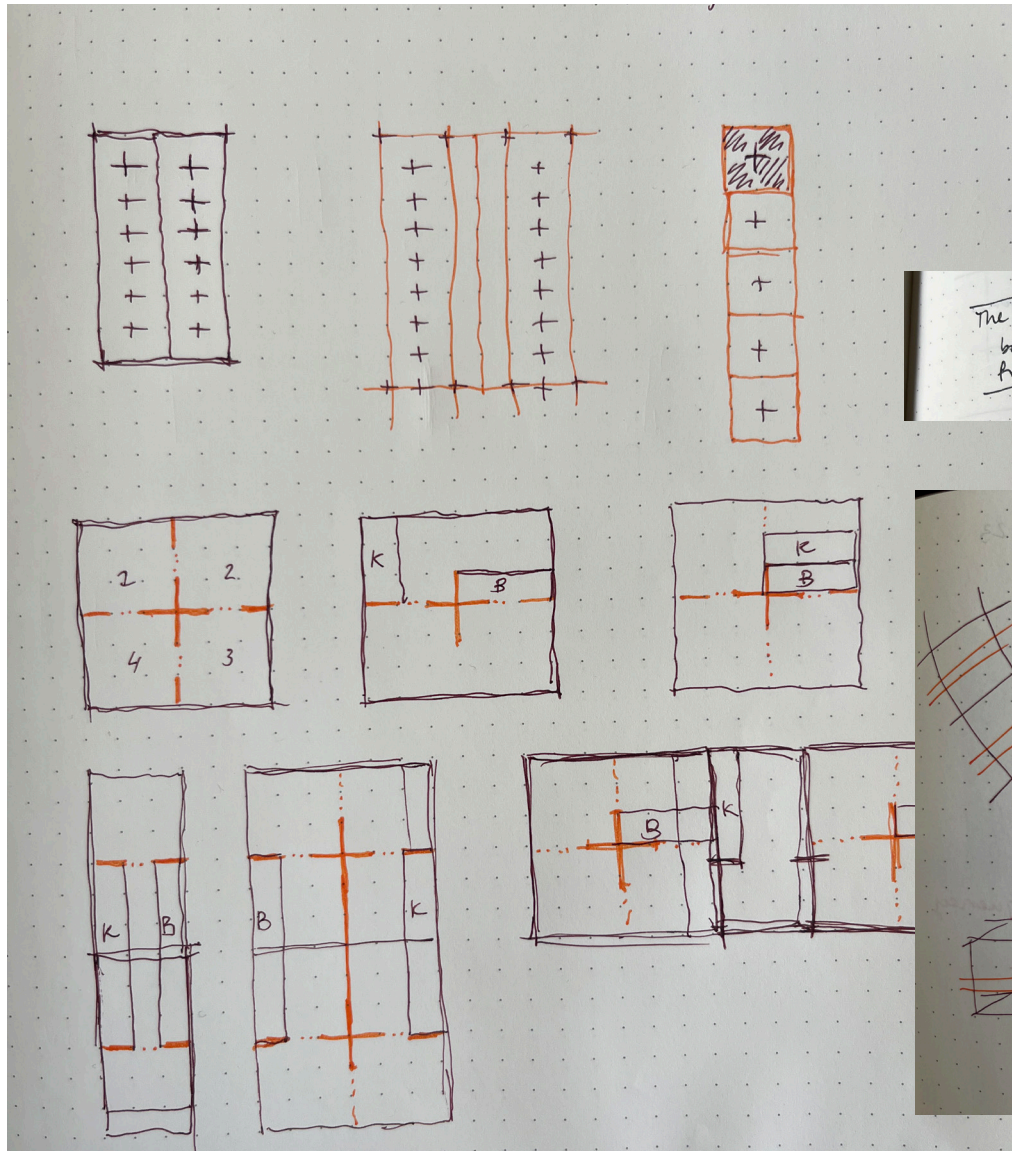


Originally, the goal was to visually represent the qualities of the interspaces through drawing, photography and modelling.



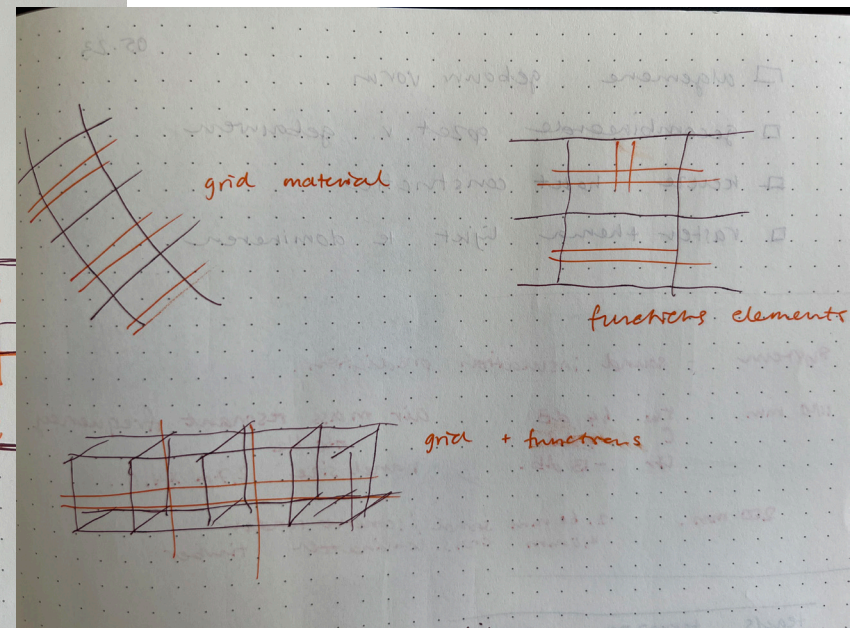


proportions + flexible floorplans

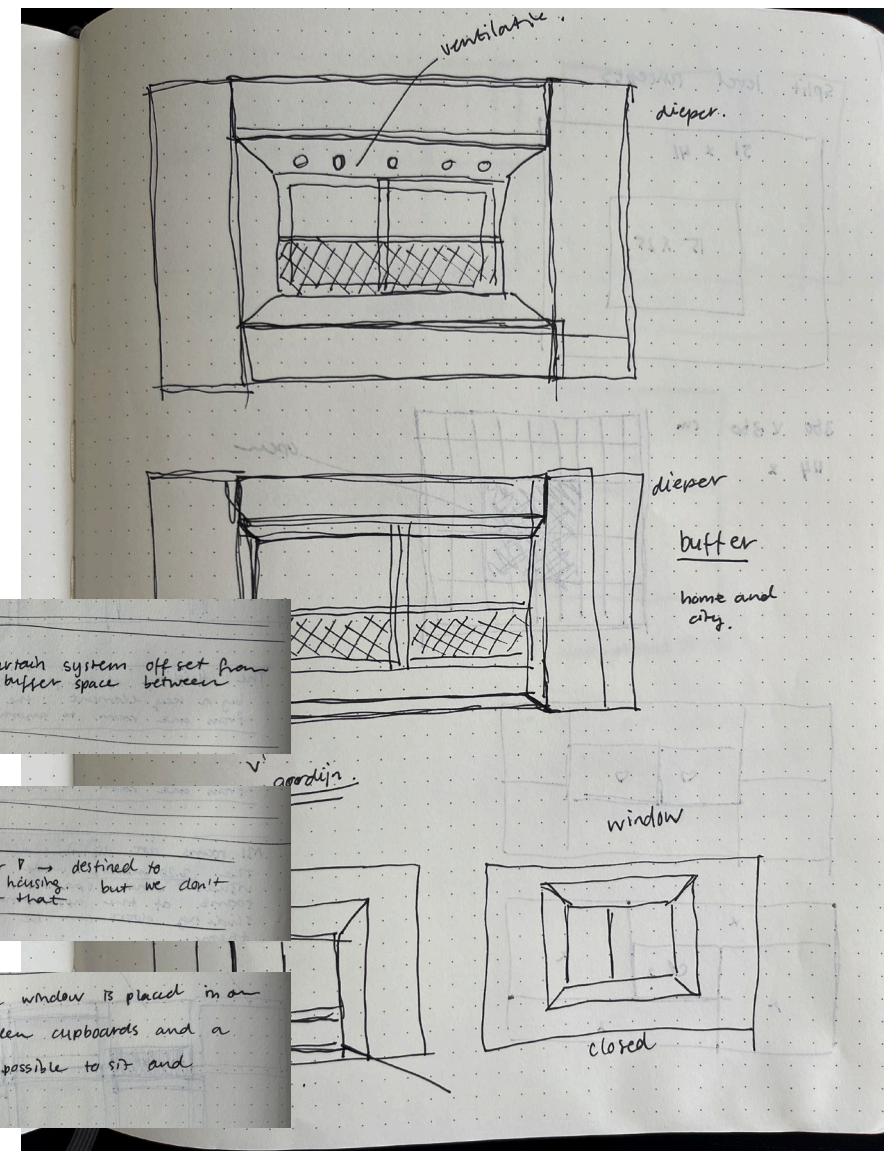
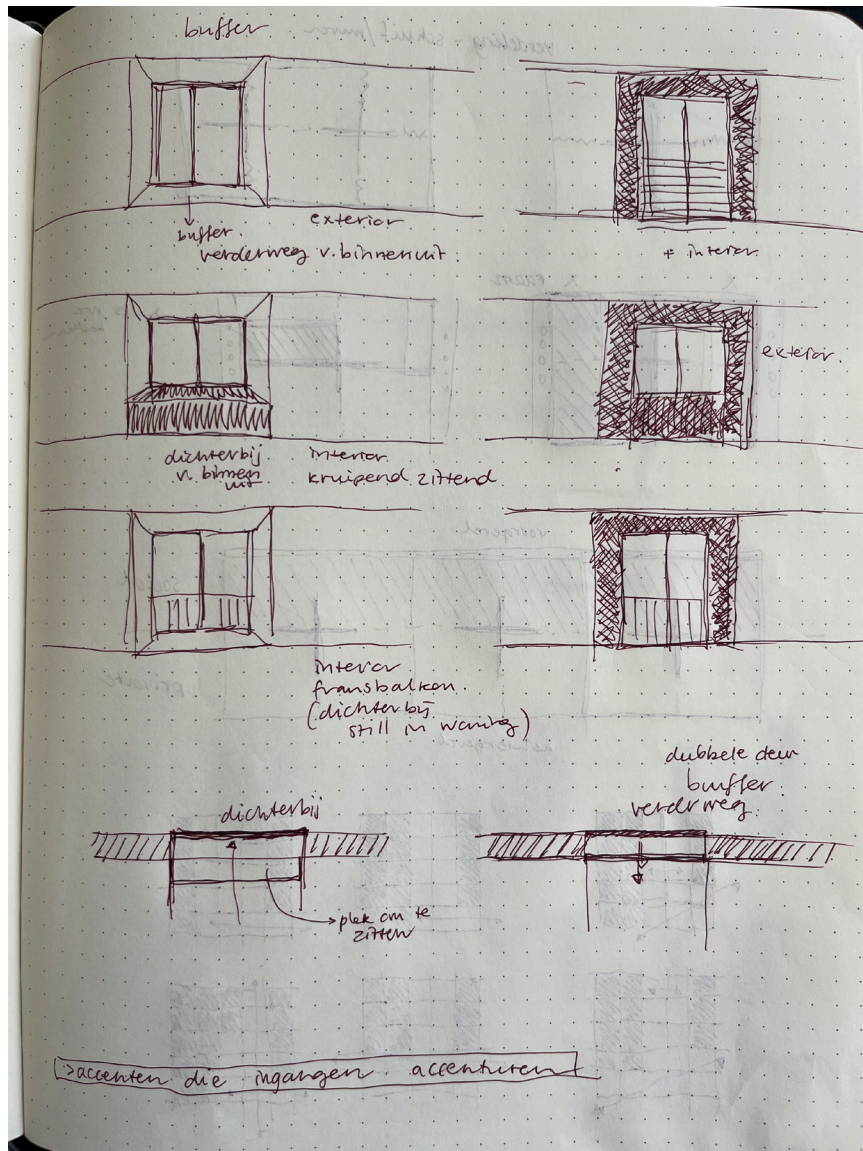


The fluidity of the plan is also made possible by a key element: the passages from one room to another

The fluidity of the plan is also made possible by a key element: the overstore passages from one room to another.



flexible floorplans

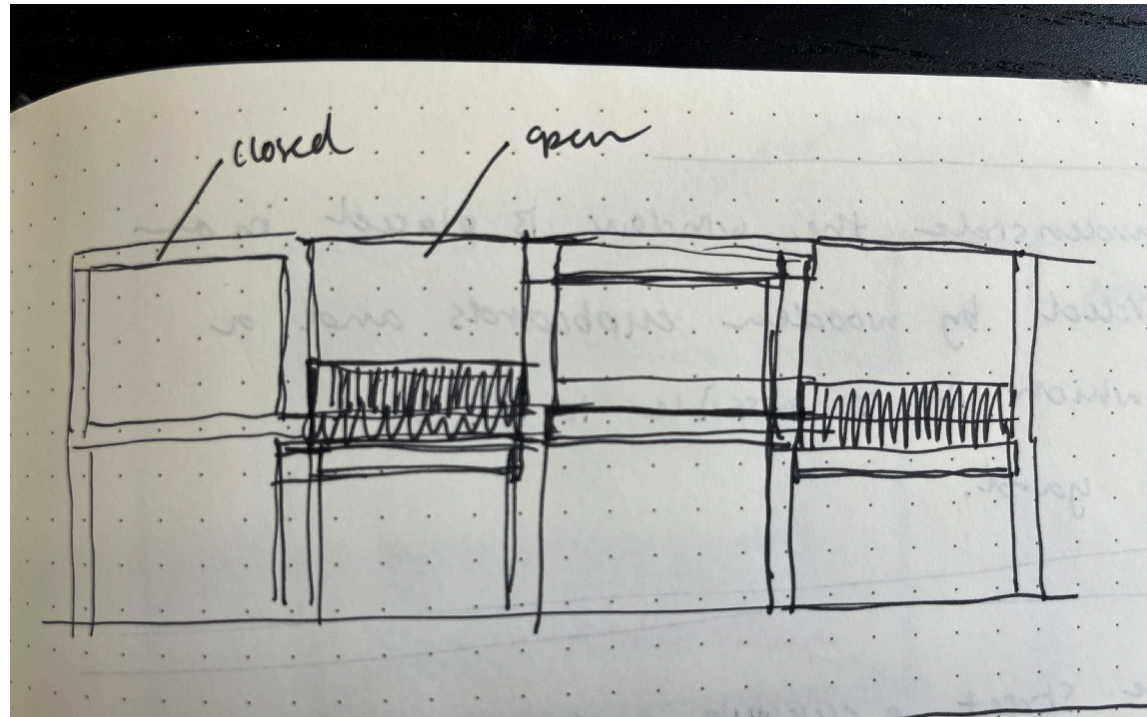


facing the street, a curtain system offset from the facade creates a buffer space between the home and the city.

outdoor? no front door & → destined to be a housing but we don't want that

On the garden side the window is placed in an alcove encircled by wooden clipboards and a coffer on which it is possible to sit and enjoy the yard.

acoustic layers (windows)

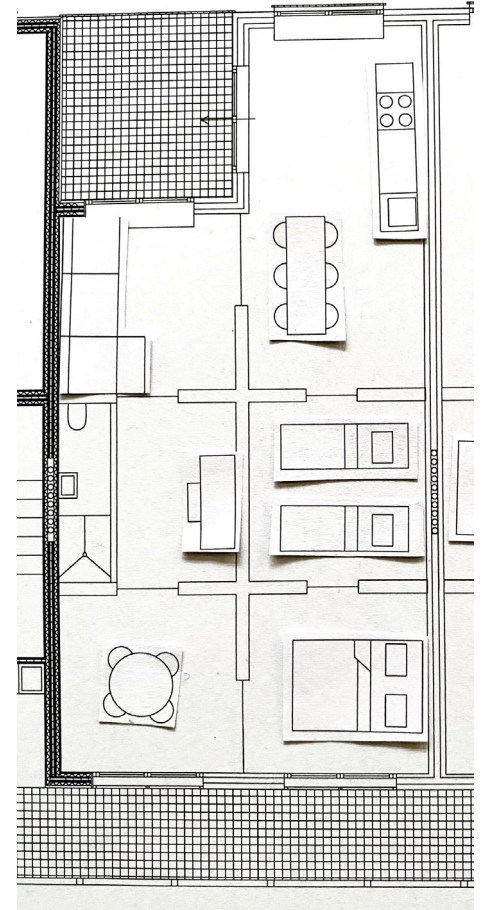
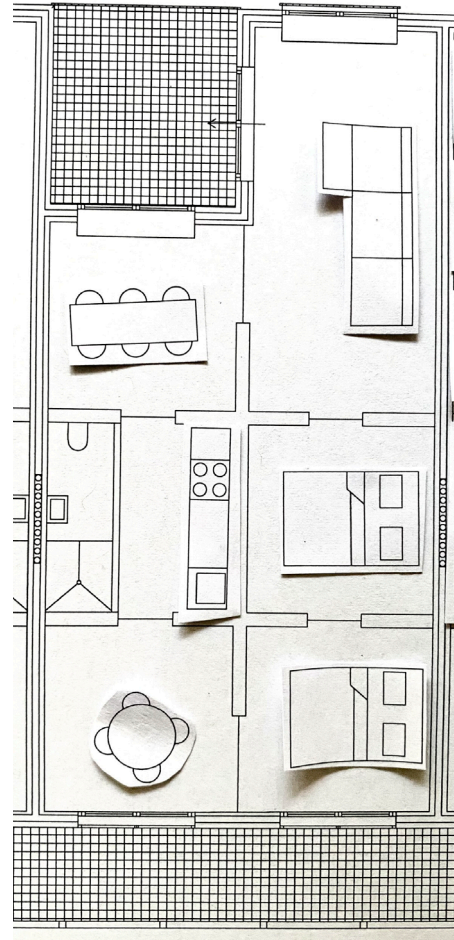
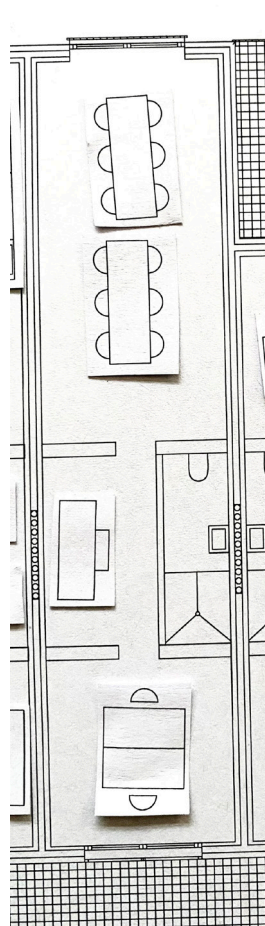
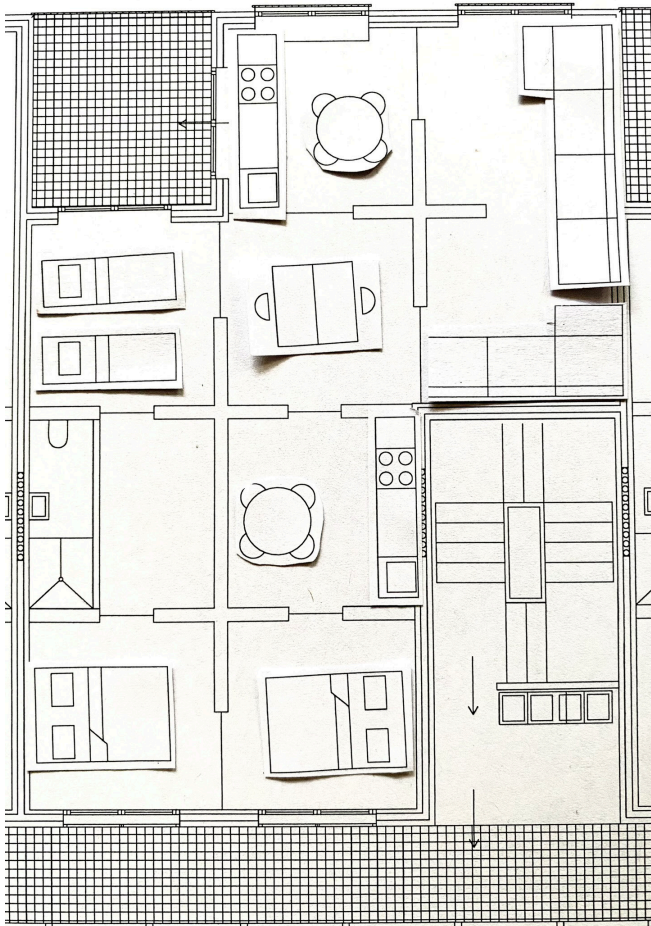


The glazed areas of windows is generous and similar in each room (no smaller ~~rooms~~ windows in rooms)

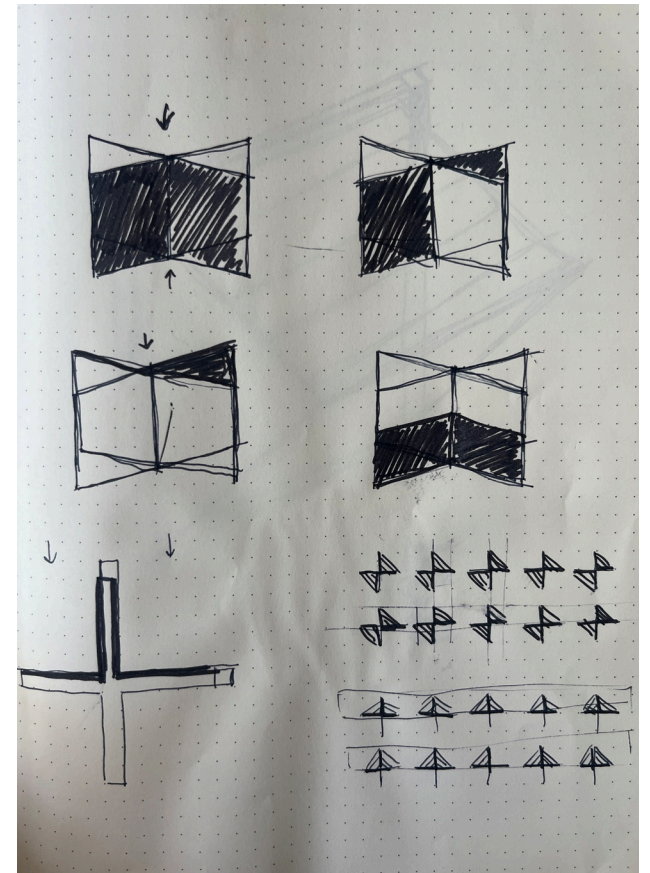
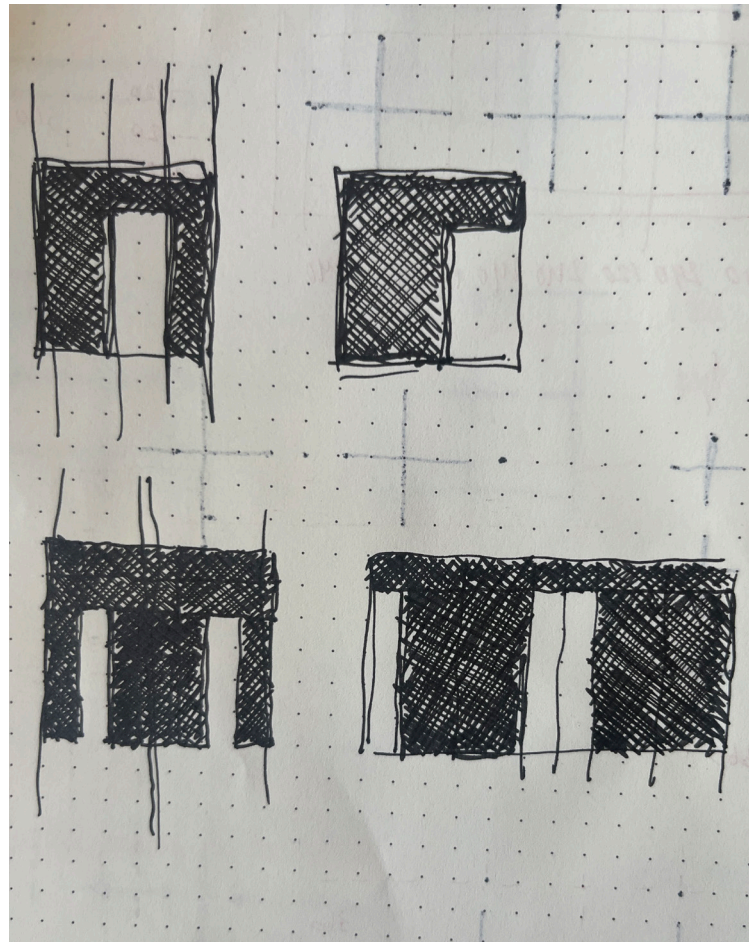
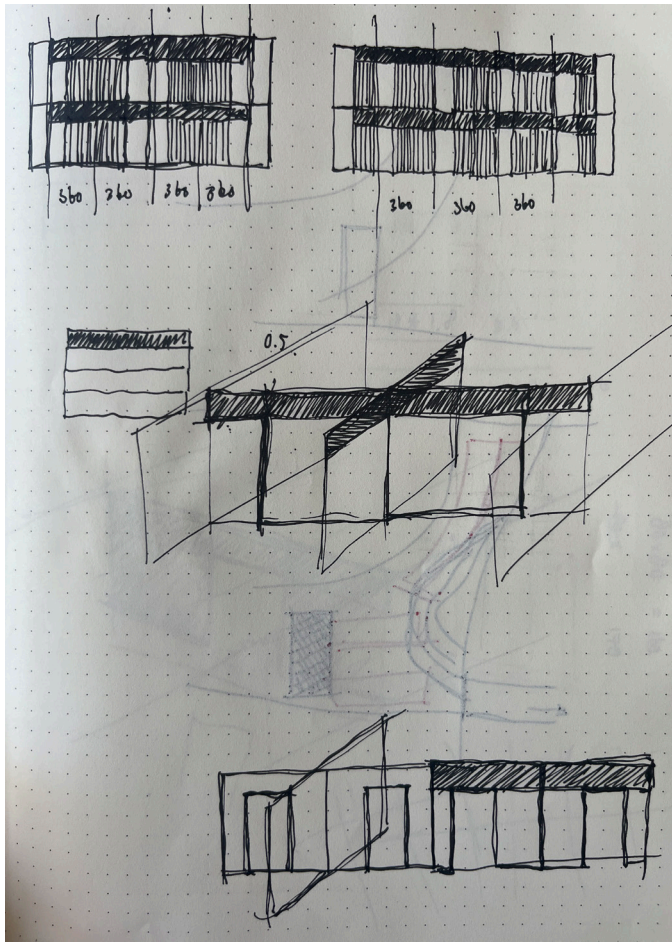
Blinds and shutters have been ~~designed~~ ^{so} designed that total black can be obtained in all rooms. (as required for bedrooms).

acoustic layers

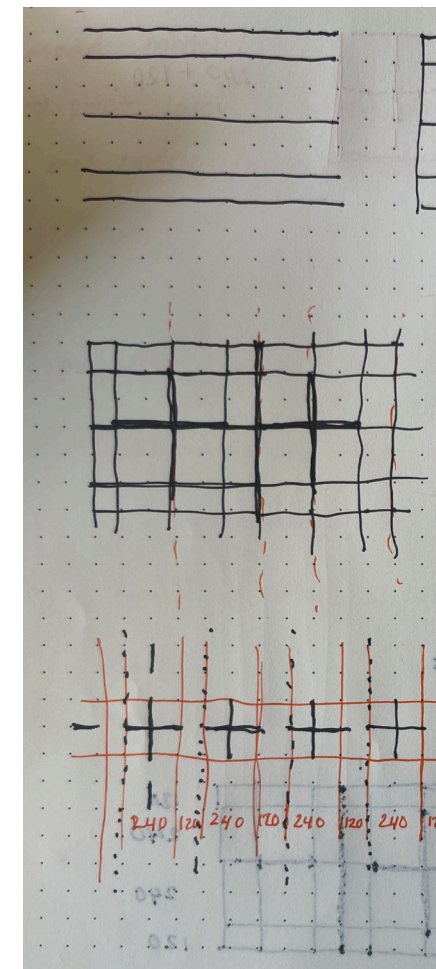
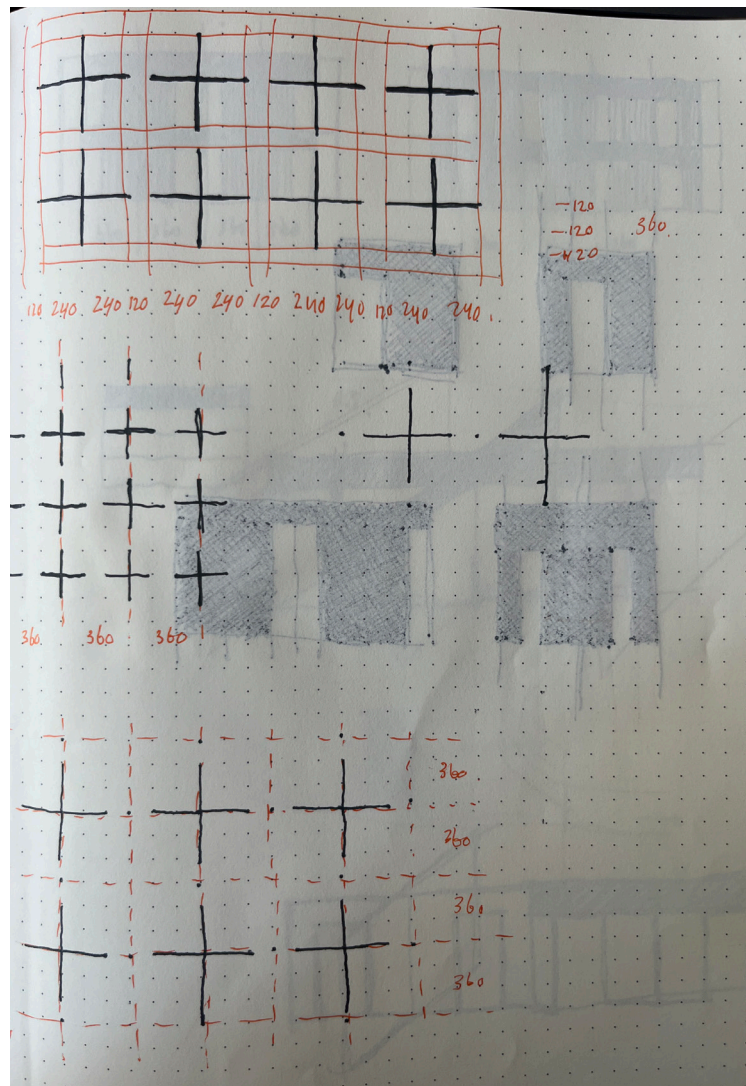
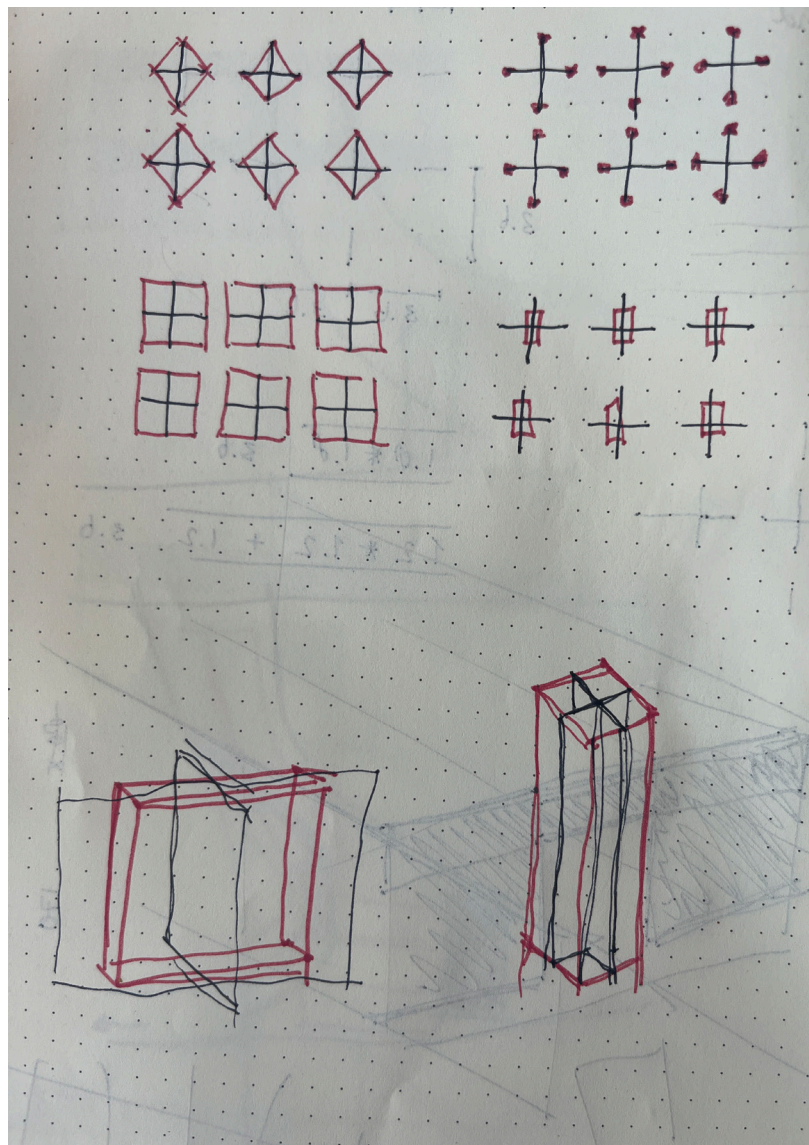
The form of the grid defines the building, and the function of the building is translated into a temporary interior - the starting point was to use the building for several functions without numerous modifications.



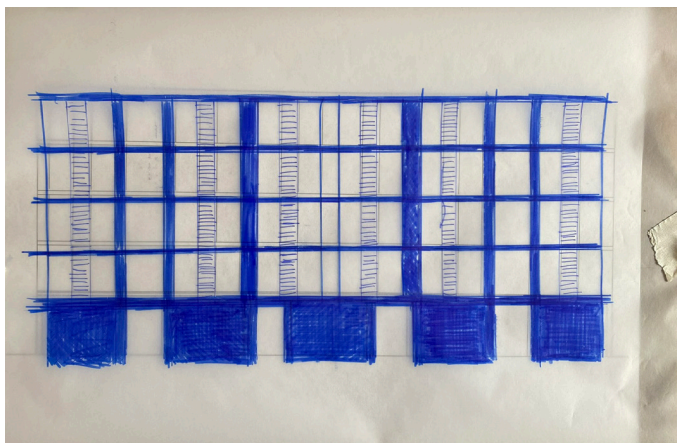
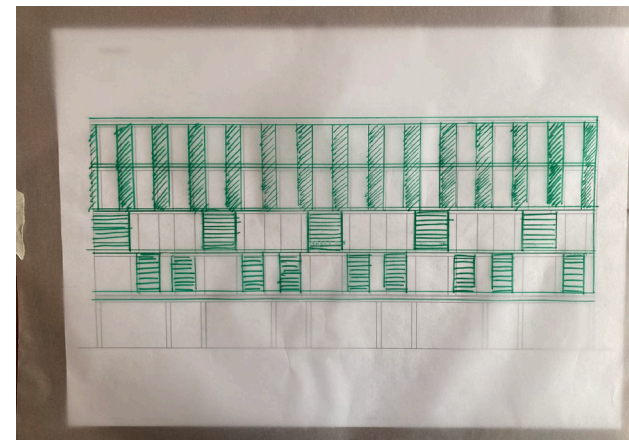
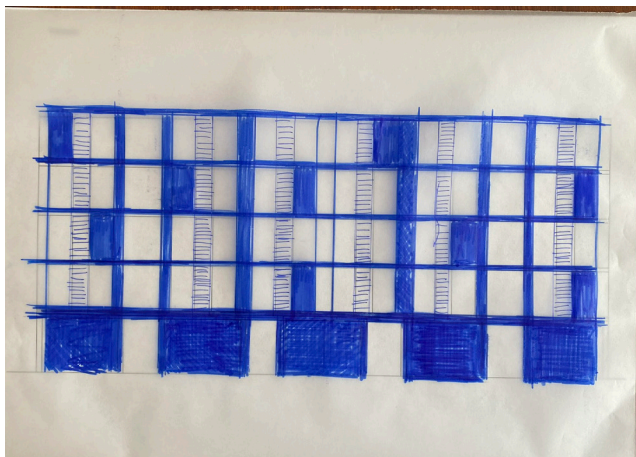
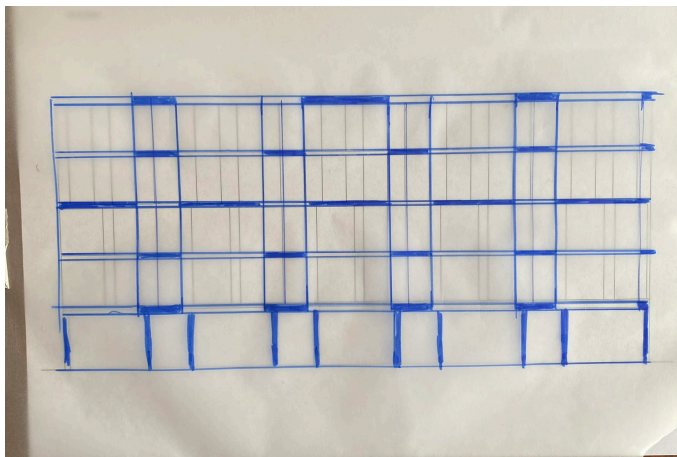
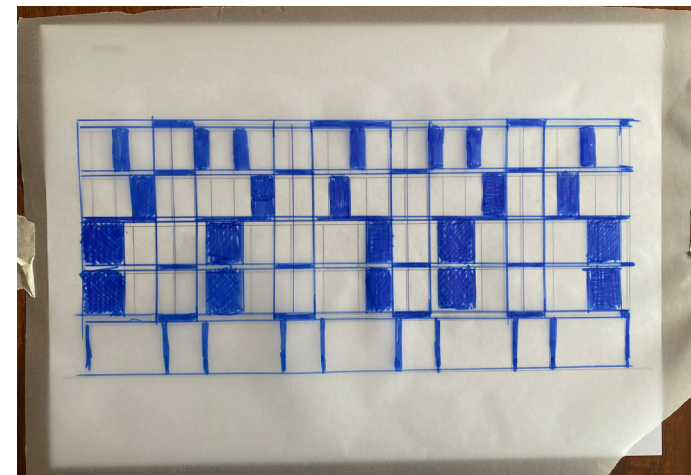
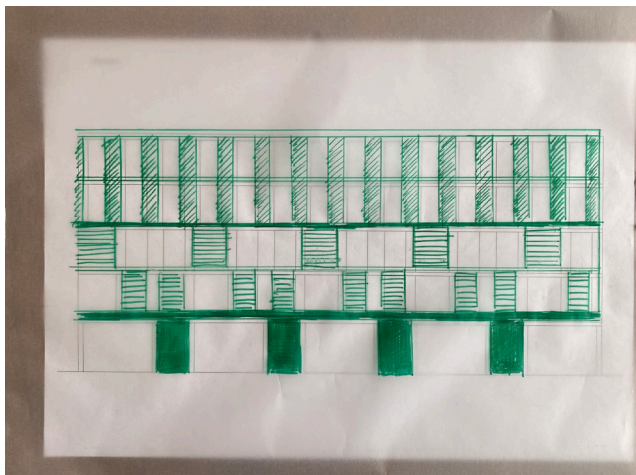
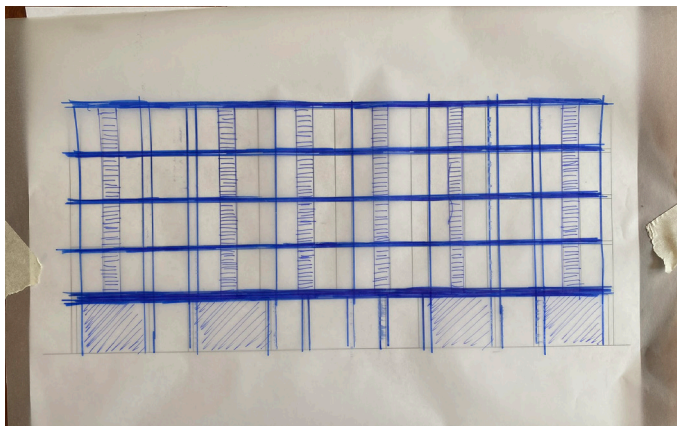
flexibility in function



lowered ceiling



columns



facades