

# URBAN COLLAGE

*Counteracting fragmentation in the Haraldsgadekvarteret*







Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners ([Examencommissie-BK@tudelft.nl](mailto:Examencommissie-BK@tudelft.nl)), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Luuk Krijnen
Student number	4872517

Studio		
Name / Theme	AR3AP100 Public Building Graduation Studio	
Main mentor	Antonio Cantero	Building design
Second mentor	Ger Warriess	Technical building design
Third mentor	Sang Lee	Theory & Delineation
Argumentation of choice of the studio	Interested in making public buildings as I see them fulfilling a major role in people’s lives. The idea of a condenser, both functionally and socially is a very interesting assignment.	

Graduation project		
Title of the graduation project		<i>Urban Collage</i> – counteracting urban and social fragmentation in the Haraldsgadekvarteret
Goal		
Location:		Haraldsgadekvarteret, Copenhagen
The posed problem,		<p>In the Haraldsgadekvarteret, there exist many different patches of urban fabric that are disconnected through the way their boundaries are set up. This, combined with the fact that there is no quality public space for everyone to use, means that the neighborhood is both physically and socially fragmented.</p> <p>It is important to combat this in order to bring new life into the neighborhood. This in turn will make people feel more connected to the neighborhood and take better care of it. This benefits quality of life.</p>
research questions and		<i>How can a public condenser in the Haraldsgadekvarteret decrease the existing fragmentation?</i>

	<p>How can the architecture of the public condenser help people identify with the building, given the wide variety of characters in the urban fabric?</p> <p>How can the notion of (in)determinacy help create temporally resilient, hybrid spaces?</p>
design assignment in which these result.	<p>Creating a familiar environment in the public condenser by creating and placing volumes and design elements based on unique characteristics found in the urban fabric of the neighborhood. Unlike the neighborhood however, these should be connected to each other by in-between space that is (in)determinate to foster connection with the building and the expression of the user according to their way of life.</p> <p>I expect the public condenser to contain a variety of different shapes and architectural expressions, that feels whole through the placement of functions and the organization of in-between space in an (in)determinate way.</p>
<p>[This should be formulated in such a way that the graduation project can answer these questions. The definition of the problem has to be significant to a clearly defined area of research and design.]</p>	
Process	
Method description	
<p>Through literature and the analyses of the neighborhood, the problems in the neighborhood and topics belonging to the greater discourse will be identified. Then, spatial conditions and massing through experimentation with different media (drawings, models, impressions, etc.) will be explored, to create a building that responds to the identified problems in the neighborhood while incorporating elements valuable to the greater discourse.</p>	

Literature and general practical references
<p>City Population. (2024). Haraldsgadekvarteret. citypopulation.de. <a href="https://www.citypopulation.de/en/denmark/copenhagen/admin/n%C3%B8rrebro/20405__haraldsgadekvarteret/">https://www.citypopulation.de/en/denmark/copenhagen/admin/n%C3%B8rrebro/20405__haraldsgadekvarteret/</a></p> <p>Fenton, J. (1985). Pamphlet Architecture 11: Hybrid Buildings. Princeton Architectural Press.</p> <p>Massey, D. (2006). For Space. Sage.</p> <p>Schmidt, G. (2011). 'Grounded' politics: Manifesting Muslim identity as a political factor and localized identity in Copenhagen. Ethnicities 12(5). pp. 603-622.</p> <p>Sennett, R. (2006). The Open City. Urban Age. <a href="https://urbanage.lsecities.net/essays/the-open-city">https://urbanage.lsecities.net/essays/the-open-city</a></p> <p>Spektrum Arkitekter (2023). Visionsplan Vingelodden/Rovsinggade. Spektrum Arkitekter.</p>
Reflection
<p>1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?</p> <p>My graduation project topic – counteracting existing fragmentation through designing a building as a collage, whose parts are based on spatial and material qualities found in the different patches of urban fabric found in the neighbourhood – makes the building almost a literal “public condenser”, as it is an abstracted amalgamation of the neighbourhood in a smaller footprint. Choosing the patches of urban fabric to take inspiration from and the way the patches are organized relative to each other make this project inherently architectural, making it fit within my master track.</p> <p>2. What is the relevance of your graduation work in the larger social, professional and scientific framework.</p> <p>My project aims to not only design a building specifically for the Haraldsgadekvarteret, but also be a study on how to create (in)determinate space. This is valuable in the larger discourse, because (in)determinacy provides a lot of opportunity in fields like sustainability, hybridity, multiplicity and resilience.</p>

Extended research abstract - (c)openhagen

Luuk Krijnen | AR3AP100

**Keywords:** porosity, (in)determinacy, boundaries, open systems, hybridity

**Problem statement**

In The Open City (Sennett, 2006), Richard Sennett states that current city planning - and therefore the architecture within - suffers from over-determination within a closed system. The city can be seen as a system where integration and relatedness are highly valued and supported by rules and practices, creating an emphasis that limits experiment and advancement which stalls progress, making it a closed system. Current city fabrics and buildings seem to last a remarkably shorter amount of time than a large part of older structures, which causes a phenomenon called “The Brittle City” (Sennett, 2006). While the Brittle City also grows with time, it does so by a process of decay, removal and rebuilding, instead of current structures adapting. The apparent problem with this is that people usually stop interacting with an area when decay starts showing, not allowing it to become *lived in*: the process of adaption caused by people appropriating the space to their wishes.

A majority of the blame given to the cause of this over-determination by Sennett is control, which manifests itself in the urban fabric. The effects of control can also be seen in a neighborhood like the Haraldsgadekvarteret, which is a historically working-class neighborhood with mostly uniform, sizable apartment blocks and wide, car-centric streets. The space these blocks form is sometimes quite elaborately furnished, with playgrounds, fireplaces, pergola’s and barbecues. However, the presence of a large amount of camera’s and the seeming lack of usage of these spaces paints an undesirable reality.

The combination of the uniform blocks, wide streets and apparent lack of (usage of) public space make the neighborhood feel more like a place of passage, rather than pause. This means that control in this neighborhood expresses itself through over-determination of function and

organization, skewed in a direction that produces a fragmented whole and undesirable results when looking at the quality of public space and social interaction.

This leads to the following main research question:

*How can a public condenser in the Haraldsgade-kvarteret be designed so that it decreases existing fragmentation and does not fall victim to decay?*

**On Porosity**

Porosity can be defined as the “... ratio between the volume related to flows and the total area.” (Vigano, 2009). Research done by The Why Factory in 2018 describes a porous building as a building where there is ample consideration for fluidity, percolation and permeability (The Why Factory, 2018).

When looking at porosity as an instrument for organizing a public condenser, it needs to be expressed along with permeability. Porosity in this case describes the amount of “pores” (accessible spaces) present and permeability describes the amount of individual connections between these pores. This allows gradations of public and private space to be created. This also means a strong argument for the link between porosity and hybridity can be made. Either through making multifunctional circulation space or through directly adjacent or even overlapping pores, a fabric hybrid can be created (Fenton, 1985). The elements that define the boundaries of these “pieces of fabric” could be anything ranging from a closed, solid wall enveloping urban greenery to an implied boundary through material or color. Thus, expressing the permeability through a variety of boundary conditions allows porosity to be employed holistically, ranging from the attachment with the urban fabric to materiality and color.

Another way the notion of porosity contributes to hybridity exists on the urban and landscape scale. The act of passage through a city is how we know it (Sennett, 2006), because it forms a very important part of our experience of it. The act of passage implies crossing a boundary, a threshold. Many buildings have a harsh threshold for entering caused by their largely impenetrable barriers, creating “dead space” besides them. Here, porosity could offer a solution as well. A possible location of the public condenser is

at the intersection of two main streets, being restructured in the future to include more greenery. This allows a porous public condenser to smoothly nestle itself in this new fabric and incorporate the greenery into it. The green space will be able to grow into the building, by utilizing passages and terraces.

**On (In)determinacy**

In case of overlapping pores, the area of overlap can be seen as indetermined, “chaotic space”. On this plane the interaction between the two spaces will be at its highest, causing the highest probability of unexpected use. This possibility of unexpected use means the building can become “more than the sum of its parts”, creating hybridity and multiplicity due to natural oscillation between different uses. Massey (2006) describes discrete and continuous multiplicity. Discrete multiplicity refers to “distinct entities, the realm of diversity”, while continuous multiplicity refers to “evolution, rather than succession”. Multiplicity is in this case interpreted as a form of hybridity: the merging of different, sometimes yet to be discovered functions, able to grow with the people that use it as time passes. The public condenser will use (in) determinacy to shape the right conditions for this to happen.

A not fully determined space can be considered an open system (Sennett, 2018), systems that allow for the aforementioned “unexpected activities” to happen. A very important aspect of structures that stand the test of time is their ability to embrace the natural way humans inhabit any space. This means the structures allow themselves to be *lived into*. This can only happen when at least part of the structure is indetermined, not only giving the users the freedom to make the space their own, but therefore also allowing a variety of usage.

Finally, indeterminacy can be an instrument for sustainability and resilience by increasing the structures adaptability, which decreases future threats of obsolescence. This means that the notion of (in)determinacy and porosity can be employed in a complementary way, allowing them to holistically form space together.

These descriptions form the foundation of the exploration by means of research-by-design that aims to answer the following sub-question:

*How can porosity and (in)determinacy be used to create temporally resilient, hybrid spaces?*

**Denmark and the Haraldsgadekvarteret**

An important aspect of Danish society and culture is the word Hygge. Hygge can be translated as the Dutch “gezelligheid”, Canadian “hominess” or German “Gemütlichkeit” (Wiking, 2016). According to Wiking, there are a few drivers that achieve the feeling of Hygge: casualness, company, closeness to nature and being in the present moment. Hygge asks for simplicity, improves happiness and therefore health. The act of Hygge in its nature is something everyone does differently, making employing the notions of porosity and (in)determinacy more strongly founded for a public condenser in Denmark. As mentioned above, these notions can be used to integrate the public condenser into the urban fabric, allowing closeness to nature, and they can be used to create gradations in public and private space, allowing everyone to find a space they are comfortable with.

Zooming in, the Haraldsgadekvarteret is inhabited by a large variety of people, with there being an (almost) equal distribution between men and women. The birthplace of the population is almost equally distributed into thirds: Copenhagen, Denmark and foreign countries (City Population (2024)). However, the amount of people with a non-western background is around 70% (Spektrum Architekter, 2023). A lot of the non-western inhabitants in the neighborhood (and Norrebro in general) are Muslim (Schmidt, 2011). This makes this demographic important to consider when creating the qualitative brief for the public condenser. For example, extra attention towards spaces that allow for religious activity or spaces that, through their organization, abide by the values this demographic holds is necessary.

This provides the foundation for the following sub-questions:

*How do Danish social traditions and the demographic buildup of the Haraldsgadekvarteret inform the creation of space?*

Followed up by:

*How can the notions of porosity and (in)determinacy co-operate with the nature of Danish society and the inhabitants of the Haraldsgadekvarteret?*

**Conclusion**

In short, the Haraldsgadekvarteret (and many cities in the world) suffers from control that expresses itself in over-determination of function and organization. This is expressed in large, uniform housing blocks, wide car-centric streets and a lack (of usage) of public space. This makes the neighborhood feel fragmented; more like a place of passage rather than pause.

The notions of porosity and (in)determinacy can be used to create a public condenser that creates a place for pause, opens the neighborhood to the rest of the city and suits the needs of the varied population. It also aids the sustainability, hybridity, multiplicity, resilience and healthiness of the building and neighborhood, by creating space for free usage and future changes in usage.

**Goal**

The goal of this research is to obtain knowledge about the creation of space using the aforementioned notions, and therefore putting more emphasis on the essential notion of time and spatial relations in creating architecture. Within the notions, the right balance will be researched between - in this case - the level of porosity and the level of (in)determinacy. The goal is explicitly not to create an open floorplan where people figure out for themselves what to do. It is instead

to organize space and interior design as such, that everyone can use the building and its functions to their preference.

**Methods**

The main research method that will be used to design the public condenser is qualitative research in the form of research by design. The nature of the chosen terms (porosity, permeability, (in)determination) asks for an experimental approach: by making diagrams, drawings, sketch models, perspectives etc., different arrangements, volumes, compositions and boundary conditions can be researched. Additionally, case studies will be observed to obtain knowledge about real world examples. Some quantitative research will be done to determine demographic aspects and other statistics.

**Significance and greater contribution**

The significance of this research can be explained through the nature of the neighborhood as mentioned above. The public condenser designed following this research will try to combat problems that exist within the Haraldsgadekvarteret and in many other places, and pose a way of making these types of buildings so it can be applied to other contexts. Because the terms chosen are broad, they can have meaning and significance in multiple contexts.

**Sources**

City Population. (2024). *Haraldsgadekvarteret*. citypopulation.de. [https://www.citypopulation.de/en/denmark/copenhagen/admin/n%C3%B8rrebro/20405\\_\\_haraldsgadekvarteret/](https://www.citypopulation.de/en/denmark/copenhagen/admin/n%C3%B8rrebro/20405__haraldsgadekvarteret/)

Fenton, J. (1985). *Pamphlet Architecture 11: Hybrid Buildings*. Princeton Architectural Press.

Massey, D. (2006). *For Space*. Sage.

Schmidt, G. (2011). ‘Grounded’ politics: Manifesting Muslim identity as a political factor and localized identity in Copenhagen. *Ethnicities* 12(5). pp. 603-622.

Sennett, R. (2018). Designing the Open City. In The Why Factory (2018). *PoroCity - Opening up Solidity* (pp 42-51). nai010 uitgevers.

Sennett, R. (2006). *The Open City*. Urban Age. <https://urbanage.lsecities.net/essays/the-open-city>

Spektrum Architekter (2023). *Visionsplan Vingelodden/Rovsinggade*. Spektrum Architekter.

The Why Factory (2018). *PoroCity - Opening up Solidity*. nai010 uitgevers.

Vigano, P. (2009). The Metropolis of the Twenty-First Century. The Project of a Porous City. *On Territories*, OASE, (80), 91-107. Retrieved from <https://www.oasejournal.nl/en/Issues/80/TheMetropolisOfTheTwenty-FirstCentury>

Wiking, M. (2016). *The Little Book of Hygge*. Penguin Random House UK.



Luuk Krijnen  
31/05/2000  
Capelle aan den IJssel



Country of origin - The Netherlands  
Student number - 4872517  
Mobile number - 0620183296  
E-mail - krijnen.luuk@gmail.com

During my studies I have discovered that buildings play a very important role in the daily life of people and through the design of them can cater to many different desires. I am very fascinated by architectural projects that set out to create a desired experience from the concept onwards, and create that experience through the design and material choices. Its especially interesting to me in this case to consider all the senses, not just visual. A project that immediately comes to mind is the Jewish Museum in Berlin by Daniel Libeskind, which in large part is a building designed to be a (somewhat) uncomfortable experience. I think for each design project there should be a clear goal in terms of the desired experience since this will dicate a lot of the future choices, not only the architectural ones.

I felt this studio could offer me the opportunity to further explore the possibilities this experience-focused design could have in terms of making a public building.

- sept 2018 - jun 2022

Bachelor Architecture TU Delft, Delft
- sept 2022 - heden

Master Architecture and the Built Environment TU Delft, Delft

MsC 1 Fundamentals of Housing Design

MsC 2 Heritage and Architecture: Research and Architectural Design

MsC 1 Heritage and Architecture: Design Studio Architectonic Design

MsC 2 Van Gezel tot Meester

- sept 2021 - jan 2022

Architectural intern at Dam & Partners Architects

Contributed to multiple designs:

- *Living and care facility Kennemerduin, Heemstede - tender, first prize.* Sketch design, presentation drawings and mass studies

- *Residential tower "Petteflet", Ravel neighborhood, Amsterdam - tender* Sketch design, mass studies and graphic presentation

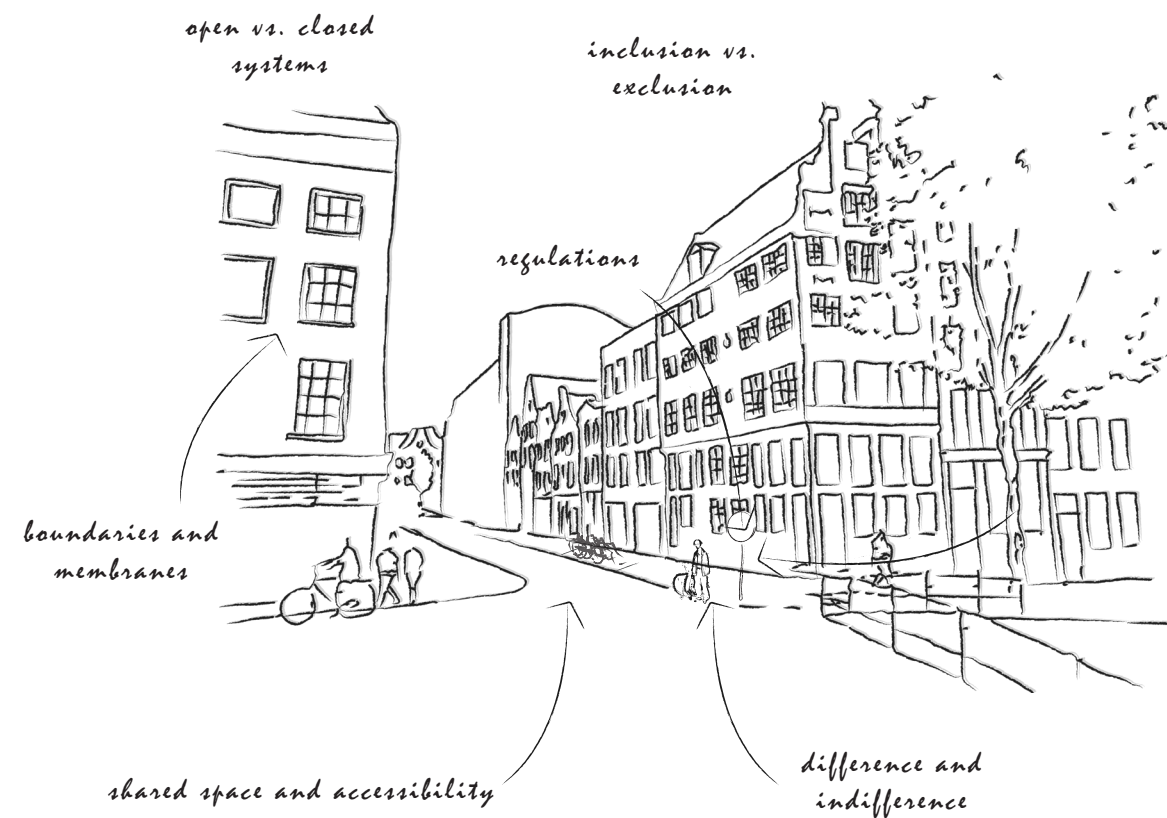
- *Transformation farmhouse Bourgogne, France* Sketch design, interior and material studies

- *Residential buildings NDSM-Werf, Amsterdam* 3D-modelling

- *concept "Landleven in the Barn", Nederland* Situation drawings

- *Office projects 2010-2020* Presentation drawings of various projects
- S1
- 2 - 5 sept
- WEEK 1.1
- 10

— Rituals of the commons  
A case study of street rituals —  
Hans Linder

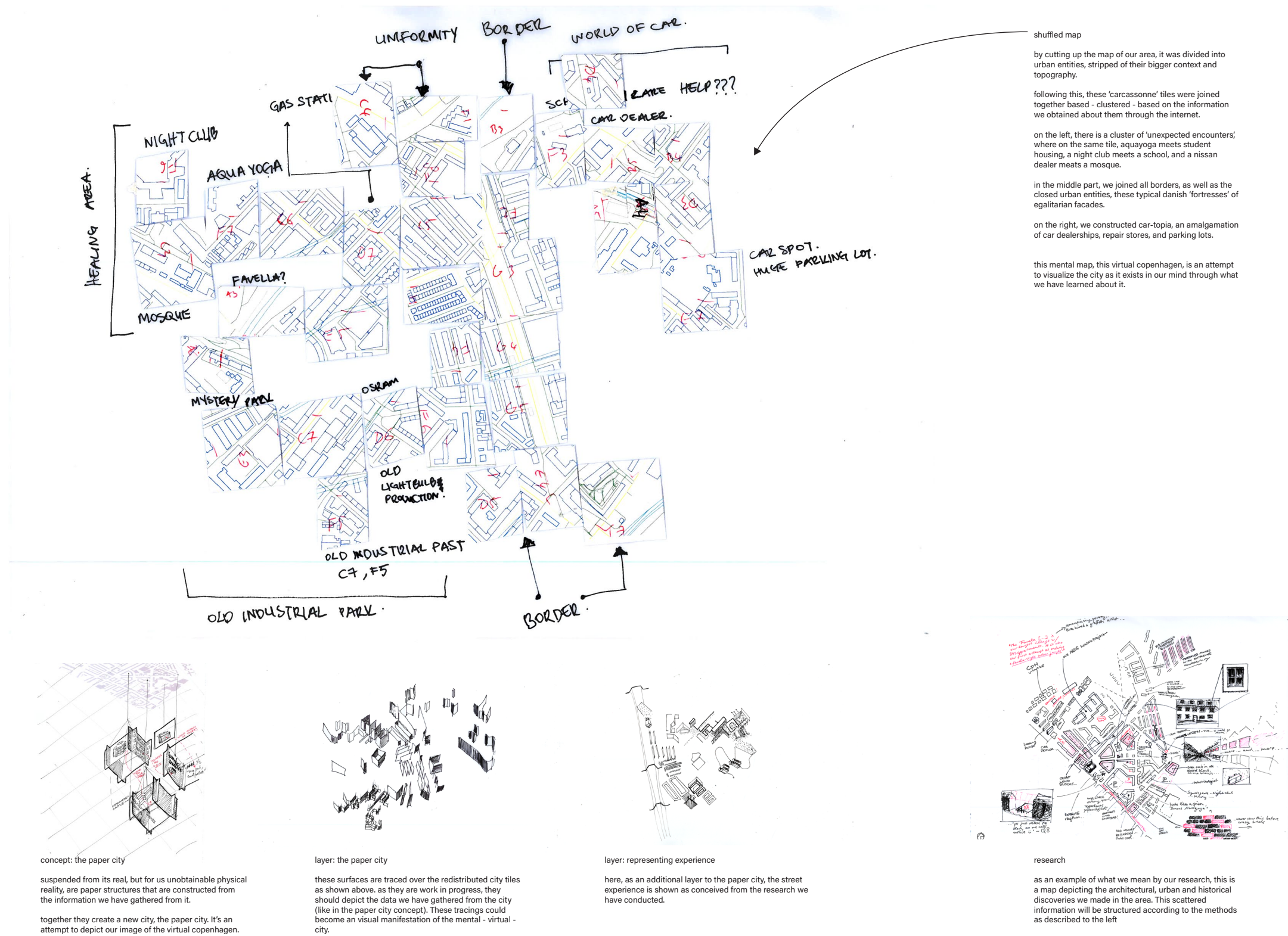


Conclusion

We advocate for more societal rituals or spatial experiments that foster new ways of social exchange and offer a counter for over-determination.

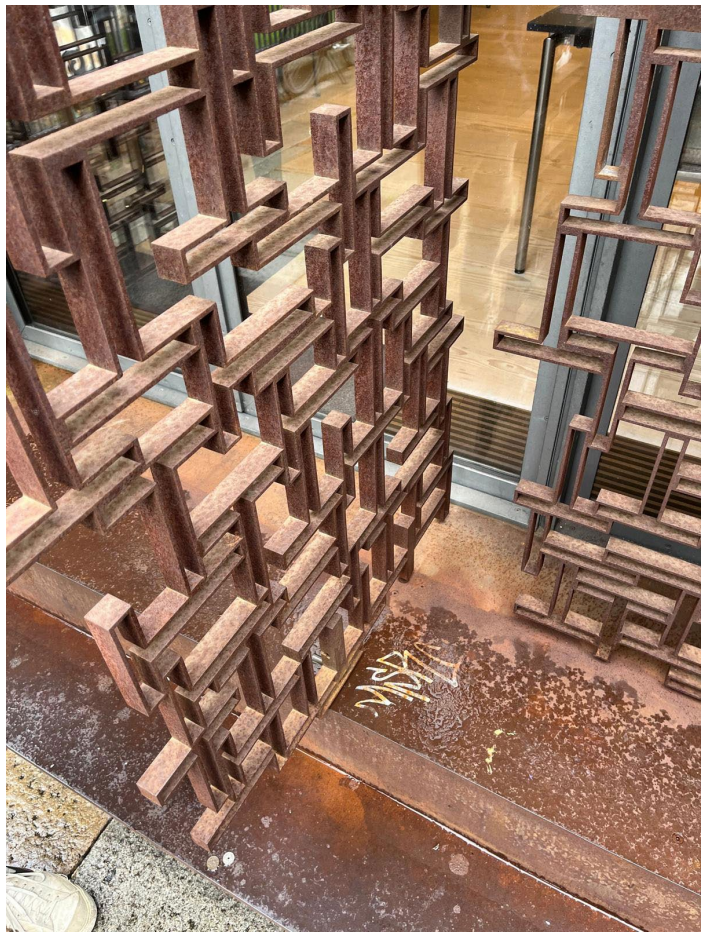
The first presentation consisted of taking a part of the urban fabric of Amsterdam, and seeing how its boundaries and the use of it shifted on a day like Kingsday. What does this national holiday do to the street? How does the visual uniformity and feeling of being there for the same purpose affect people's behaviour?



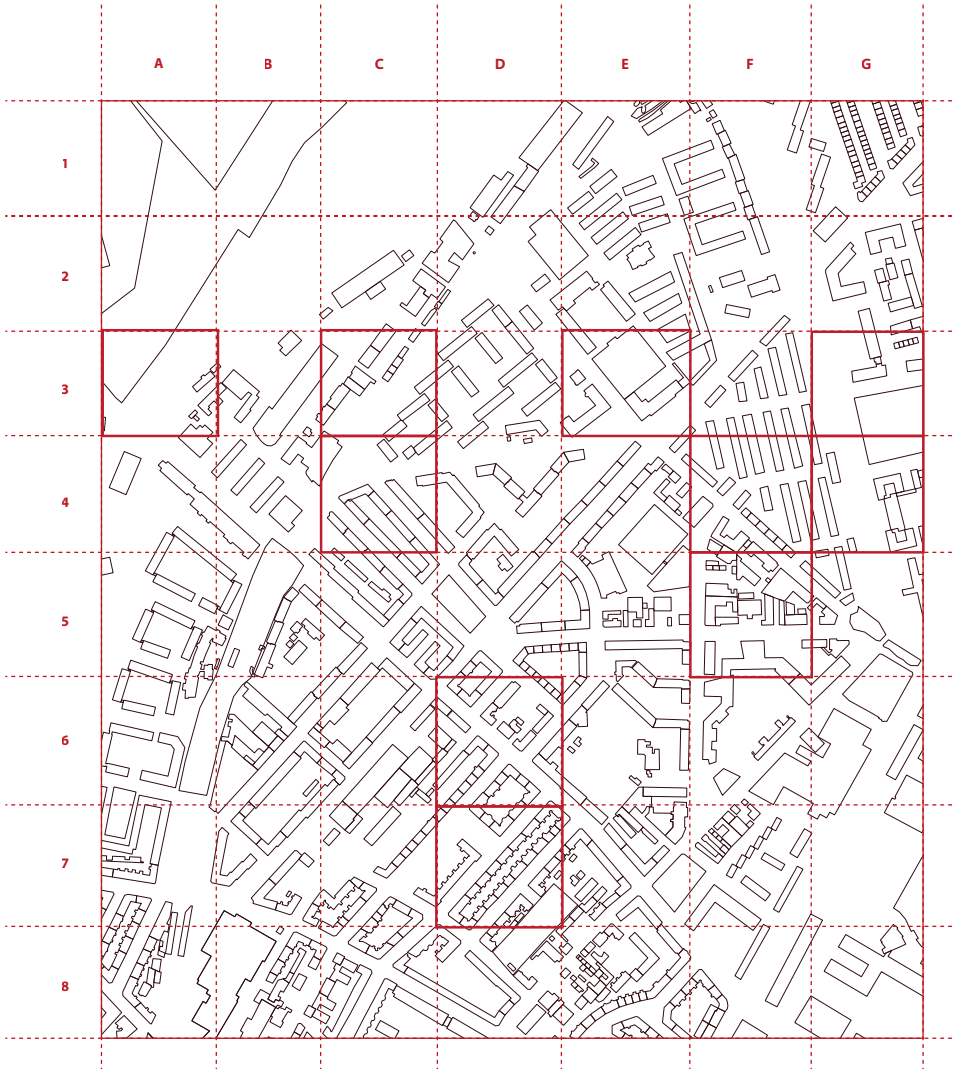


For the first iteration of the psychogeographical map, we decided to try to map the way we interpreted the site through the internet. Because we had never actually been there, we decided to cut up the map into squares and try to group the different tiles according to what we noticed were common themes in the site. Then, extra information could be added to the map along the themes we determined.









## YDRE NØRREBRO THE PAPER CITY

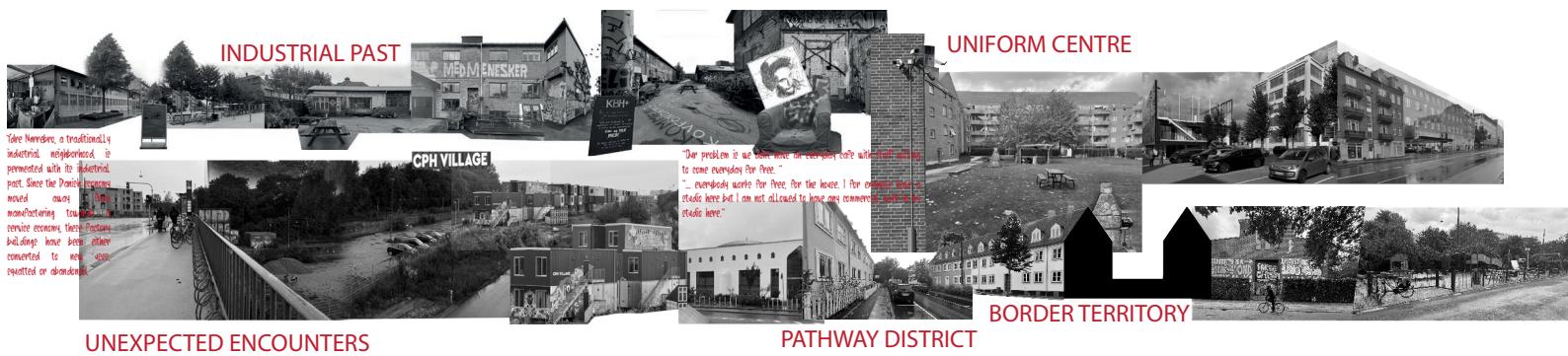
While researching our plan area - Ydre Nørrebro - we used various virtual methods to get a grasp of the place. Through Google maps, Google street view, online videos, articles and more internet resources, a virtual image of our plan area formed in our minds. While we amassed quite some information, we doubted the accuracy and realism of the virtual image that came to exist in our minds through this research.

In *The Production of Space* (Lefebvre, 1974), Lefebvre makes (among other spaces) a distinction between spatial practice - the perceived, lived space - and representation of space. In our research of the plan area, before actually going there, we have only been able to investigate the online virtual representation of space, not space how it is actually perceived and lived. Extending this notion of representation and reality, Jean Baudrillard (Corner, 1999) points out that "late twentieth-century communication and information technologies have produced such a blurring of what is real and what is a representation that the two can no longer be distinguished".

In our psychogeographical map we depict this virtual image to show that we do not 'know' Copenhagen yet, and also cannot really know its reality through the internet and through other virtual sources we have used. We aim to visualize this virtual city, how it resides in our memory and what connections we have drawn from it. How we mentally store information is mostly built on

relations between concepts. We aim to show the connection between the places in our site area through physically re-ordering it into a new map. By cutting up the map, it was divided into urban entities, stripped of their larger context and topography. Following this, these 'Carcassonne' tiles were joined together - clustered - based on the categories that we consciously and subconsciously attributed to them through our online research. This newly ordered city can be called the 'paper city'. Just like paper structures, only the surface is visible of these fragile mental constructions.

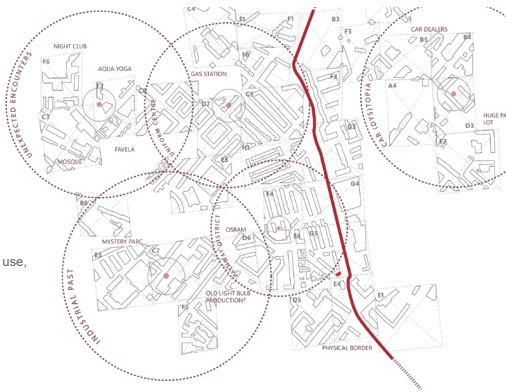
- In total, six clusters and themes were found in this process.
- On the top left, we placed 'unexpected encounters', where on the same tile aquayoga meets student housing, a night club meets a school and a nissan dealer meets a mosque.
  - In the middle of the Paper City, we have the 'uniform center'. The closed - typical for Copenhagen - housing blocks with their uniform façades were clustered there.
  - On the bottom left, the industrial past of our area is clustered into one big post-industrial cityscape.
  - In the lower middle, we find 'the pathway district', comprising of all long and stringy building blocks, ubiquitous in our area.
  - dividing left and right, the physical border divides the Paper City.
  - on the separated right, there is Car-topia. All car dealerships, parking lots and gas stations area clustered here.



UNEXPECTED ENCOUNTERS

**Human.** A city lives and breathes through the people who use, change and shape it.

- and their relations to other species
- And their social interactions/communities
- And their diverse groups/cultural identity
- Accessibility & safety
- And the scale/proportionality to the human body



<b>H</b>	ASLAP100 Public building	<b>Human group</b> Hester Baars 5642779 - Hugo van Rossum 4840909 - Enzi Üzümcü 6036074 - Luuk krijnen 4872517
----------	-----------------------------	---

Attention for fauna in simplistic ways

human attempt to create nature, this remains limited

**Human**  
and their relations to other species

The first iteration of the group presentation contained mostly observations about what the site contained based off of different relational themes we set up: humans and their relation to other species, humans and accessibility and safety, etc.

The conclusion was that the presentation required more depth in terms of data, and a general sense of going deeper than just visual observations.

<b>H</b>	ASLAP100 Public building	<b>Human group</b> Hester Baars 5642779 - Hugo van Rossum 4840909 - Enzi Üzümcü 6036074 - Luuk krijnen 4872517
----------	-----------------------------	---

Multicultural

Child friendly area (playground)

Free minded people attracted to area

Bio-food interest is sparked in area

**Human**  
And their diverse groups/cultural identity

<b>H</b>	ASLAP100 Public building	<b>Human group</b> Hester Baars 5642779 - Hugo van Rossum 4840909 - Enzi Üzümcü 6036074 - Luuk krijnen 4872517
----------	-----------------------------	---

Multiple outdoor sport areas to be found

Attention for each others stories in neighbourhood

**Human**  
And their social interactions/communities

<b>H</b>	ASLAP100 Public building	<b>Human group</b> Hester Baars 5642779 - Hugo van Rossum 4840909 - Enzi Üzümcü 6036074 - Luuk krijnen 4872517
----------	-----------------------------	---

Security areas

Narrow alleys

Metro Station

**Human**  
Accessibility & safety

<b>H</b>	ASLAP100 Public building	<b>Human group</b> Hester Baars 5642779 - Hugo van Rossum 4840909 - Enzi Üzümcü 6036074 - Luuk krijnen 4872517
----------	-----------------------------	---

Residential buildings 5 stories high, streets too wide

Workers' houses balance out the human scale

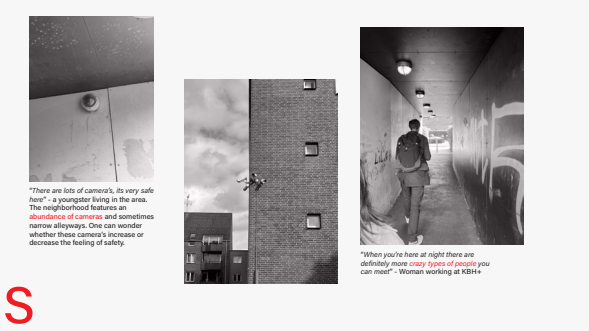
Seating areas But limited

Small interventions visible in area

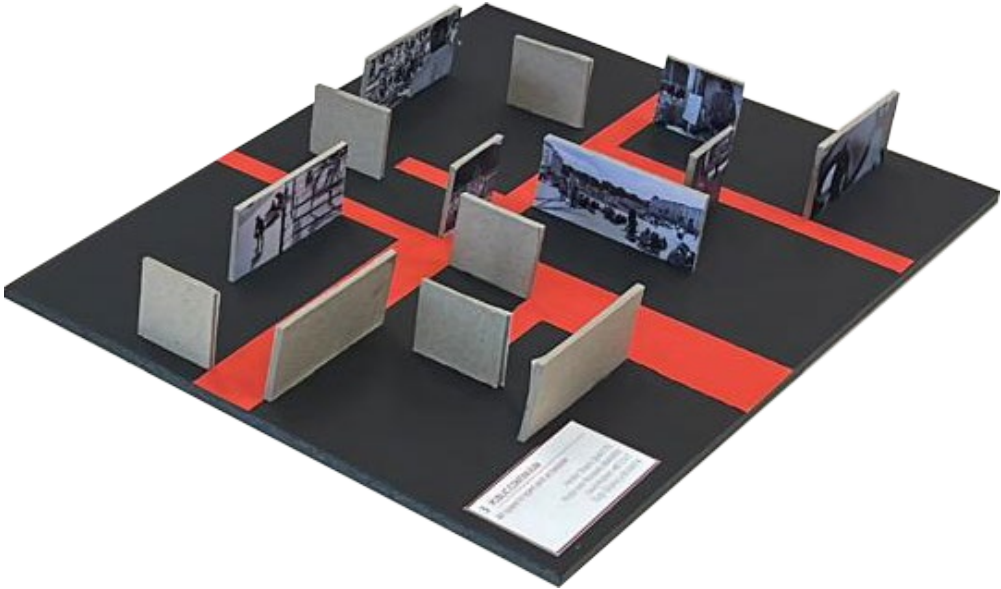
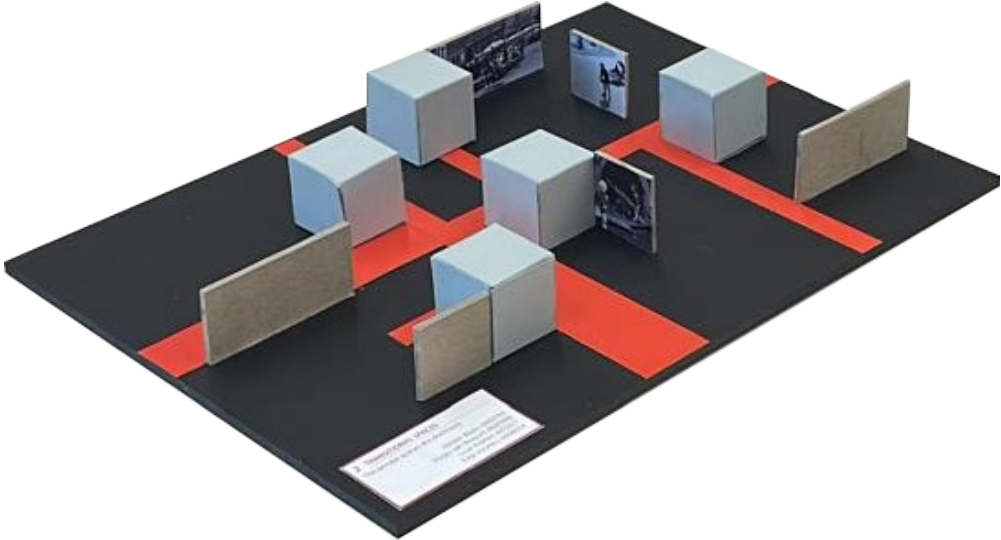
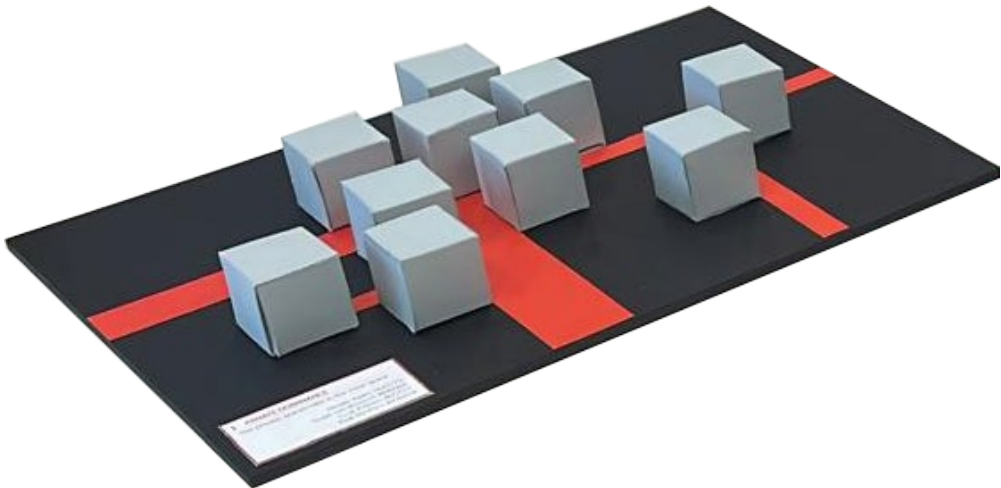
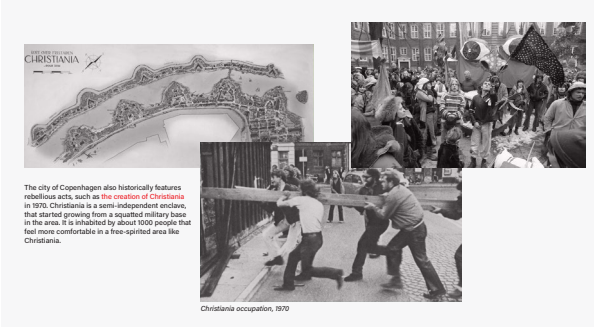
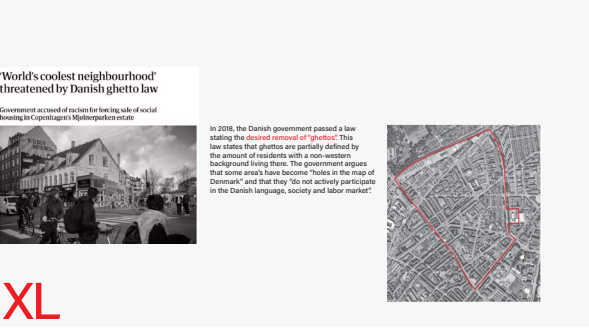
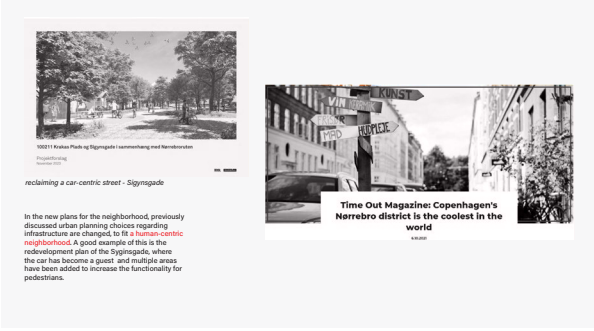
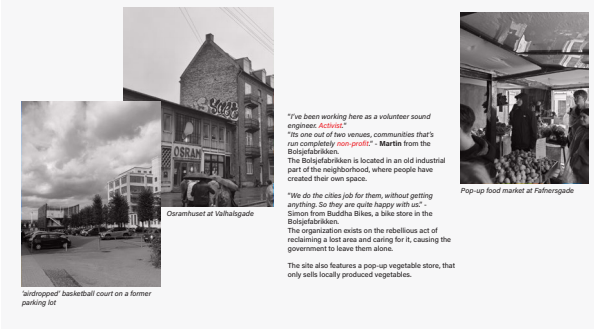
**Human**  
And the scale/proportionality to the human body



control



rebellion



As an extension to the presentation, a poster was made organizing different human relations across four scales. The feedback concluded that the poster was very grim in its terminology.

These are the results of the 3D diagramming exercise. The idea was to create three pieces of urban fabric, using different versions to define space. From volumes to volumes and planes, to only planes. As feedback on this, it was suggested that we use more different materials and shapes to create a similar but extended effect.

Hybridity

What makes my public condenser a Hybrid?

Luuk Krijnen | AR3AP100

My project will be about using the notions of porosity and determination to create a public condenser that allows the users to appropriate the space and provide a place with a low threshold for interaction by effectively using boundaries. This will enable the building to provide an important currently missing space in the neighborhood, that currently has an abundance of spaces mainly used for passing through.

The way these terms will manifest itself in the building go hand in hand with hybridity. The porosity of the building can be described as the amount of pores (spaces) and their mutual permeability. When regarding the permeability as the connection between pores, a strong argument for the link between porosity and hybridity can be made. Either through making multifunctional circulation space or through directly adjacent or even overlapping pores, a fabric hybrid can be created (Fenton, 1985). In a way, the area where two pores overlap can be seen as undetermined, "chaotic space". On this plane the interaction between the two spaces will be at its highest, causing the highest probability of unexpected use. The building will become "more than the sum of its parts", creating hybridity due to natural oscillation between different uses.

The notion of determination will be combined with the notion of porosity to create space that is able to be appropriated by the users. This will not only allow the users to form a stronger connection with the building, by allowing it to become *lived into*, it will also be used as an instrument towards sustainability. Indeterminacy can increase the building's adaptability, which decreases future threats of obsolescence. The building will be both static in its shape and dynamic in its function (Terzidis, 2003). Massey (2006) describes discrete and continuous multiplicity. Discrete multiplicity refers to "distinct entities, the realm of diversity", while

Fenton, J. (1985). *Pamphlet Architecture No. 11: Hybrid Buildings*. Princeton Architectural Press.

Terzidis, K. (2003). Hybrid Form. *Design Issues*, 19(1), pp. 57-61.

Massey, D. (2006). *For Space*. Sage.

continuous multiplicity refers to "evolution, rather than succession". My public condenser will, as mentioned above, try to achieve both. Multiplicity in this case is interpreted as a form of hybridity: the merging of different, sometimes yet to be discovered functions.

Another way the notion of porosity contributes to hybridity exists on the urban and landscape scale. The placement of the public condenser I have in mind is at the intersection of two large roads that will be restructured to include more greenery. In this case, combining porosity with border conditions, the building will be able to "smoothly" nestle itself into the city fabric and therefore the added greenery, similar to how Velcro connects to its counterpart. The green space will be able to grow into the building, by utilizing passages and terraces.

In conclusion, my public condenser will combine both the notion of porosity and determination to create hybridity across different scales and temporalities. The organization of the individual pores (spaces), the building as a whole and the way its nestled in the urban fabric, classifies it as a hybrid in a static sense. This has an effect on not only the present use of the building, but also on the capabilities for the building to evolve into something different, creating a hybrid in a dynamic sense.

Research Proposal - (c)openhagen

Luuk Krijnen | AR3AP100

**Keywords:** porosity, (in)determination, boundaries, open systems

Problem statement

In The Open City (Sennett, 2006), Richard Sennett states that current city planning - and therefore the architecture within - suffers from over-determination within a closed system. The city can be seen as a system where integration and relatedness are highly valued and supported by rules and practices, creating an emphasis that limits experiment and advancement which stalls progress, making it a closed system. Current city fabrics and buildings seem to last a remarkably shorter amount of time than a large part of older structures, which causes a phenomenon called "The Brittle City" (Sennett, 2006). While the Brittle City also grows with time, it does so by a process of decay, removal and rebuilding, instead of current structures adapting. The apparent problem with this is that people usually stop interacting with an area when decay starts showing, not allowing it to become *lived in*: the process of adaption caused by people appropriating the space to their wishes.

A majority of the blame given to the cause of this over-determination by Sennett is control, which manifests itself in the urban fabric. The effects of control can also be seen in a neighborhood like the Haraldsgadekvarteret, which is a historically working-class neighborhood with mostly uniform, sizable apartment blocks and wide, car-centric streets. The space these blocks form is sometimes quite elaborately furnished, with playgrounds, fireplaces, pergola's and barbecues. However, the presence of a large amount of camera's and the seeming lack of usage of these spaces paints an undesirable reality.

The combination of the uniform blocks, wide streets and apparent lack of (usage of) public space make the neighborhood feel more like a place of passage, rather than pause. This means that control in this neighborhood expresses itself through over-determination of function and

organization, skewed in a direction that produces a fragmented whole and undesirable results when looking at the quality of public space and social interaction.

A public condenser in this neighborhood could attempt to combat this control, the resulting fragmentation and the lack of (usage of) public space by creating a space allowing freedom of use and a low threshold for interaction. This can be achieved by employing the notions of porosity and (in)determination.

On Porosity

Porosity can be defined as the "... ratio between the volume related to flows and the total area." (Vigano, 2009). Research done by The Why Factory in 2018 describes a porous building as a building where there is ample consideration for fluidity, percolation and permeability (The Why Factory, 2018).

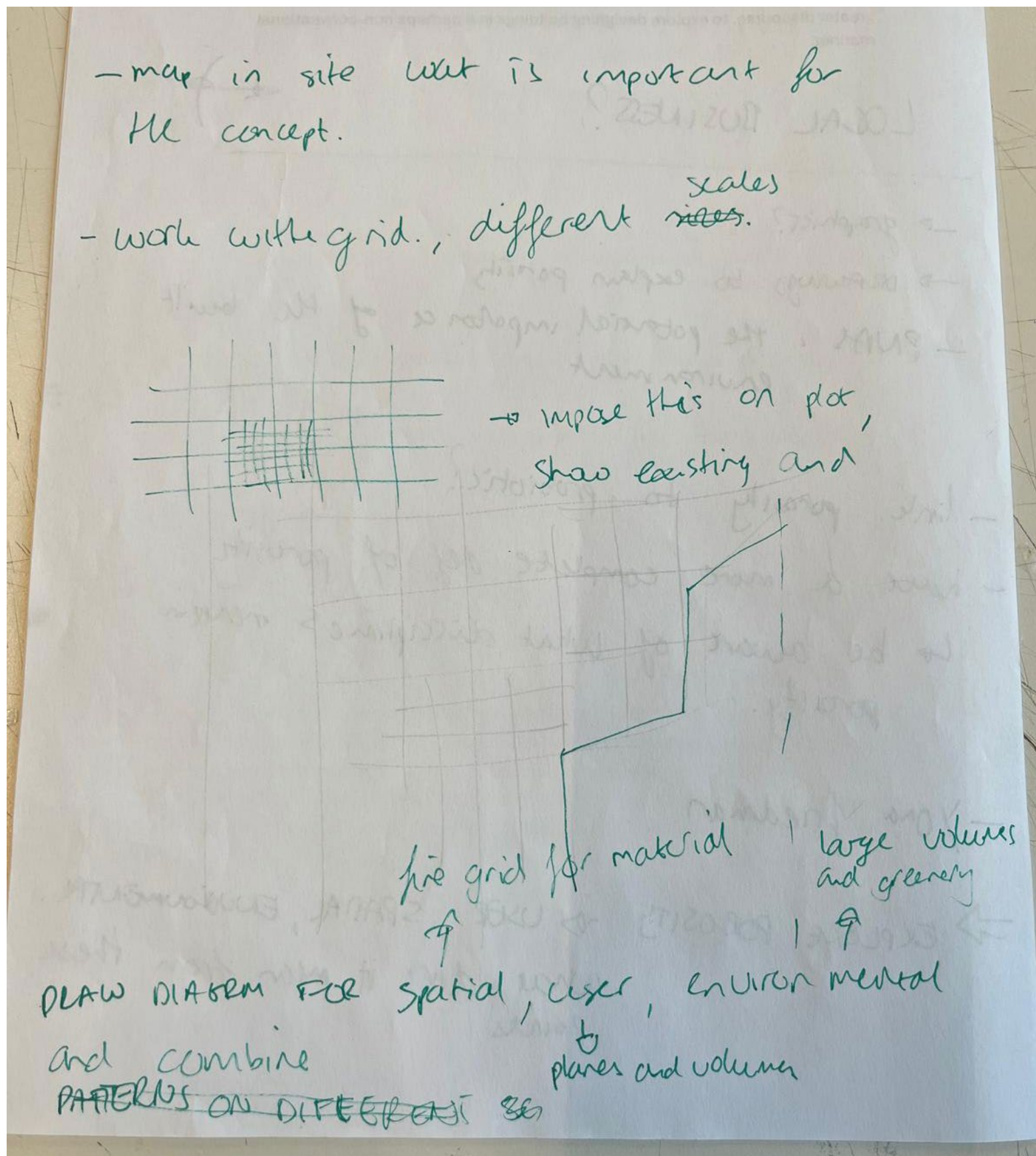
When looking at porosity as an instrument for organizing a public condenser, it needs to be expressed along with permeability. Porosity in this case describes the amount of "pores" (accessible spaces) present and permeability describes the amount of individual connections between these pores. This allows gradations of public and private space to be created. This also means a strong argument for the link between porosity and hybridity can be made. Either through making multifunctional circulation space or through directly adjacent or even overlapping pores, a fabric hybrid can be created (Fenton, 1985). The elements that define the boundaries of these "pieces of fabric" could be anything ranging from a closed, solid wall enveloping urban greenery to an implied boundary through material or color. Thus, expressing the permeability through a variety of boundary conditions allows porosity to be employed holistically, ranging from the attachment with the urban fabric to materiality and color.

Another way the notion of porosity contributes to hybridity exists on the urban and landscape scale. The act of passage through a city is how we know it (Sennett, 2006), because it forms a very important part of our experience of it. The act of passage implies crossing a boundary, a threshold. Many buildings have a harsh threshold for entering caused by their largely impenetrable barriers, creating "dead space" besides them. Here, porosity could offer a solution as well.

An important aspect of Danish society and culture is the word Hygge. Hygge can be translated as the Dutch "gezelligheid", Canadian "hominess"

These weeks were used for expanding the research proposal and writing about hybridity.





This TD session focussed on the diagramming exercise, the first step from the theoretical framework sketched in the research proposal to a physical manifestation of it. The first idea about the diagram was using different scale grids to express the notions of porosity and (in)determinacy along different scales (environmental, spatial, user).

# PROBLEM STATEMENT

Luuk Krijnen



# Target groups & stakeholders

## Martin - activist at Bolsjefabrikken

"Its one out of two venues, communities thats run **completely non-profit.**"

"... everybody **works for free, for the house.** I for example have a studio here but I am **not allowed to have any commercial work** in my studio here."

"... **very wide audience**, also the activists we sometimes have people who are doing an internship for half a year..."

## Moussef - youngster living in the area

"There is a **football pitch there**, I play football in my free time with my friends sometimes."



## Eyoub - resident in his mid 20's

"There is **no kind of small place where you can study** outside I think"

"There is **no official place where everybody can come and hang out**"

## Woman working at KBH+ - a cafe in the Bolsjefabrikken

"This is more a local thing. I think there are a lot of people that **don't know this exists.**"

"When you're here **at night** there are definitely **more crazy types of people** you can meet, but **during the day** there's **a lot of families** that hang out here."

"The municipality is **offering** some of the **buildings for free** to the parties."

## Simon - Buddha Bikes inside the Bolsjefabrikken

"We do the **cities job for them**, without getting anything. So they are quite happy with us."

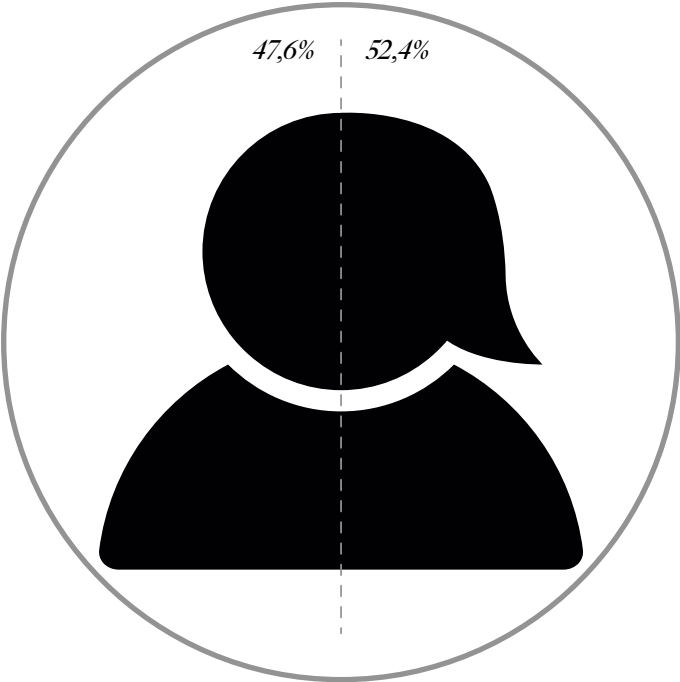
"If someone came and asked if they could be part of it **we would say no. Everyone would say no.**"

"Purpose matters. And **moneygrabbing is not a purpose that's very popular** around here."

## General stakeholders

- Small businesses

# Persona & problem



Copenhagen | Denmark | Foreign  
33% 33% 33%  
Mostly 18-65 year olds

**Persona**  
A **35 year old muslim mother** who wants to go to a public place with her children and friends. The **children are able to play** and the muslim women have a **space for religious activity**.

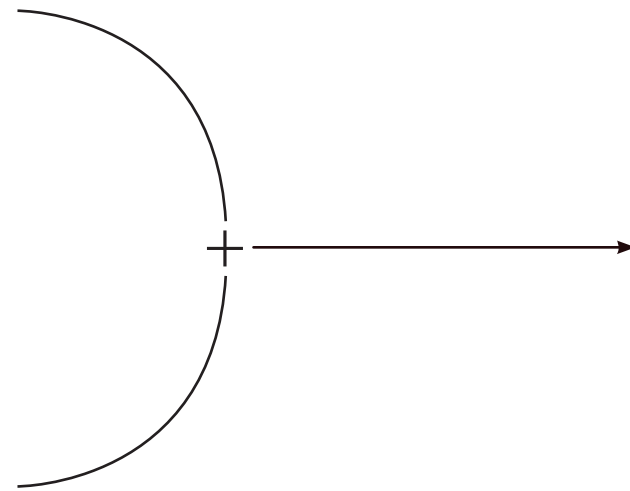
**Persona**  
A **23 year old student** who wants a **quiet space for studying**.

It seems there are **many young people** and **not many clearly defined public meeting spaces**. The neighborhood is mostly working class, visible in the **urban fabric** consisting mostly of **uniform, sizable blocks**, separated by often **long and wide streets**. Significant attention has been paid to the spaces in between the blocks, but they lack usage, probably because of their nature. A large part of the neighborhood feels like a **space for passage, not pause**.

# Solvability

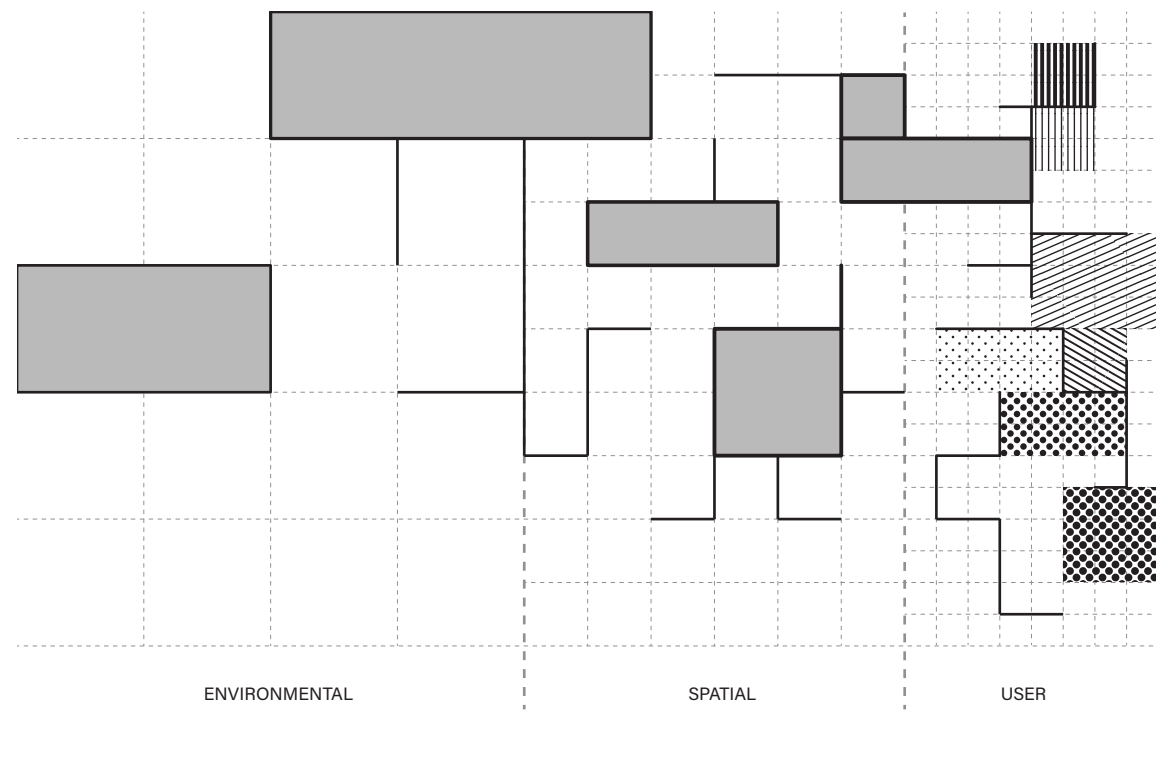
*Porosity*

*Indetermination*



These two notions combined can, create a public condenser that is **open through its structure** and **freedom of use**. This is essential to break through the **relatively monotonous urban character** of the area and provide a space for the **wide range of different users**. It can also, on a larger scale, **facilitate more connection with the rest of Copenhagen**.

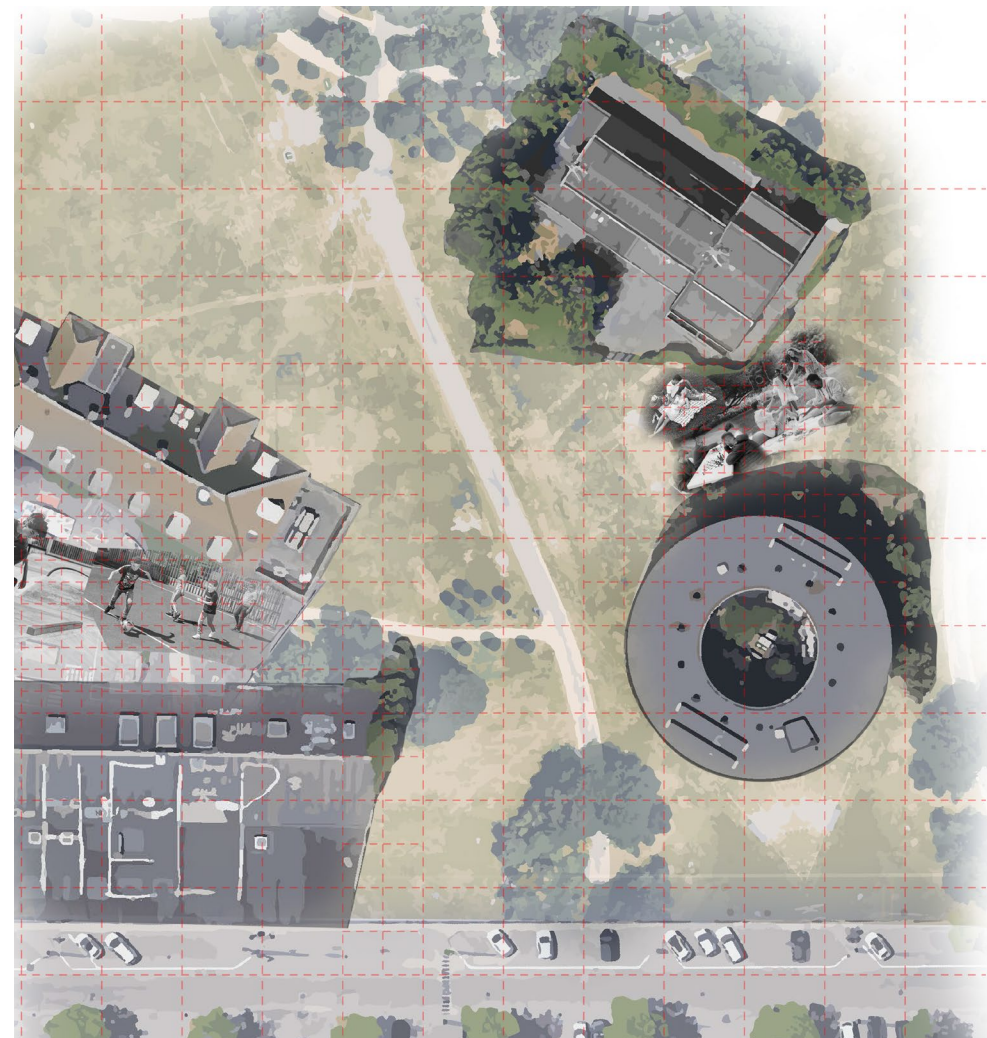
*How might we design a porous and relatively underdetermined public condenser for the inhabitants of the Haraldsgadekvarteret, its directly surrounding area and small businesses in order to improve social interaction and availability of public spaces in a very uniform, closed and passage-oriented neighborhood?*



**Diagram proposal 2**

This diagram is spaced more like a building, with smaller grids showing spaces with different boundary conditions. There is a clearer hierarchy of routing within this diagram.

This can be seen as an adaptation of the first diagram shaped more like a building.



**Diagram proposal 3**

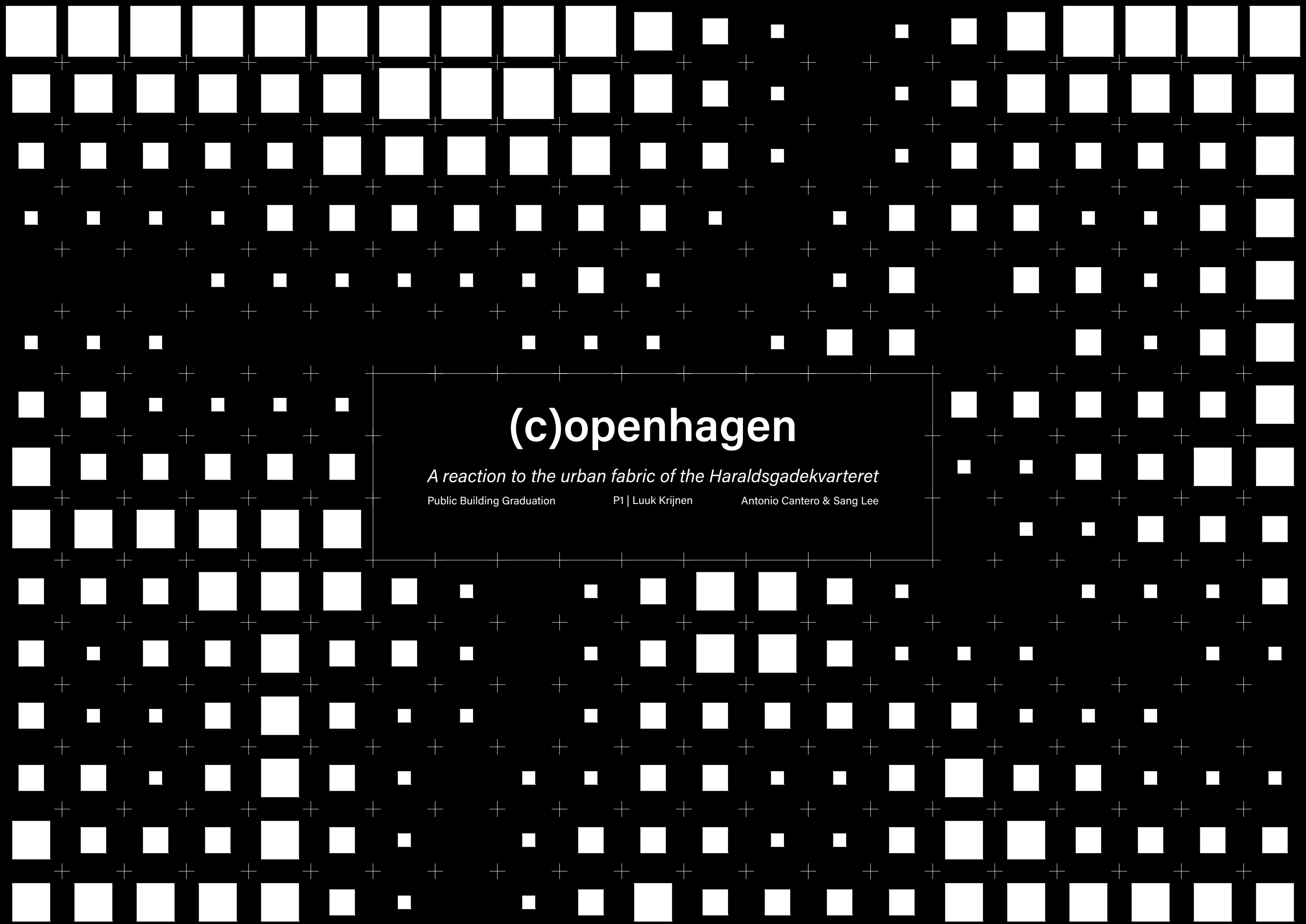
This diagram shows the different types of conditions different types of grid sizes can shape. Buildings form around the site have been organized in such a way that their presence implies certain types of usage, narrowing down the grid.

There is a large passage occupying the largest grid size, the medium grid size is occupied by the boundaries of the buildings and the smallest grid size are spaces created by the buildings, that can be used as shown in the collages.

This diagram aims to show that different boundary conditions (in this case related to grid spacing) can provoke different types of usage and can create a gradation in public and private space for example.

The three first diagram ideas. The general consensus after feedback was that the direction of the first two diagrams was good, but it had to be more related to the site in terms of direction and characteristics of the site.

P1



# (c)openhagen

*A reaction to the urban fabric of the Haraldsgadekvarteret*

Public Building Graduation

P1 | Luuk Krijnen

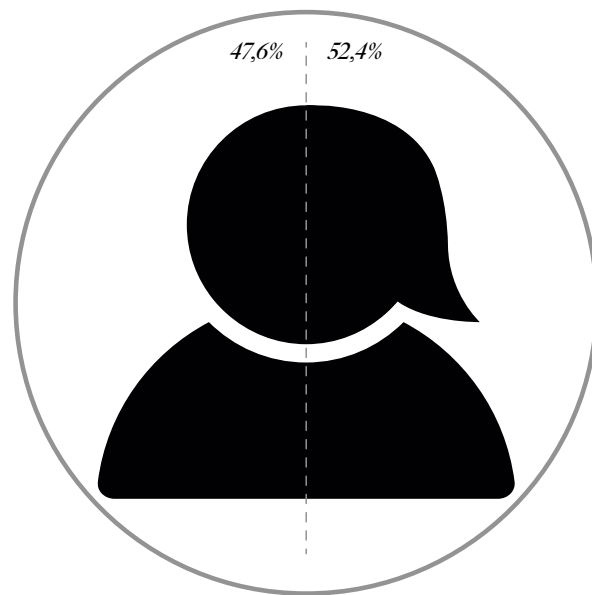
Antonio Cantero & Sang Lee











Male/Female distribution

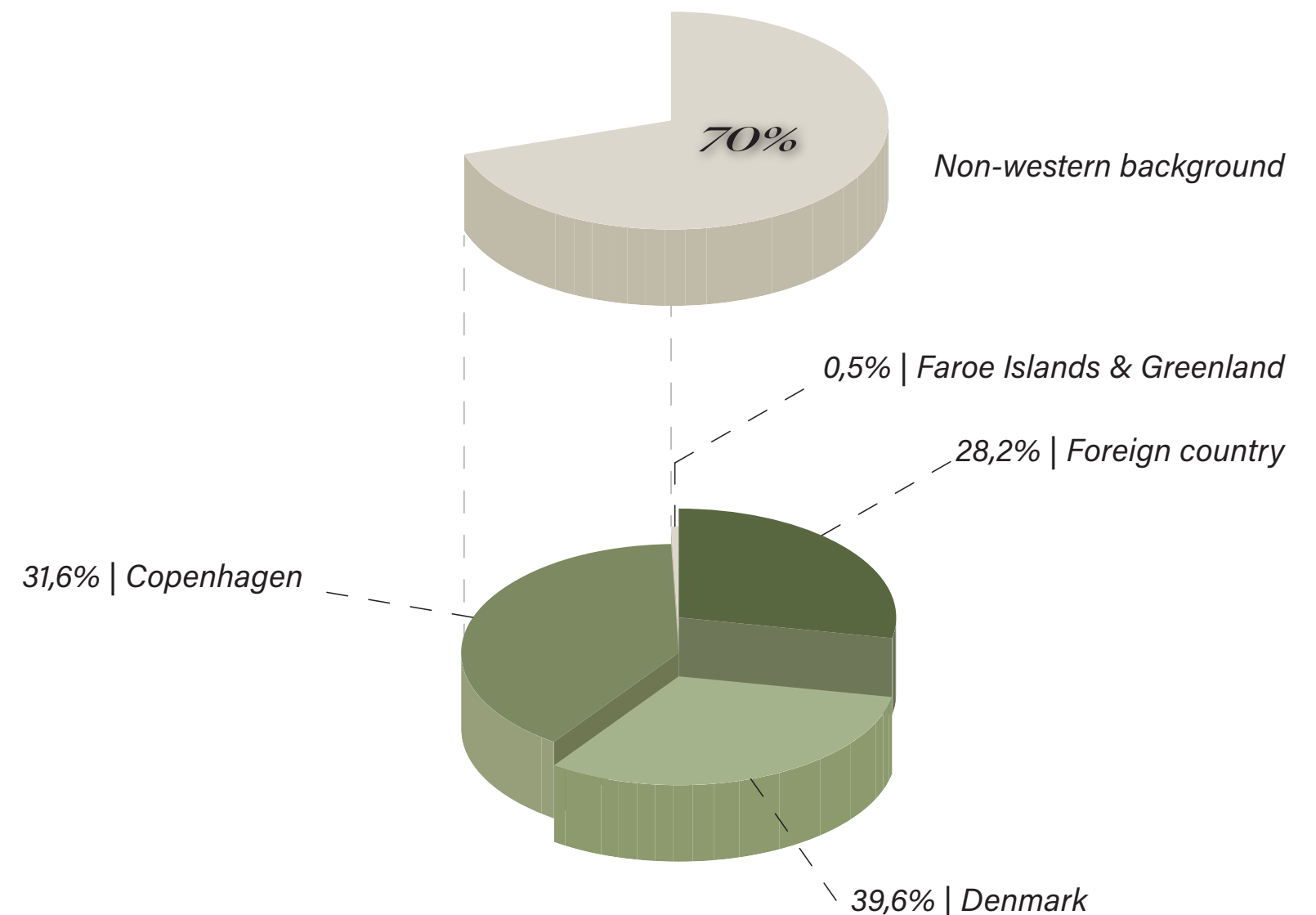
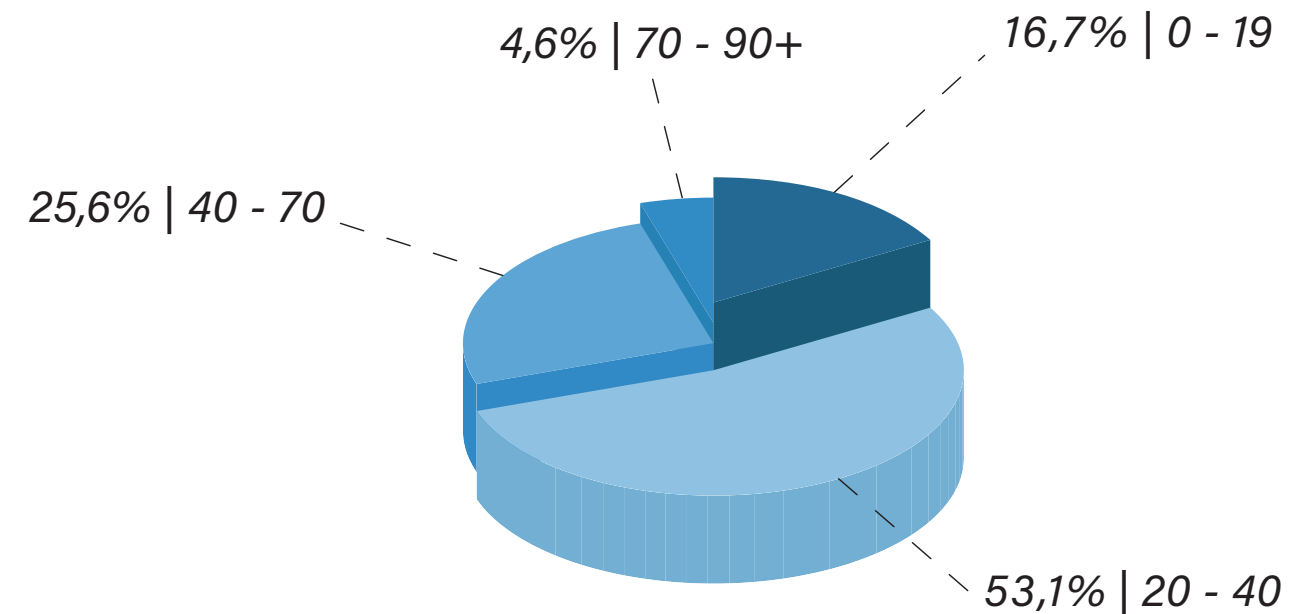
*"There is no official place where everybody can come and hang out or study, even though there is a large school here." - Eyoub, resident in the area*

*"If someone came and asked if they could be part of it we would say no. Everyone would say no. Purpose matters. And moneygrabbing is not a purpose that's very popular around here". - Simon, an employee at Bhudda Bikes, a bike shop in the Bolsjefabrikken*

*"If someone came and asked if they could be part of it we would say no. Everyone would say no. Purpose matters. And moneygrabbing is not a purpose that's very popular around here". - Simon, an employee at Bhudda Bikes, a bike shop in the Bolsjefabrikken*

*"This is more a local thing. I think there are a lot of people that don't know this exists."*

*"Here we would love for there to be tourists visiting. Some places have different interests." - Woman working in KBH+, a cafe in the Bolsjefabrikken*



## *What if a public condenser ...*



*could break through the neighborhoods  
fragmentation?*

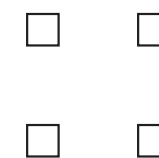
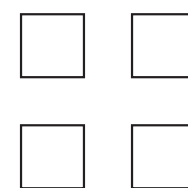
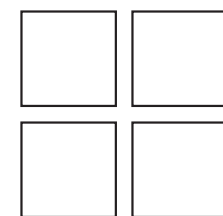
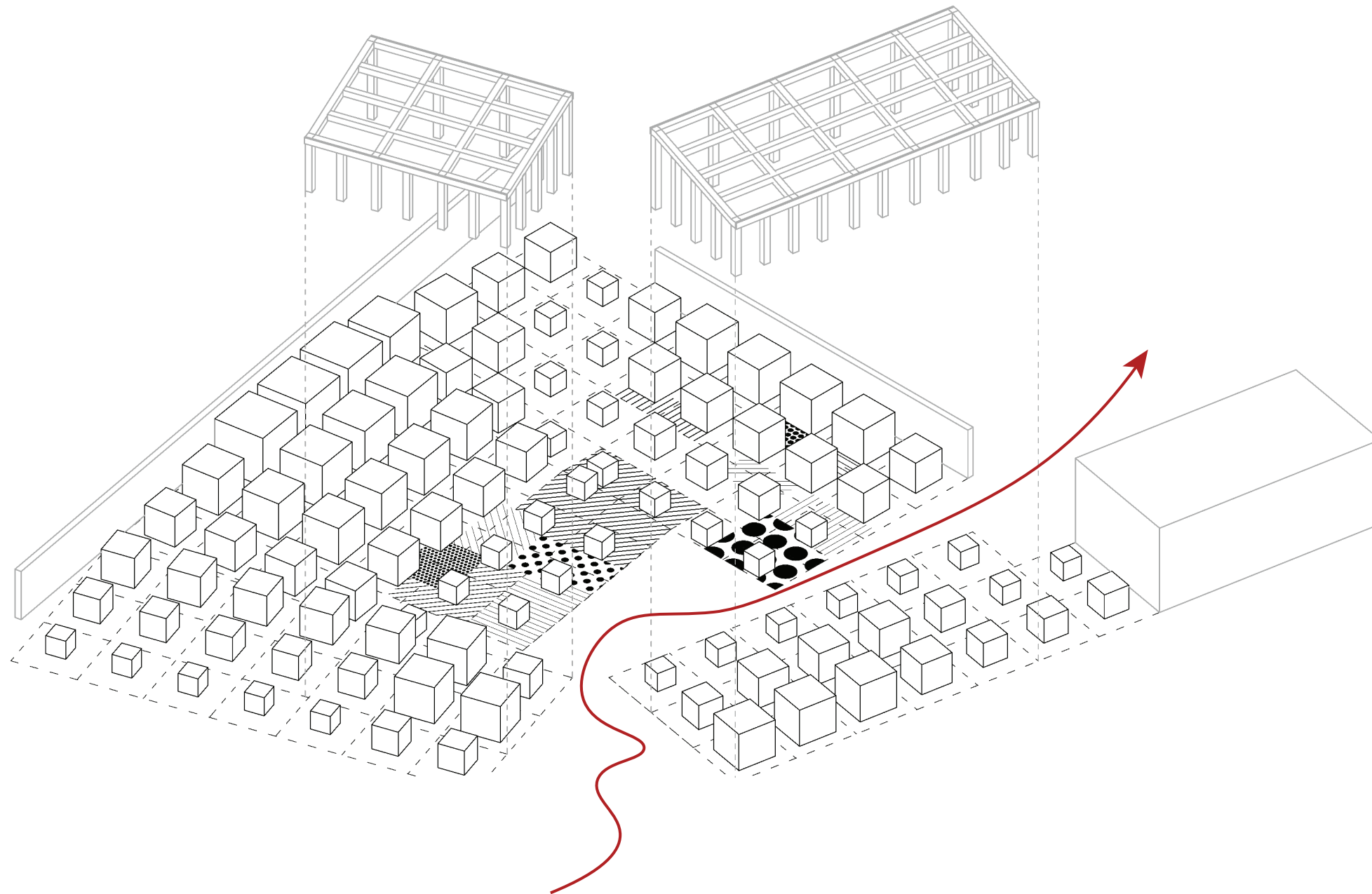
*allows the user to coax its spaces into  
their wishes making unexpected uses  
possible?*

*is able to carefully combine the needs of  
the varied demographic while creating a  
low threshold for interaction?*

Using a public condenser, spatially dictated by the notions of *porosity* and *indeterminacy*, to create a building that combats existing fragmentation and over-determination of function, by introducing a low threshold for interaction and the ability for the varied demographic to coax its spaces into their wishes.







← Impermeable Permeable →



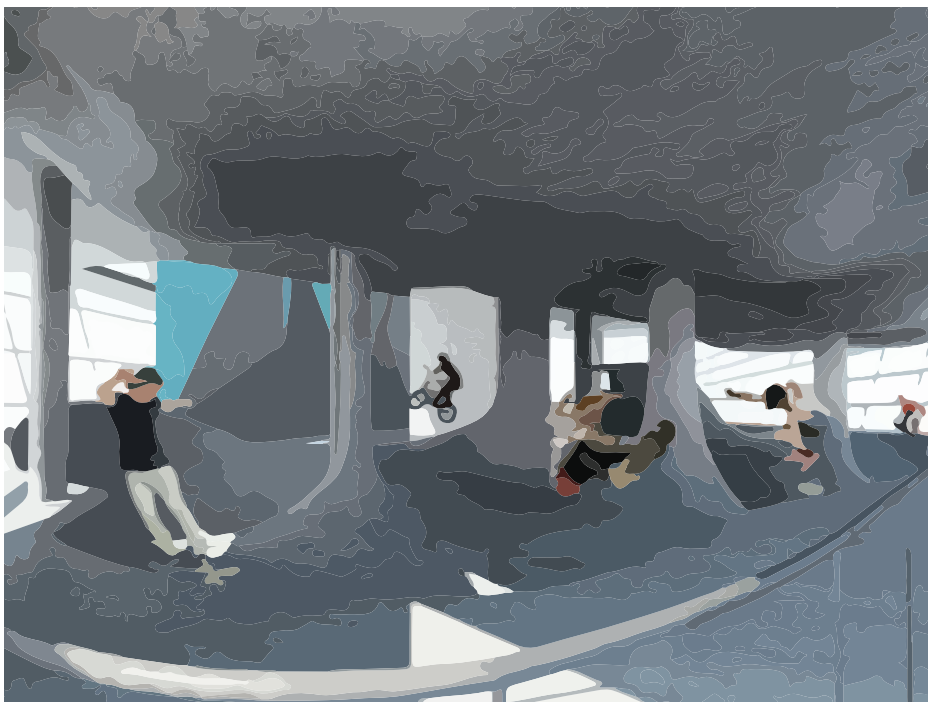
Allotment gardens



Local businesses



Allowing the building to be decorated



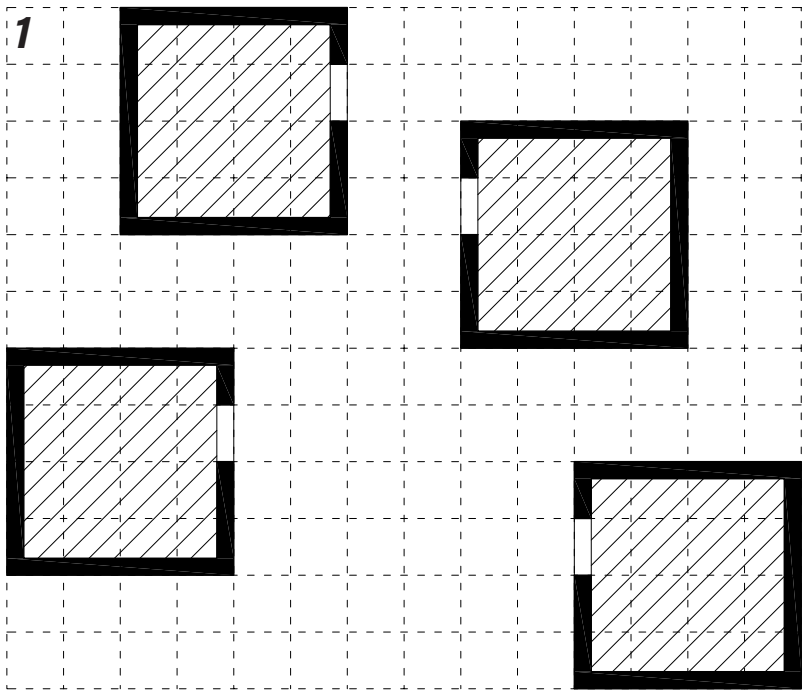
Re-introducing forgotten functions



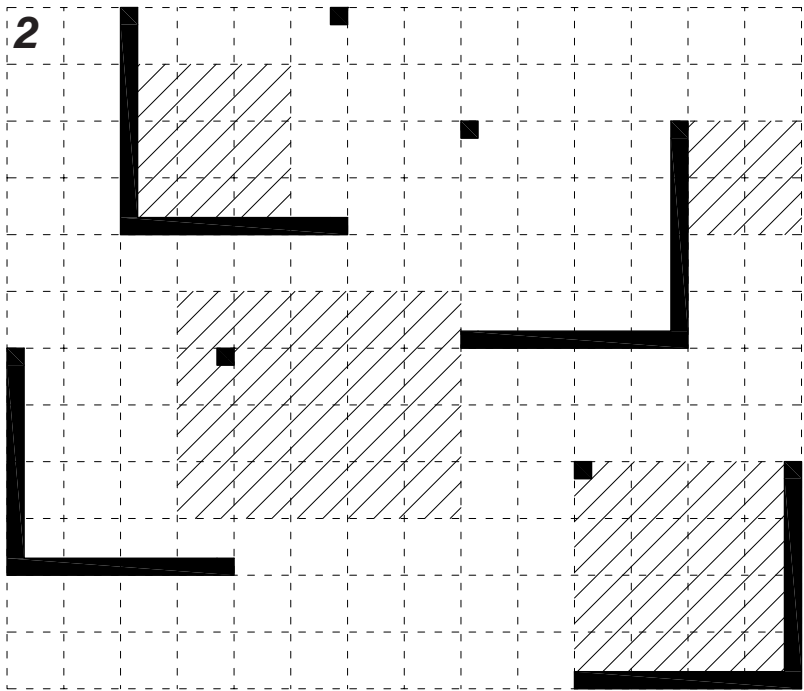
Artist studios, an extension of the Bolsjefabrikken



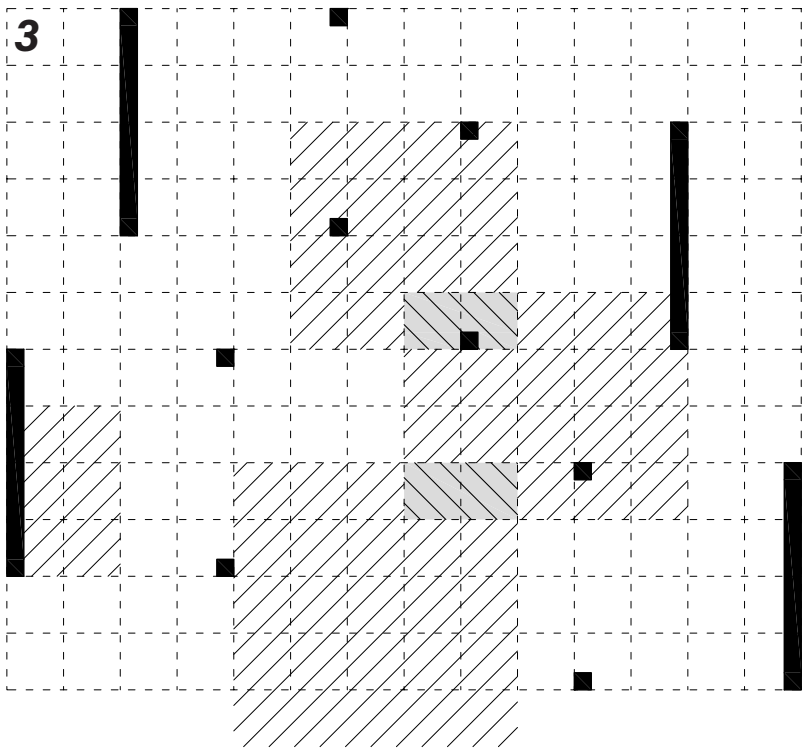
Study spaces



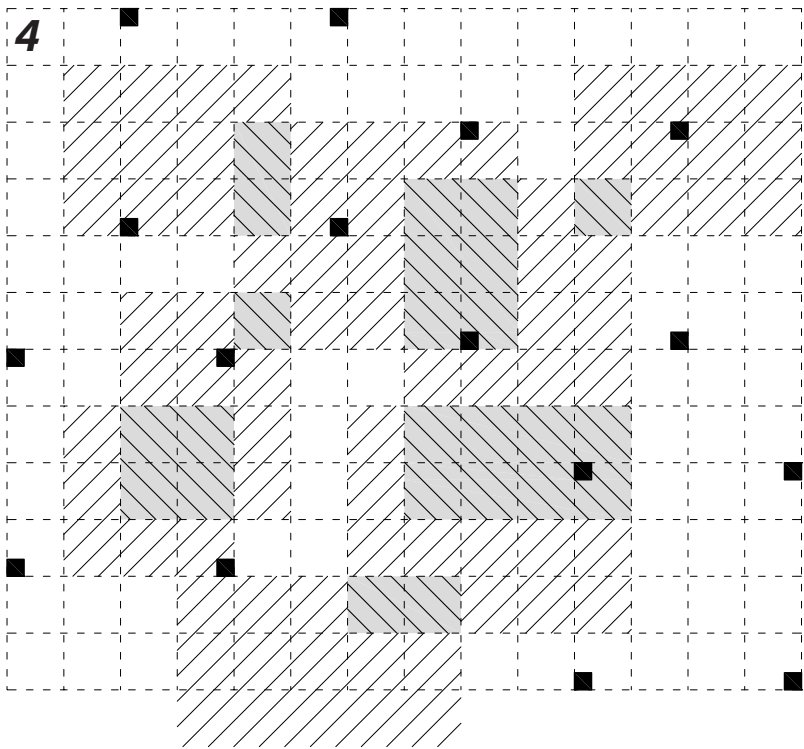
*Closed pores connected through circulation space*



*Pores open more, space becomes more free to interpretation*



*Overlap of function creating hybridity and multiplicity is possible, as is integration of urban fabric*



*Absence of planes creates the highest order of hybridity and multiplicity. Urban fabric merges with functions inside the building*



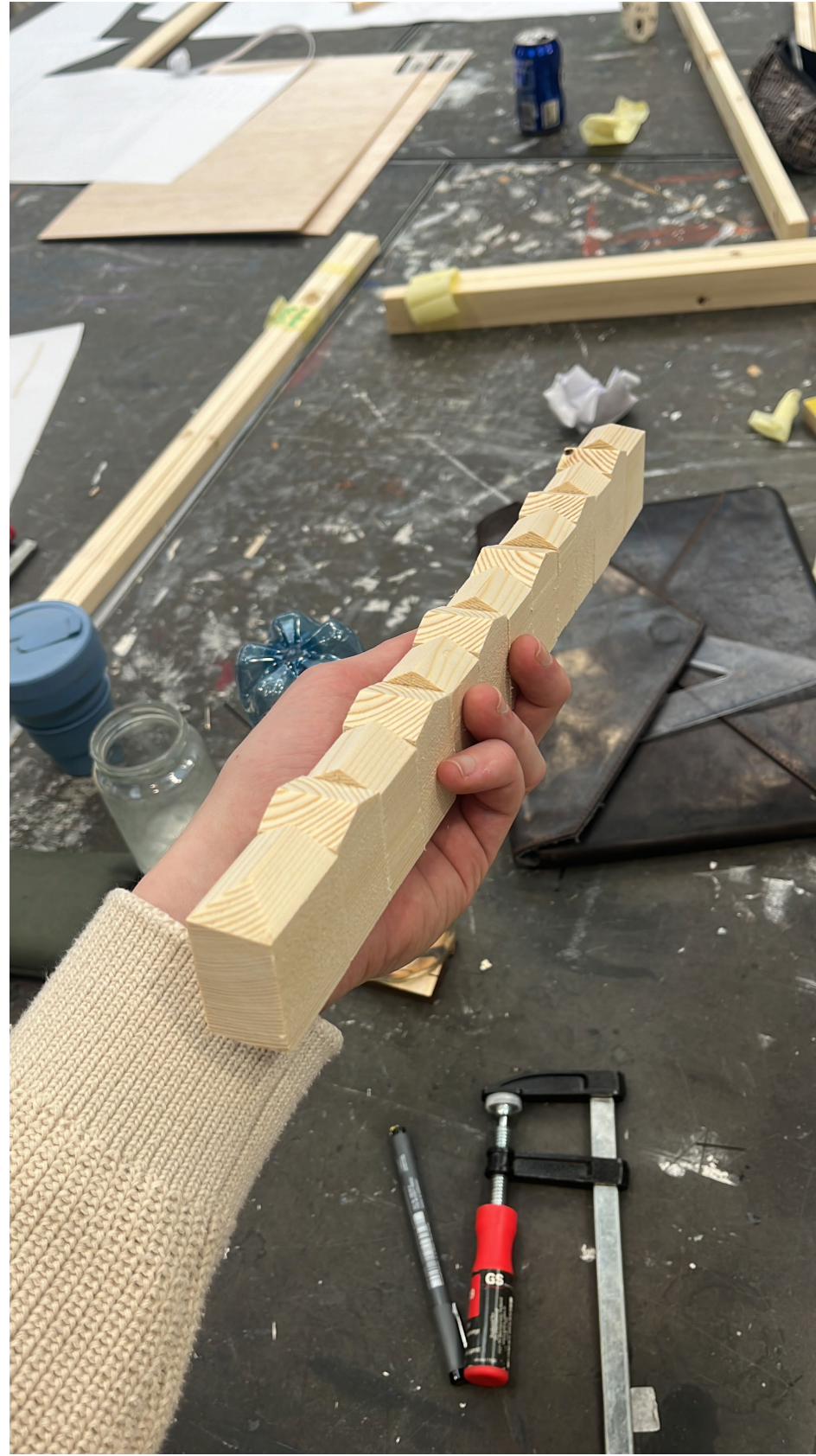


# QUARTER 2





The first week after P1 was spent making and managing the creation of the site model. After three days, it was finished.



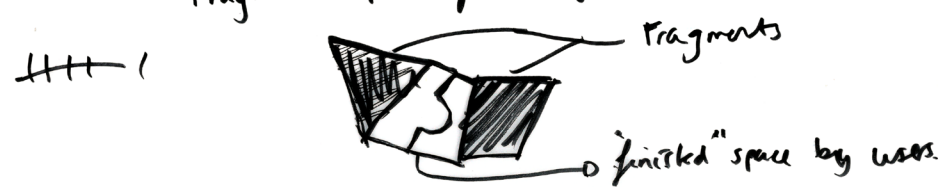


- granting the user the freedom of slightly changing spaces to their wishes.
- not defining everything.
- making suggestions? like a ledge that is not explicitly to sit on, but people will.

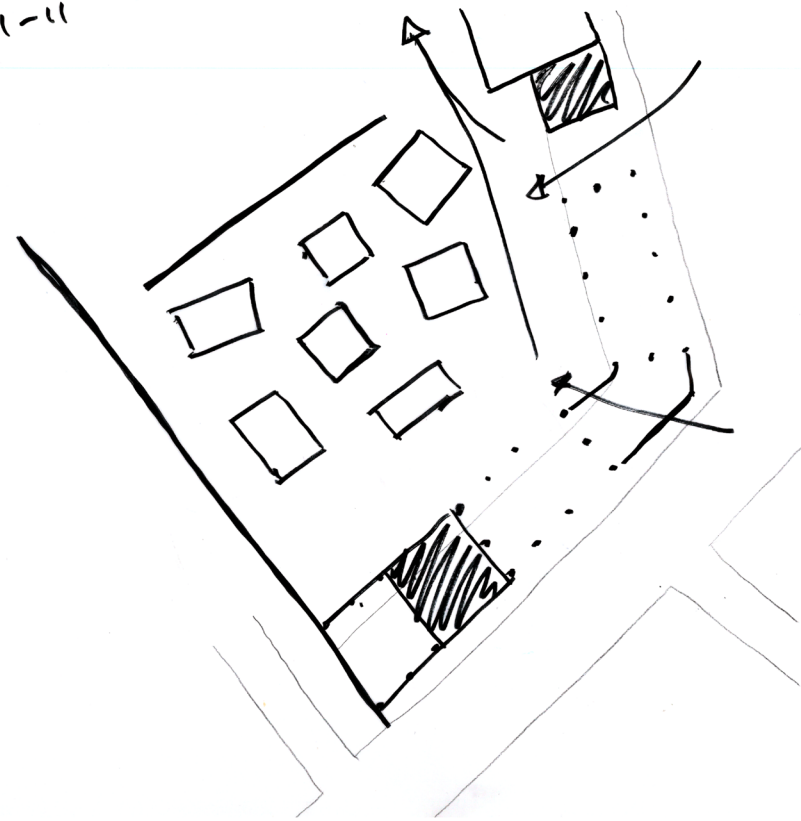
### fragmentation

- urban and social fragmentation
- design building as a collection of fragments
  - ↳ in this case, a fragment is a volume or collection of volumes that ~~have~~ has an architectural expression
- this allows the different characteristics of the neighborhood to be represented in the building.

Fragmented parts glued together by indeterminacy

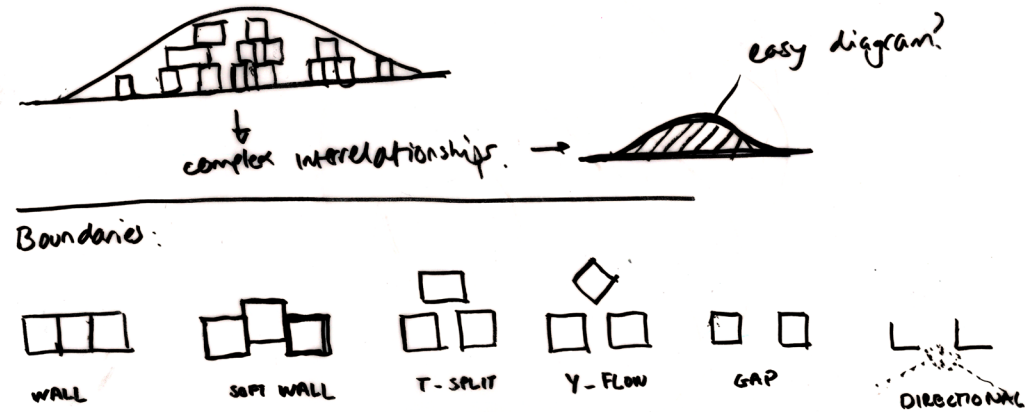


21-11



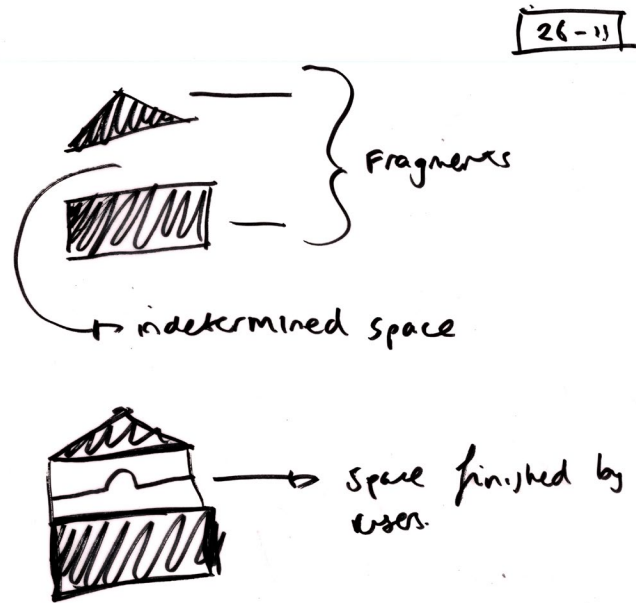
22-11

Building should be able to have a clear diagram, but within it should be an infinite number of complexities. 0 ↔ 1



Probably because of the diagram made for the P1, I started experimenting with orthogonal volumes. The placement of these volumes could, in theory, provide indeterminate in-between space.

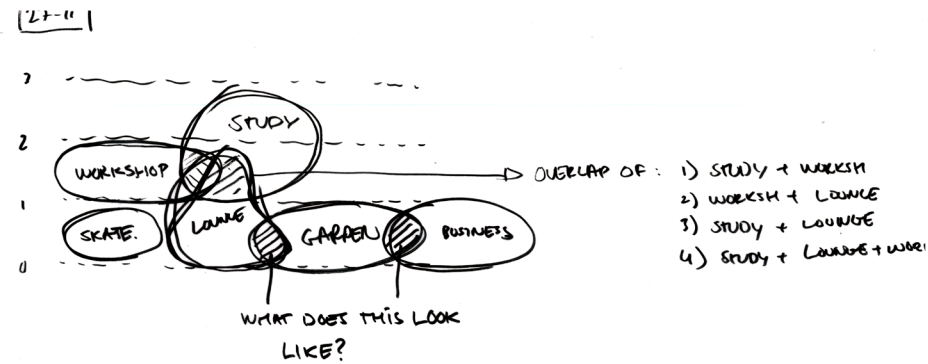
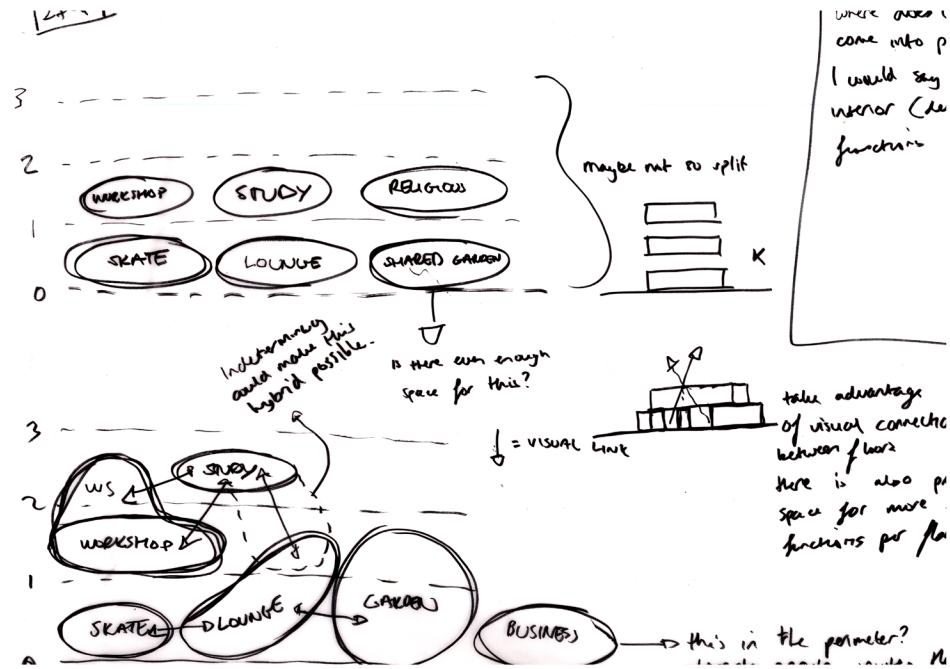
The main idea behind this was to reflect the fragmented nature of the neighborhood, but then "fix" it in the building by elaborating on the in-between space.



With "space finished by users" I meant that the space is finished by the fact peoples patterns of behaviour make them use/cross it regularly. They can also freely move around furniture and possibly even decorate the space.



The addition of walls to create the building and its indeterminate space was explored here



Hybridity in section was explored here, to try to find ways to possibly create indeterminate space in section.



# On Sustainability

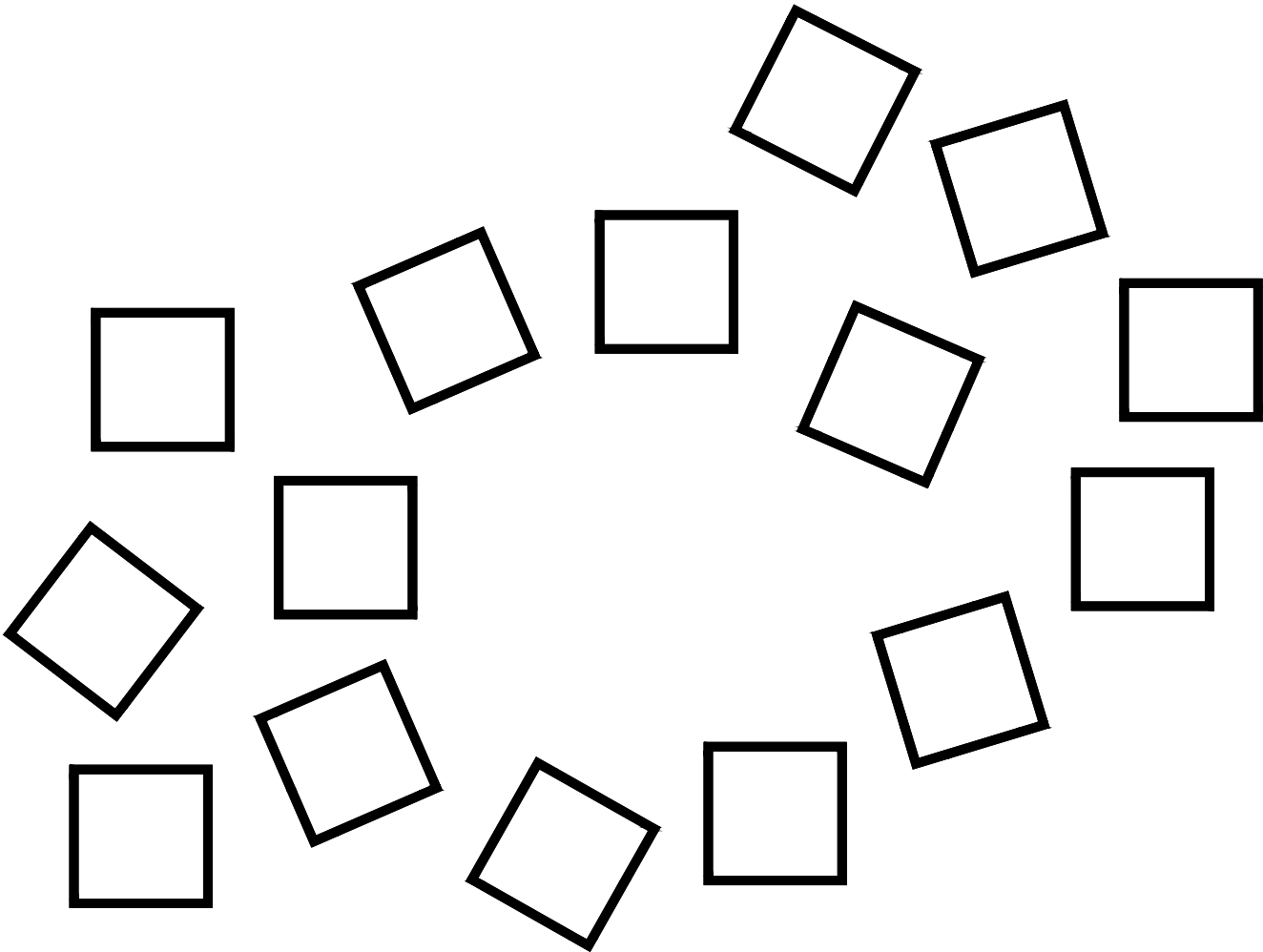
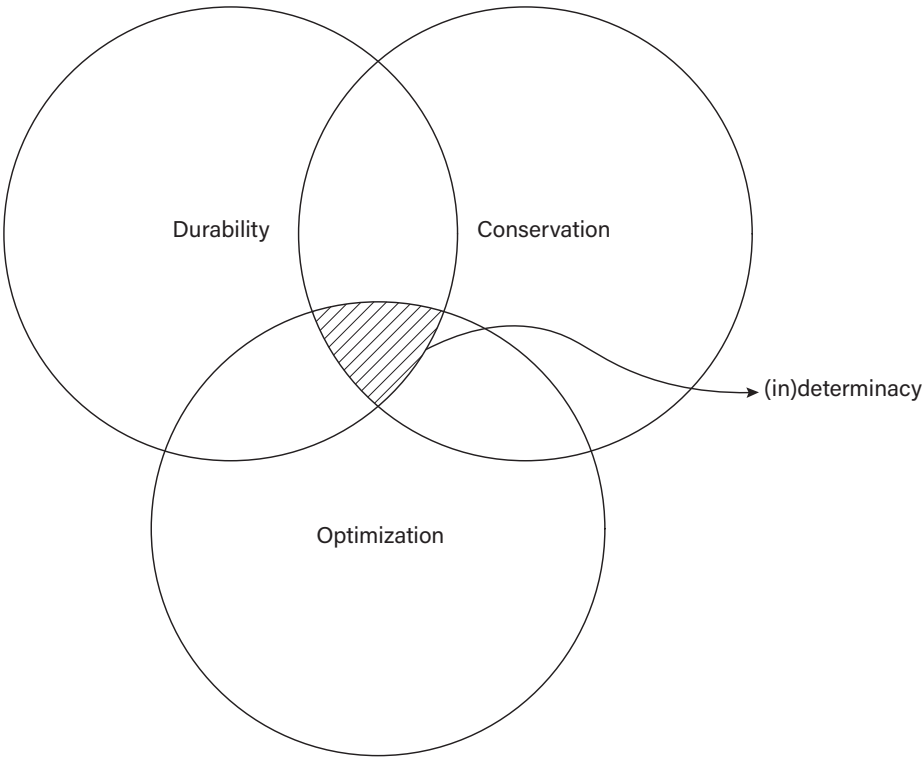
Luuk Krijnen

(In)determinacy is an important term, that (among other terms) will be used spatially to create a public condenser. The idea behind this is that this allows the users to essentially “finish” the building through their desired usage. This in turn increases the chance of the users forming a deeper connection with the building, causing it to be used more and be cared for more, as it grows into the community that uses it. Alongside this, it ties into the idea of architecture being a temporal expression. Society, peoples wishes, the surroundings, are constantly changing. In theory, a building spatially dictated by the notion of (in)determinacy will have much less trouble conforming to changing ideas by the user, because it is in its nature designed to do so.

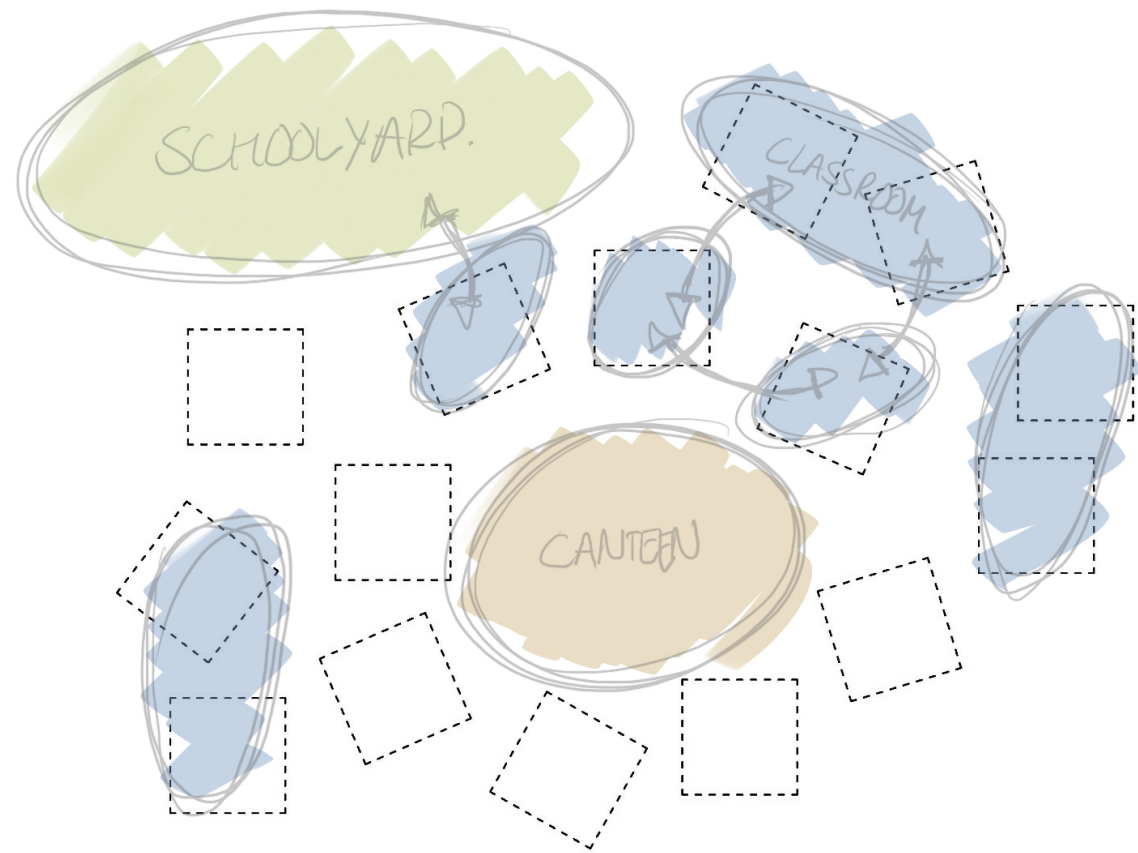
This results in the main driver of sustainability of the building. First of all, the adaptable nature of the building that is created makes it more durable. The fact that this adaptability is created through (in)determinacy means the main structure can be conserved. Lastly, a paradoxical expression is made. By employing the notion of (in)determinacy, more optimization can be created. It may seem as though defining something less does not go along with optimization, but (in)determinacy fits perfectly into “doing most with least”. As mentioned before, the adaptability created is actually an optimization of the relatively rigid base structure.

A possible structure is one like Fujimoto's *Children's Center for Psychiatric Rehabilitation*, whos structure looks similar to the example on the right. This project aims to feel like a small city, yet posess qualities of a house. In the following pages, such a structure is used to explore the aforementioned statements. One issue that may arise from using such a structure is a climatisation issue. Especially with future changes in uses possible, inside spaces could become outside and vice versa. Also the aim of reducing the harsh inside/outside boundaries for the sake of lowering the threshold for interaction with the building poses climatization problems. It also offers opportunities, as seen in the drawings.

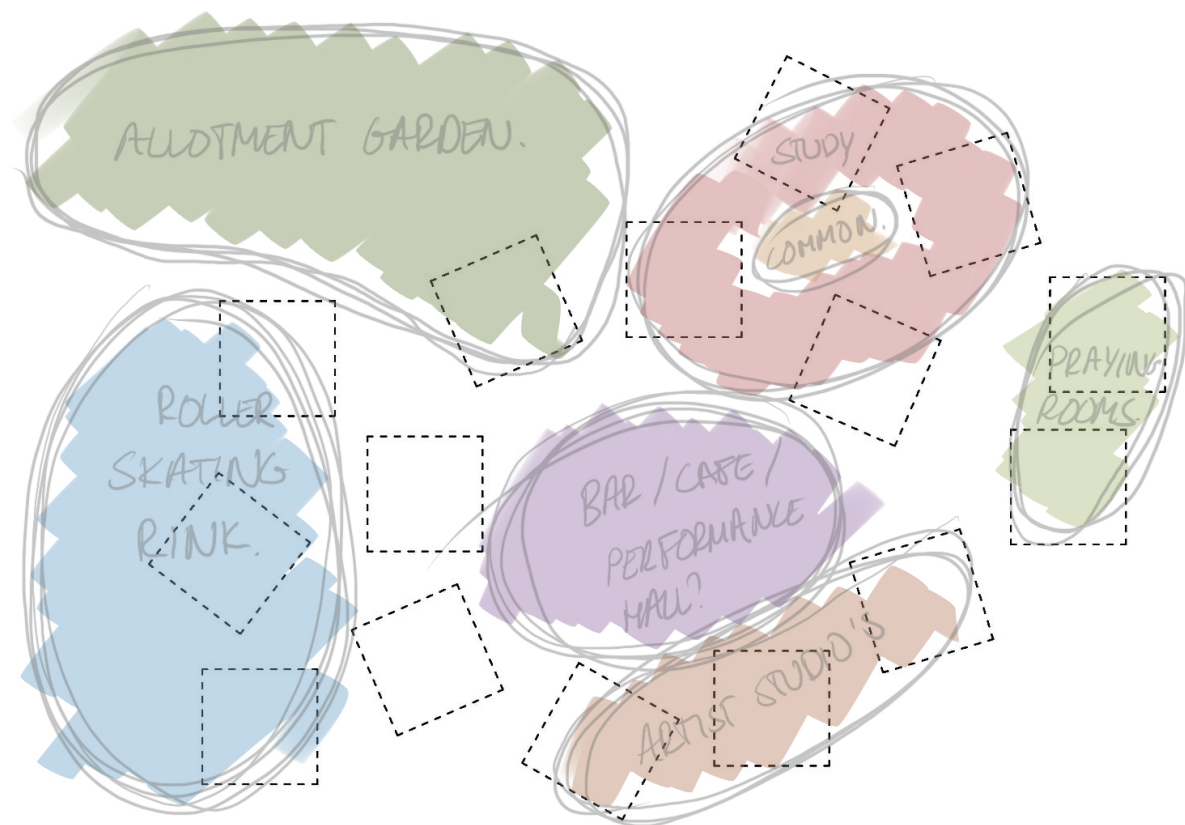
The condenser will be built from sustainably appropriate materials. This means that structures that are estimated to last a long time could even be built from concrete without no sustainability issues. Shorter lasting structures should be built from more environmentally friendly materials.



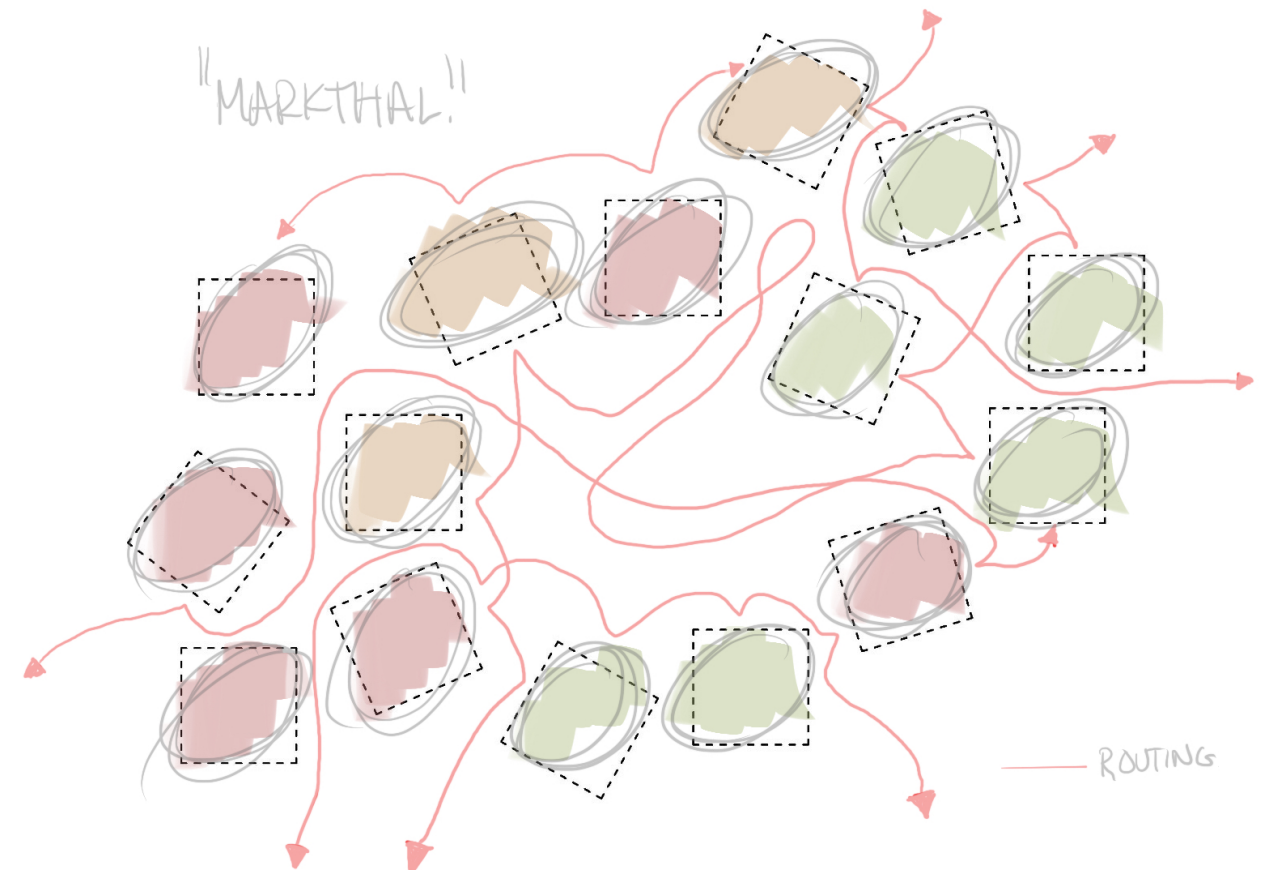
Floorplan of several volumes, used to illustrate aforementioned points in the next pages



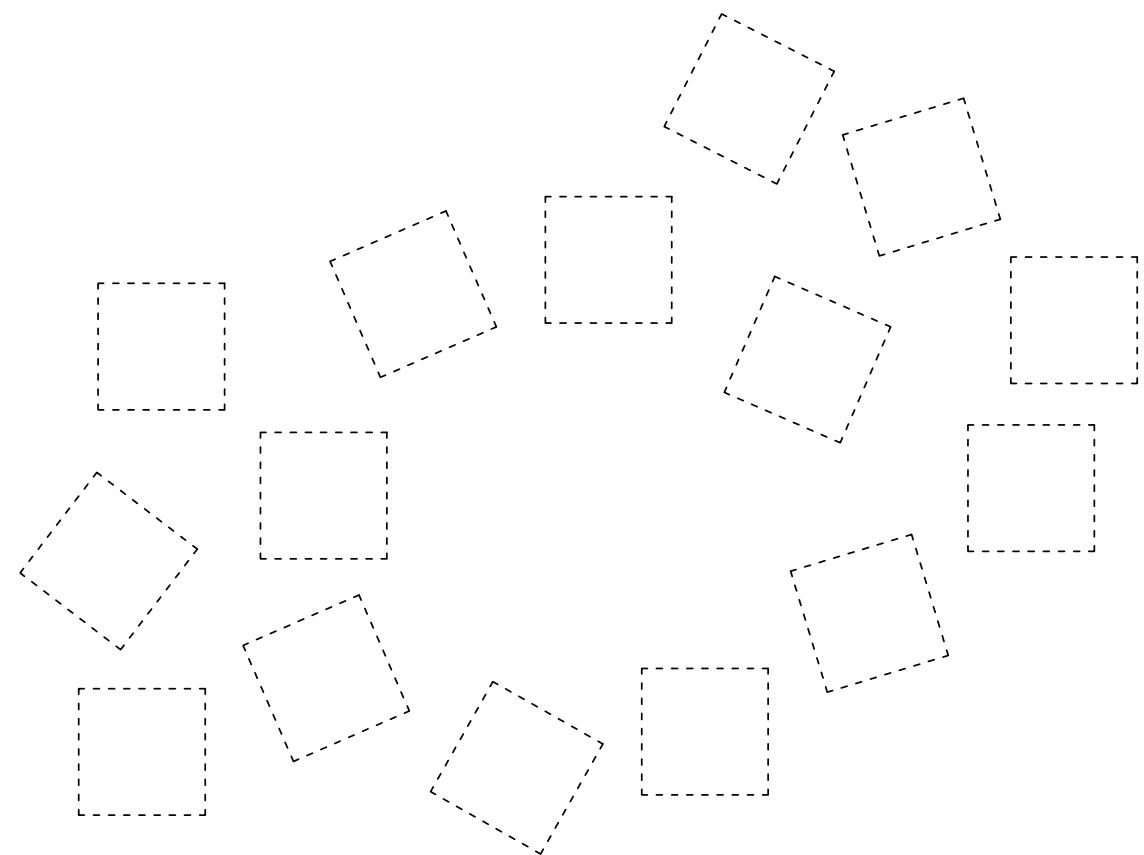
An elementary school



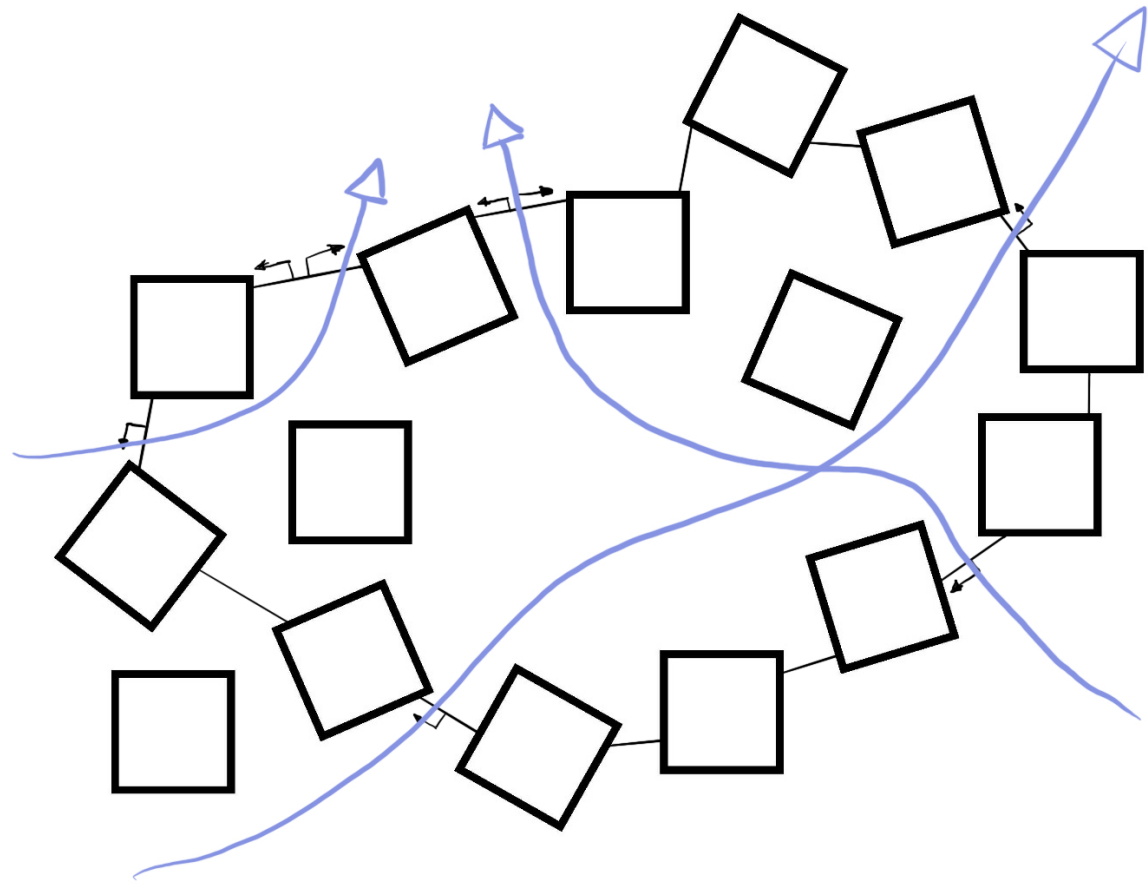
A public condenser



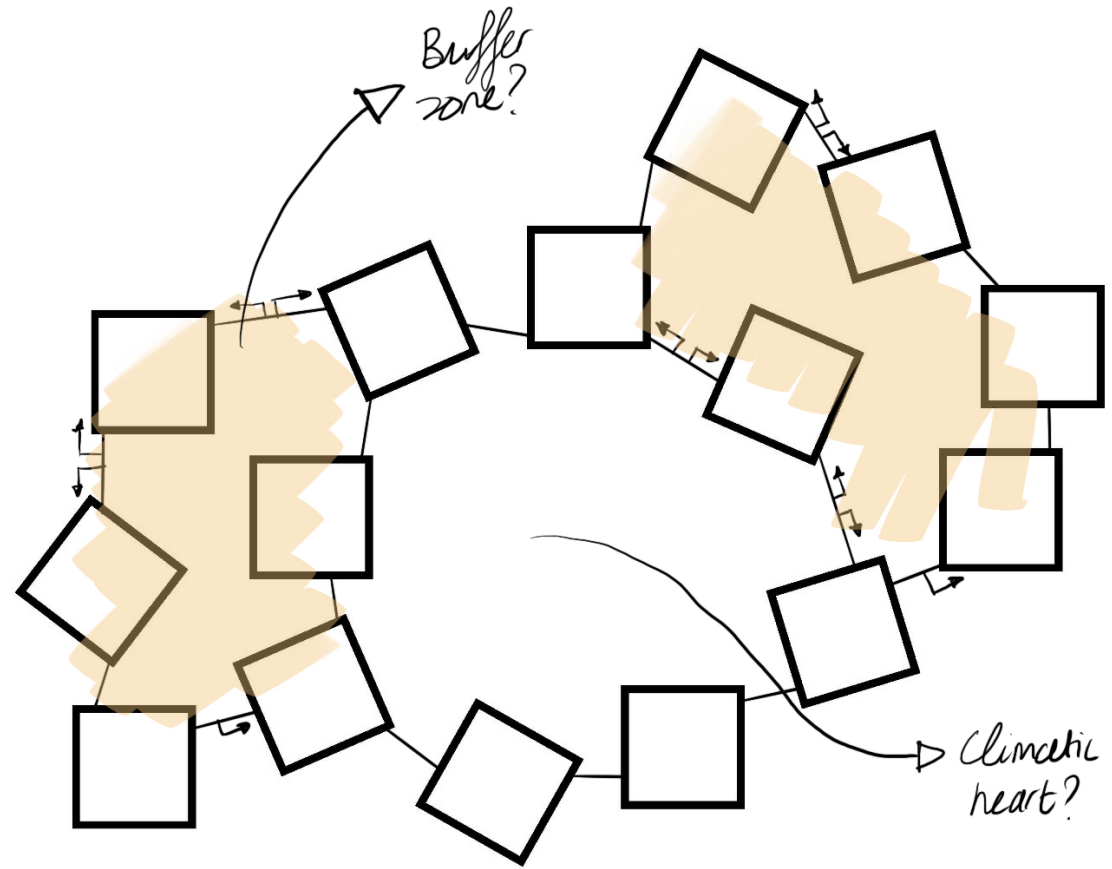
Small marketplace with locally produced goods



As can be seen by these rough blob diagrams, choosing a general main structure allows many different functions to flourish.



*Inherent cross ventilation qualities this configuration offers in summer*

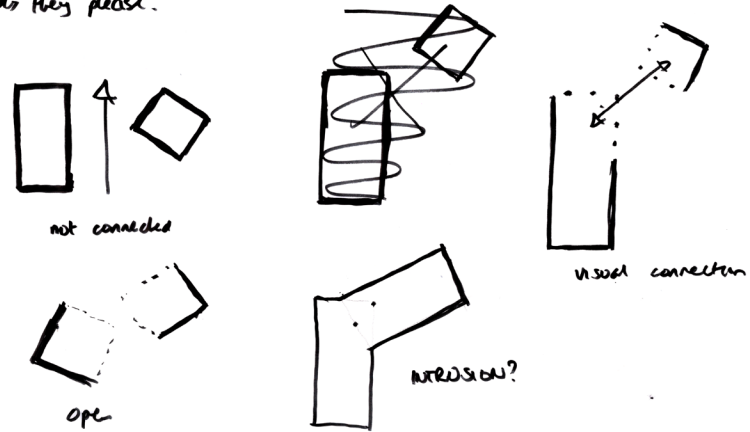


*On the aforementioned problems when switching uses, multiple climate zones could be created that allow certain functions to work there. This would ensure functional flexibility that is climatically supported*

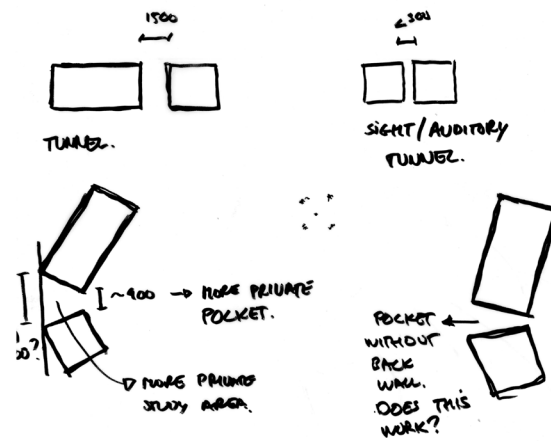


14-12

The point of the design is creating hybridity and resilience through a system of an adaptable structure that by its organization creates different boundary conditions. This not only allows hybridity but also for people to use the building as they please.

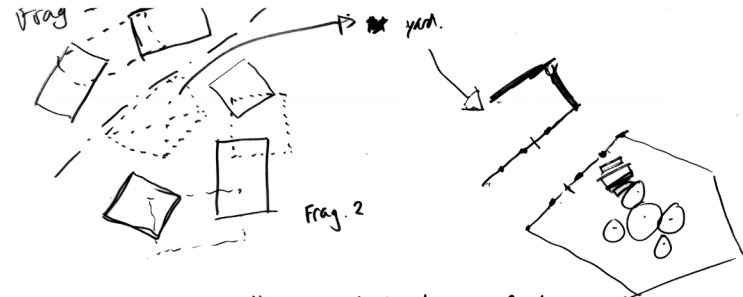


17-12 1 type of relationships



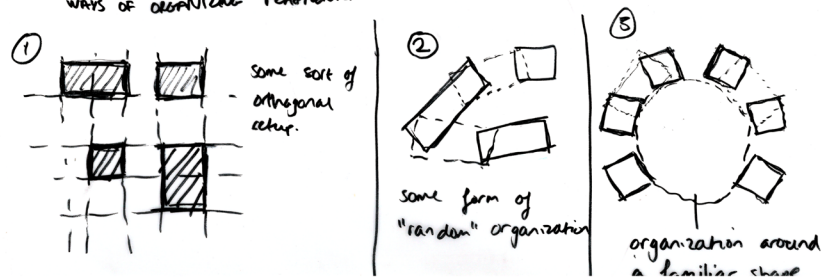
How do I make people use

- STUDY / WORK SPACES
- COMING TOGETHER → ...
- ARTIST STUDIOS
- LOCAL BUSINESS
- SKATE PARK + CLIMB WALL?
- PLAYGROUND?
- RELIGIOUS SPACES
- WORKSHOP SPACES



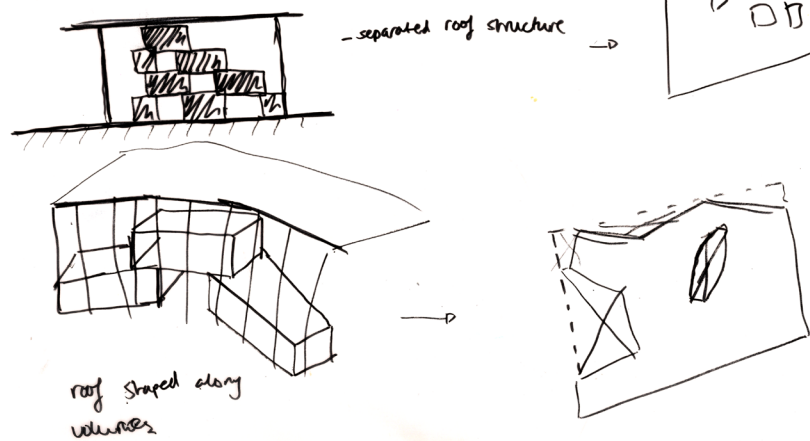
connection of fragments, ~~the~~ sense of direction important.

WAYS OF ORGANIZING FRAGMENTS.

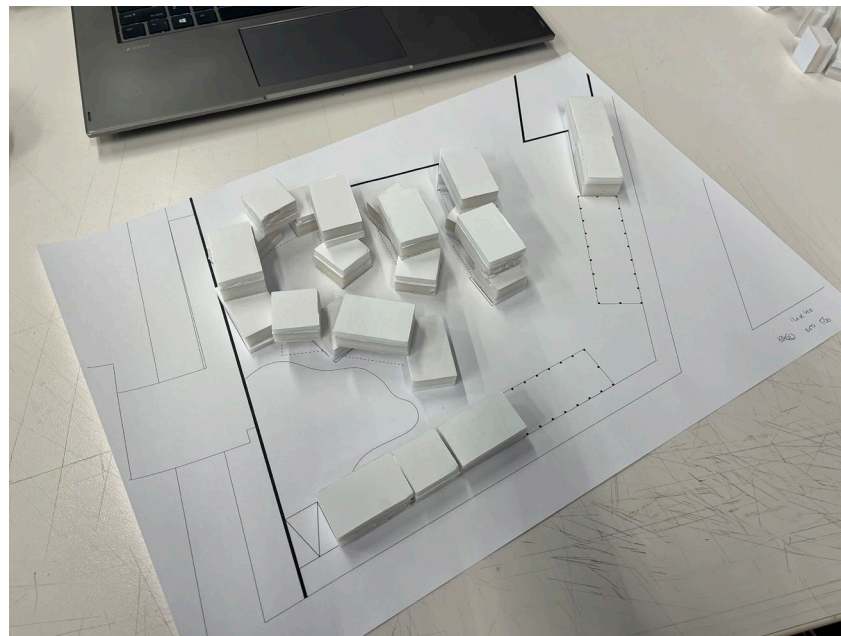
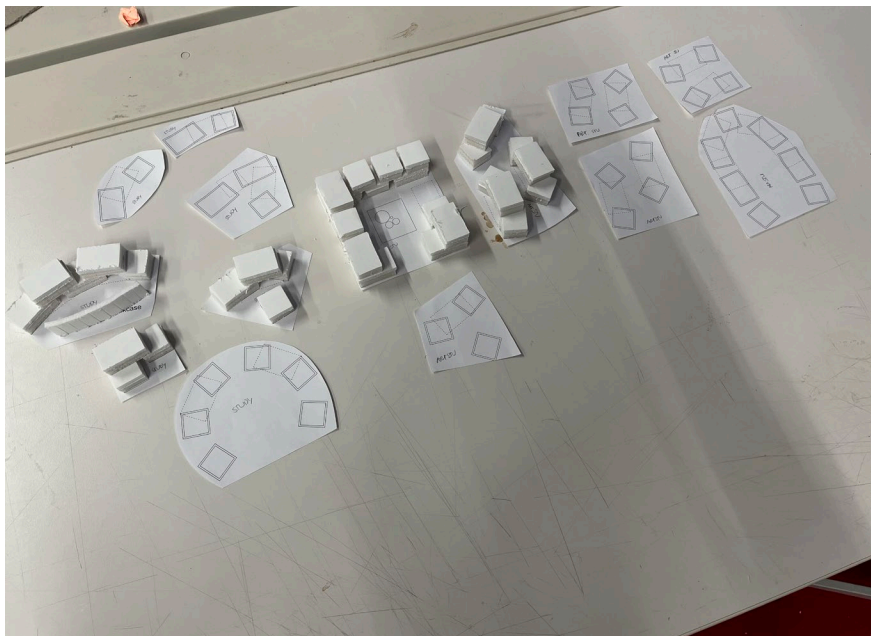


2-12

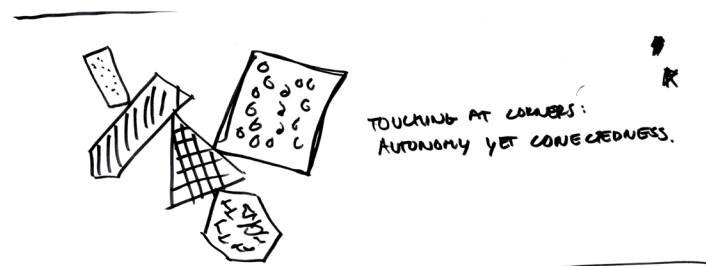
options.



Different ways of organizing the "fragments" were being explored. During this phase I could feel that there was too little substance in the foundation of my concept, causing me to have too little "grips" for designing further. This made the choices I was making about placing the volumes feel more random.





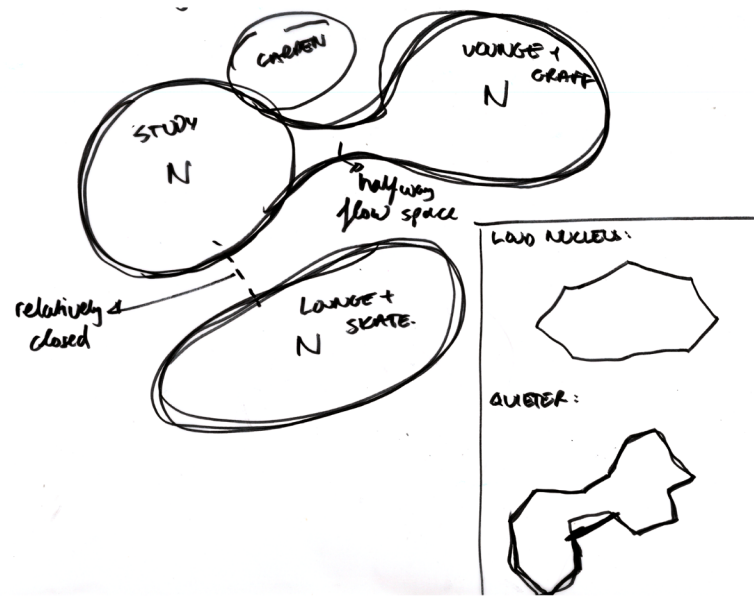


"part to whole relationships"  
CHRISTOPHER ALEXANDER LECTURES

"Living structures" → through (on) determining?

- environment is no longer nurturing  
↳ patterns would allow this to be applied on a large scale

→ living structure can only be produced by an unfolding wholeness. There is a ~~condition~~ maintaining the whole, but gradually introducing differentiations. They need to be structure preserving/enhancing. Then you get living



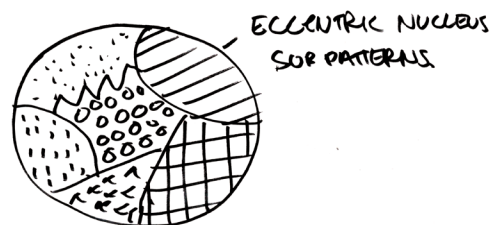
[9-12]

Pattern = a regularity

Fractal. Tree.

Fragments are patterns? Collection of patterns

Each pattern describes a problem and its possible solution



People need human mixing

activity nodes -  
gradations of public private (near now, isolated) → this could be created by the volumes)  
site-related natural routes.  
nucleal crossings?  
natural "goals" for walking.  
intimacy gradient.  
Edges are important, varied functions.  
and spread evenly

define: character!!  
need to have complementary funct.

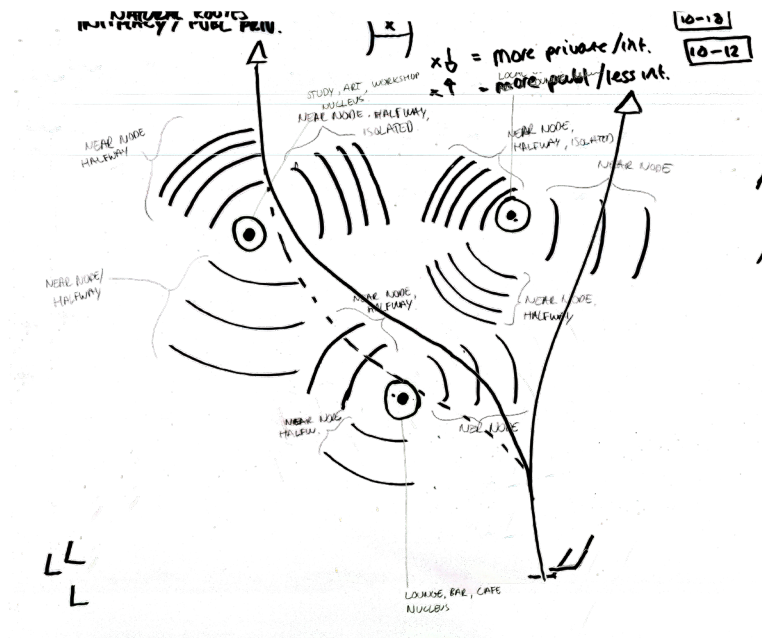
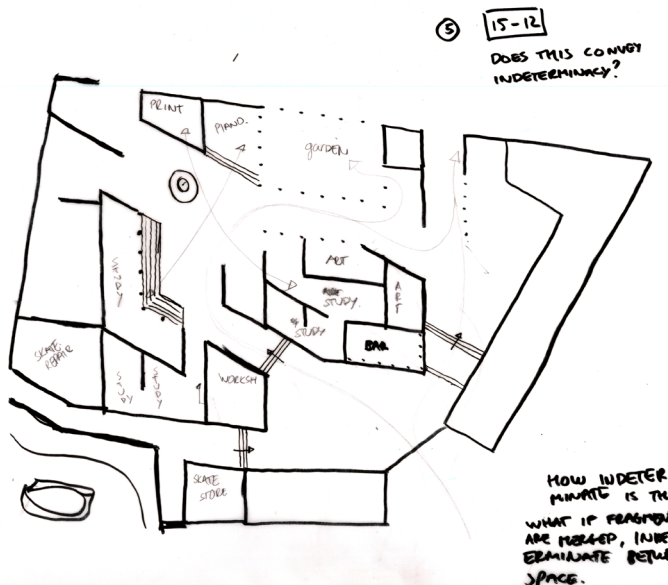
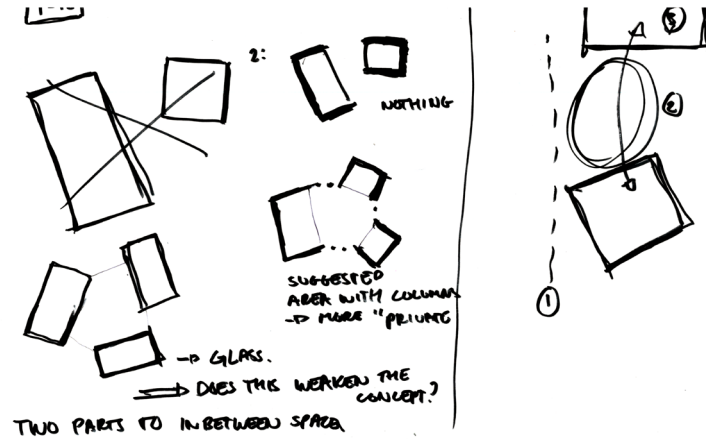
- nucleal  
- resulting gradation in public private  
- center guide the space around it.  
- people need back protection.  
- natural light in "hallways"

you want people to the cross nucleus to get activity

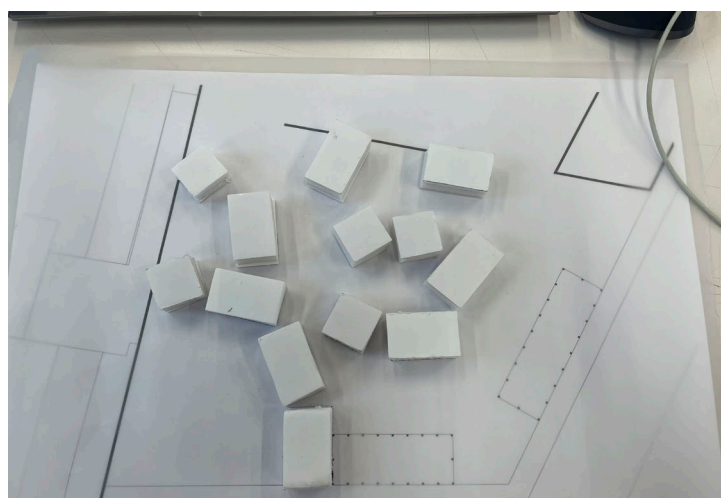
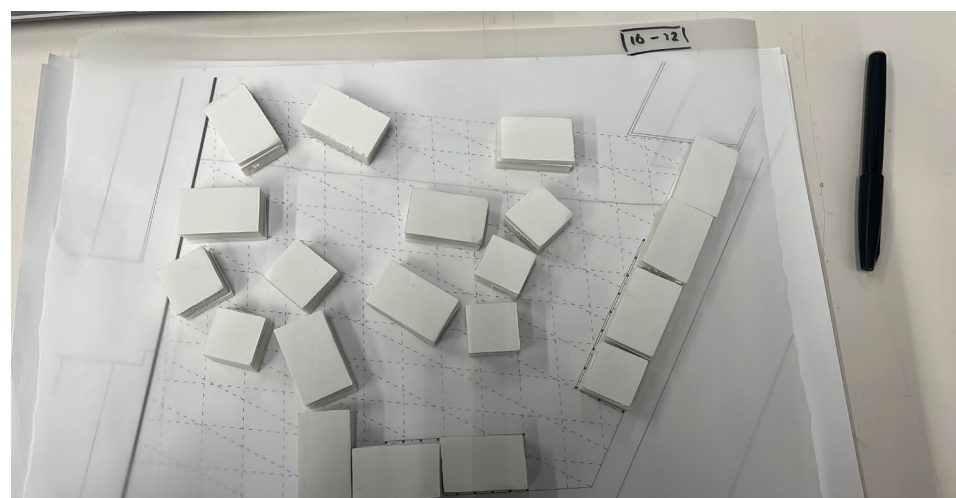
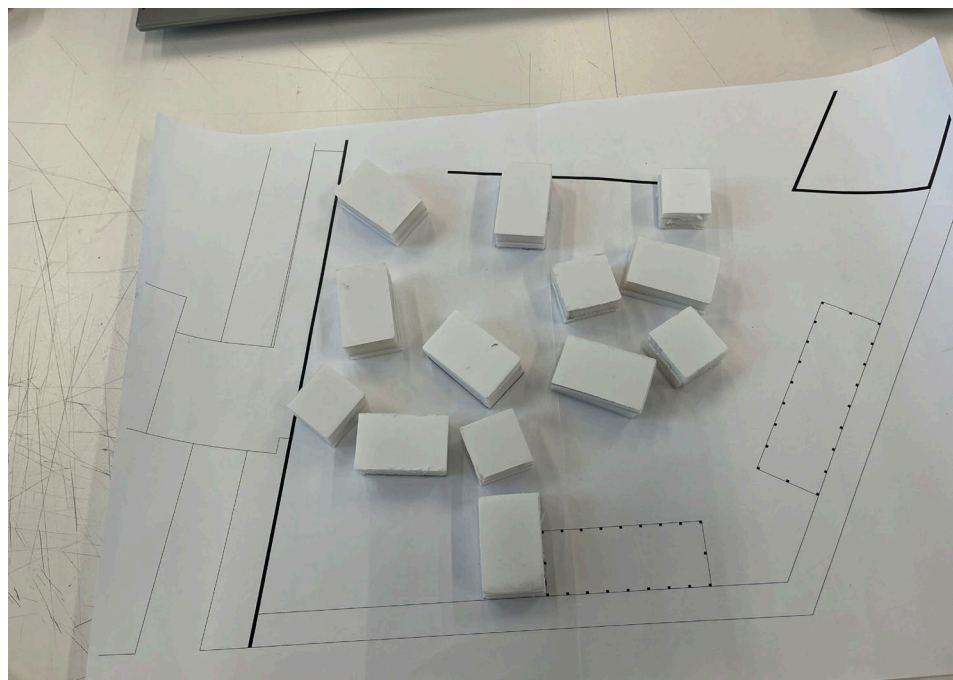
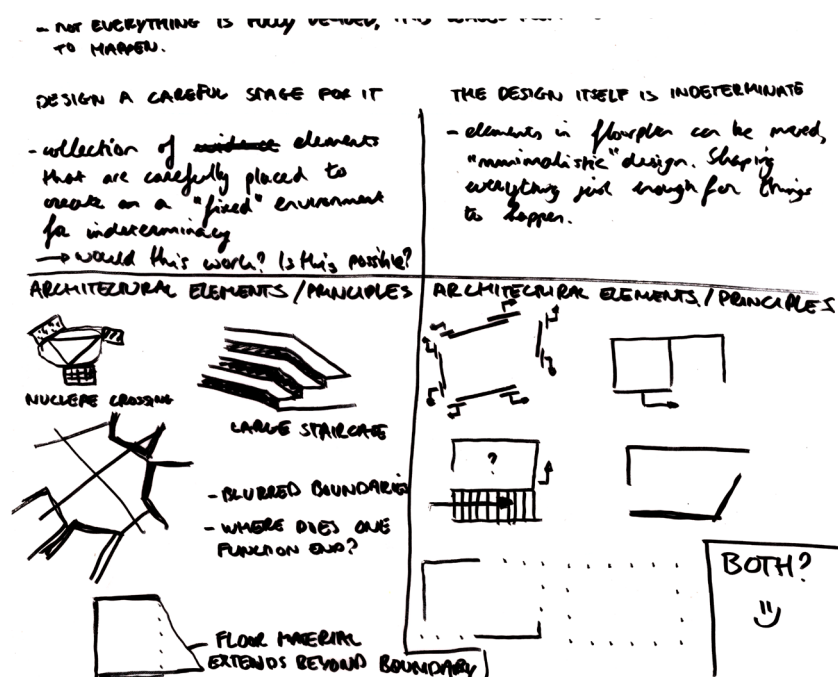
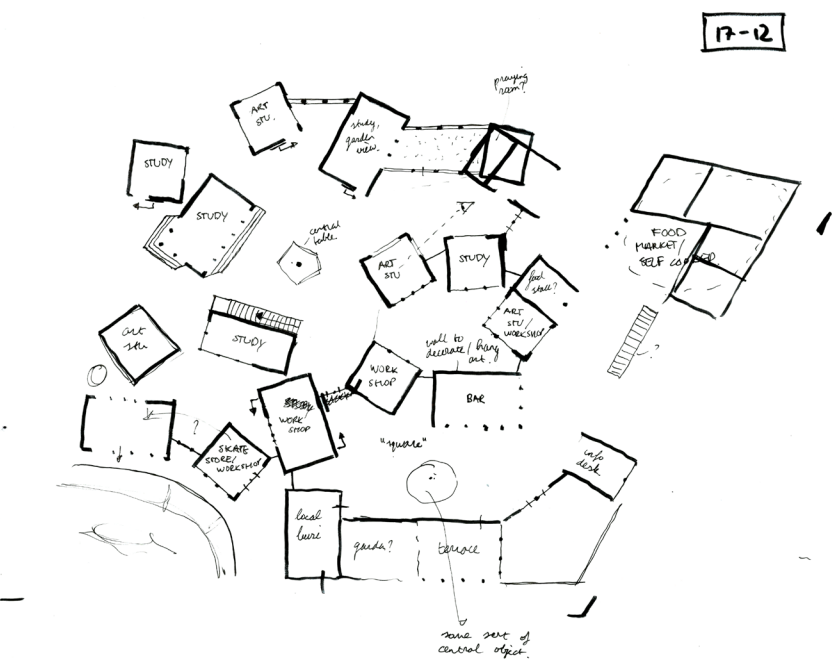
CATCH BASIN?

Public life is spread too thin.  
Common path needs to run longer to area.  
main street, shop next to it?

ADD ELEMENTS THAT PROMOTE WALK. MAYBE RAISED BLOCK WITH LARGE STOPS, STOPS COULD BE USED AS SEATING.



I watched lectures by Stan Allen and Christopher Alexander, as well I read A Pattern Language. The way Alexander describes nucleae and the determinacy of public spaces was interesting. Some of these principles were used to try to obtain a more founded approach. While the concepts and rules were interesting, they still didn't provide the necessary "grips" for designing on the site.

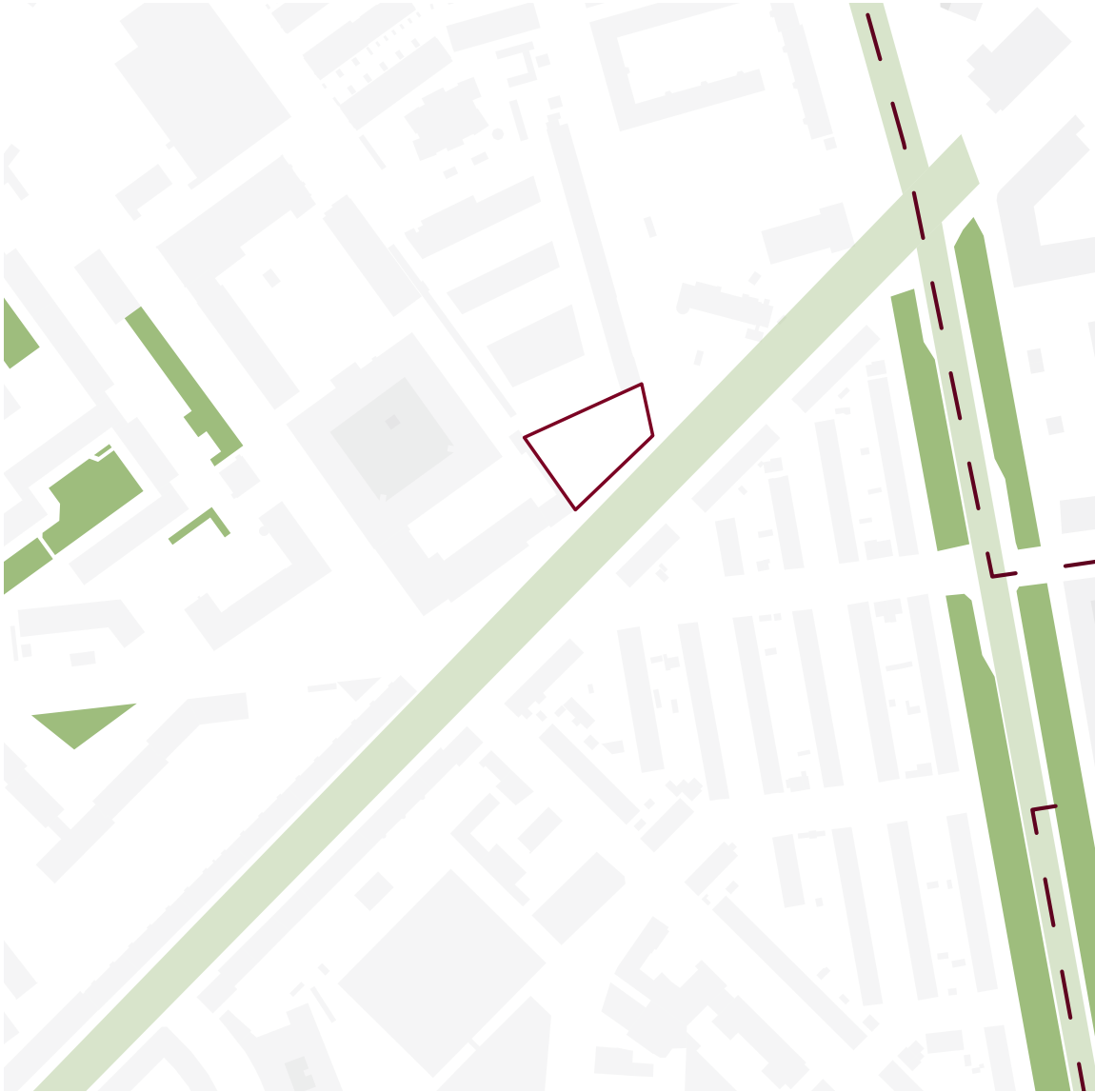





Further exploration with the masses, now with the addition of using gridlines derived from the directions found on the site as an organizing principle. While better, it still missed a lot of spatial expression that should be derived from site research.

Christmas break



Publicly accessible greenery



-  Site
-  Neighborhood border
-  Future green interventions by municipality

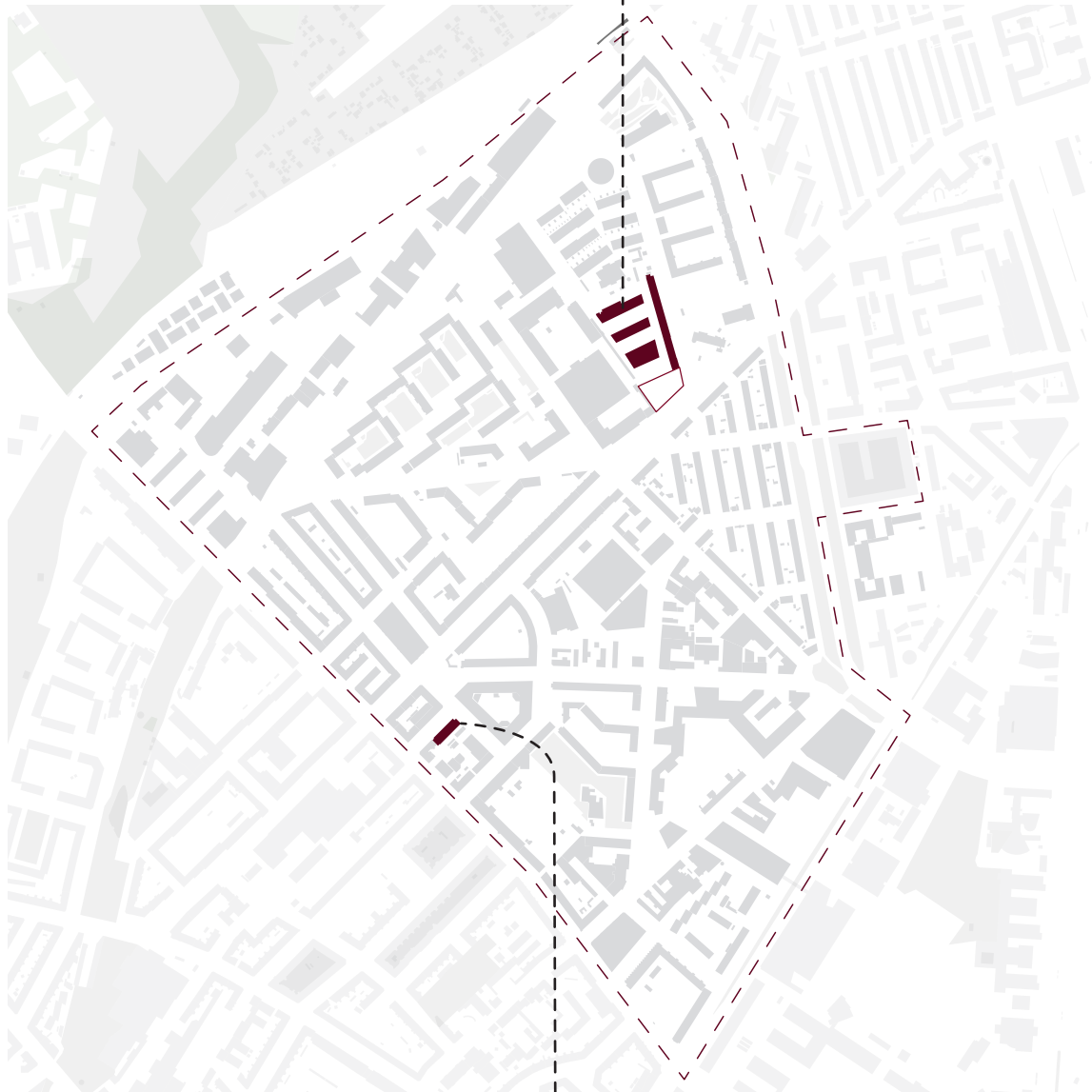


Lack of publicly accessible greenery. More greenery is to be added to two major streets in the neighborhood, one of which is next to the site area.

# Cultural facilities

## Bolsjefabrikken

Famous non-profit cultural center. Artist studio's, parties, café's and sports facilities. Can look and seem unfriendly towards newcomers.



-  Site
-  Neighborhood border
-  Cultural facilities

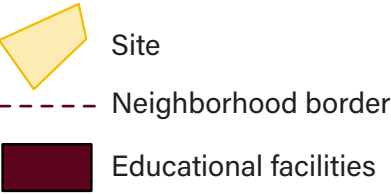
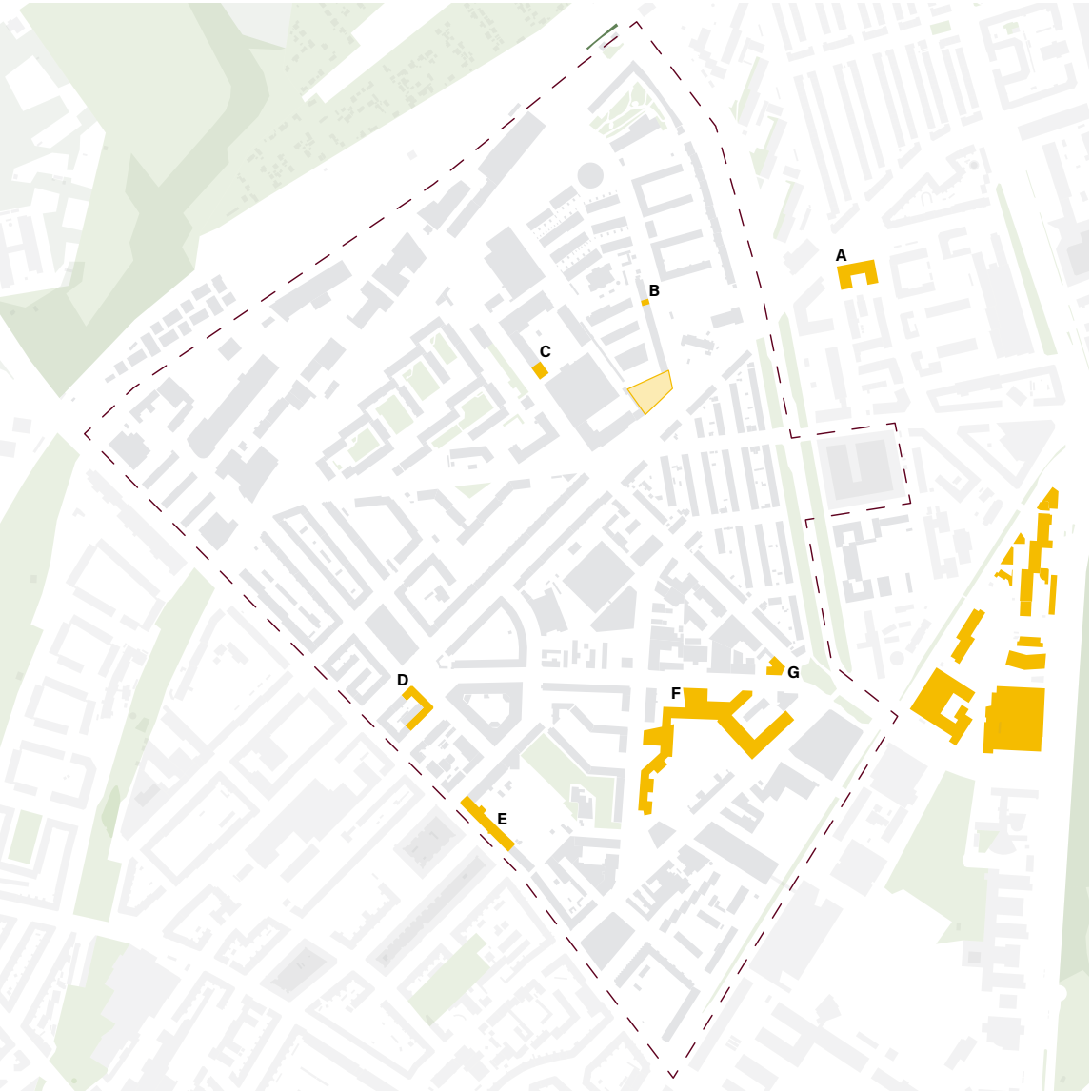
## OSRAM-Huset



Public building available for meetings and courses involving childcare and pregnancy.

The site is at the end of the Bolsjefabrikken. This provides an opportunity to have the building work with the Bolsjefabrikken in terms of function.

# Educational facilities in the area



## A: Herbal Medicine School and Dyslexia Center

*brief* → Counseling rooms, study spaces with attached garden.

## B: L.O.W. Academy (skate school)

*Provides lessons to people using a monthly subscription*

*brief* → Skate rink

## C: Sine Ginsborg Hair & Make-Up school

*Highly rated and well respected make-up and hair styling academy*

*brief* → Spaces for practicing make-up

## D: Part of the Copenhagen Vocational School

*School providing courses like: administration, physical therapy, healthcare.*

*brief* → "Normal" study spaces

## E: Part of the University of Copenhagen

*Large University providing a very broad range of courses*

*brief* → "Normal" study spaces

## F: Copenhagen Vocational School

*School providing courses like: administration, physical therapy, healthcare.*

*brief* → "Normal" study spaces

## G: AOF Center Copenhagen

*Danish language courses and various other courses having to do with light exercise, art or mindfulness.*

*brief* → Spaces to paint, spaces for practicing mindfulness and spaces for light exercise.

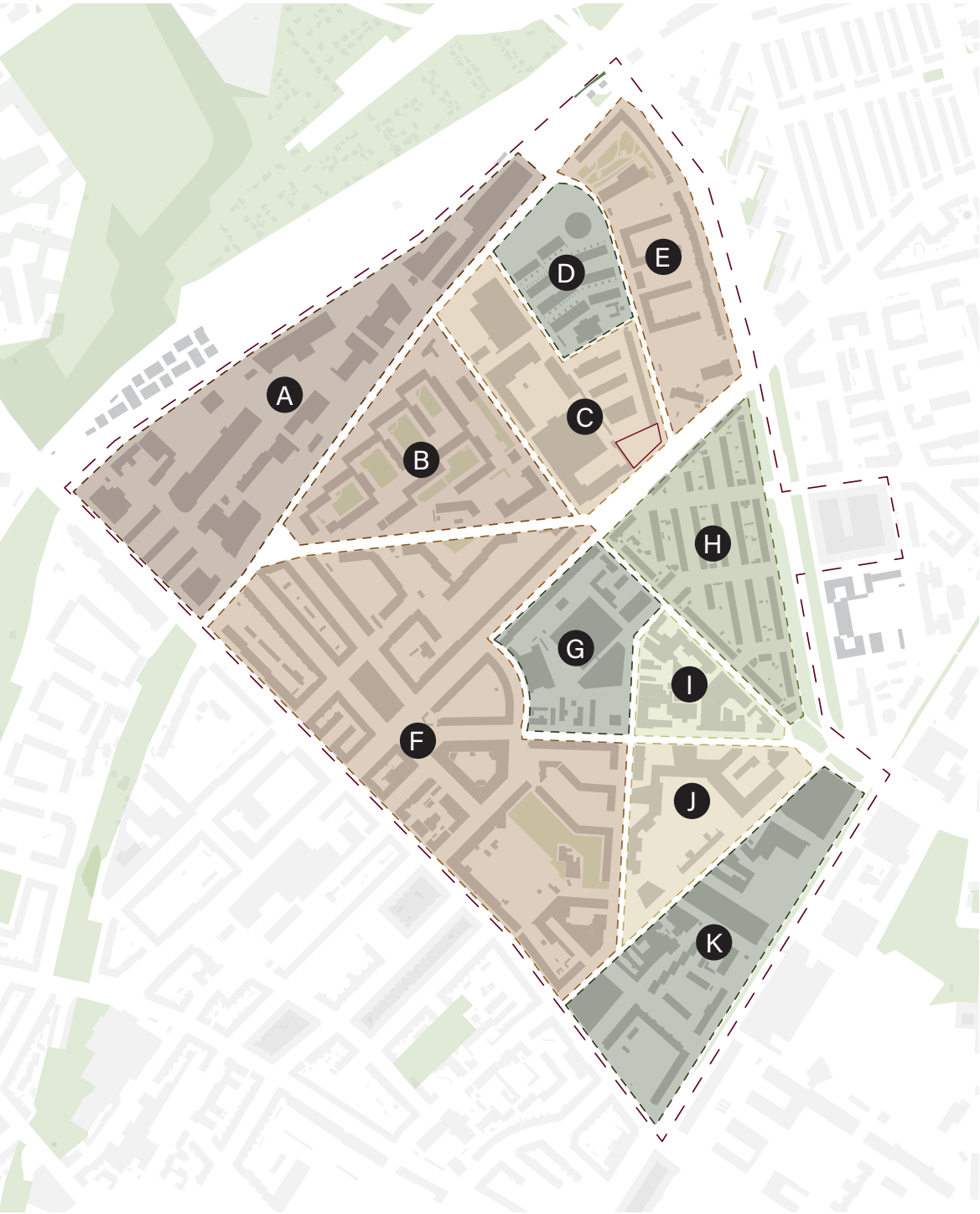
## H: University of Copenhagen

*Large University providing a very broad range of courses*

*brief* → "Normal" study spaces



# Urban patchwork



The neighborhood contains a large variety of different building types and functions, that seem to be dispursed into patches.

**A: Car industry field**  
An area that is almost completely made up out of car dealerships.

**B: Housing blocks with elaborated common areas**  
These housing blocks are shaped so that they create common areas, that are quite elaborately furnished. They seem however to not be frequently used.

**C: Reclaimed industry**  
An area consisting of different types of industrial buildings, like factories. They have been adaptively reused as things like an architecture office, a make-up school and the famous Bolsjefabrikken, a non-profit cultural organization that hosts different events and contains things like artist studios.

**D: Unique housing typologies**  
A small area of housing with very unique typologies

**E & F: Long building blocks**  
Long building blocks in different shapes, one up to 300 meters. Residential, educational and commercial functions are places here, with residential being the largest

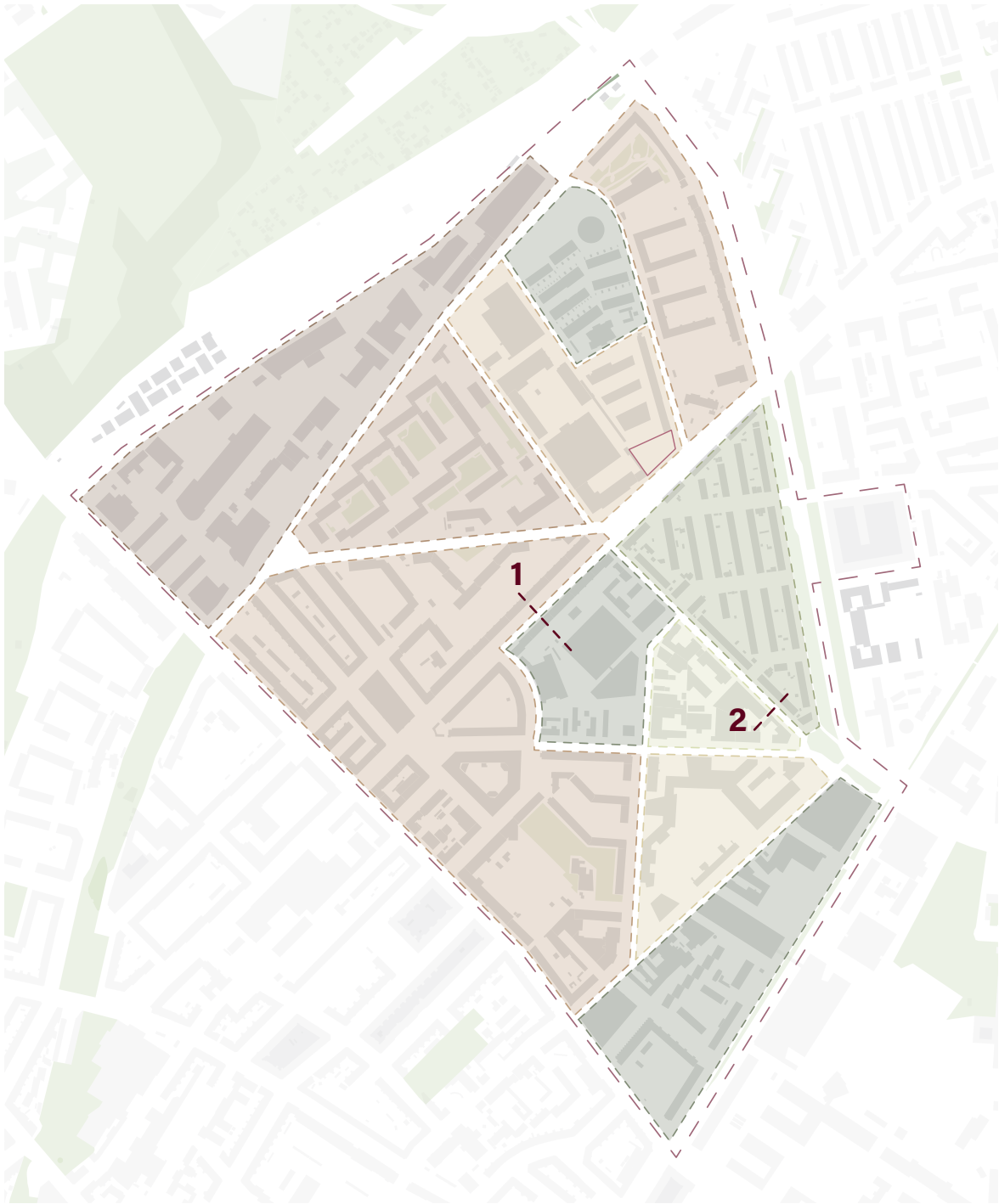
**G&K: Jack of all trades**  
These patches both contain a few bits of other, more monofunctional patches. They both have housing, industry and schools.

**H: Row houses**  
A linear and uniform patch of row housing with private gardens.

**I: Industrial Triangle**  
Dense patch of industrial buildings, partly reclaimed by local businesses. All buildings are different, creating a dense mix of varieties.

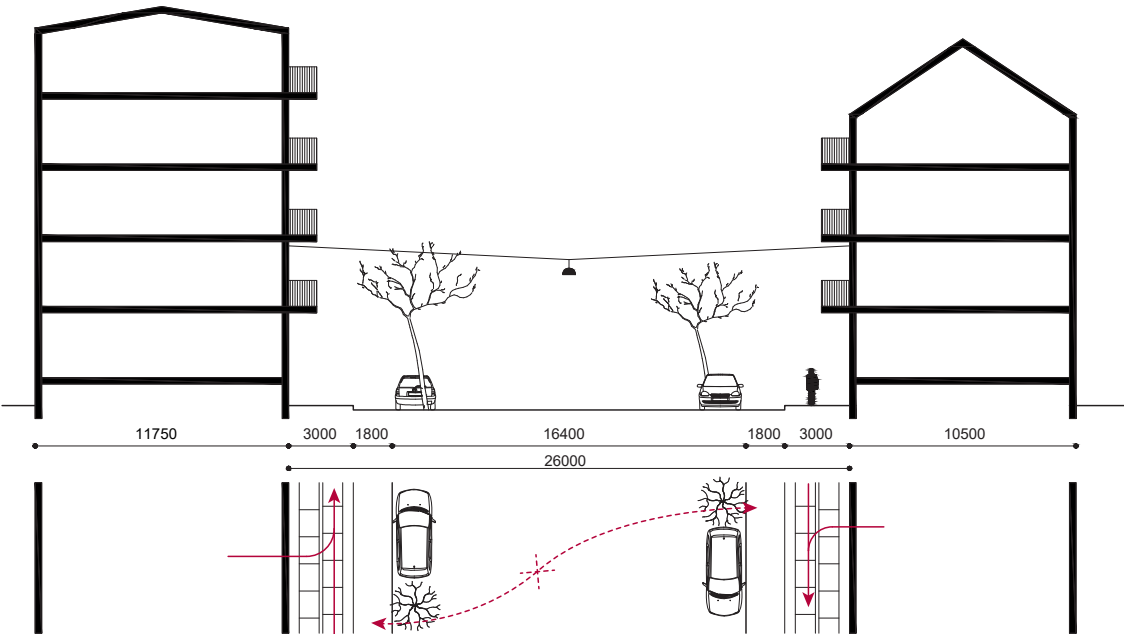
**J: Copenhagen vocational school**  
This patch virtually only contains the Copenhagen vocational school and a block of student housing

Disconnect between patches



1: Haraldsgade

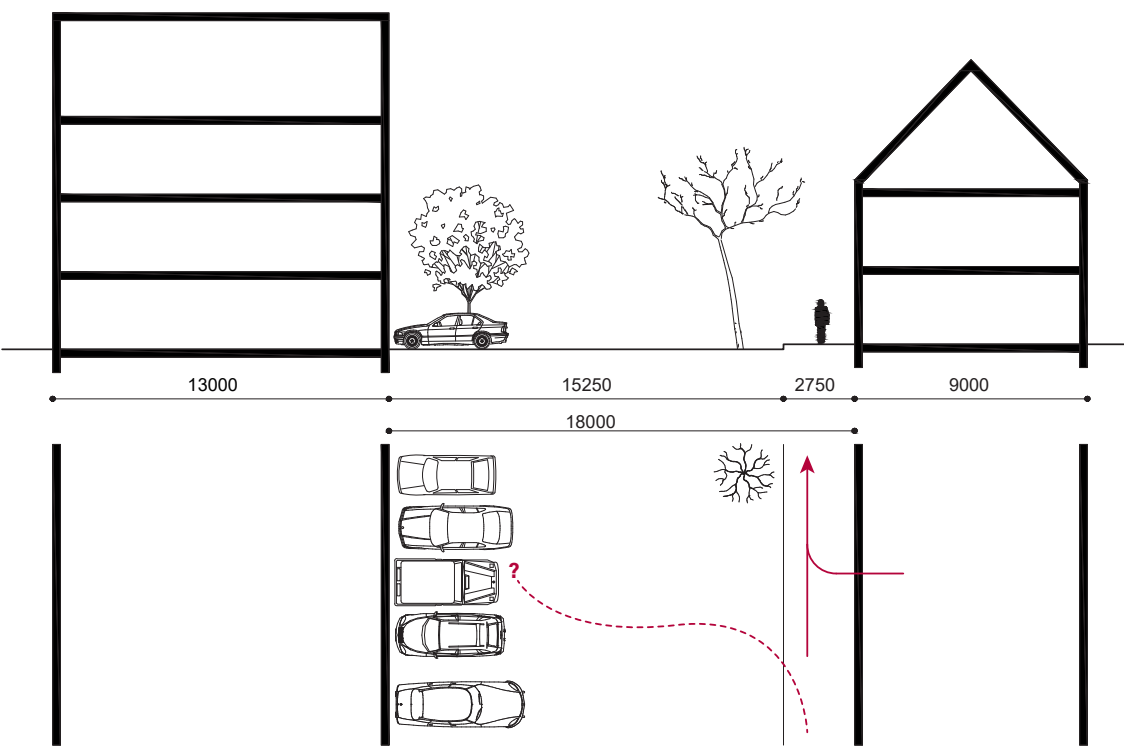
Residential street



No nonparallel street movements, therefore little random occurrences. This itself is not a big problem, but combined with the fact that there is no proper destination for this movement makes it not valuable for the neighborhood.

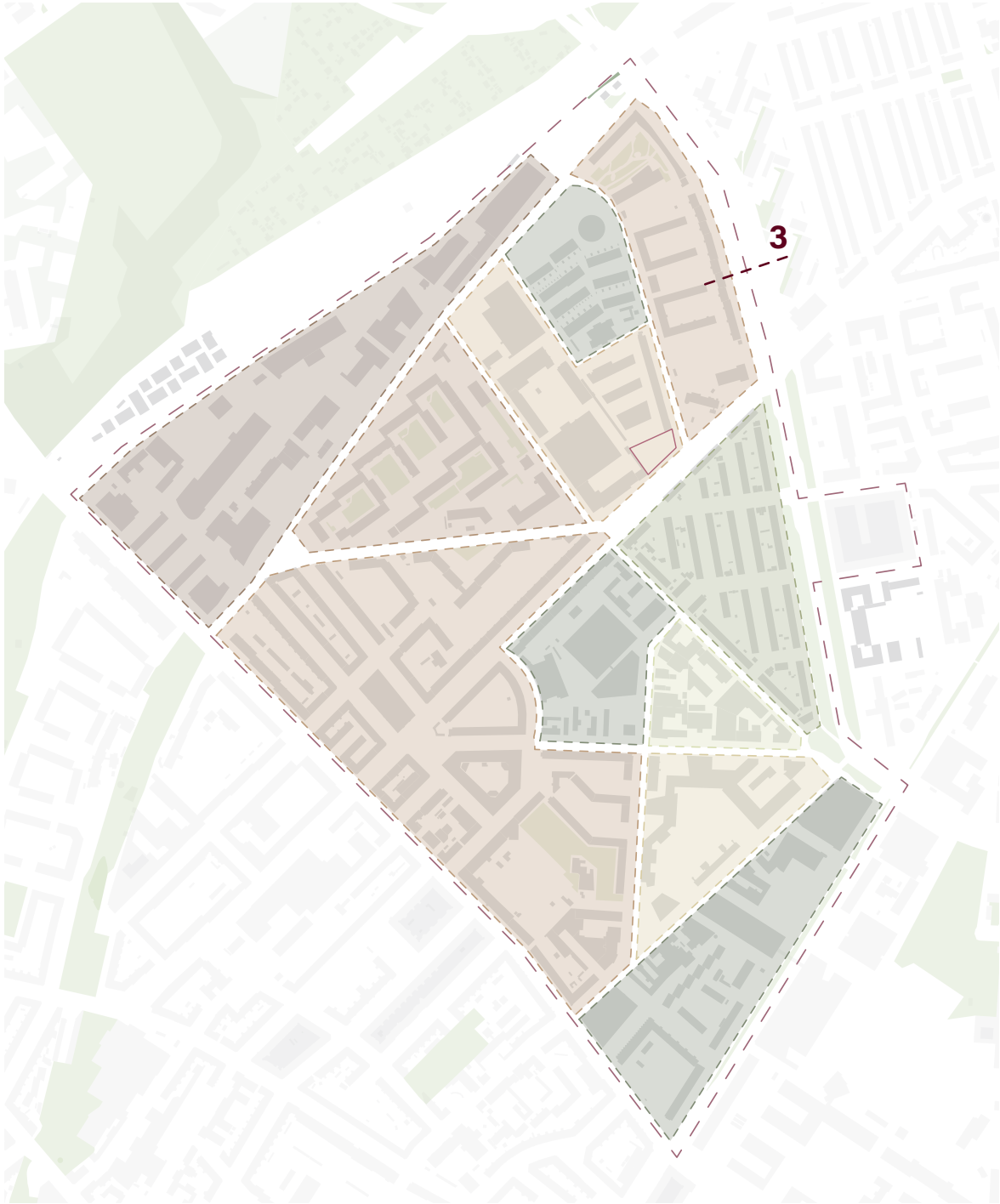
2: Vermundsgade

Residential and industry



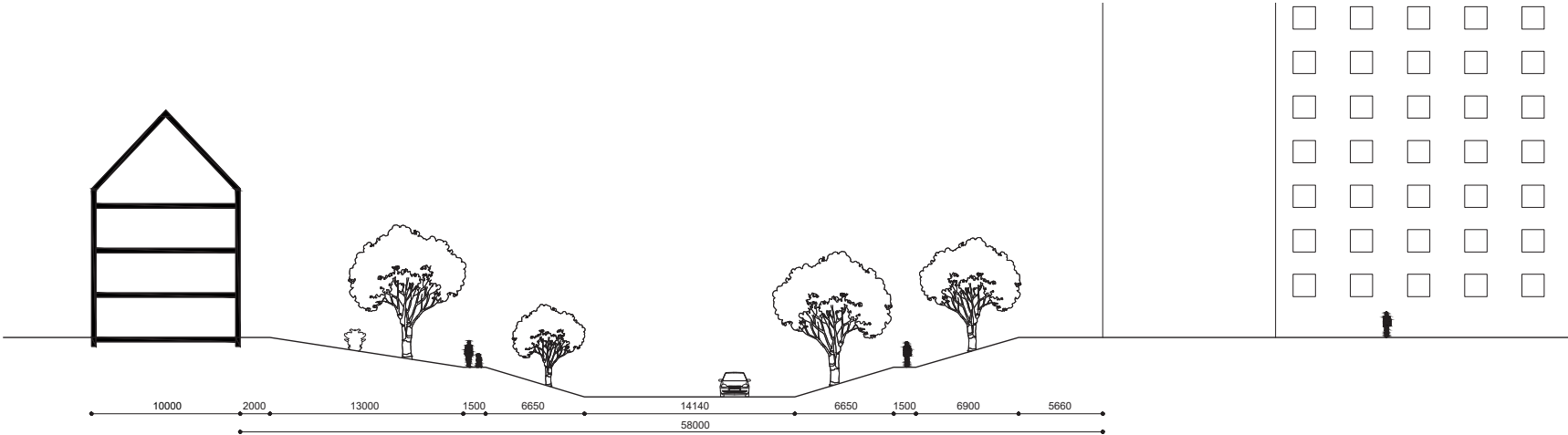
As with the Haraldsgade, no nonparallel street movements. In this case, a deactivation of the left side of the street is the cause. This makes the street "dead", until the sidewalk on the left.

Disconnect between patches



3: Lersø Parkallé

Edge of the neighborhood



A remarkably wide street, shutting this side of the neighborhood off of the rest of the neighborhoods and the city. This shows fragmentation on a larger scale than only inside the neighborhood.

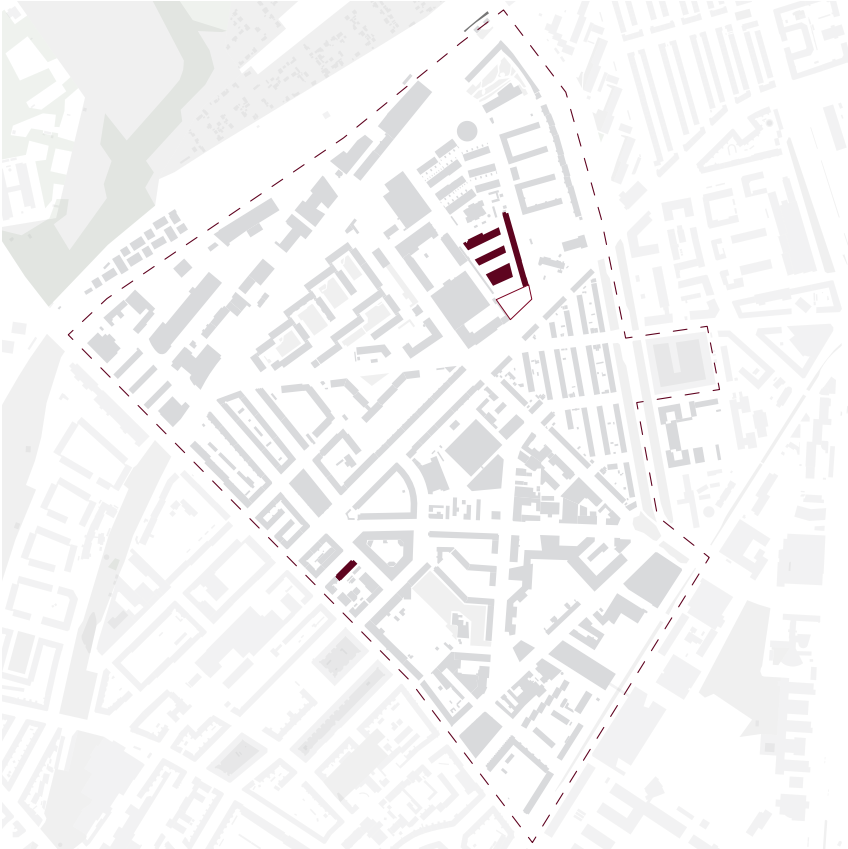
A remarkably wide street, shutting this side of the neighborhood off of the rest of the neighborhoods and the city. This shows fragmentation on a larger scale than only inside the neighborhood.



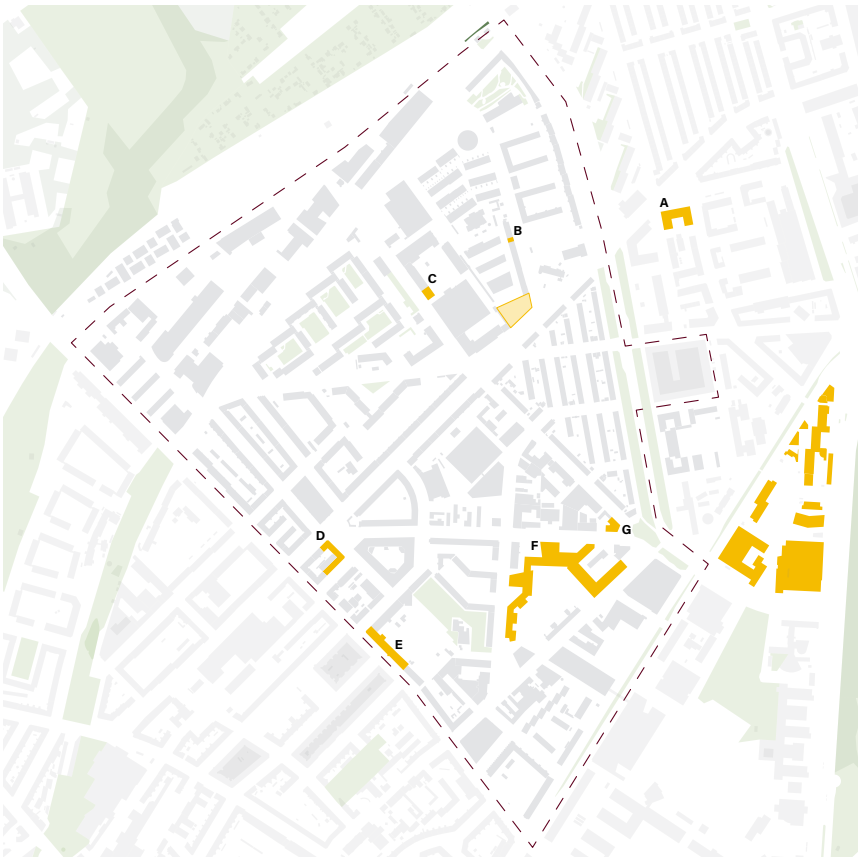
Conclusion



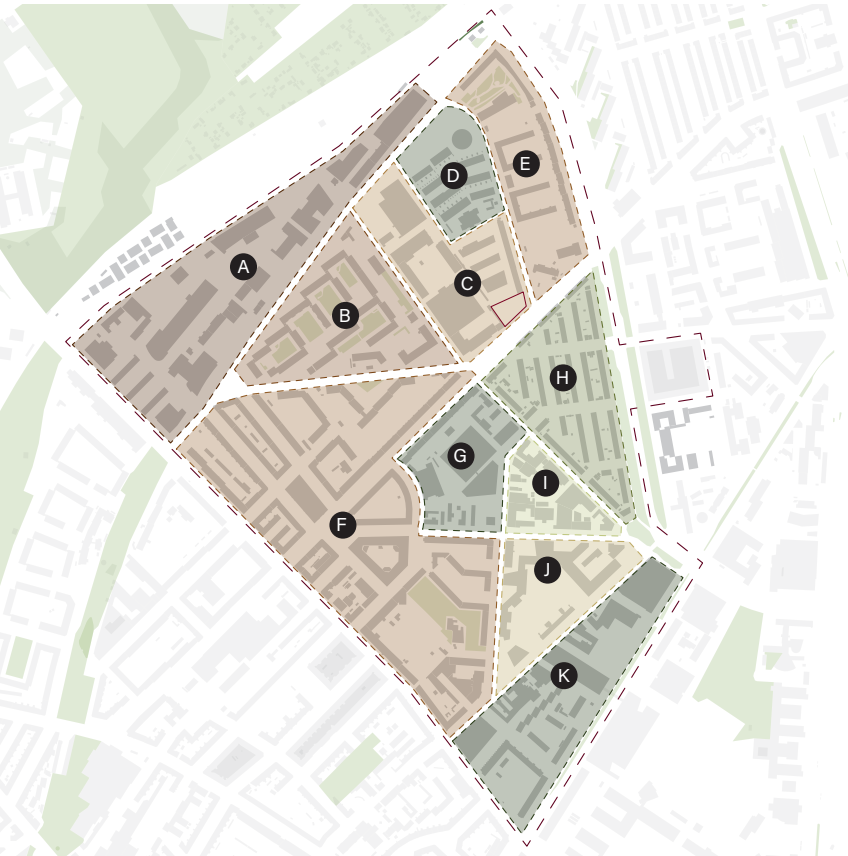
Lack of public greenery in the area, the public condenser should incorporate greenery.



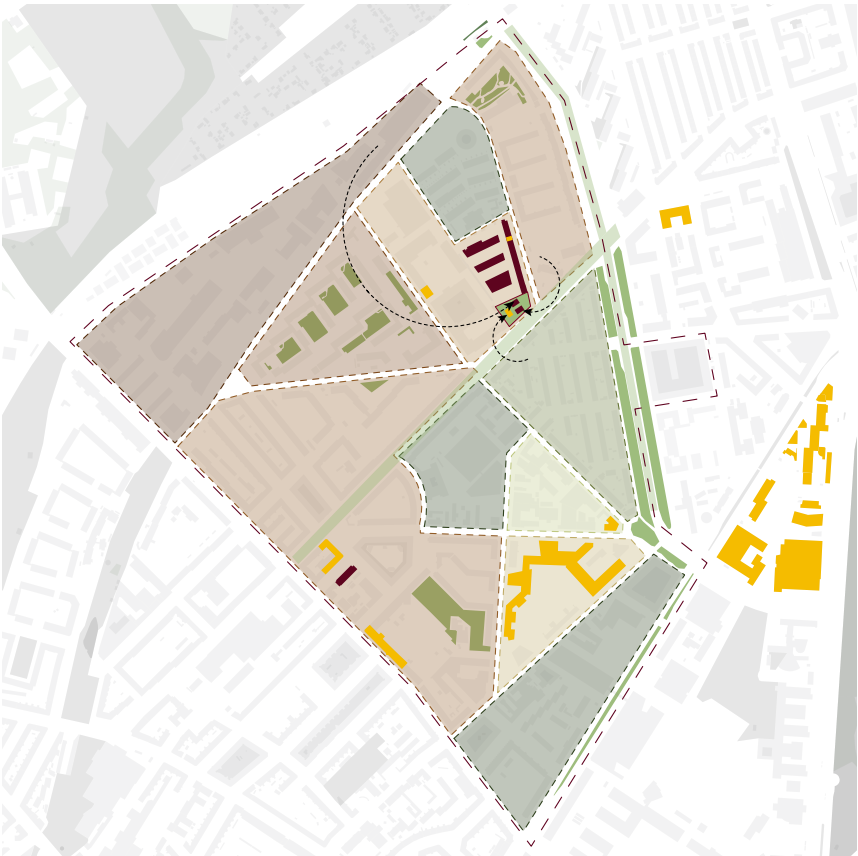
Lack of cultural facilities, the public condenser is meant as a cultural center with a low threshold for interacting with it, being functionally intertwined with the Bolsjefabrikken



There is a large amount of educational facilities in the area. The public condenser will incorporate general and some specific spaces for studying



The neighborhood consists of many different patches, that carry their own character. They are however disconnected from eachother through the way their boundaries are set up.



This data combined means that the public condenser will be a reflection of the neighborhood and its patches, fill in the lack of cultural facilities and incorporate greenery and support for local schools.

# Design strategies

The public condenser will reflect this part of the character of the neighborhood by creating a small “village”, that consists of different buildings with their own character, based on the existing patches in the neighborhood. These patches should however be connected by the placement of functions and the orchestration of the in-between spaces in an indeterminate way.

“SNAKE”

PATCH E&F

Reflects the snake-like shape of some of the building blocks in the neighborhood. This snake like volume has the opportunity to act as the thread that stitches the patches together and acts as the main circulation route through the building. It will be wide enough to support functions and will become the main “indeterminate” space. By its nature, the width of the corridor will allow this. It becoming the connections between the volumes will also allow them to merge in a way.

All floors



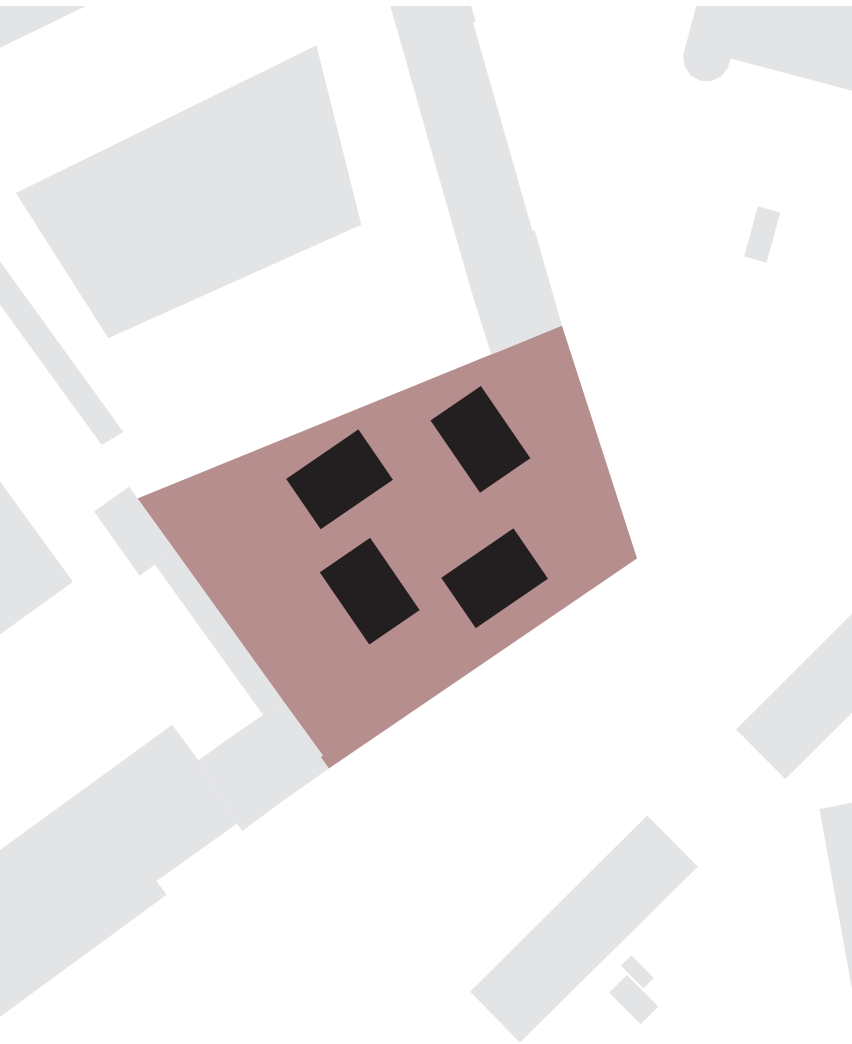
The idea is that certain defining features of the buildings and/or urban fabric in the patches will return in the different parts of the building. These more abstract translations are shown in below.

“BLOCKS WITH GREENERY”

PATCH B

This patch is represented in a more holistic way as opposed to the others. The building will consist of different blocks placed in a park.

Ground floor



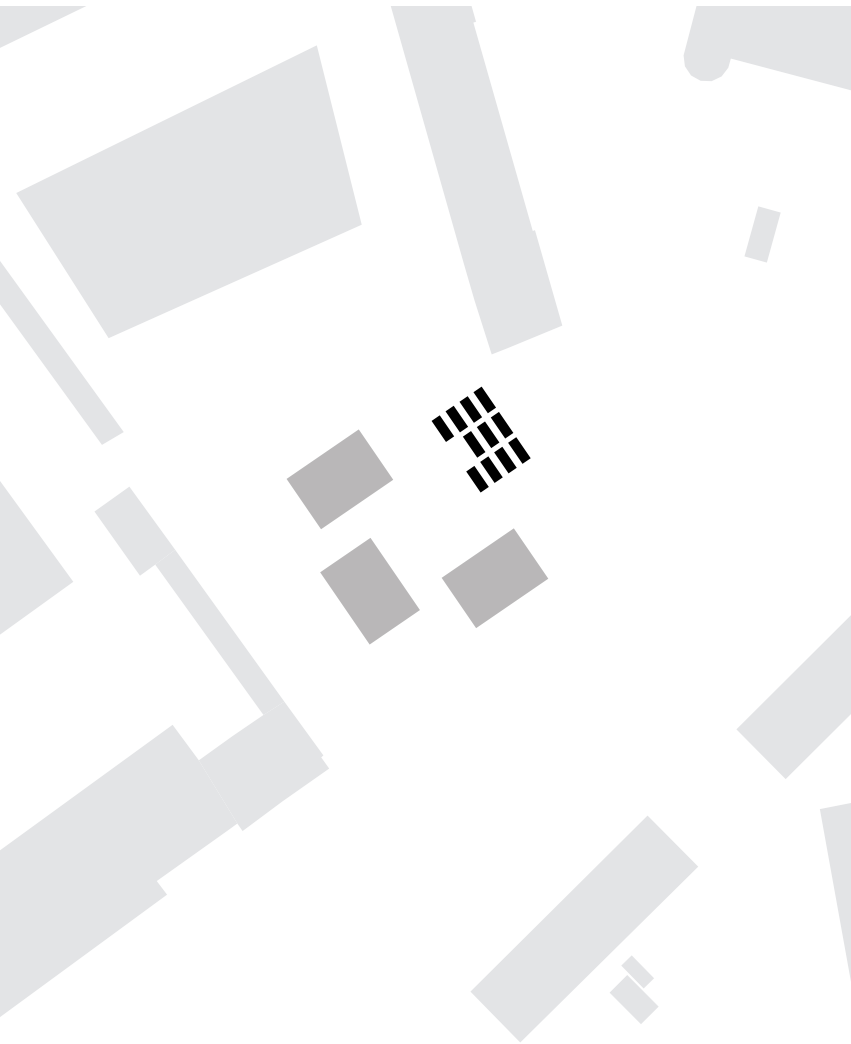
The incorporation of greenery will be on the ground floor, where the “snake” will serve only to provide a boundary to the site.

“ROW HOUSES”

PATCH H

A marketplace made up of fixed stalls, where local produce, homemade food and other items can be sold.

Ground floor, possibly first floor

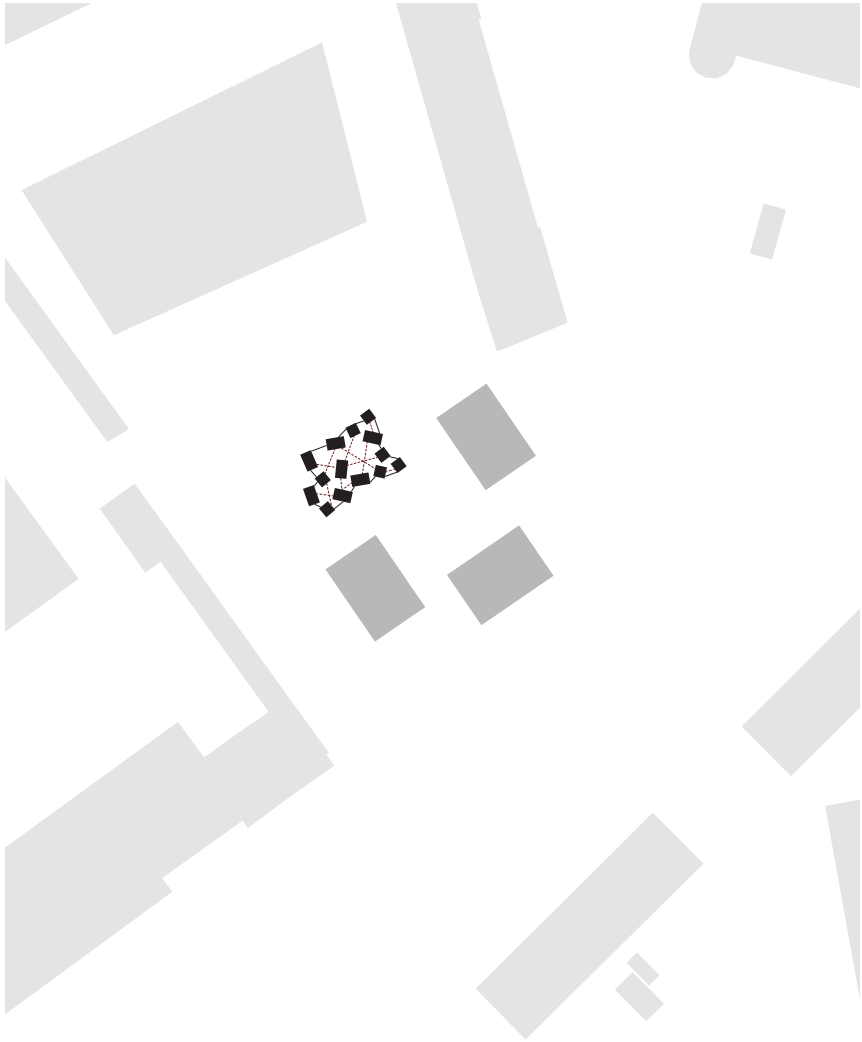


“SEEMINGLY UNORGANIZED”

PATCH A

A floor with volumes on it, placed in a seemingly unorga-  
nized matter. This could be where more dividable, smaller  
functions, such as study spaces and spaces for light exercise  
could go. This would result in a facade that is more angular,  
following the floorplan seen below

First floor

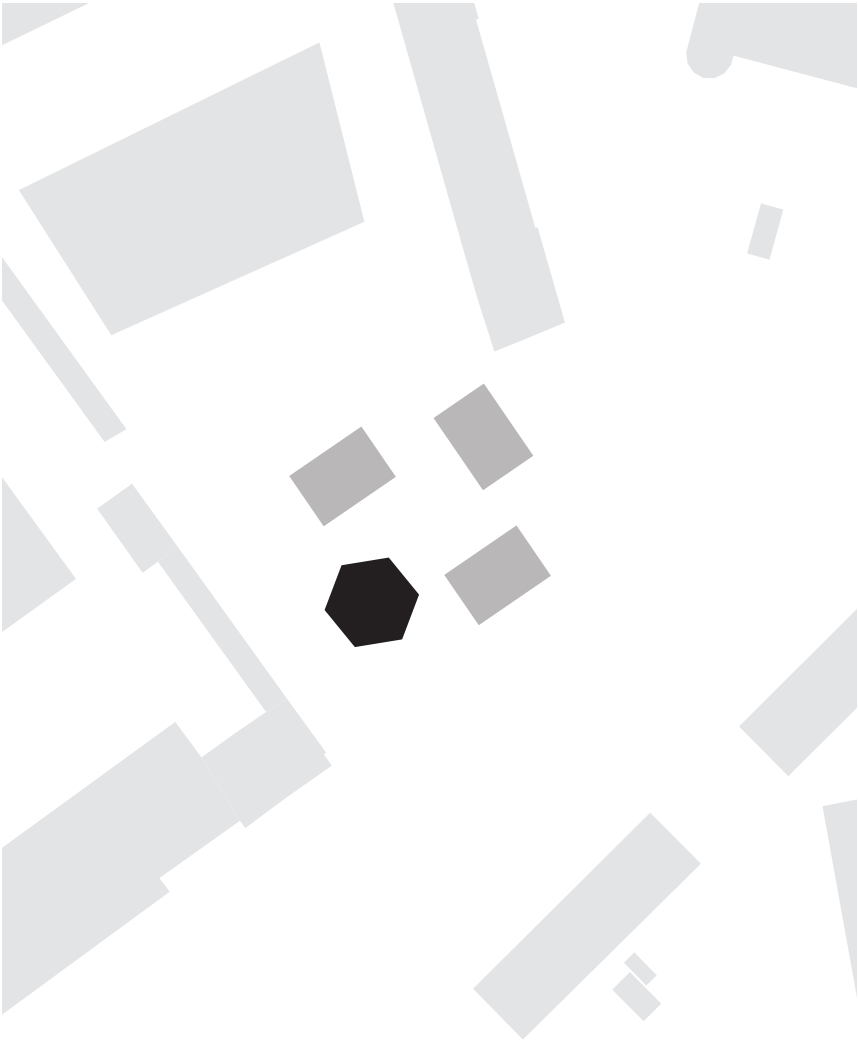


“UNIQUE TYPOLOGY”

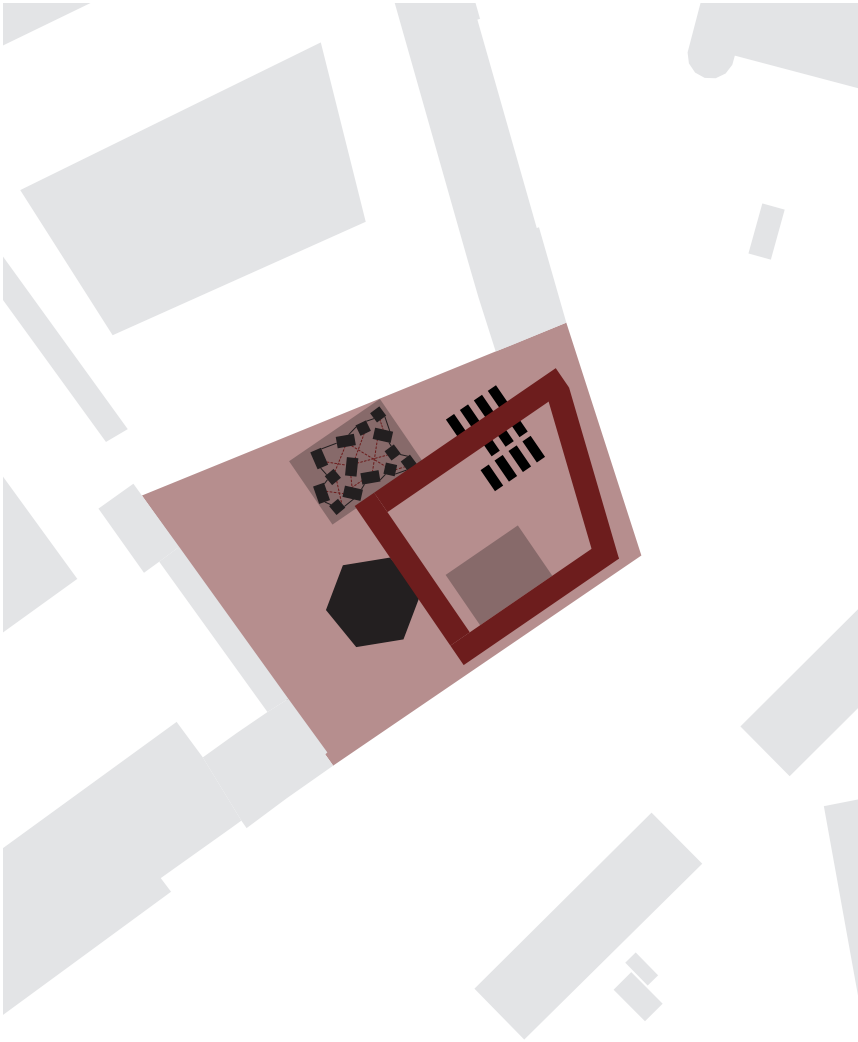
PATCH D

A building with a unique typology, could contain an atrium  
for example.

First floor

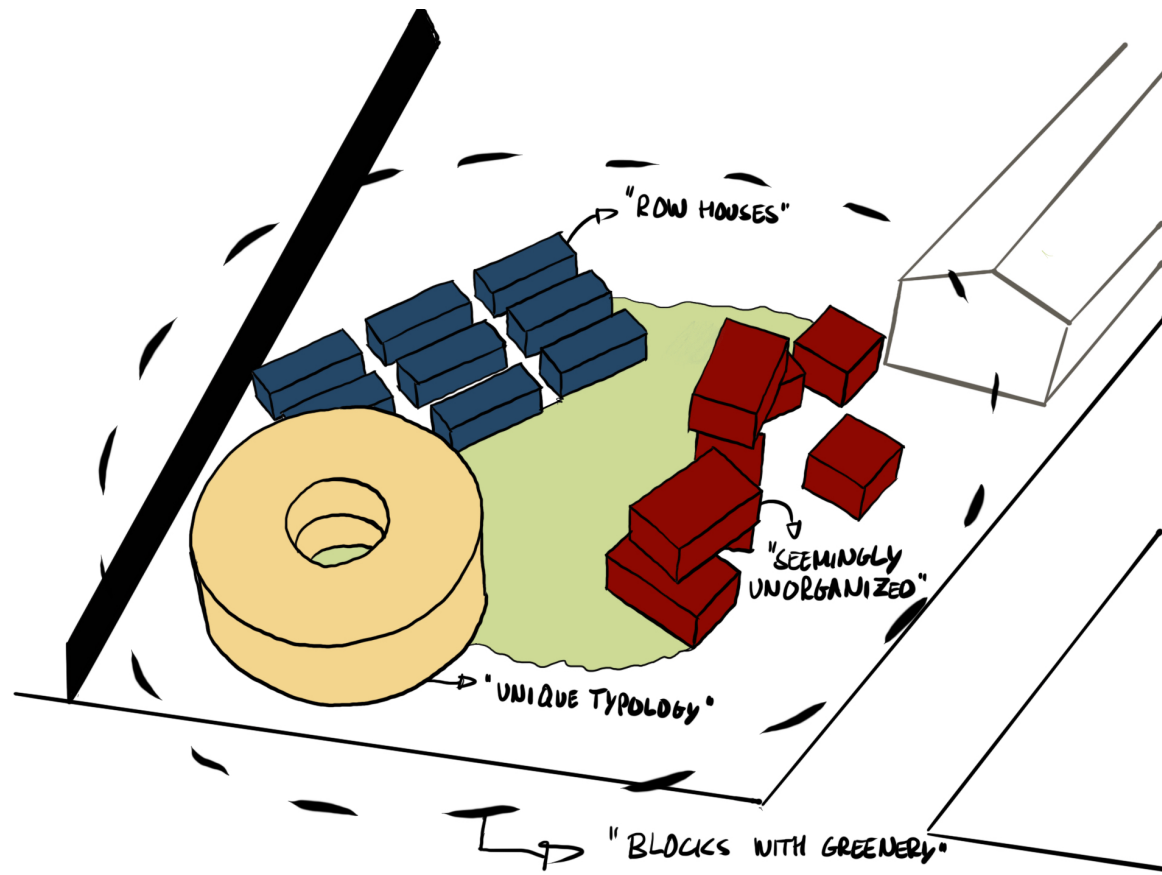


COMBINED

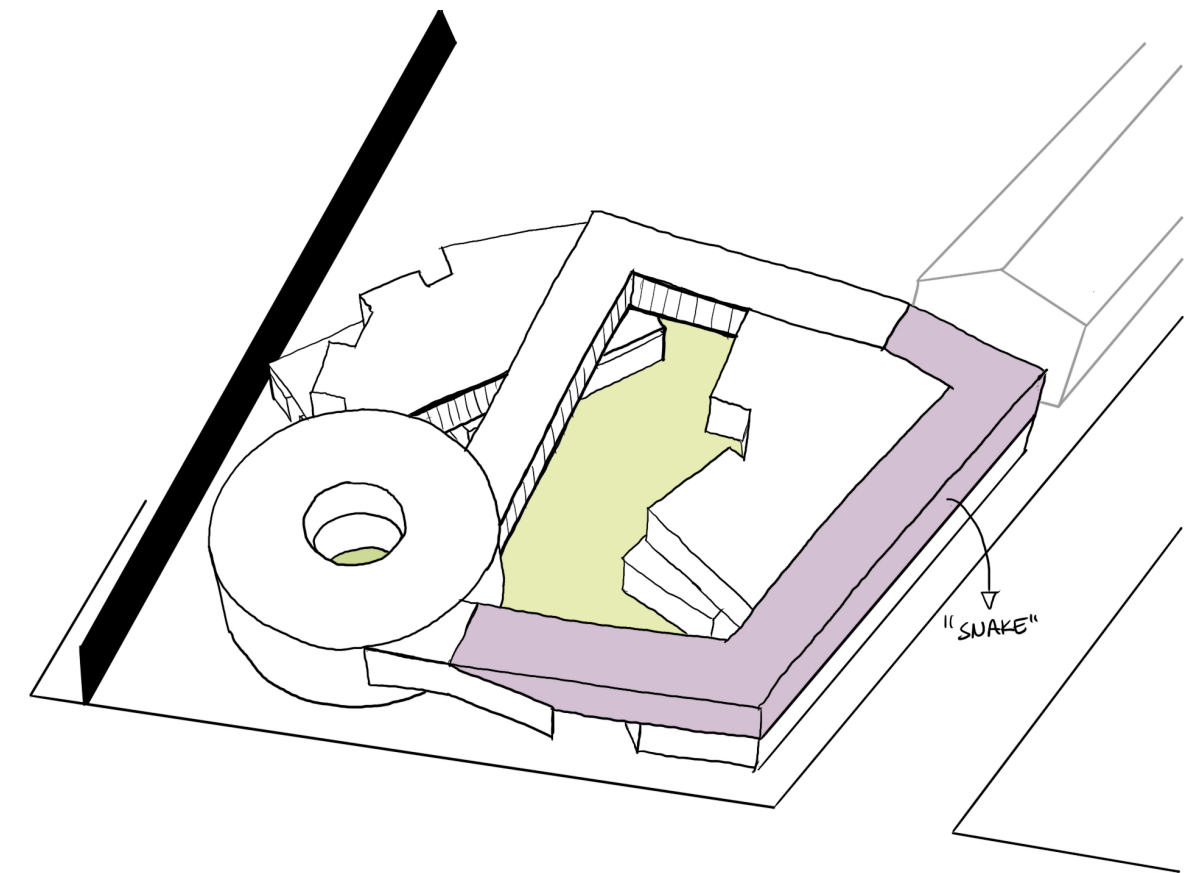
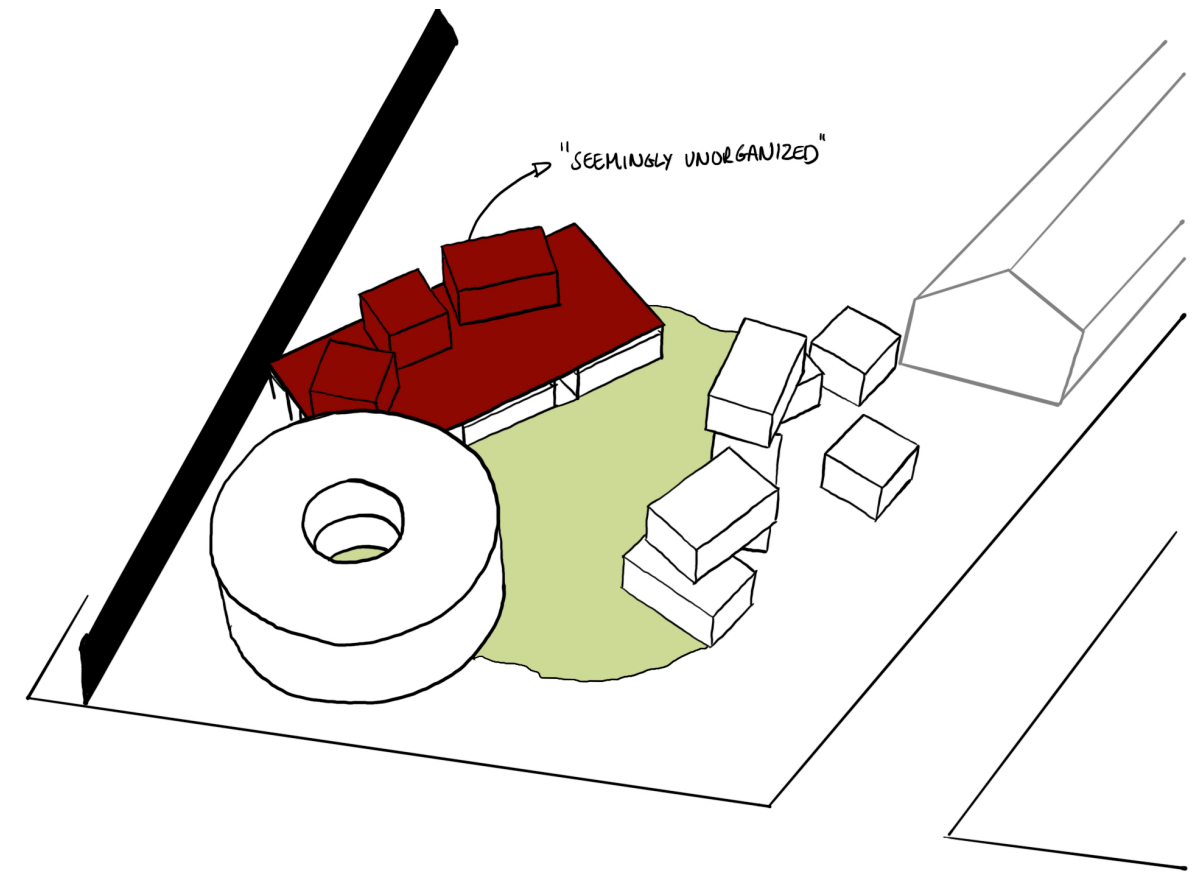




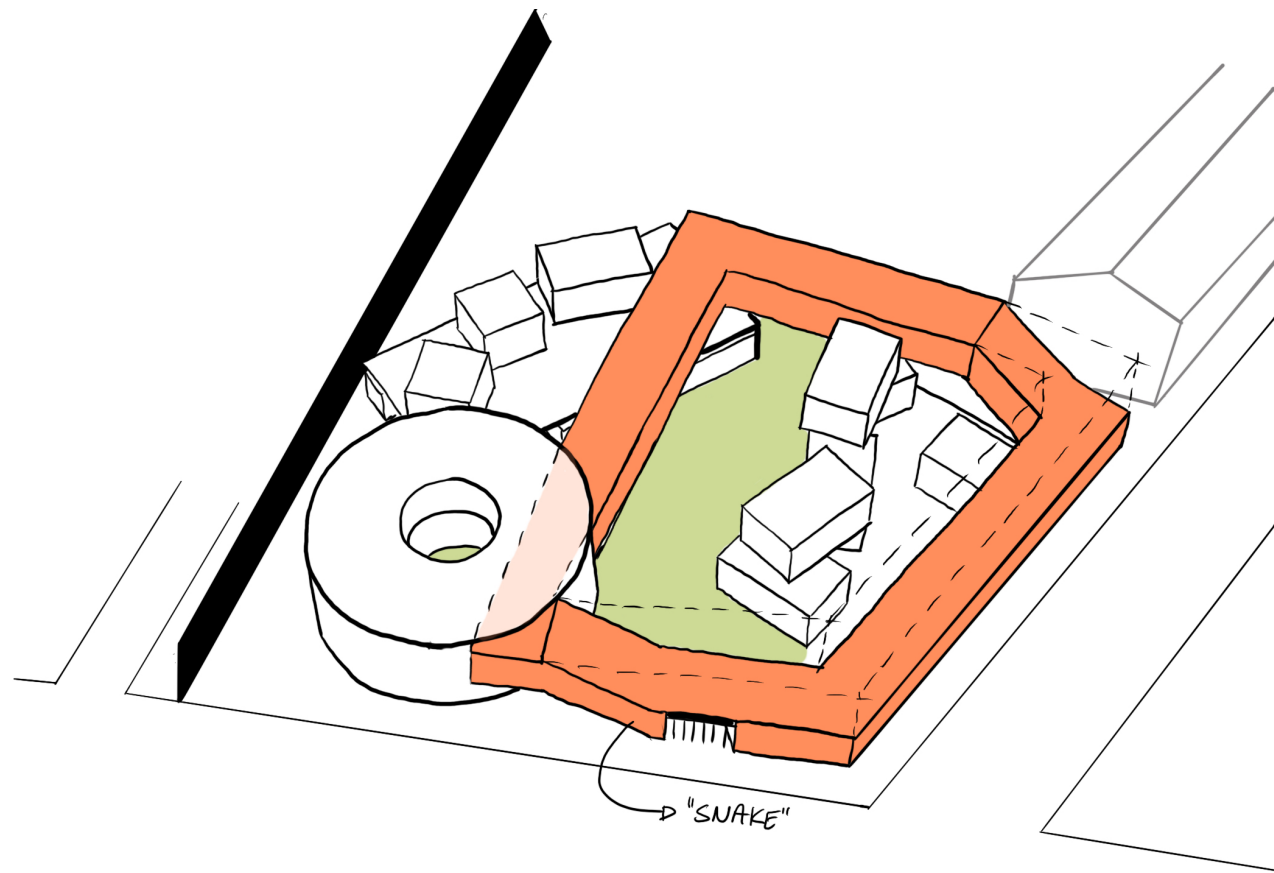
# MASSING DIAGRAM - IT. 1



Abstraction of patches

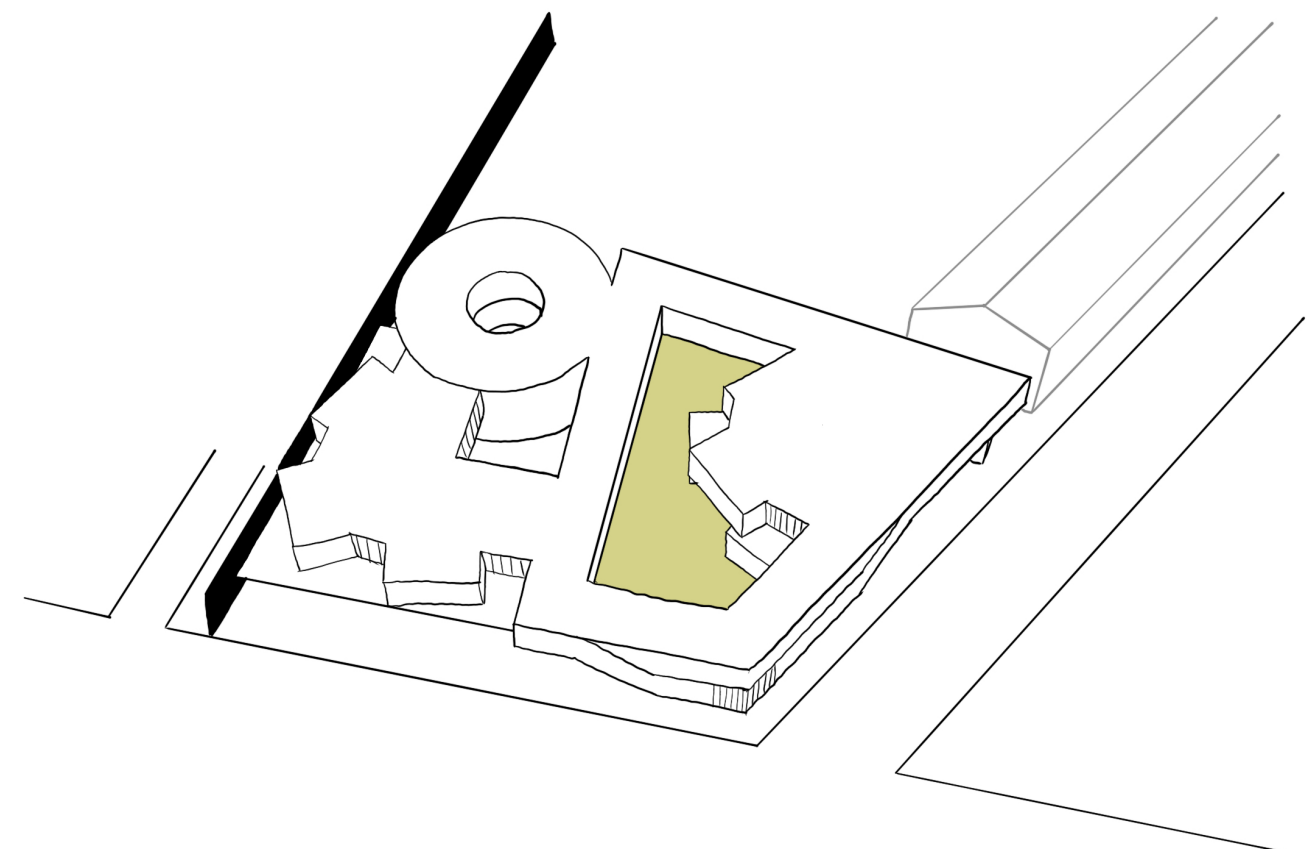
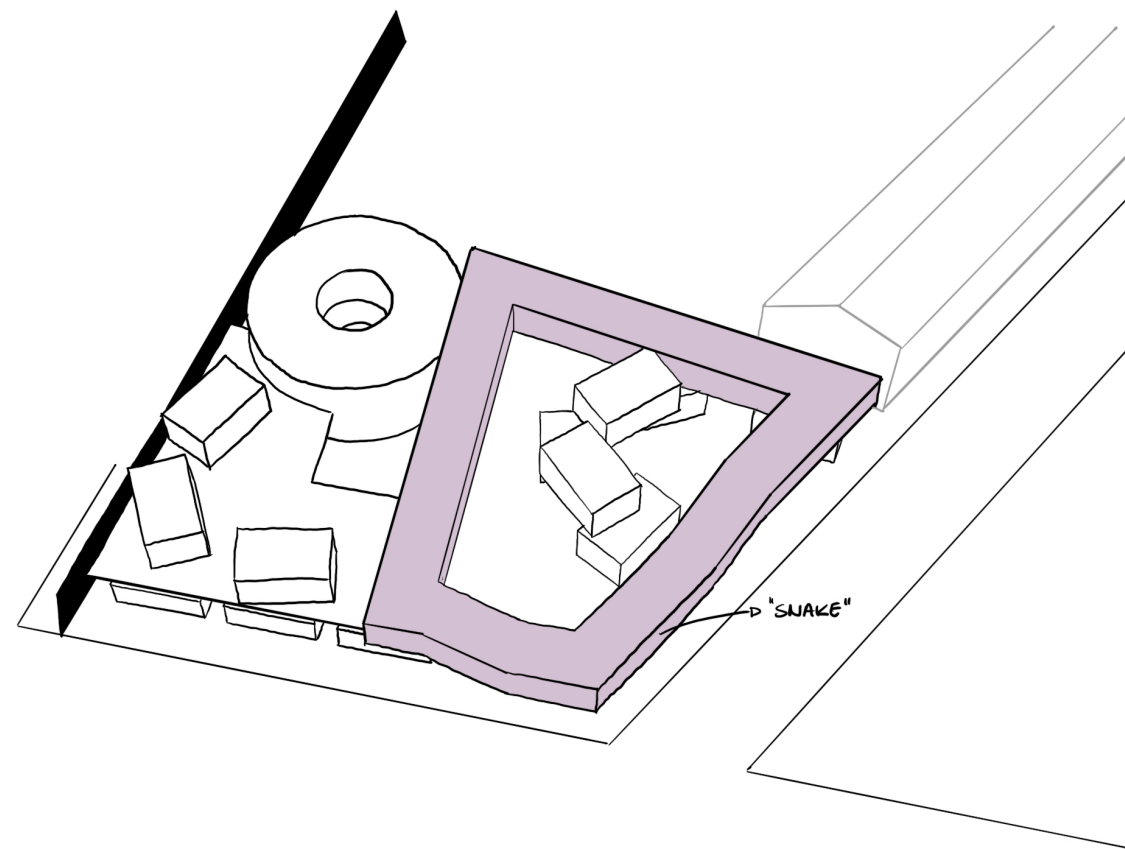
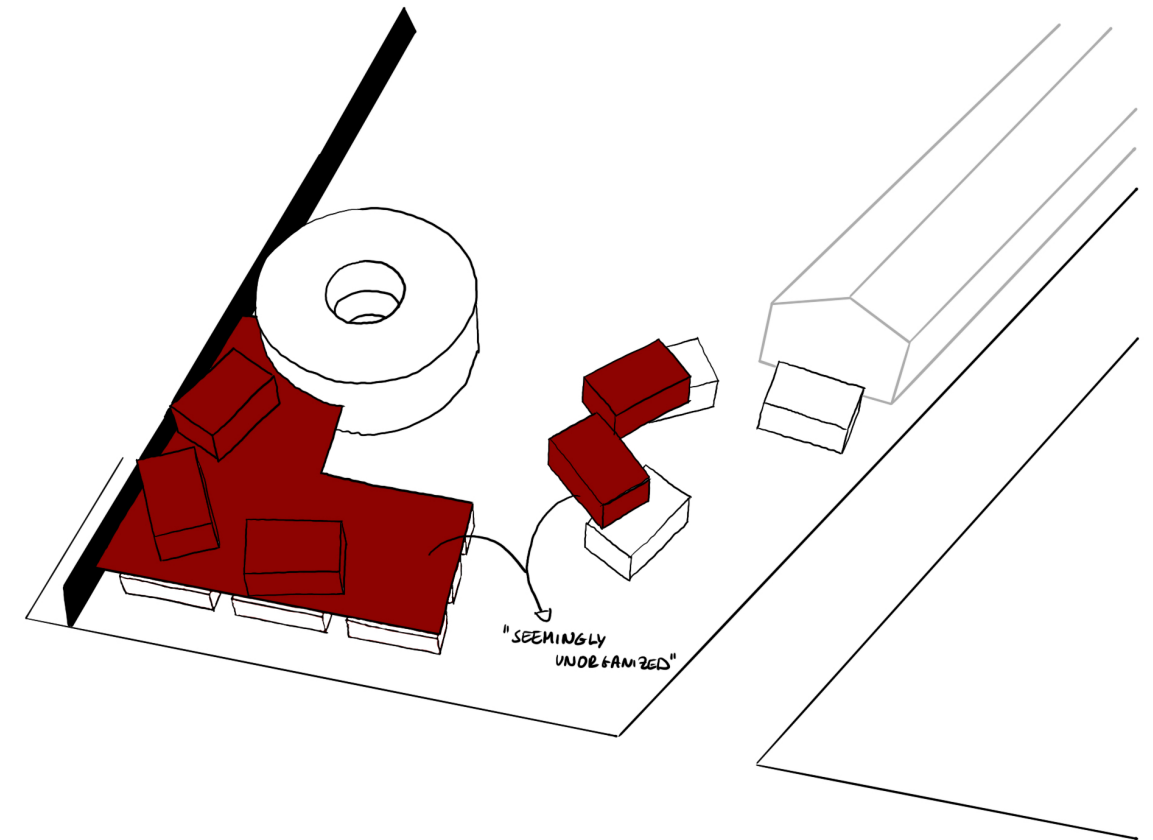
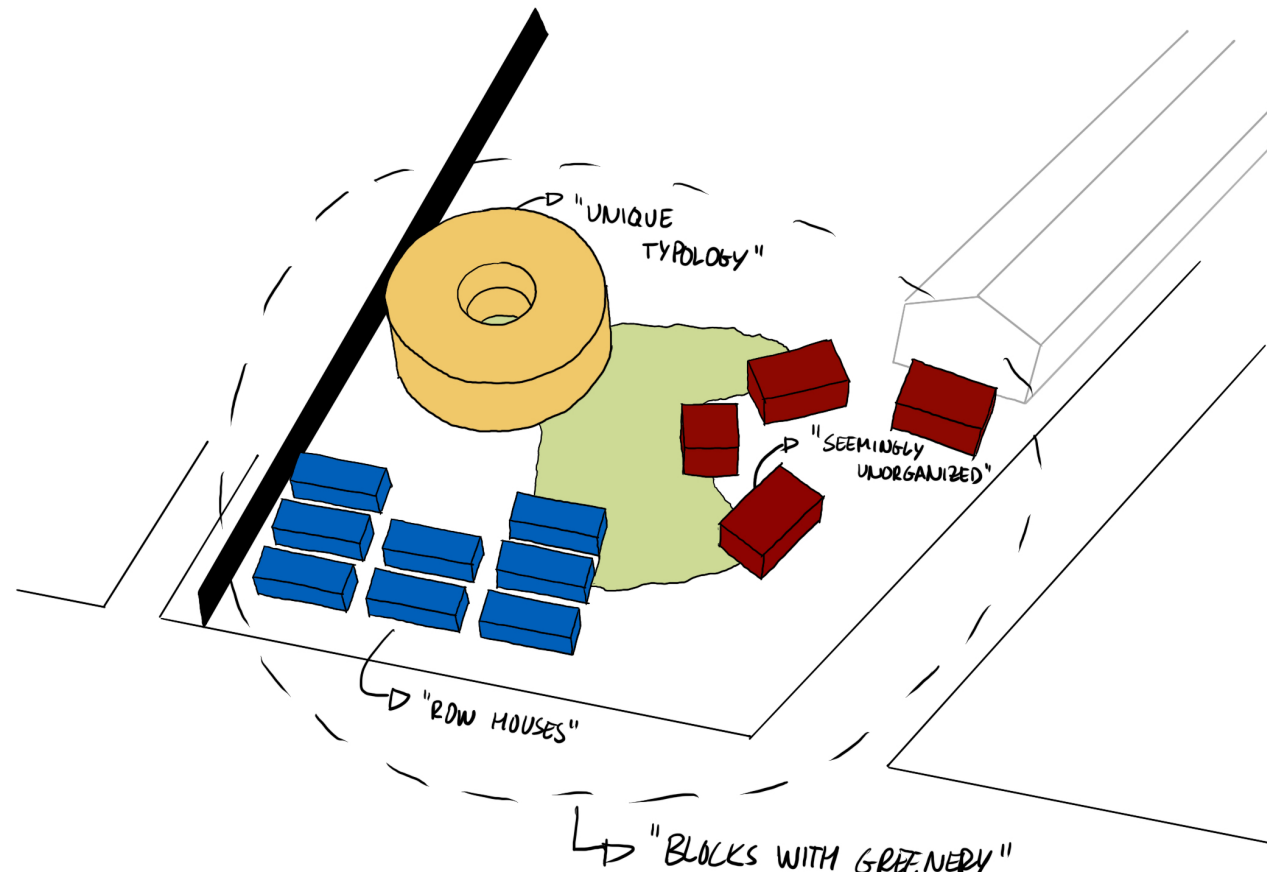


Completed mass



Traffic space

## MASSING DIAGRAM - IT. 2



**Brief**

***Educational facilities***

- “Normal” study spaces
- Spaces for light exercise (yoga etc.)
- Spaces for mindfulness
- Spaces for handcraft
- Space with a herbal garden
- Dyslexia and counseling spaces
- Workshop spaces
- Library?

***General functions***

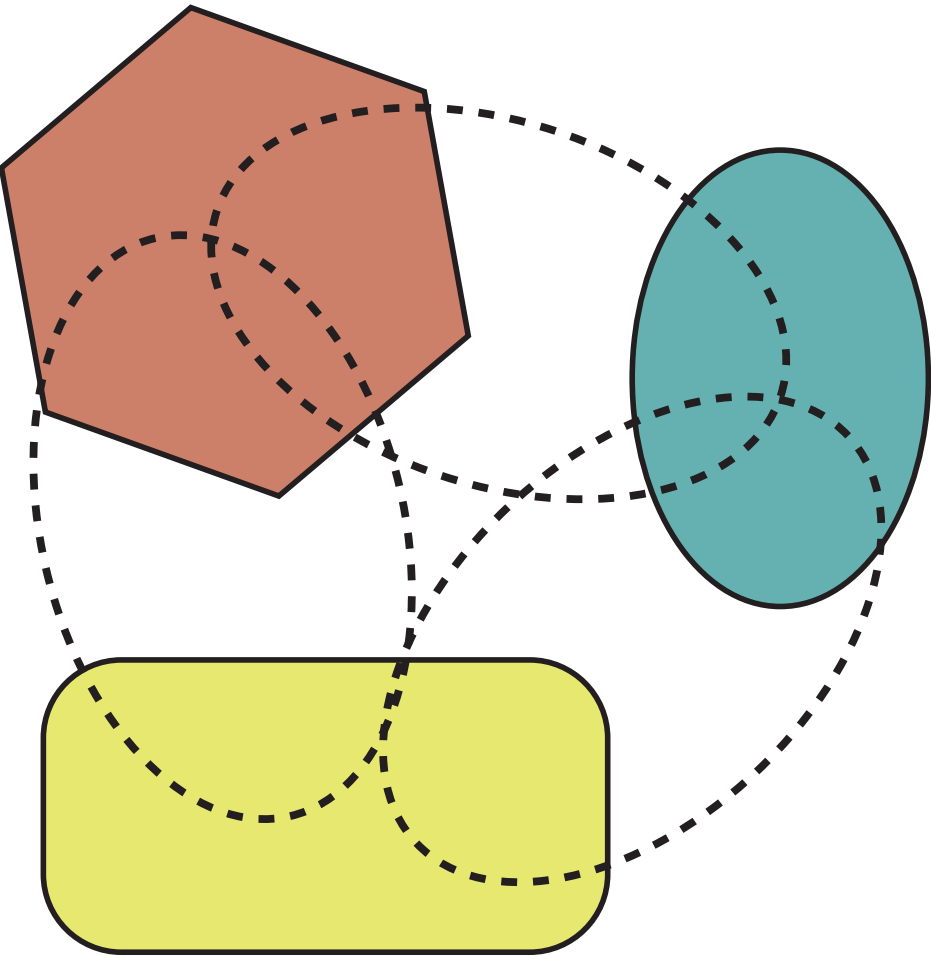
- Reception
- Emergency care
- Storage
- Toilets

***Connection to Bolsjefabrikken***

- Artist studio's (also in residence)
  - Music*
  - Painting*
  - Masonry*
- Skate rink
  - Supports skate school*
  - mitigates removing*
  - existing skate rink*

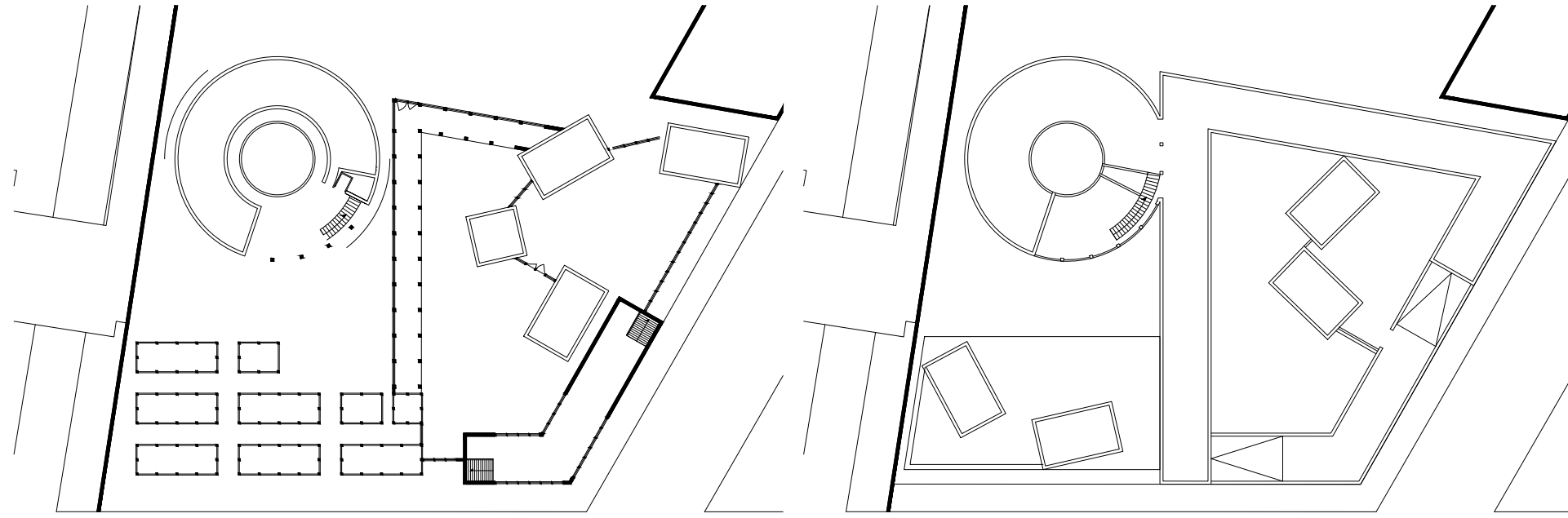
***Functions for activation***

- Local businesses
- Bar
- Urban living room
- Food

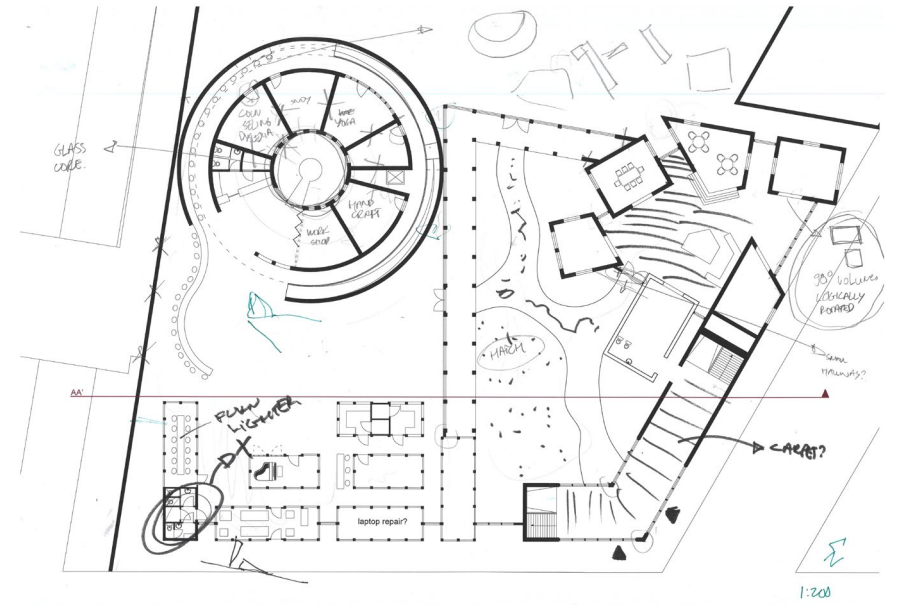


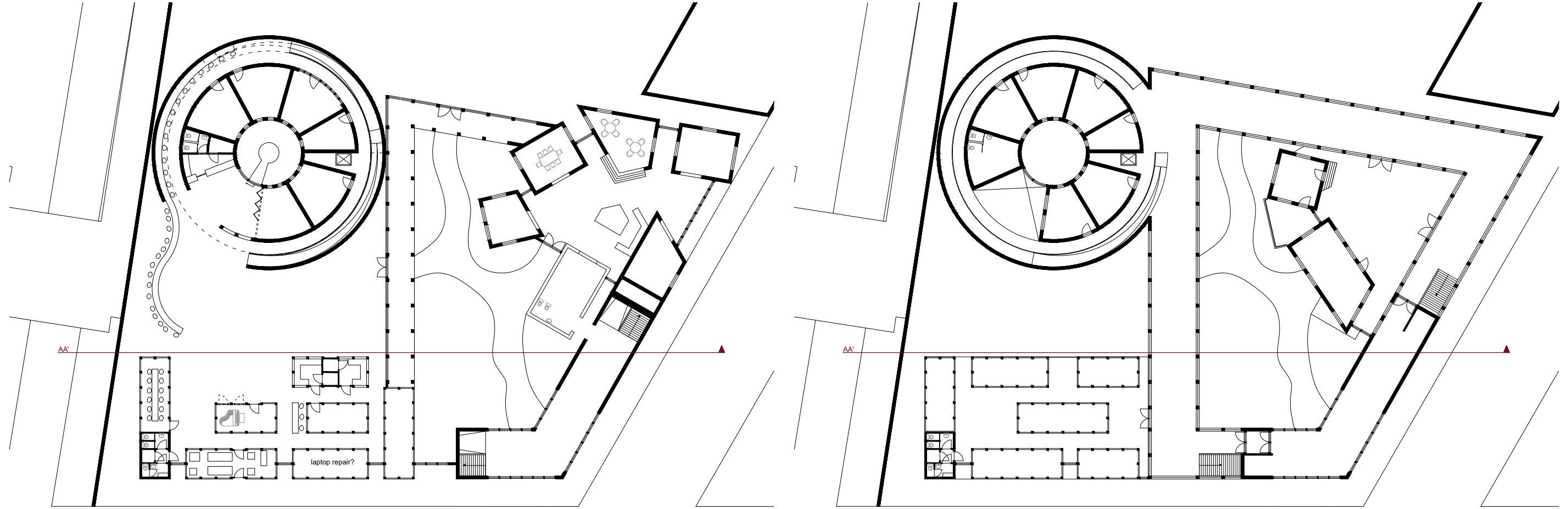


With this christmas break update, there was enough research to link the massing and spatial concept found in the building to the site. In essence, the spatial concept remained the same, only the massing changed.



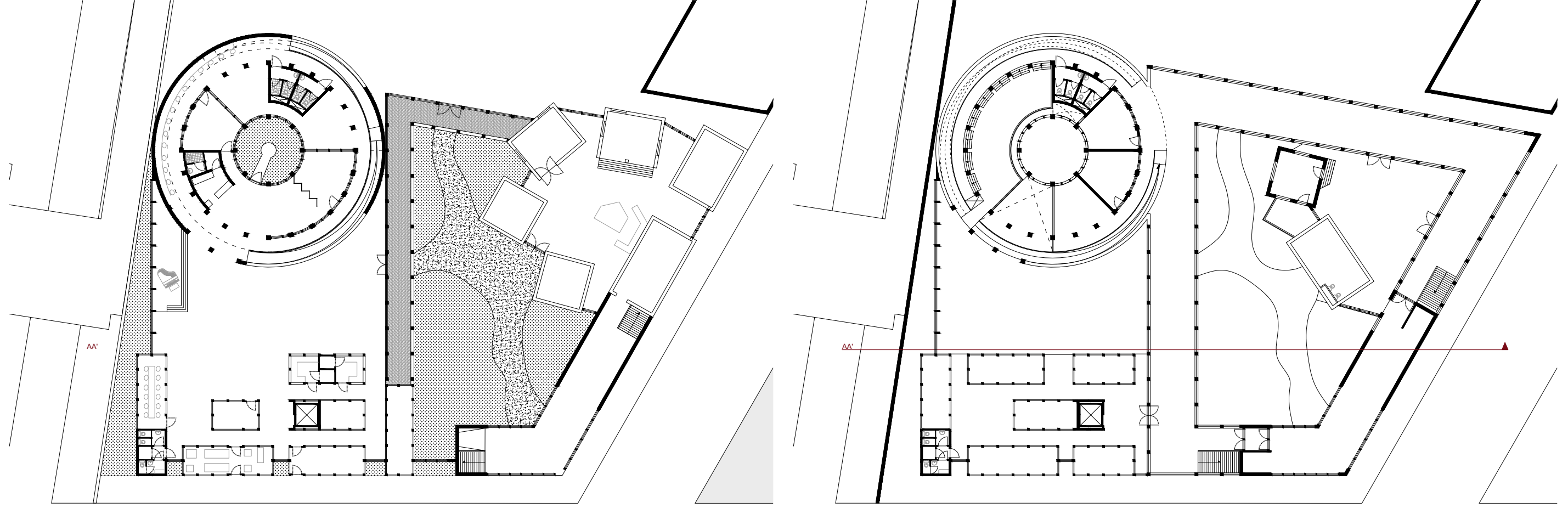
The second spatial interaction taken from the design principles was chosen to be further developed until the P2.





Further exploration of the spaces. For conceptual consistency, the same spatial language was used on the first floor of the “row houses” part. Before, this carried the visual language of the “seemingly unorganized” part.





Final developments before the P2, which included a more spatially free organization of the circular volume.



P2



# URBAN COLLAGE

*Counteracting fragmentation in the Haraldsgadekvarteret*

**DATA**



**DESIGN  
STRATEGIES**



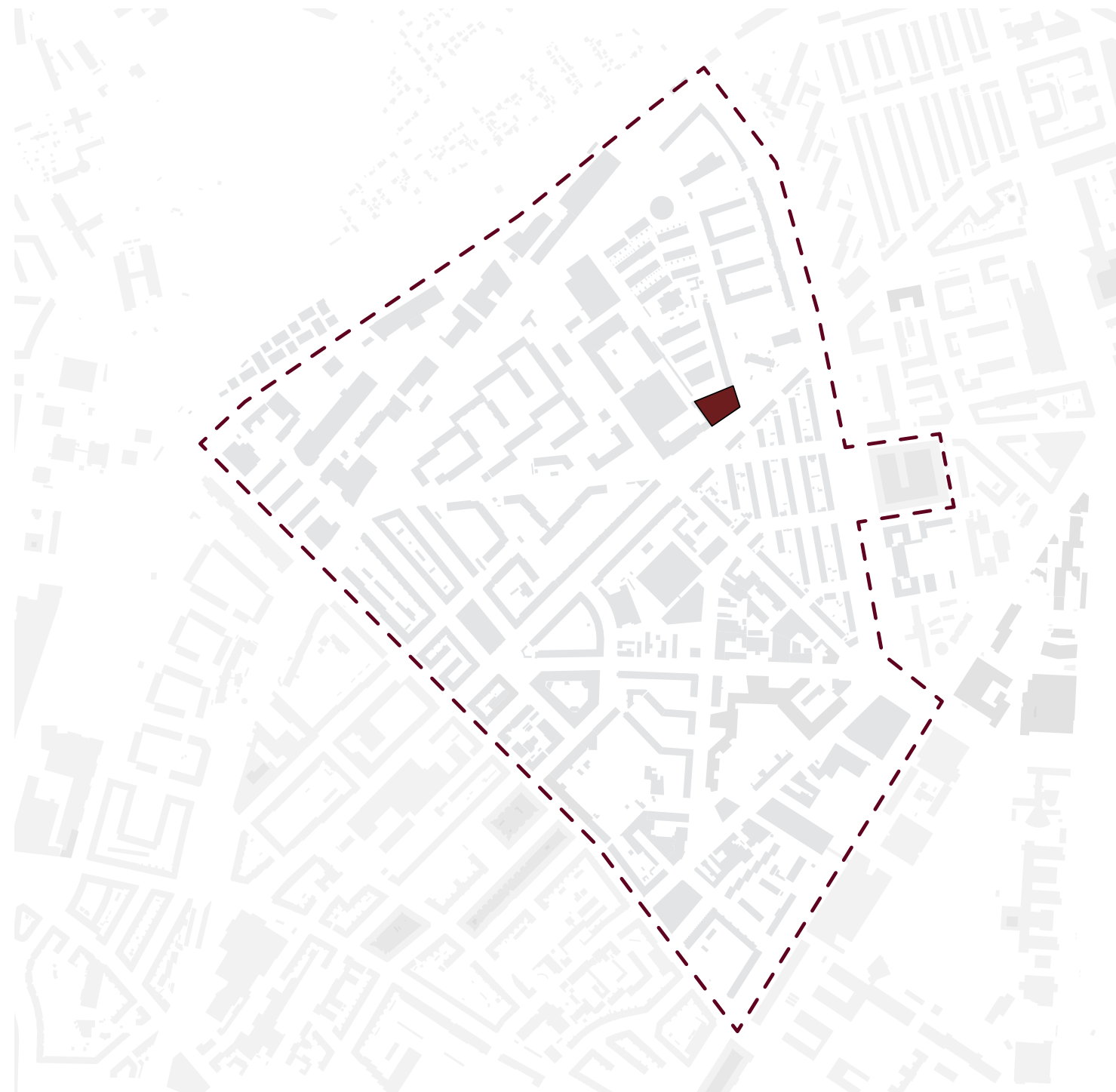
**DESIGN**

**DATA**





*Districts of Copenhagen*



*Haraldsgadekvarteret & site area*

**SITE AREA**

**GREATER DISCOURSE**

**GREENERY**

**BUILDINGS**




**URBAN FABRIC**

**(IN)DETERMINACY**

# GREENERY

# SITE

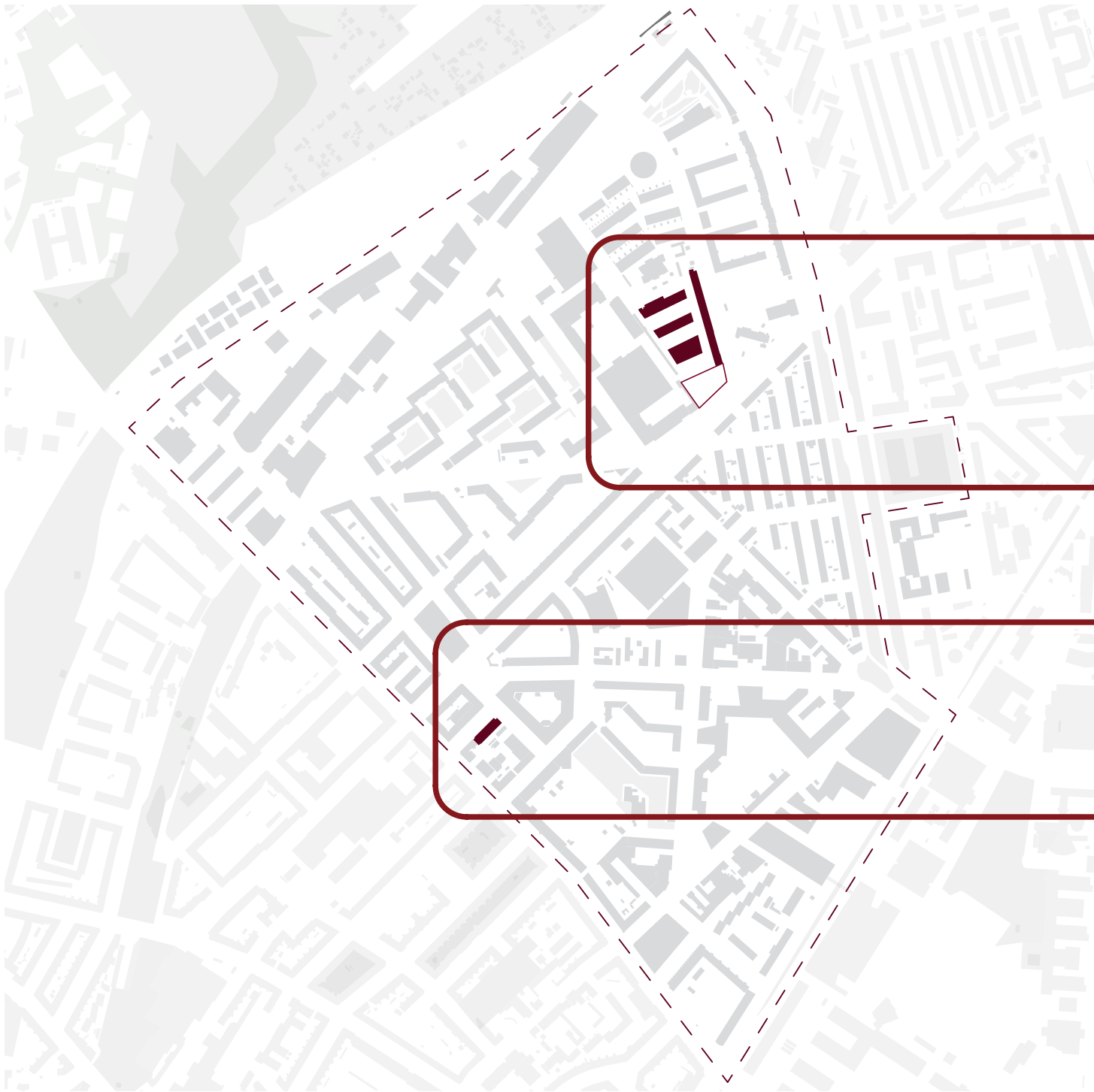


-  Site
-  Neighborhood border
-  Future green interventions by municipality



Lack of publicly accessible greenery. More greenery is to be added to two major streets in the neighborhood, one of which is next to the site area.





**The Bolsjefabrikken**  
The Bolsjefabrikken is a famous non-profit organization that contains a variety of functions, such as a bicycle repair shop, a café and artist studios.



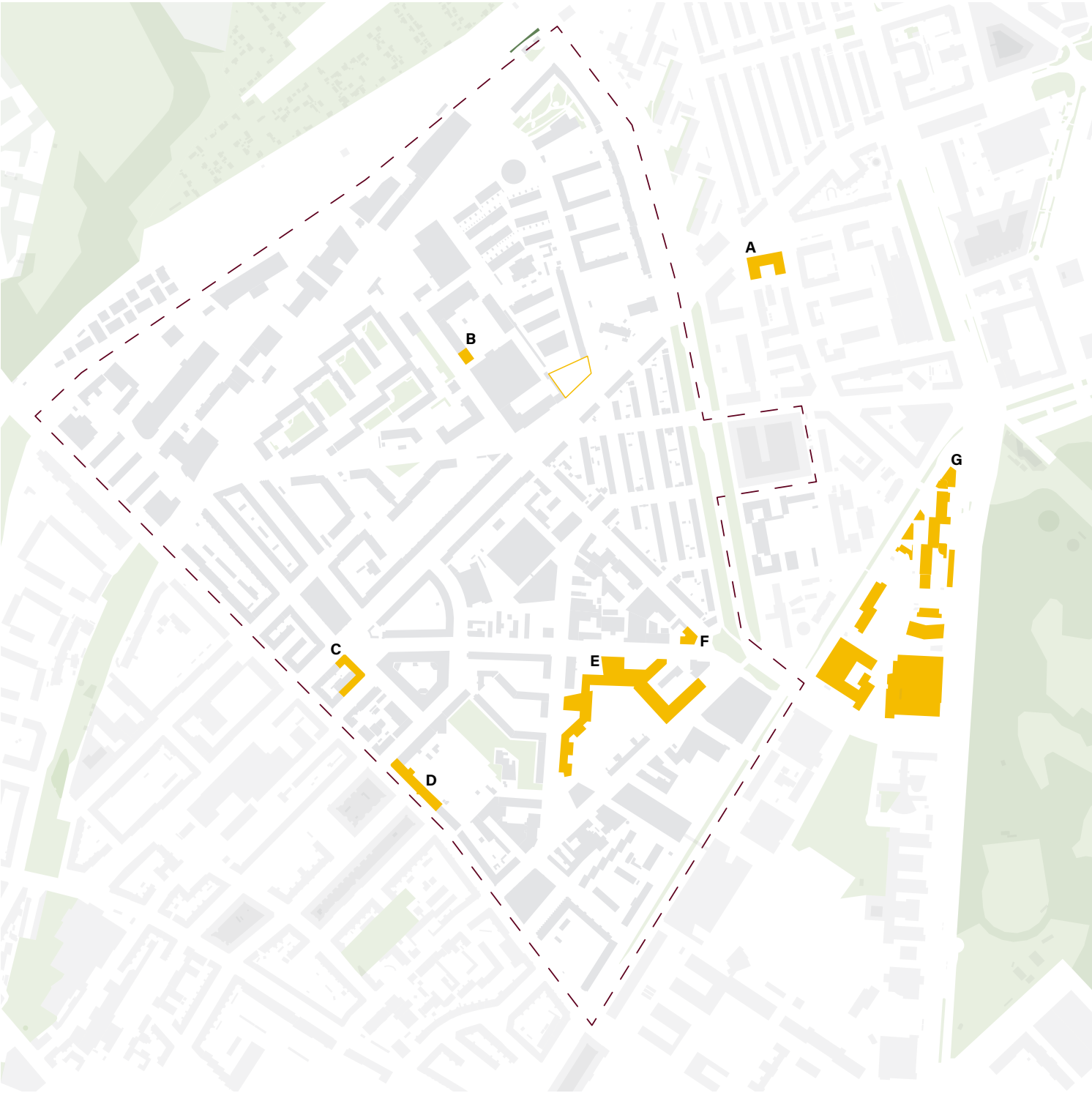
**OSRAMHUSET**  
Public building available for meetings and courses involving childcare and pregnancy.



# BUILDINGS

Educational Facilities

# SITE



**A: Herbal Medicine School and Dyslexia Center**

**B: Sine Ginsborg Hair & Make-Up school**

**C: Part of the Copenhagen Vocational School**

**D: Part of the University of Copenhagen**

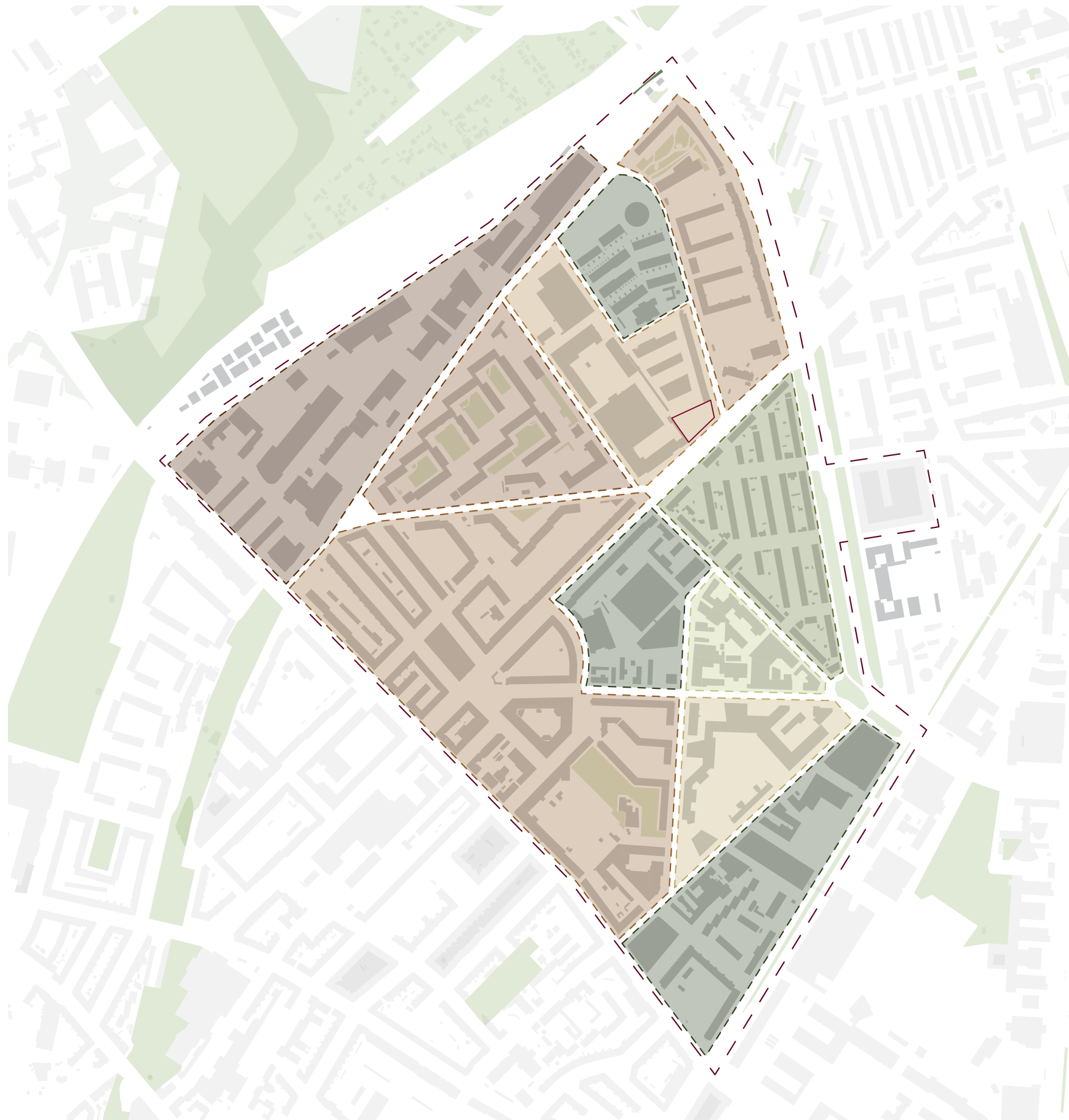
**E: Copenhagen Vocational School**

**F: AOF Center Copenhagen**

**G: University of Copenhagen**

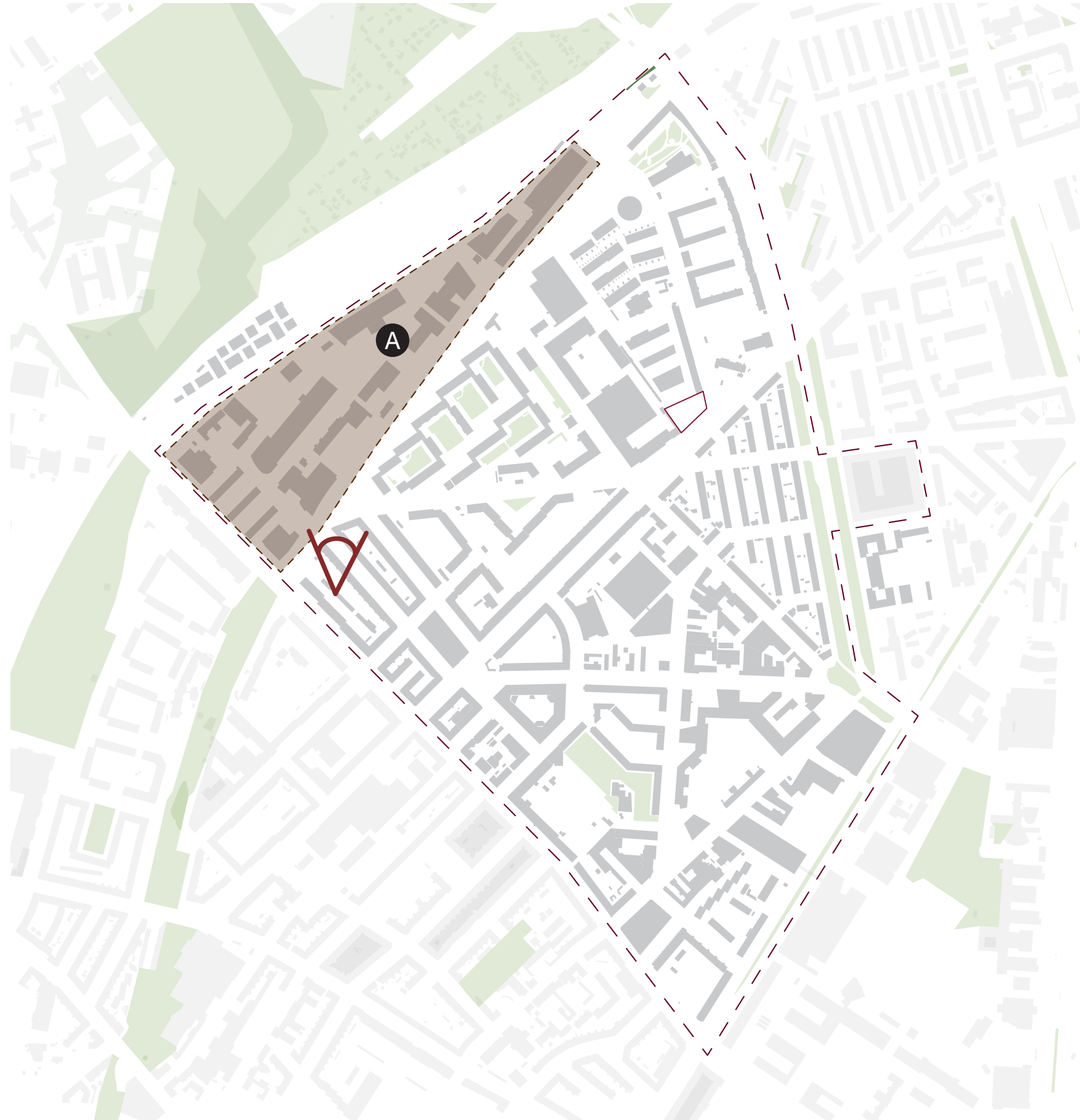
URBAN FABRIC

SITE

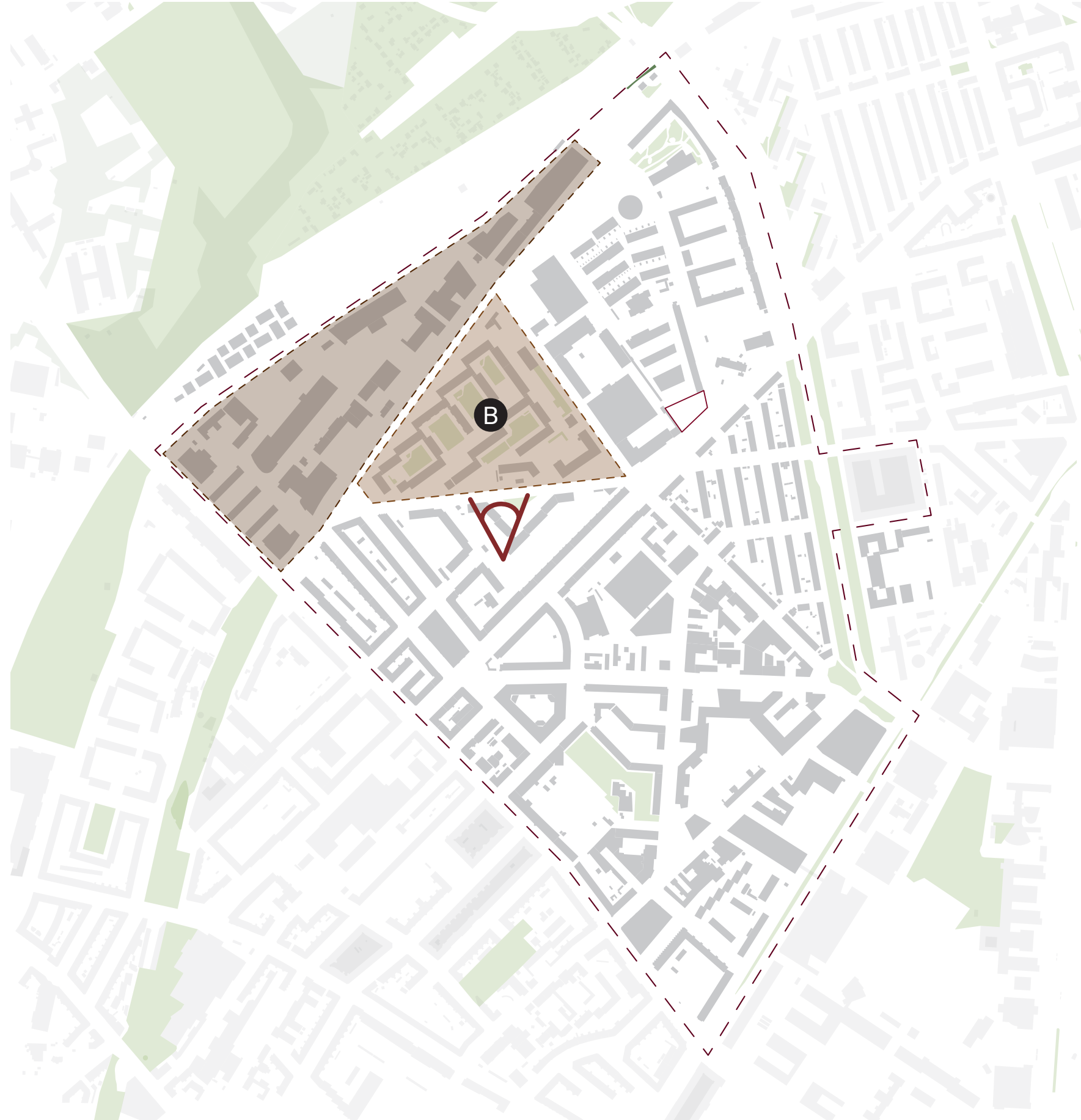




## CAR DEALERSHIPS

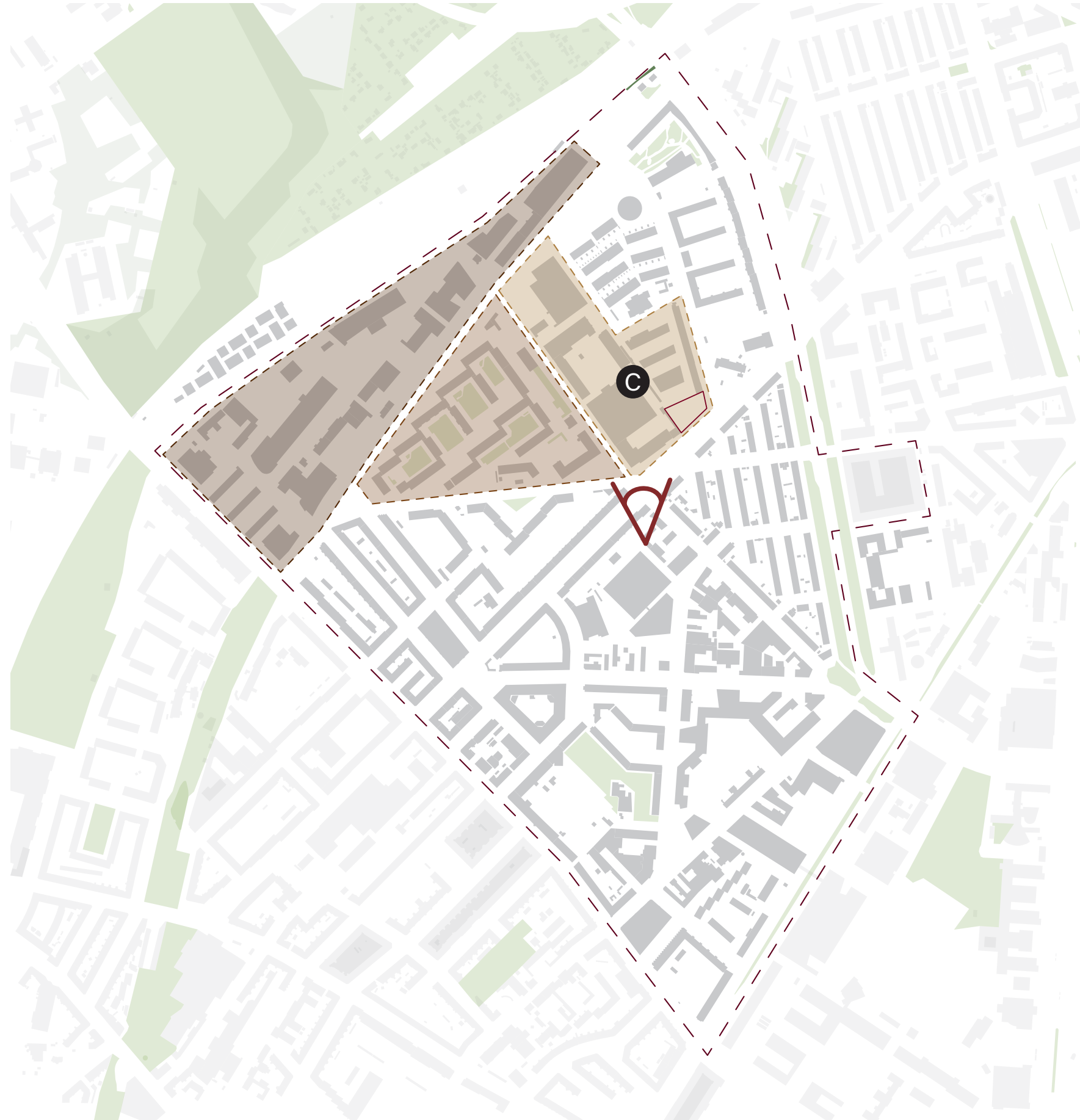


## HOUSING BLOCKS WITH ELABORATED COMMON GREEN AREAS



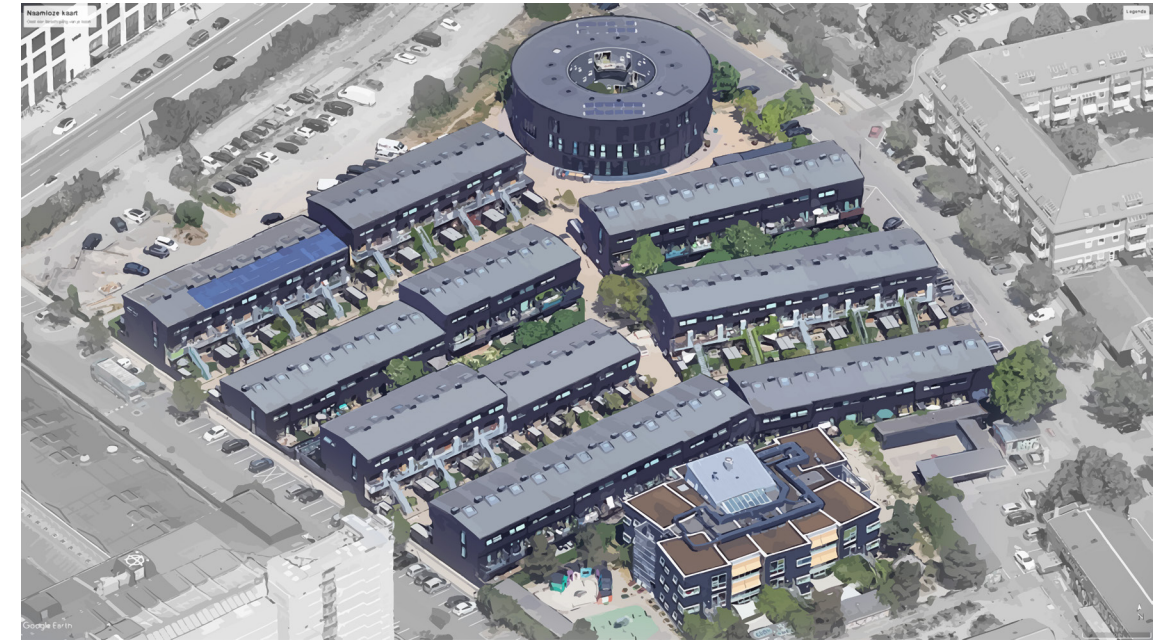
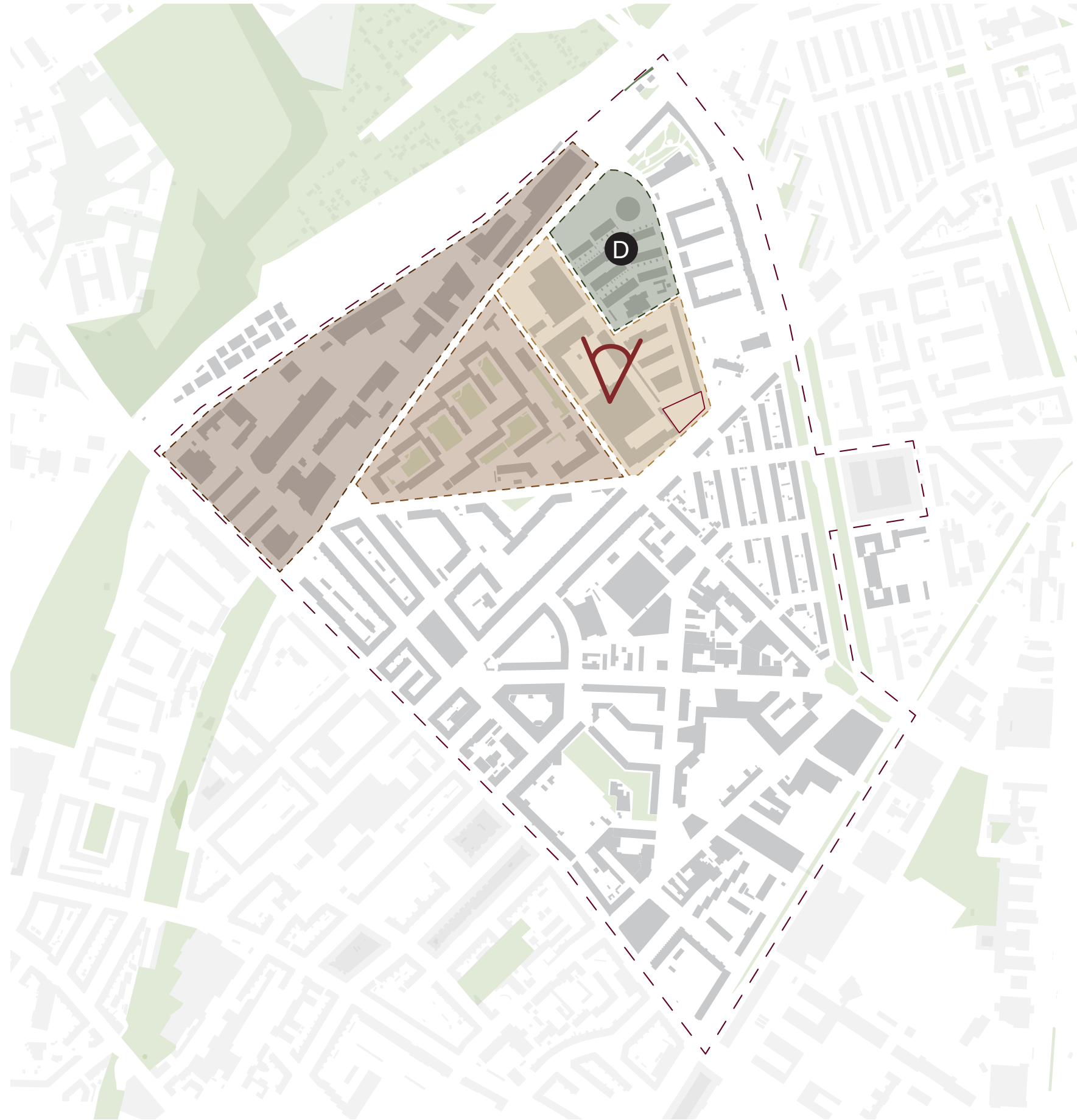


## RECLAIMED INDUSTRY



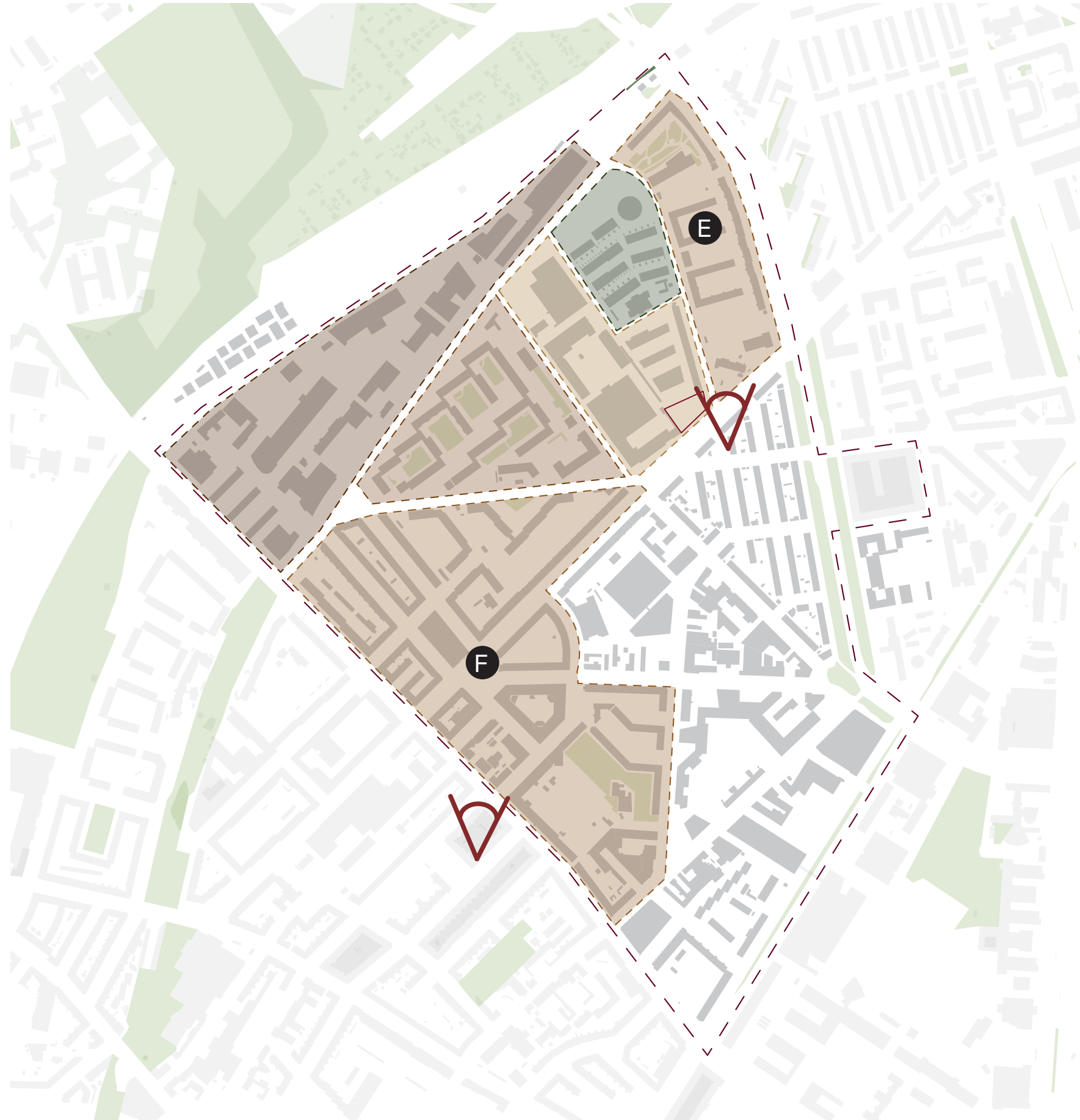


## UNIQUE TYPOLOGIES



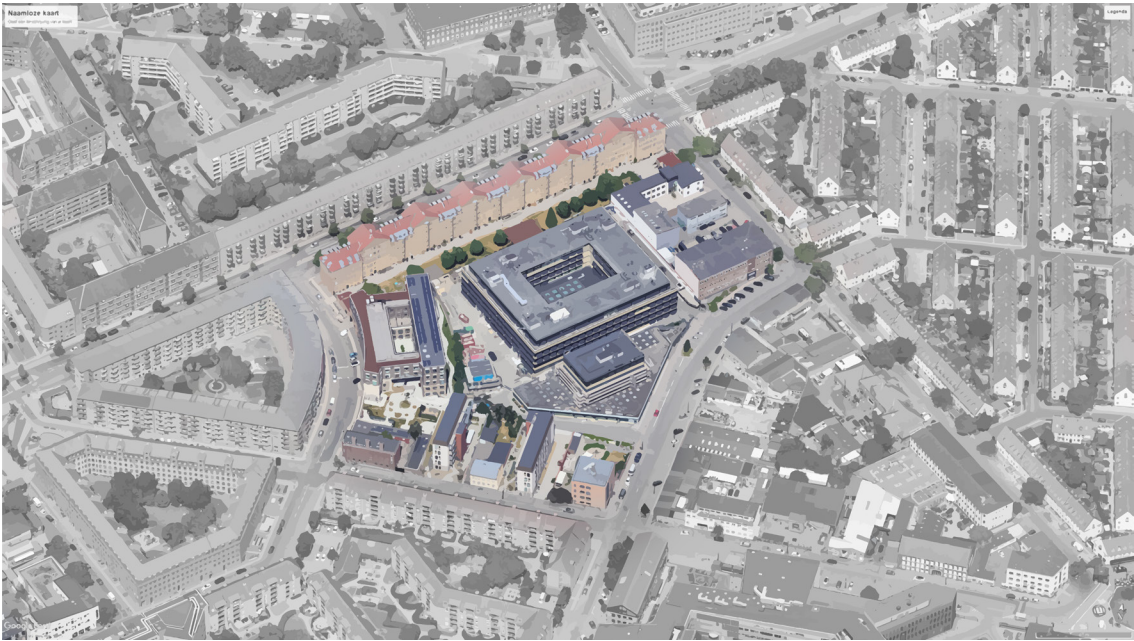
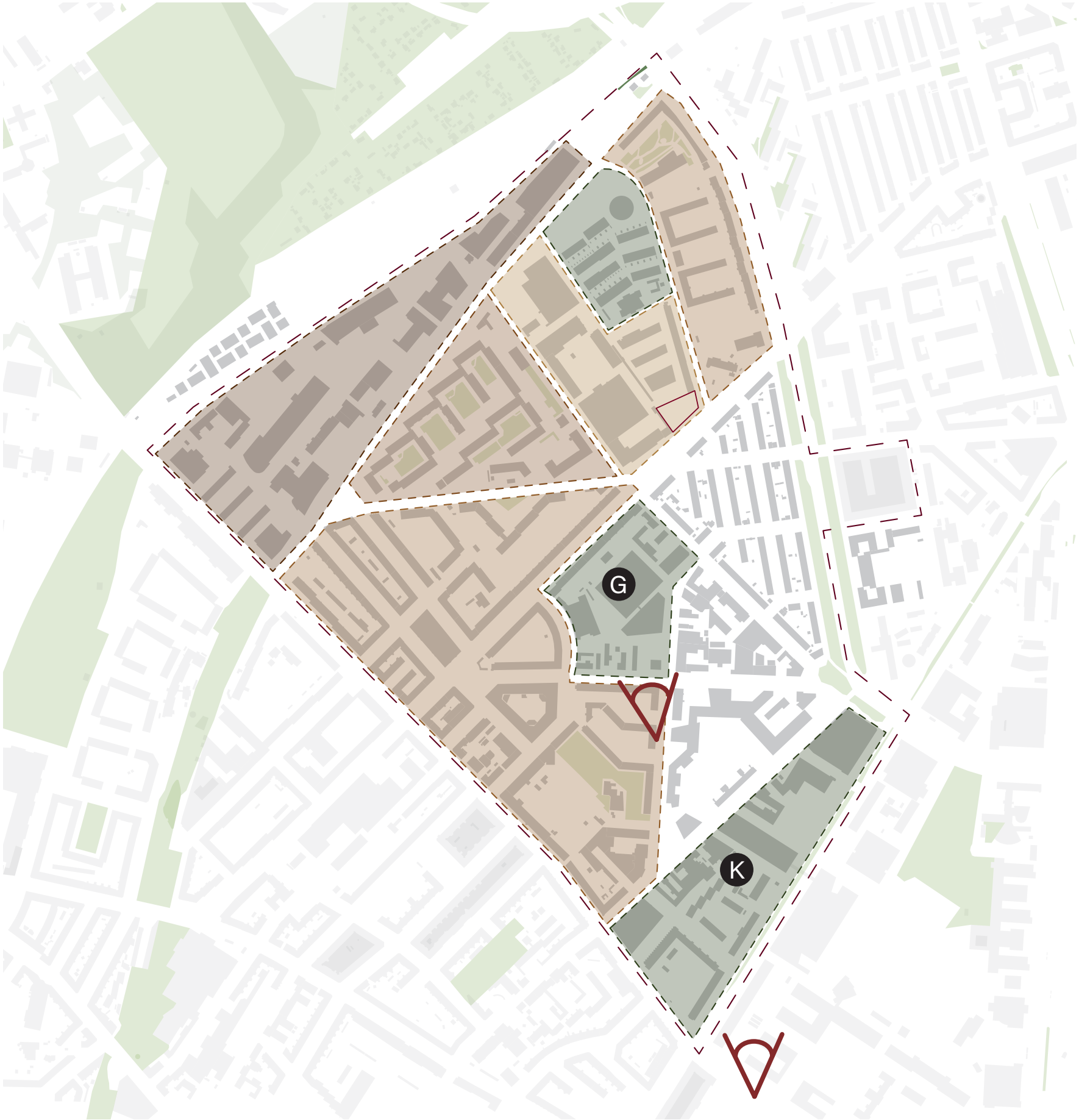


## LONG BUILDING BLOCKS



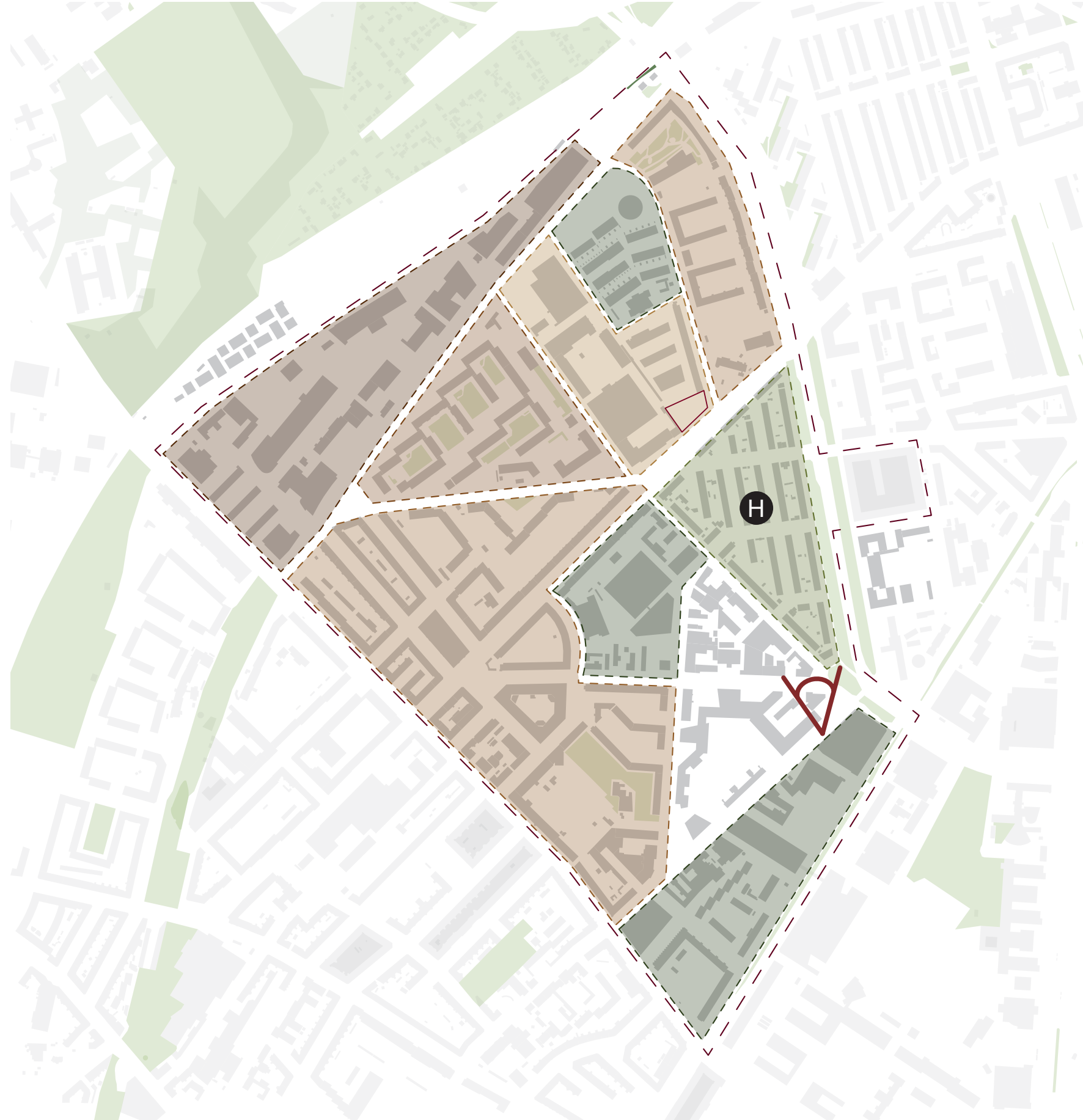


A MIX OF MULTIPLE

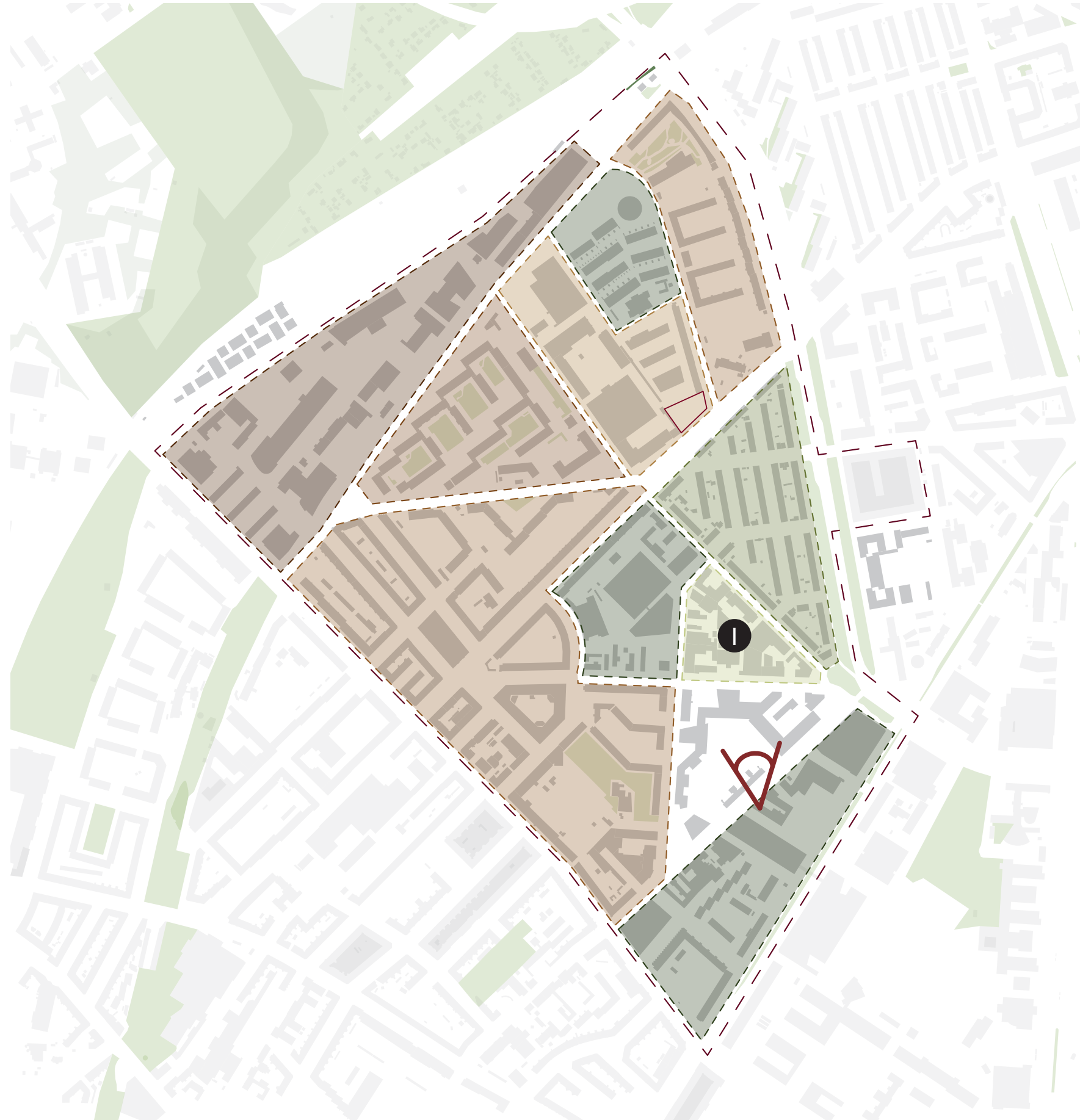




## ROW HOUSES

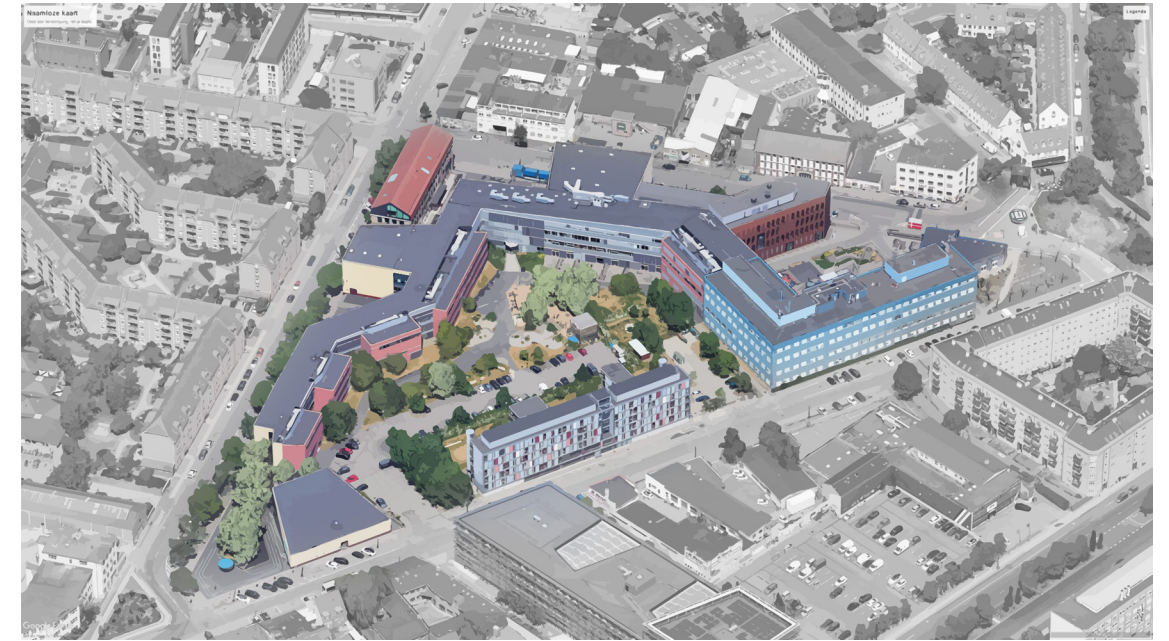
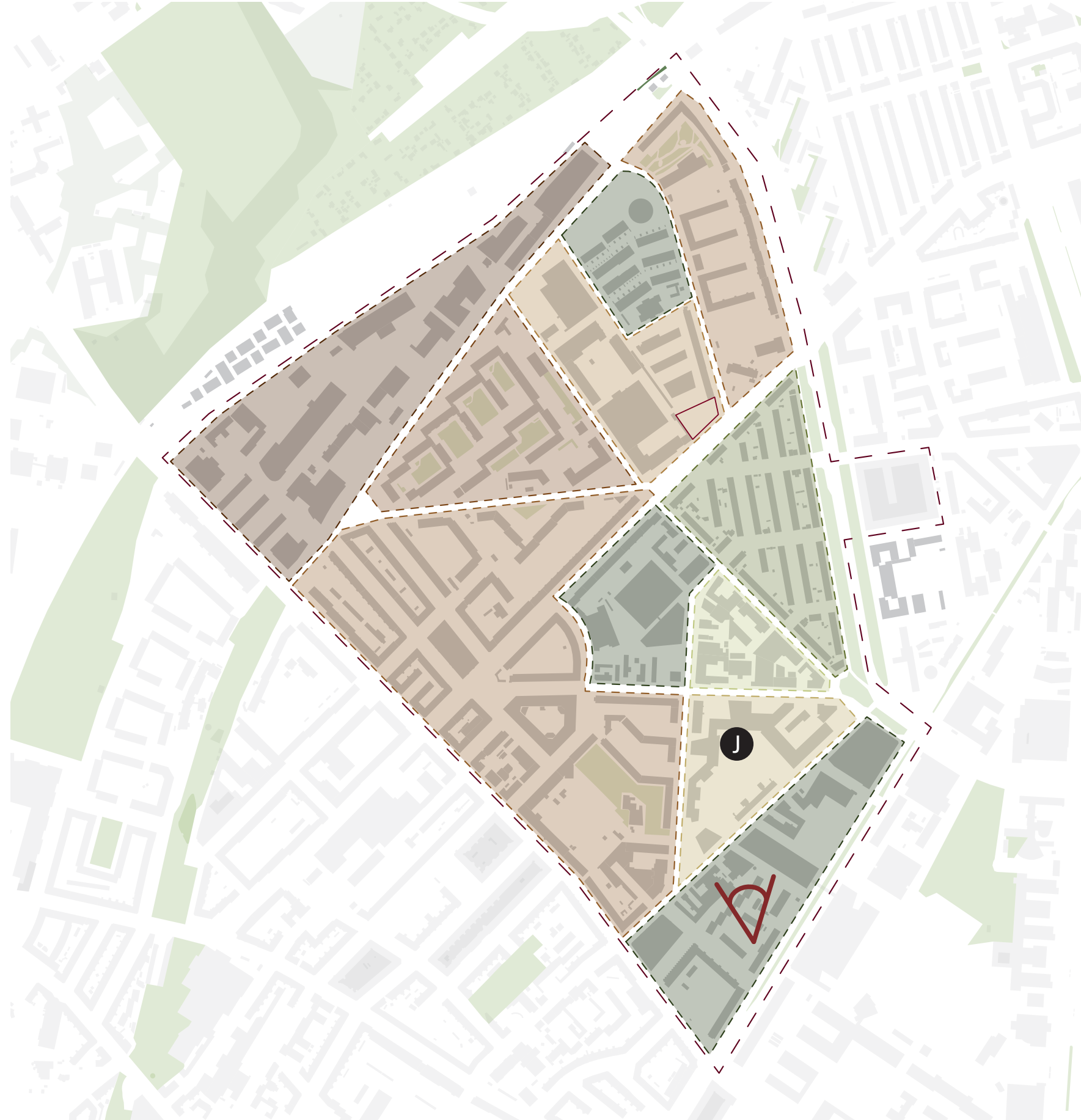


## INDUSTRIAL PAST

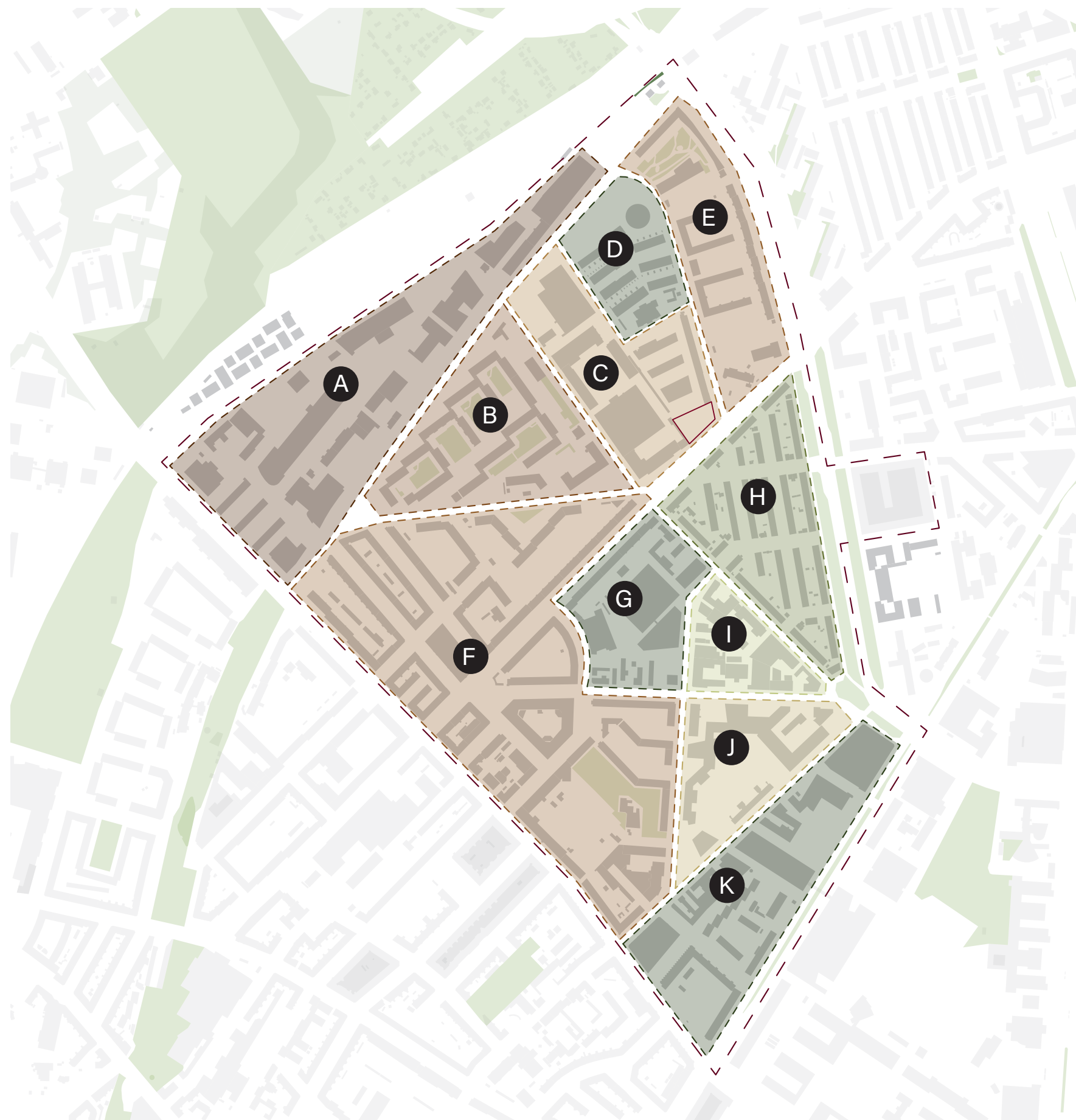




## COPENHAGEN VOCATIONAL SCHOOL







**A: Car dealerships**

**B: Housing blocks with elaborated common green areas**

**C: Reclaimed industry**

**D: Unique typologies**

**E&F: Long building blocks**

**G&K: A mix of multiple (housing, education, industry)**

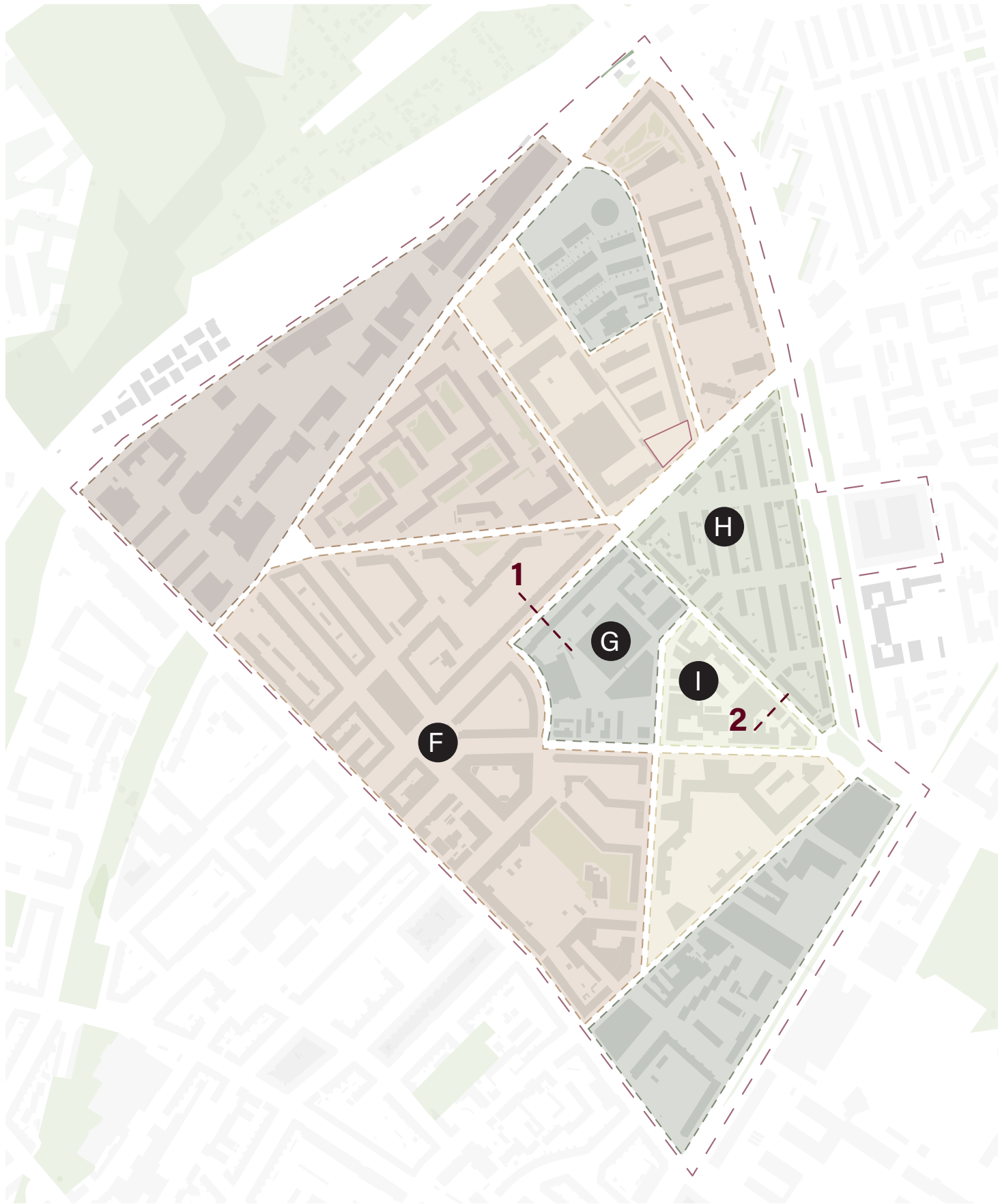
**H: Row houses**

**I: Industrial past**

**J: Copenhagen vocational school**

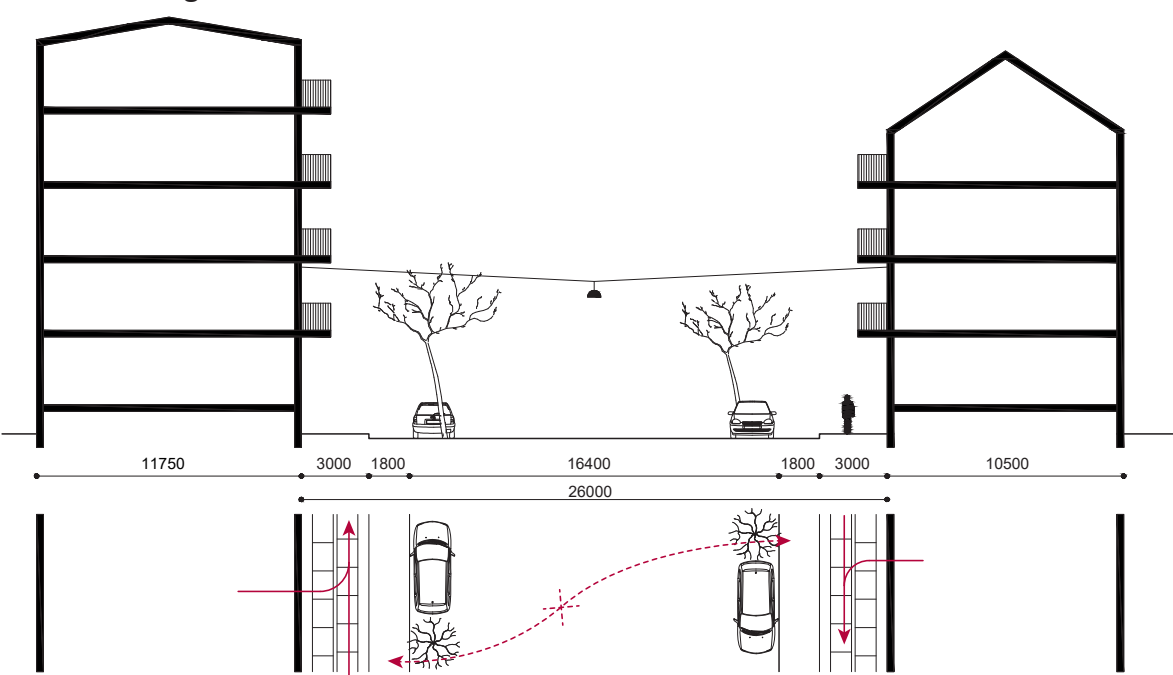
BOUNDARIES

SITE



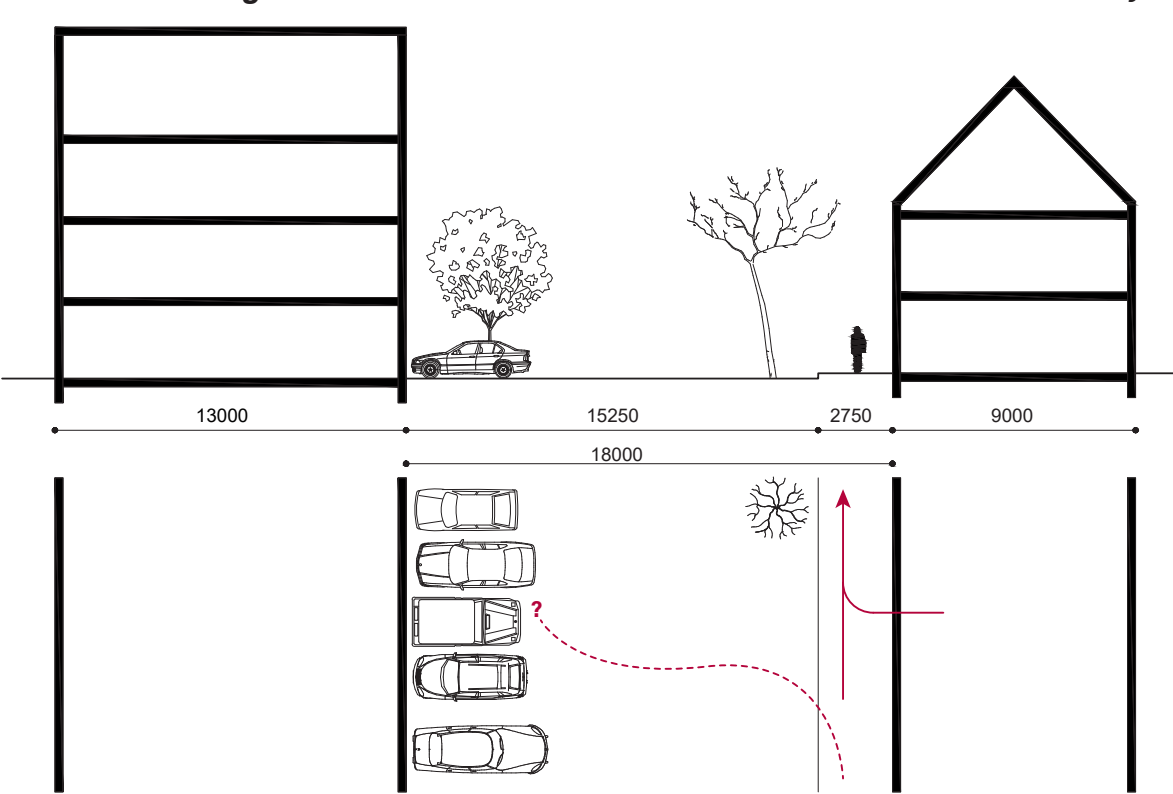
1: Haraldsgade

Residential street



2: Vermundsgade

Residential and industry



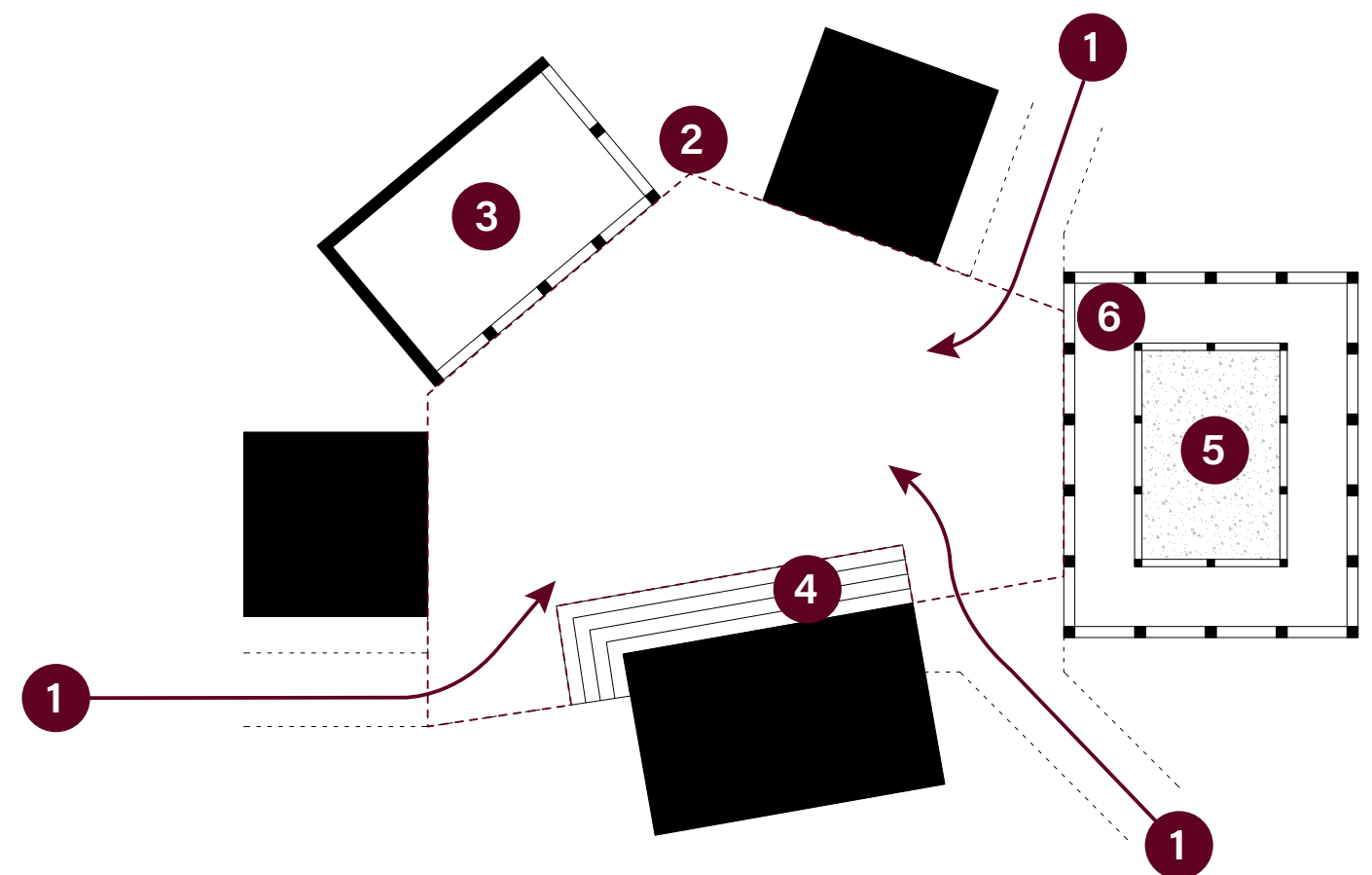
*"Because of the diverse and casual nature of these activities, they require a space which has a subtle balance of being defined and yet not too defined, so that any activity which is natural to the neighborhood at any given time can develop freely and yet has something to start from."*

*- Cristopher Alexander, A Pattern Language*

## 1. Getting there and having a reason to stay



## 2. Architectural elements using a square as an example

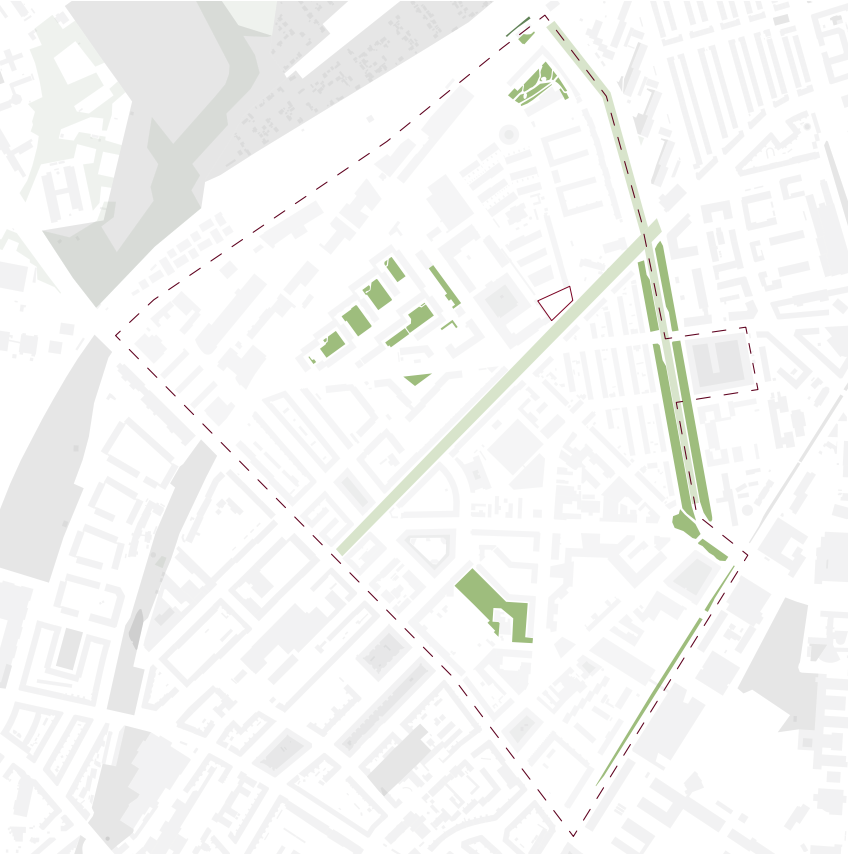


- 1. Several paths leading to the space
- 2. Defined partially by building edges
- 3. Columns to define **some** borders

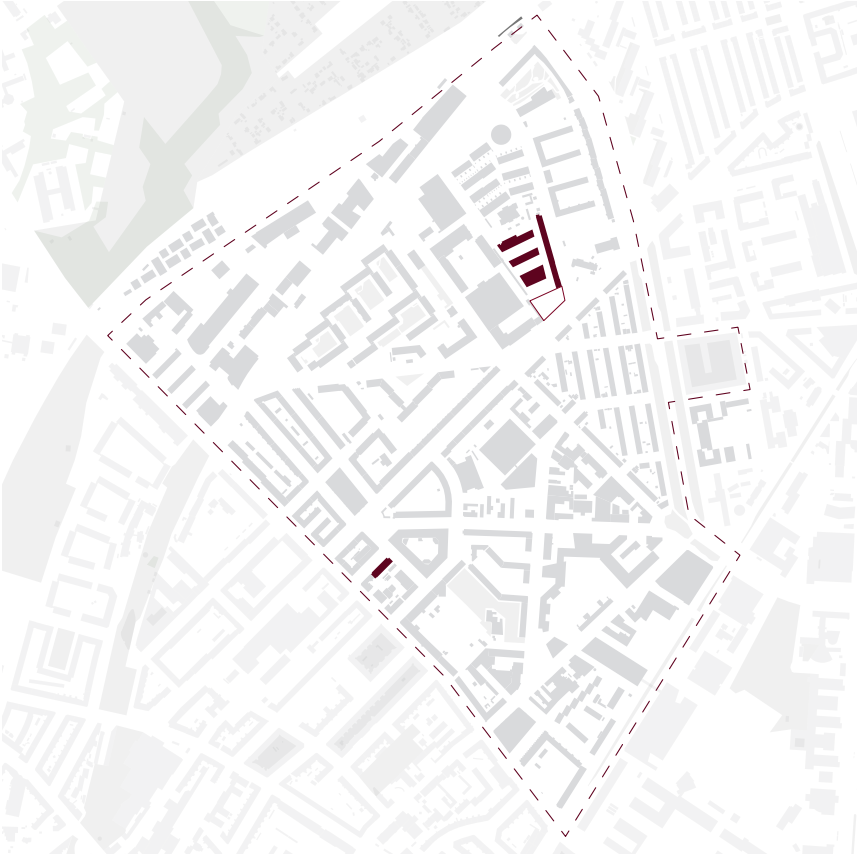
- 4. Stair seats
- 5. Courtyard next to it, with an arcade around it (6)



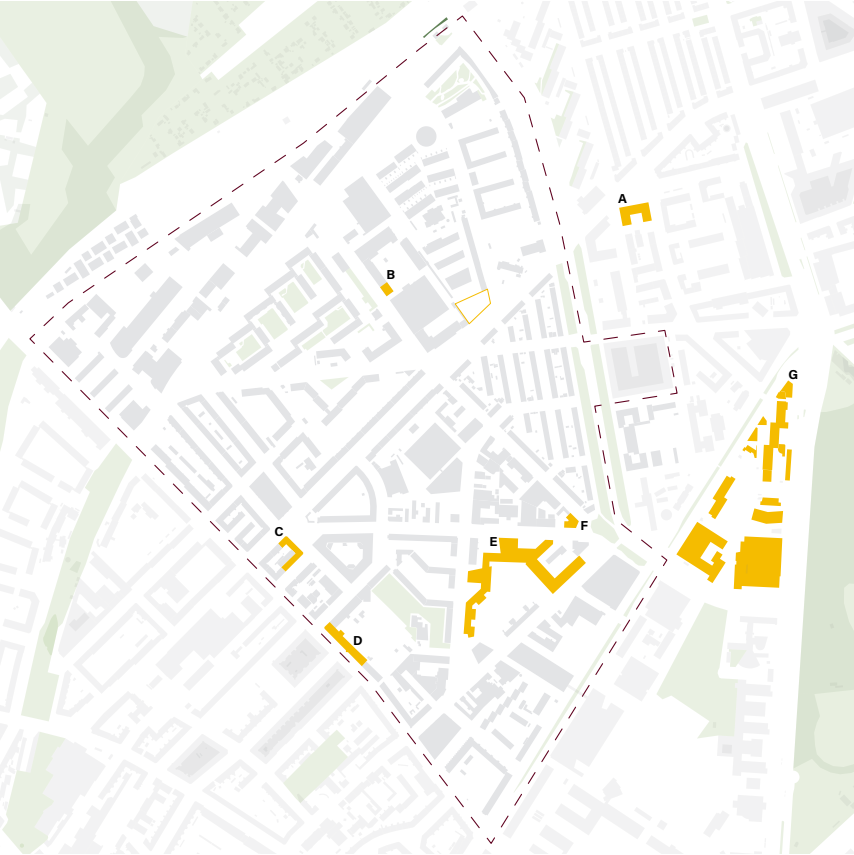
Conclusion



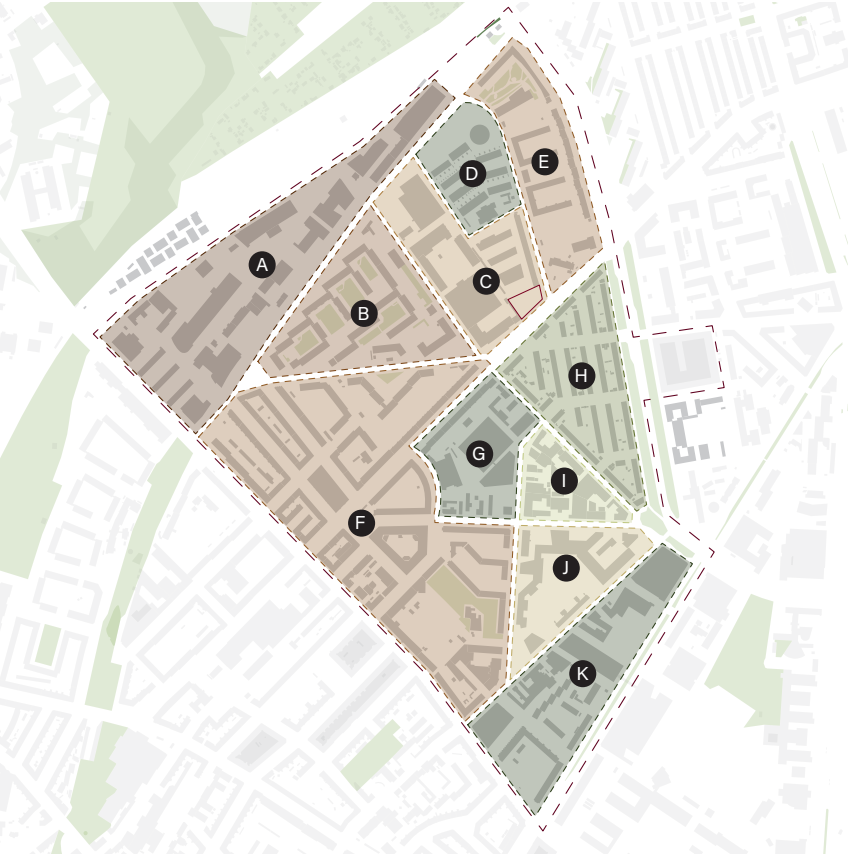
Lack of public greenery



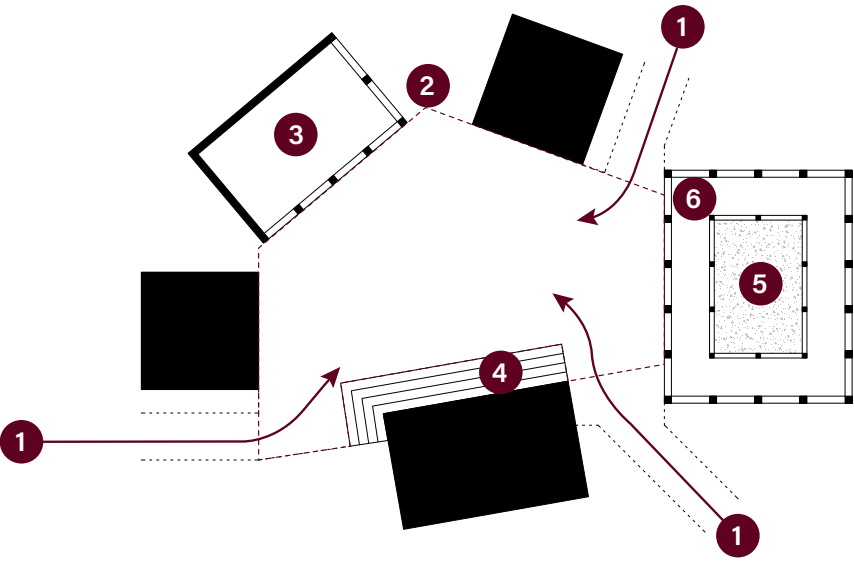
Lack of cultural facilities



Large amount of educational facilities

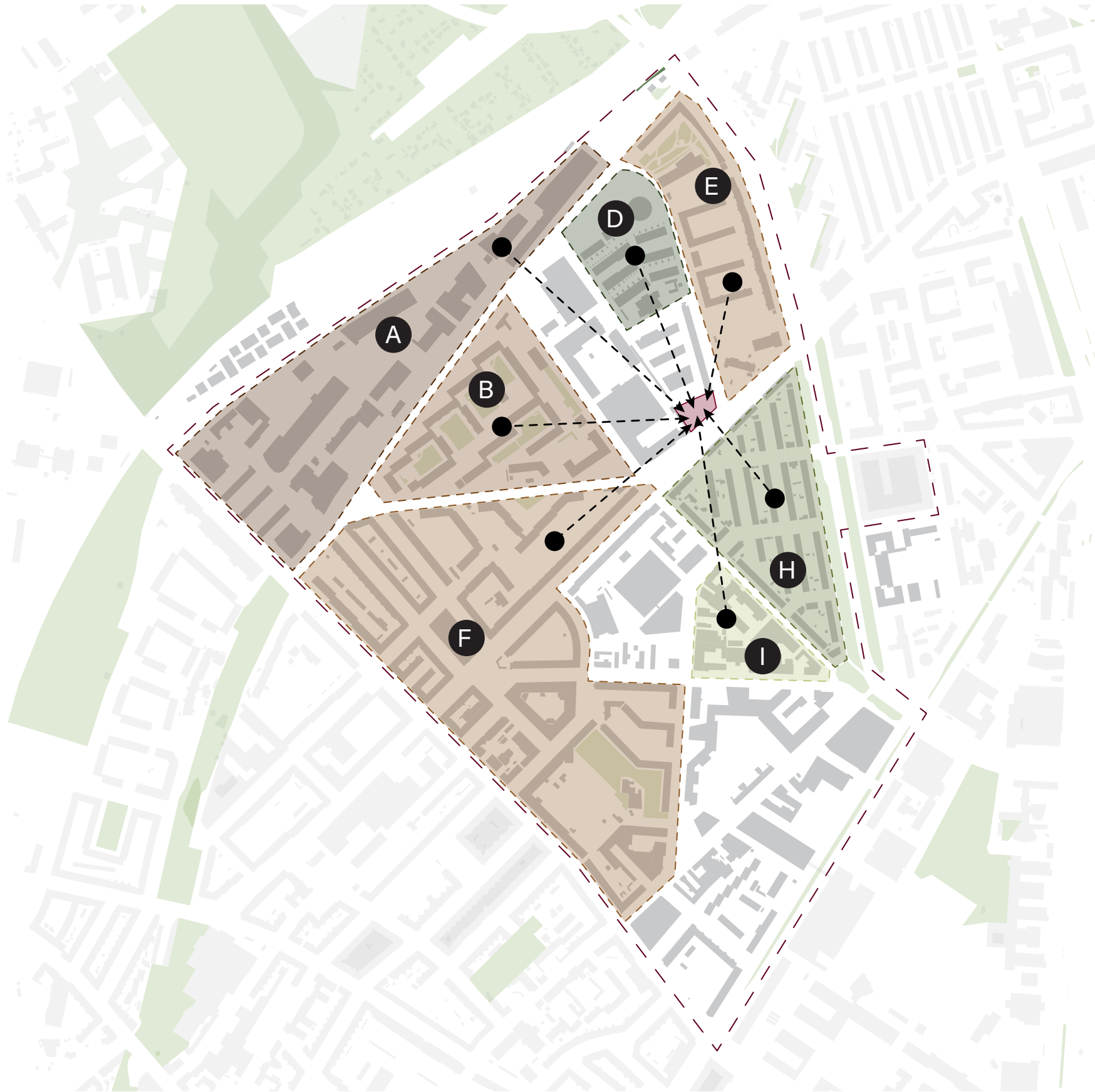


Collection of unique patches that are disconnected



Methods towards indeterminacy

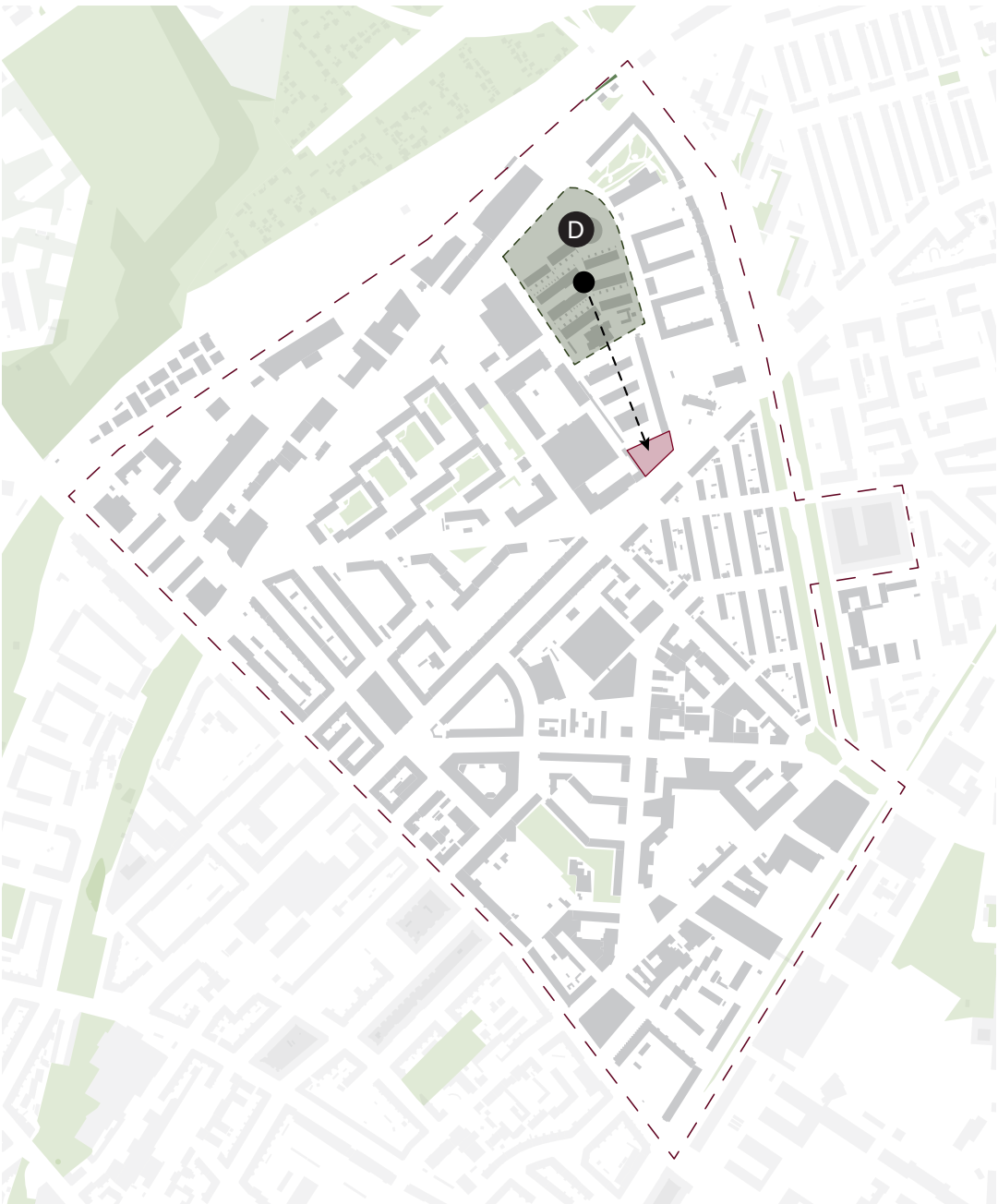
## **DESIGN STRATEGIES**



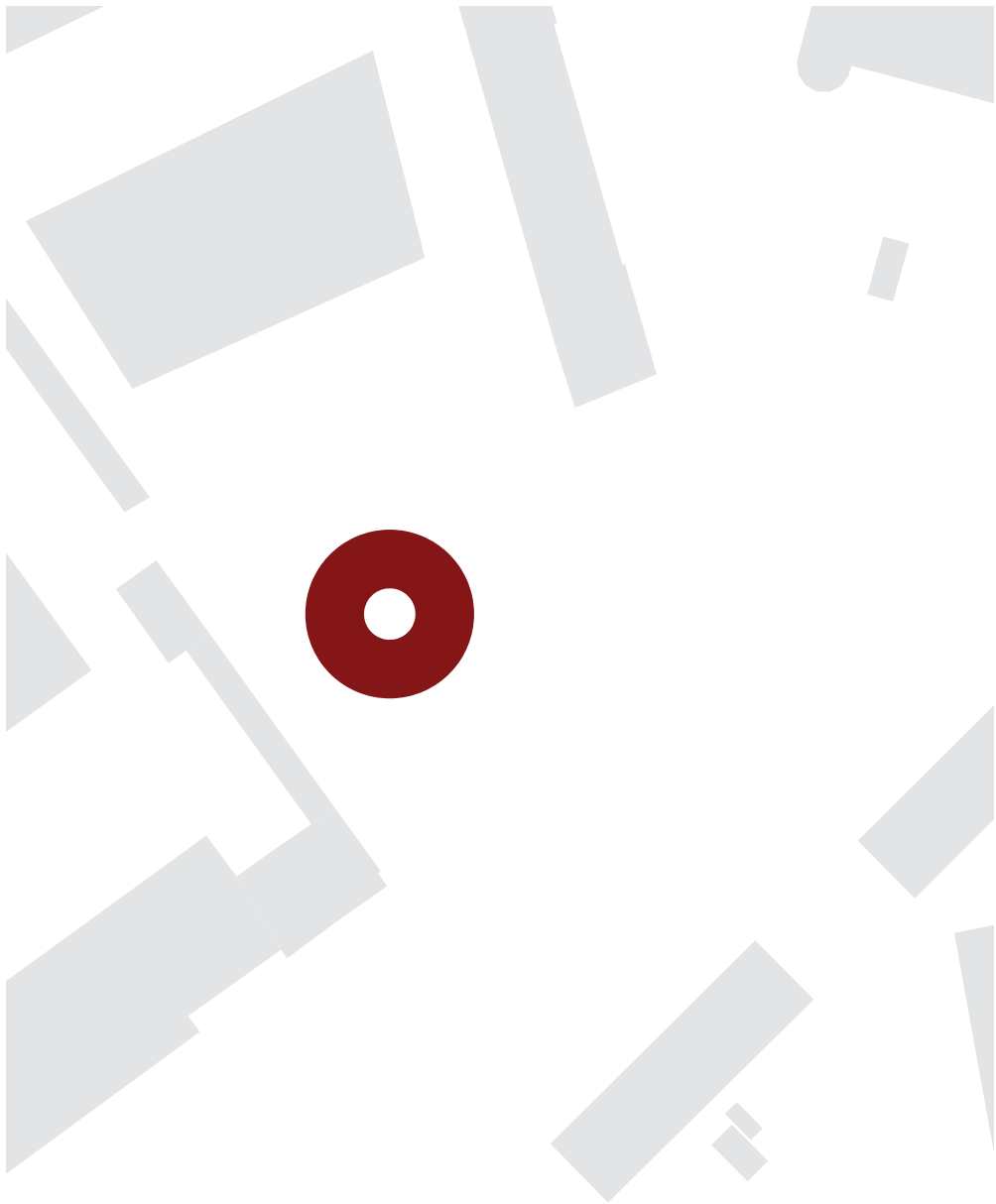
*Abstraction of a patch into a design element* - - - - - →



UNIQUE TYPOLOGIES

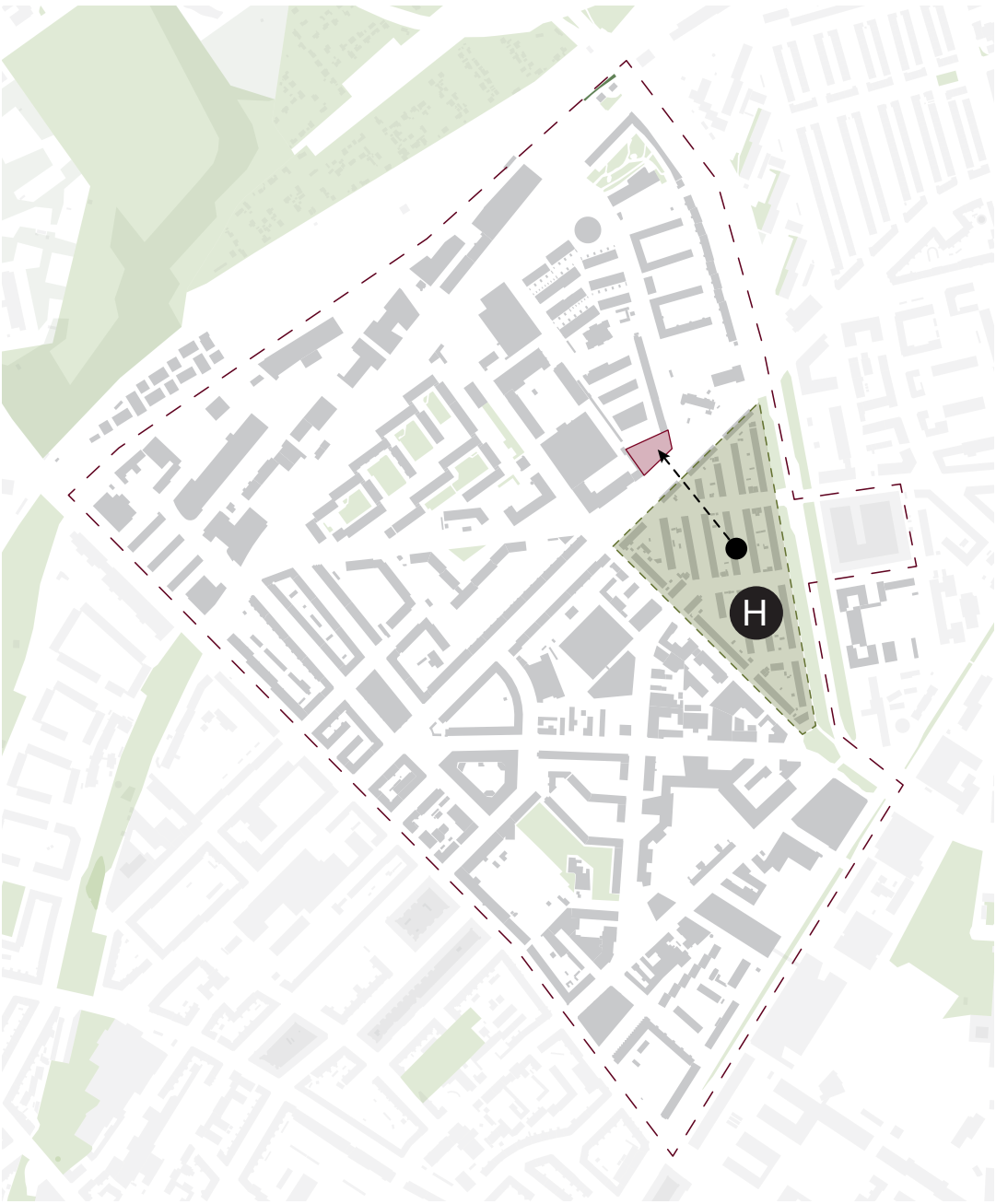


“UNIQUE TYPOLOGY”

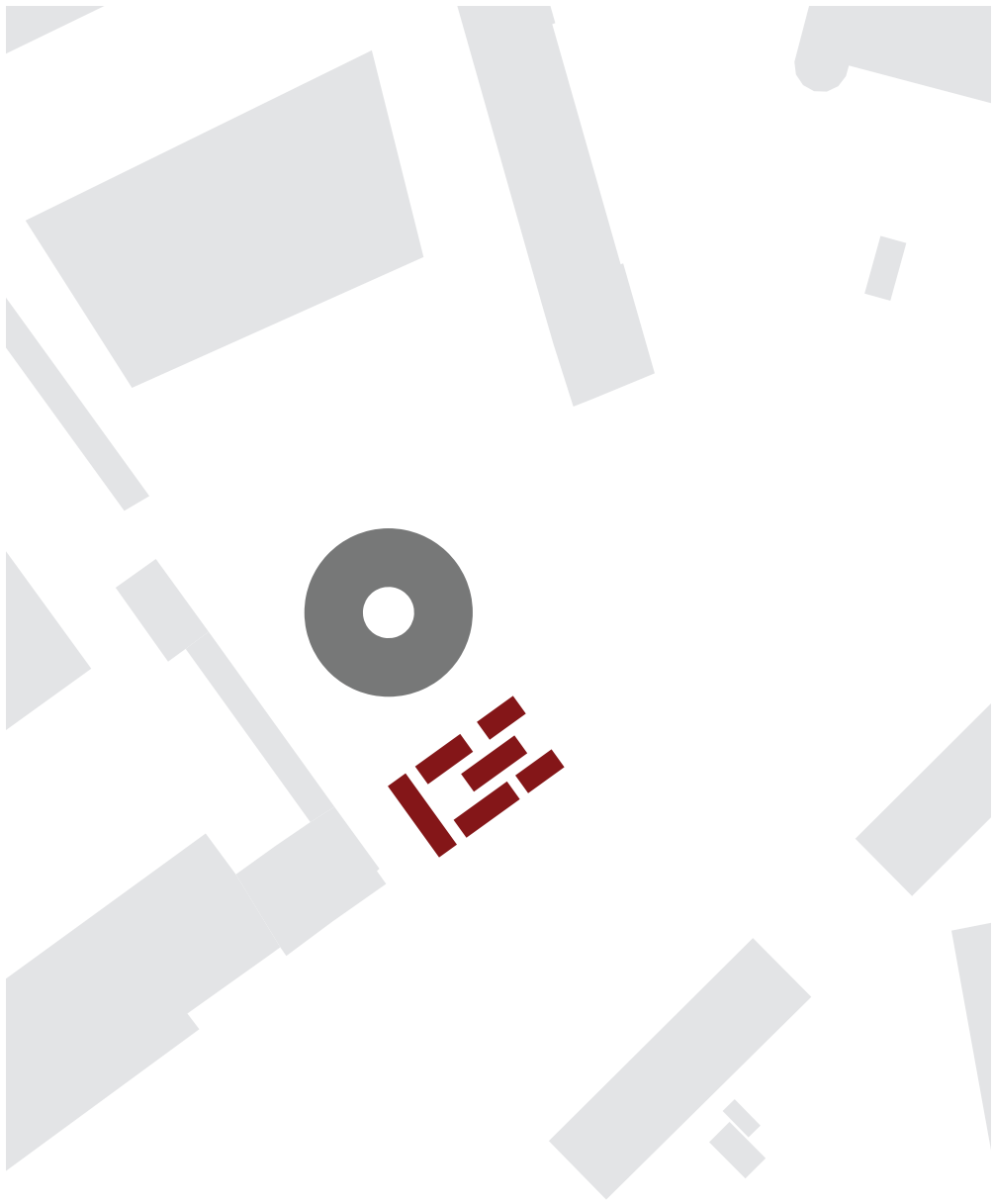


- *A circular volume representing the patch containing unique typologies*

ROW HOUSES

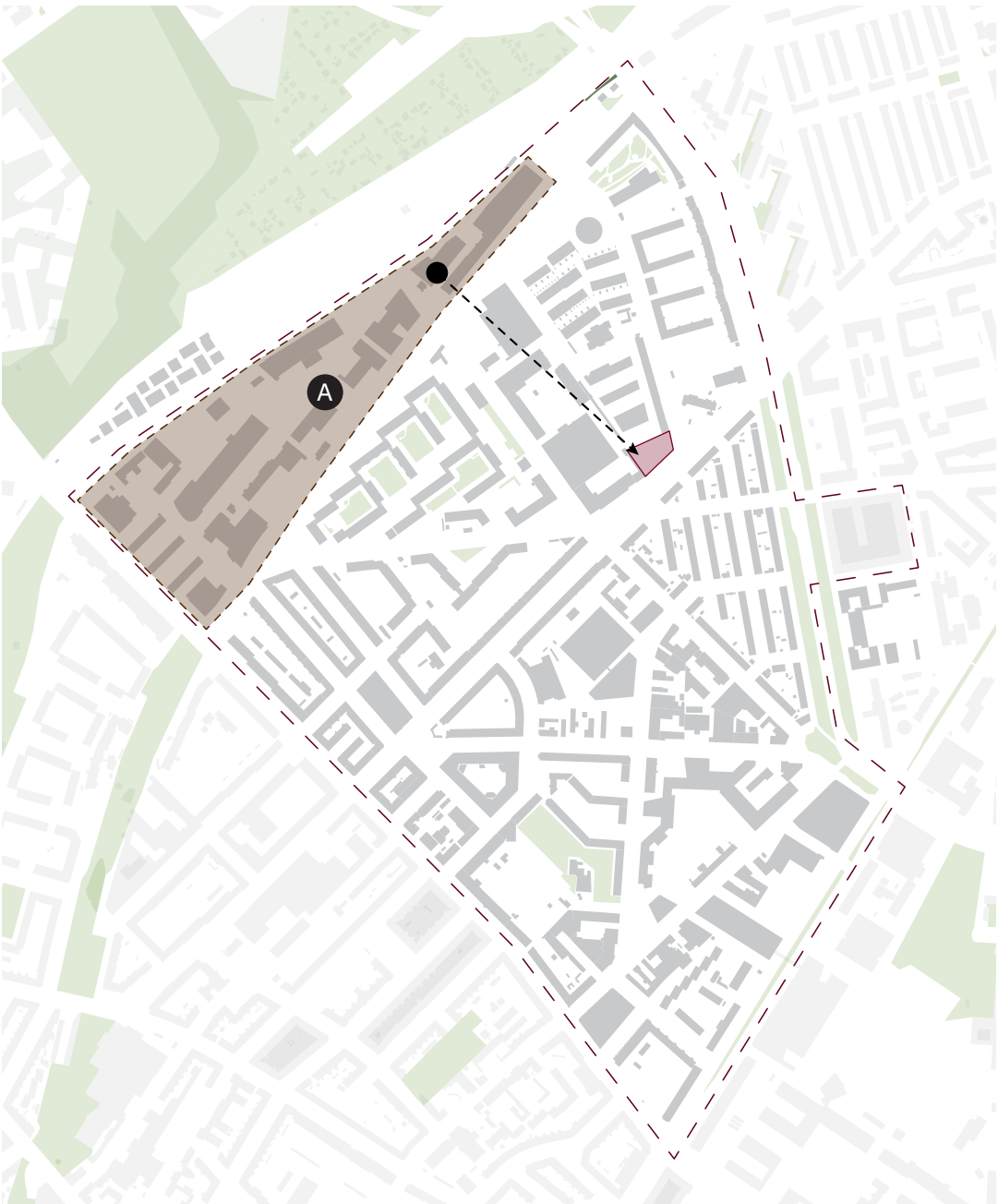


“ROW HOUSES”

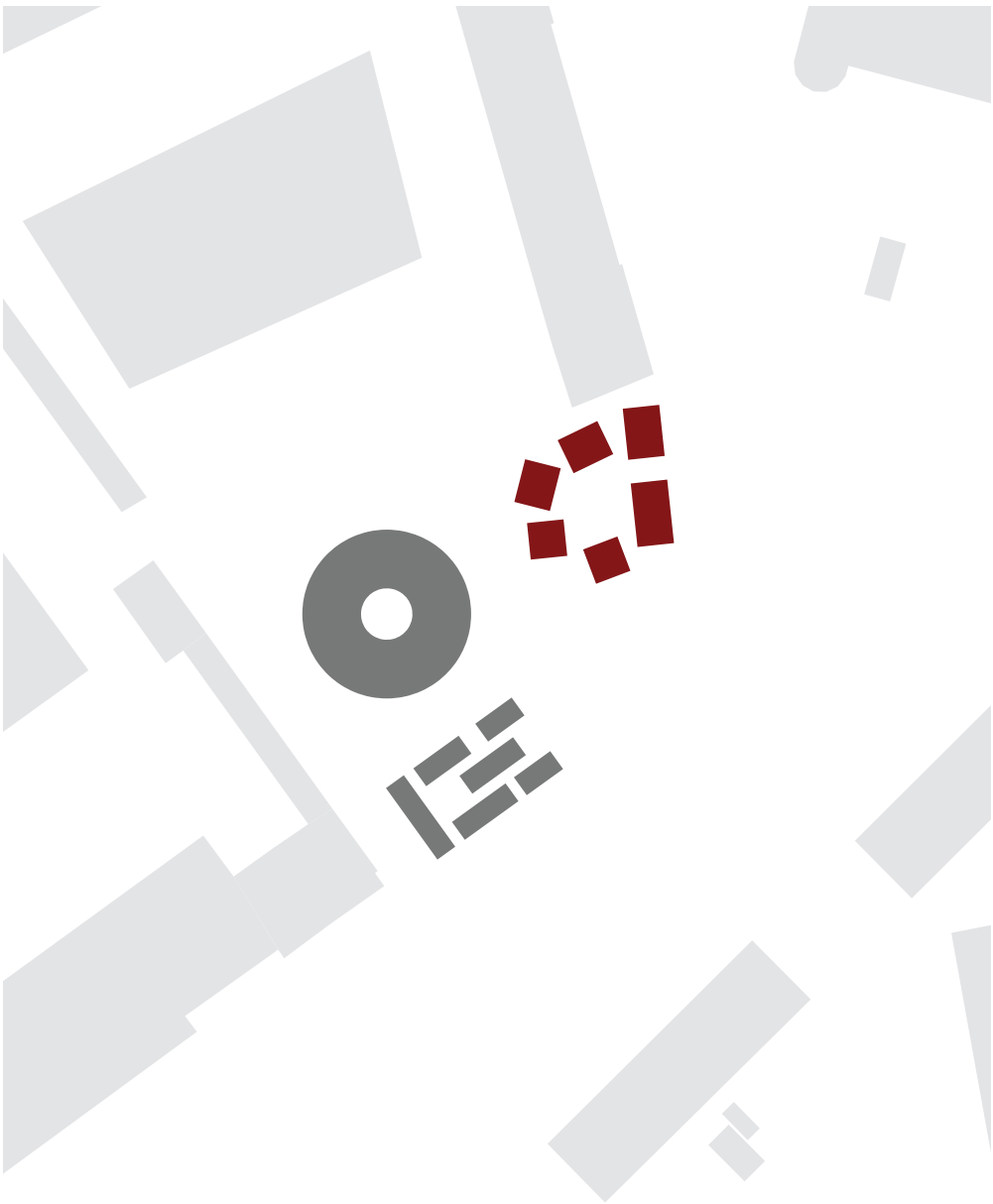


- *A cluster of orthogonally organized volumes that represent the structure of row the row houses in the neighborhood.*

**CAR DEALERSHIPS**



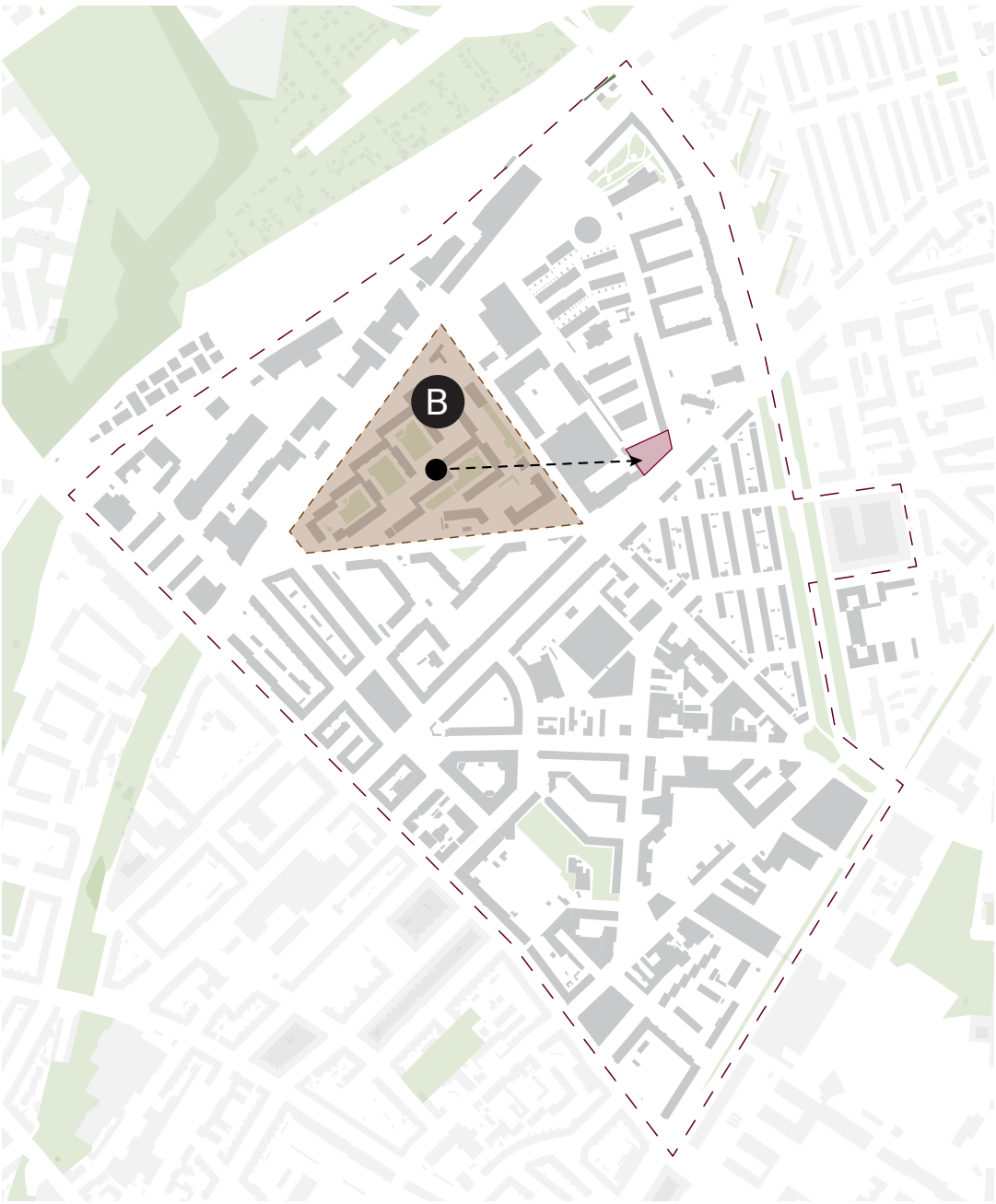
**“SEEMINGLY UNORGANIZED”**



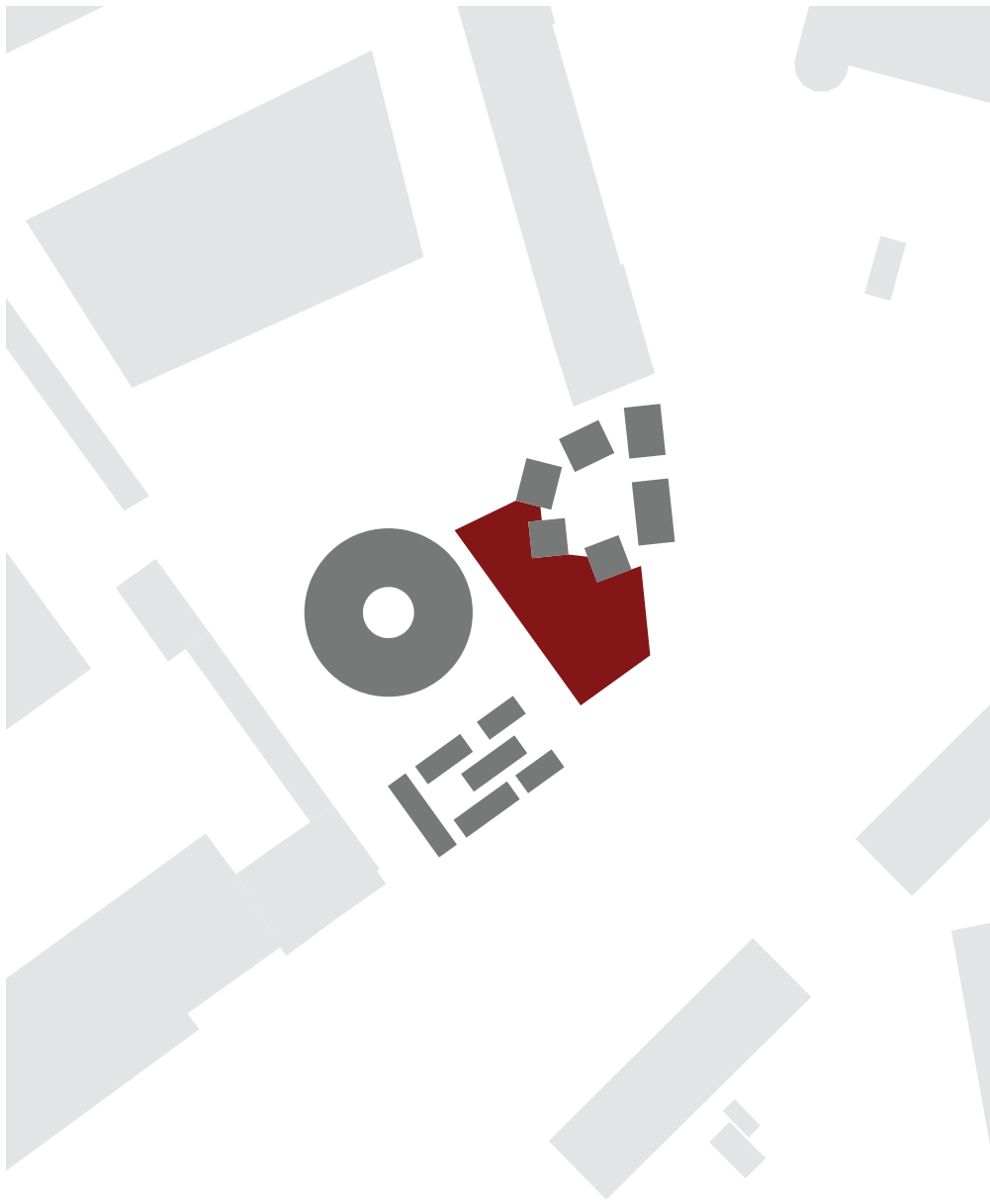
- *A cluster of volumes that are seemingly placed in an unorganized manner, reflecting the lack of organization in the car dealership patch. They are not actually unorganized, but placed according to the rules of (in) determinacy as mentioned in A Pattern Language.*



**HOUSING BLOCKS WITH ELABORATED  
COMMON GREEN AREAS**

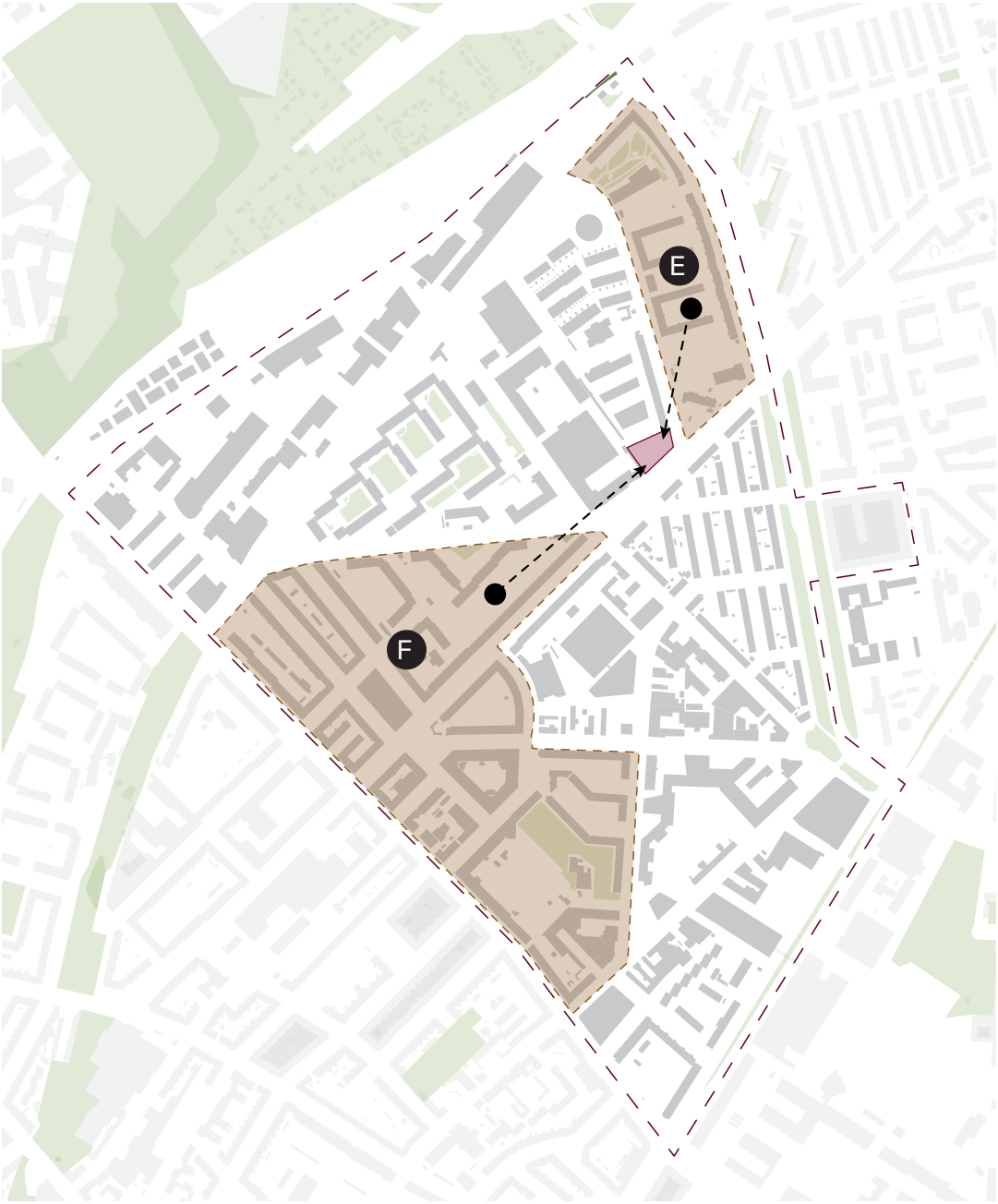


**“BLOCKS WITHIN GREENERY”**

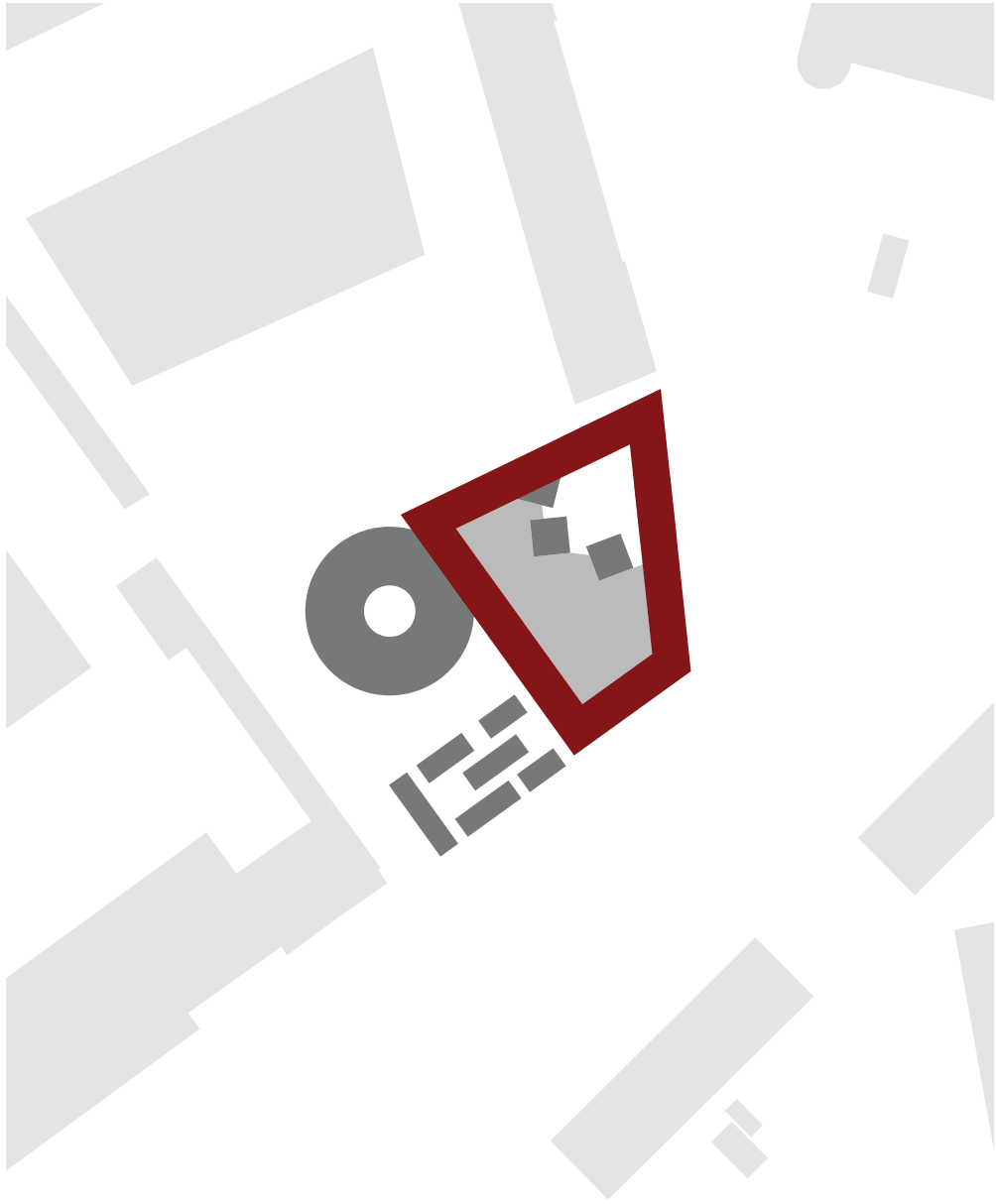


- *Some of the volumes abstracted from the patches in the neighborhood are situated around a courtyard*

**LONG BUILDING BLOCKS**

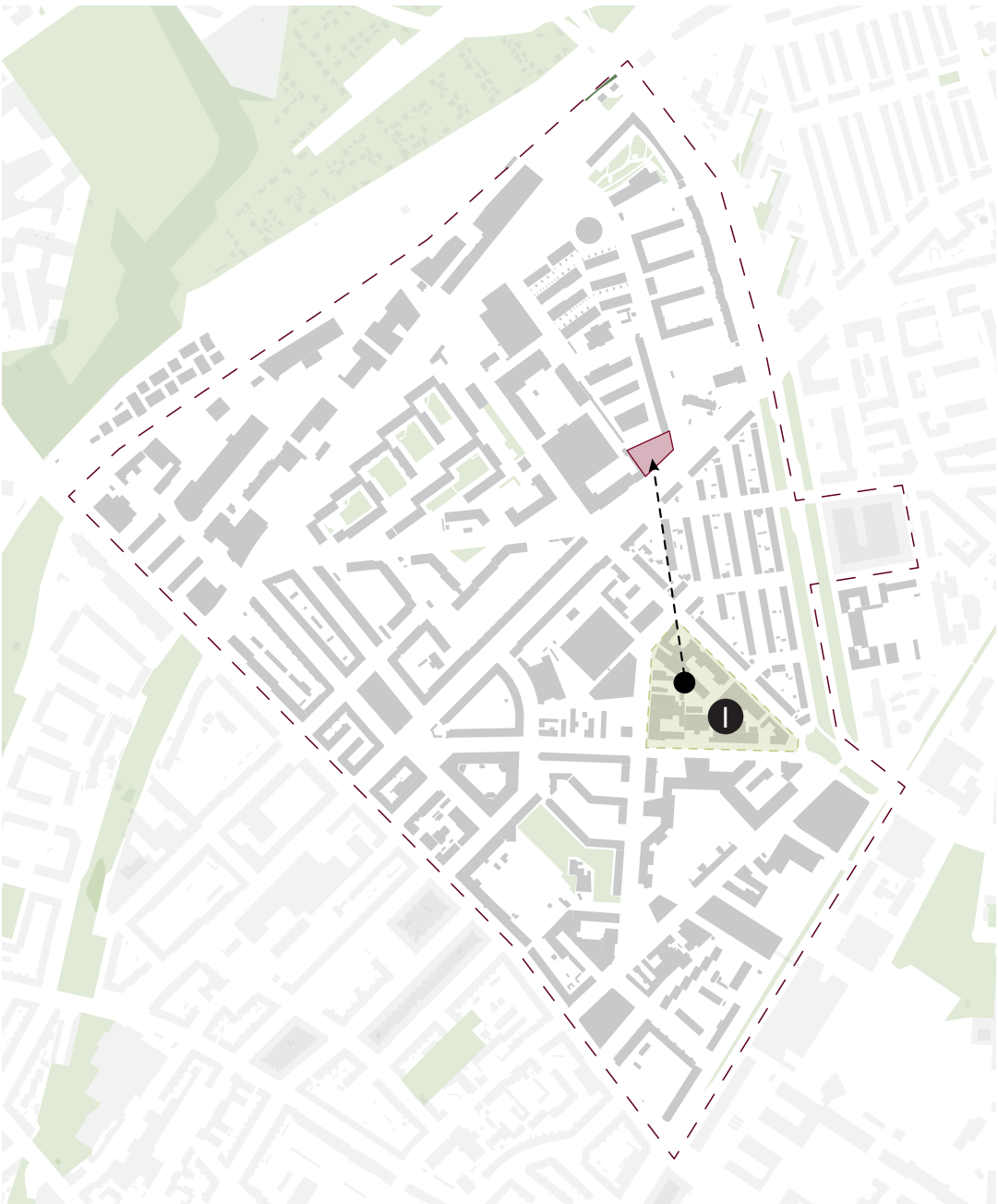


**"SNAKE"**

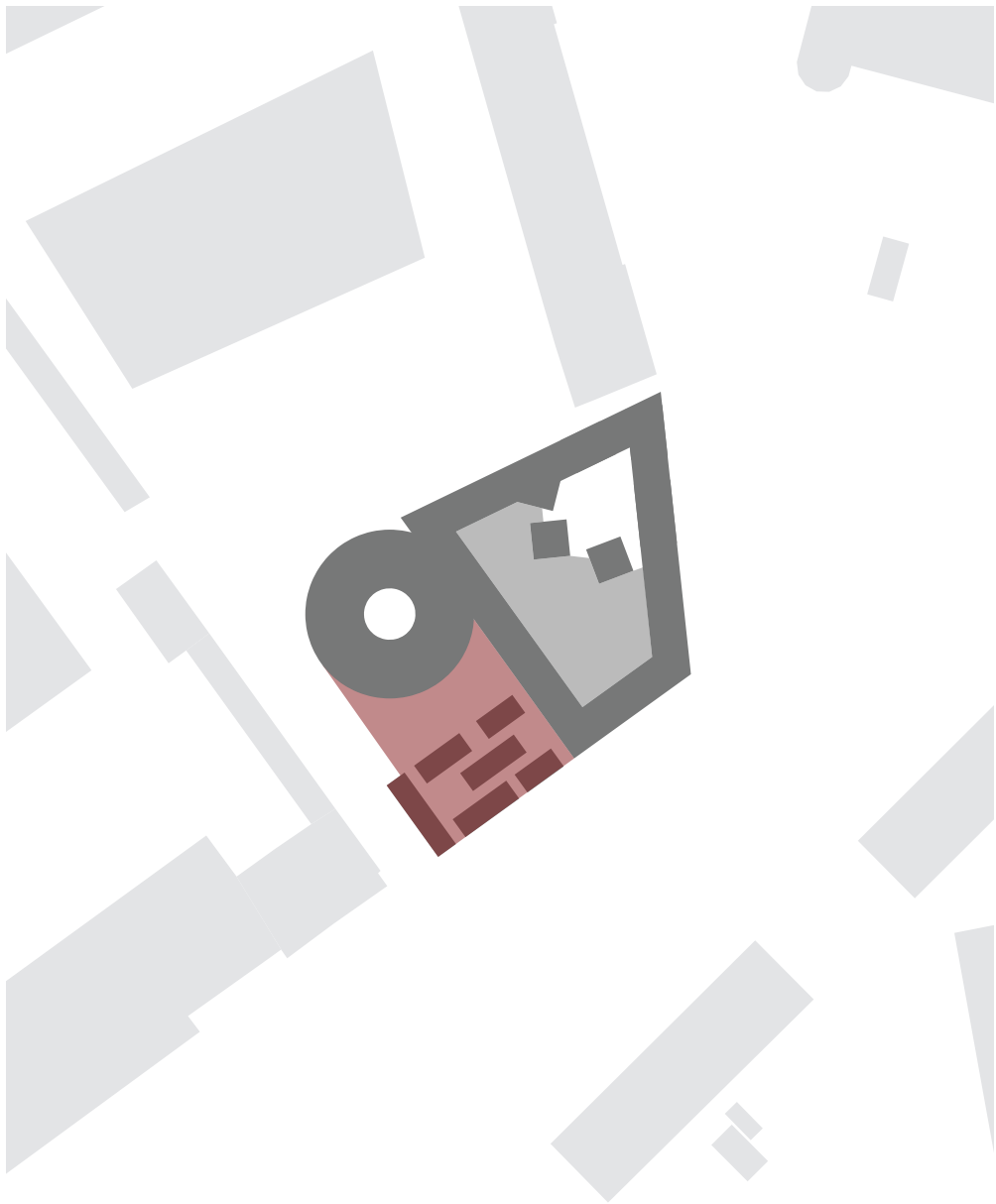


- *Main circulation space through building*
- *Stitches Pathes together*
- *Supports functions (exhibition, study)*

**INDUSTRIAL PAST**



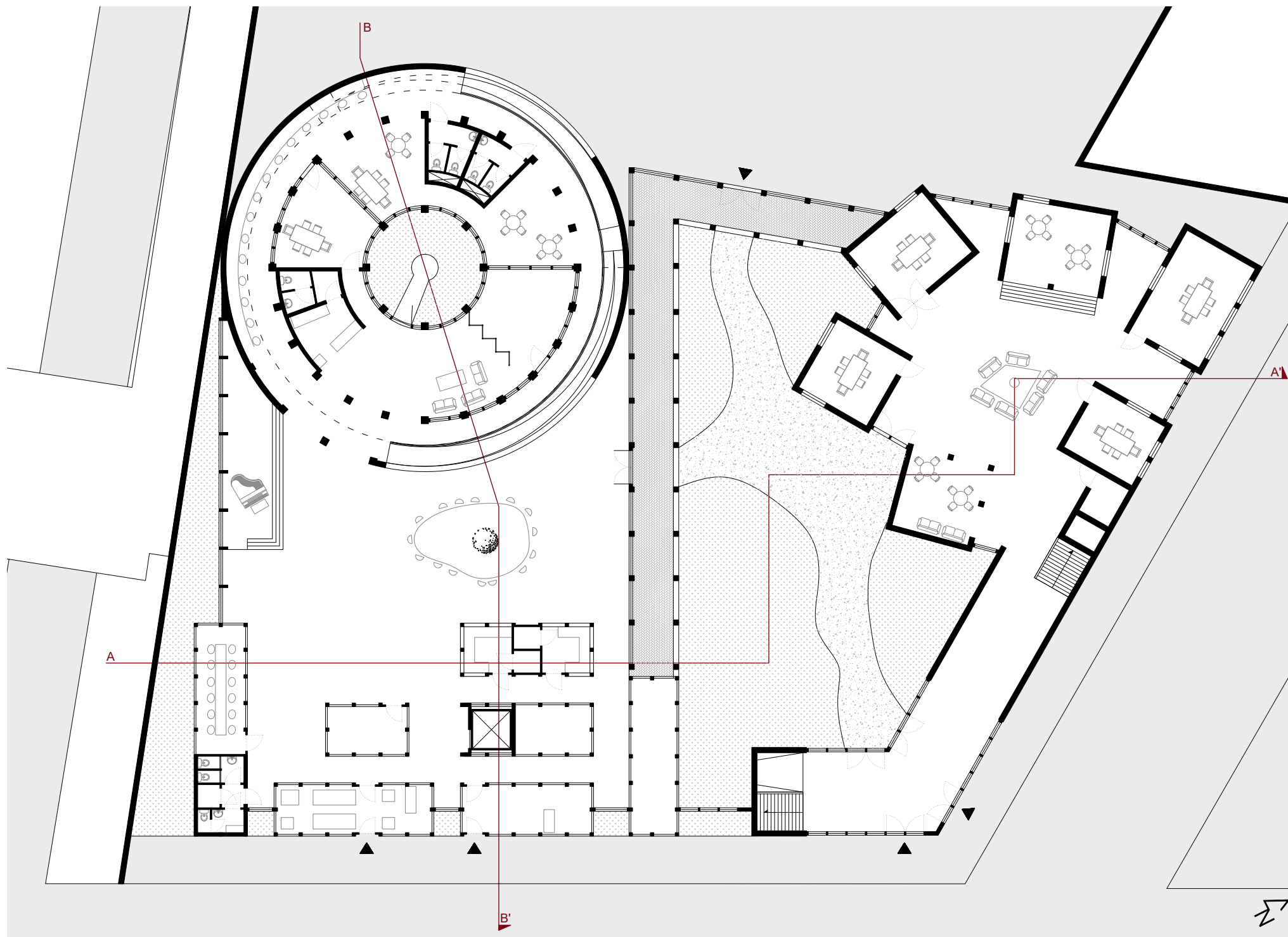
**"INDUSTRIAL PAST"**



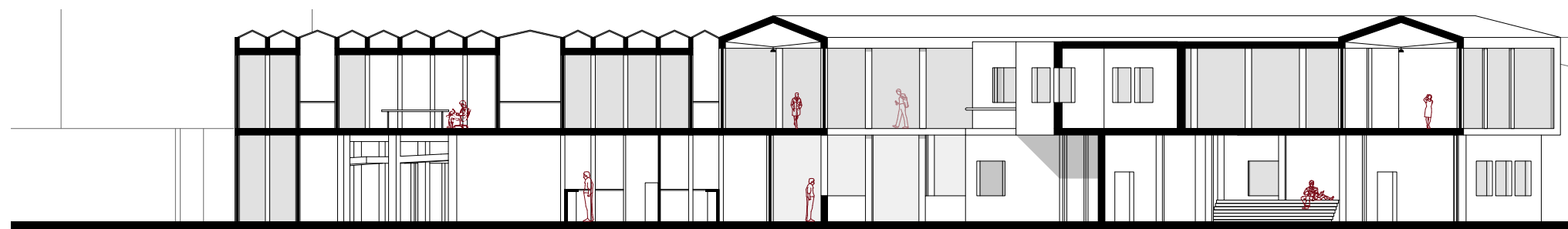
- *A roof structure representing the industrial past of the neighborhood and allowing the creation of a sizable part of the in-between space to be indoors, promoting the use of it.*



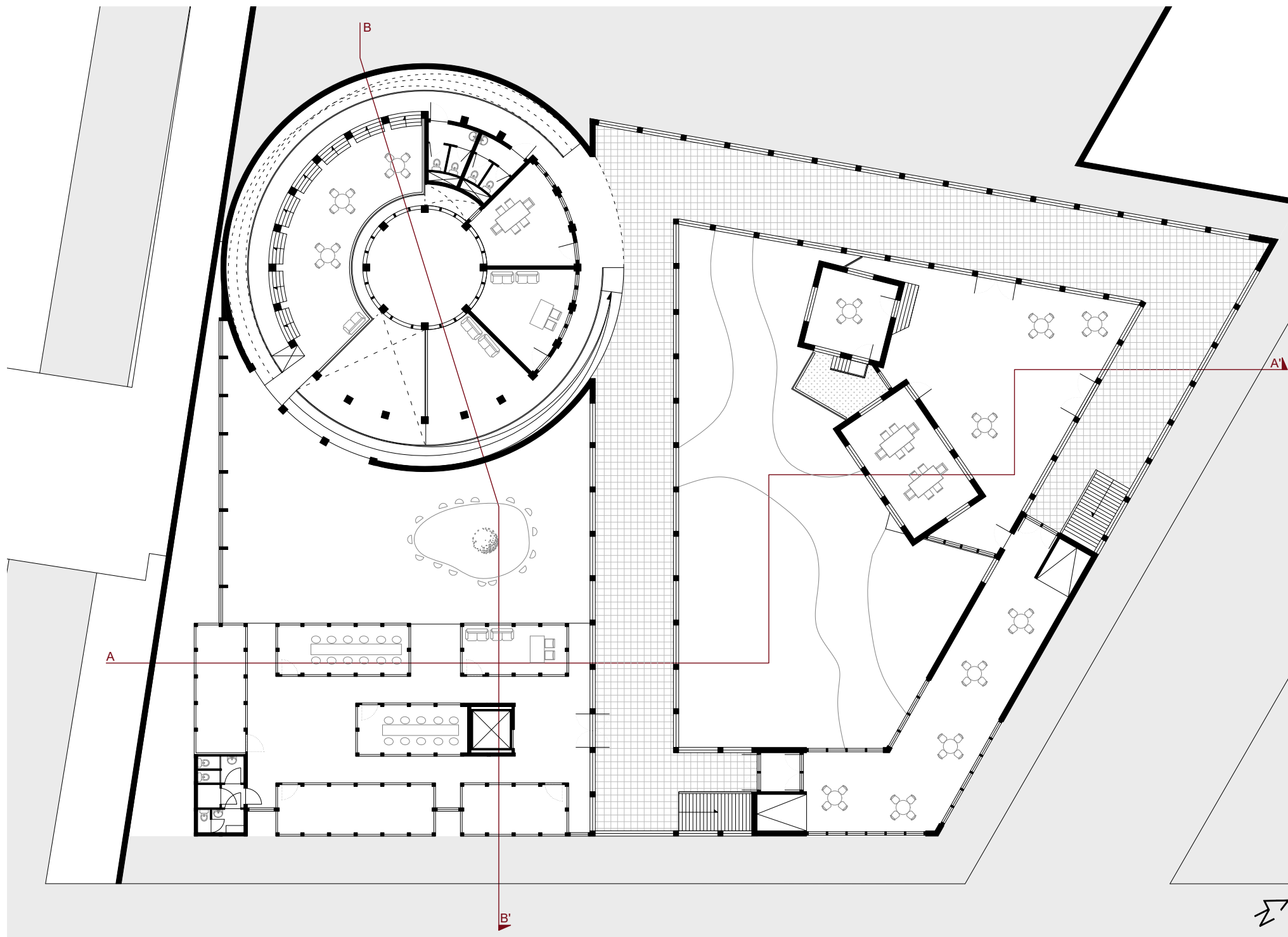
**DESIGN**



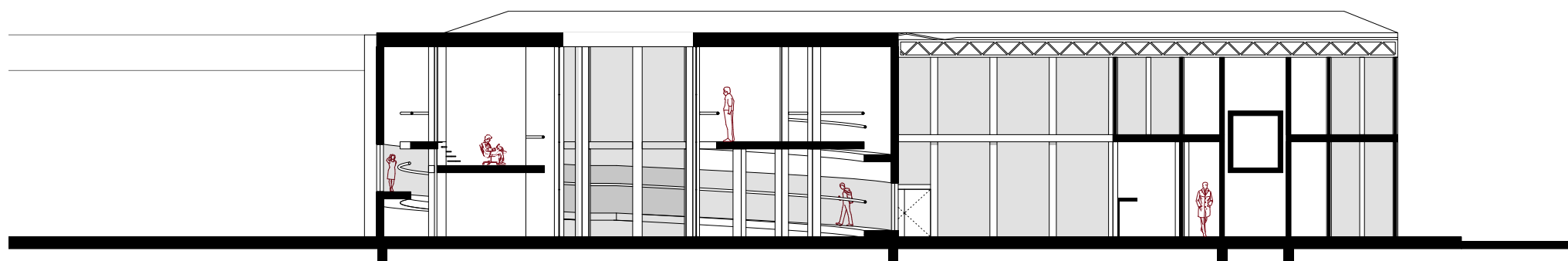
Ground floor - 1:200



Section AA' - 1:200

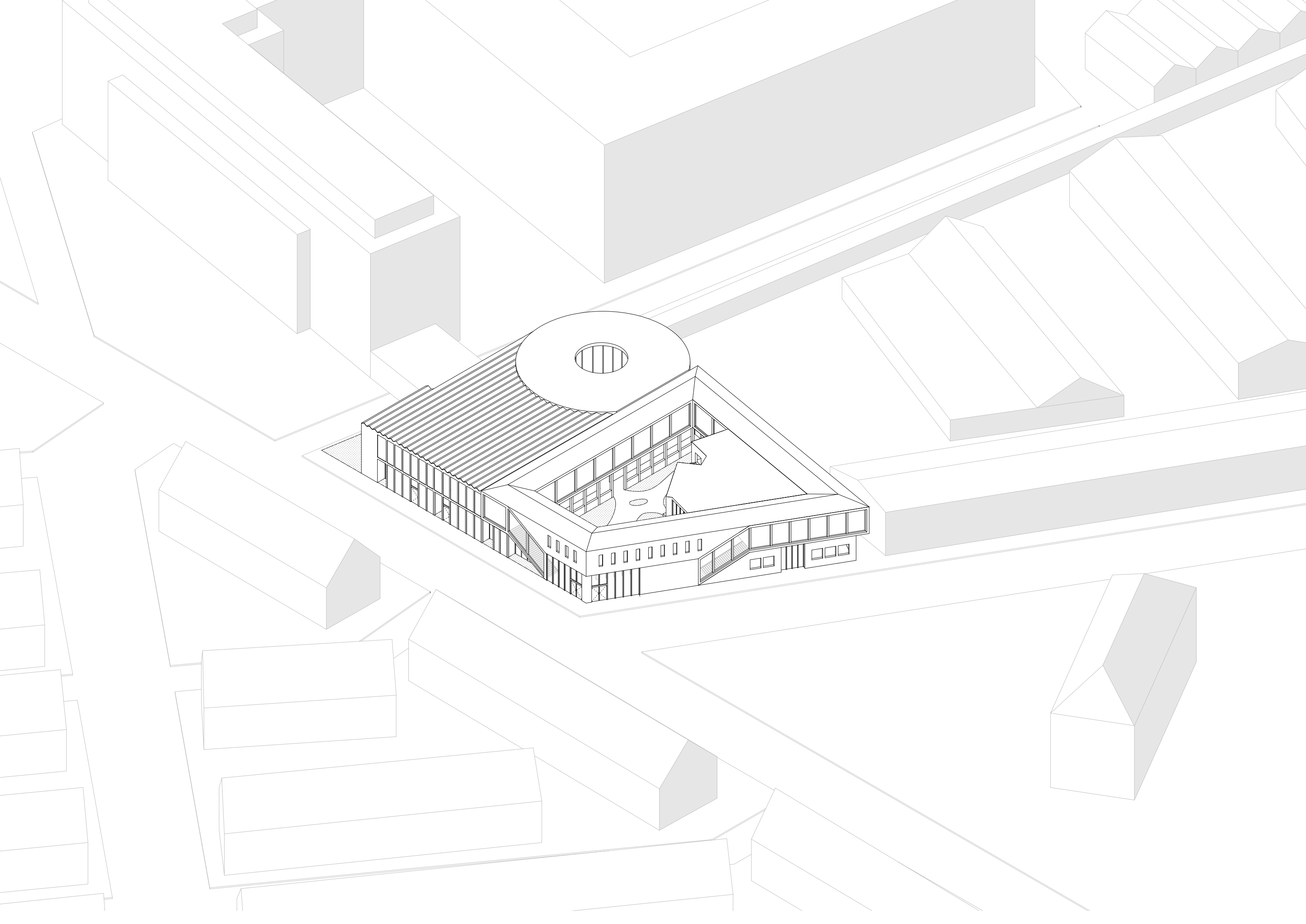


Ground floor - 1:200

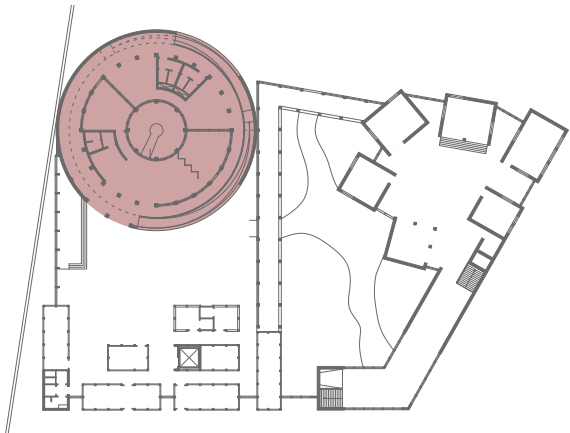


Section BB' - 1:200

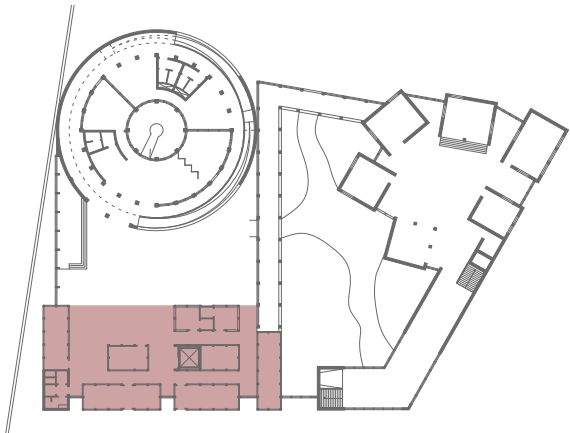




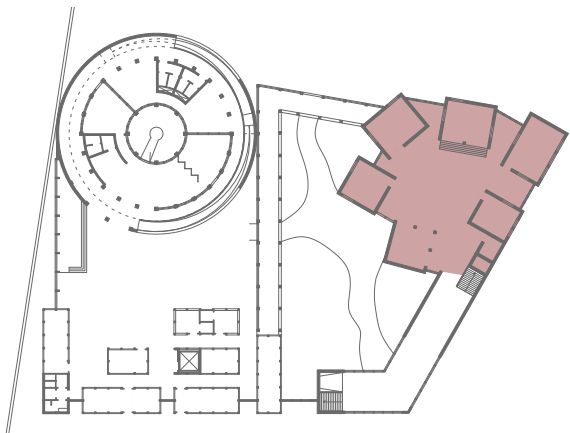
# BRIEF



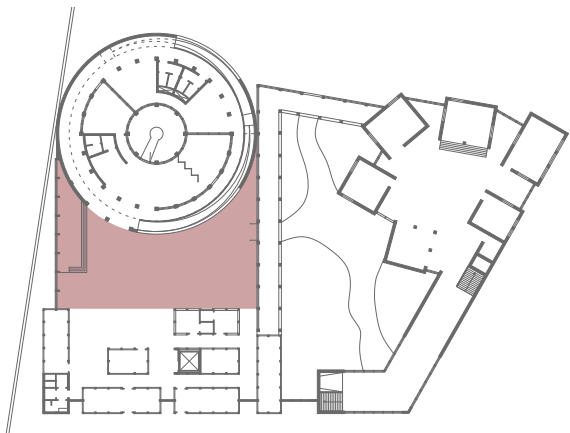
Urban living room, bar, workshop & study spaces | 415m<sup>2</sup>



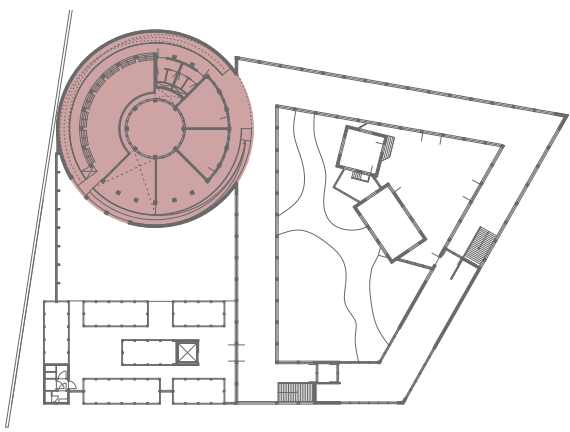
Local business, marketplace & study area | 319m<sup>2</sup>



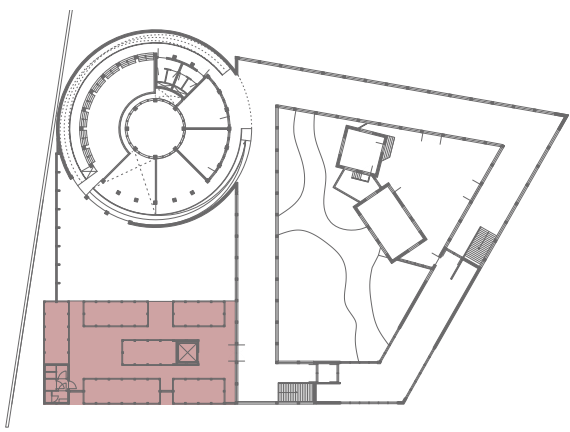
Study area & artist studios | 352m<sup>2</sup>



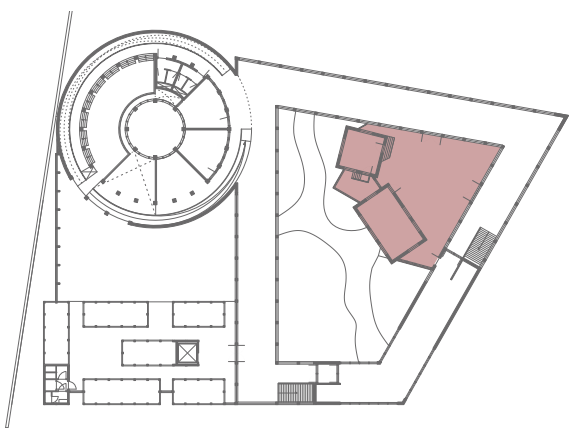
Indeterminate in-between space & auditorium | 253m<sup>2</sup>



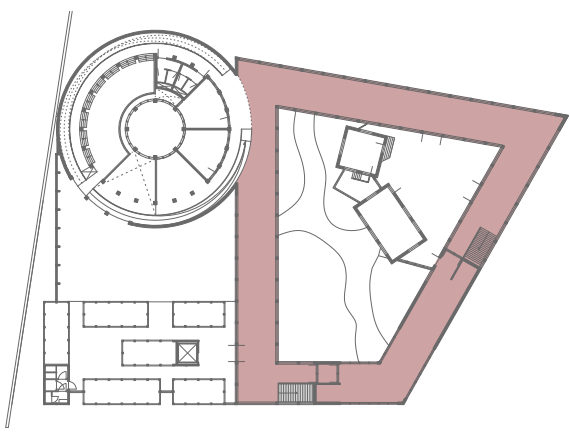
Study area & workshops | 415m<sup>2</sup>



Counseling rooms, local business & artist studios | 267m<sup>2</sup>

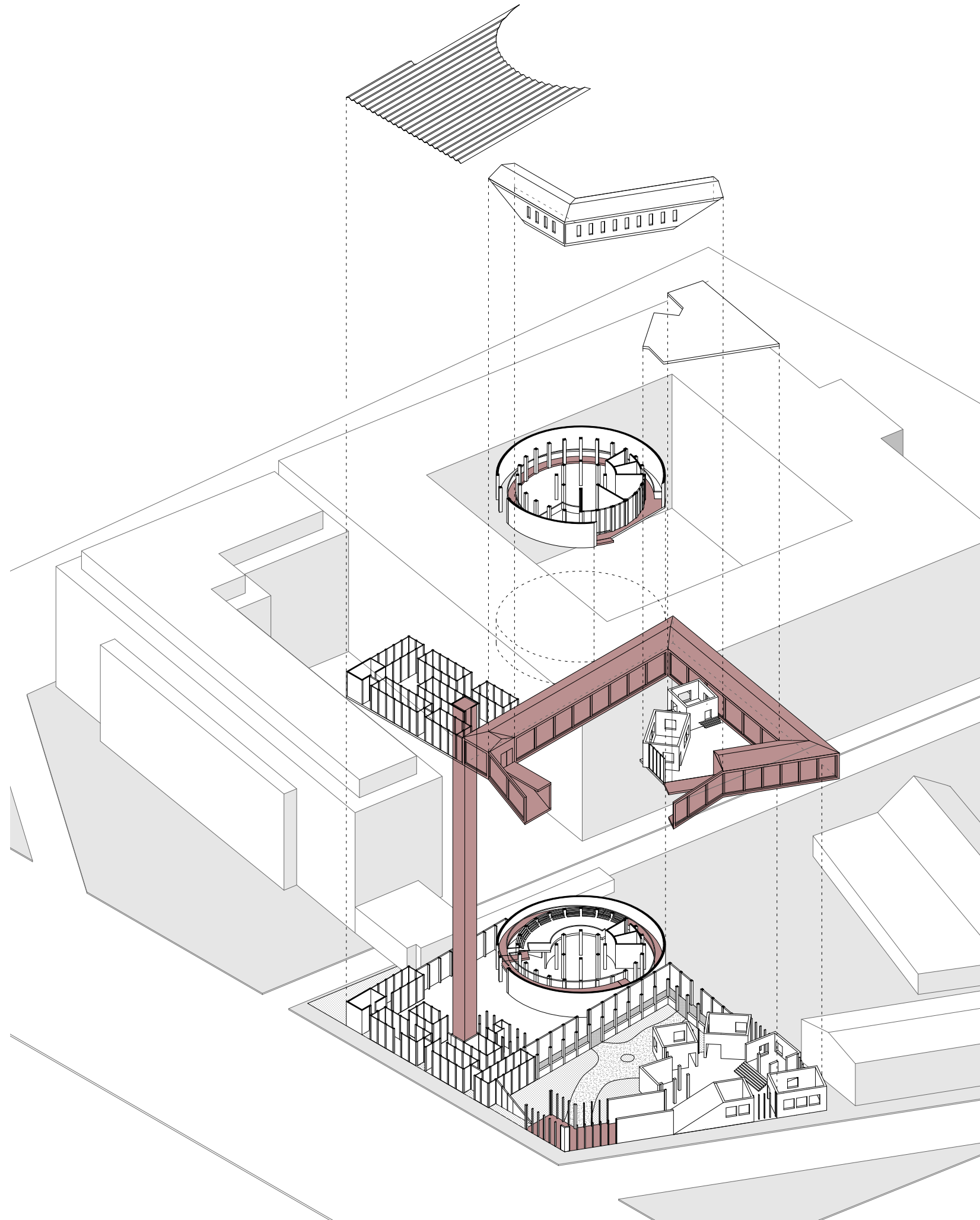


Study & workshop space | 204m<sup>2</sup>



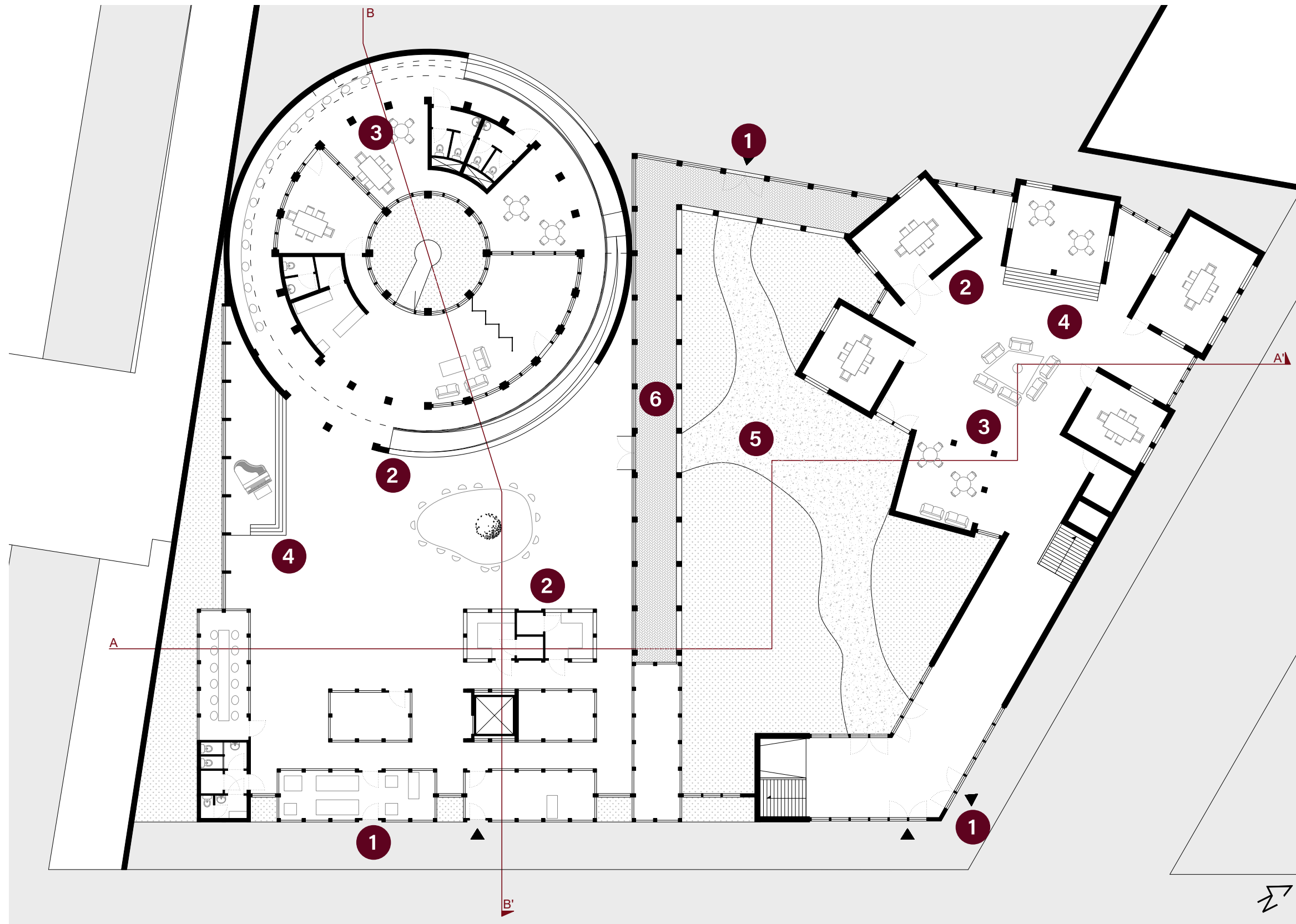
Circulation, exhibition space and study area | 586m<sup>2</sup>

# CIRCULATION



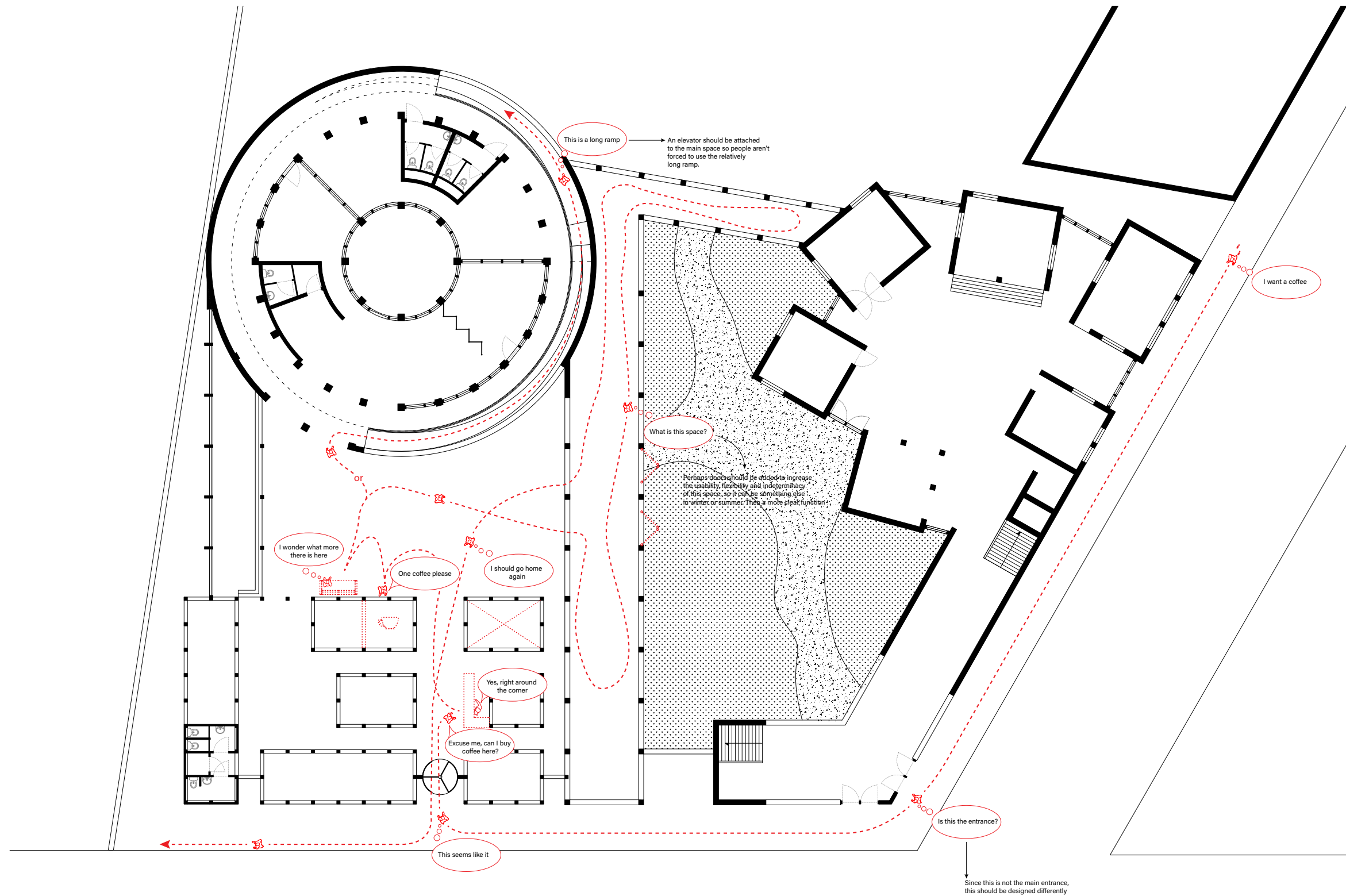


# (IN)DETERMINACY

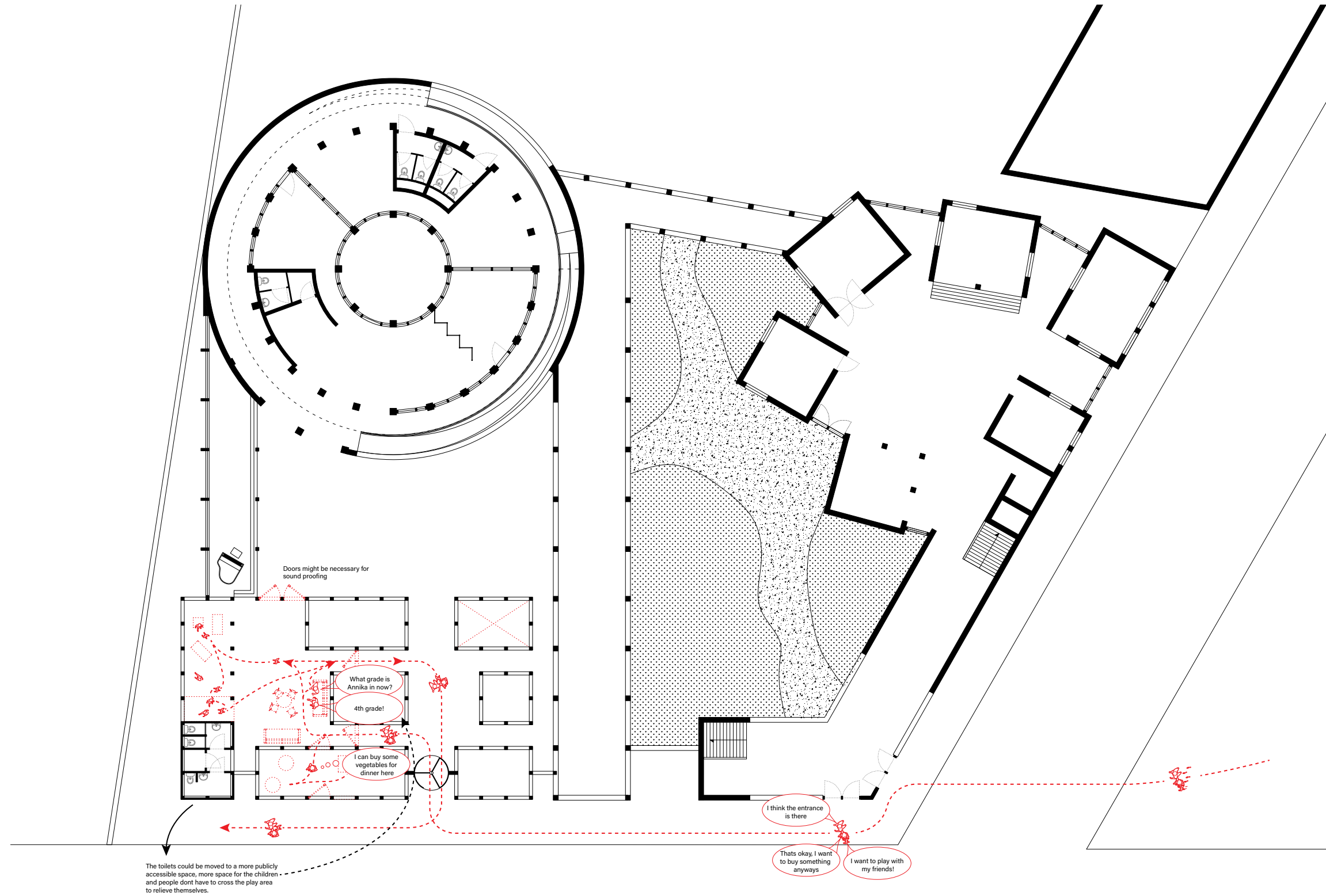


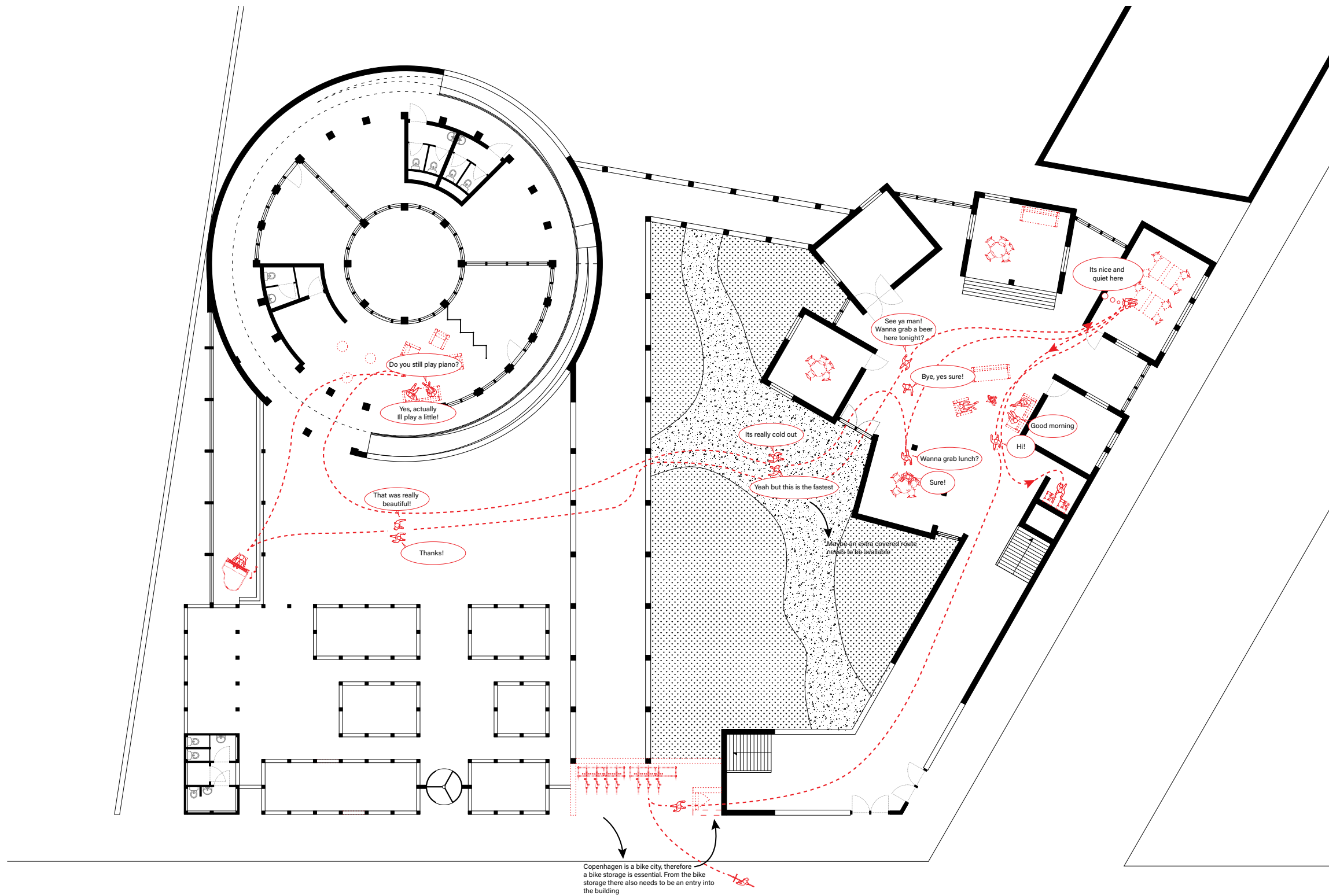
- |  |   |
|--|---|
| 1. Several paths leading to the space    | 4. Stair seats                          |
| 2. Defined partially by building edges   | 5. Courtyard next to it, with an arcade |
| 3. Columns to define <b>some</b> borders | around it (6)                           |

After P2

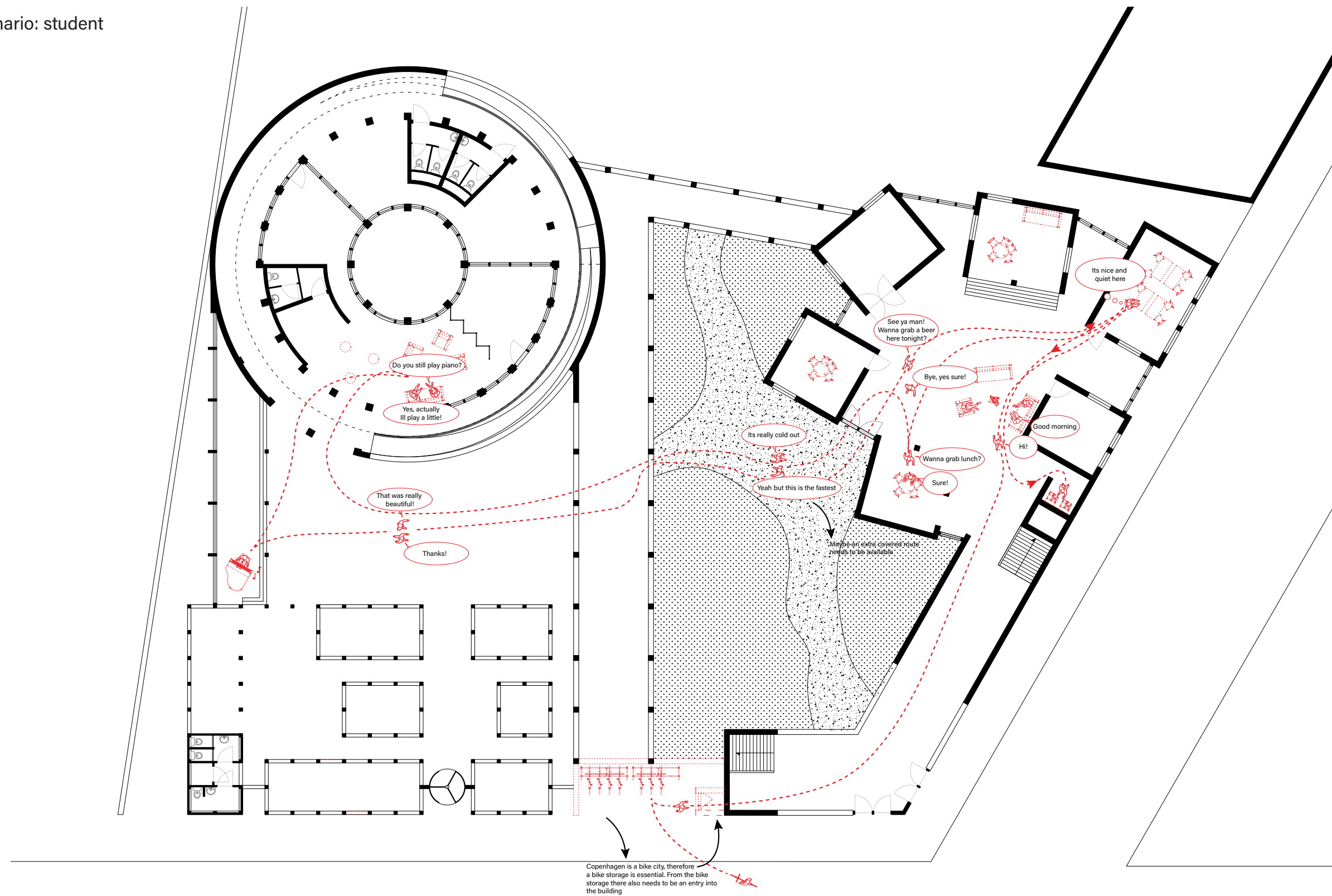








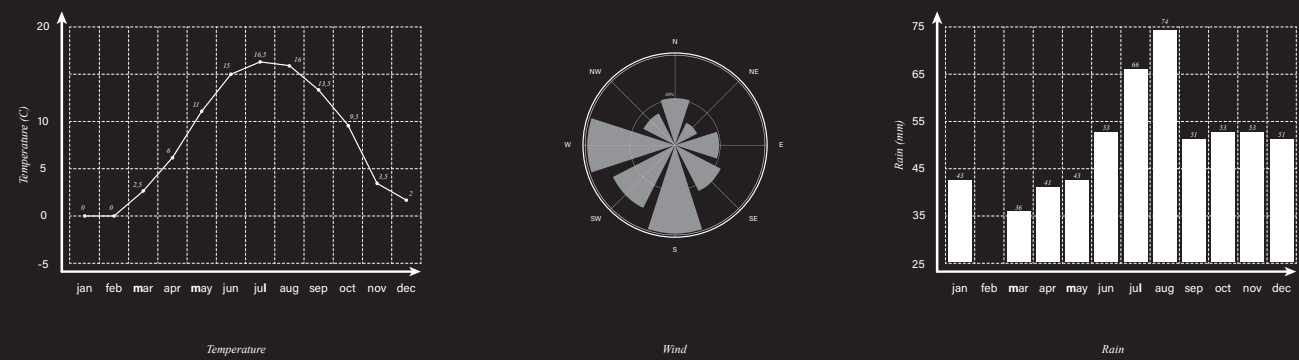
scenario: student



After P2, part of the conclusion was the lack of user data. In response I tried to map out usages of the building, to see if there were things missing.



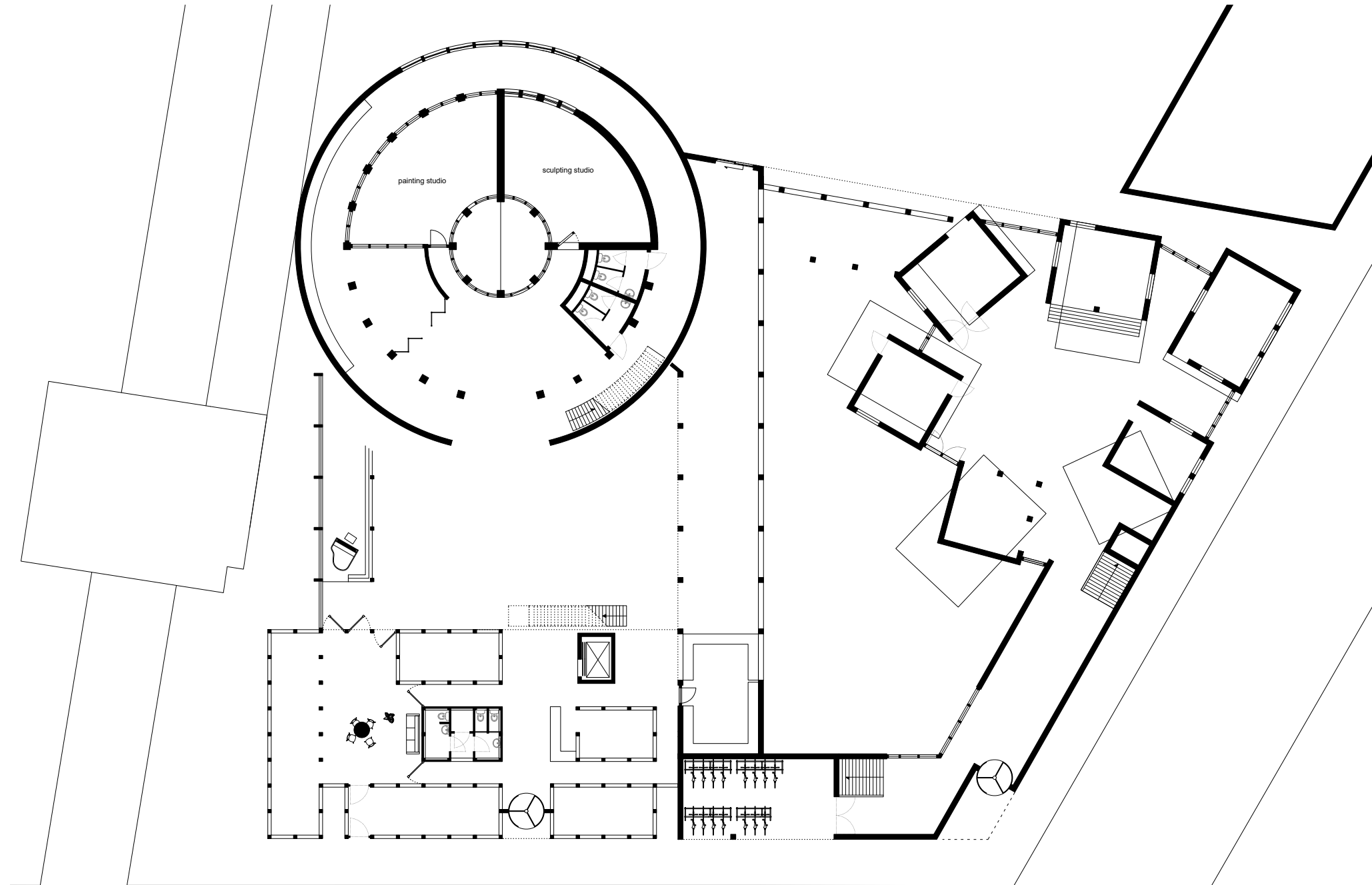
CPH Climate



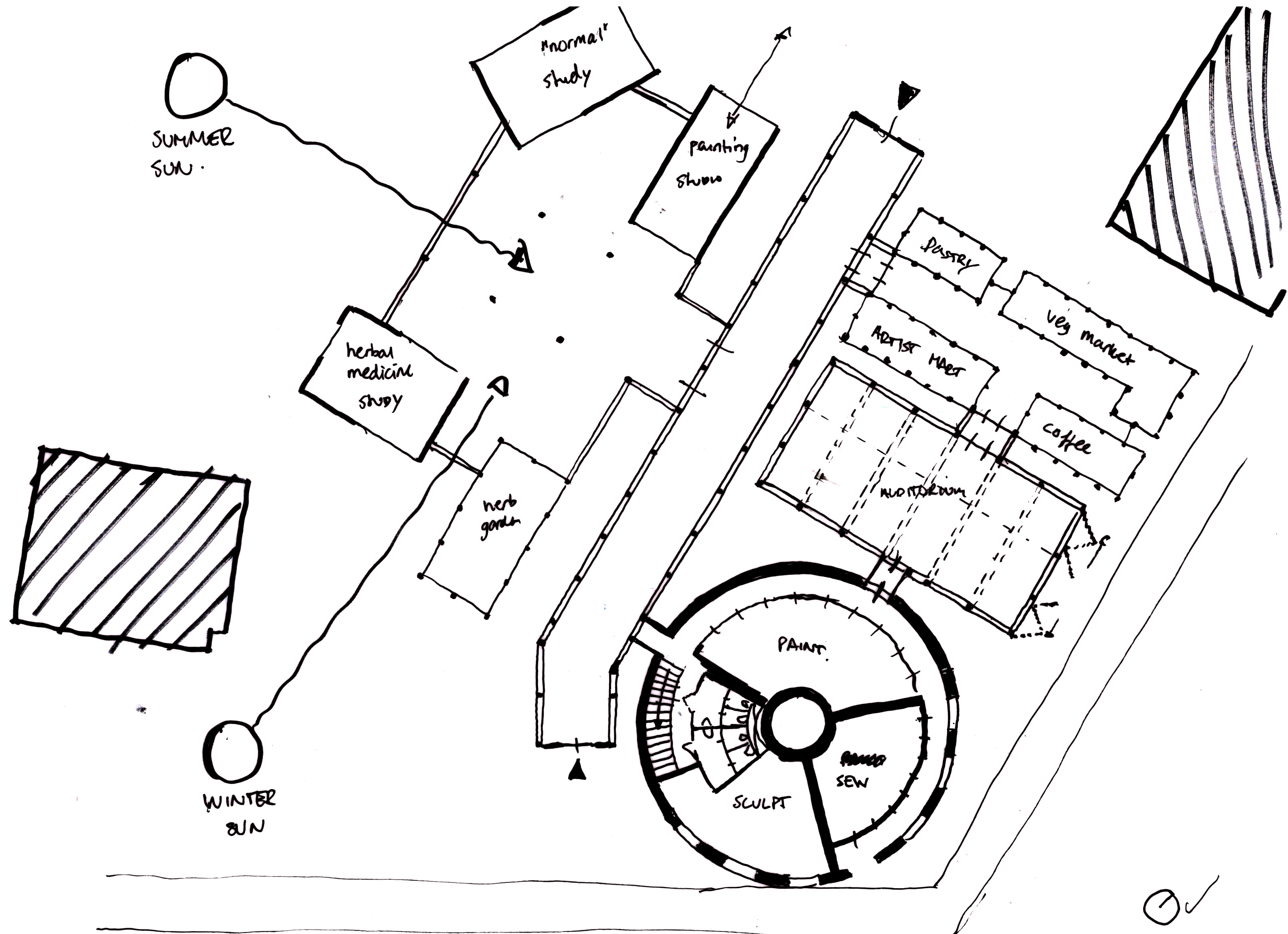
Another angle I tried to explore was looking at climate data. How many people would use the room at once and what kind of demands did the rooms need to meet depending on the function.

Indoor climate parameters

	Max. amount of people	Ventilation requirement & system	Sound production	Temperature (°C)	Heating system	Light (lux)	Direct sunlight beneficial?	Material
Food stall	2	60 m³/h natural	normal	0-20	none	400	yes	glass + wood
Vegetable market	3	90 m³/h natural	normal	0-20	none	400	yes	glass + wood
Coffee stall	1	30 m³/h natural/mechanical	normal	18-20	IR-panels	300	no	glass + wood
Reception desk	2	30 m³/h natural/mechanical	quiet	18-20	IR-panels	300	no	glass + wood
Painting studio & workshop space	11	330 m³/h natural/mechanical	quiet	18-20	IR-panels	750	no	rammed earth
Pottery studio & workshop space	7	210 m³/h natural/mechanical	normal	16-18	IR-panels	200	no	rammed earth
Music studio & workshop space	7	210 m³/h natural/mechanical	normal - loud	18-20	IR-panels	150	no	rammed earth
Sewing studio & workshop space	10	300 m³/h natural/mechanical	normal	18-20	IR-panels	300	no	rammed earth
Sculpting studio & workshop space	4	200 m³/h mechanical	loud - very loud	16-18	floor heating	400-750	no	rammed earth
Rentable space for light exercise	16	800 m³/h natural/mechanical	normal - loud	16-18	IR-panels	300	yes	rammed earth
Bar	50	1500 m³/h natural/mechanical	normal - very loud	18-20	floor heating	100	yes	glass + wood/rammed earth
Herbal medicine study space	10	300 m³/h natural/mechanical	quiet - normal	16-20	IR-panels	200	yes	glass + wood
Make-up school study space	10	300 m³/h natural/mechanical	quiet - normal	18-20	IR-panels	400-750	no	rammed earth
Standard small study space	15	450 m³/h natural/mechanical	quiet - normal	18-20	IR-panels	400	yes	rammed earth
Exhibition space ("snake" volume)	50	1500 m³/h natural/mechanical	normal - loud	18-20	IR-panels	200-400	yes	rammed earth
Main indoor square	150	4500 m³/h natural/mechanical	normal - very loud	18-20	floor heating	200-750	yes	glass + wood/rammed earth
Indoor study square	50	1500 m³/h natural/mechanical	quiet - normal	18-20	IR-panels	200-400	yes	rammed earth

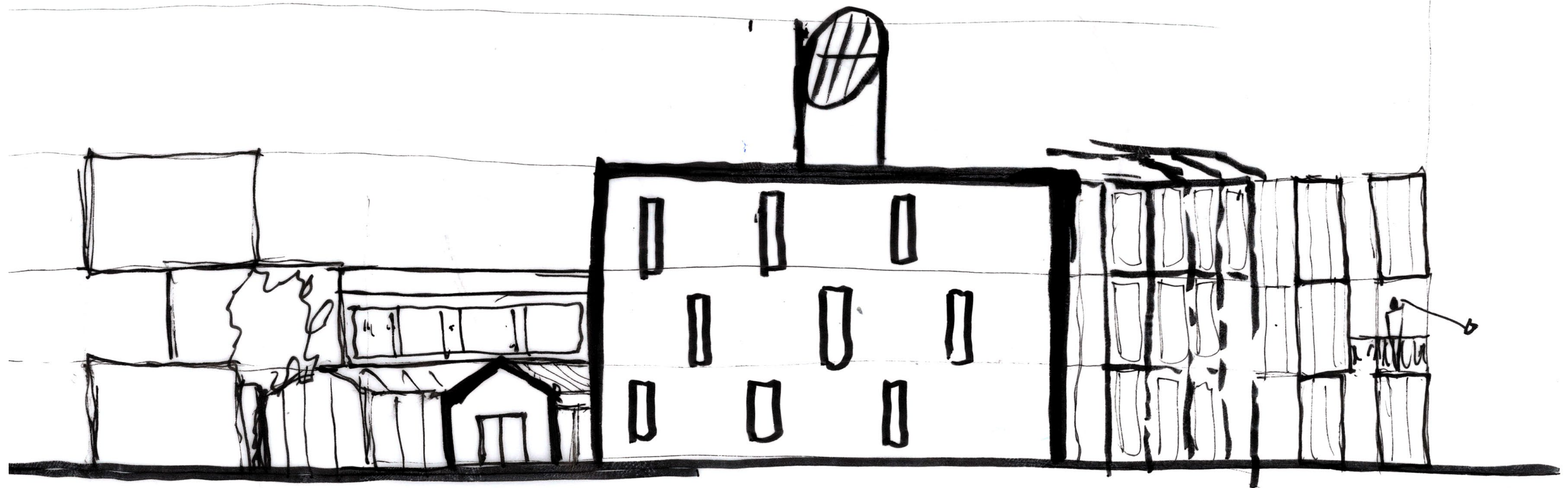


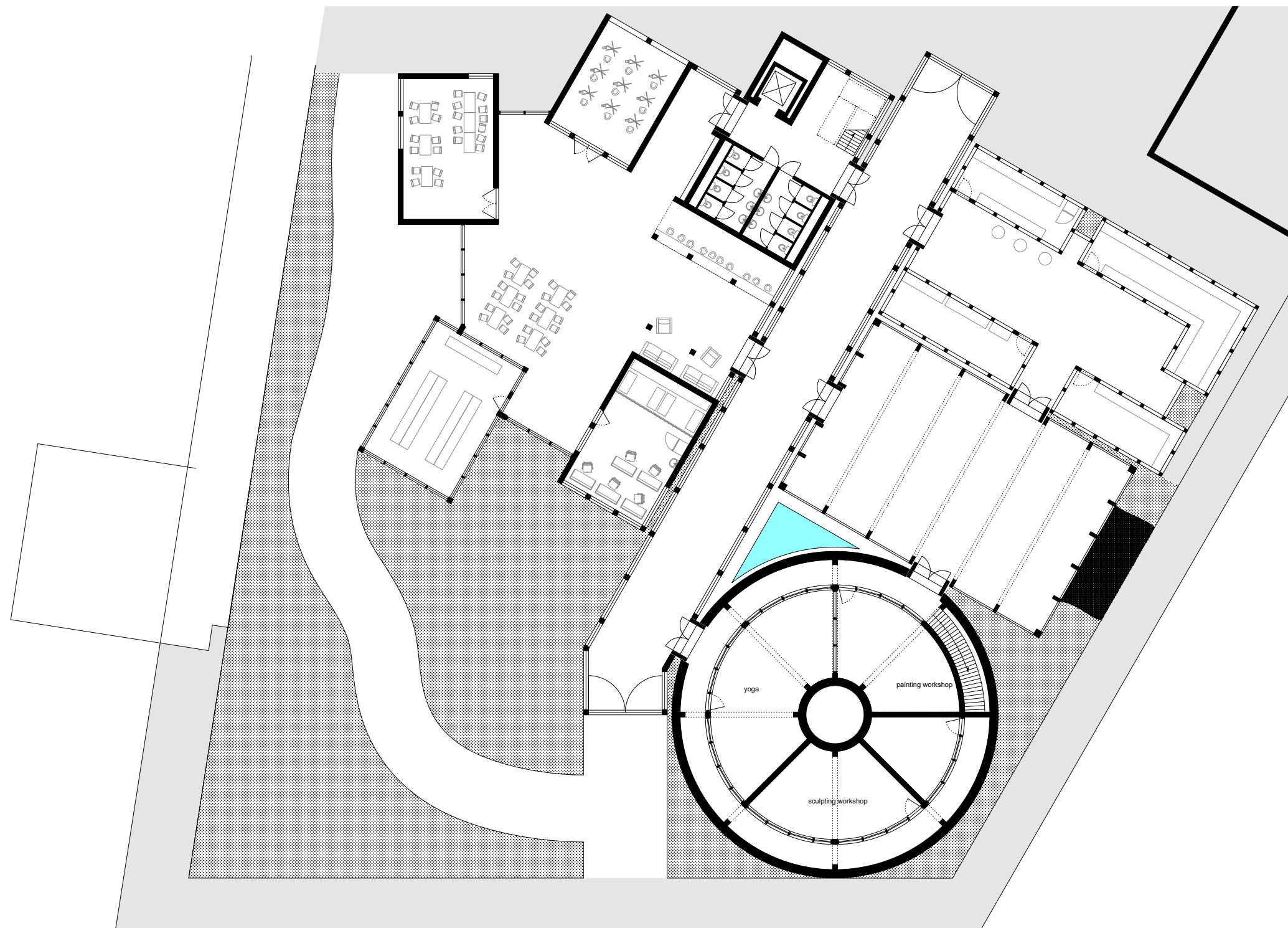
As a result, minor changes to the existing state of the project were made. It was clear that this was not the right approach. These new user data and demand data findings needed to be applied integrally, not after the fact.

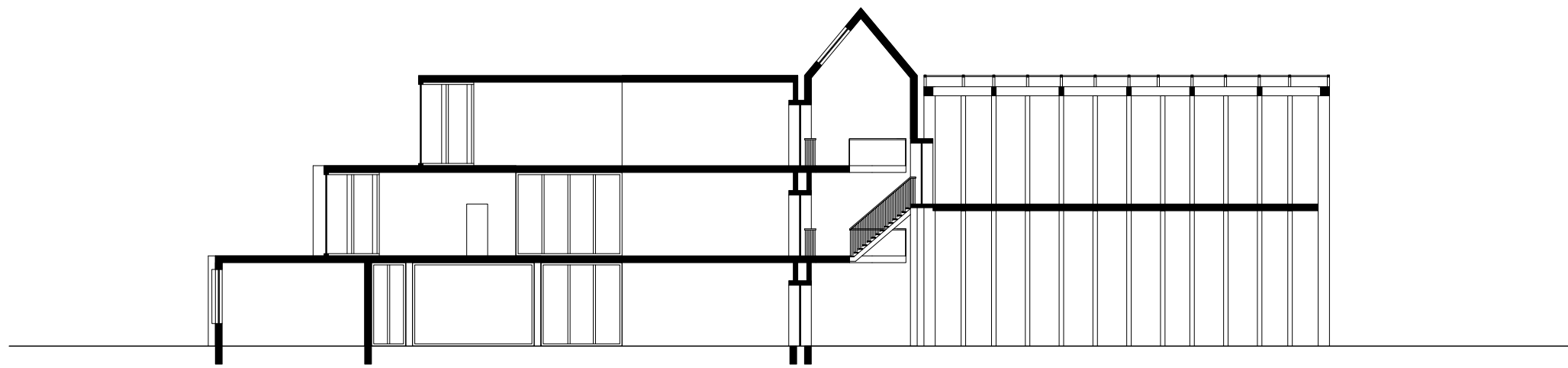


As a result, quite a large step back was taken to create a layout that uses the same "ingredients", but placed with more data backing it up. This created a significant improvement

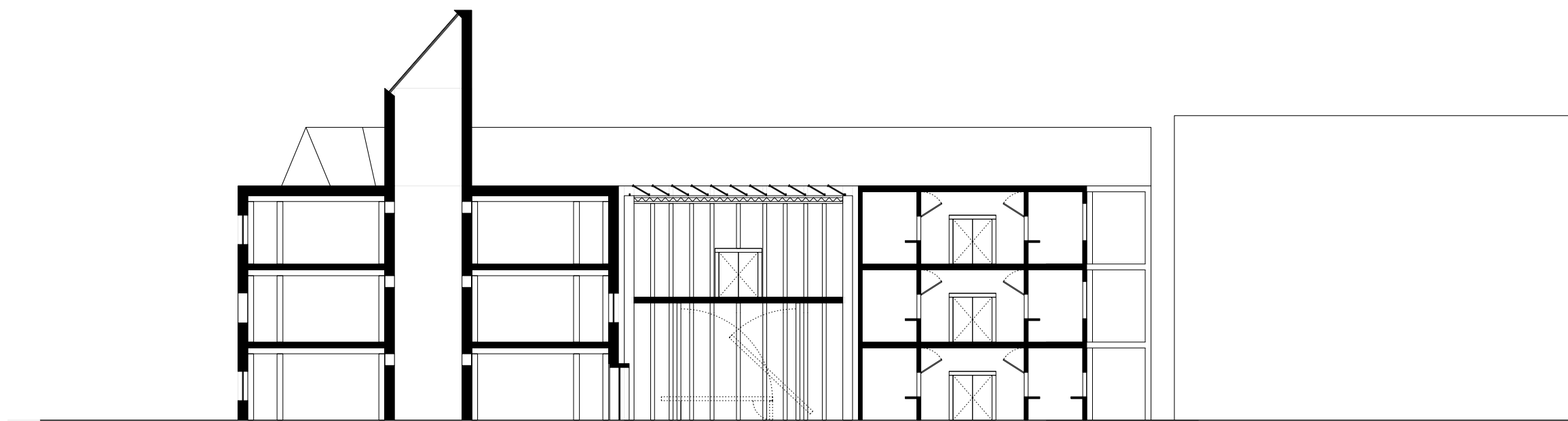


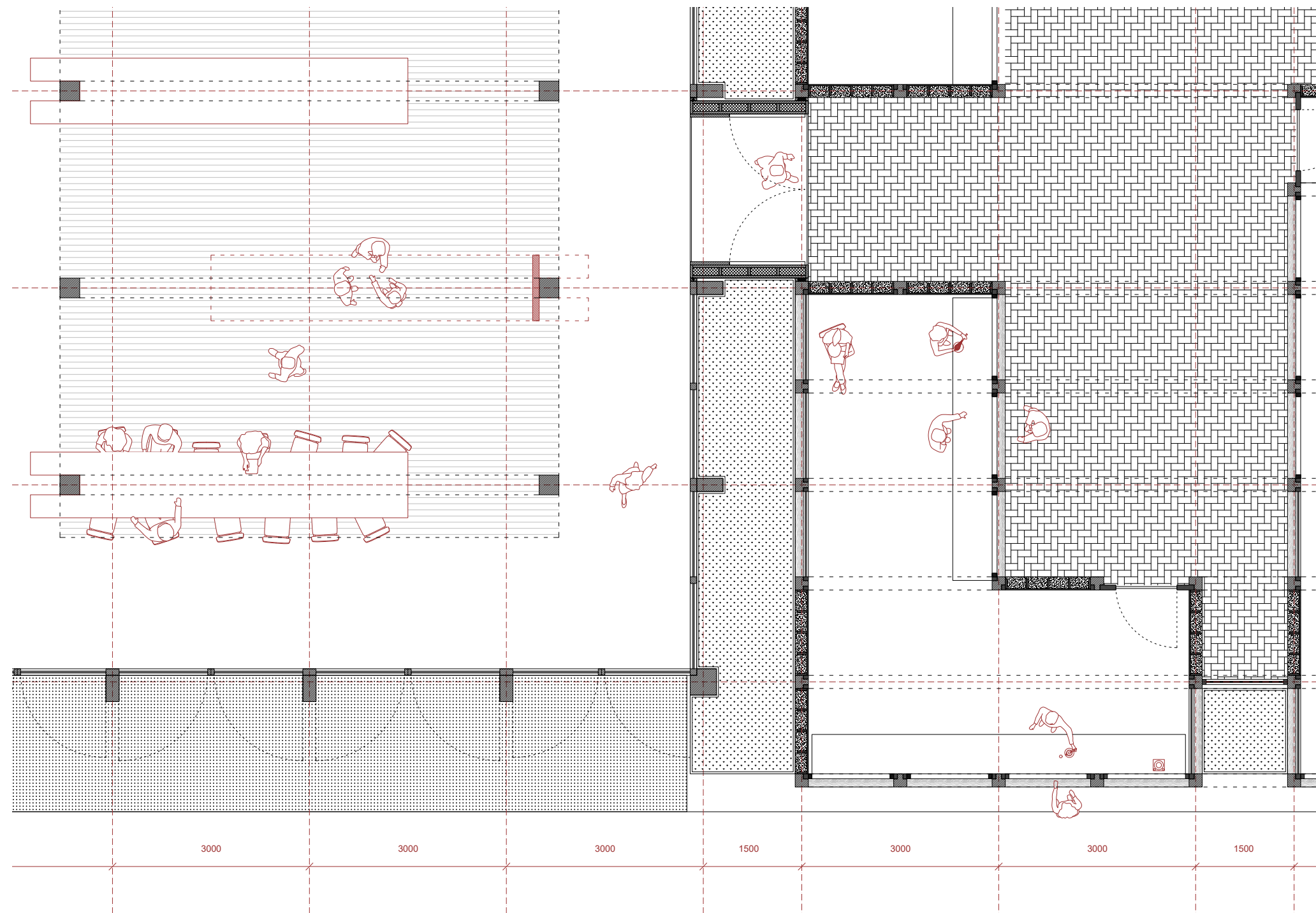


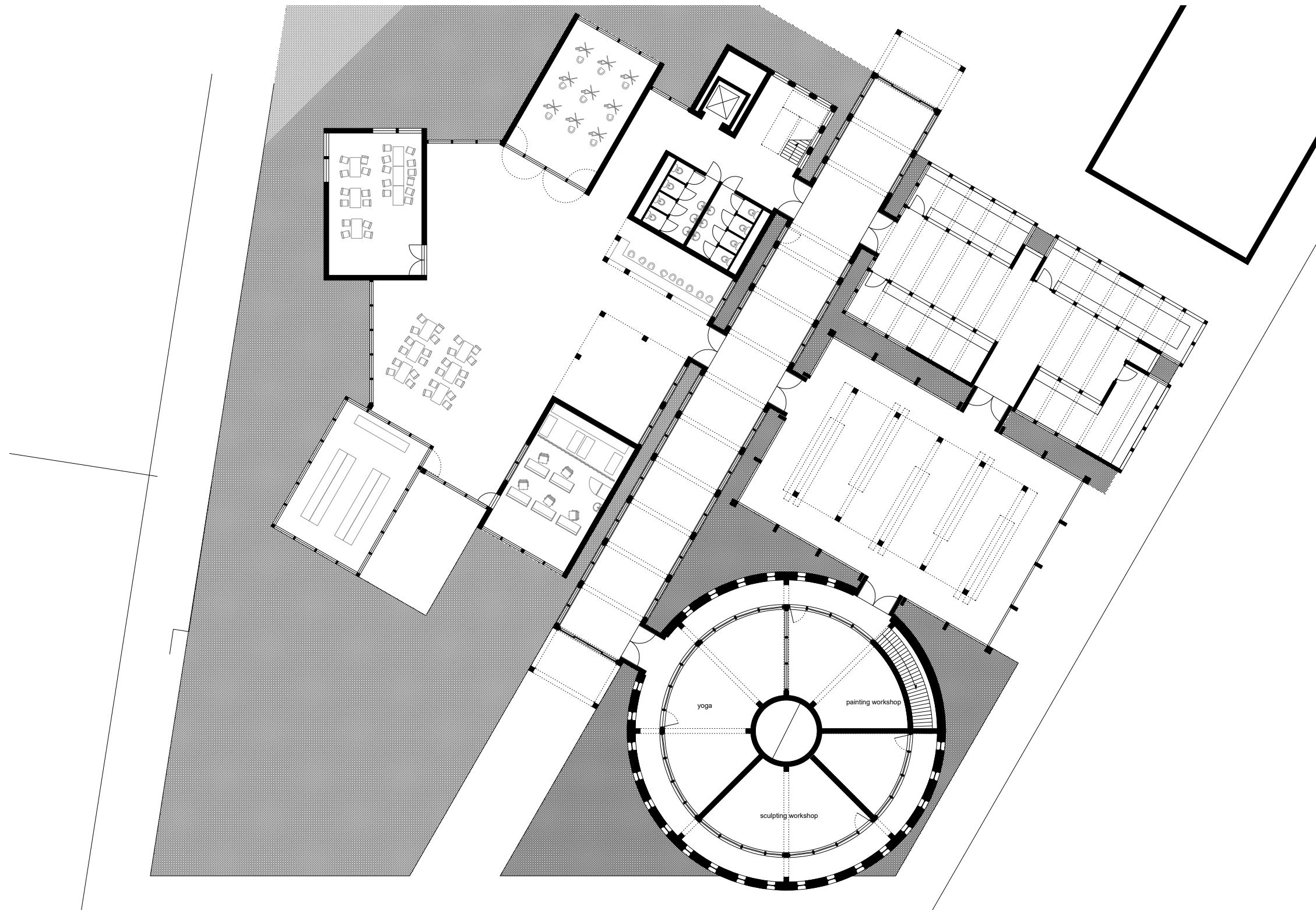






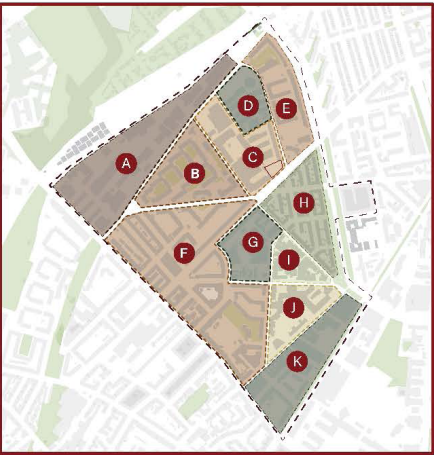




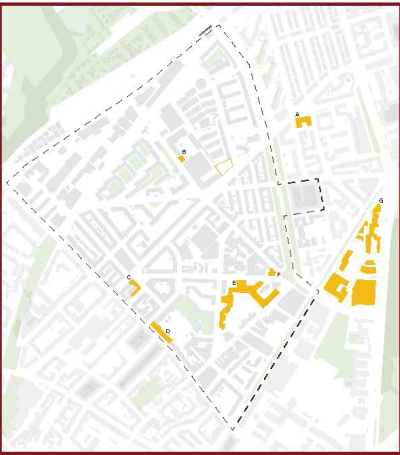




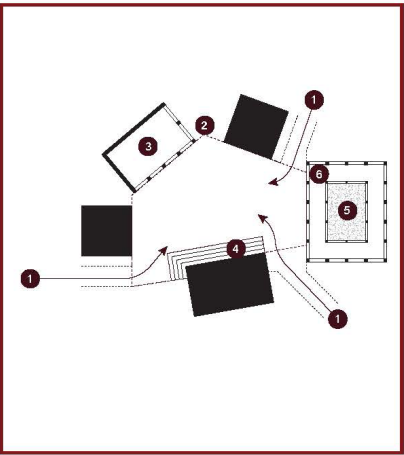
P3



A: Car dealerships  
B: Housing blocks with elaborated common green areas  
C: Reclaimed industry  
D: Unique typologies  
E&F: Long building blocks  
G&K: A mix of multiple (housing, education, industry)  
H: Row houses  
I: Industrial past  
J: Copenhagen vocational school

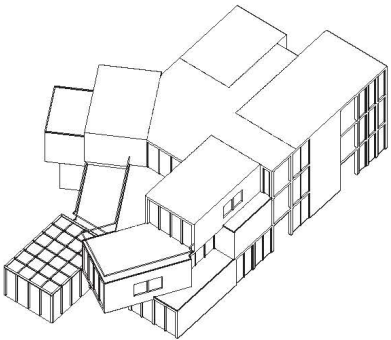


A: Herbal medicine school and dyslexia center  
B: Sine Ginsborg Hair & Make-Up School  
C: Part of the Copenhagen Vocational School  
D: Part of the University of Copenhagen  
E: Copenhagen Vocational School  
F: AOF Center Copenhagen  
G: University of Copenhagen



Indeterminacy  
1. Several paths leading to the space  
2. Defined partially by building edges  
3. Columns to define some borders  
4. Stair seats  
5. Courtyard next to it, with an arcade around it (6)

A: "Seemingly unorganized"

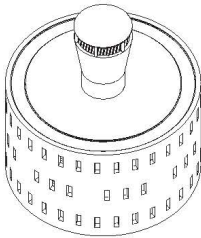


**Rules**  
1. Blocks are sized by increments of 1500 mm  
2. They are rotated either 30 or 60 degrees  
3. Placed allowing indeterminate space in between  
4. Placed according to sun exposure

**Brief**  
- Artist studios (painting, music, sewing)  
- Study spaces, general and specific  
- Core (toilets, elevator and stairs)

**Materiality**  
Wood & rammed earth

D: "The silo"

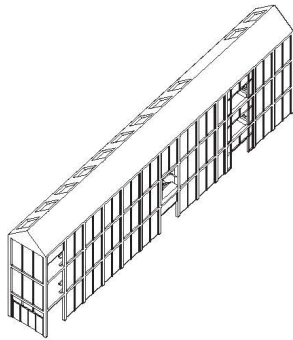


**Rules**  
1. Diameter according to 1500 mm grid size  
2. Contains solar chimney that allows ventilation of the building, and some heating in the winter  
3. Small windows and skylights for natural light

**Brief**  
- Workshops  
- Study space  
- Counseling spaces

**Materiality**  
Wood & rammed earth

E&F: "The snake"

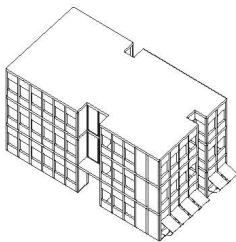


**Rules**  
1. Comparable proportions to the housing blocks in the neighborhood  
2. Gable roof  
3. Open during daytime

**Brief**  
- Main circulation space  
- Connects Bolsjefabrikken to the street

**Materiality**  
Wood and glass

H: "Rowhouses"

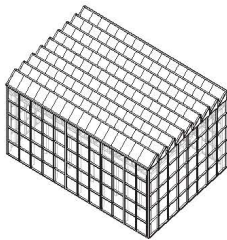


**Rules**  
1. Volumes considerably more narrow than long, matching the proportions of the row houses in the neighborhood  
2. Consistent construction with 1500 mm as the leading measurement, allowing modular infill

**Brief**  
- Permanent marketspace (coffee, food, artist works, etc.)  
- Small focus cubicles

**Materiality**  
Wood, glass, straw and loam.

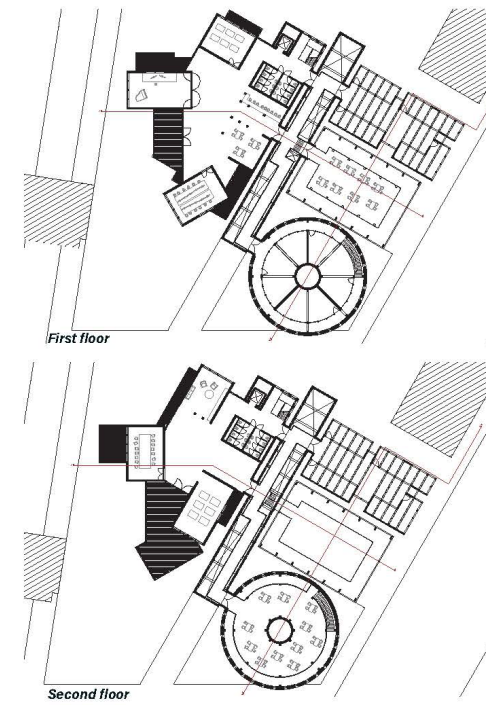
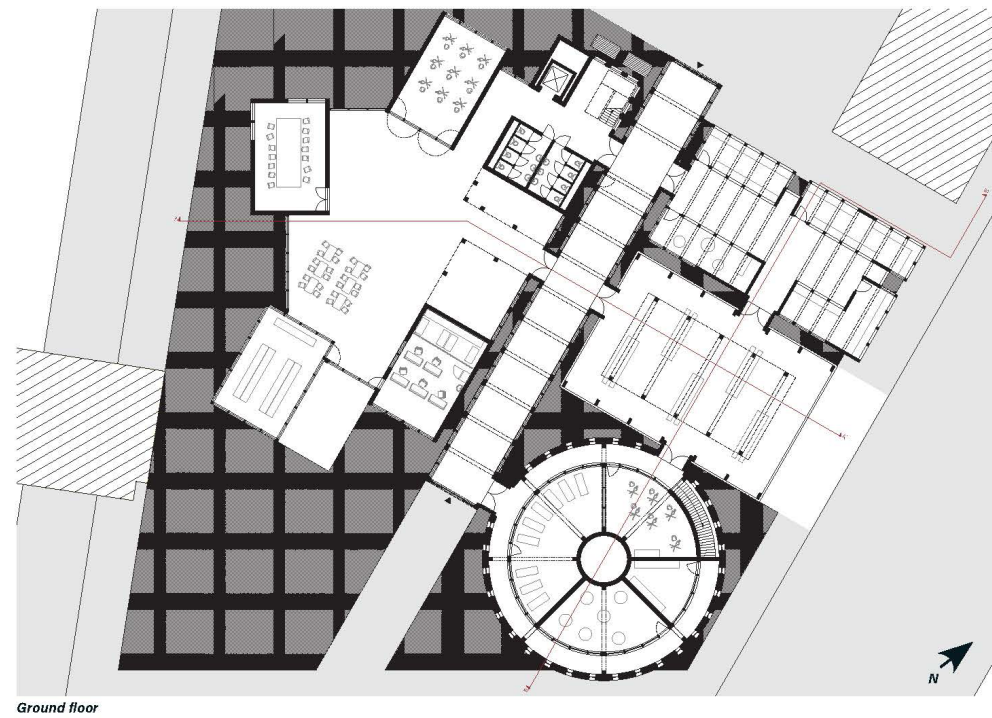
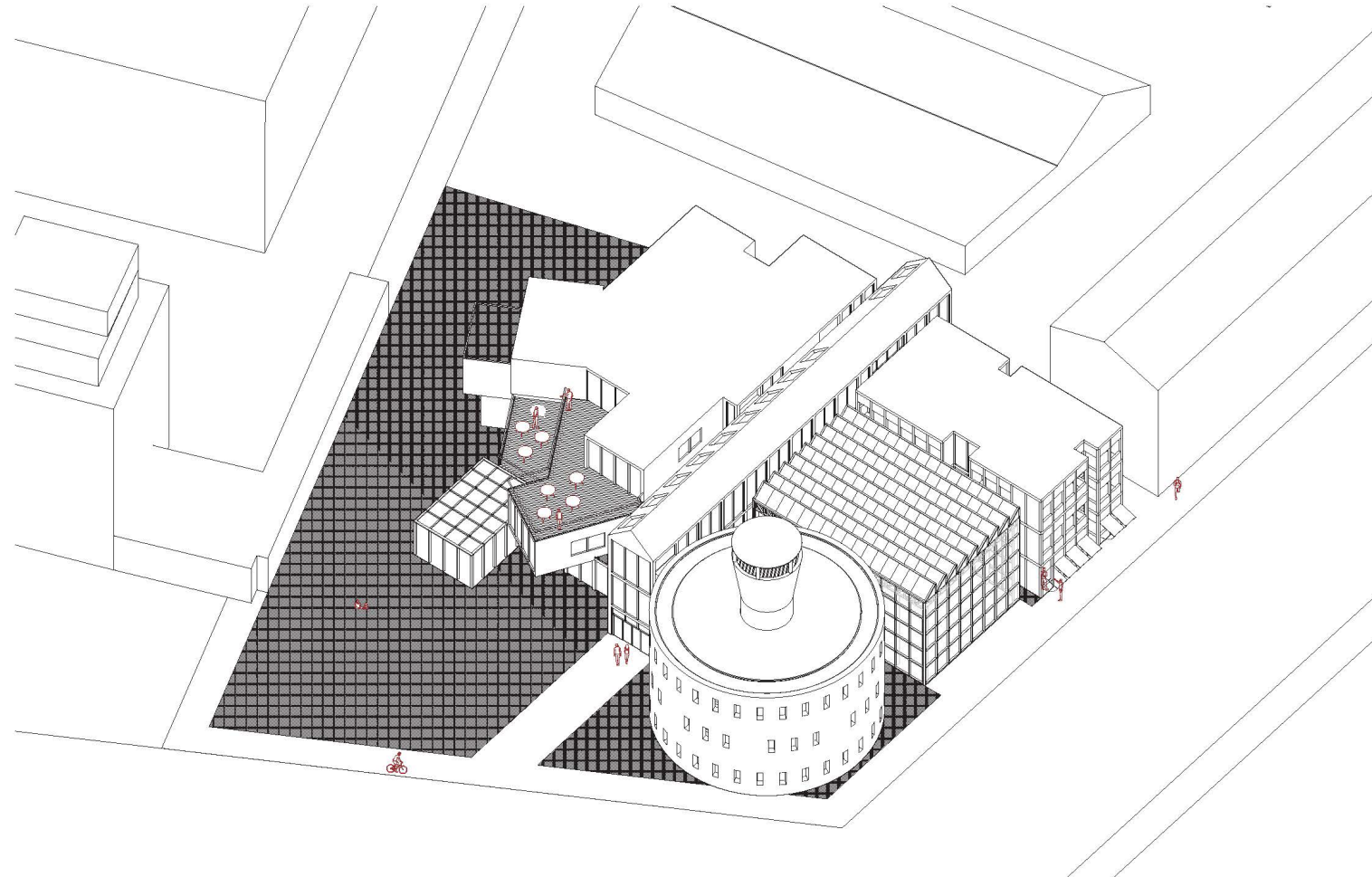
I: "Industrial past"



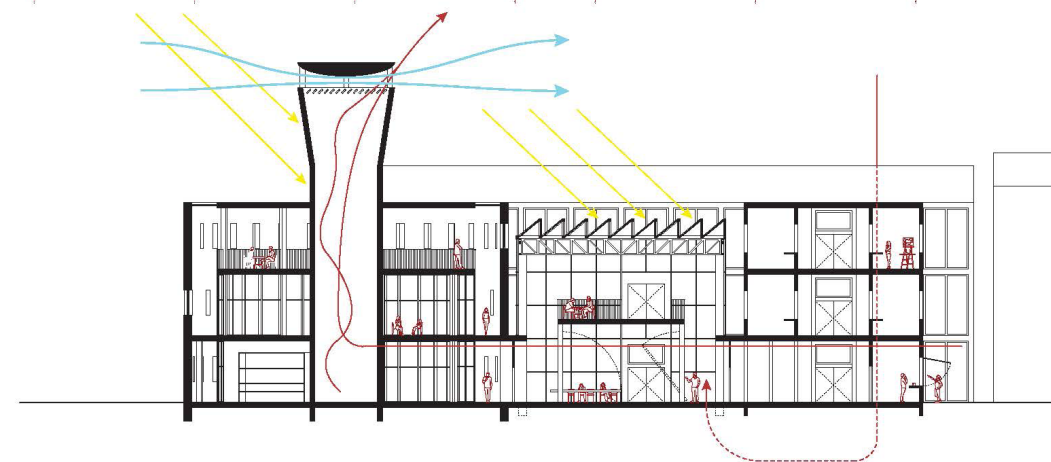
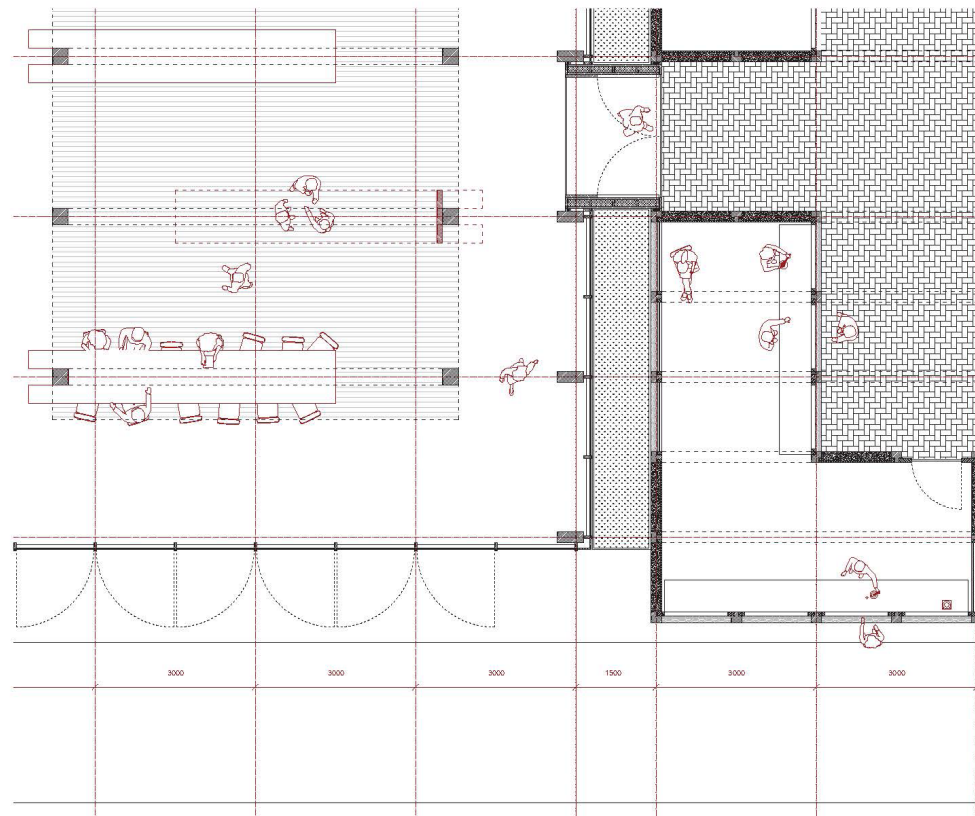
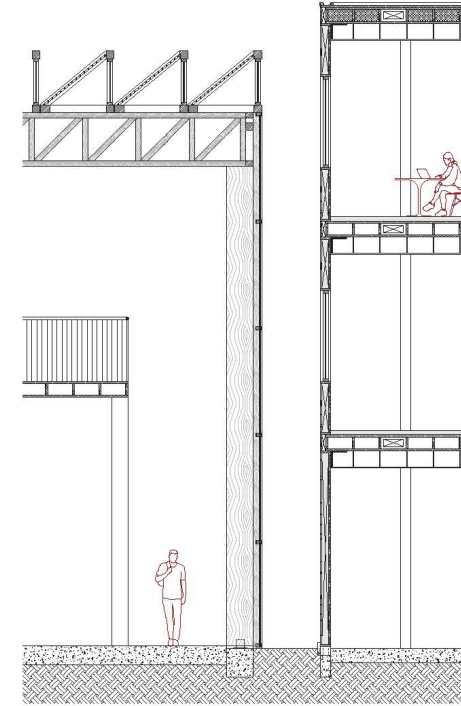
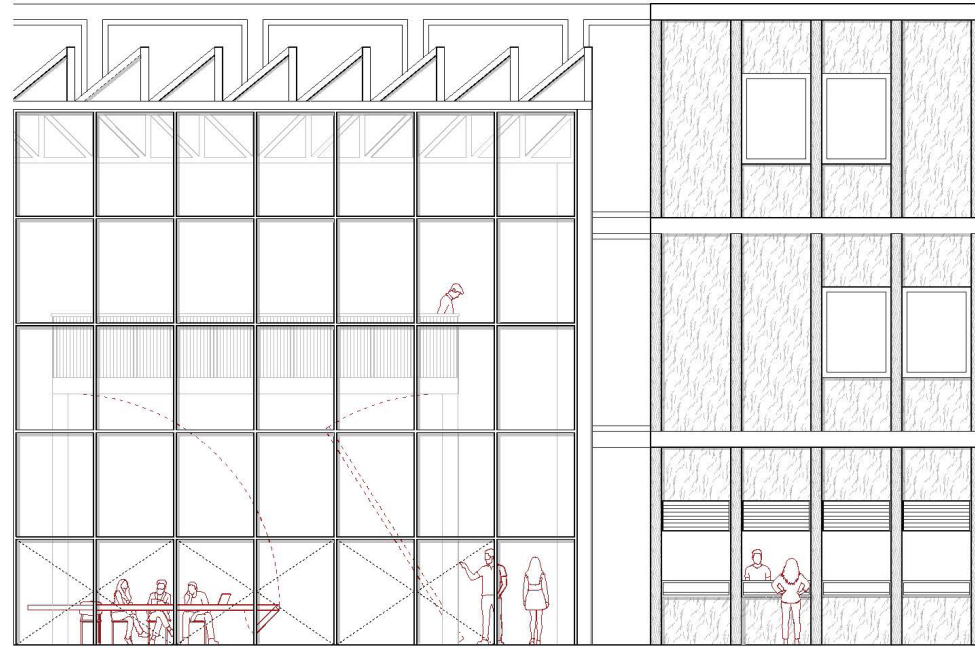
**Rules**  
1. Construction using elements reminding of industrial buildings; such as trussed beams and a saw-tooth roof. The latter allows for the placement of solar panels  
2. Open floorplan with movable tables

**Brief**  
- Auditorium, workspace, space to eat, drink etc.

**Materiality**  
Wood and glass



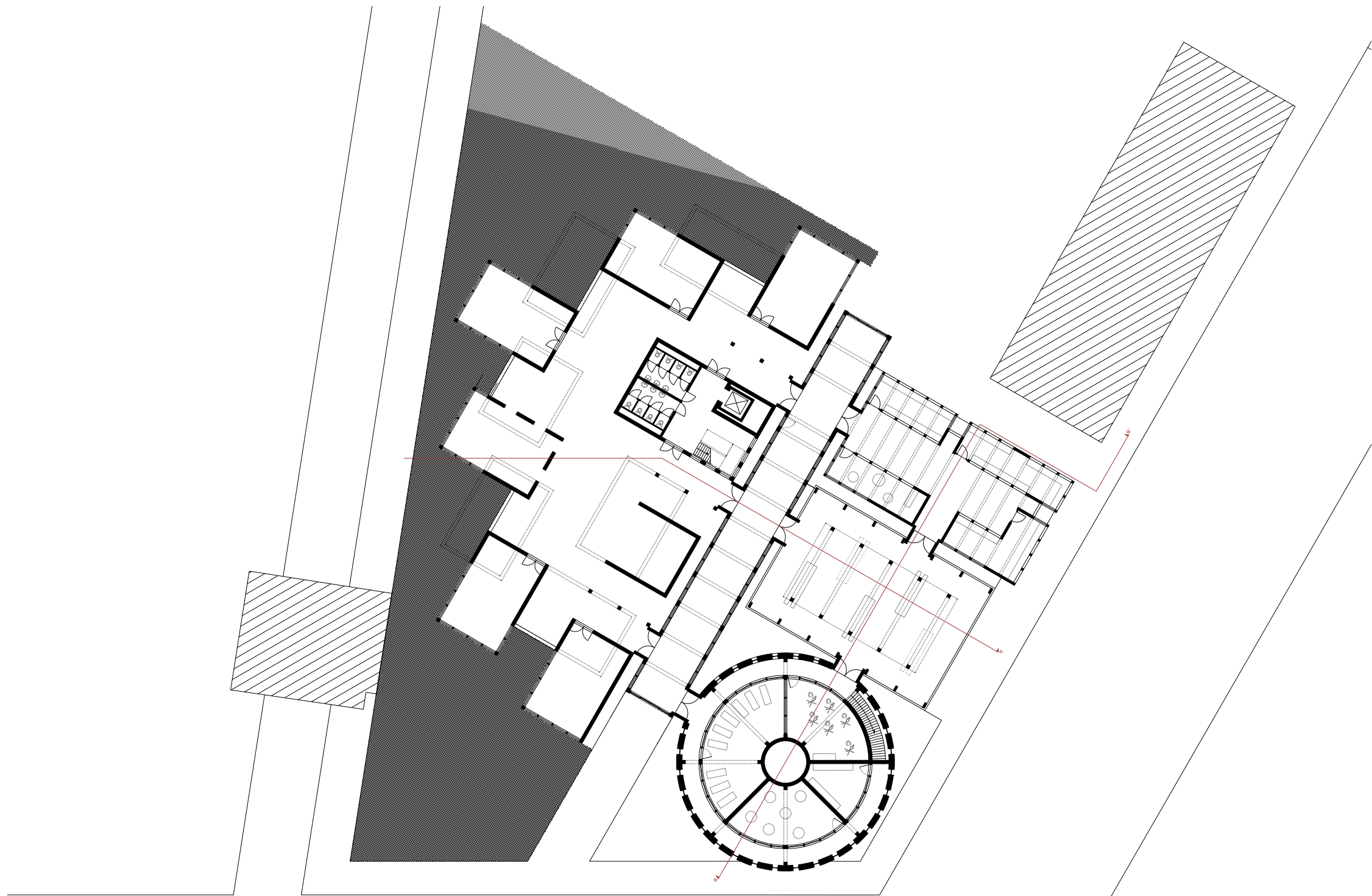




**Summer**  
 - Venturi effect & stack effect provide ventilation,  
 air inlet at the north side (next to core)  
 - Solar panels provide energy

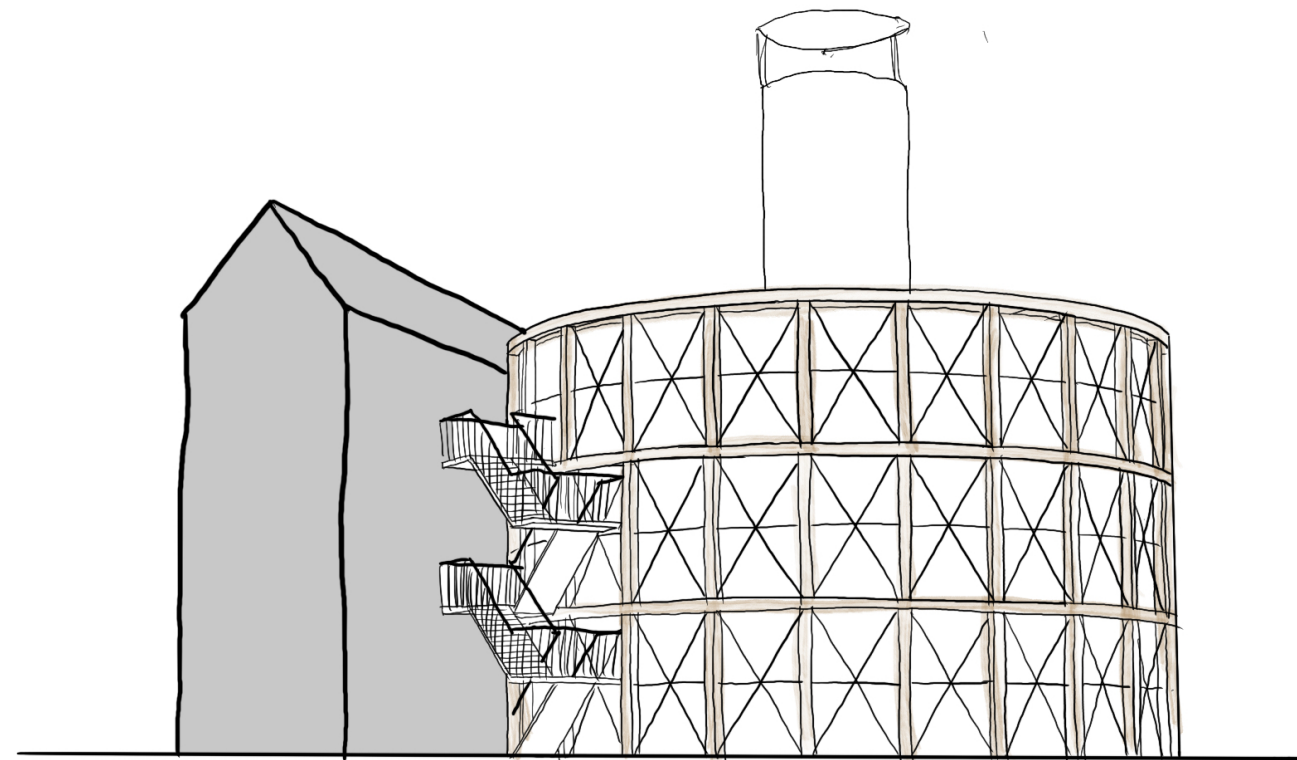
**Winter**  
 - Solar chimney provides hot air that is  
 distributed by activating the ventilation at the  
 north side

After P3

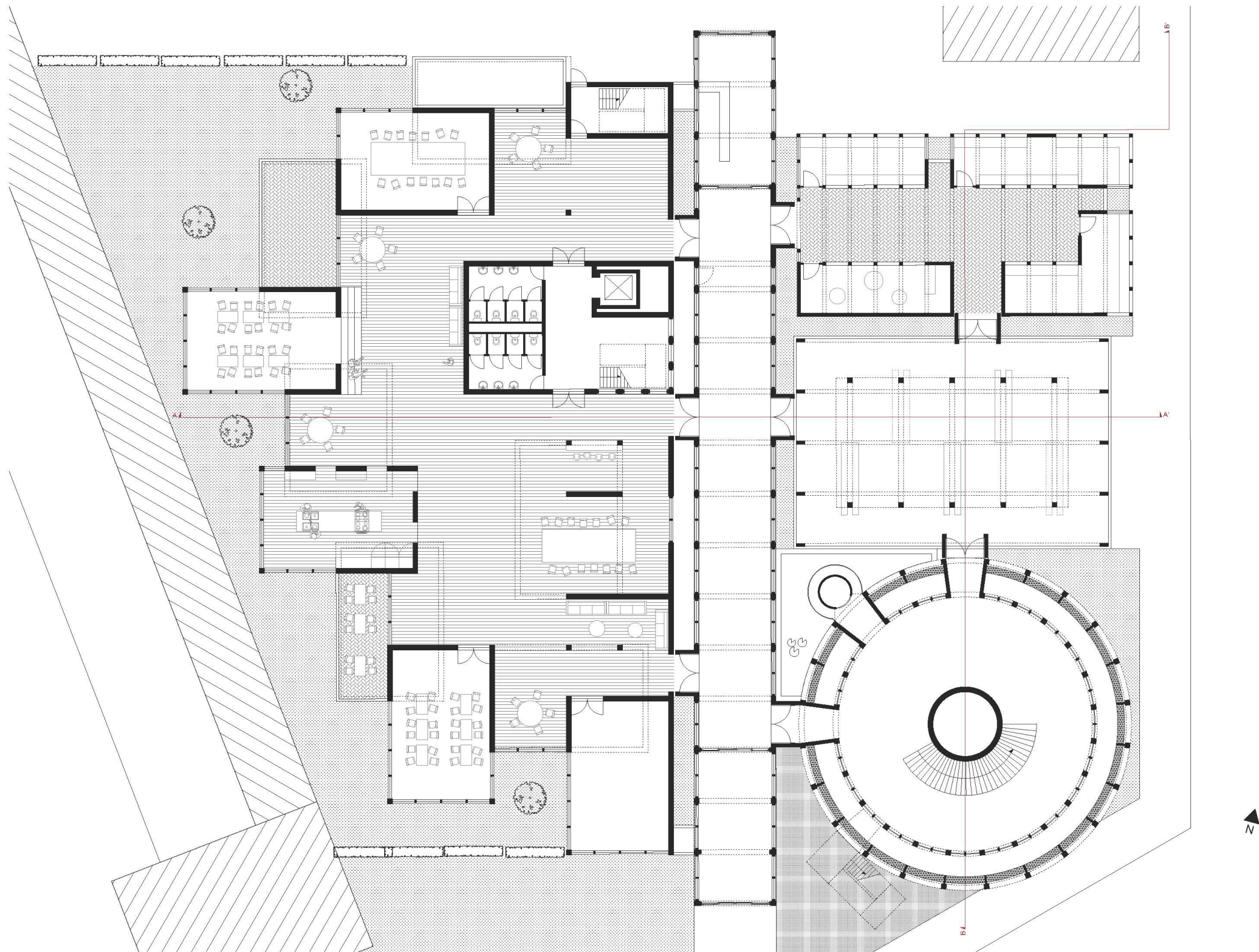


After P3 it turned out that the architecture of some parts needed improvement, and the in-between space between the volumes needed to be further elaborated. The idea was to have the circular volume draw inspiration from the gasometer typology

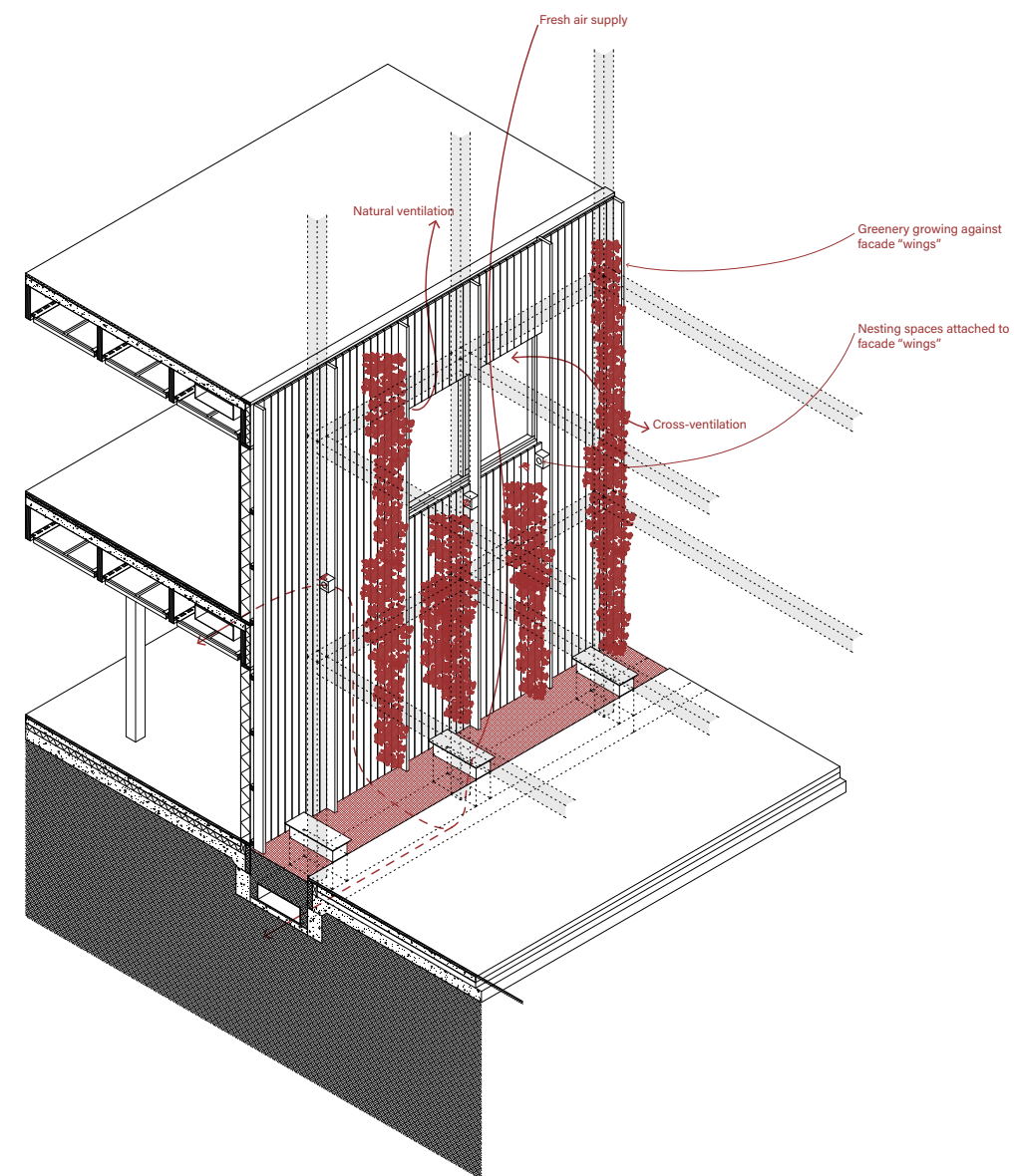




Architectural expression inspired by gasometers

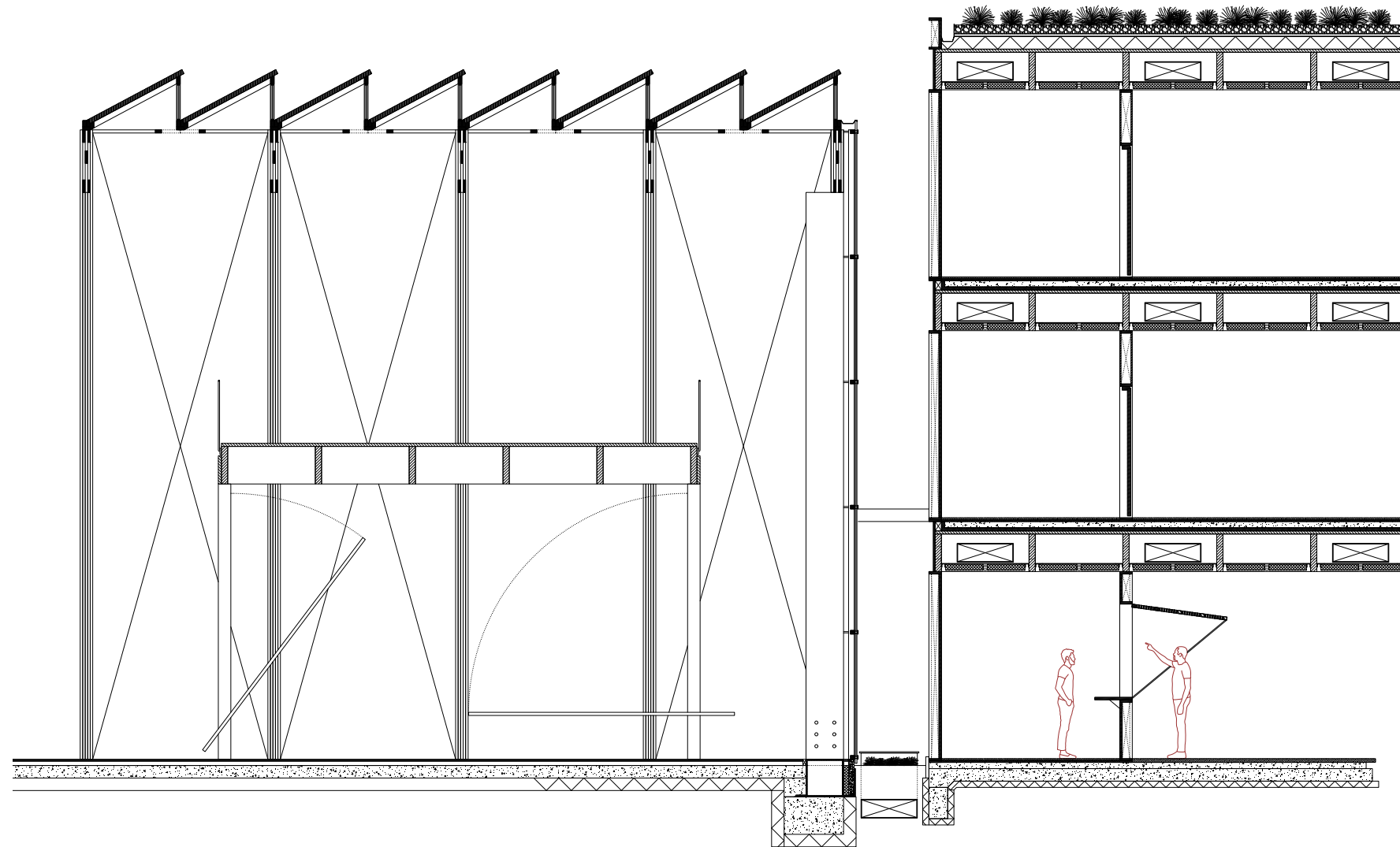


Updated floorplan

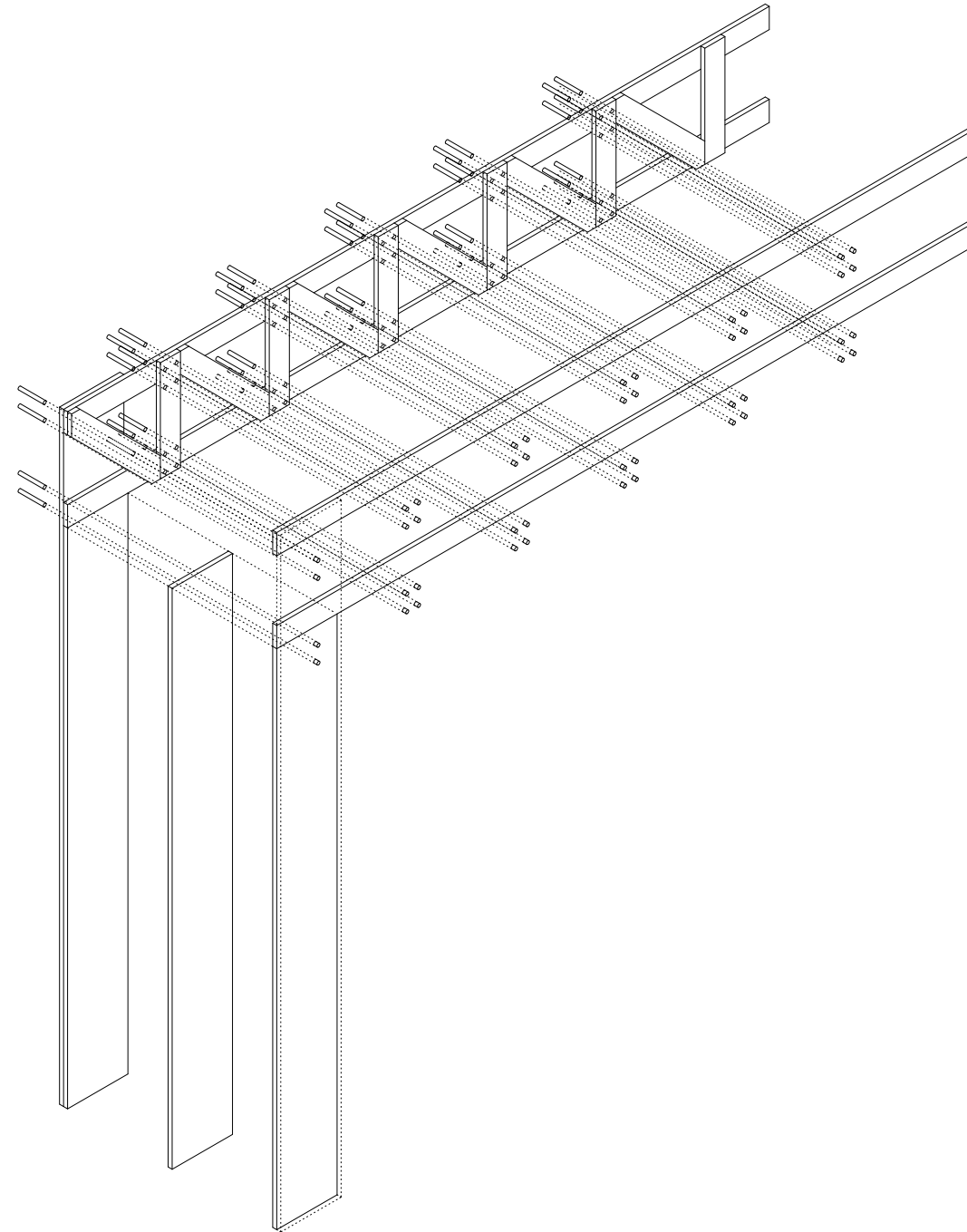


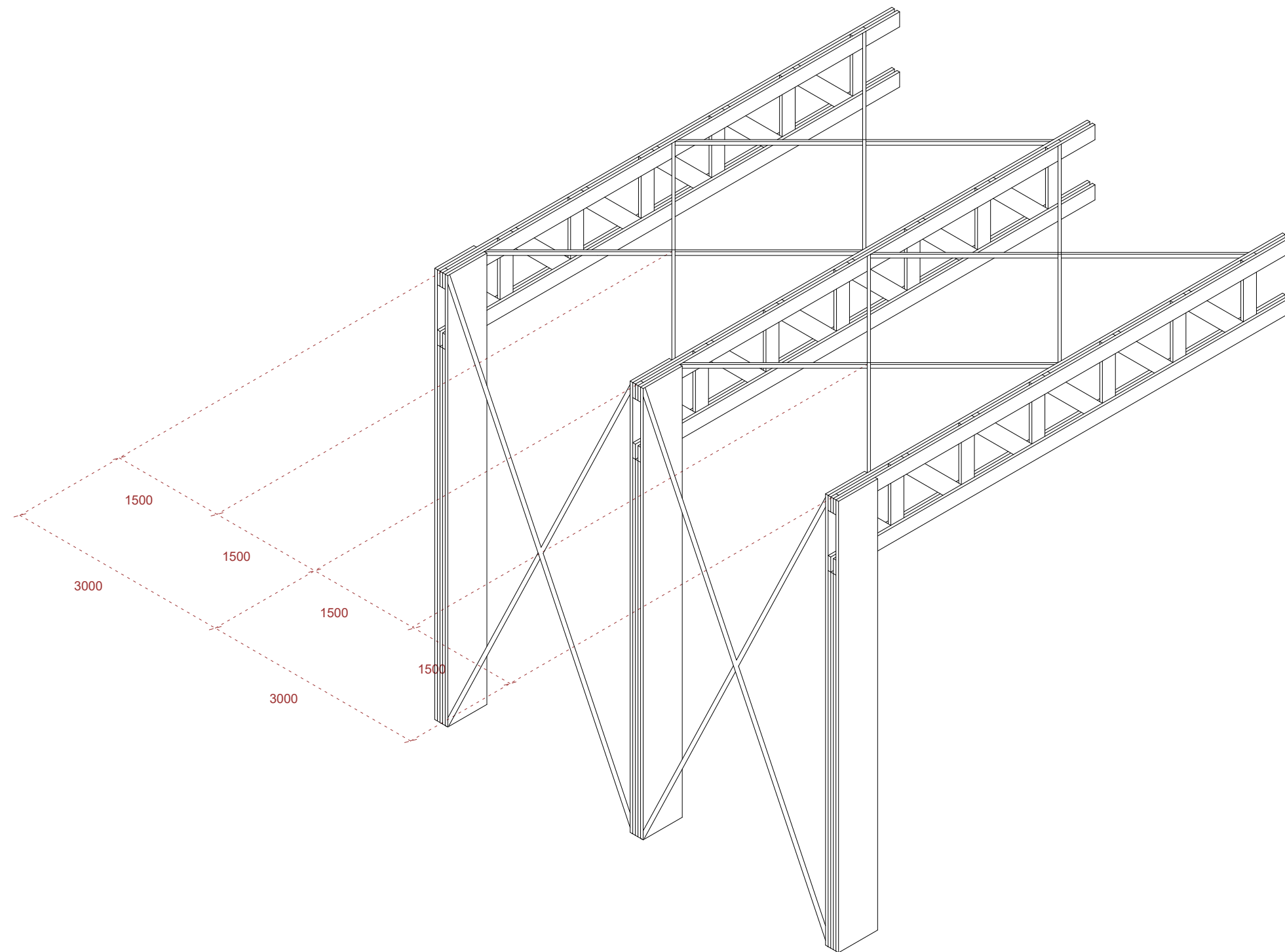
Principle for the functioning of the inbetween space





A sktech version of a 1:20







P4

# URBAN COLLAGE

*Counteracting fragmentation in the Haraldsgadekvarteret*

# Table of contents

Context and problem statement



Concept



Building design



Technical elaboration



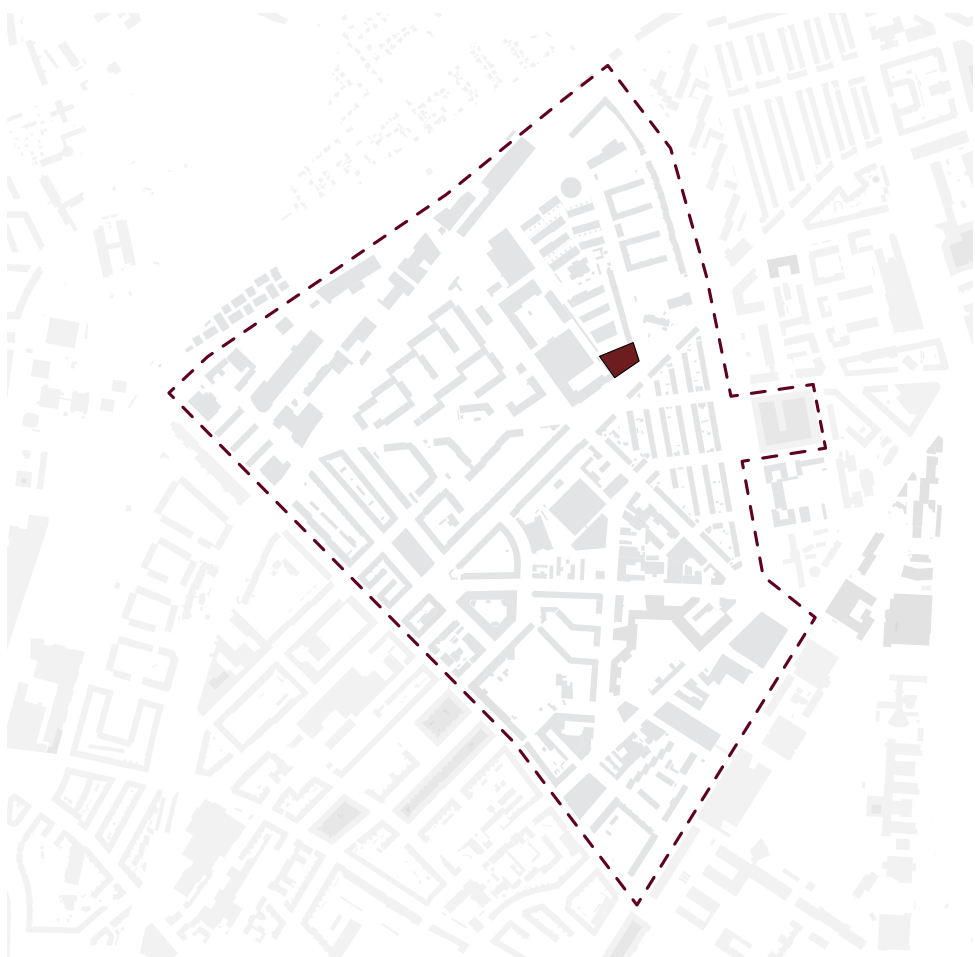
## Context and problem statement



*Denmark and Copenhagen*

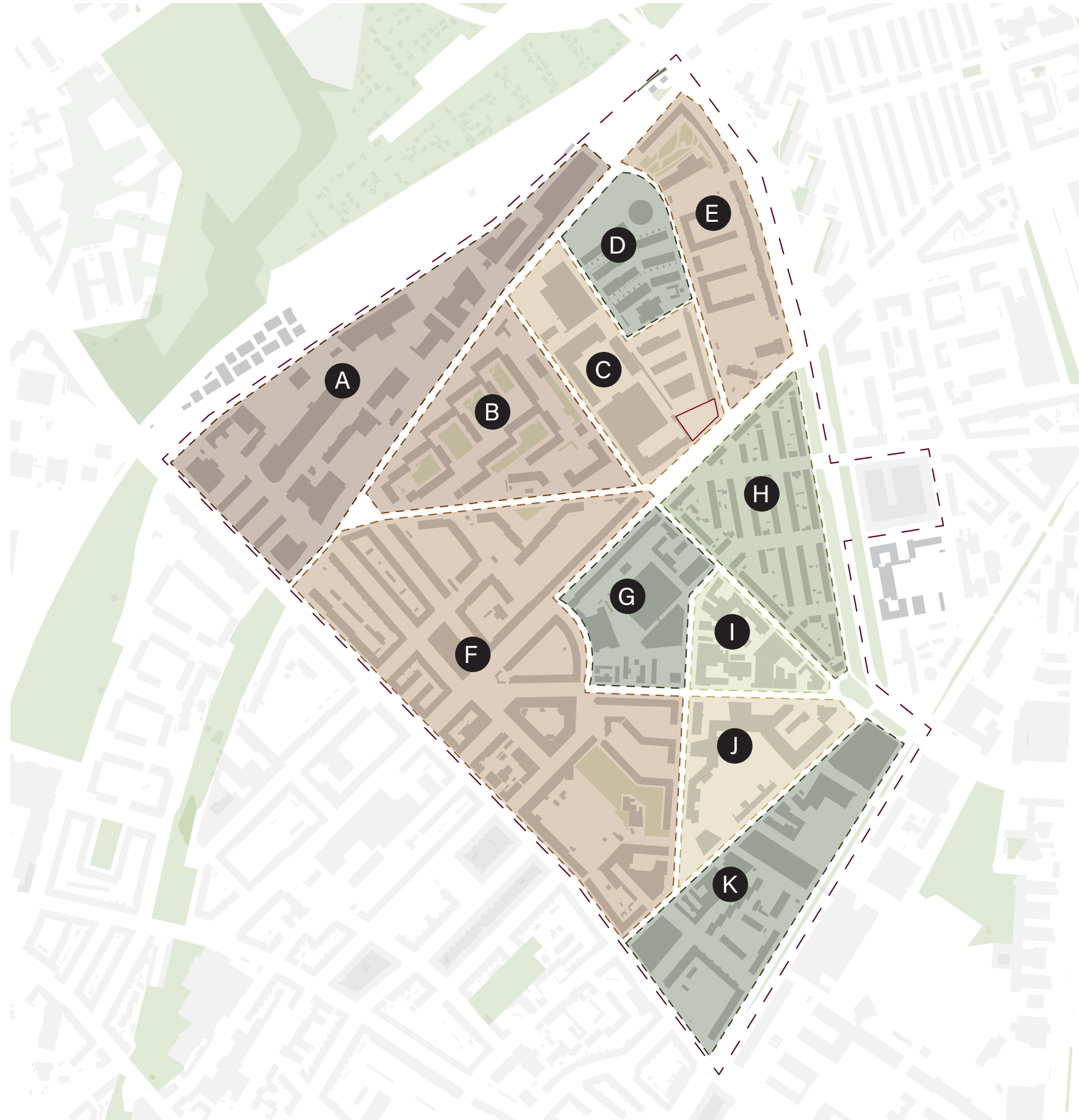


*Districts of Copenhagen*



*Haraldsgadekvarteret & site area*

## Urban fabric



**A: Car dealerships**

**B: Housing blocks with elaborated common green areas**

**C: Reclaimed industry**

**D: Unique typologies**

**E&F: Long building blocks**

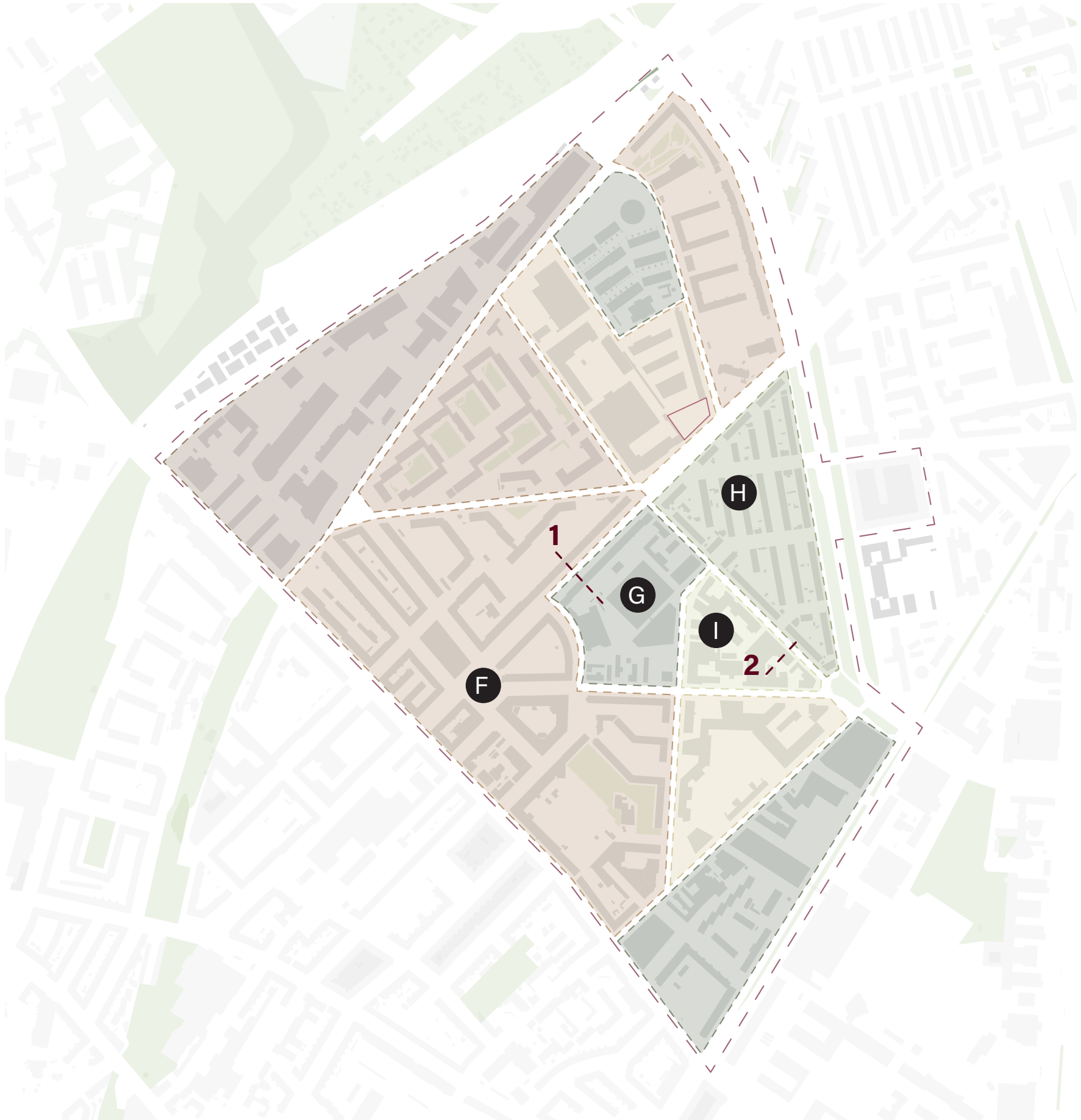
**G&K: A mix of multiple (housing, education, industry)**

**H: Row houses**

**I: Industrial past**

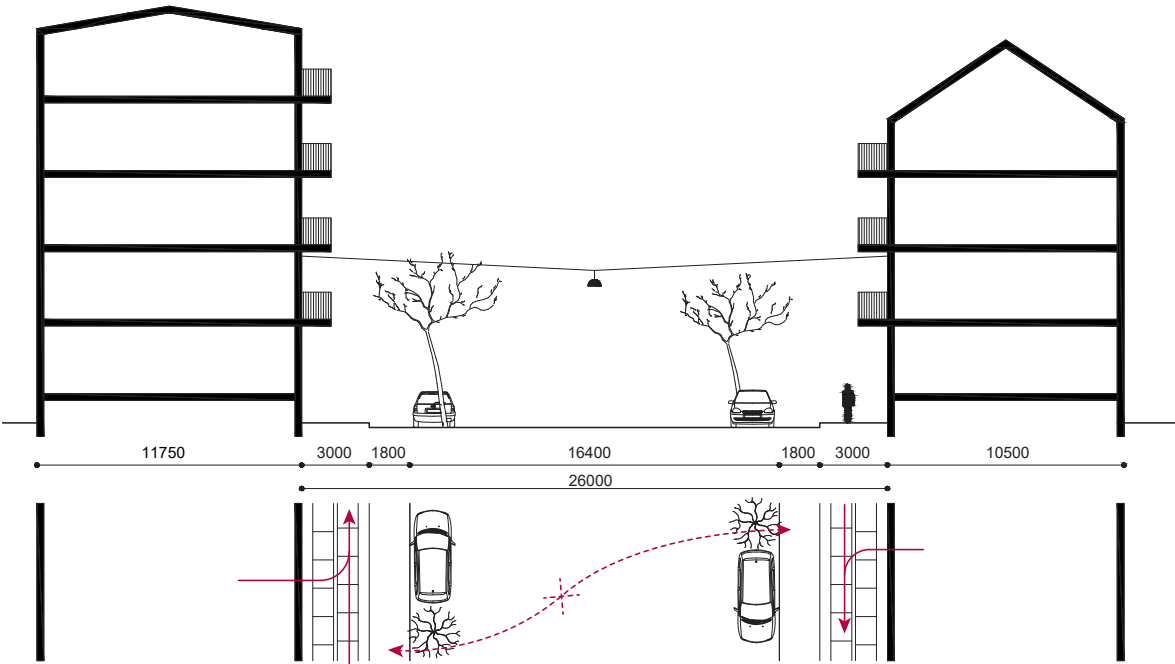
**J: Copenhagen vocational school**

Boundaries



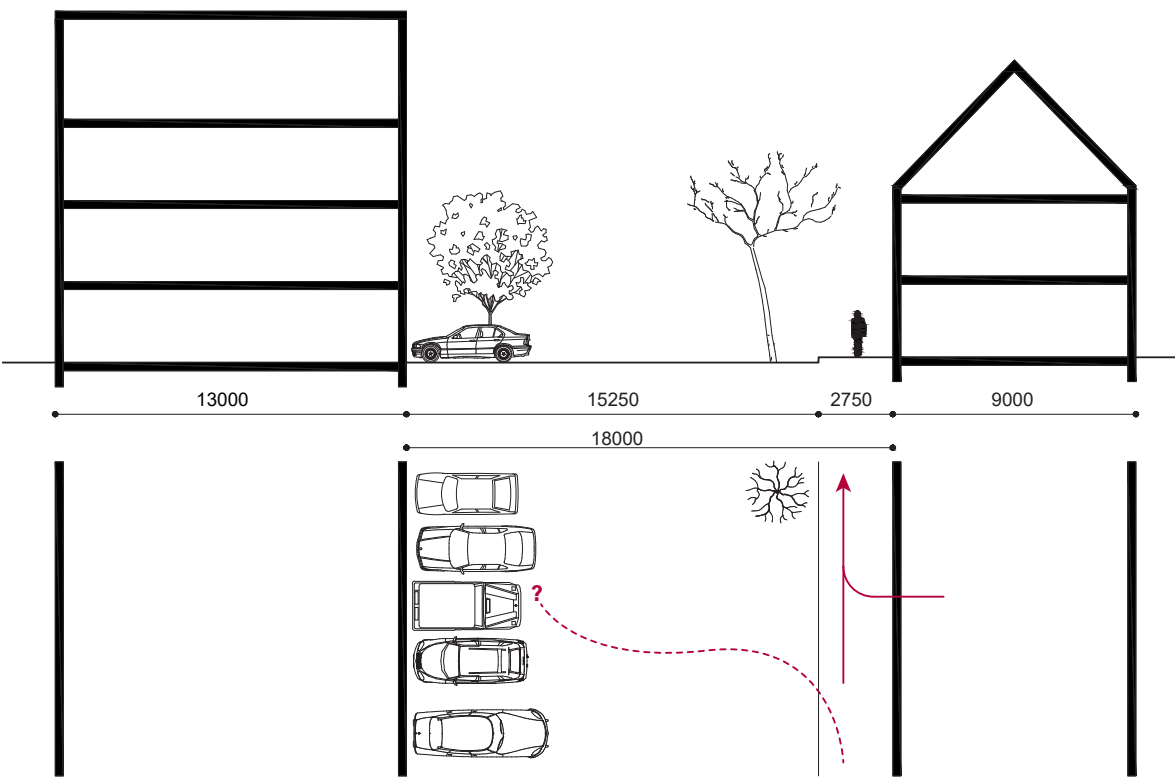
1: Haraldsgade

Residential street



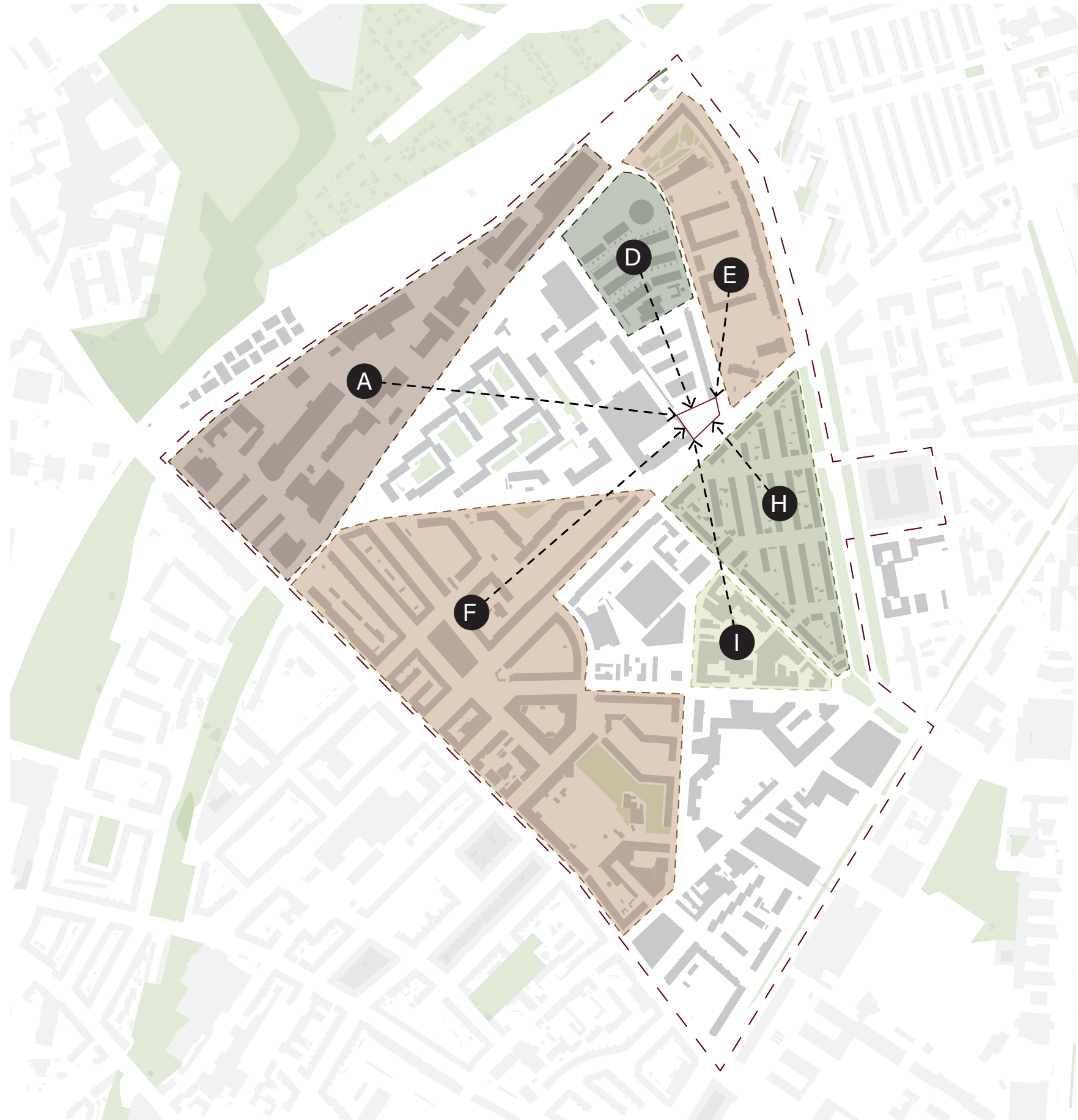
2: Vermundsgade

Residential and industry





## Spatial concept



**A: Car dealerships**

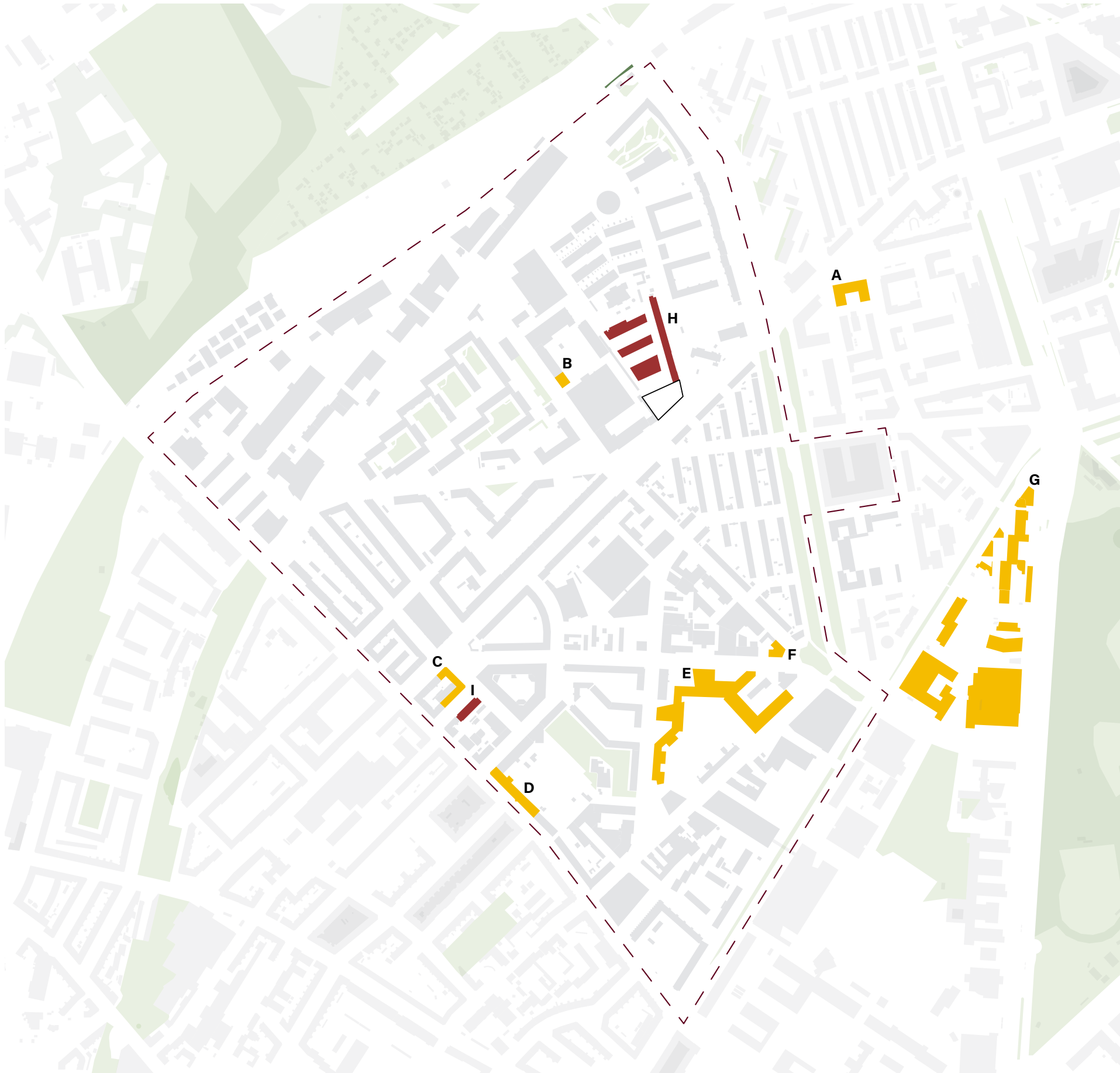
**D: Unique typologies**

**E&F: Long building blocks**

**H: Row houses**

**I: Industrial past**

Schools and cultural facilities in the area



**A: Herbal Medicine School and Dyslexia Center**

**B: Sine Ginsborg Hair & Make-Up school**

**C: Part of the Copenhagen Vocational School**

**D: Part of the University of Copenhagen**

**E: Copenhagen Vocational School**

**F: AOF Center Copenhagen**

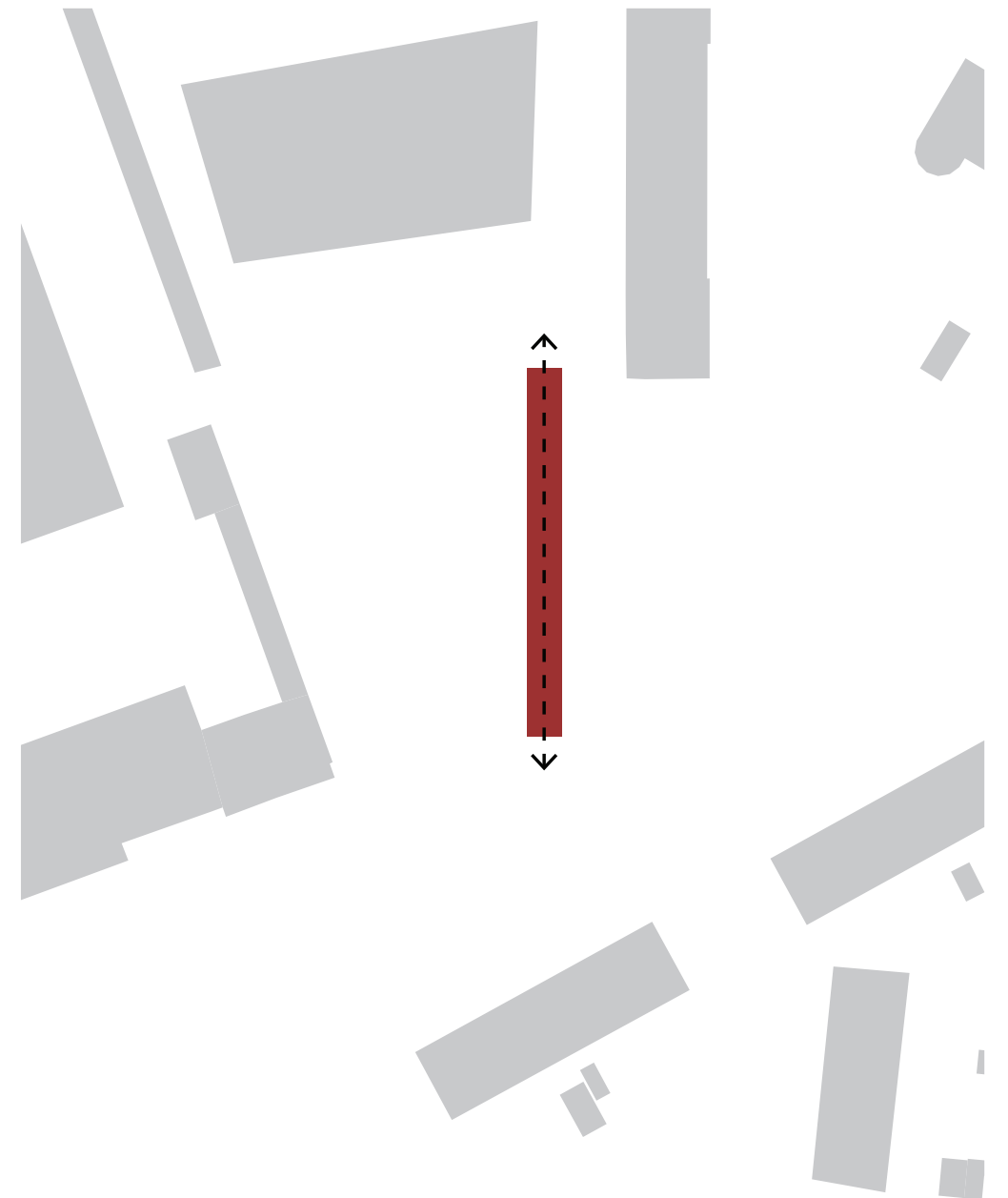
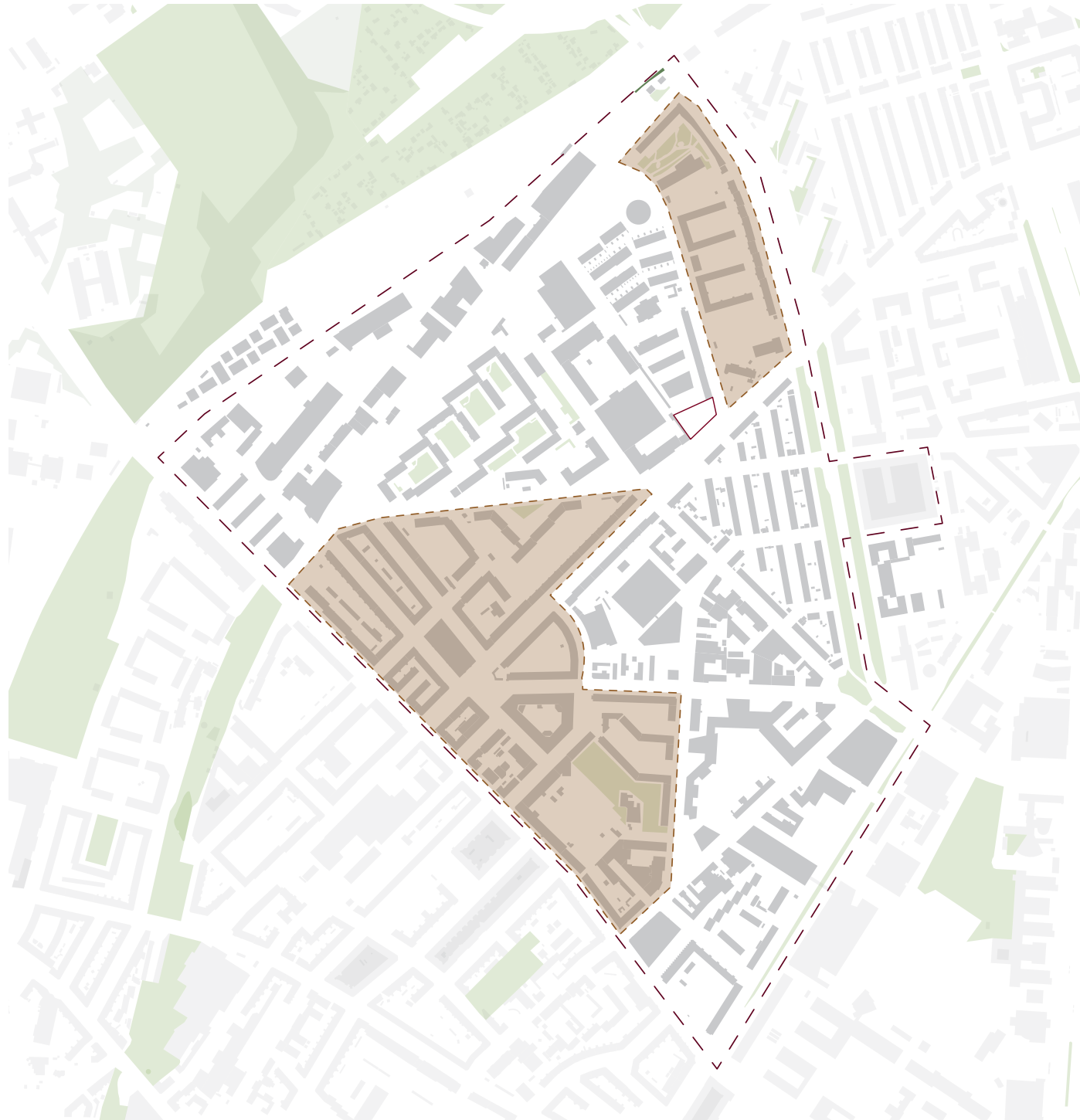
**G: University of Copenhagen**

**H: Bolsjefabrikken**

**I: OSRAM-Huset**

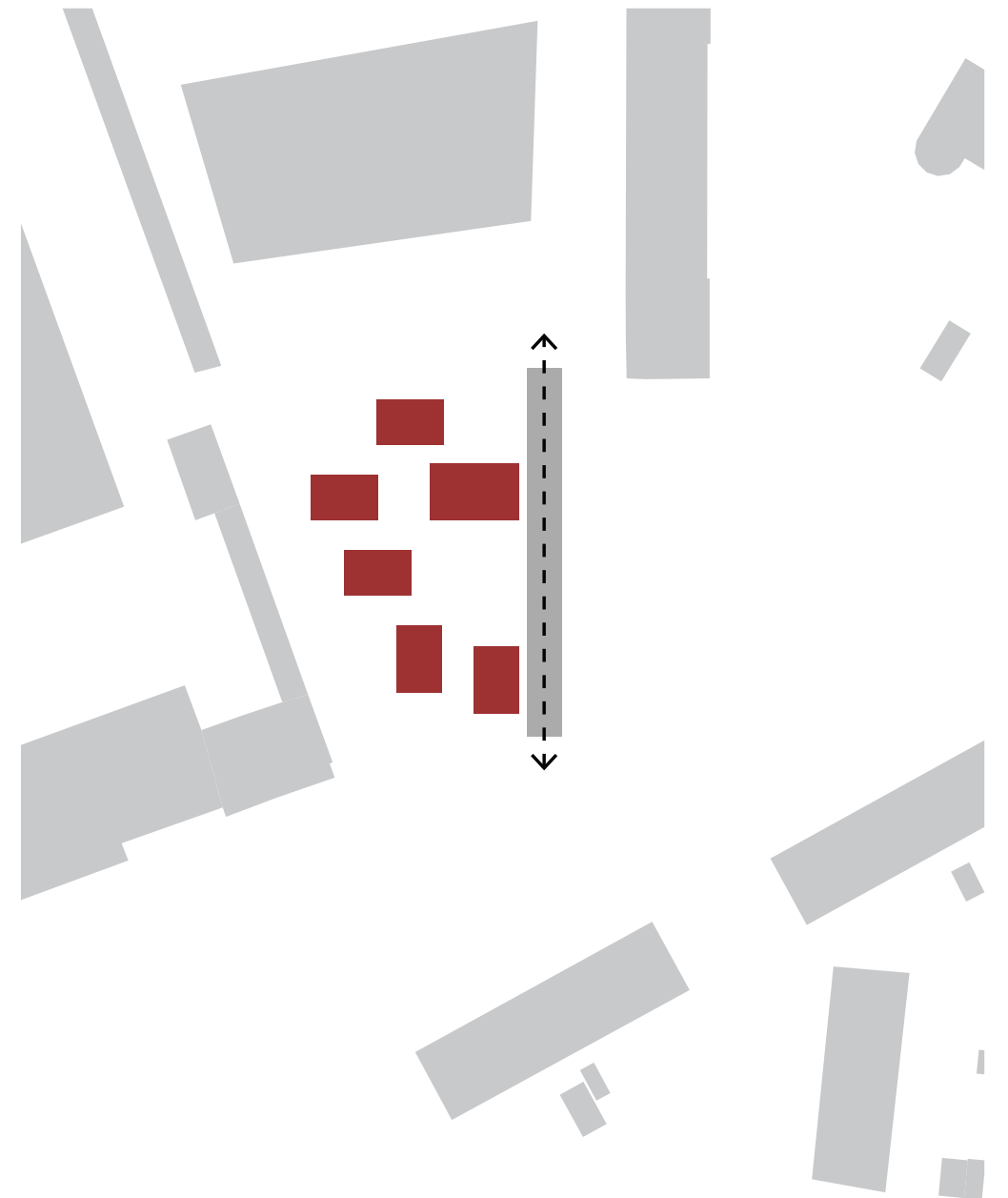
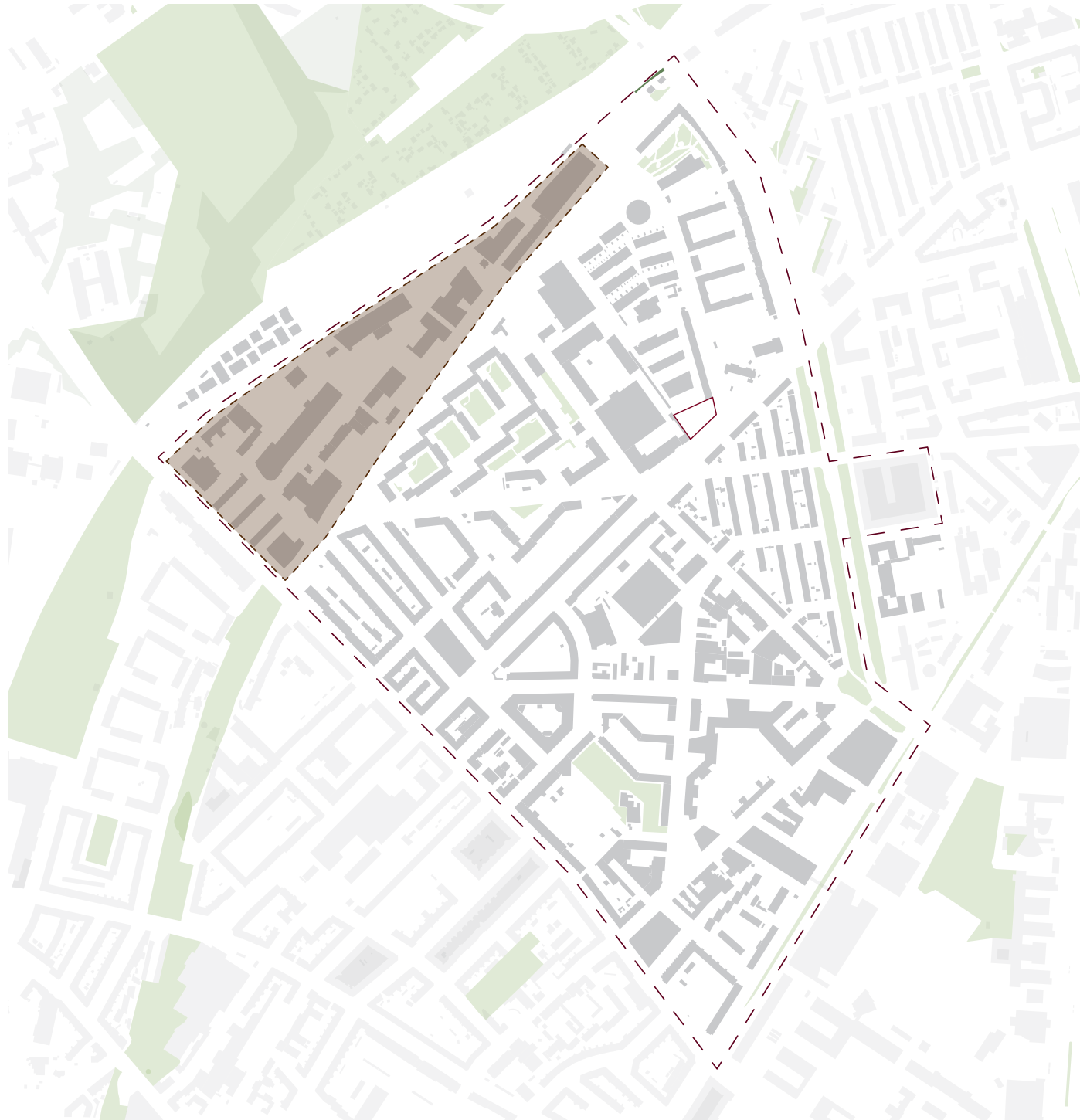
**Concept**

## Long building blocks

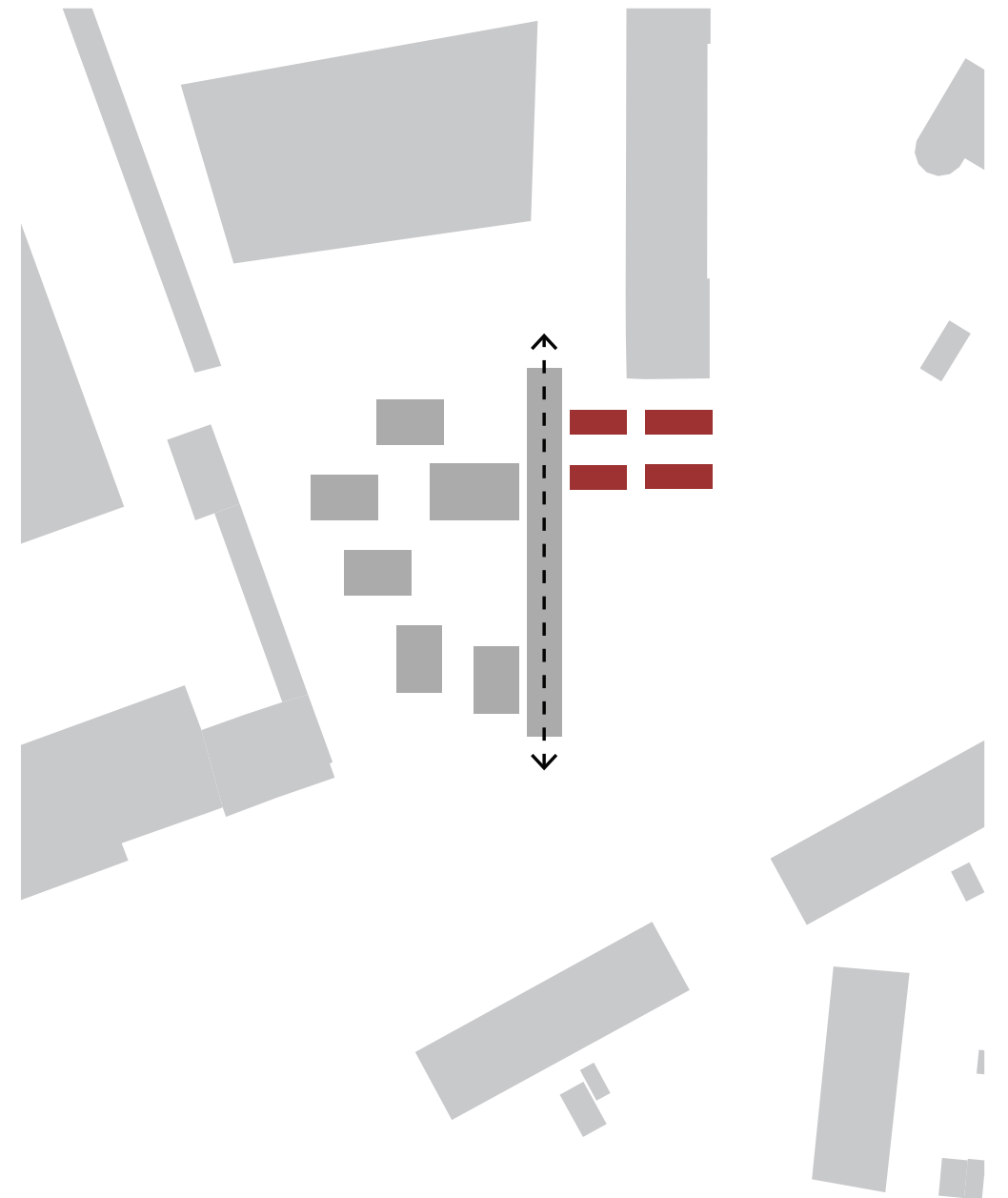
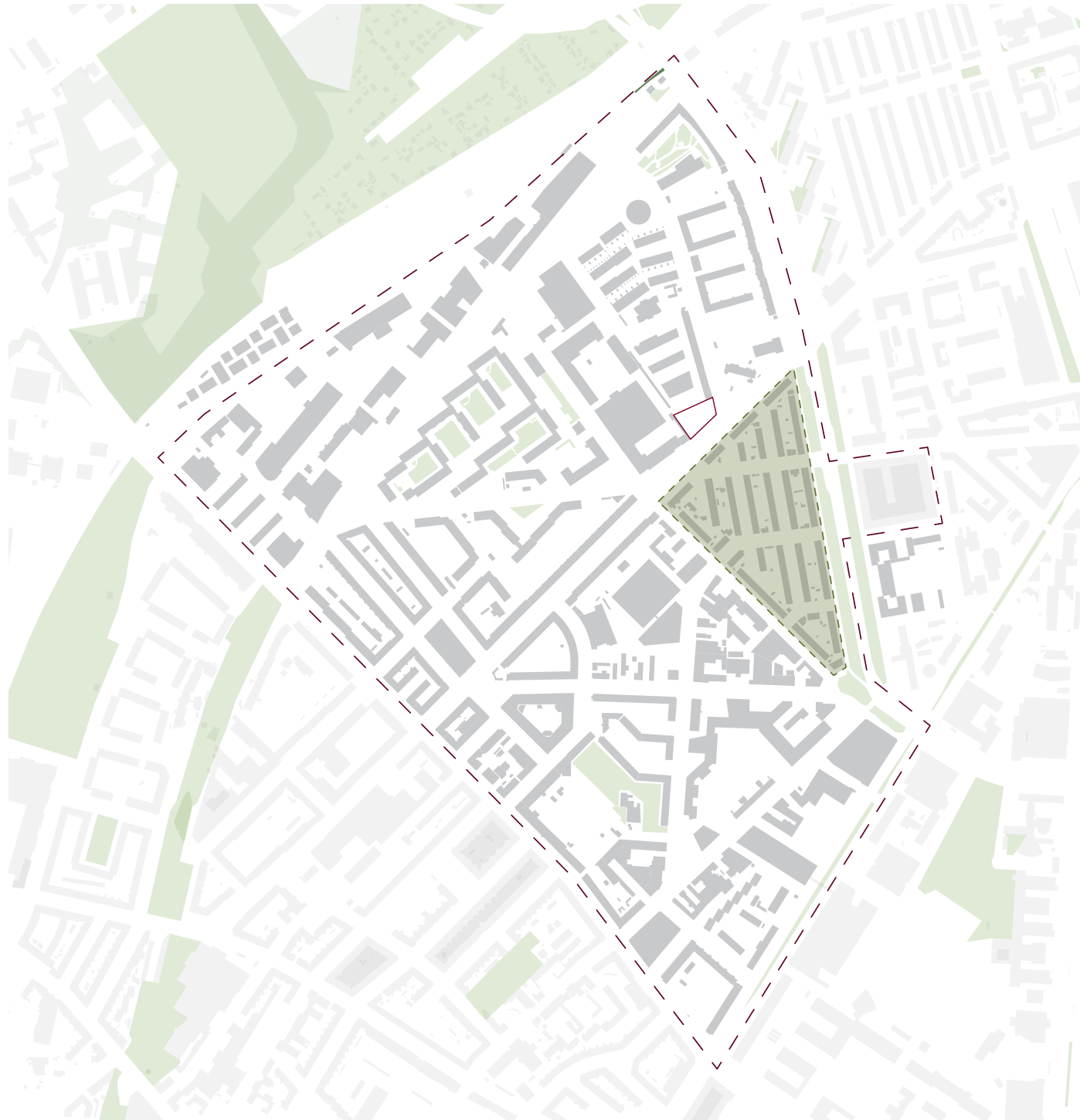




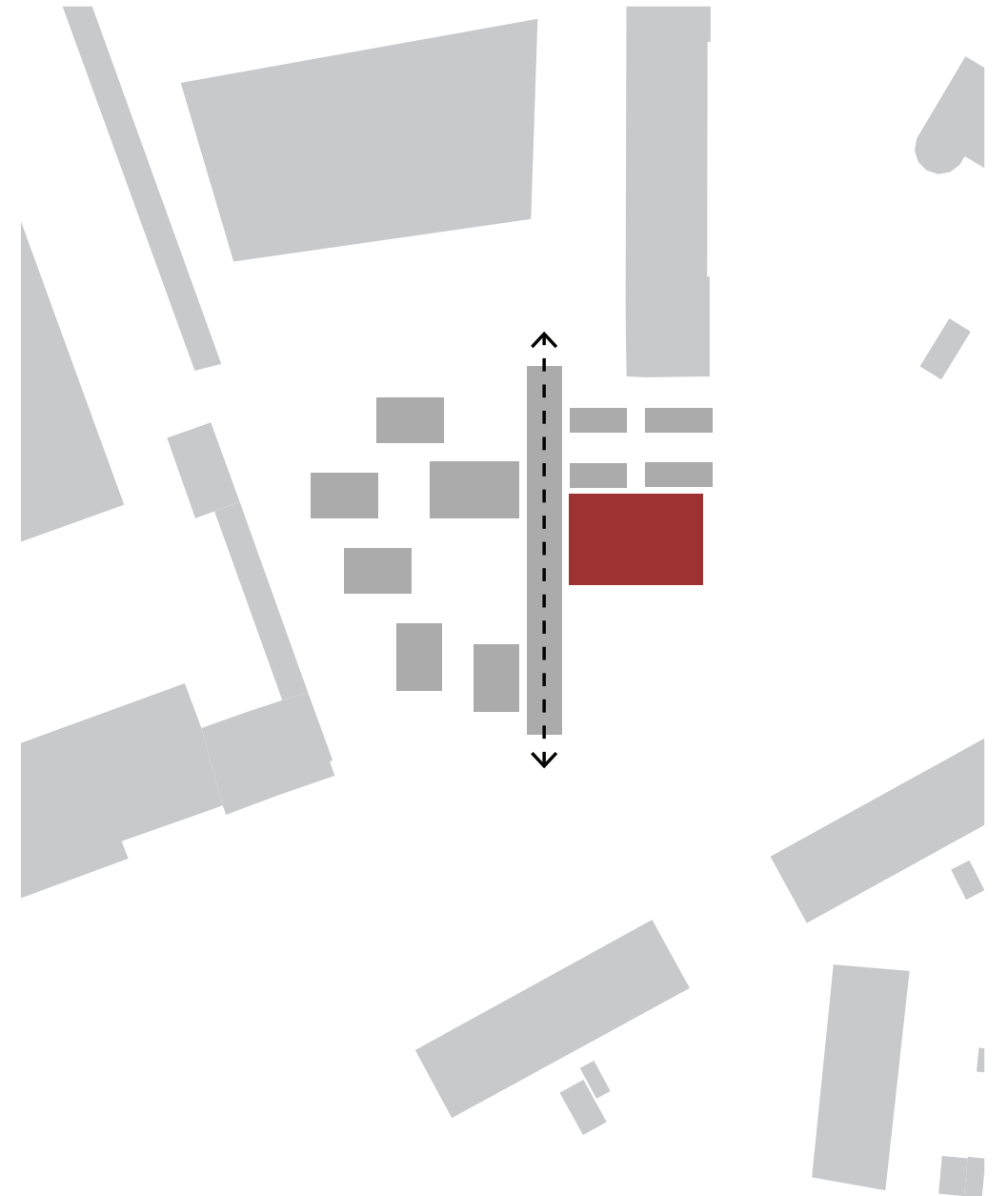
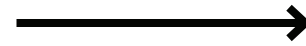
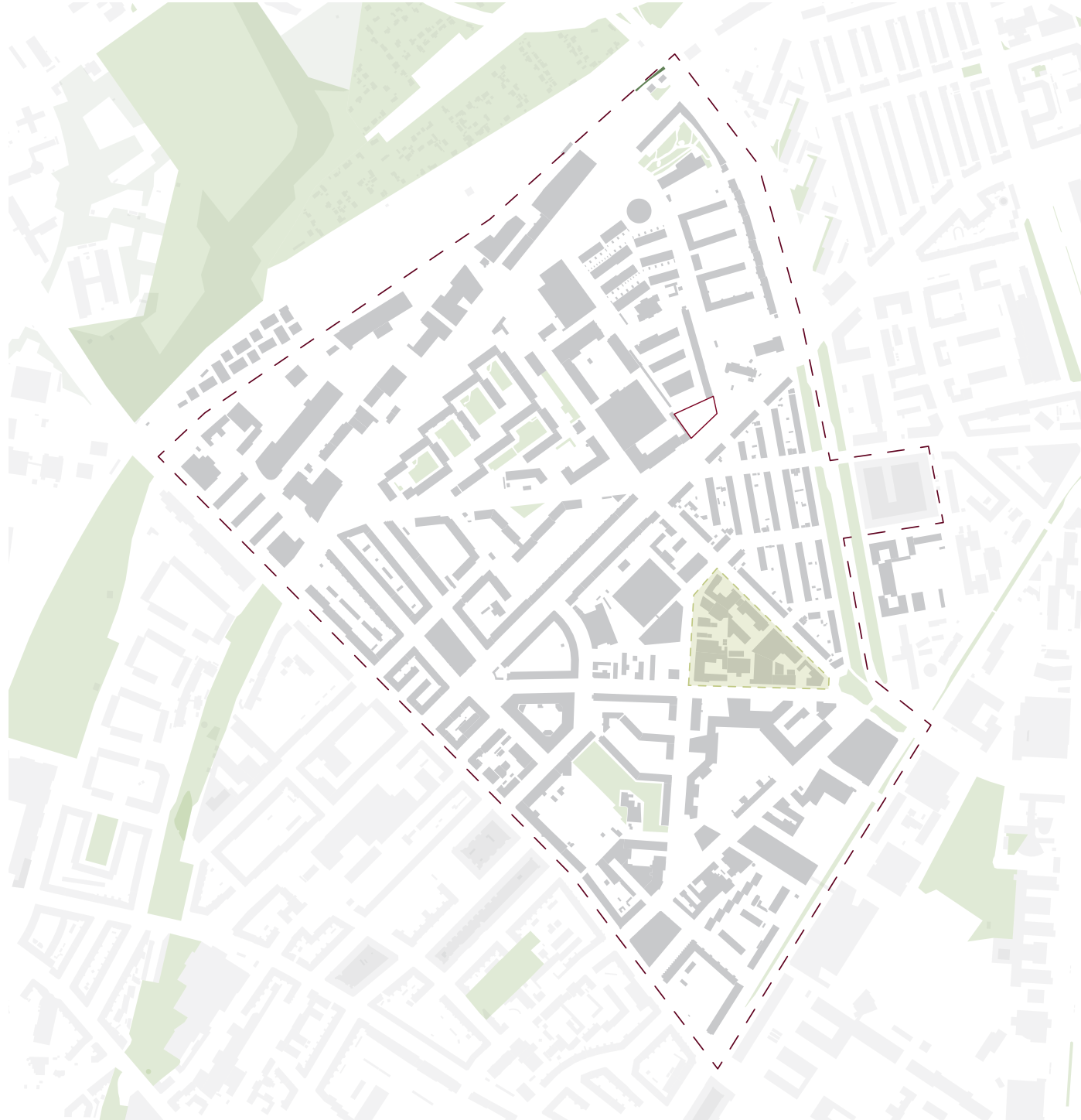
Seemingly unorganized



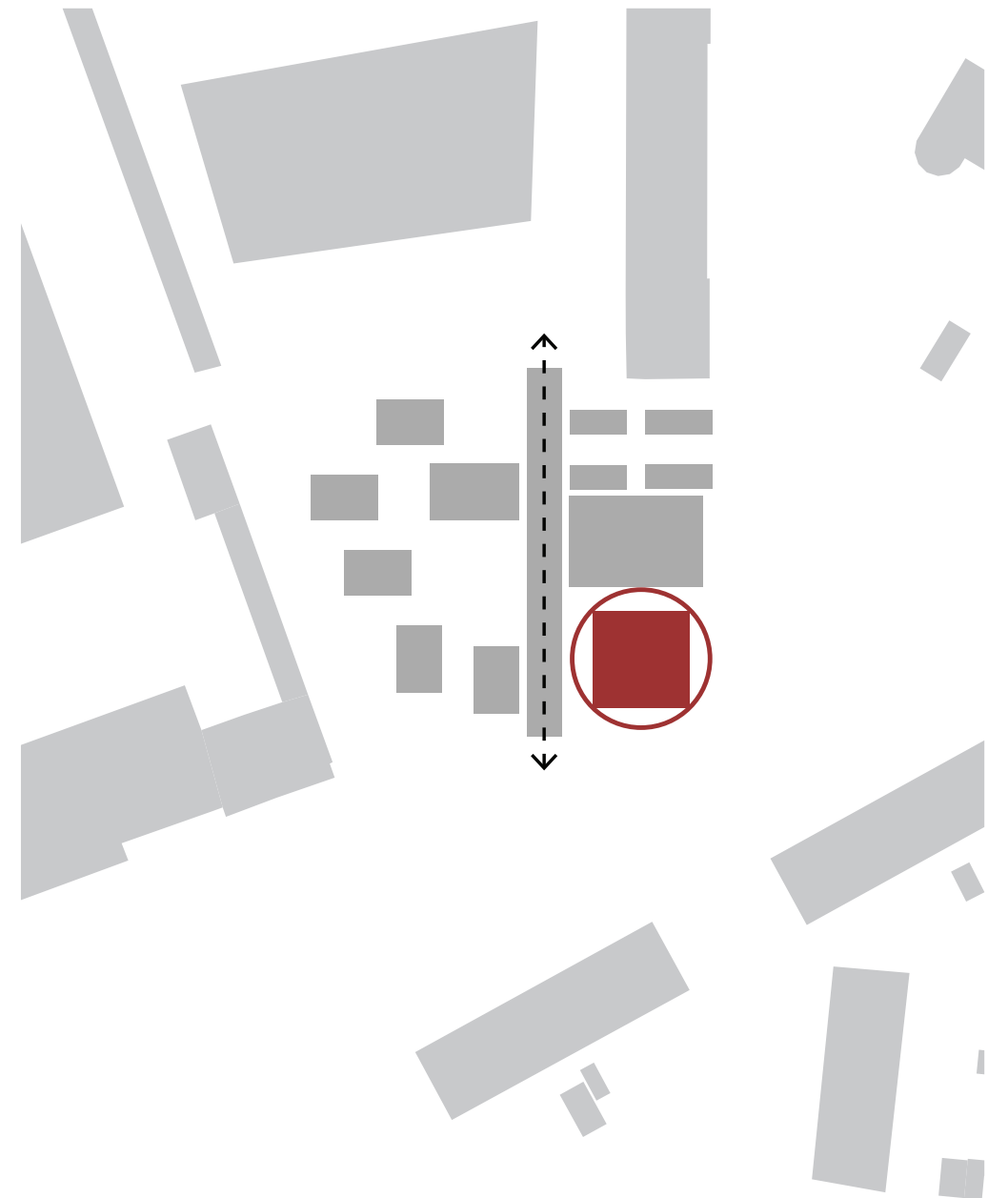
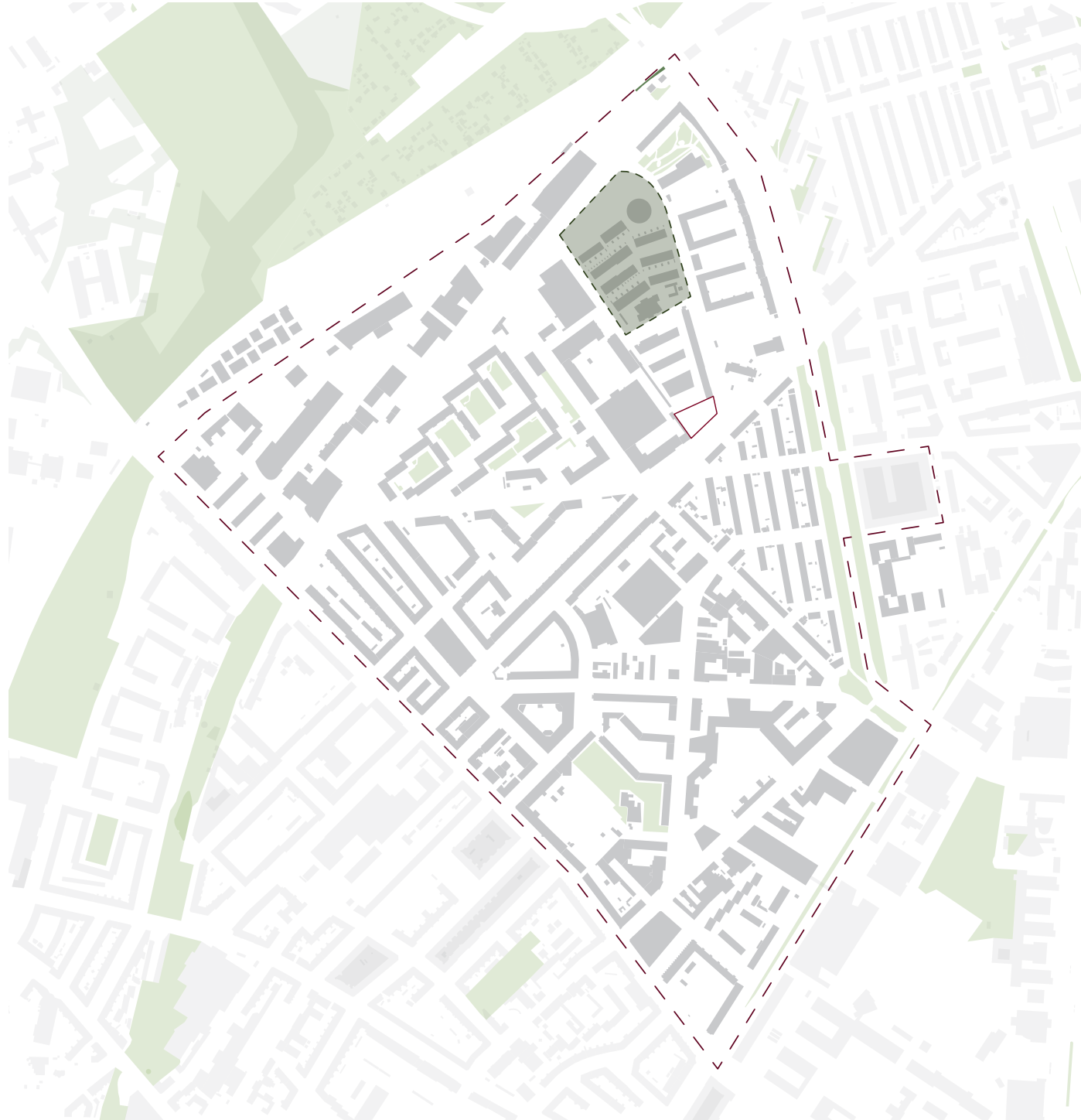
## Row houses



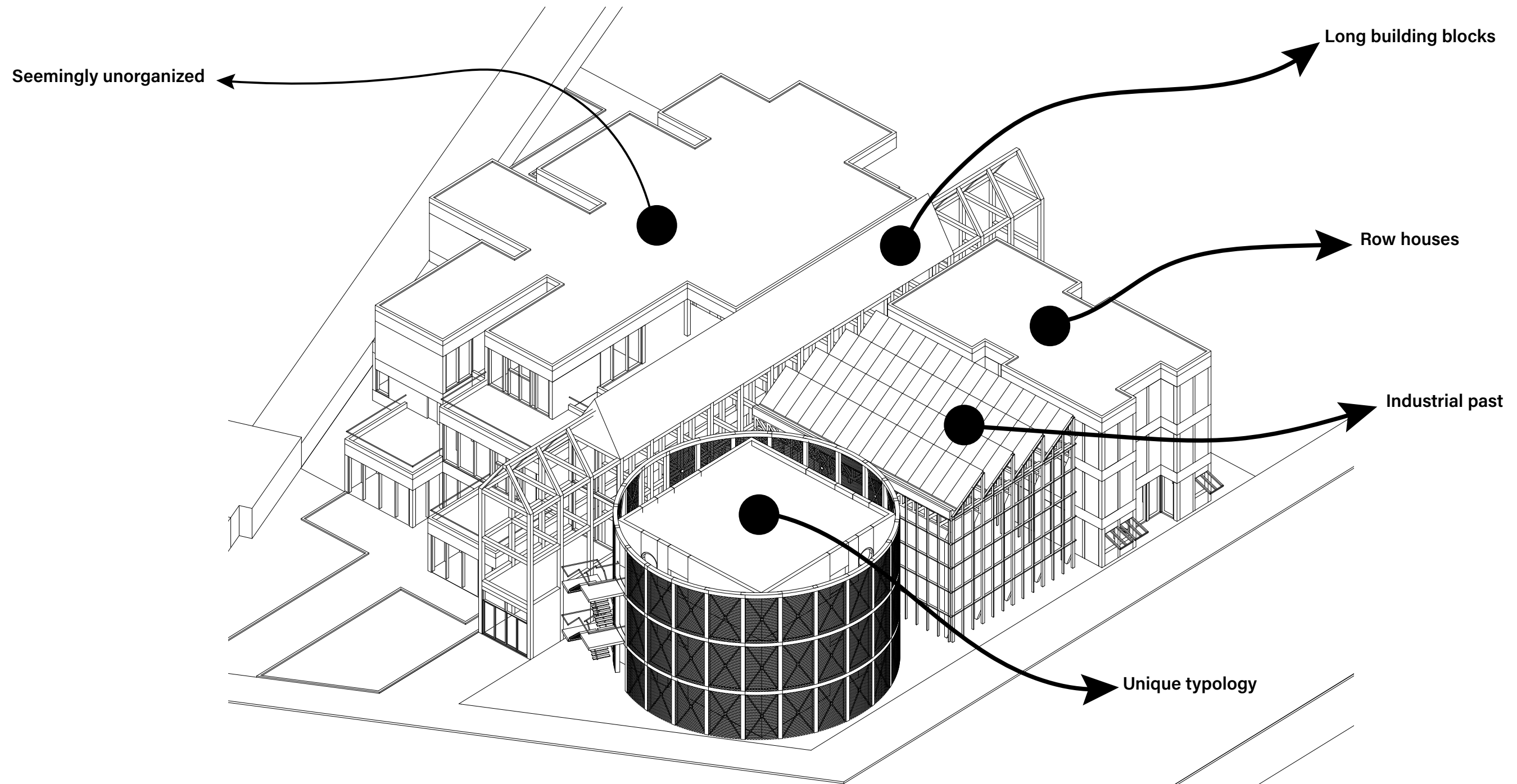
## Industrial past



## Unique typology

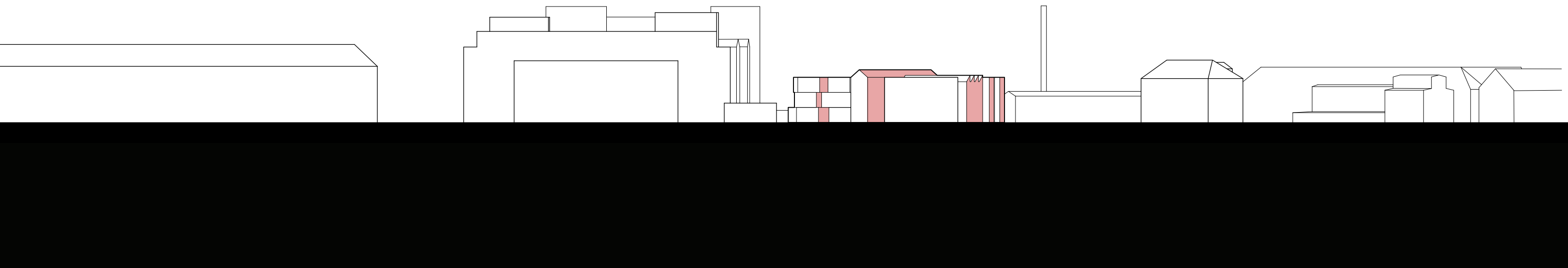


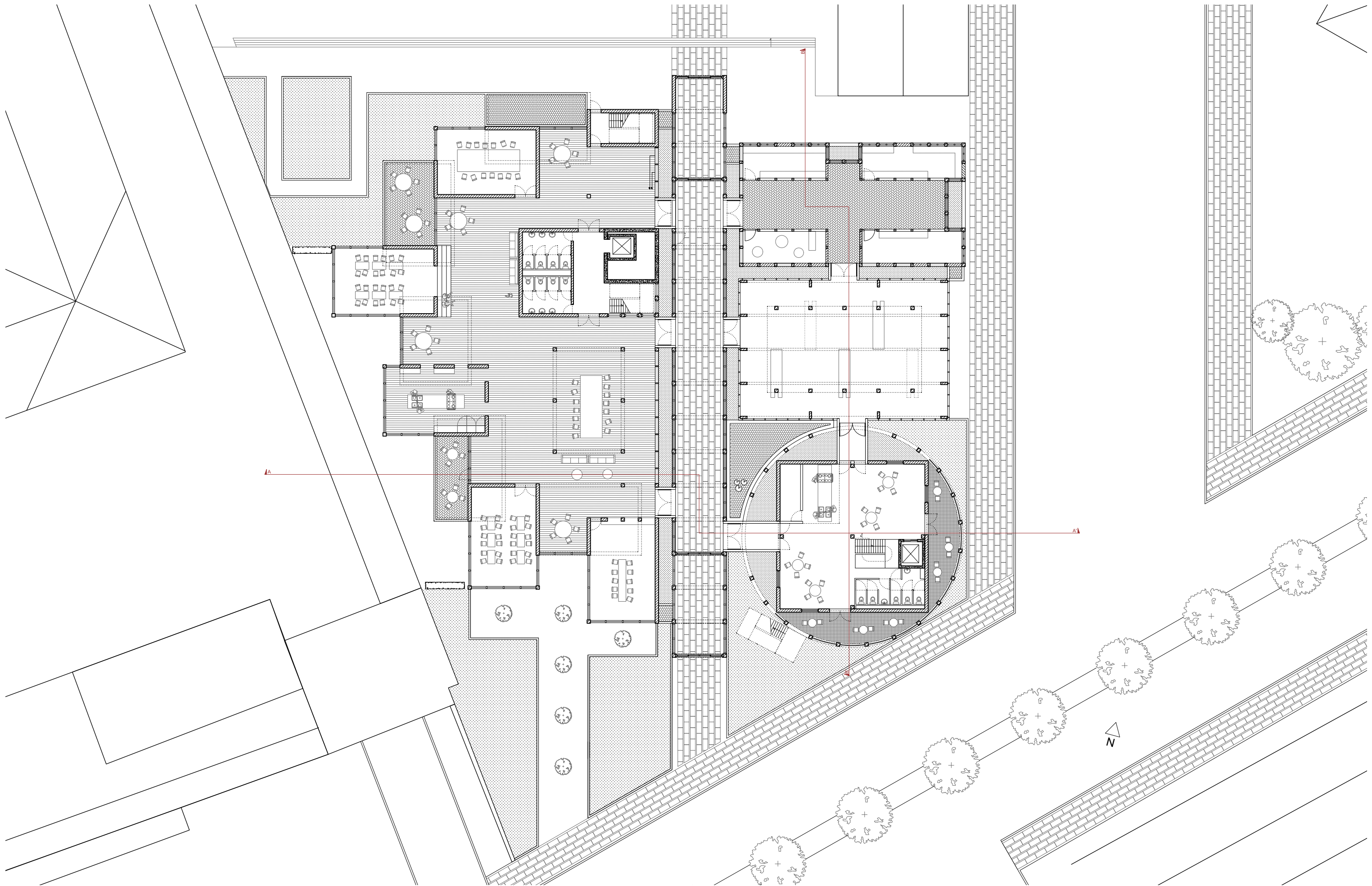




**Building design**

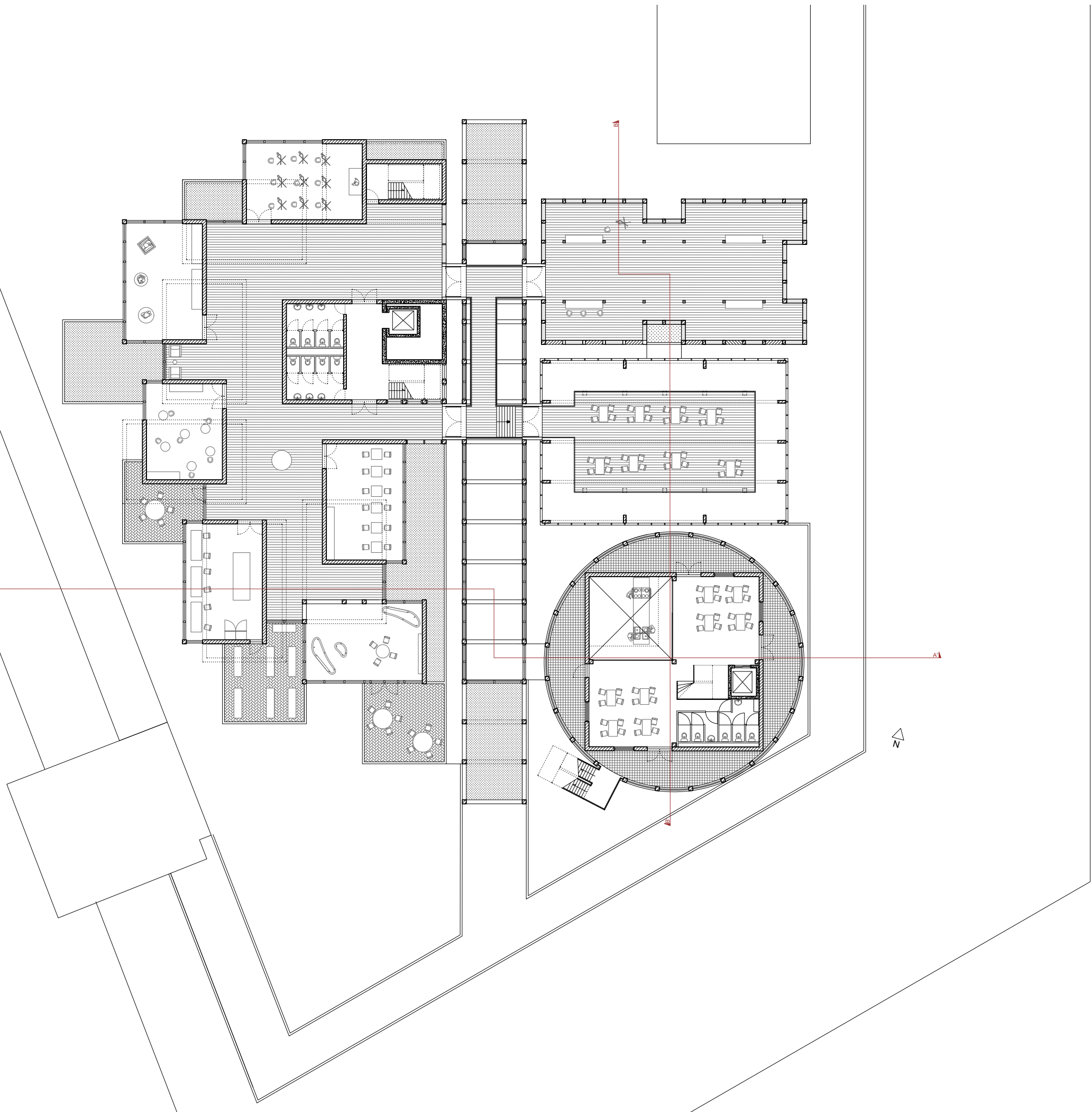
## Urban section



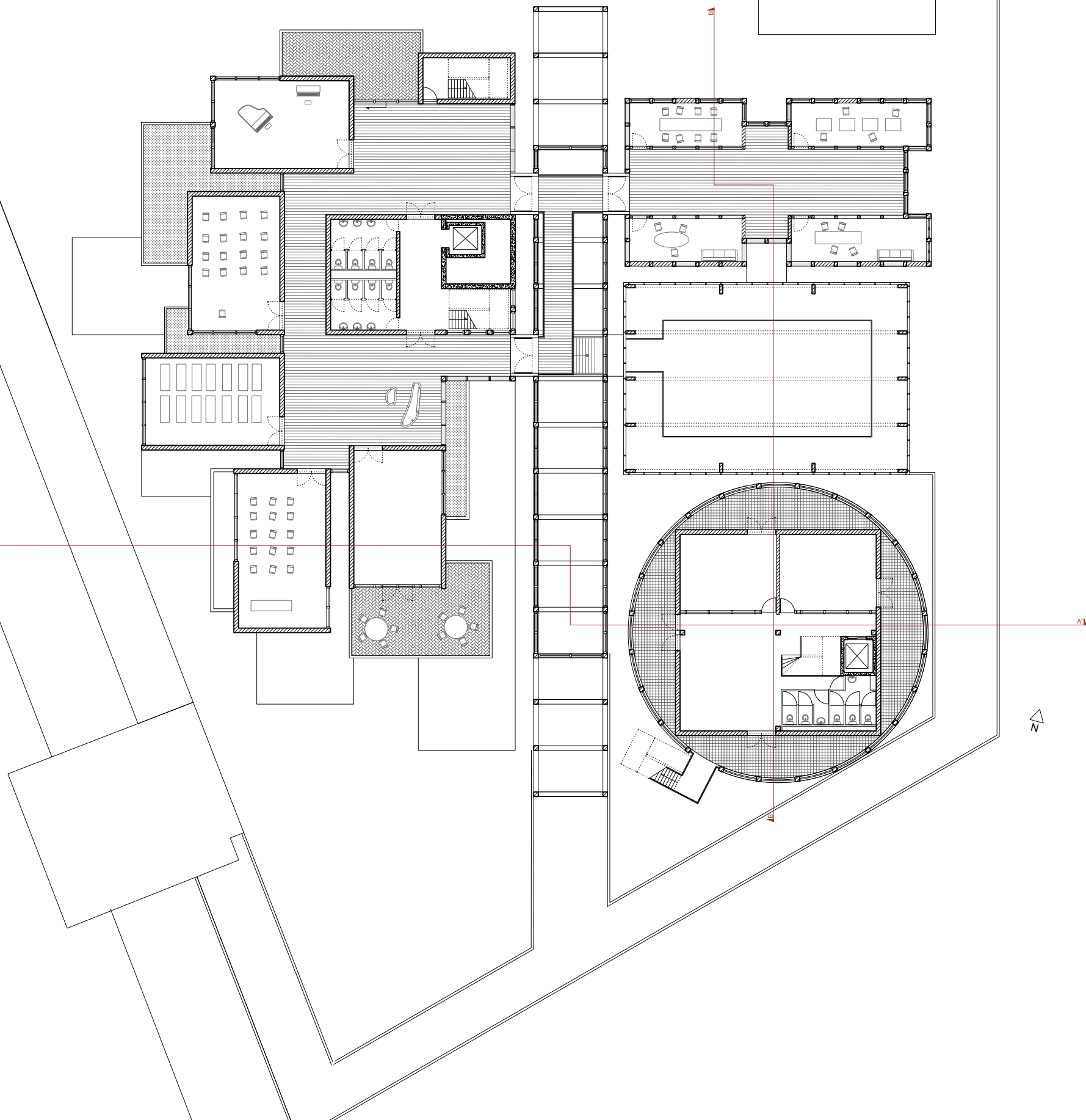


Ground floor 1:200

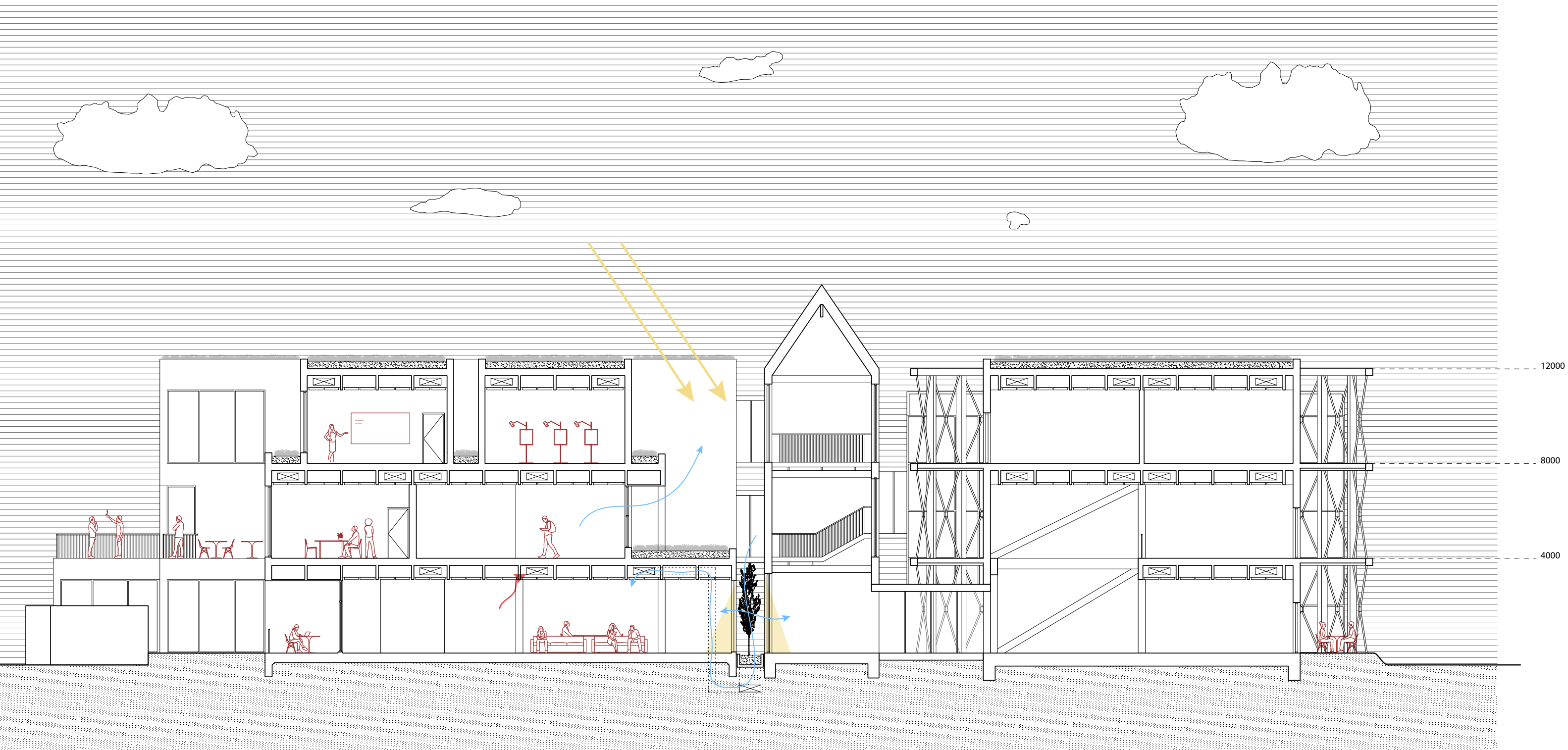




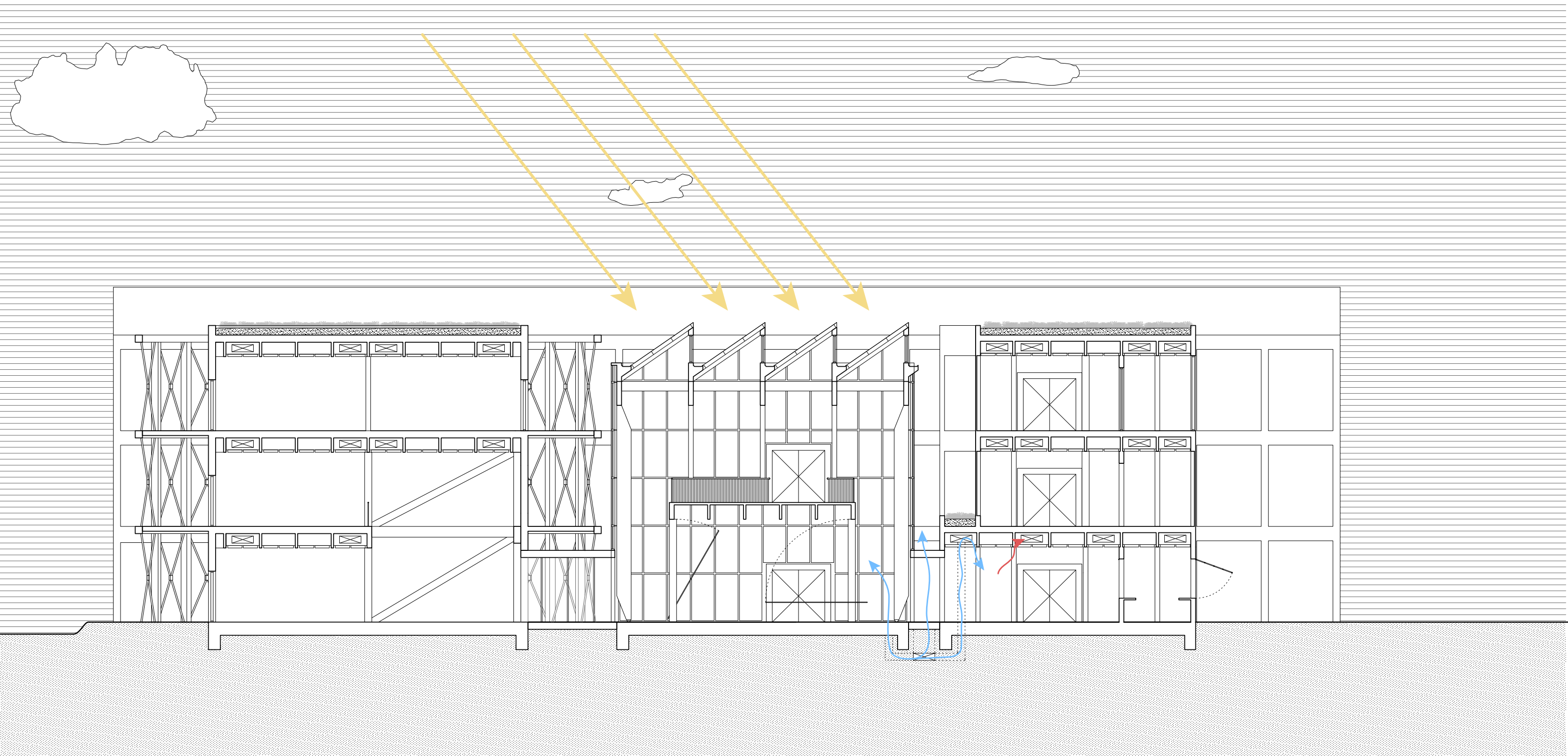
First floor 1:200



Second floor 1:200



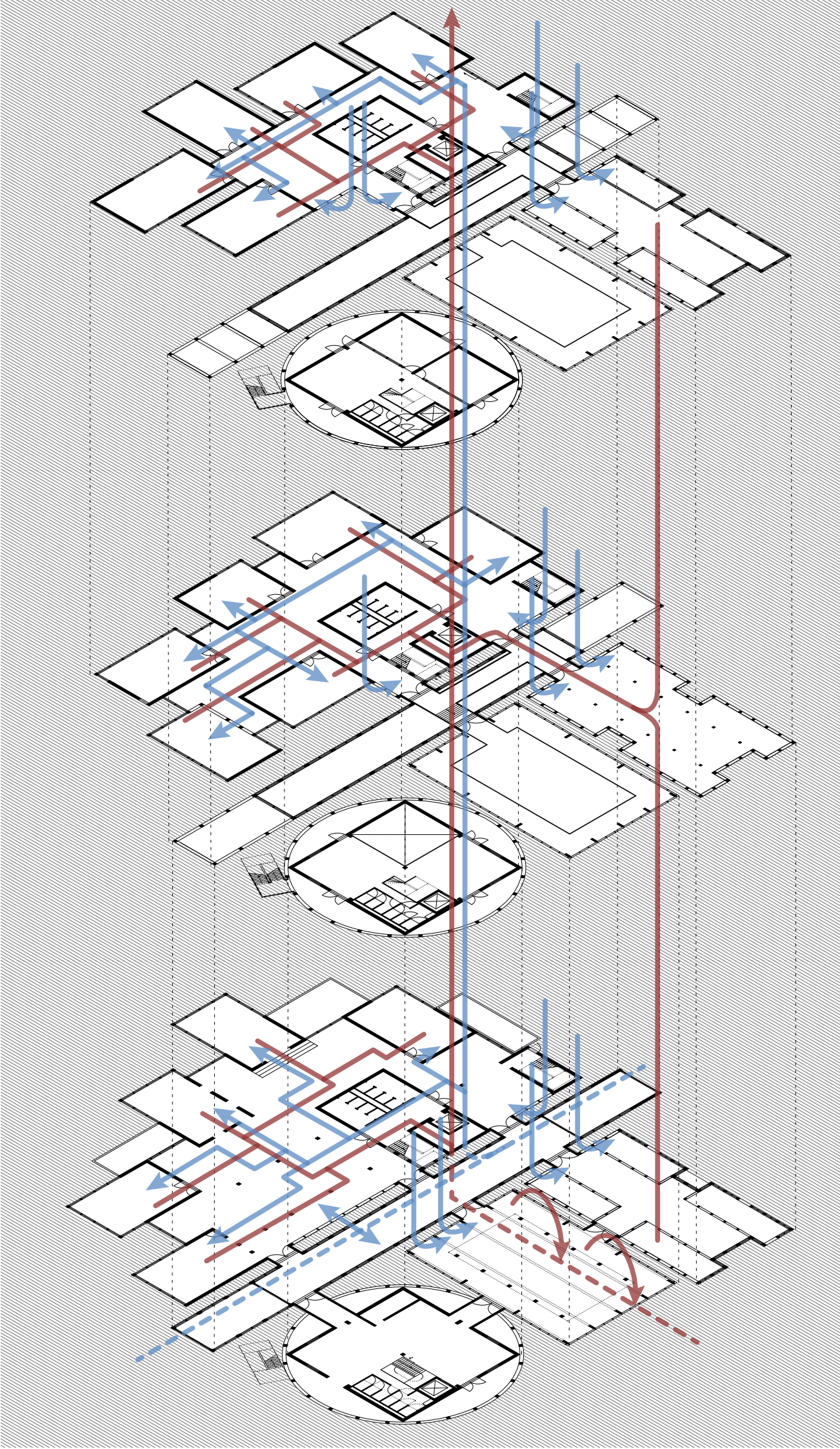
Section AA' 1:200



Section BB' 1:200

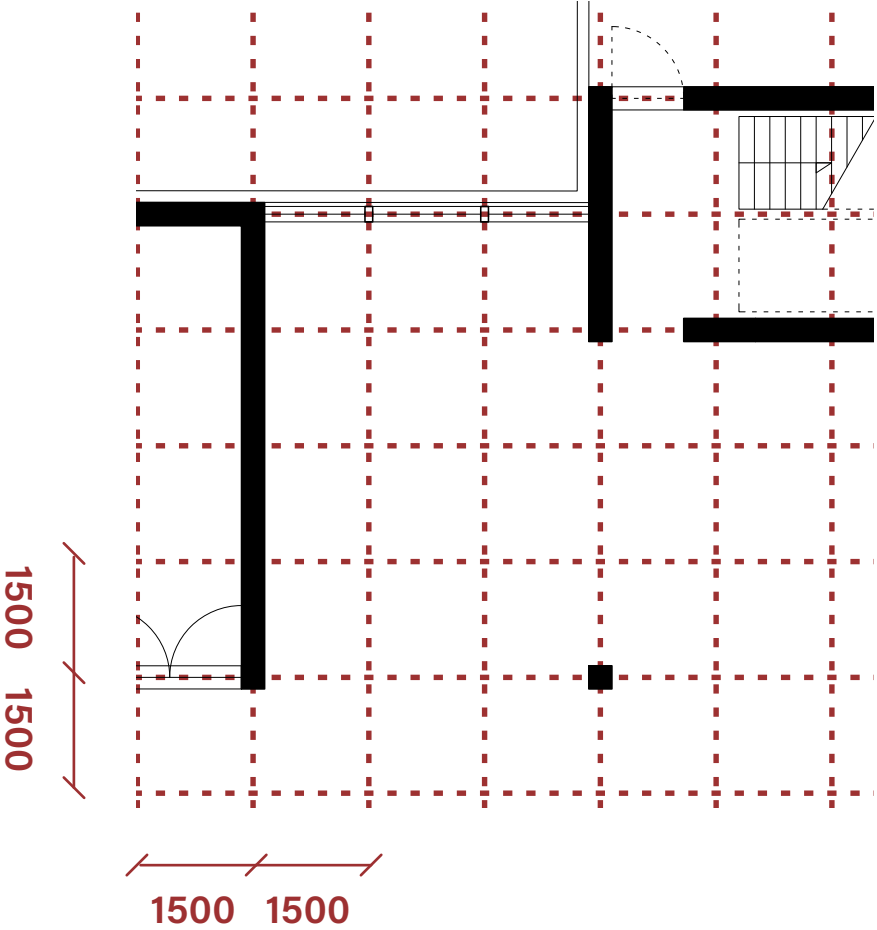
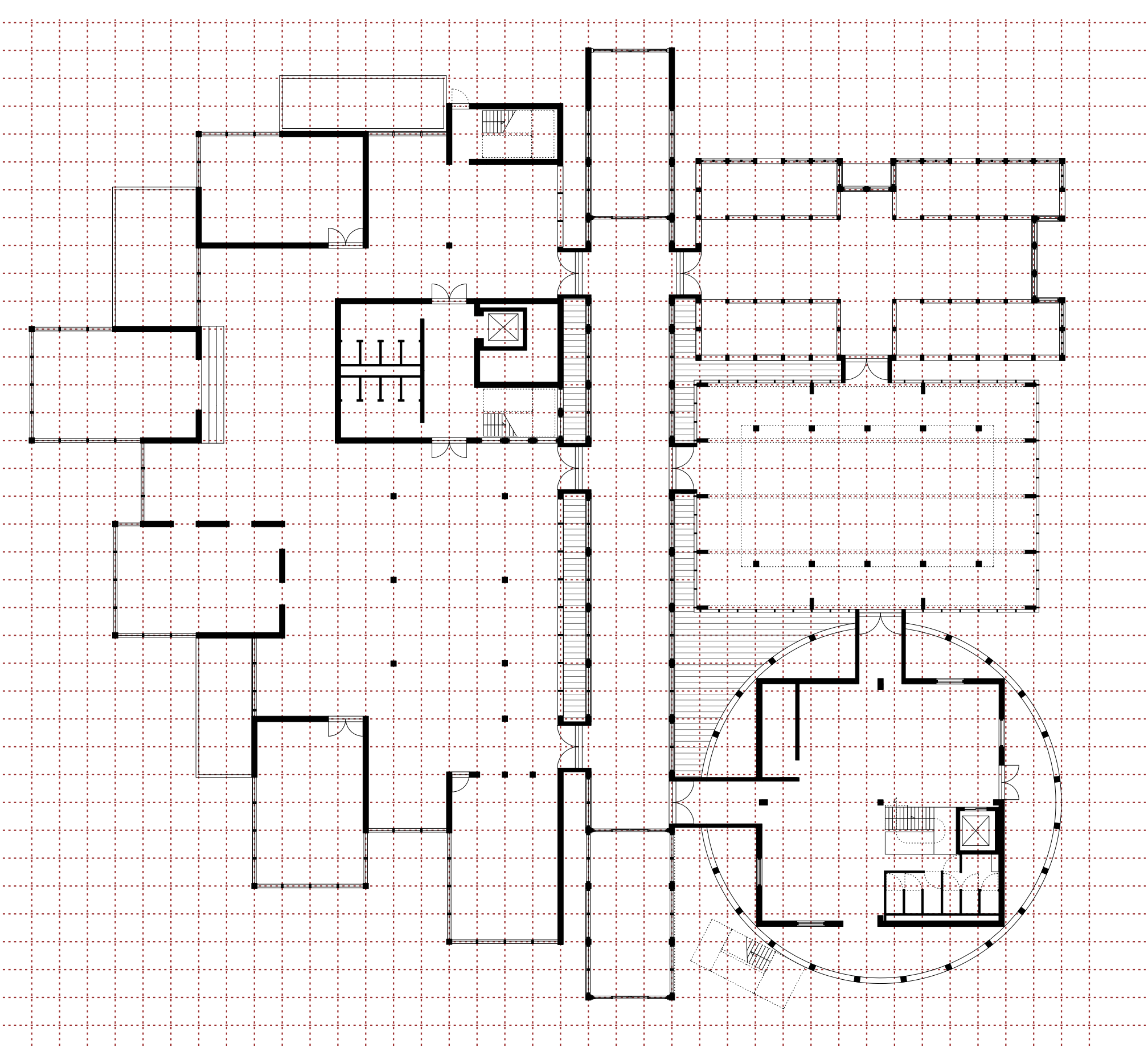


Ventilation principle

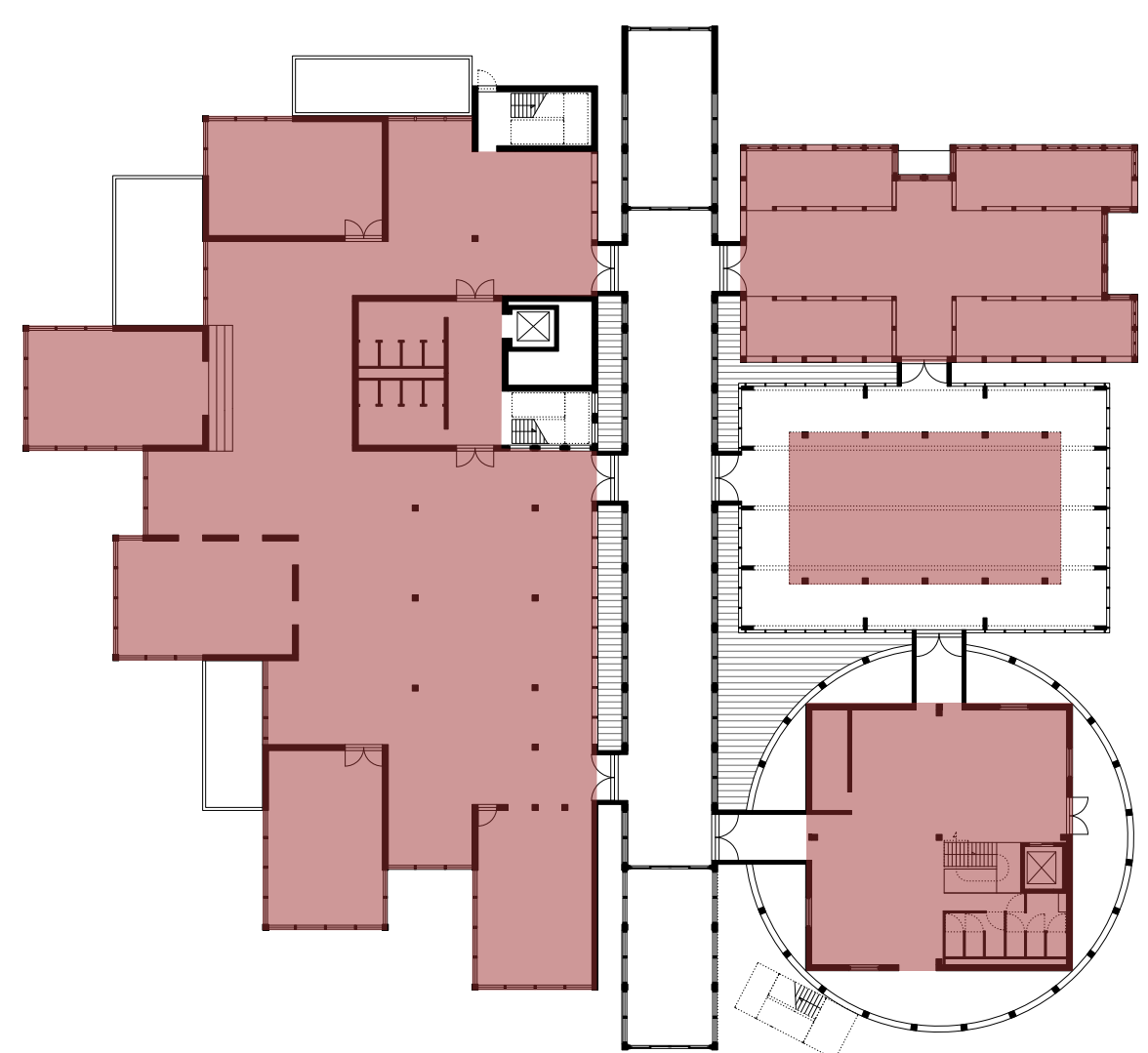
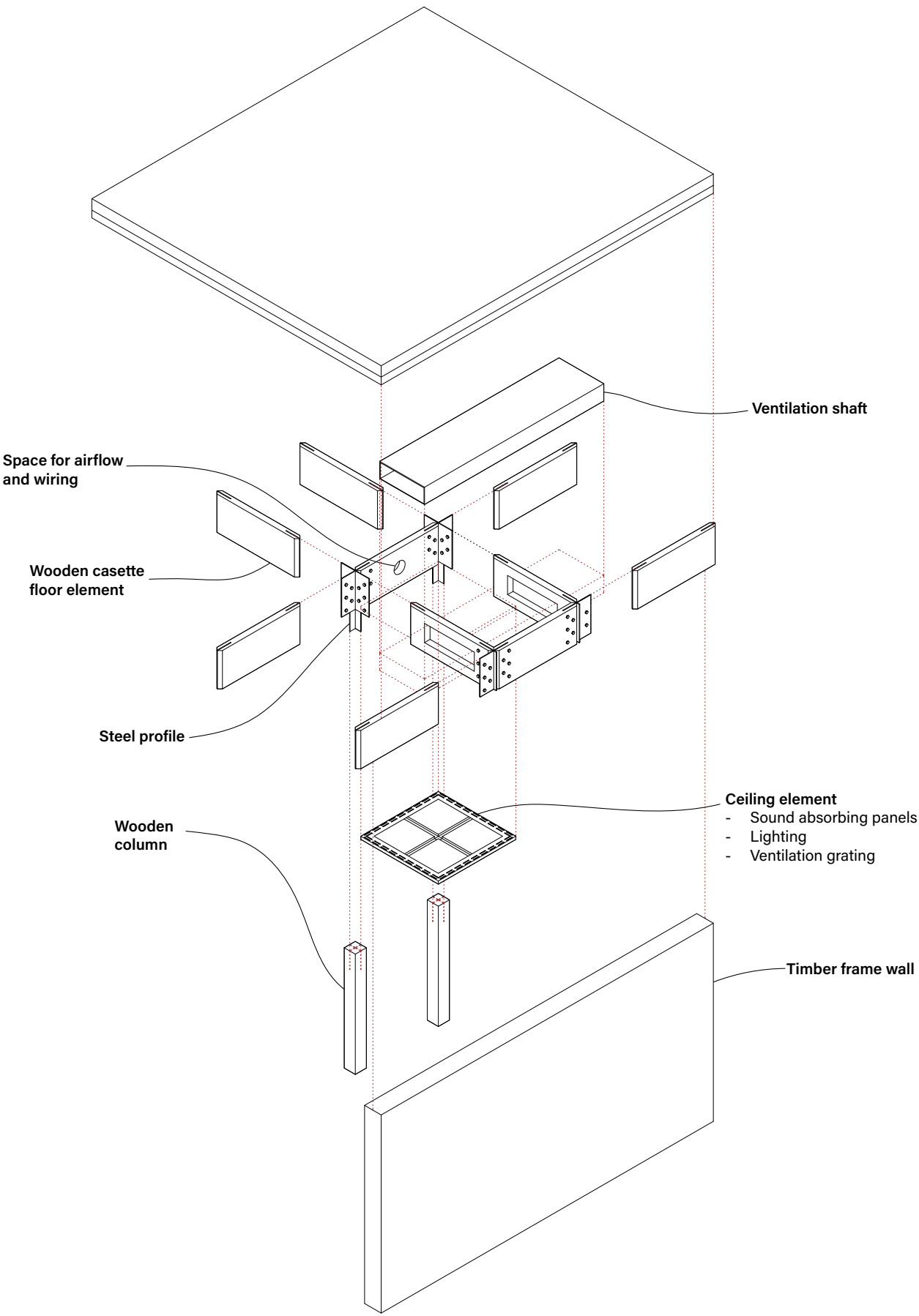


**Technical elaboration**

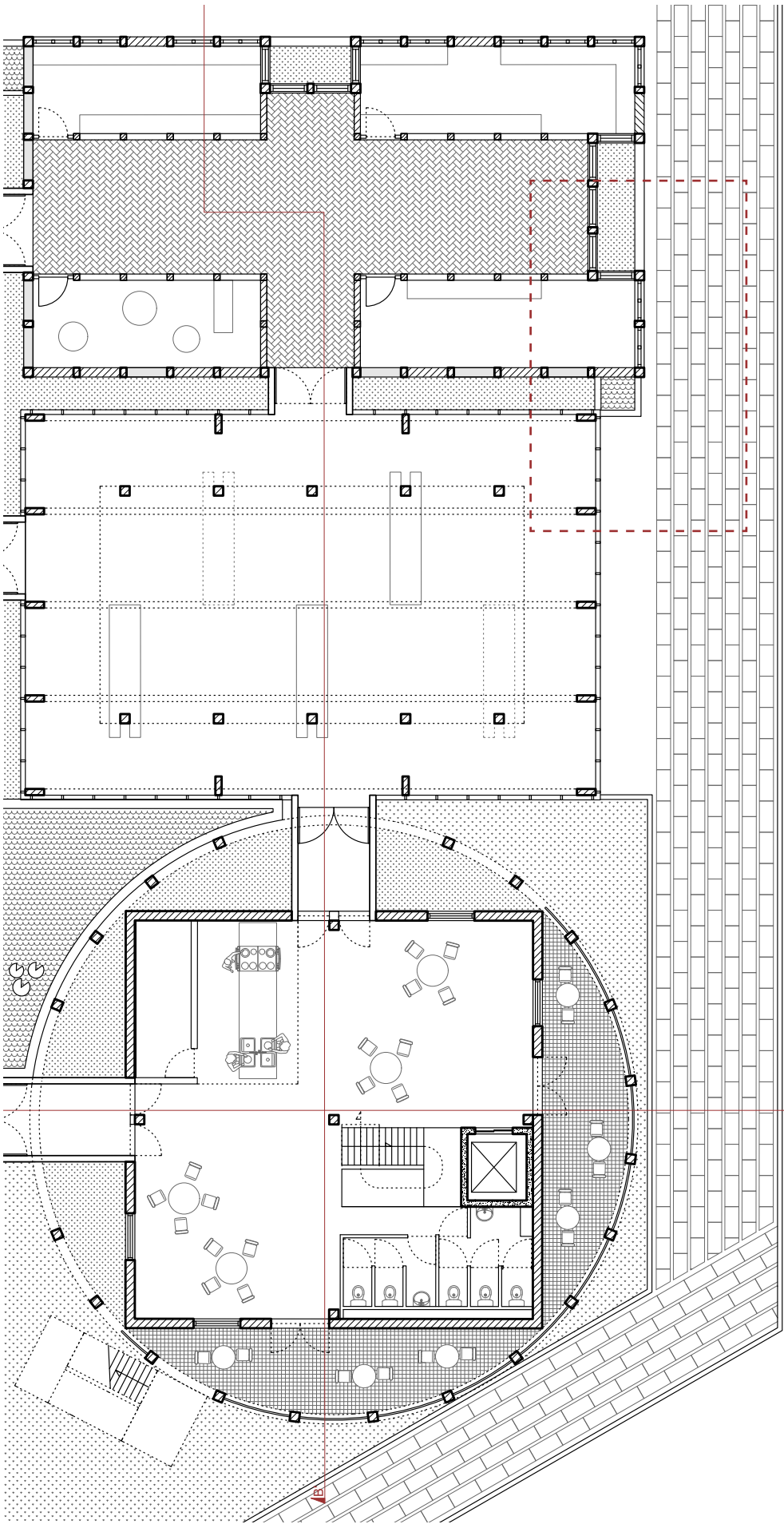
Structural grid



Construction method

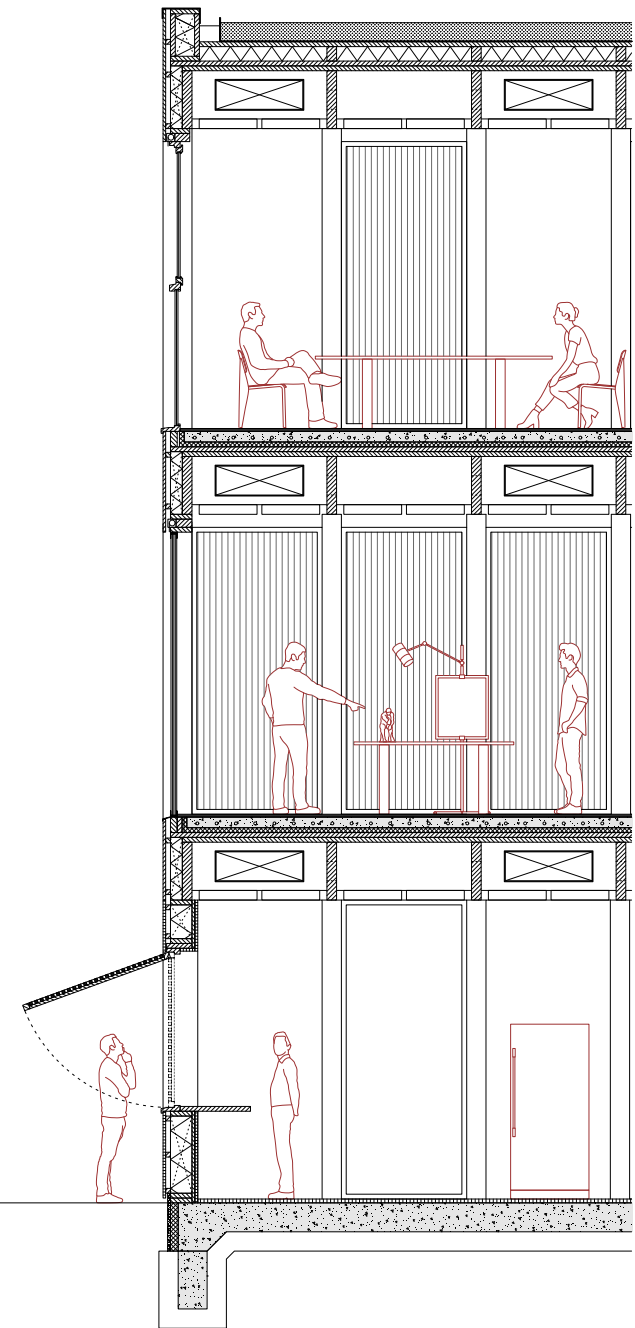
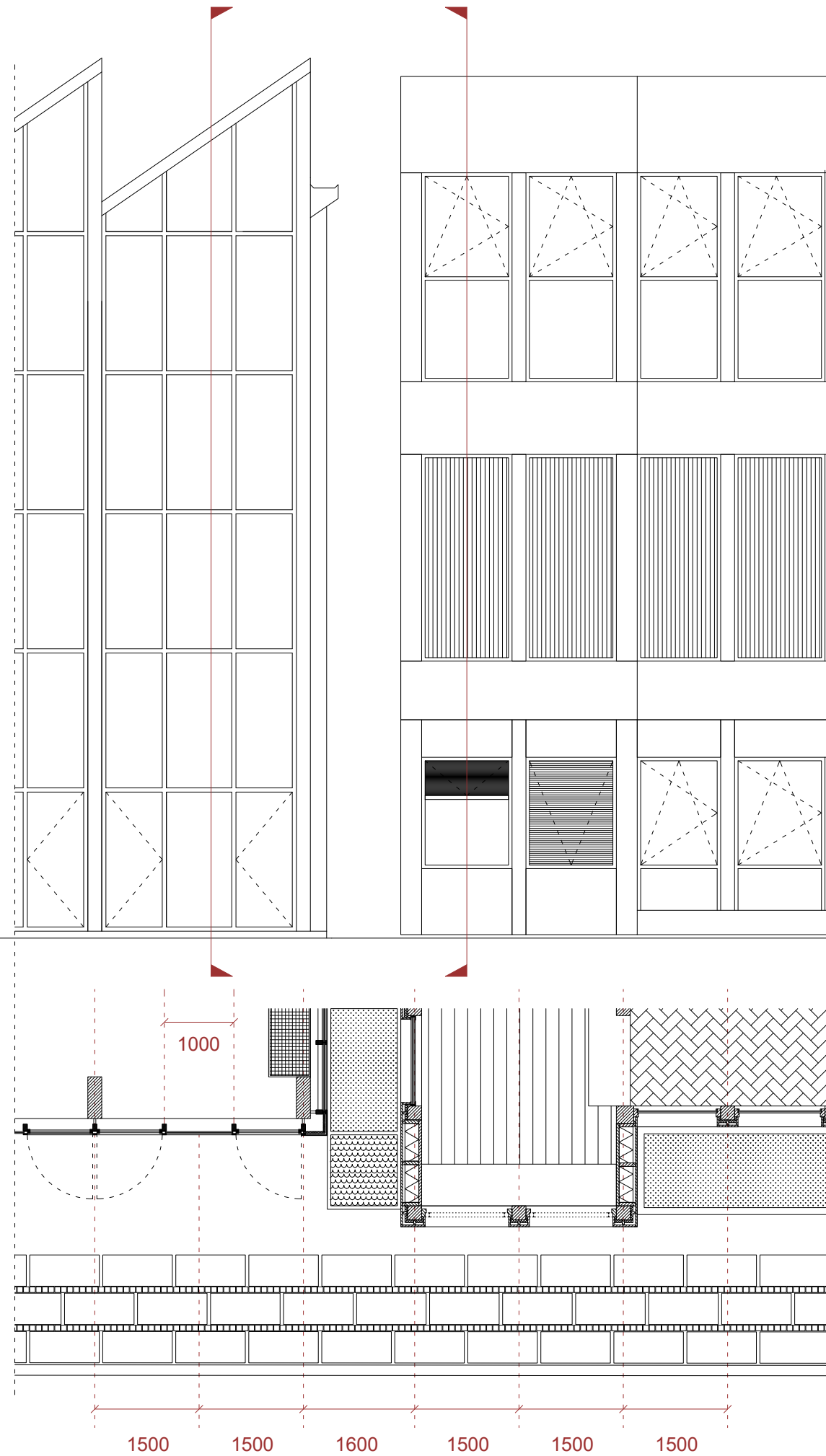
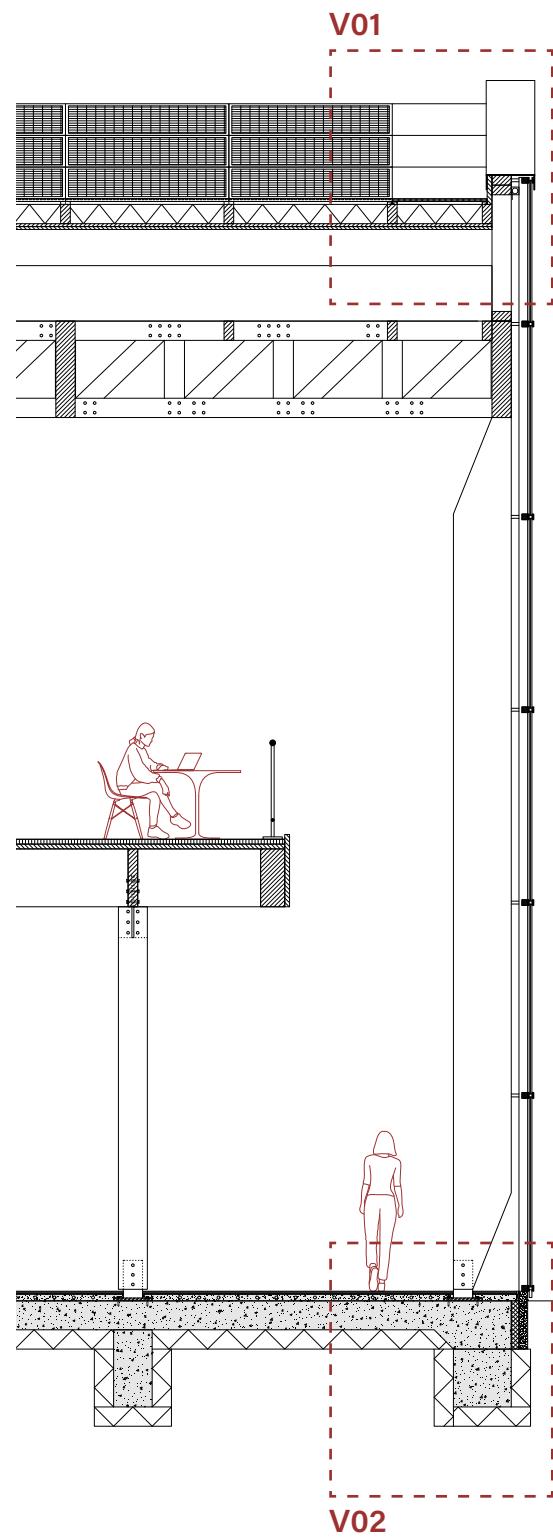


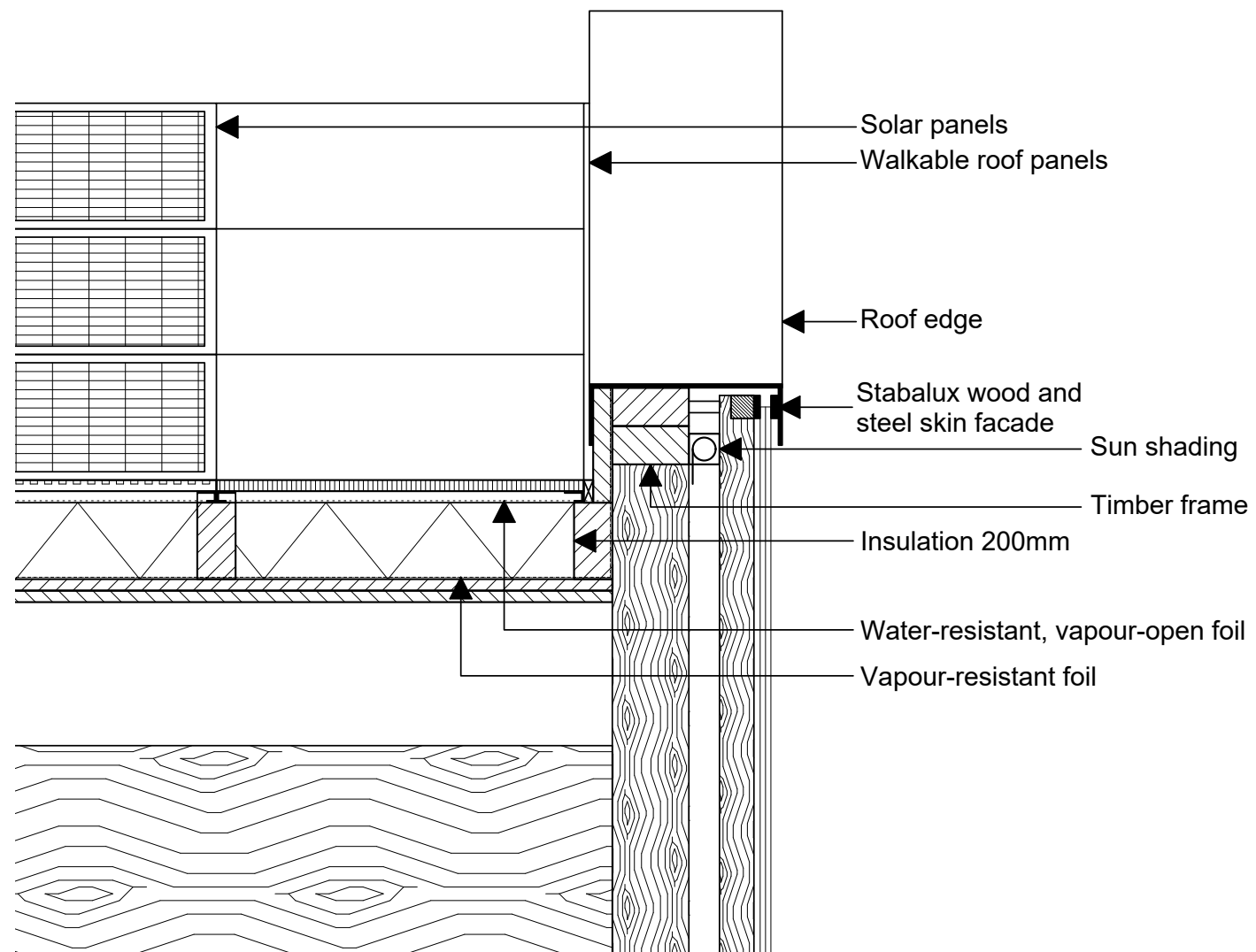




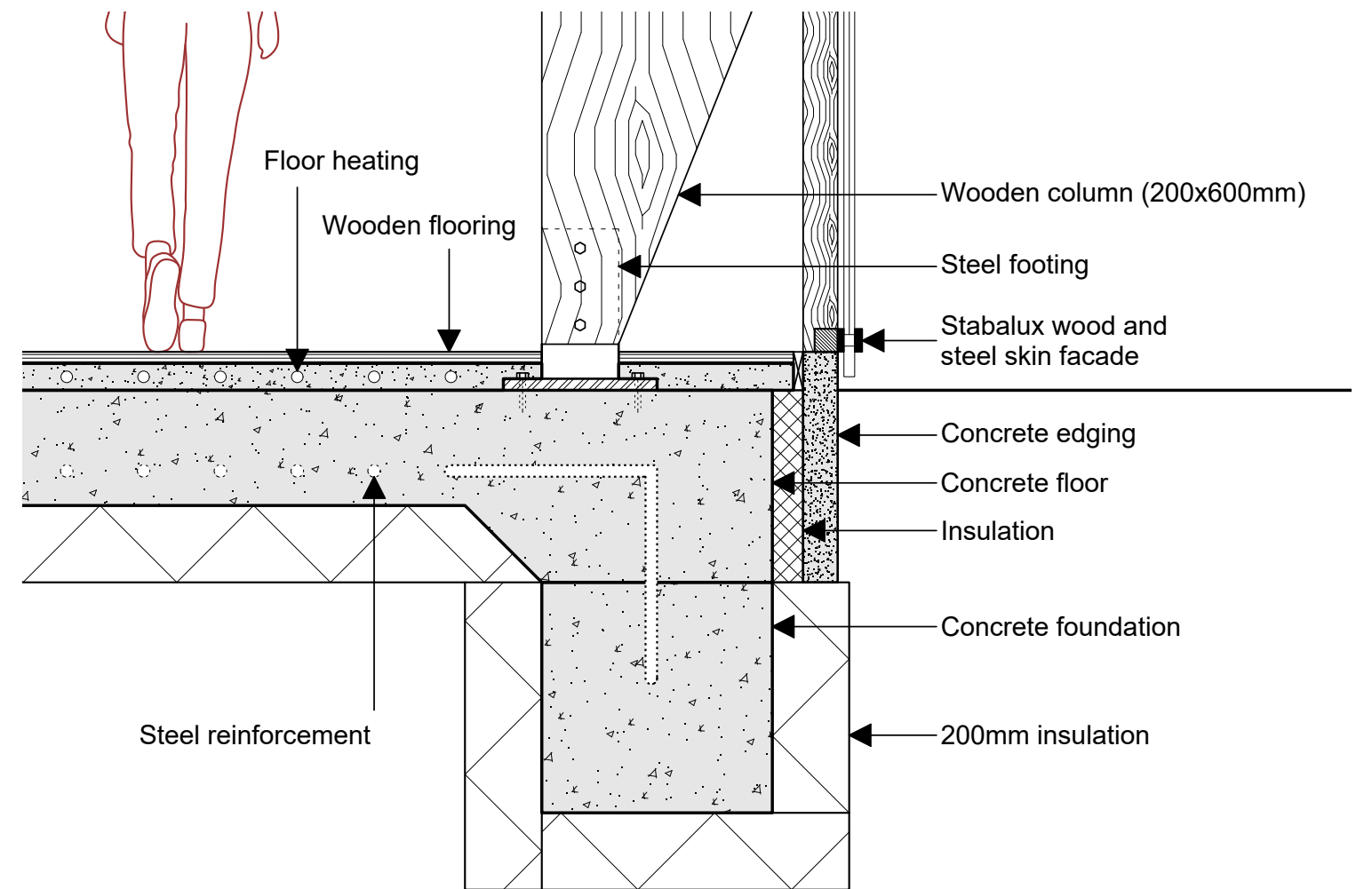
A-A

1

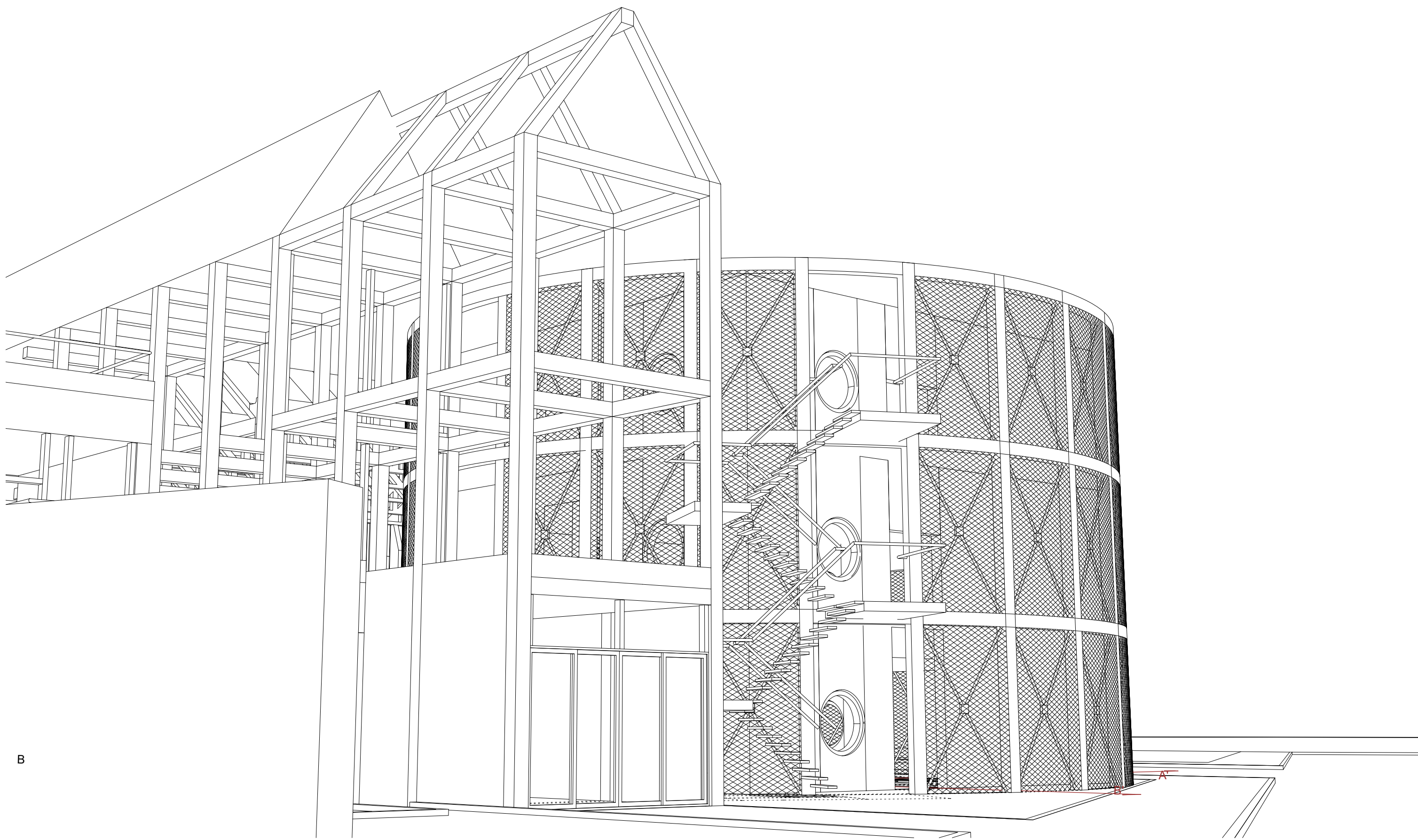




V01



V02



B

A

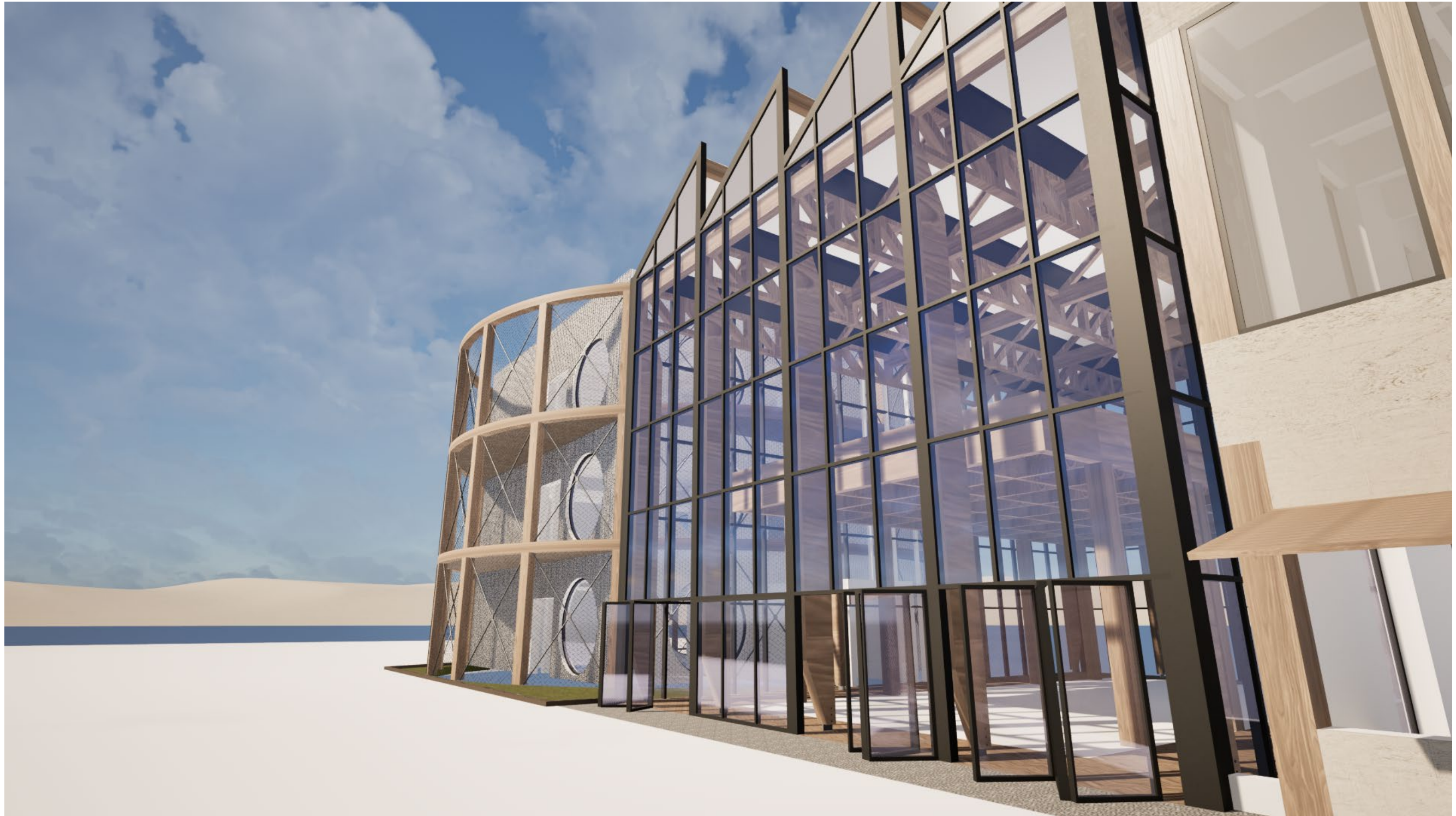


P5



Making this render revealed things that were better changed, like the ceiling panels, thickness of the windowframes and the materiality.





This test mostly revealed opportunities in materiality





# URBAN COLLAGES

*Counteracting fragmentation in the Haraldsgadekvarteret*



# Table of contents

01

Introduction

---

02

Problem statement

---

03

Concept

---

04

Building design

---

**PUBLIC CONDENSER**

HYBRIDITY

MULTIPLICITY

RESILIENCE

SUSTAINABILITY

HEALTHINESS







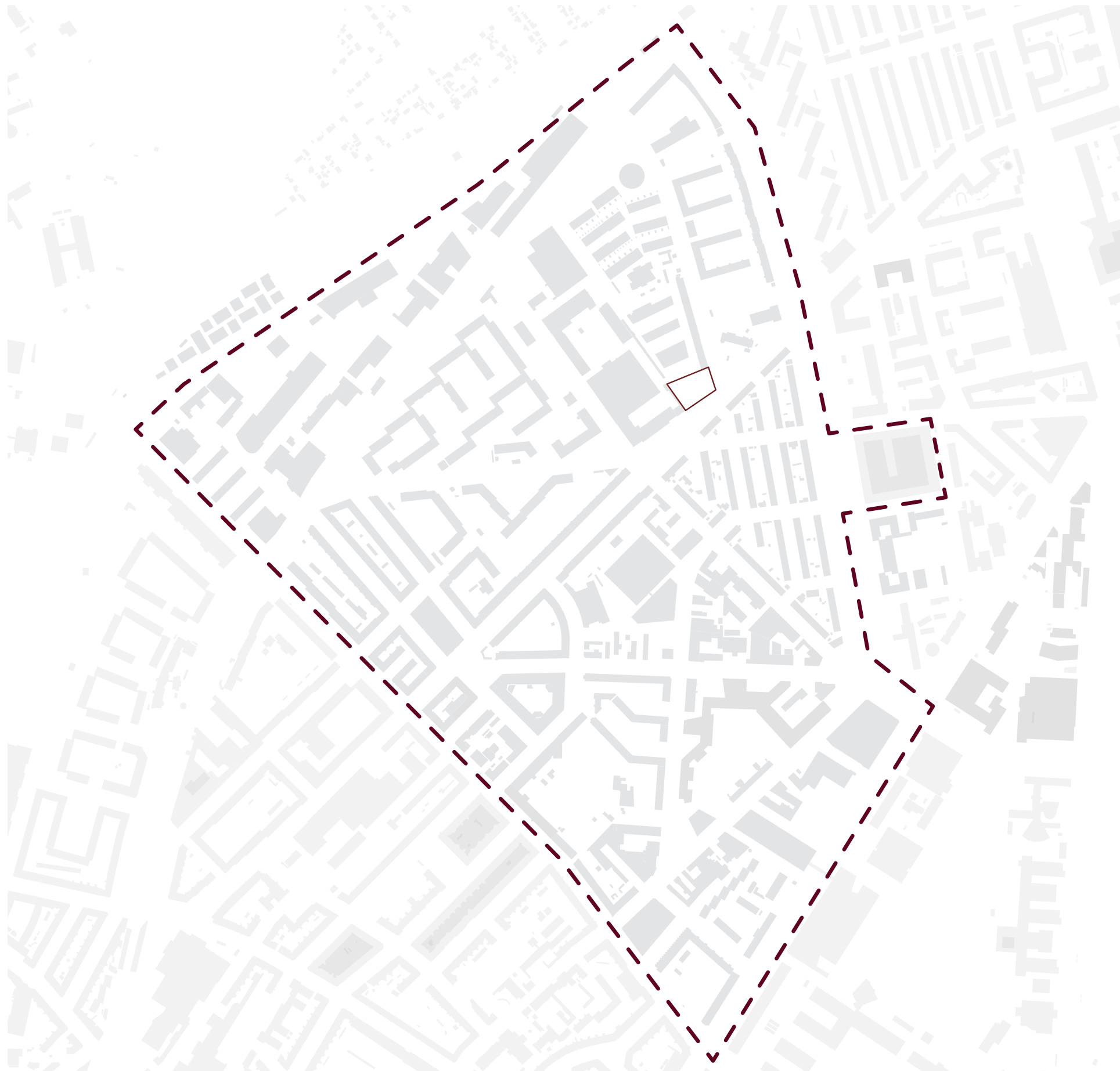


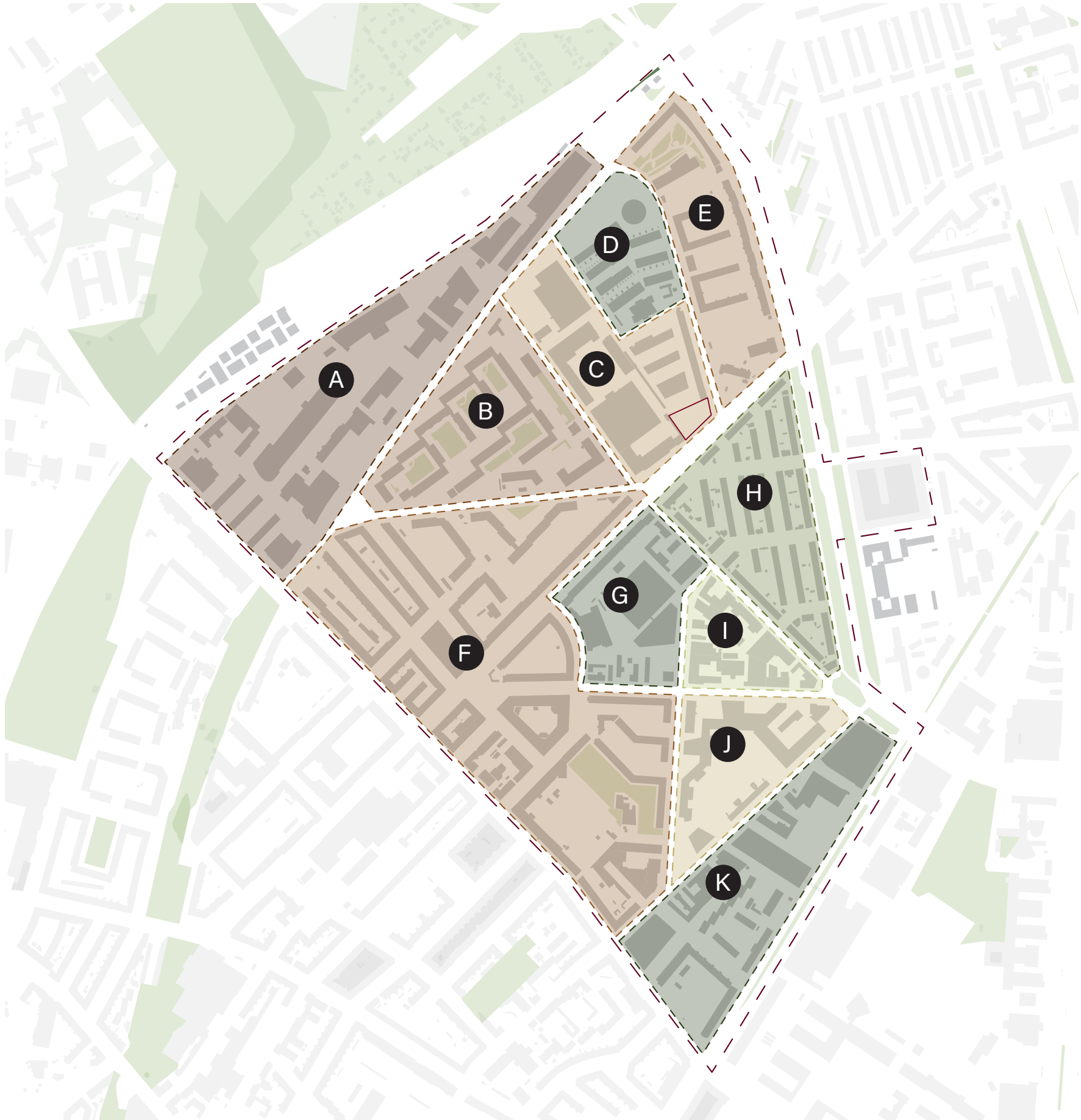
# **PROBLEM** STATEMENT





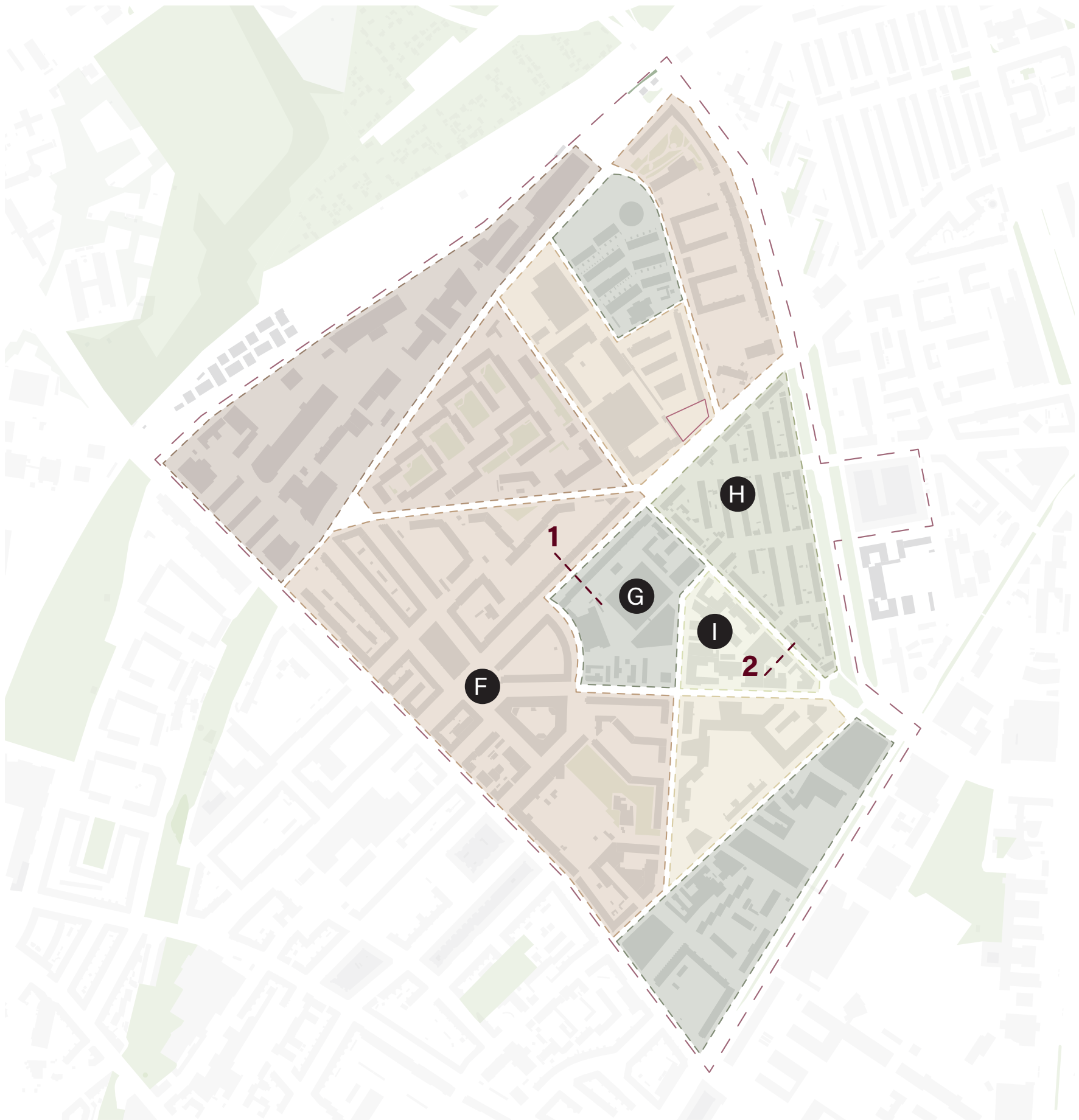






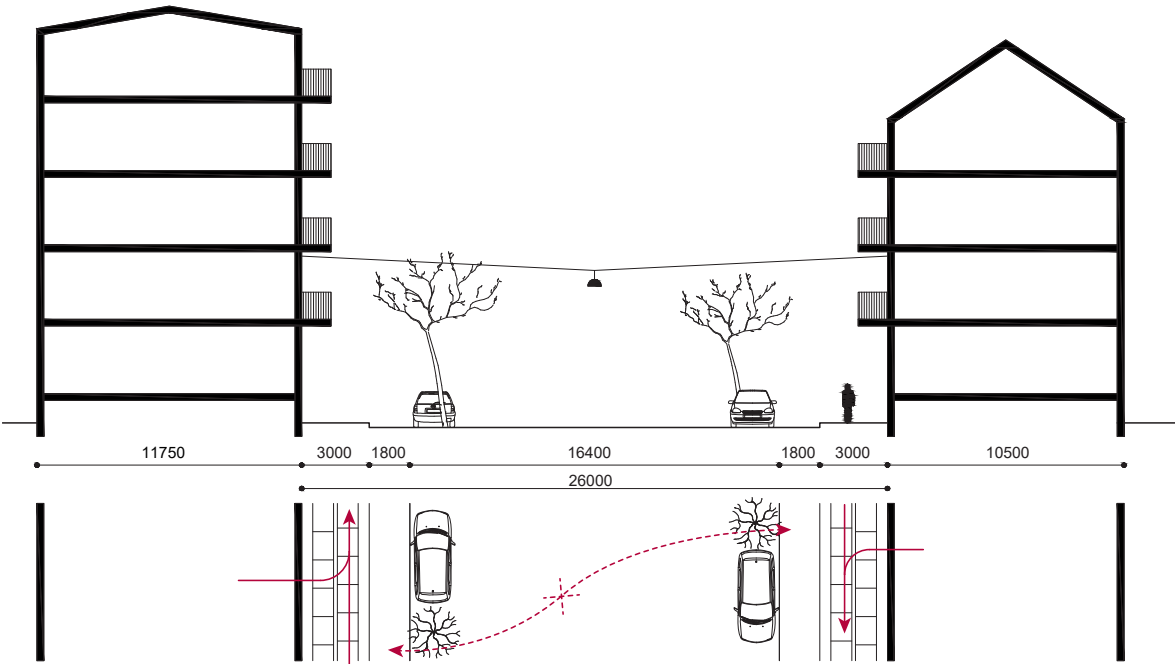
- A: Car dealerships
- B: Housing blocks with elaborated common green areas
- C: Reclaimed industry
- D: Unique typologies
- E&F: Long building blocks
- G&K: A mix of multiple (housing, education, industry)
- H: Row houses
- I: Industrial past
- J: Copenhagen vocational school





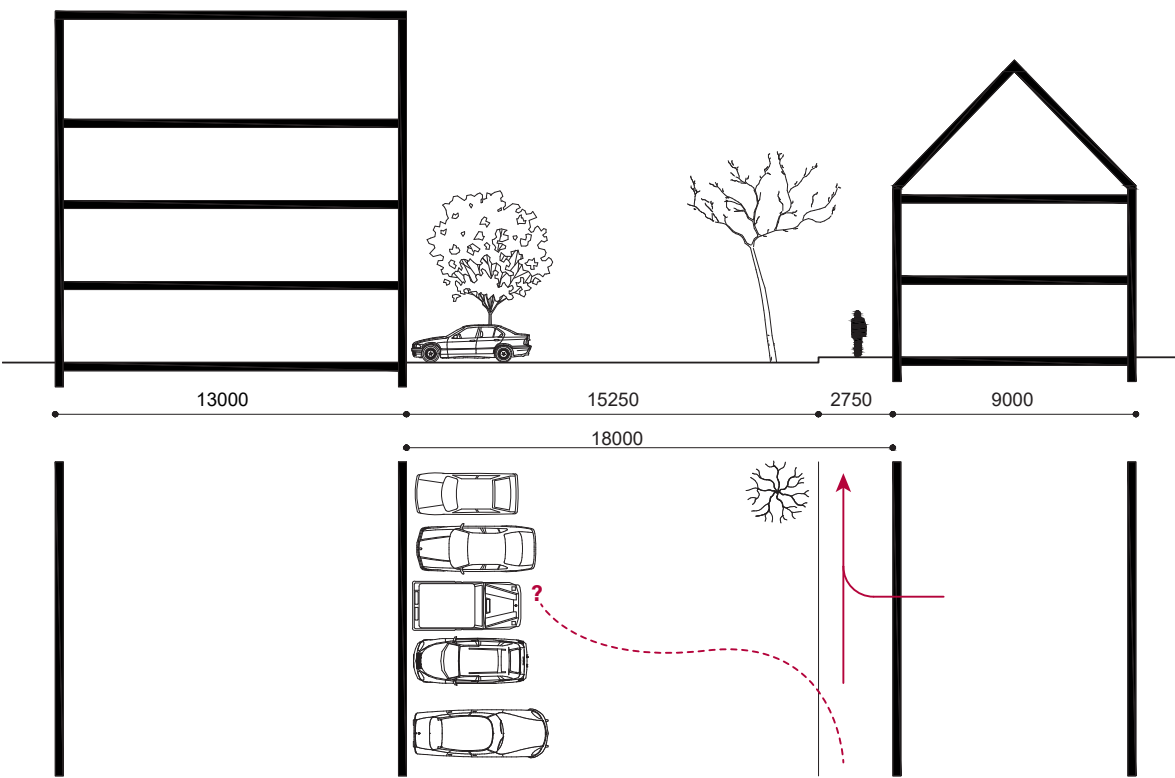
1: Haraldsgade

Residential street



2: Vermundsgade

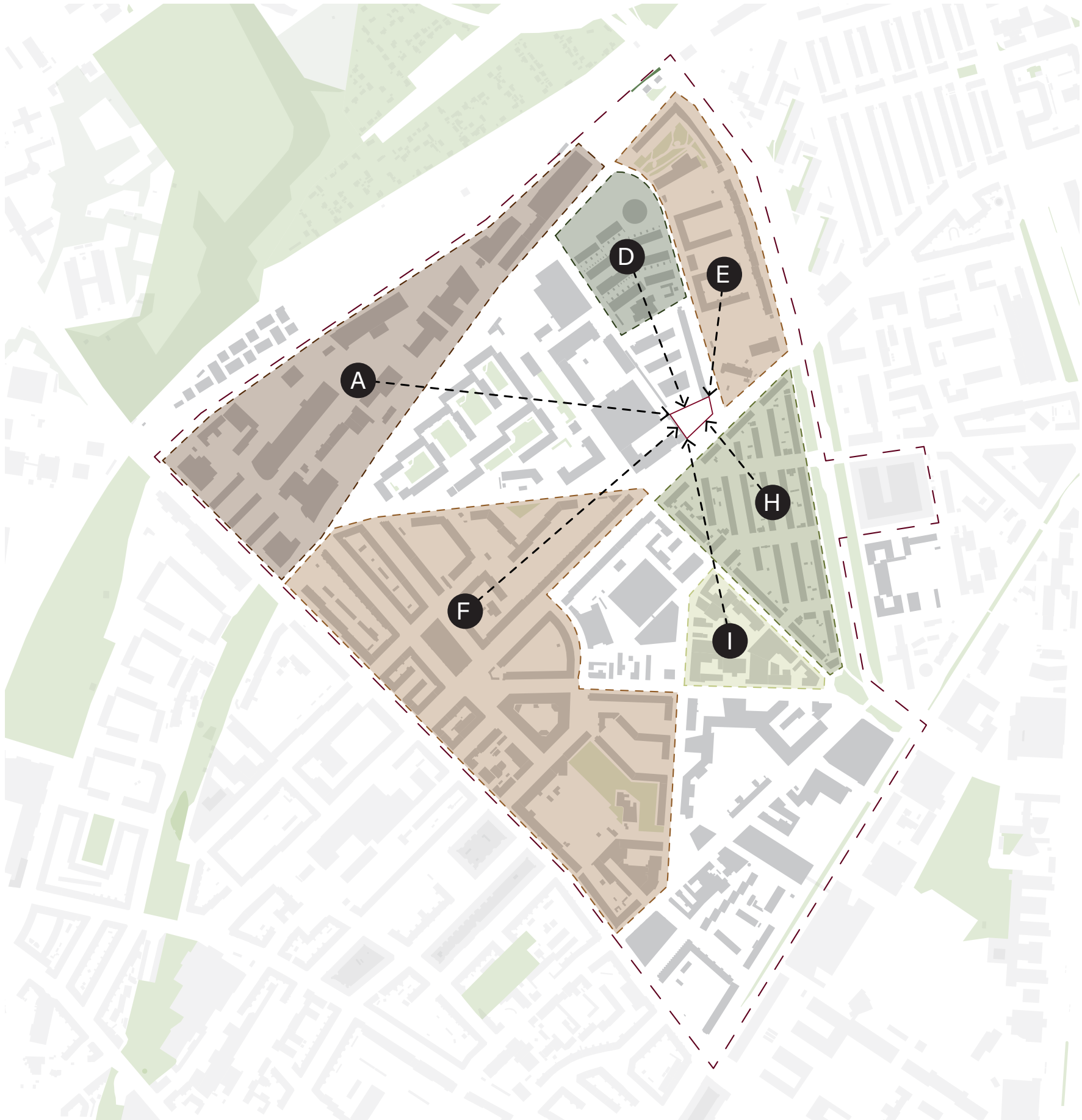
Residential and industry





**CONCEPT**





**A: Car dealerships**

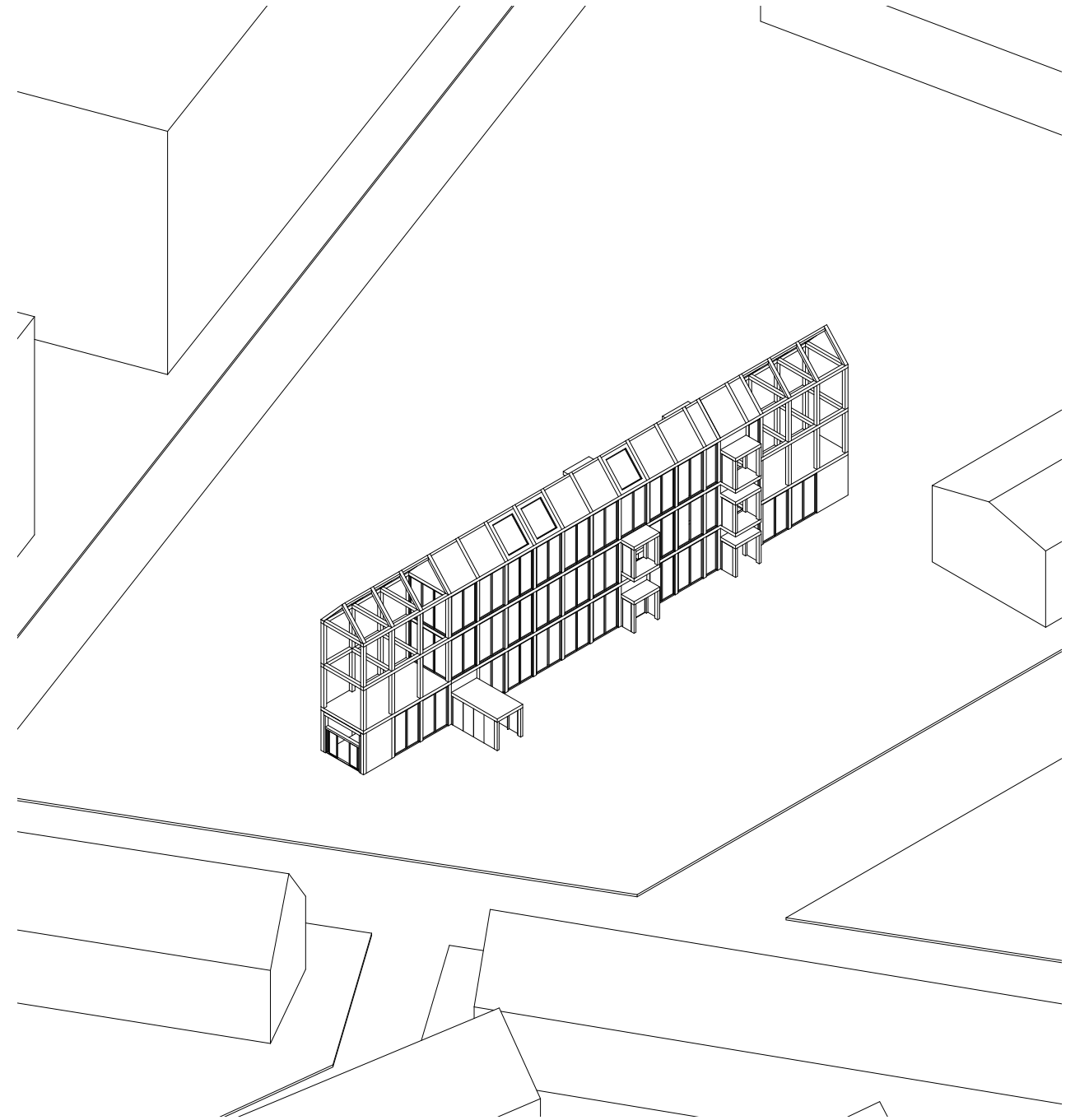
**D: Unique typologies**

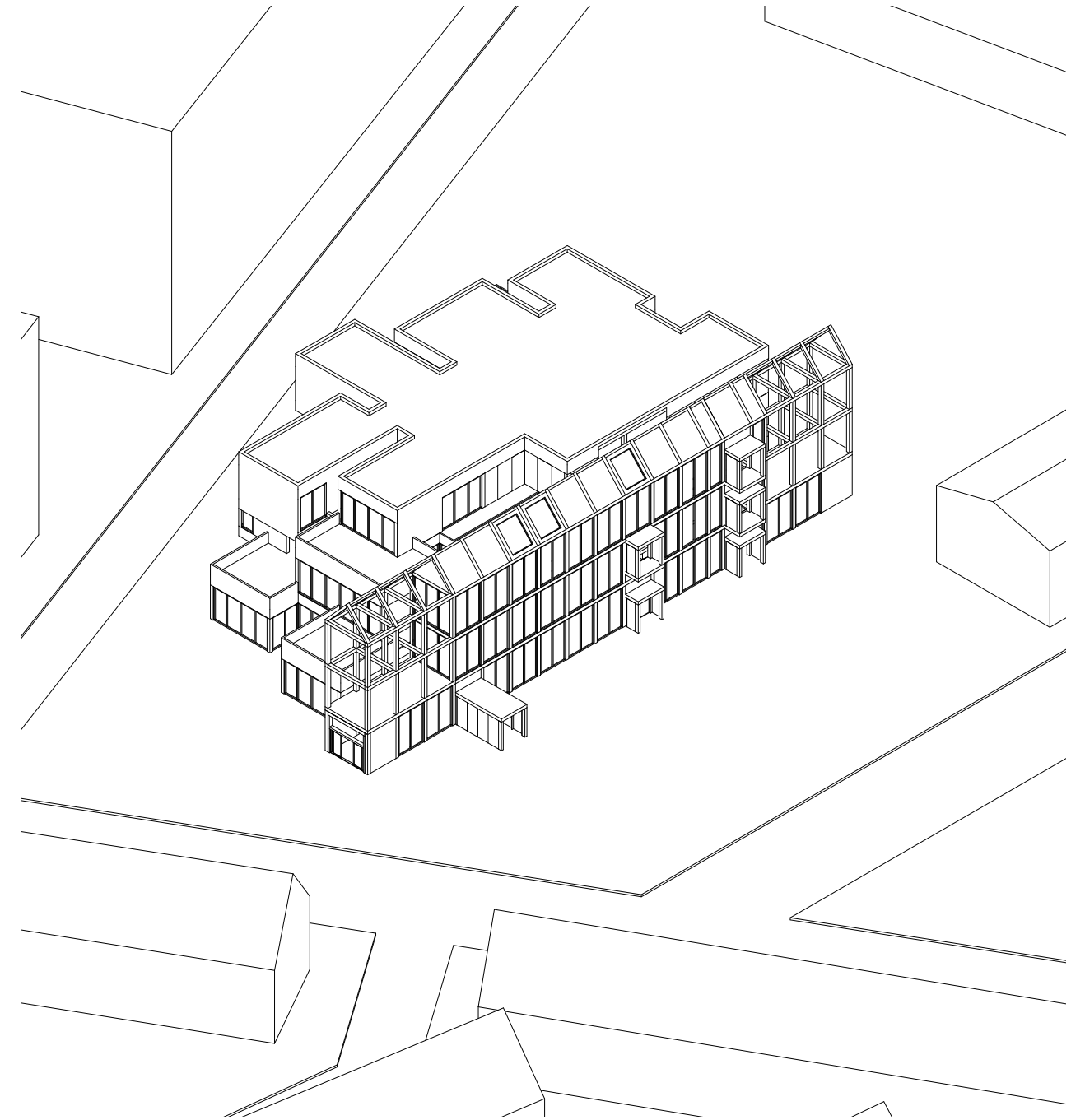
**E&F: Long building blocks**

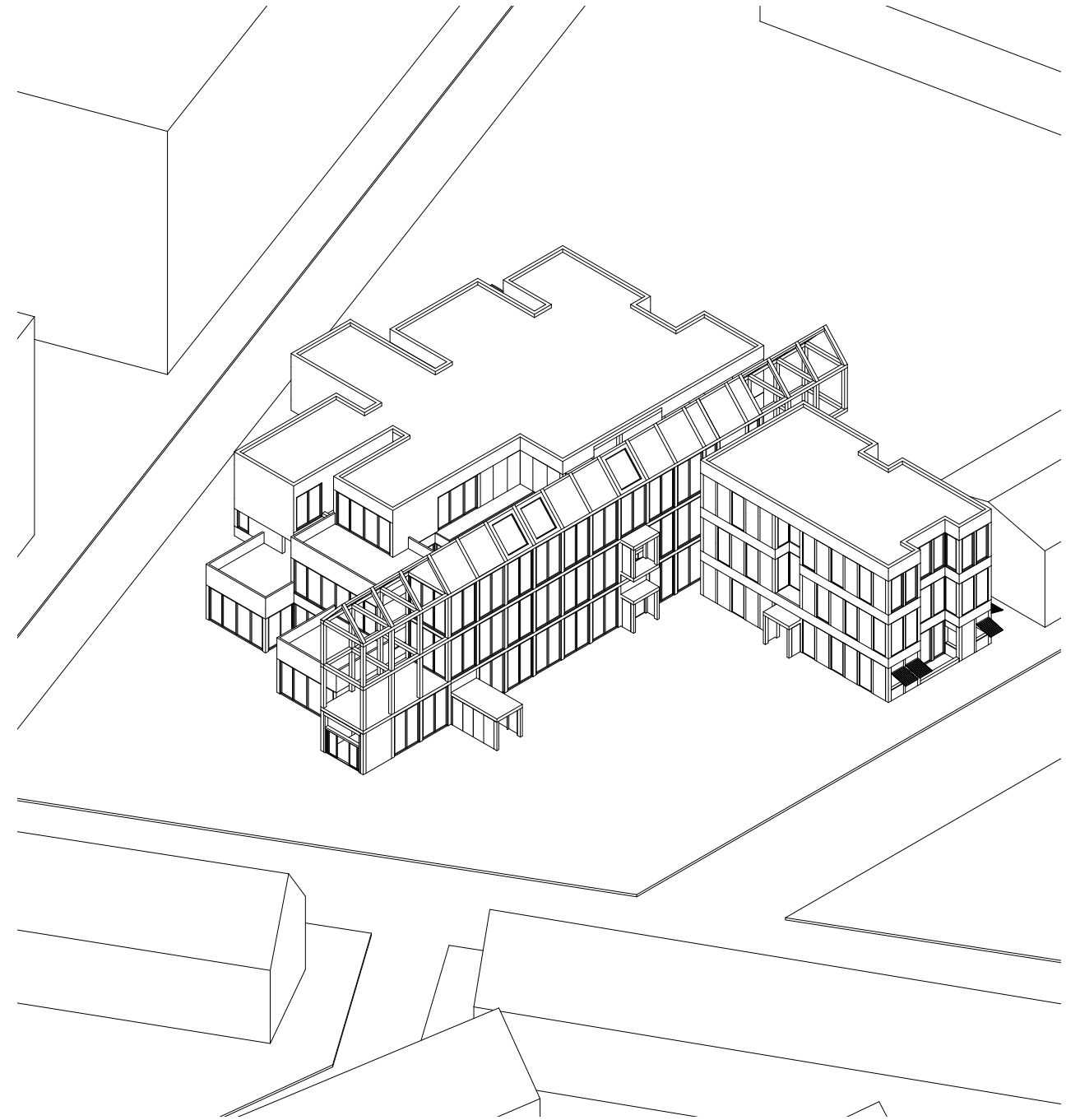
**H: Row houses**

**I: Industrial past**

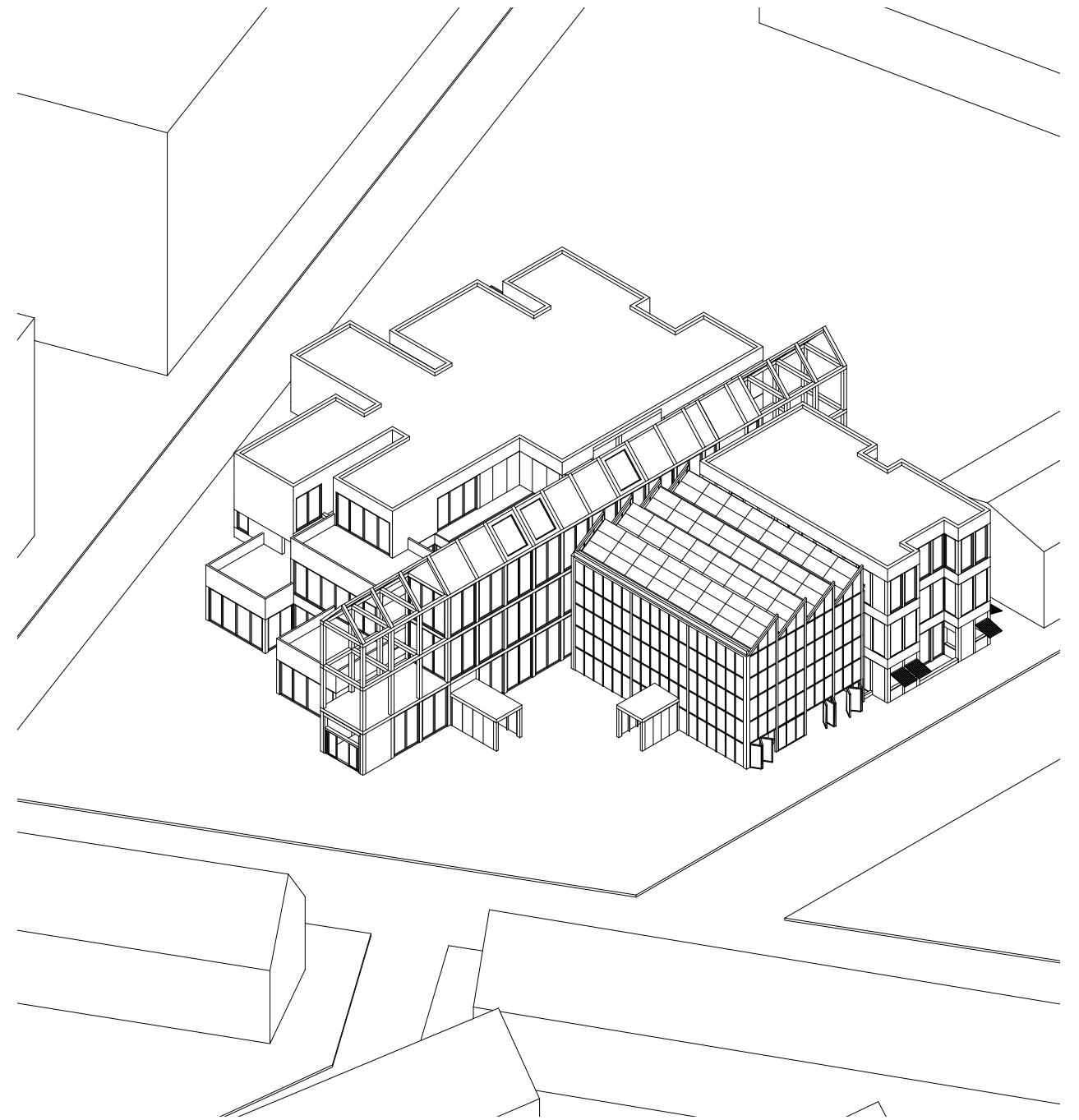


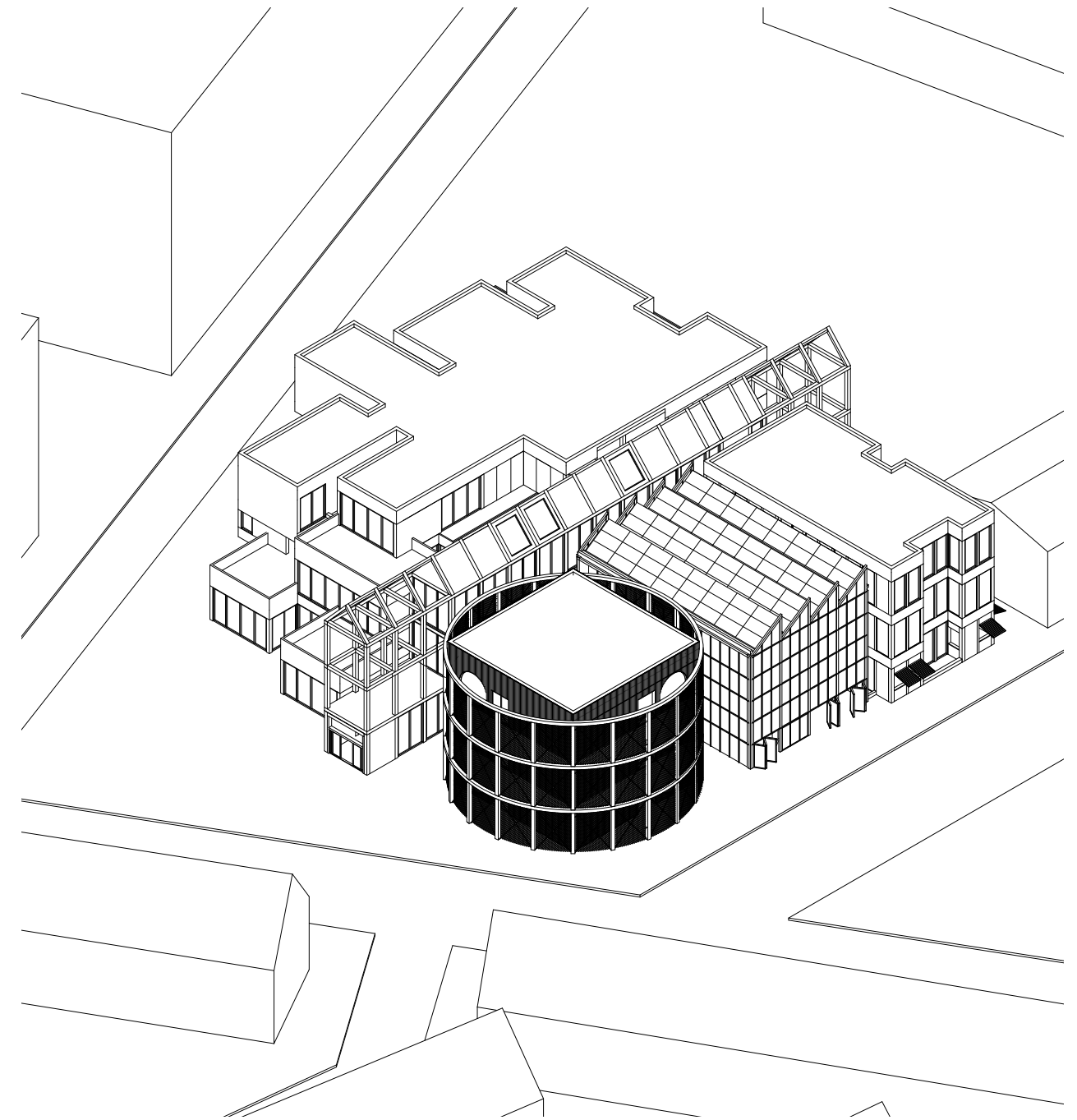


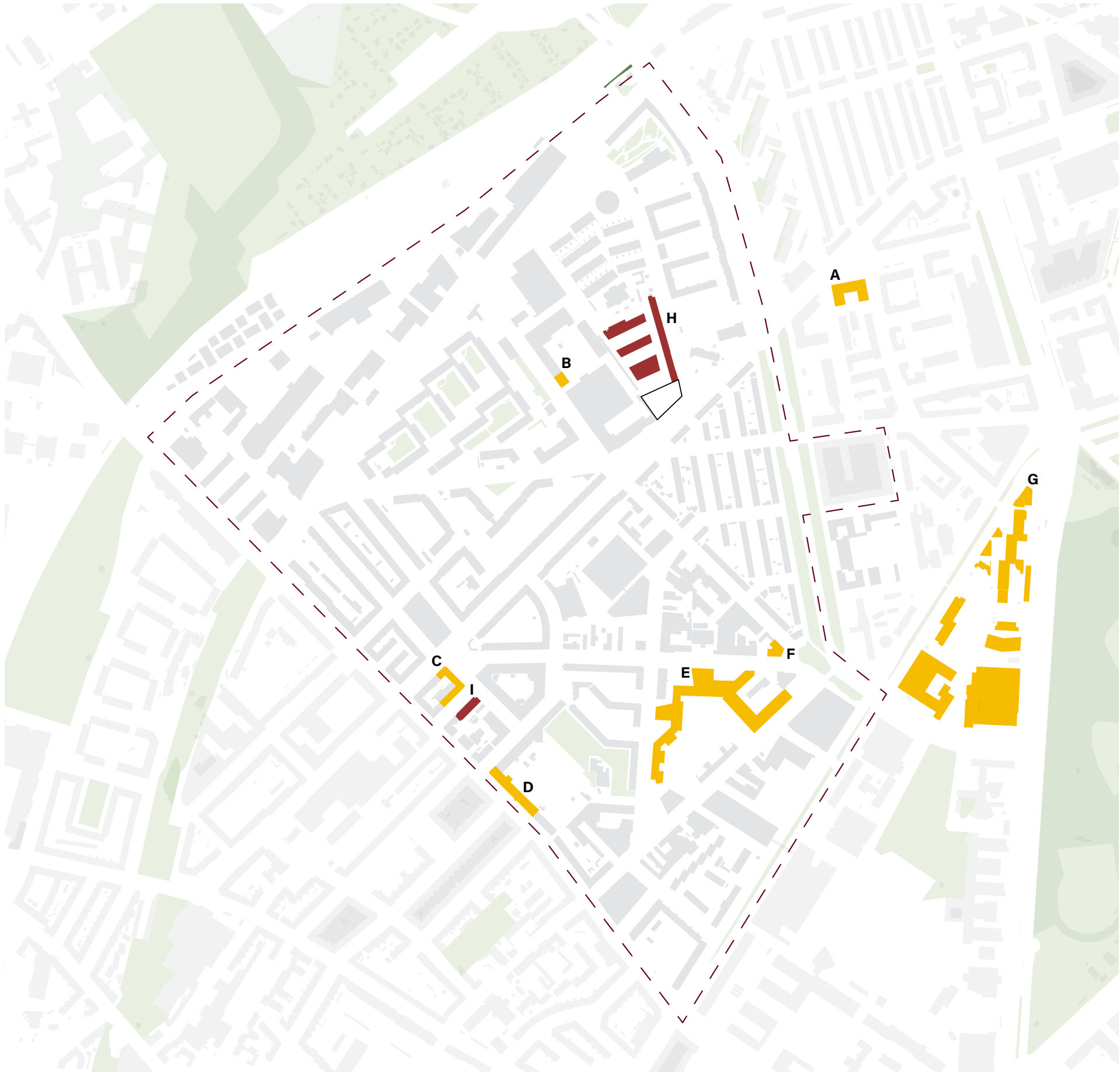












A: Herbal Medicine School and Dyslexia Center

B: Sine Ginsborg Hair & Make-Up school

C: Part of the Copenhagen Vocational School

D: Part of the University of Copenhagen

E: Copenhagen Vocational School

F: AOF Center Copenhagen

G: University of Copenhagen

H: Bolsjefabrikken

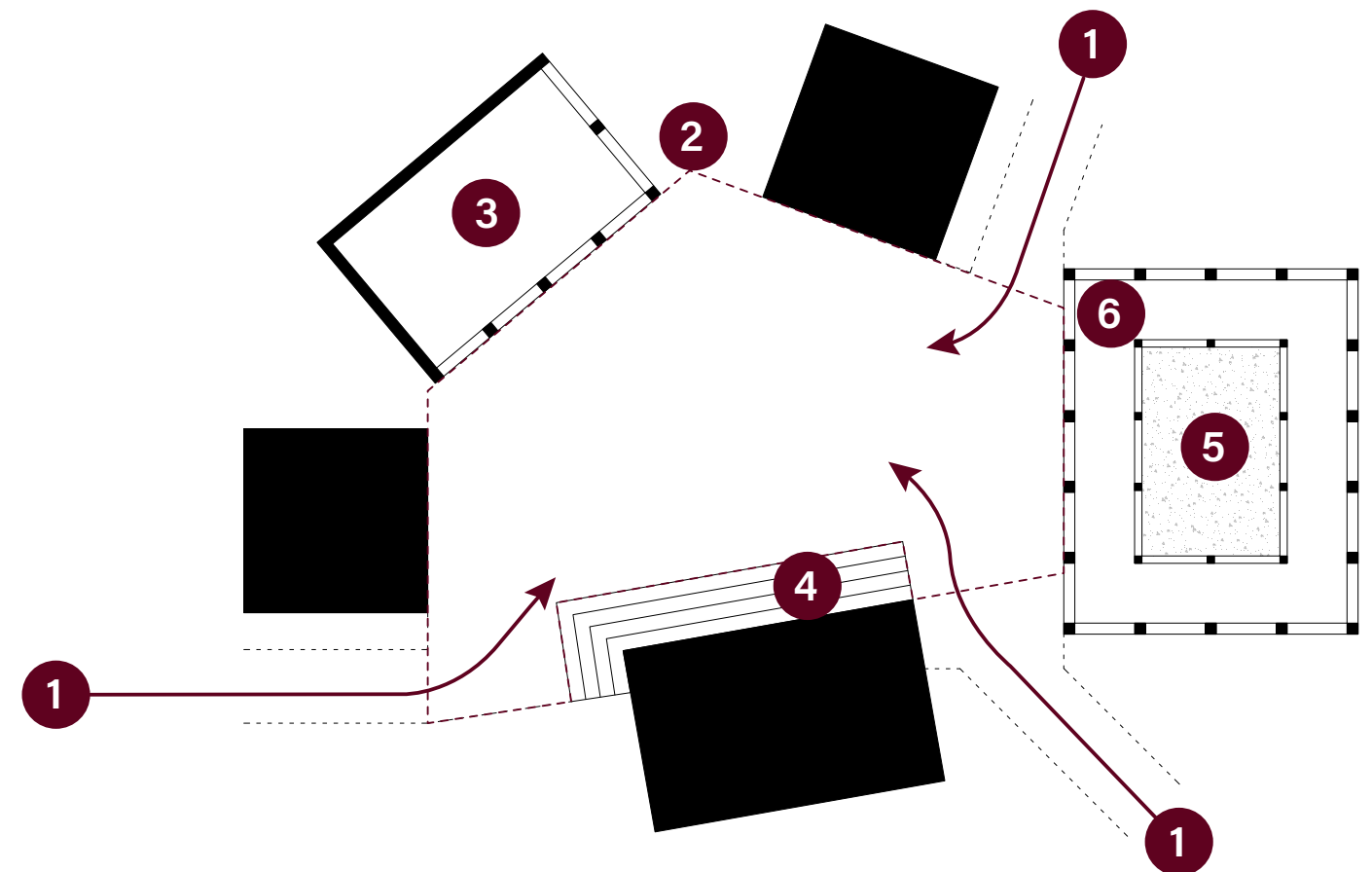
I: OSRAM-Huset



# 1. Getting there and having a reason to stay



# 2. Architectural elements using a square as an example



- 1. Several paths leading to the space
- 2. Defined partially by building edges
- 3. Columns to define **some** borders

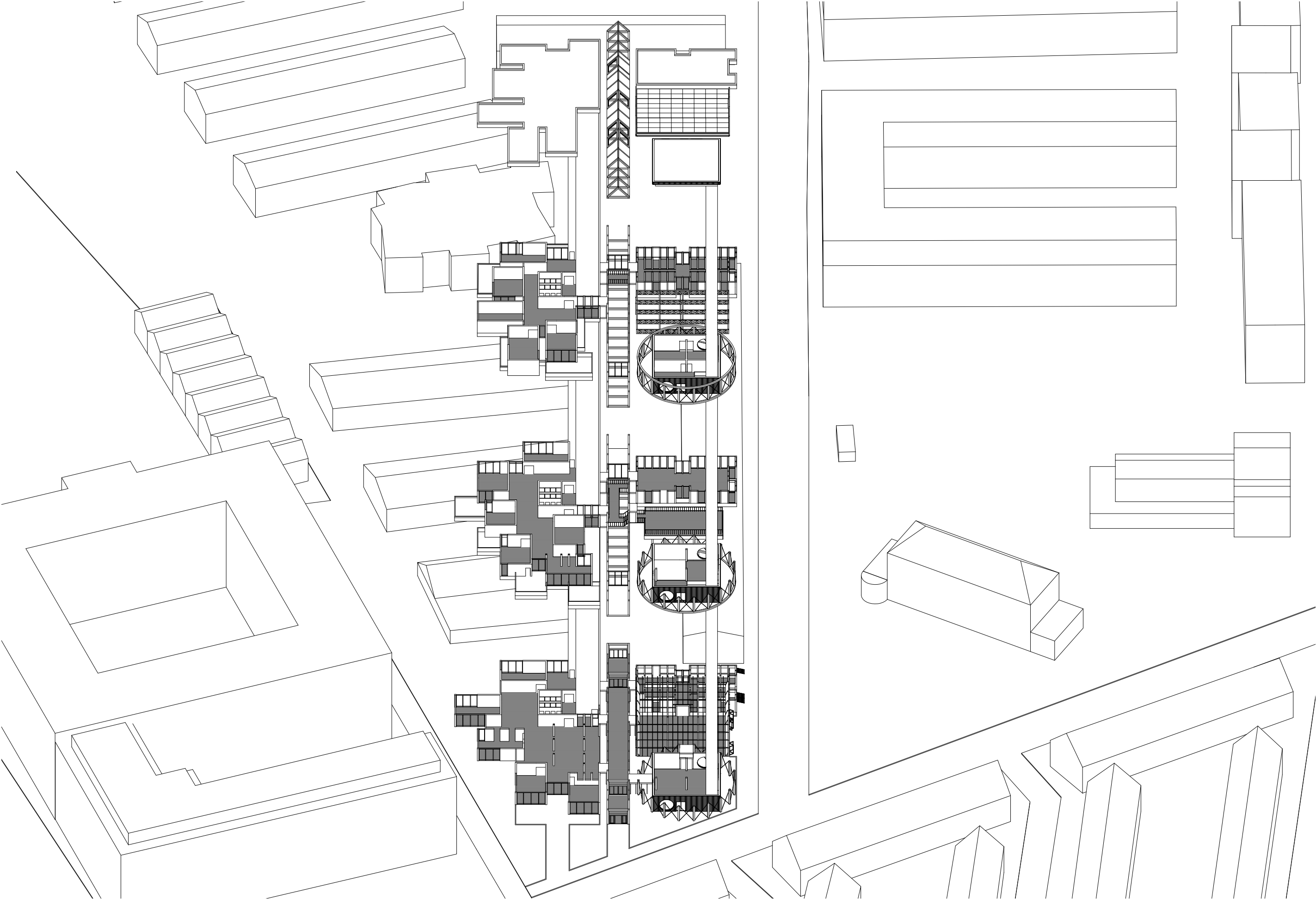
- 4. Stair seats
- 5. Courtyard next to it, with an arcade around it (6)



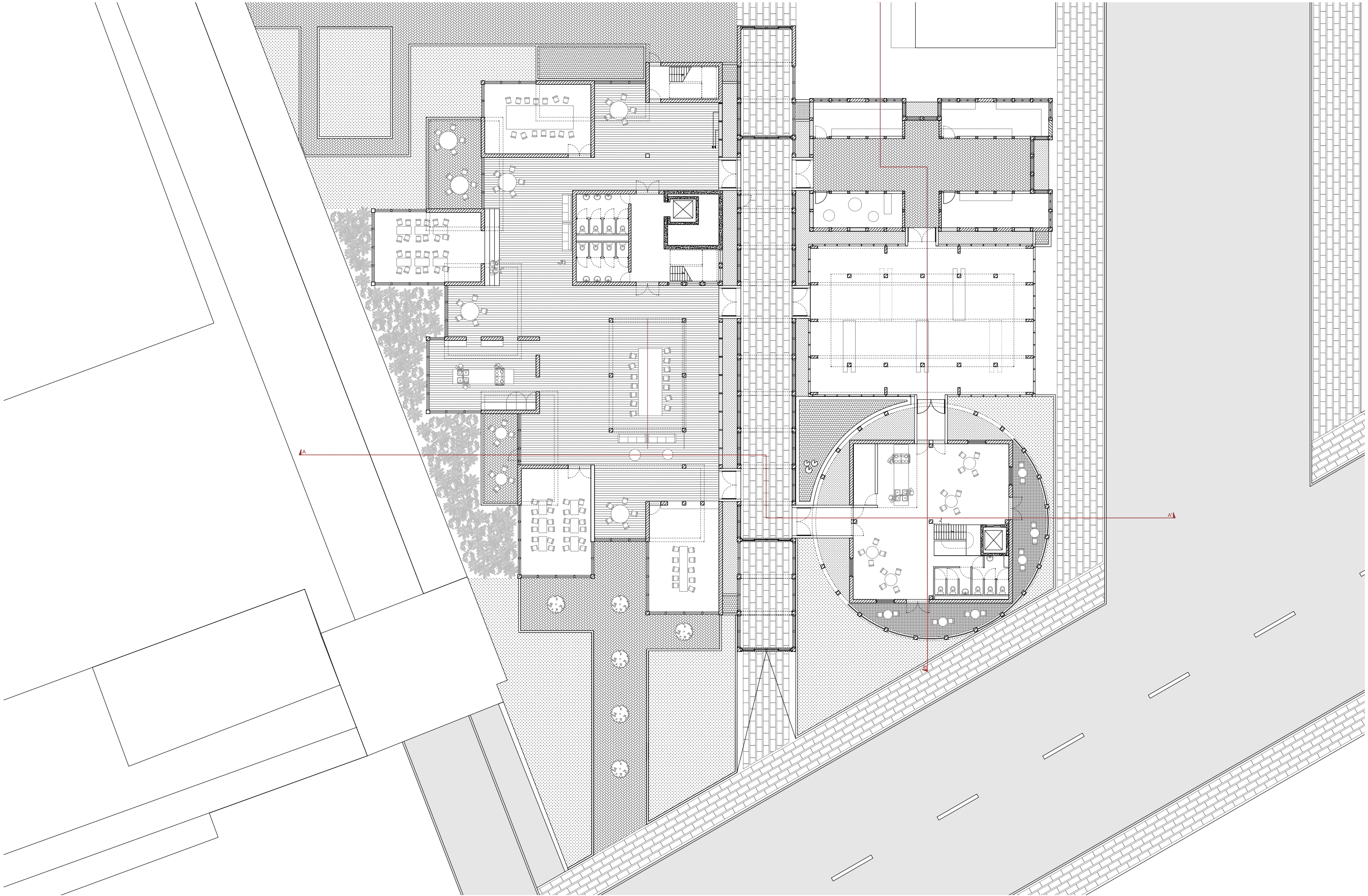


**BUILDING DESIGN**





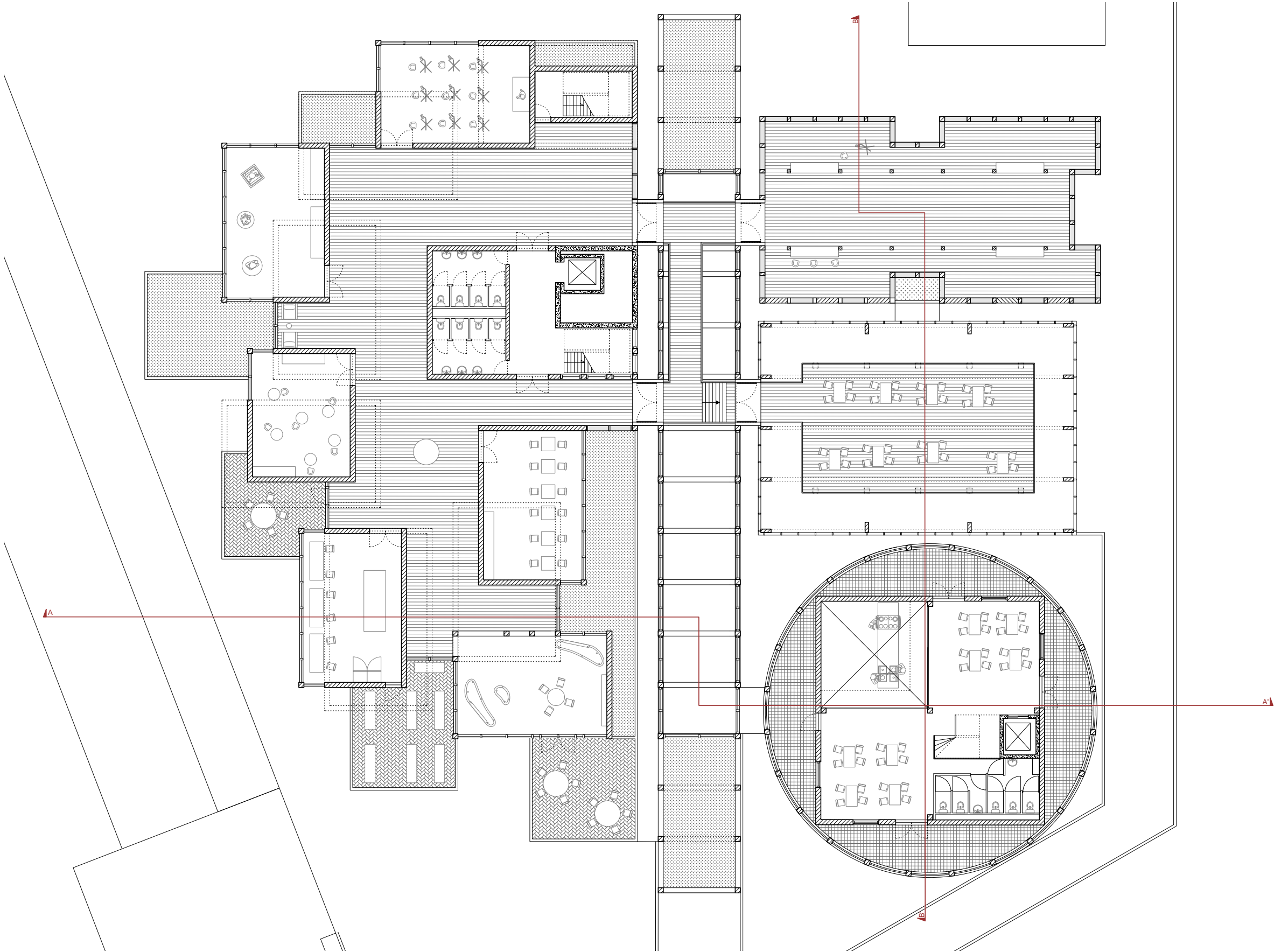






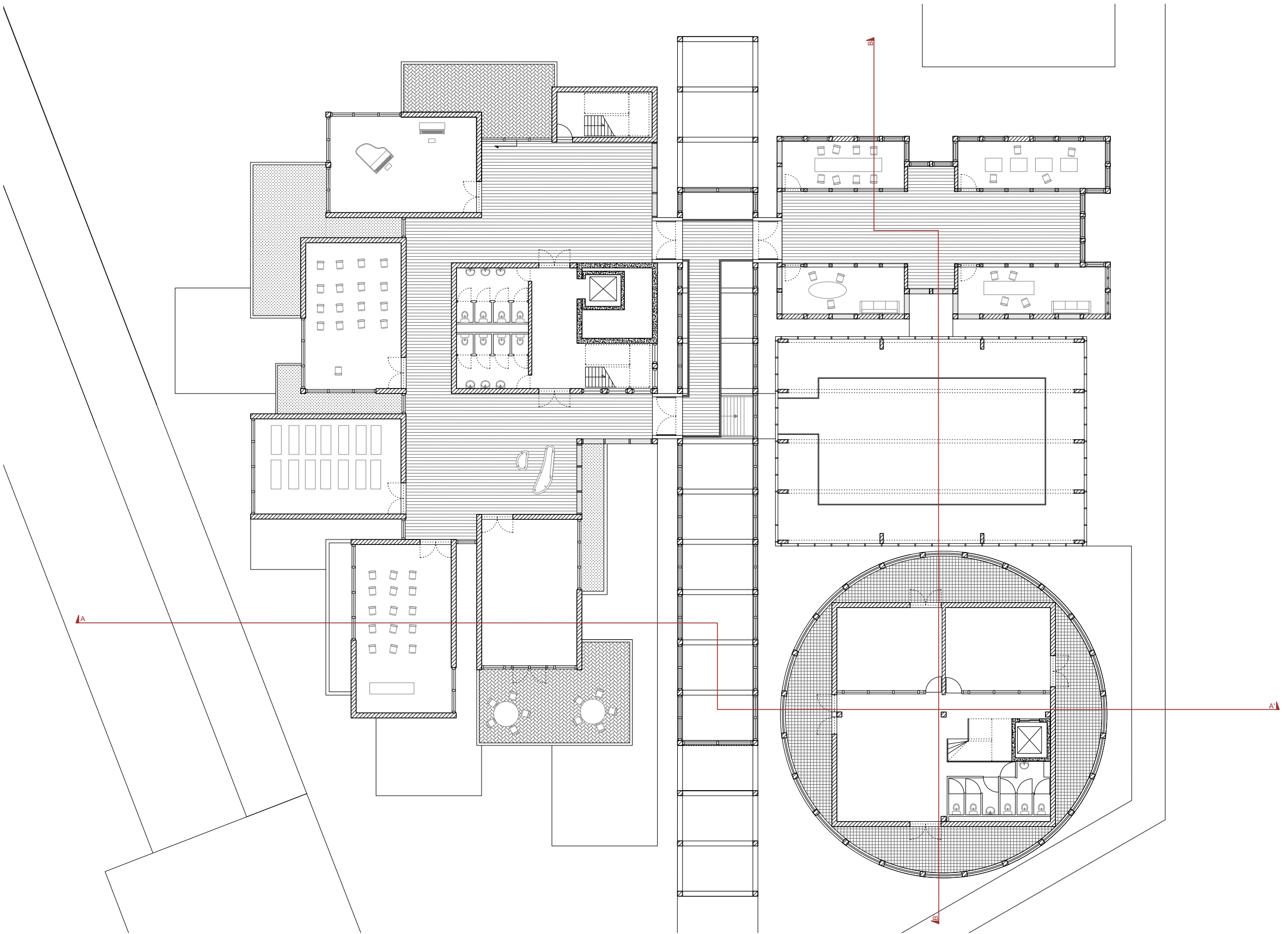








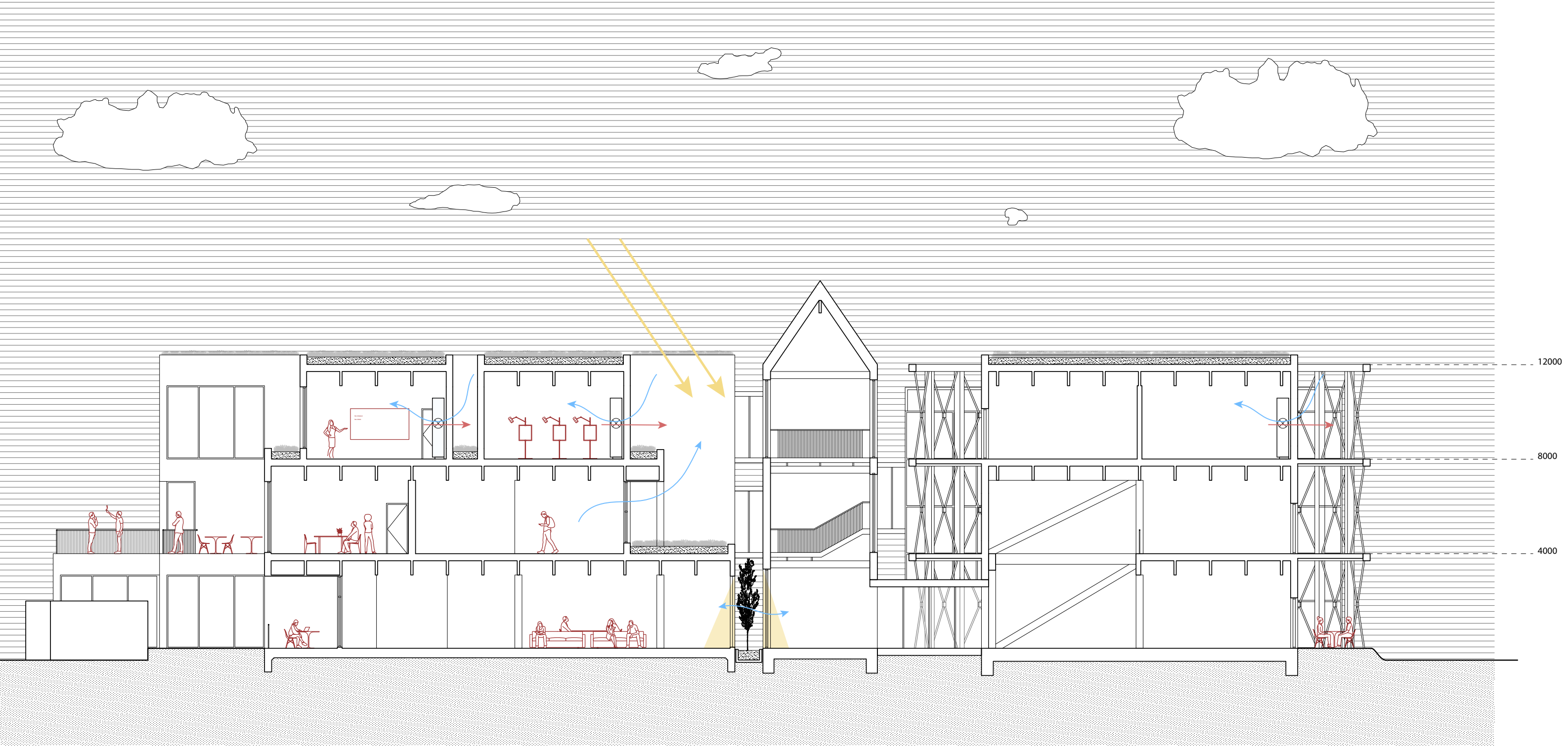


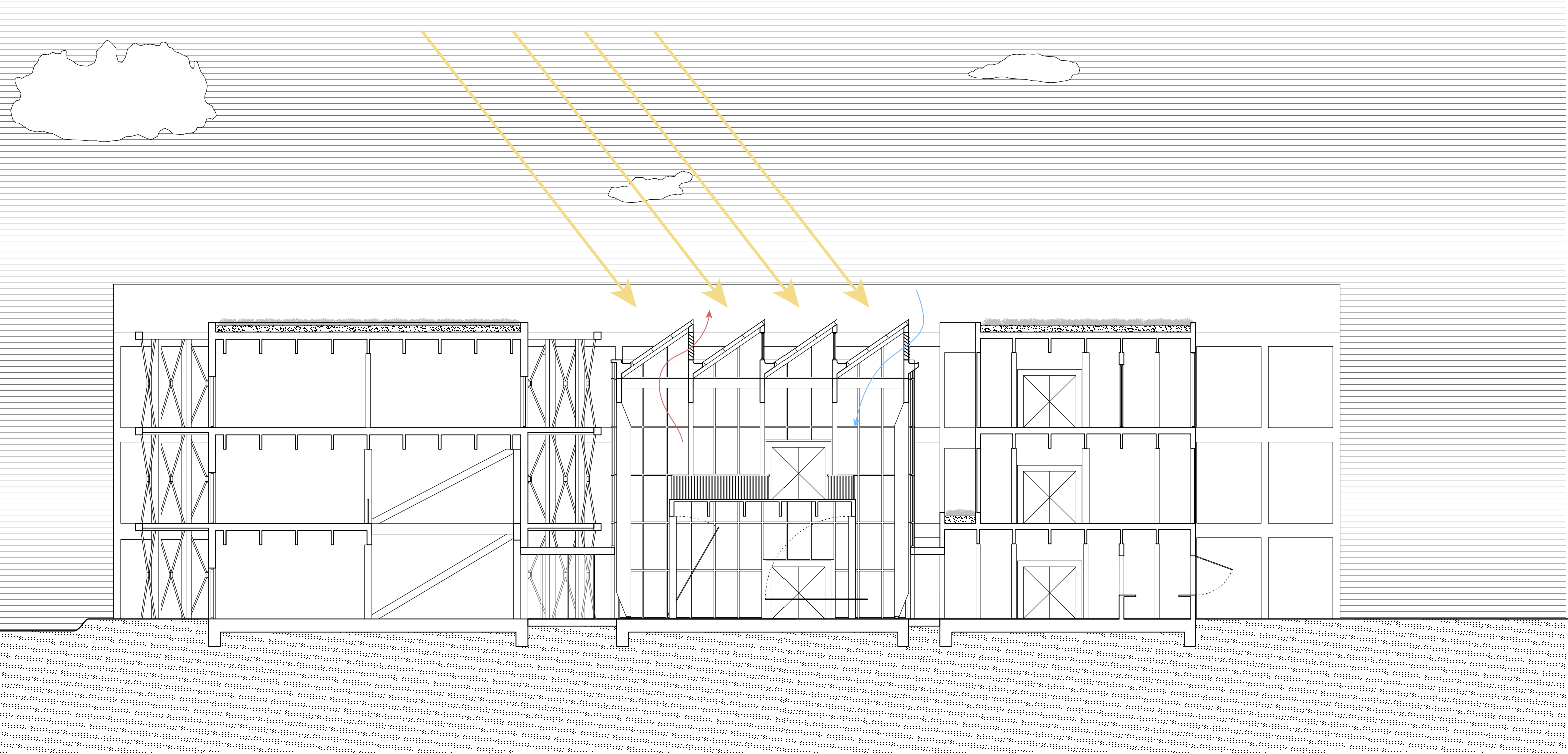


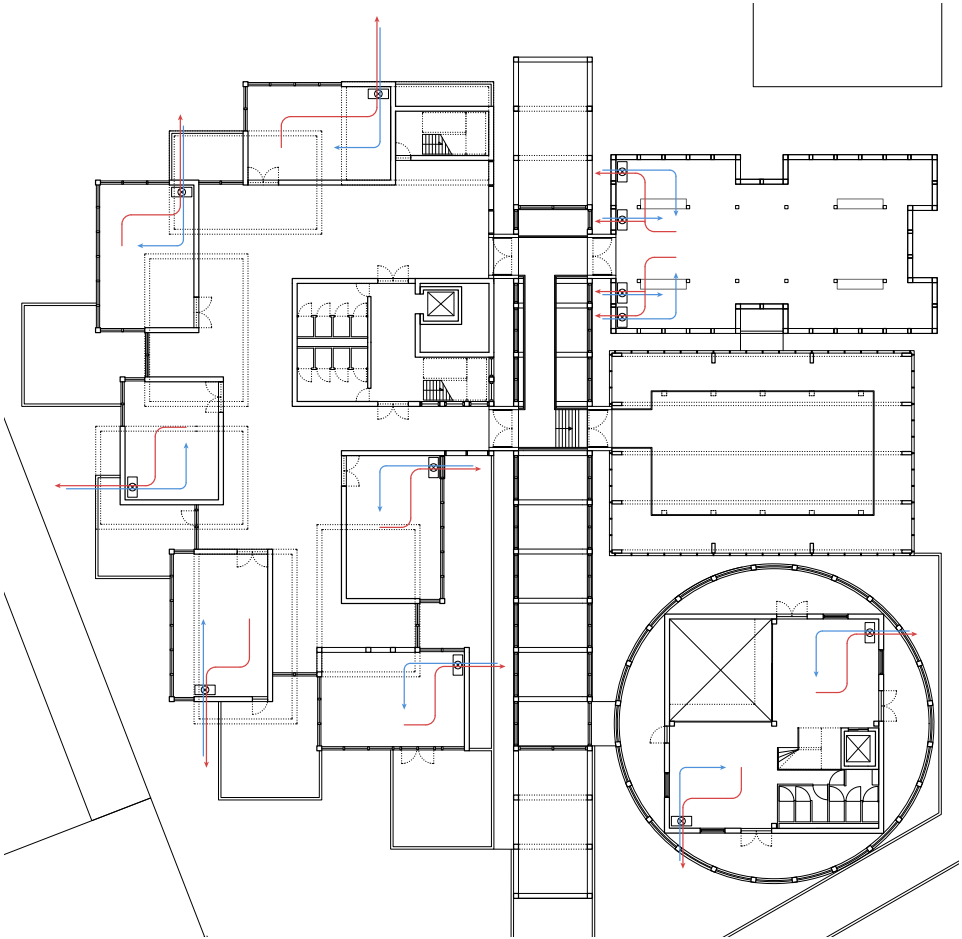
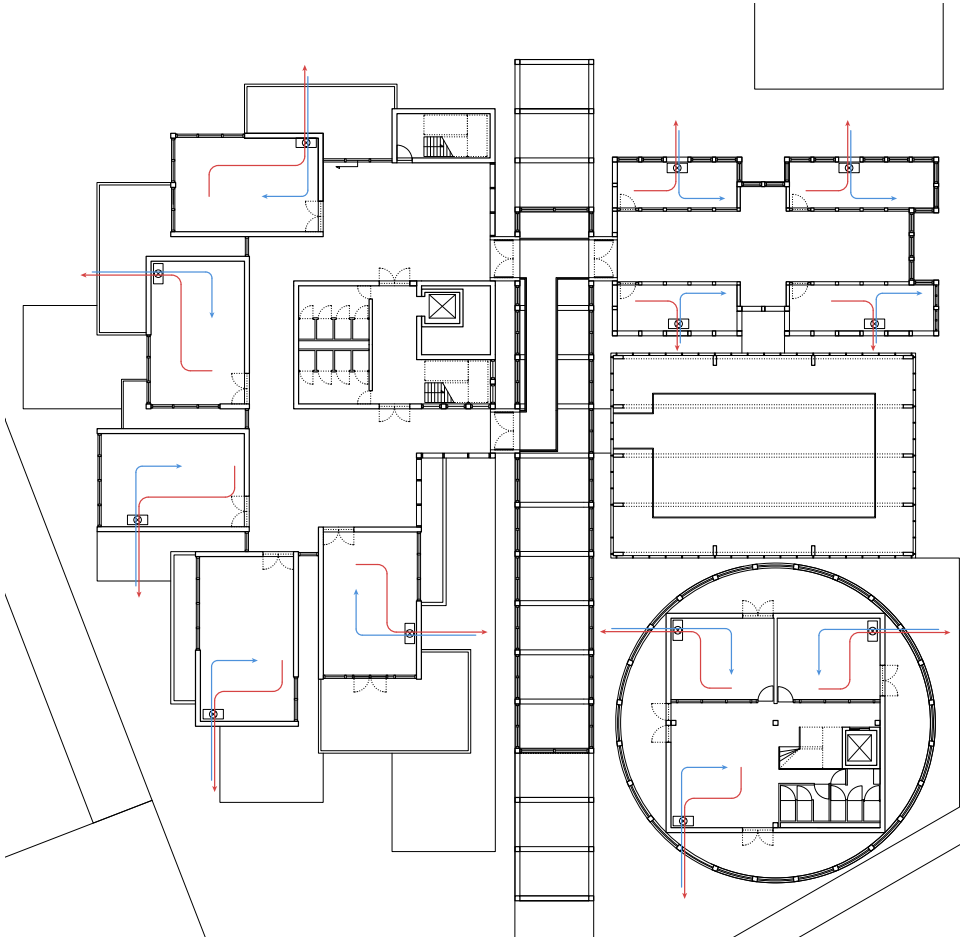
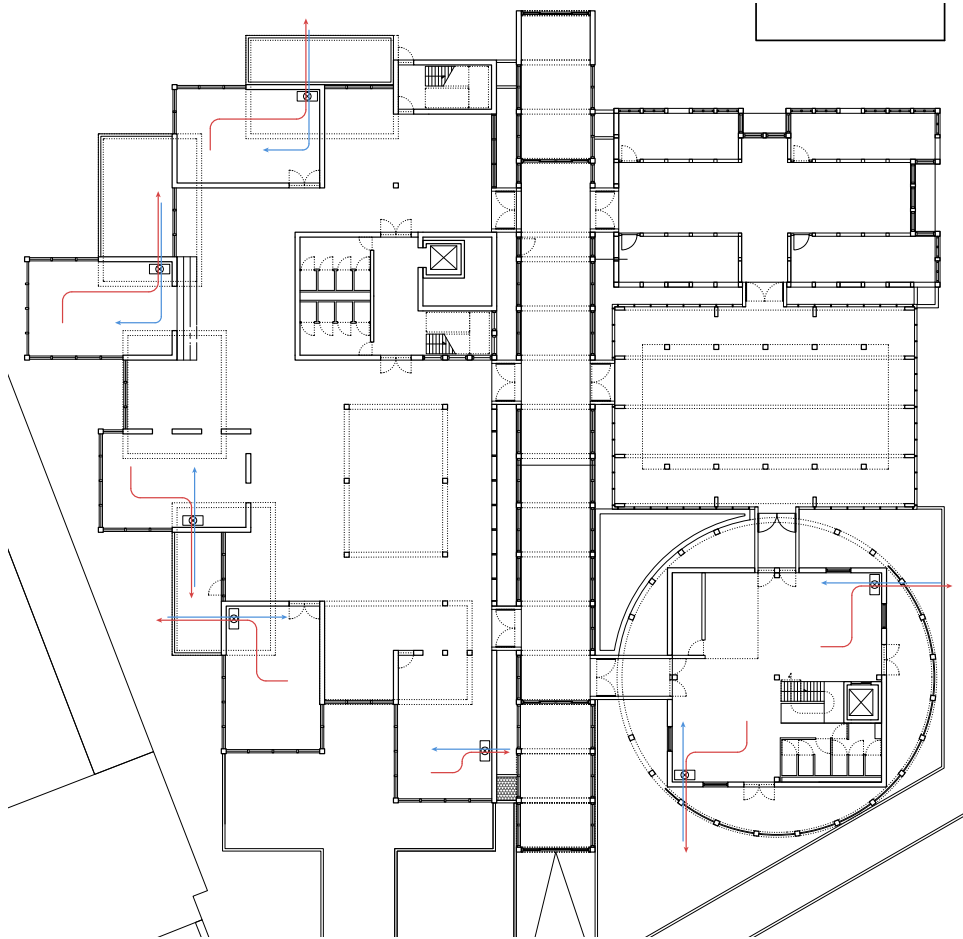




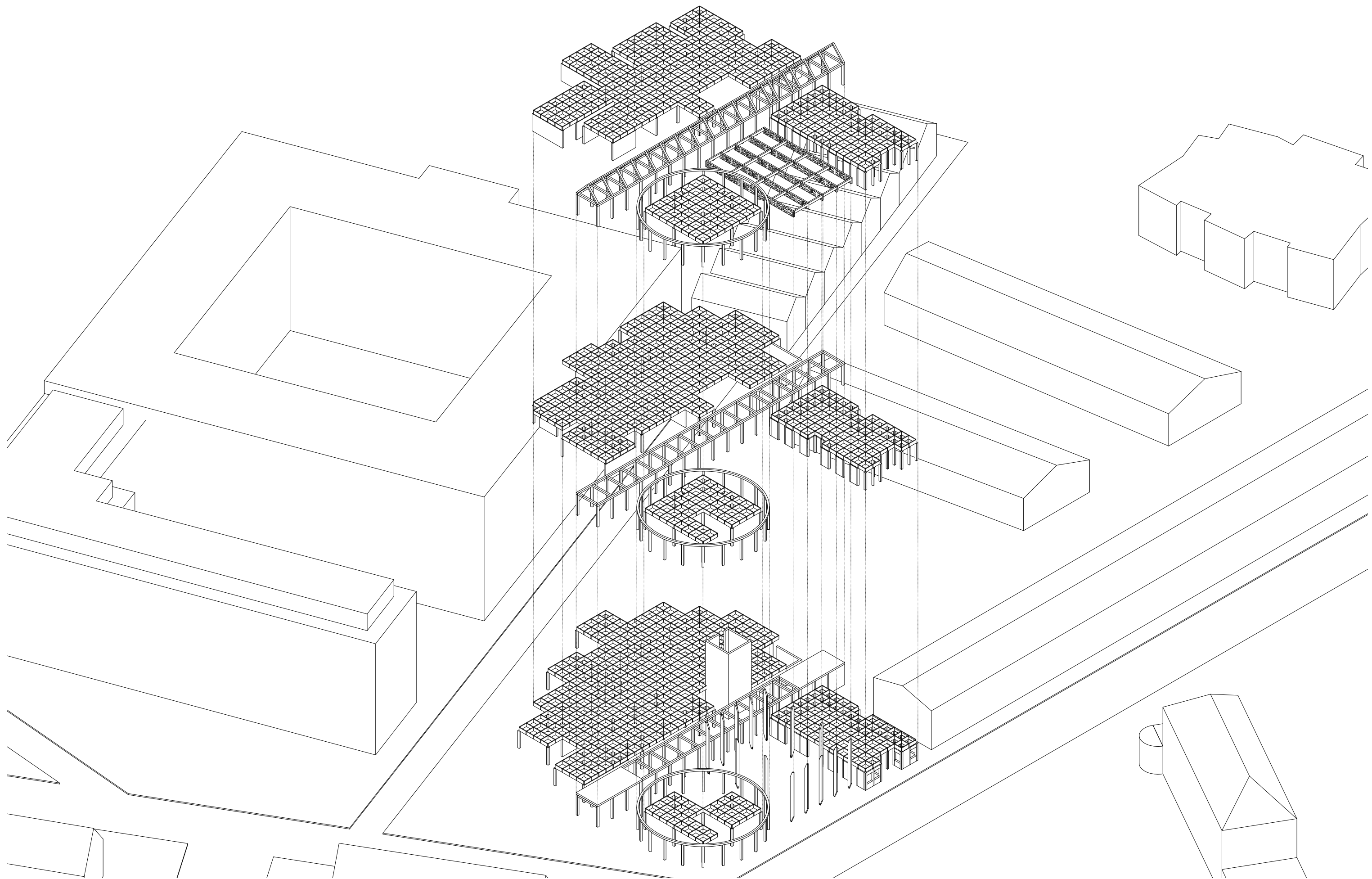


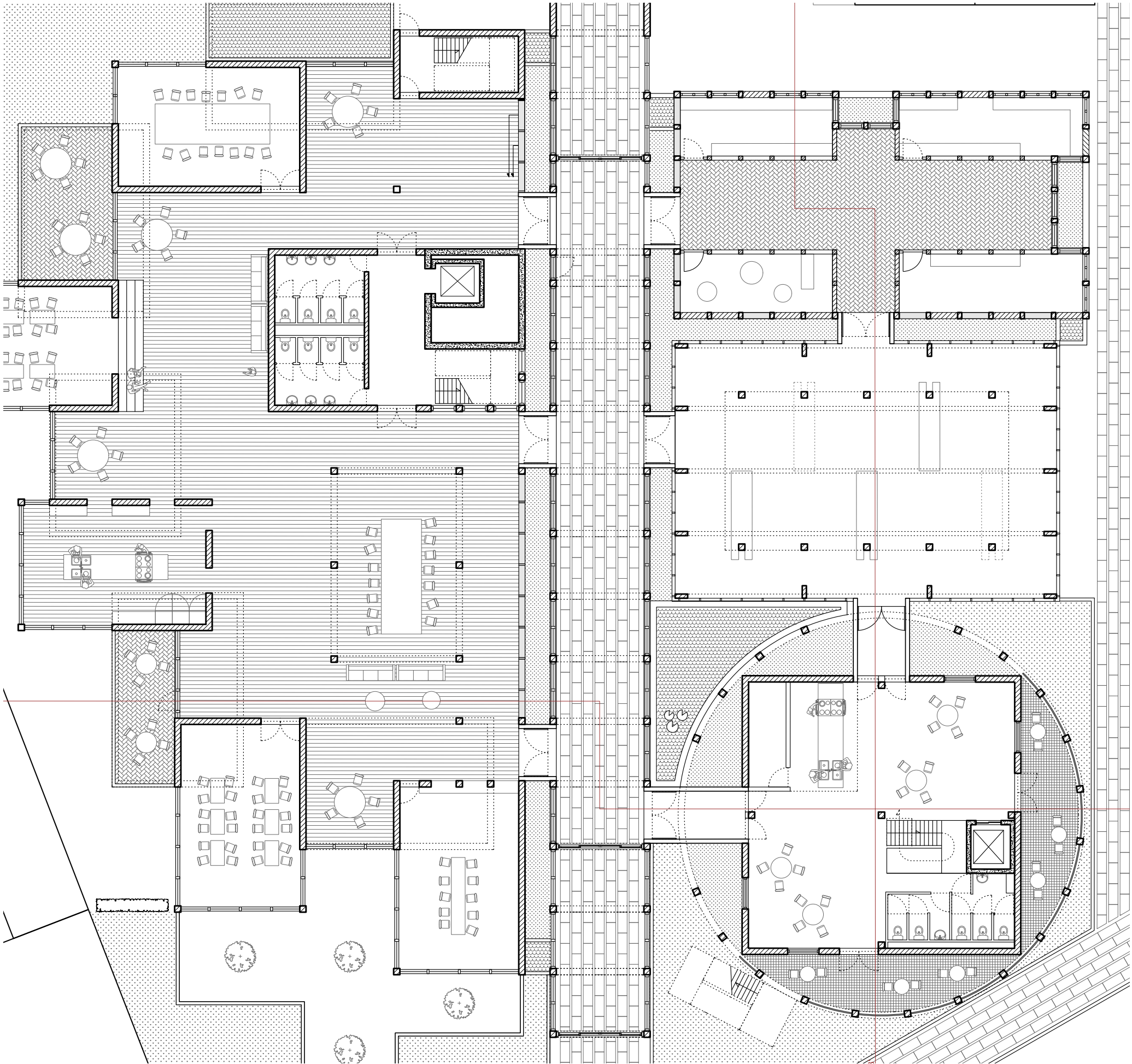


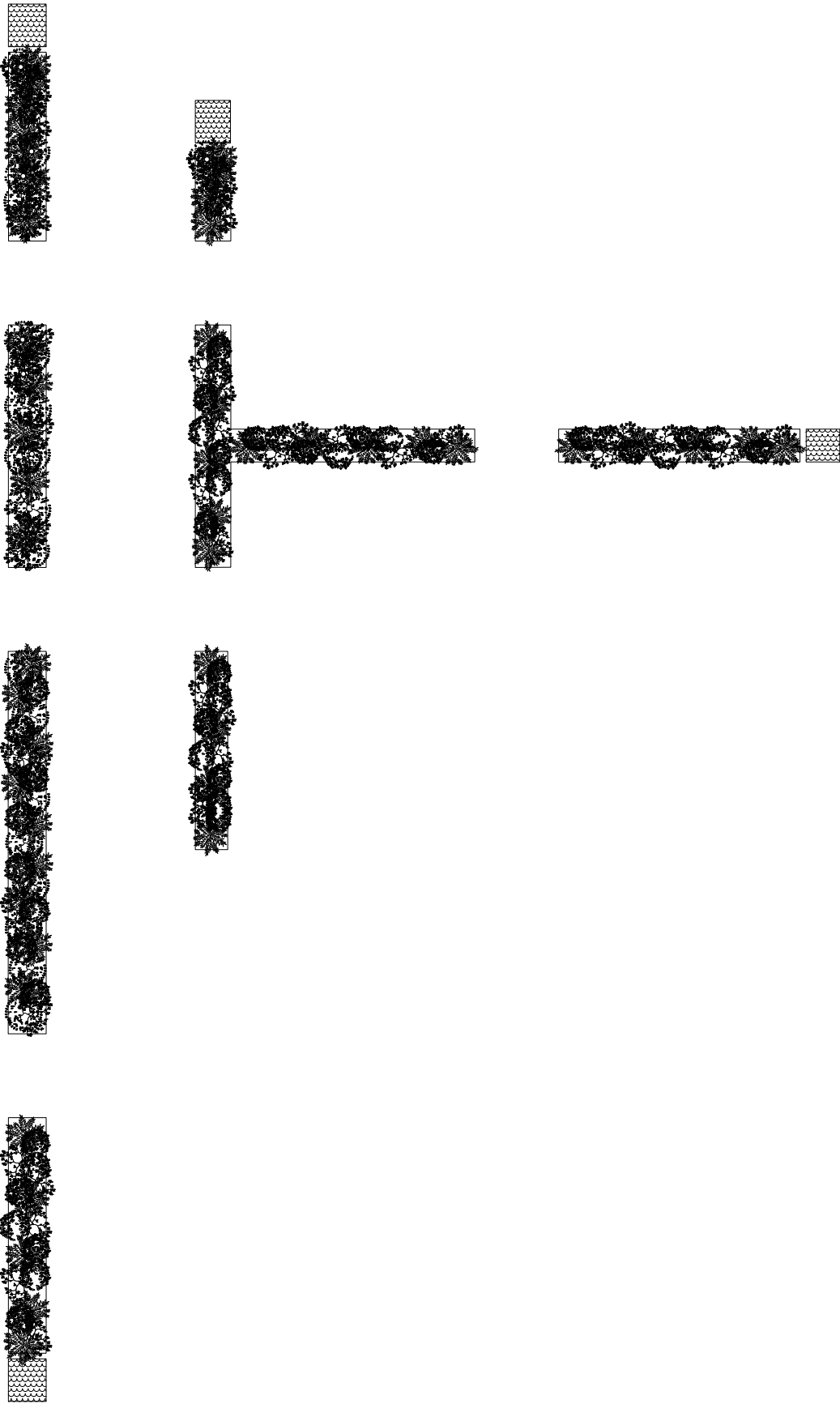














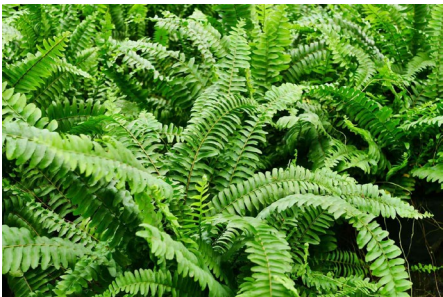
SHADE



Wood anemone



Lungwort



Fern



Viburnum



English ivy



Bergenia

SUN

Fern, English Ivy, Lungwort  
Wood anemone

Fern, English Ivy, Lungwort  
Wood anemone

Fern, English Ivy, Viburnum  
Wood anemone

Fern, English Ivy, Viburnum  
Bergenia

Fern, English Ivy, Lungwort  
Wood anemone

Fern, English Ivy, Viburnum  
Bergenia

Fern, English Ivy, Viburnum  
Bergenia

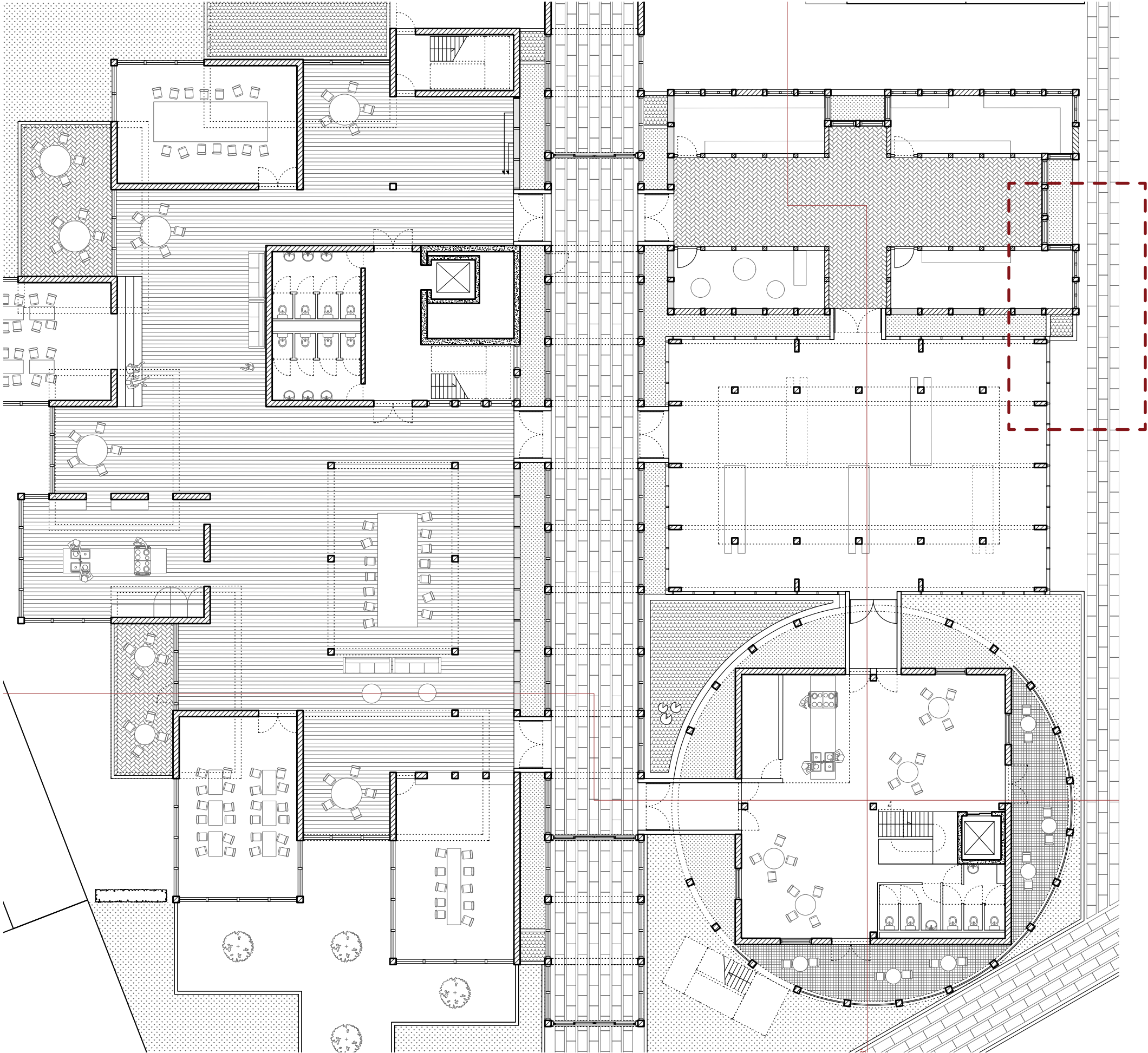
Legend

Solid	Glass, small opening	Recycled acrylic glass with window	Recycled acrylic glass with small opening	Skin facade, glass	Viburnum	Bergenia
					Fern	English Ivy
					Lungwort	Wood anemone

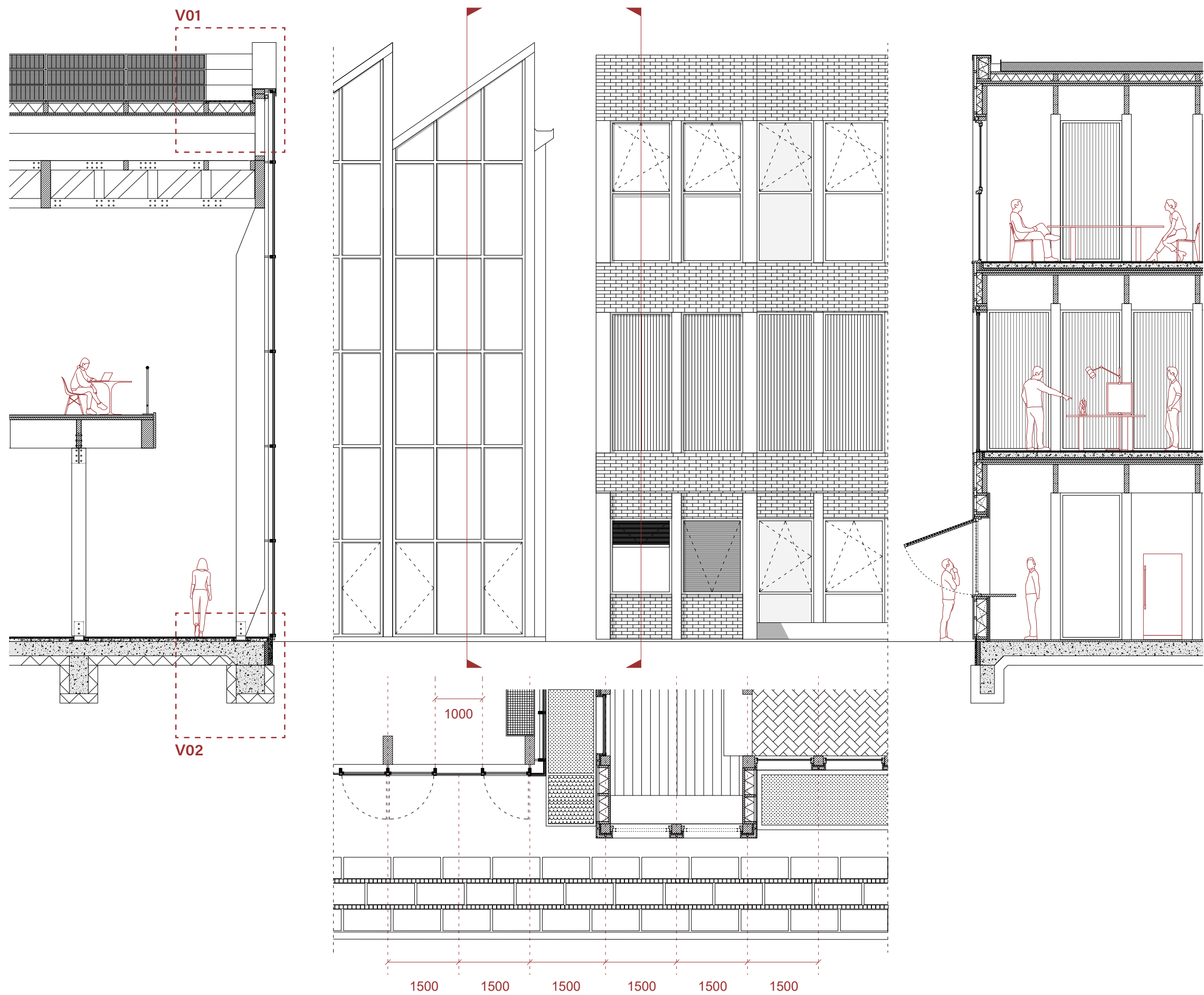
















# Final Reflection

This short text serves as a reflection on my design process of a “public condenser” in Copenhagen. To me and according to the exercise, a public condenser means a public building that combines many different functions and target groups in a small area, creating unique challenges such as contrasting functions being close together and trying to conform enough to everyone.

In my case, I wanted to approach this through the lens of indeterminacy. In my opinion, indeterminacy comes down to specific strategy for not fully defining everything in a space, so it in theory lasts longer, allow for natural mixing of functions and people and strengthen the bond people create with the building. Because it inherently calls for less or more flexible determination of space, it can also be used as a tool for sustainability, by assuming the flexibility will make the building last longer.

This was combined with more site specific data, to see what role indeterminacy could play at this specific location.

# Urban Collage

AR3AP100 - Public Building Graduation Studio  
Luuk Krijnen 4872517

First mentor: Antonio Cantero  
Second mentor: Ger Warries  
Third mentor: Sang Lee



## 1. Relation with master track and programme

The topic of my graduation project consists of a building design, influenced by a more general principle, fitting the Architecture master track. That being said, it also inherently relates to the urban scale and contains technical elaboration. It therefore fits more generally in the AUBS master track.

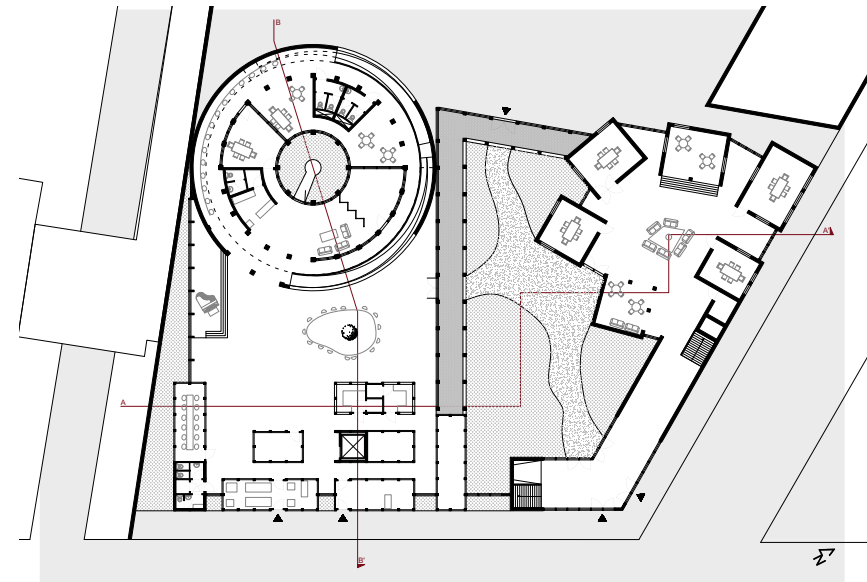
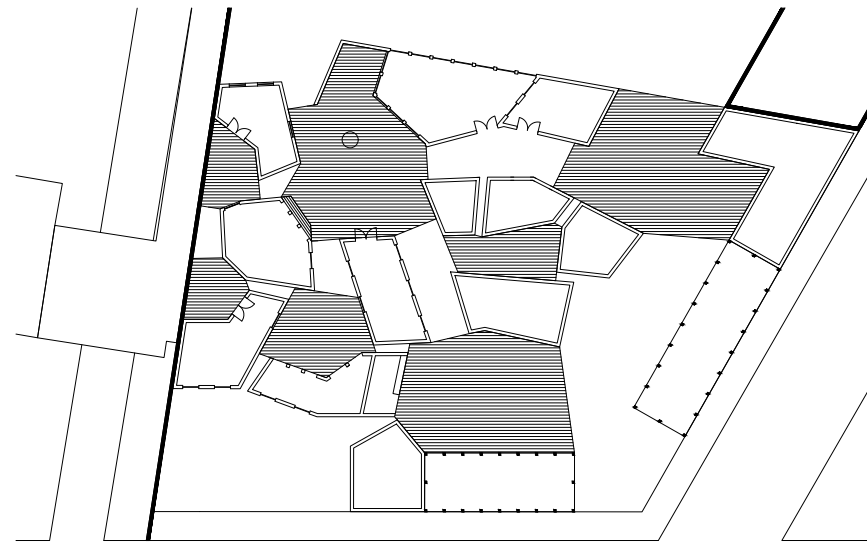
## 2. How did your research influence your design/ recommendations and how did the design/recommendations influence your research?

My research gave me a goal to work towards, and the large elements of the building. The observation of fragmentation informing the shape and character of the large elements, and the personal interest regarding indeterminacy. Starting designing using these ideas gave a certain result, that was not based on a lot more than the initial research, causing a lot of choices to be founded by intuition. This created an undesirable result, and signaled the importance of more research. Looking deeper into the role each part might serve and how they could be best placed so that things like buildability, accessibility and climate design were taken into account required more research and in the end resulted in an improved version of the design. After this, the research by design cycle started to be shortened, meaning more frequent switches between research and design.

## 3. How do you assess the value of your way of working (approach, methods, methodology)?

I think I chose to work on something that I found interesting, but was unaware of some issues that prevented me from working smoothly. Because (part of) my approach was quite abstract (the notion of indeterminacy, which in its nature seems to ask for a lack of specificity) I feel that I needed a much more substantial body of data to allow for a smoother process. This would have given me the specificity to allow for a controlled and founded application of something inherently unspecific, indeterminacy in this case. This is not to say that none of my ideas about indeterminacy made it into the building, but I wanted to explore more ways this could be possible and be a more integral part of the building. I think the above (especially the lack of specificity with an inherently unspecific topic) caused me to run into significant dead ends at times, where a quite major step back was necessary to move forward.

In the end, I think the intention of my approach was valuable, also in a larger context, but the application of it did not go as it should have. I think I made reasonably good use of my planned methods, but more modelling and especially impression drawing could have



*The evolution of the design through working with more data at every step*

helped me design from a different angle. Perhaps a more clear methodology could have paved the way for a smoother process.

4. How do you assess the academic and societal value, scope and implication of your graduation project, including ethical aspects?

I think working with indeterminacy, with the goal to get more clarity about it and to try to see if it could make buildings last longer (more flexible and a stronger connection with its occupants) gives my graduation project some societal as well as academic value. I wouldn't state I have found the answer to the question of how to effectively apply indeterminacy, but I have experienced why it is difficult. This gives someone the opportunity to continue working with it with that knowledge in mind. This automatically means that the scope of the project is increased, because it essentially tries to create both a building and a principle tackling the issue of sustainability in a less-than standard way, which can be used for other buildings.

5. How do you assess the value of the transferability of your project results?

I think because my building is a combination of a principle and more site specific influences, at least the principle is very transferable to other projects.

6. Most important lessons

The most important lesson I learned is that designing is making specific **enough**. Specific enough to be able to make decisions in a founded way, according to a strategy. This, to my understanding is why I got stuck at times and why I ended up working on things too intuitively. If there is not enough constraint, everything is possible, and that is too much.

7. How are the pillars of the studio represented?

The potential I saw with indeterminacy also stretched out to the pillars of the studio. Multiplicity would be achieved by allowing the indeterminacy to have people and functions merge naturally, through a more flexibly interpretable space. Because the building would in theory last longer through being naturally more flexible, it would be sustainable and resilient by nature. The freedom of expression within the building should improve the experience of it, garnering positive emotion as a result of usage. This is the main contribution towards healthiness. Lastly, the spatial concept regarding the volumes makes the building a hybrid, a graft hybrid to be exact. The expression of the different parts fit the different functions placed in them.

Architectural concept (an idea)

→ The goal of the building, what is it supposed to do?, who is it for?, etc.

+

Data that is associated with this idea

→ What implications do the aforementioned goals have on the building? What is the influence on the building based on what its function is, who it is for and where its located?  
Think environmental, user and spatial data, factual things. Numbers, images, etc.

↓

Strategy

→ Try to see how the concept and data can be combined to form a way of approaching the building design in a more general sense. This means for example to be able to describe how the building works according to a principle or short sentence.

↓

Architectural drawings

→ The result of being able to experiment, backed by the previous elements.

*Design process as described to me by my main mentor.*

*What it means according to my main tutor as well as to me based on what I've noticed.*