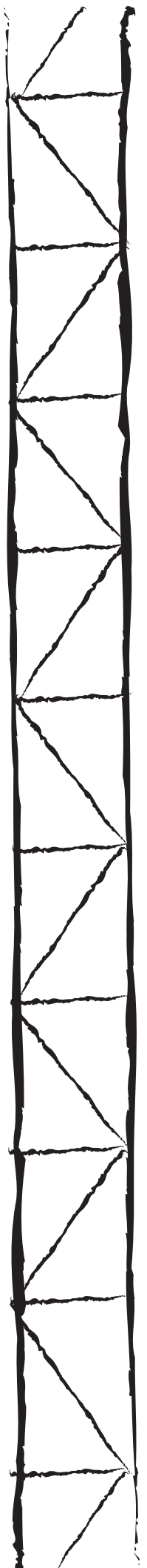
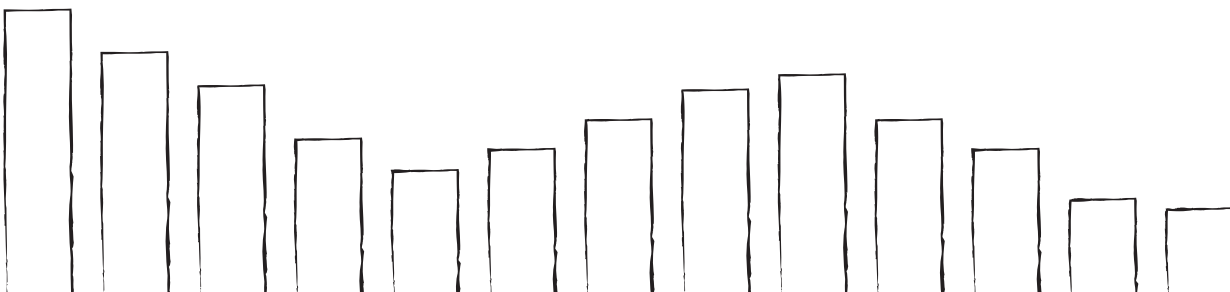


Mental Health Center Hembrug
Revitalizing Hembrug, to revitalize society

Project Journal

Chair of Heritage and Architecture
Faculty of Architecture and the Built Environment
Delft University of Technology

Job van den Berg
4287762
16-04-20





"We can always see the original soul through the eyes,
the eyes are the only things that never change"

Dear reader,

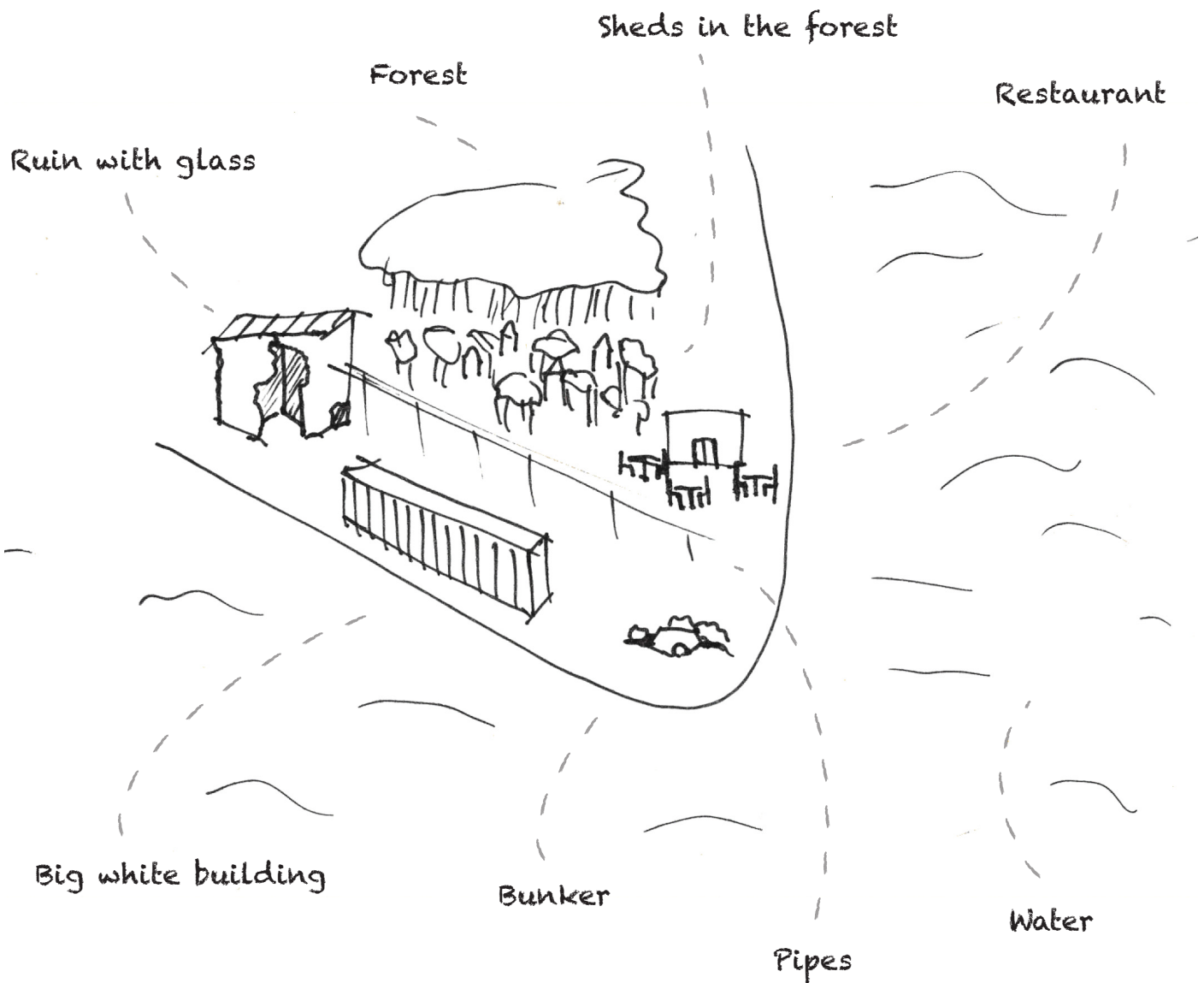
This journal is a collection of my work and process that has been done during my graduation project 'Mental Health Center Hembrug'. It's my personal diary, sketch, scrap and photo book. The highlights and all the ideas and roads that have been taken can be found in here. The book is designed as a travel journal with all the locations and events that have passed; not only in real life but also the destination my project went in my thoughts. I went crisscross throughout the Netherlands: Eindhoven, Maastricht, Tilburg, Utrecht and of course Amsterdam and Zaandam, did Pitches, workshops and presentations: P1, P2, P3, P2 'again' until my P4 and saw imaginary destination: Hotel Restaurant-Bar Hembrug, Shopping Mall Hembrug and my final destination Mental Health Centre Hembrug.

I wish you a lot of reading pleasure and I hoop you can also enjoy the journey I took the past year.

Job van den Berg

Week 3.1
11-2

My memory of Hembrug

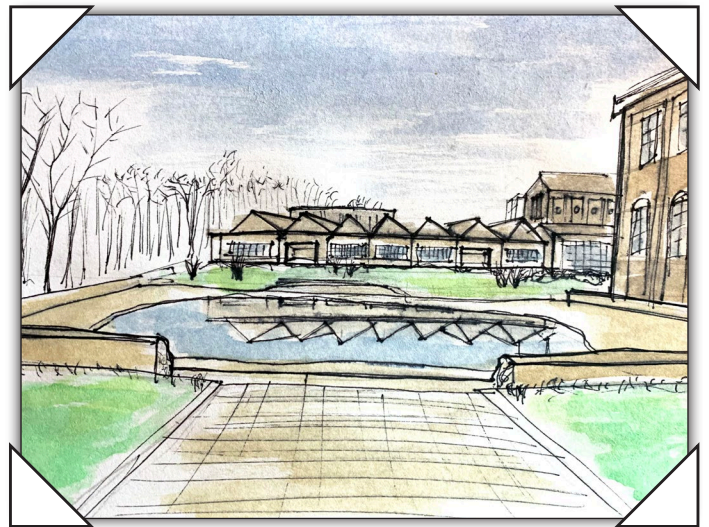


Visit to Hemburg

Summer 2018



Winter 2019



Abandoned
Contrast

My impression of Hemburg was a lot different then the first time. The first time I used "abandoned" as a word to describe the area. This because it felt like nature had taken up the buildings again. The border between buildings and green space felt at some places faded. But this time it was winter and the trees were bare. My eye was much more led to the buildings instead of the trees. Therefore I used the word "contrast", contrast between buildings and green and contrast between time of the year.

Week 3.2
18-02

Section of Hembrug



Noordzeekanaal

Waterfront

Production buildings

Pipes construction

Sheds in the forrest

The 'Plofbos'

Workers housing

The Zaan

Incubators

In redevelopments where the outcome is not clear yet this incubator can give a perspective for the redevelopment. It shows the possibilities of the area and attracts other functions. These incubators are mostly temporary but they can also evolve and be part of the final redevelopment. The building works as a research object, a test case to help in the process of the redevelopment and give new insights and possibilities.

In some areas it can be hard to see the final result of a redevelopment. People don't actually know if the redeveloping will work and they are holding back. This incubator is the first building in the redevelopment and is an example for the further development. Other project developers and investors get trust from this example and start there redeveloping afterwards, I have to see it to believe it.

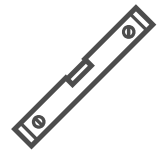


	Temporary value	Permanent value
Process value	Meaning creating incubator	Trust creating incubator
Product value	Public attracting incubator	History raising incubator



Most of the areas that have to be redeveloped are having trouble with a bad image and less activity. Public attracting incubators are independent of the area but can attract a certain group of people and let them become acquainted with the area. The building works as a magnet to other people, and more people leads to more activity, request and development.

Some areas have a strong historic value. With the transformation of a building that is characteristic for this history, it creates this historic notion and the importance of the building and the area. The building is an example for the whole area and even after the redevelopment is still has a strong effect on the people. The building highlights the importance and the meaning of the area and the.



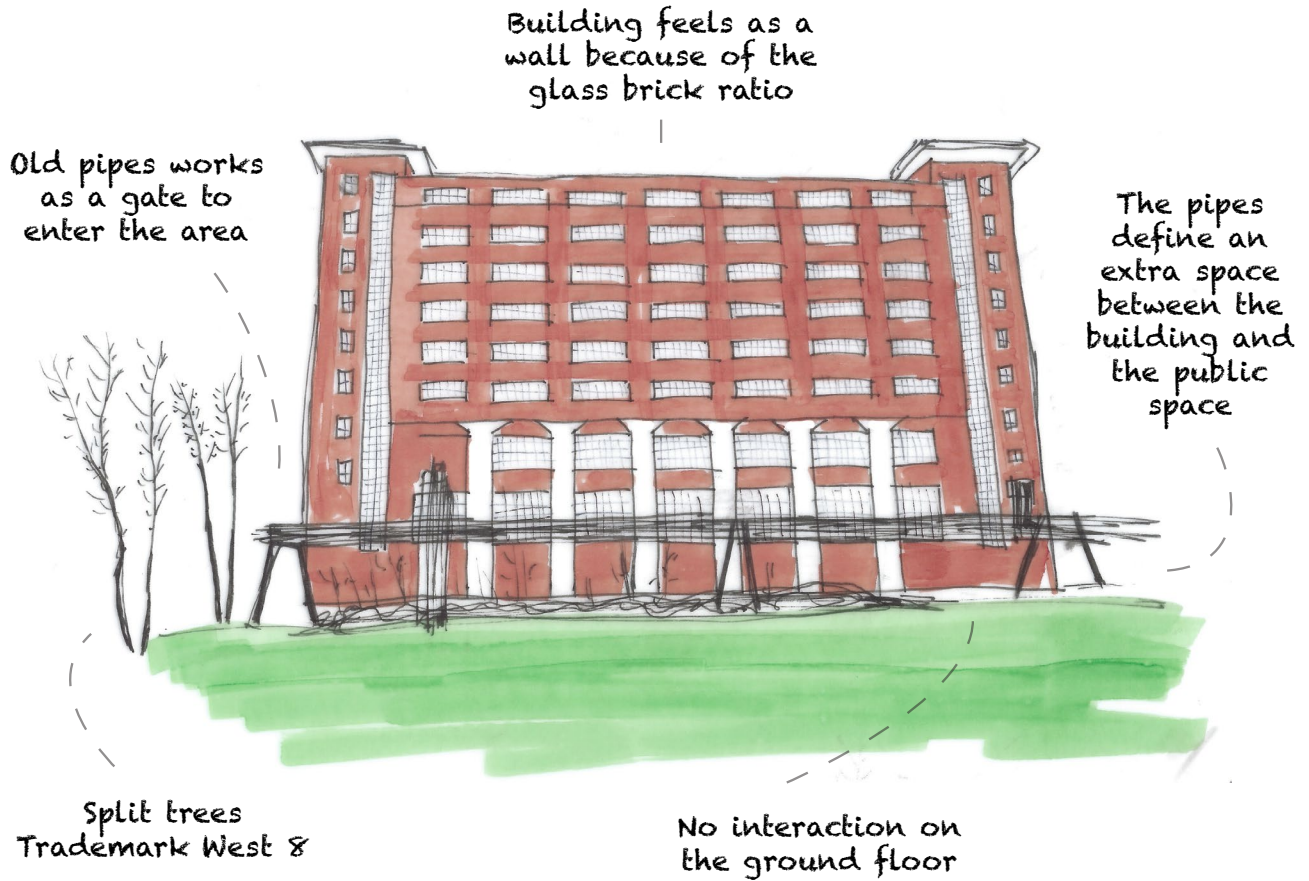
	Temporary value	Permanent value
Process value	Meaning creating incubator Glasgebouw	Trust creating incubator
Product value	Public attracting incubator Klokgebouw	History raising incubator

	Temporary value	Permanent value
Process value	Meaning creating incubator	Trust creating incubator Bonnefonten
Product value	Public attracting incubator Centre Ceramique	History raising incubator

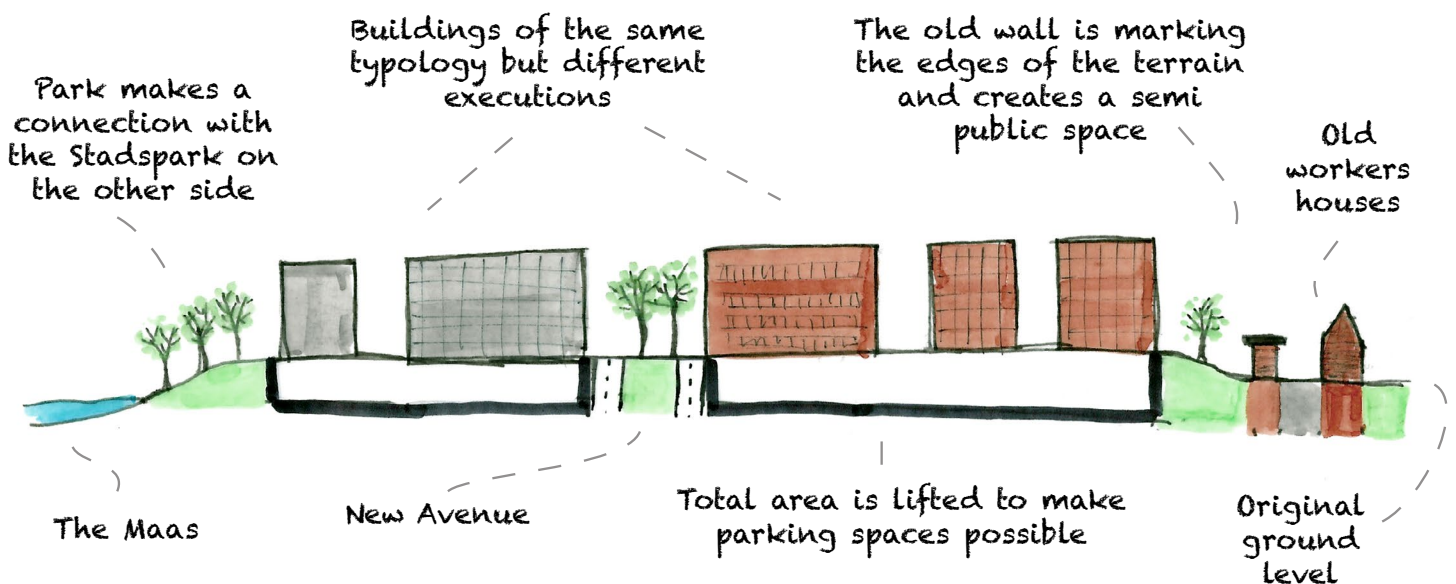
Week 3.3

25-2

Strijp-S



Ceramique

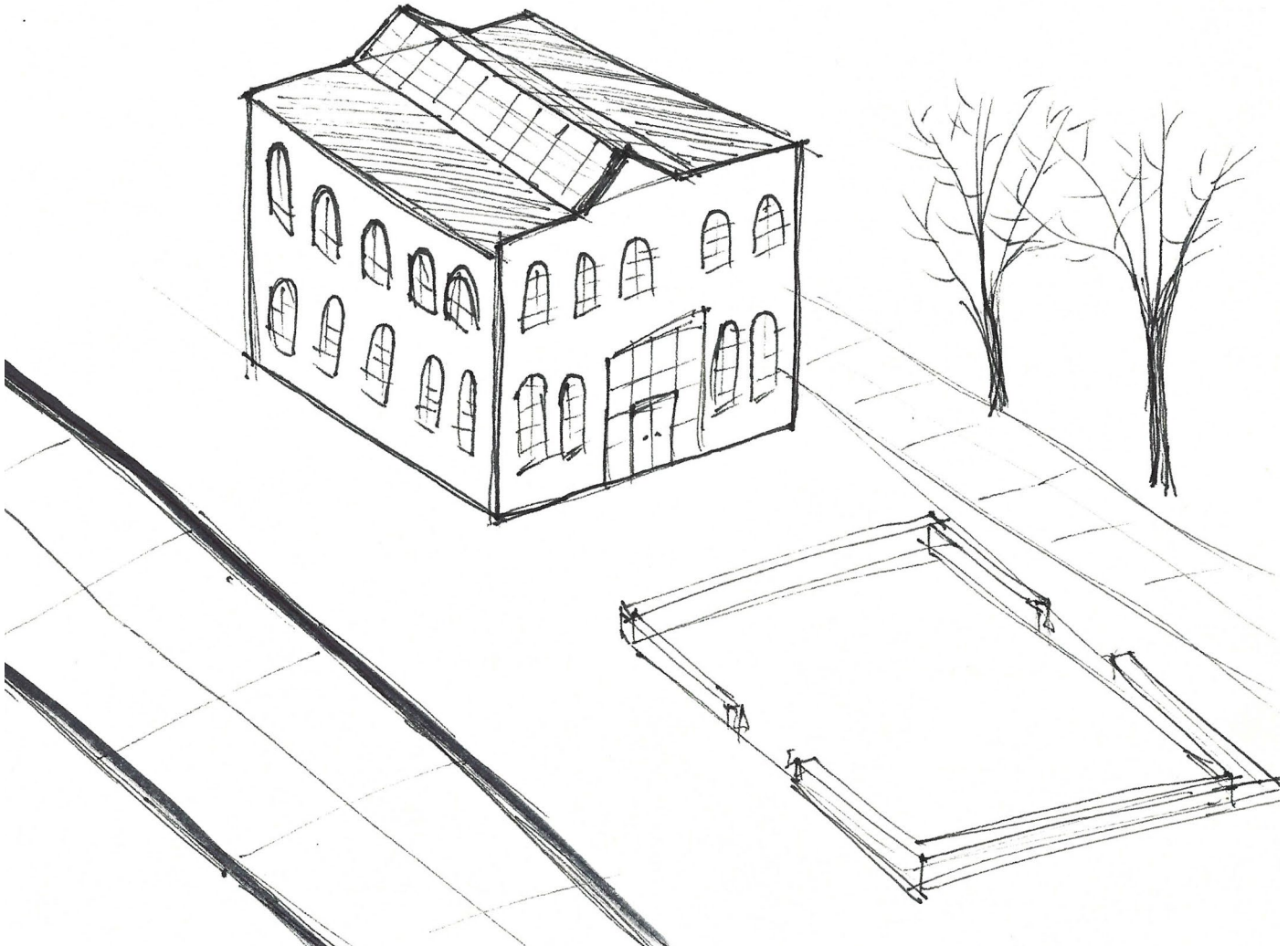


Visit to Hemburg

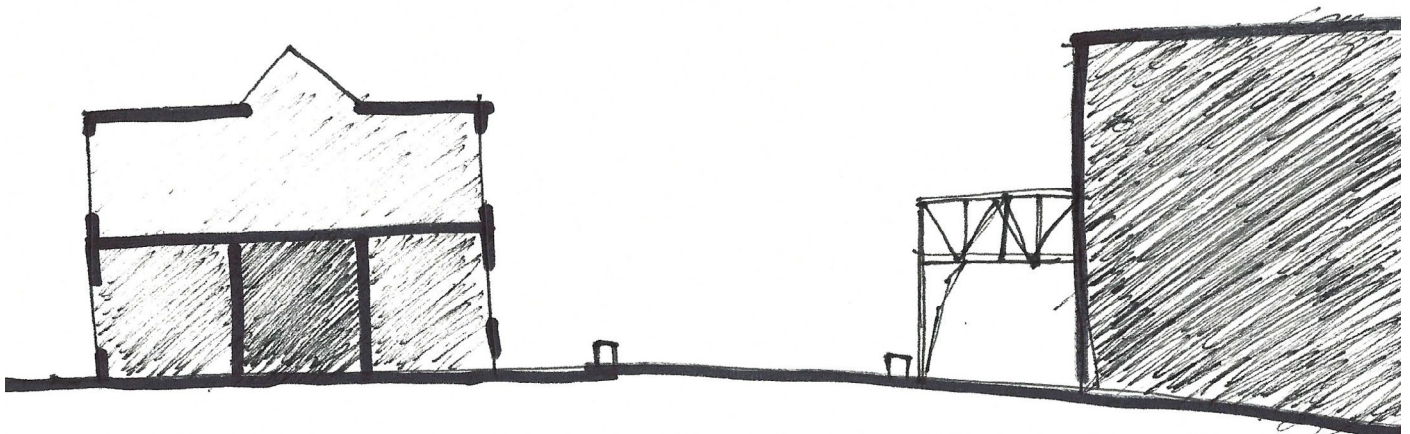


Week 3.4
04-03

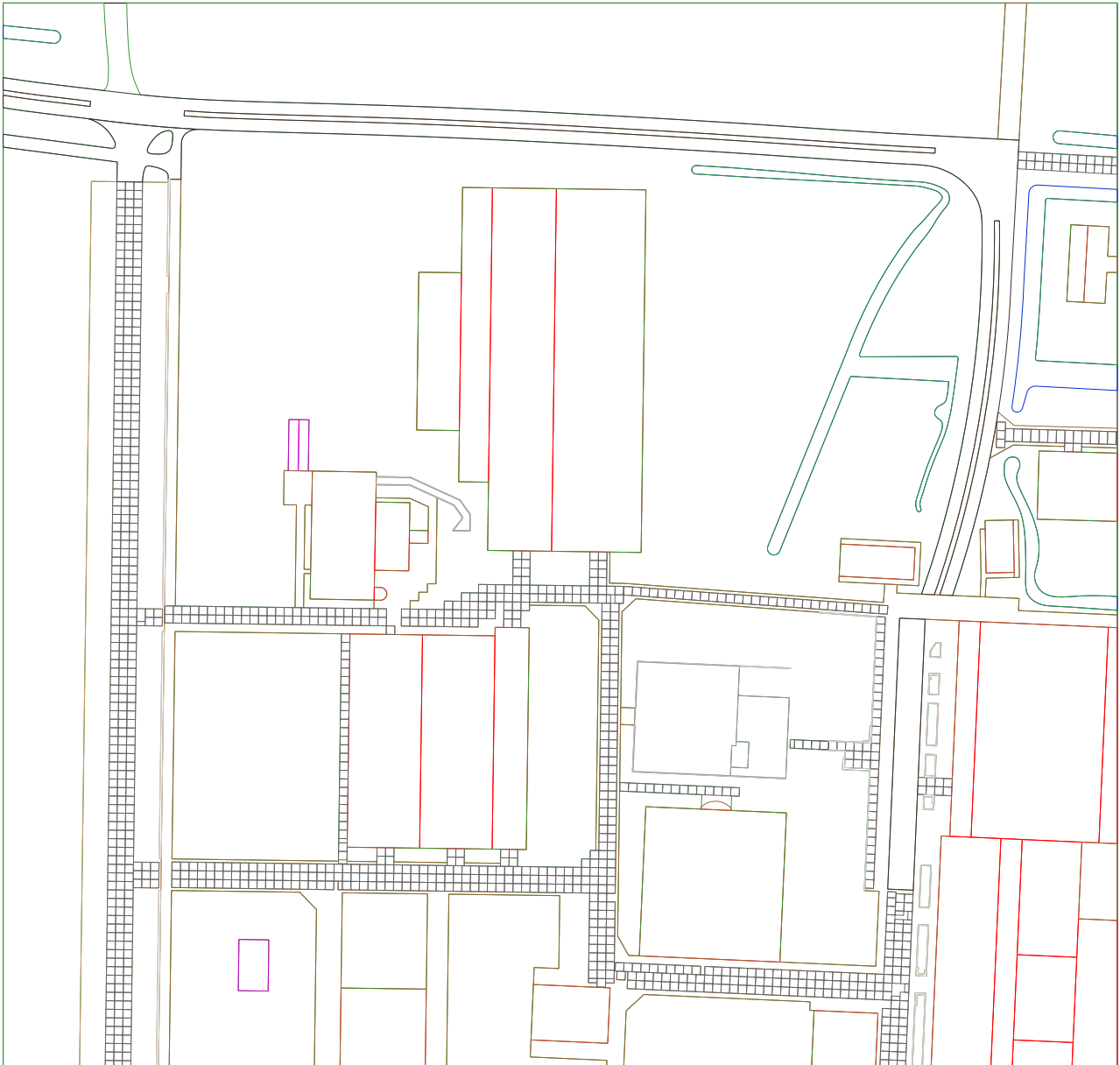
Ensemble characteristics



Space



DWG of Campus North



Wat is a campus?

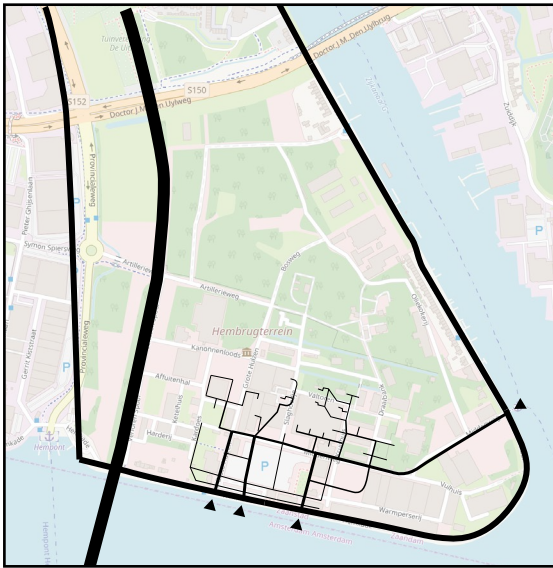
"The grounds and buildings
of a university or college"

Latin (campus, campi)

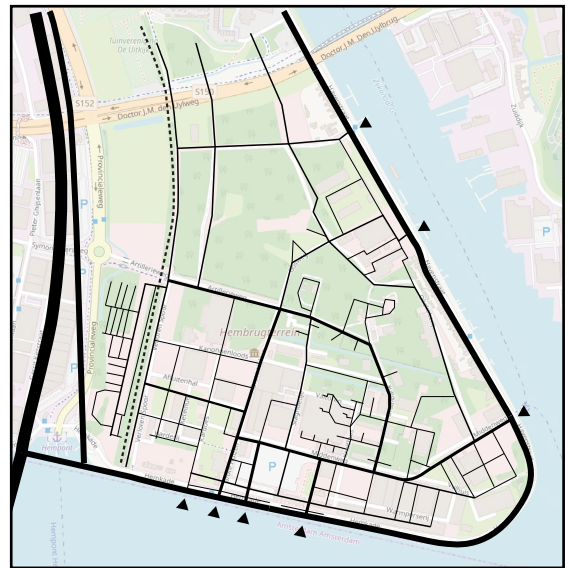
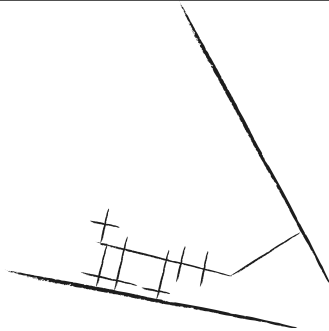
1. campus
2. level field/surface
3. open space for battle/games
4. plain
5. scope
6. sea

Week 3.5
11-03

Historical research on the infrastructure



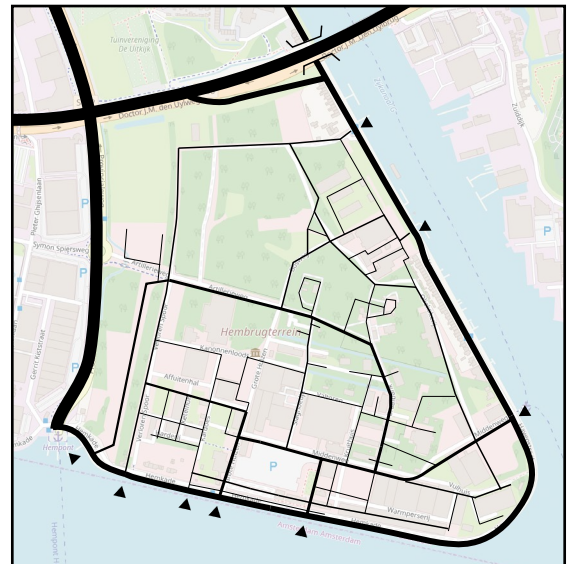
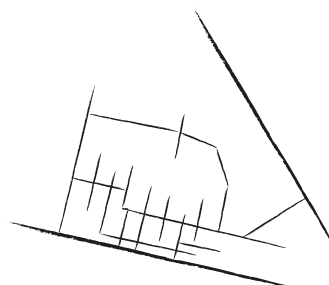
1901



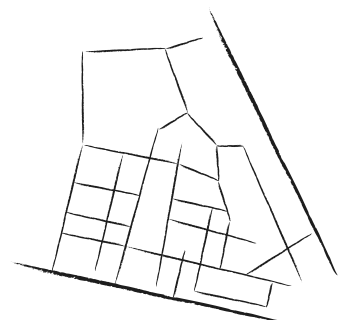
1941

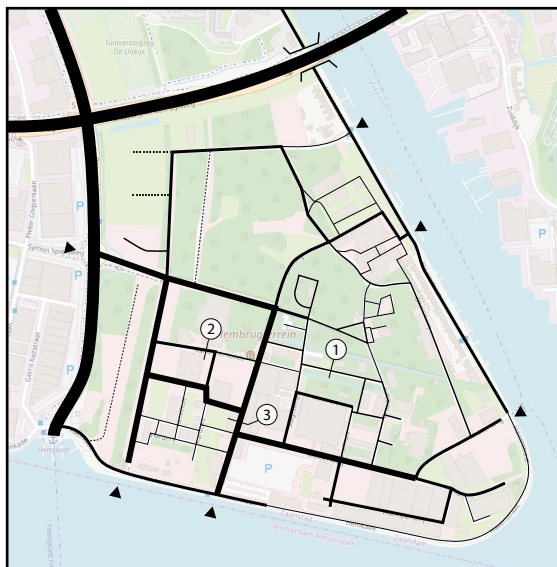


1924

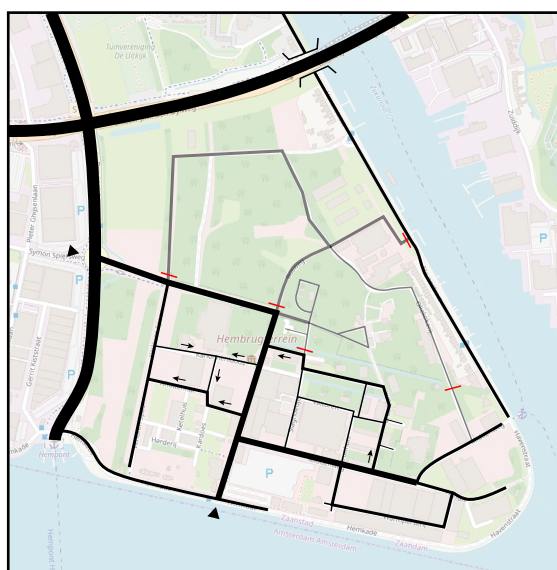
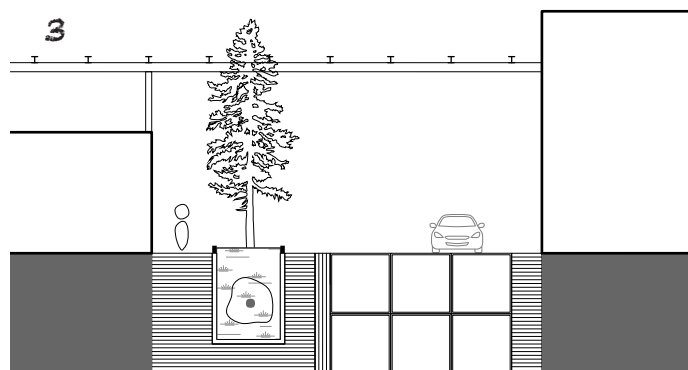
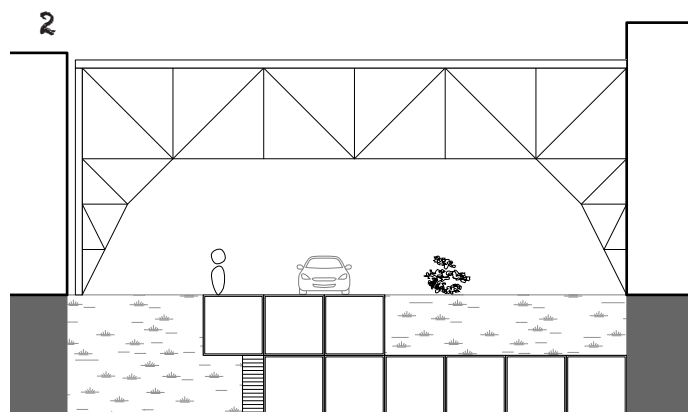
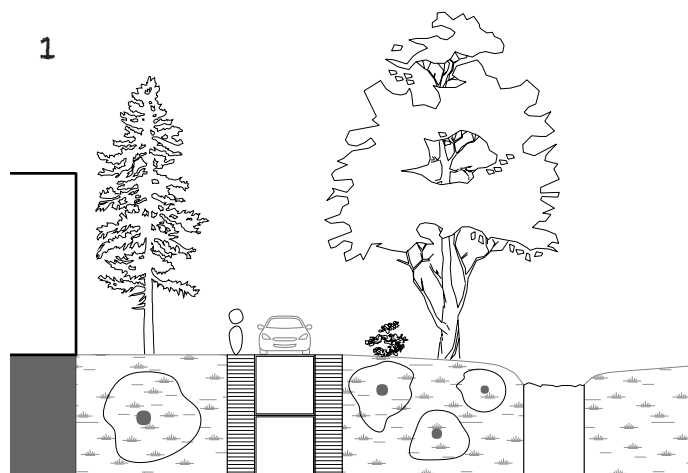


1996

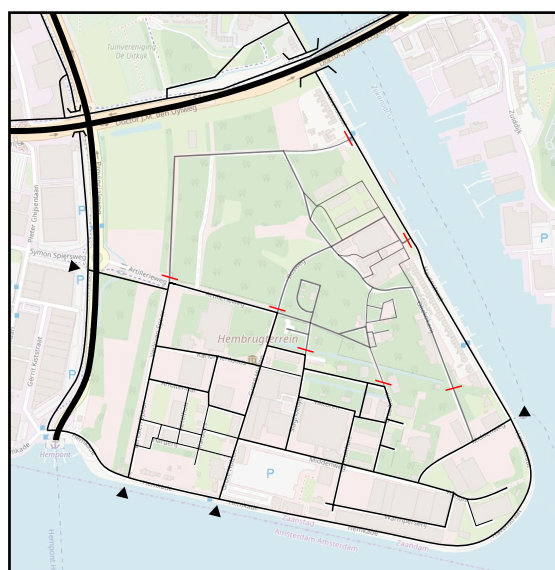




2019



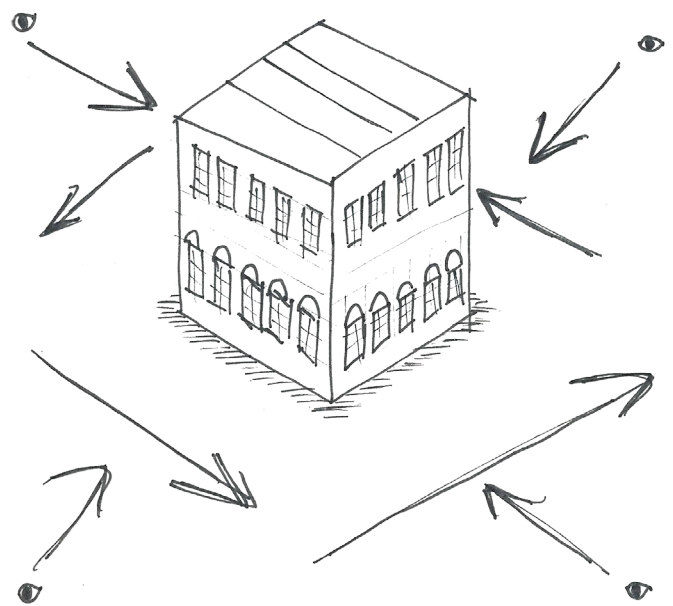
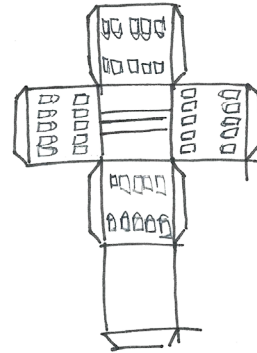
Fast



Slow

First questions I had

1. What is the relationship between Campus North and the main axe?
2. How does Campus North work in a connection between the forest and the production area?
3. What is the influence of build or not build on the open square?
4. How does Campos North work as the new entrance of the area? (from back to front)
5. What was the production line and how did this relate with campus South?
6. How to keep the monumental value?
7. What to do with the construction? (Use or reuse)



Blocks in the field

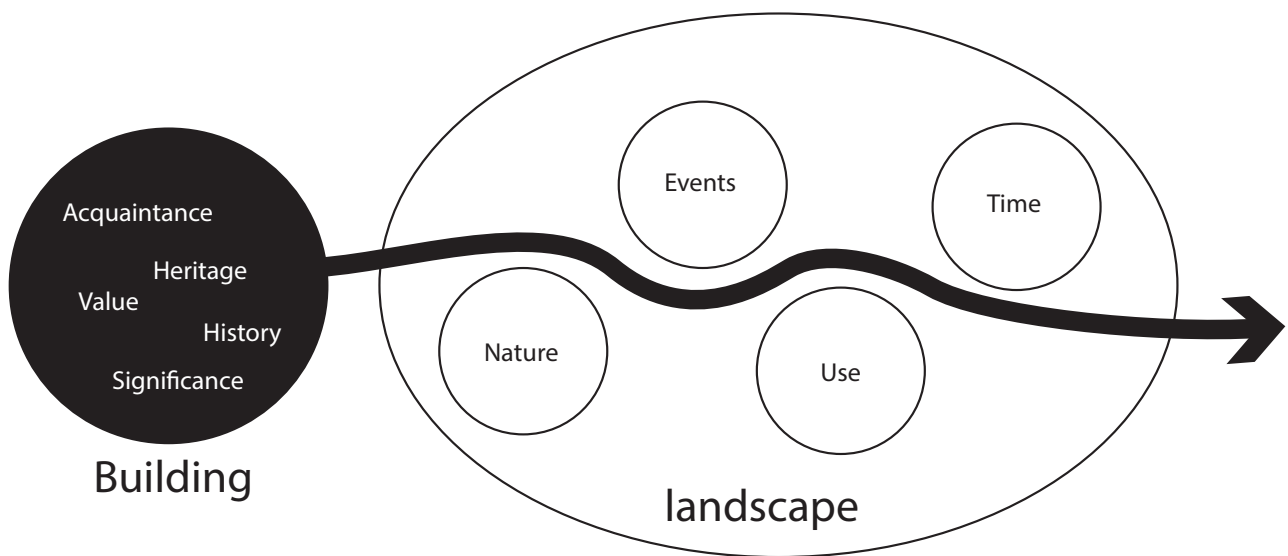
Characteristics

Significance

Research methods workshop

"A Building is not a static object its a continuous process that flows"

A Building as a process



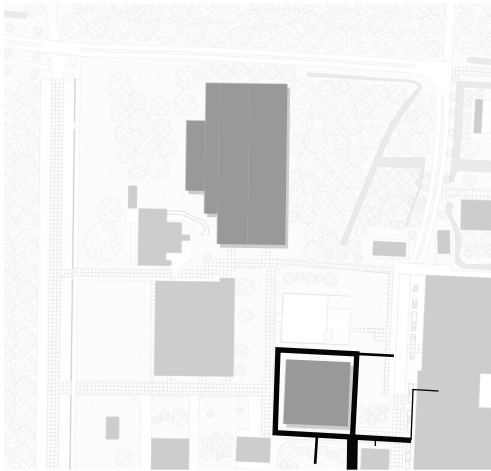
Landscape = Context

How can we as an architectd interfere is this process?

How can we chance the landscape and influence the flow?

Week 3.6
18-03

Timeline infrastructure



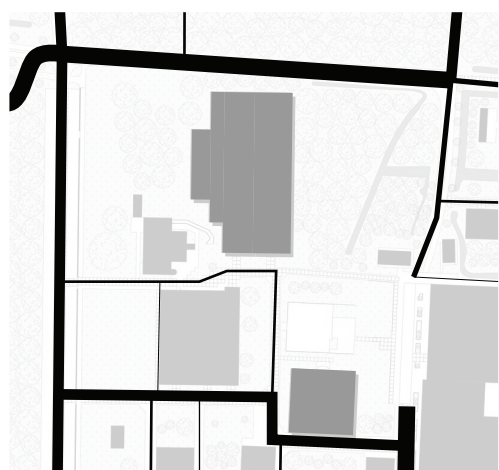
1901



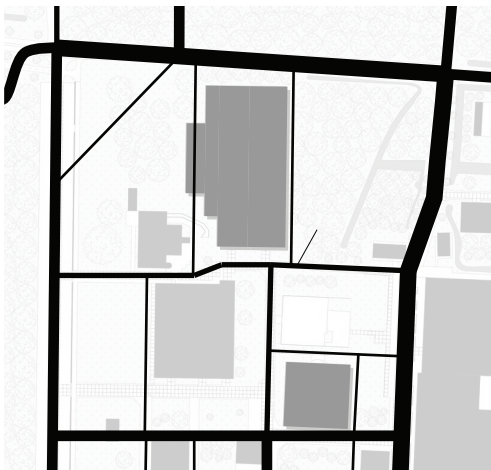
1996



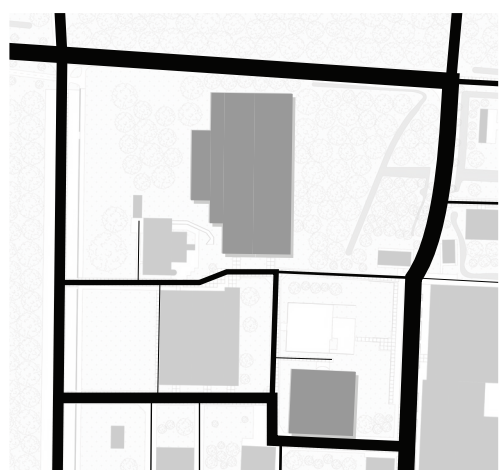
1924



2010



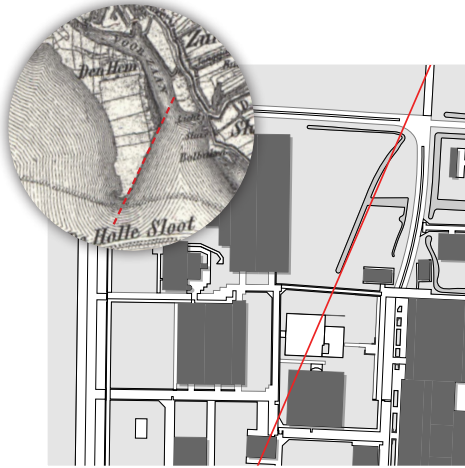
1941



2019



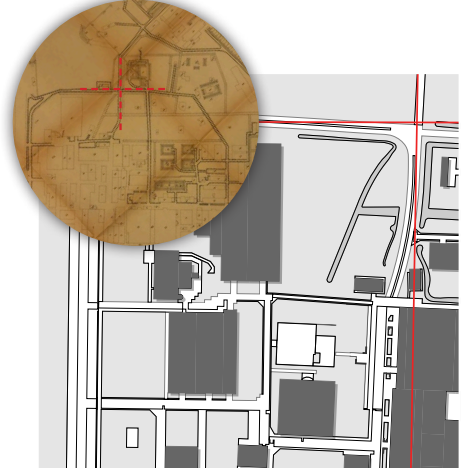
Axes



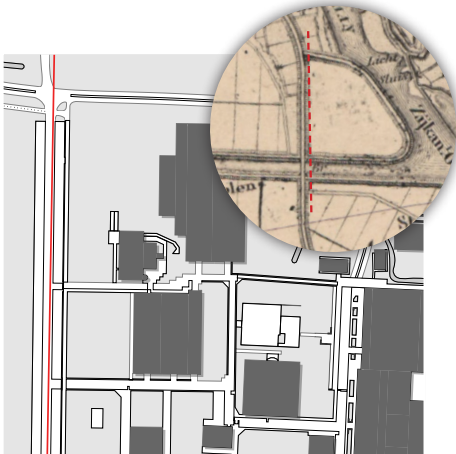
Original border



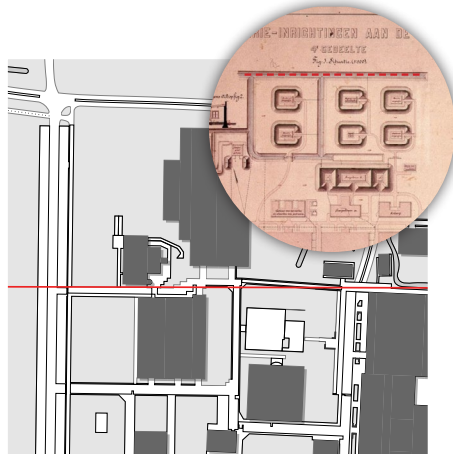
West border and main axis



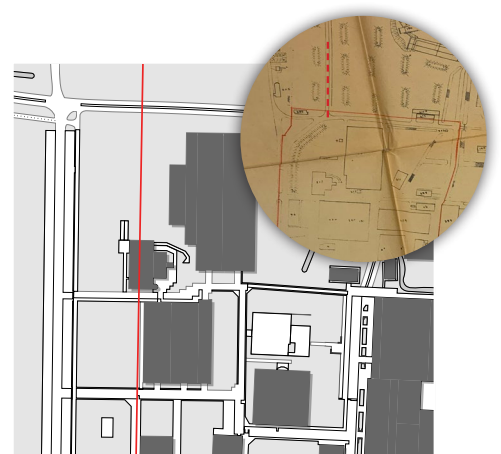
Main structure forest



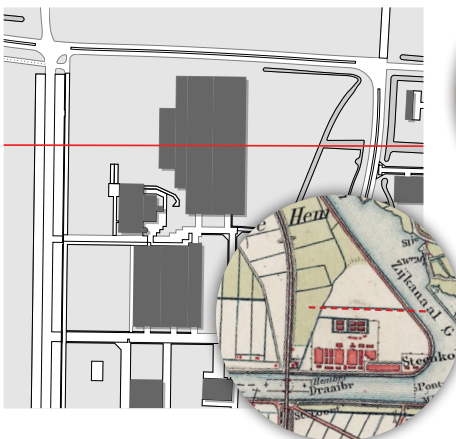
Old railroad



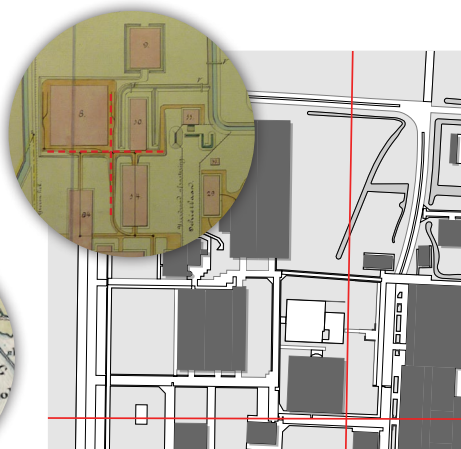
Water structure



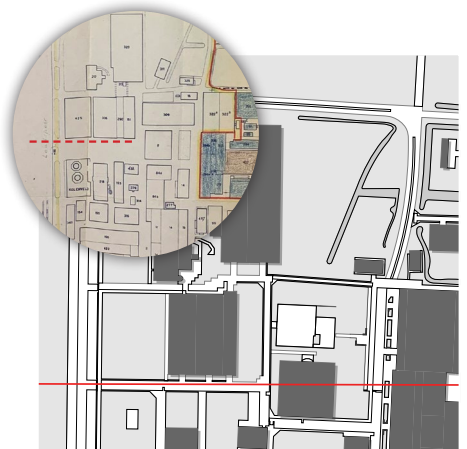
North connection



Polder structure



Main structure campus north

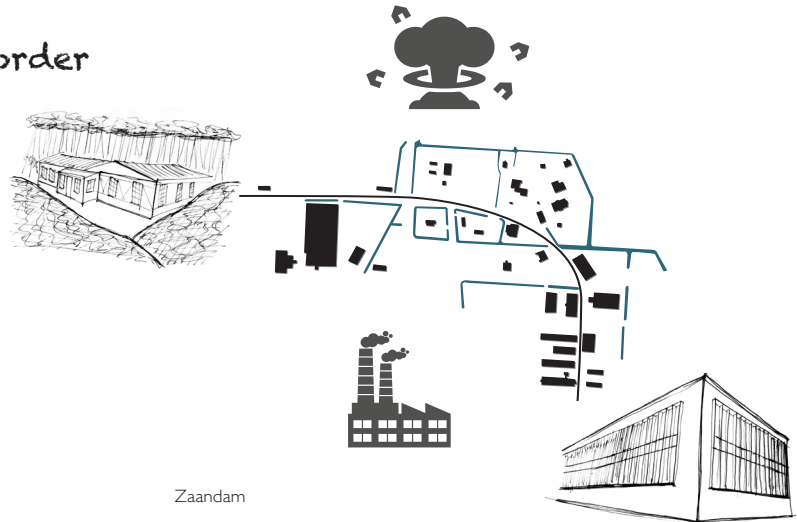


New monumental axis

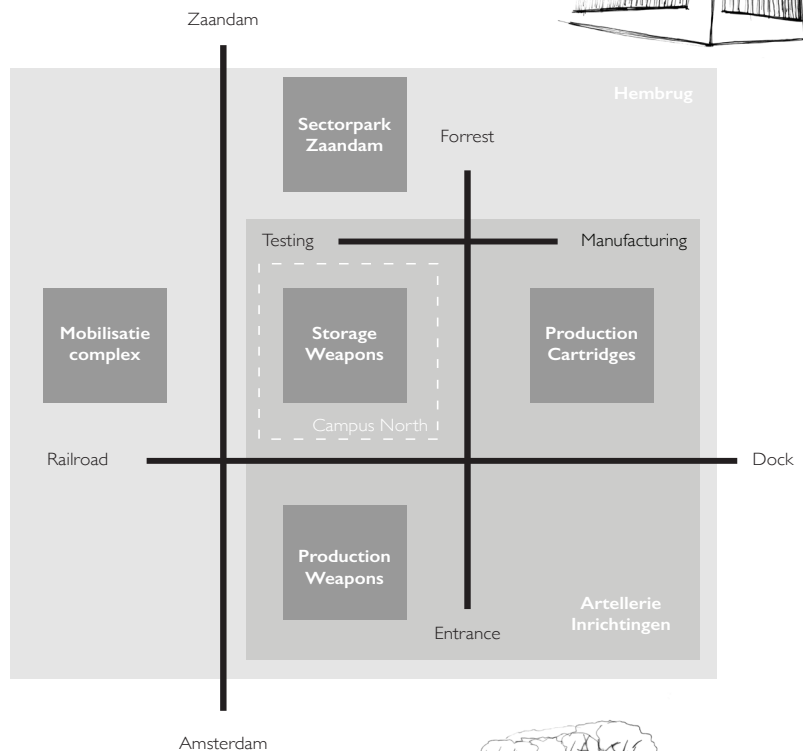
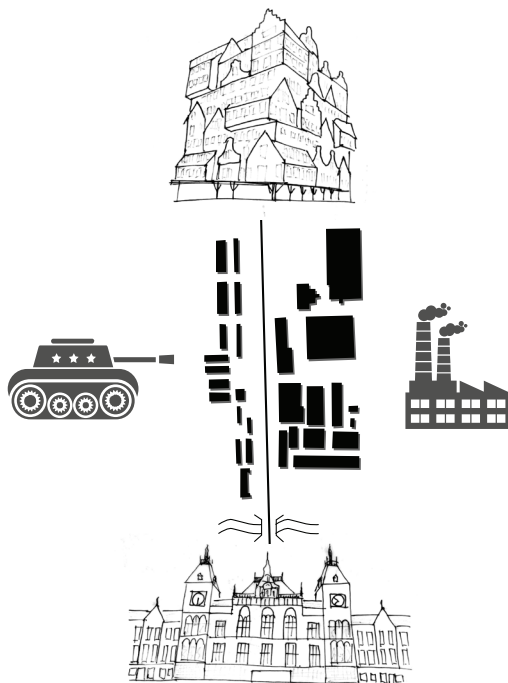
Week 3.7
25-03

Borders

North Border

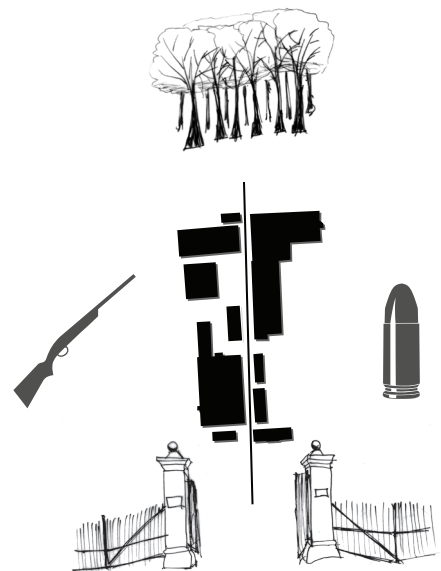
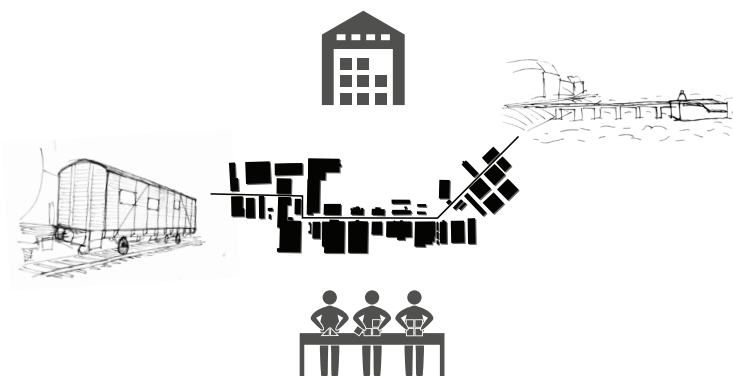


West Border



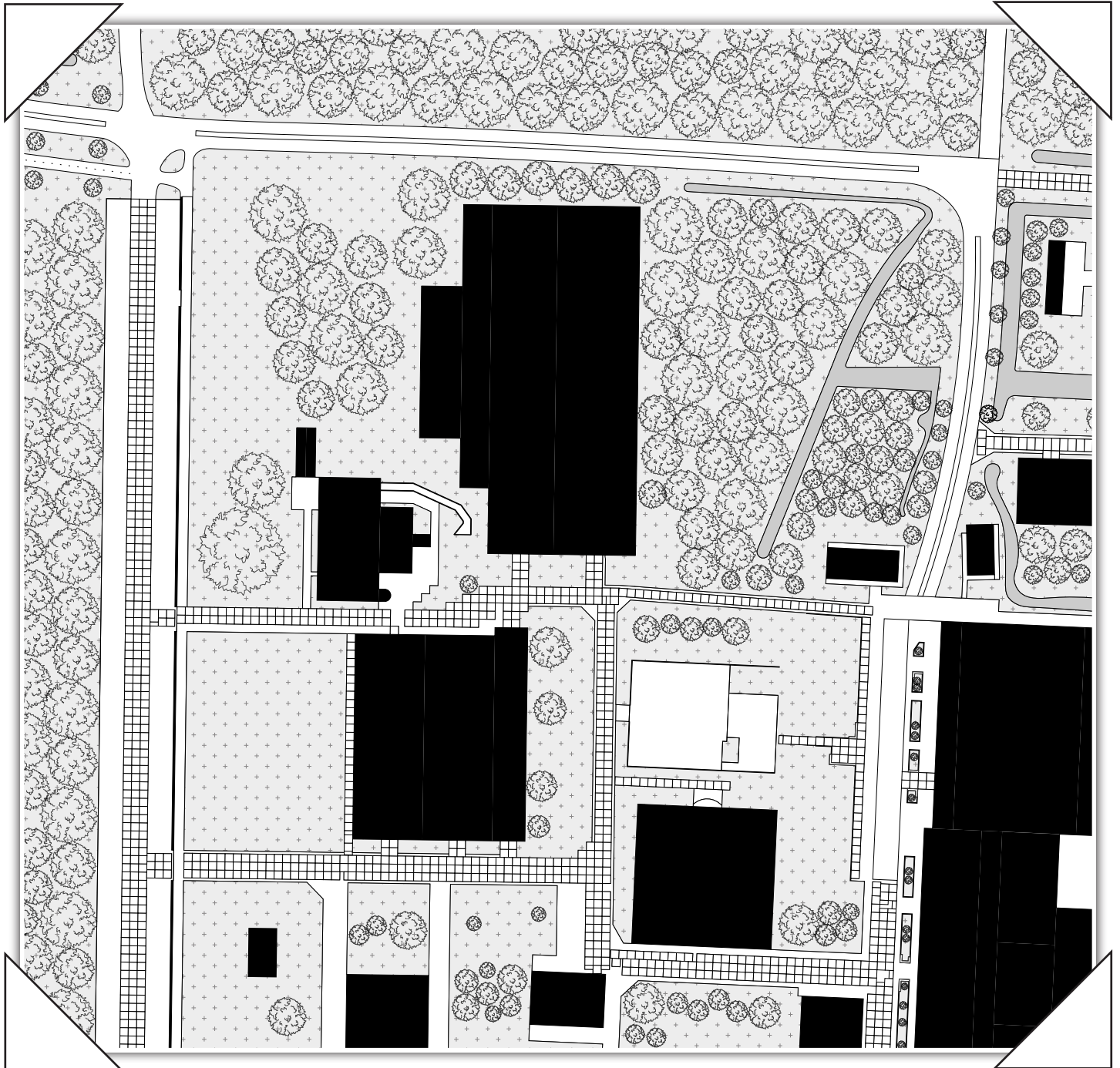
Organization

South Border



East Border

1:1000 map of the Site



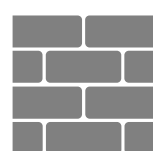
59 %



24 %



7 %



6 %



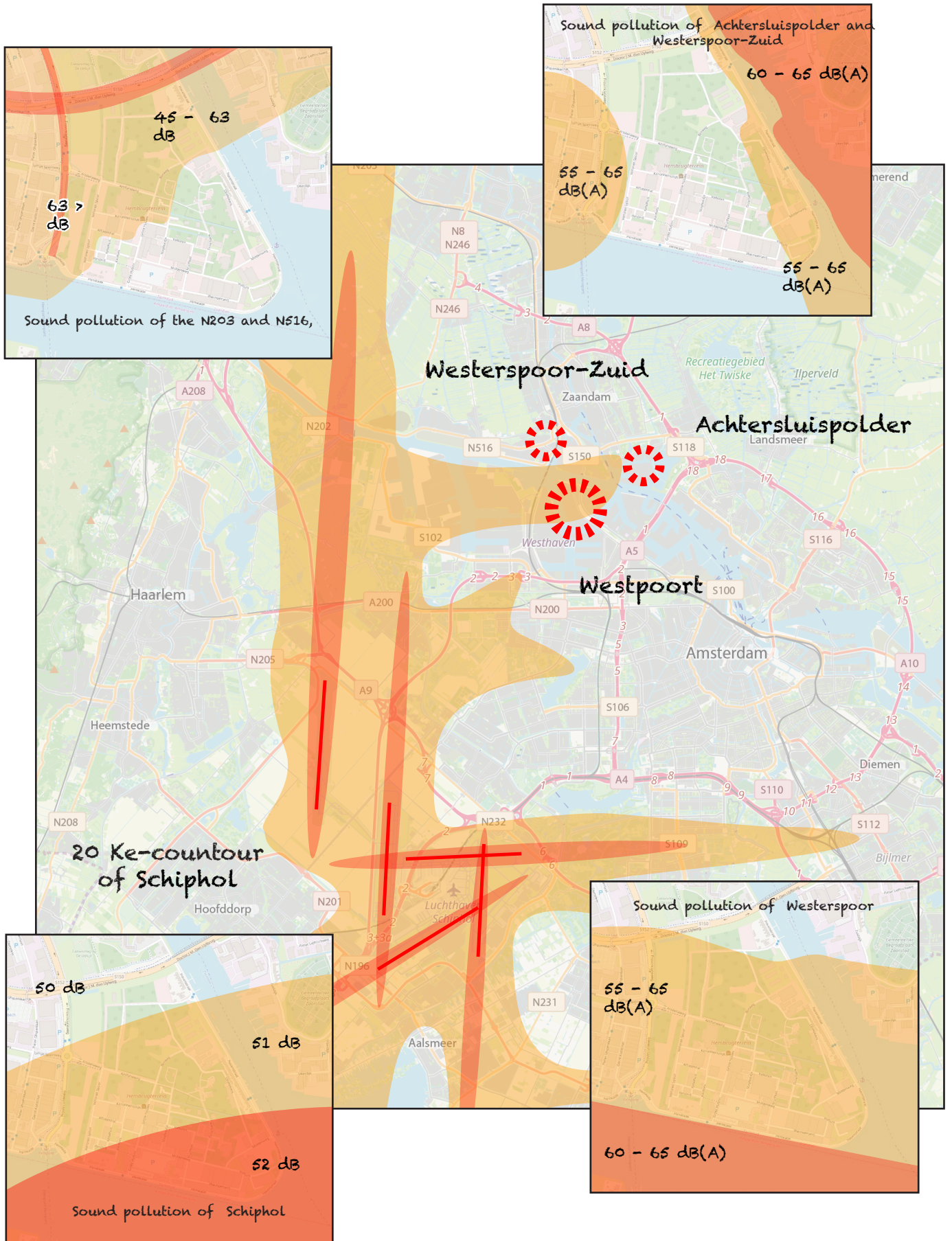
3 %



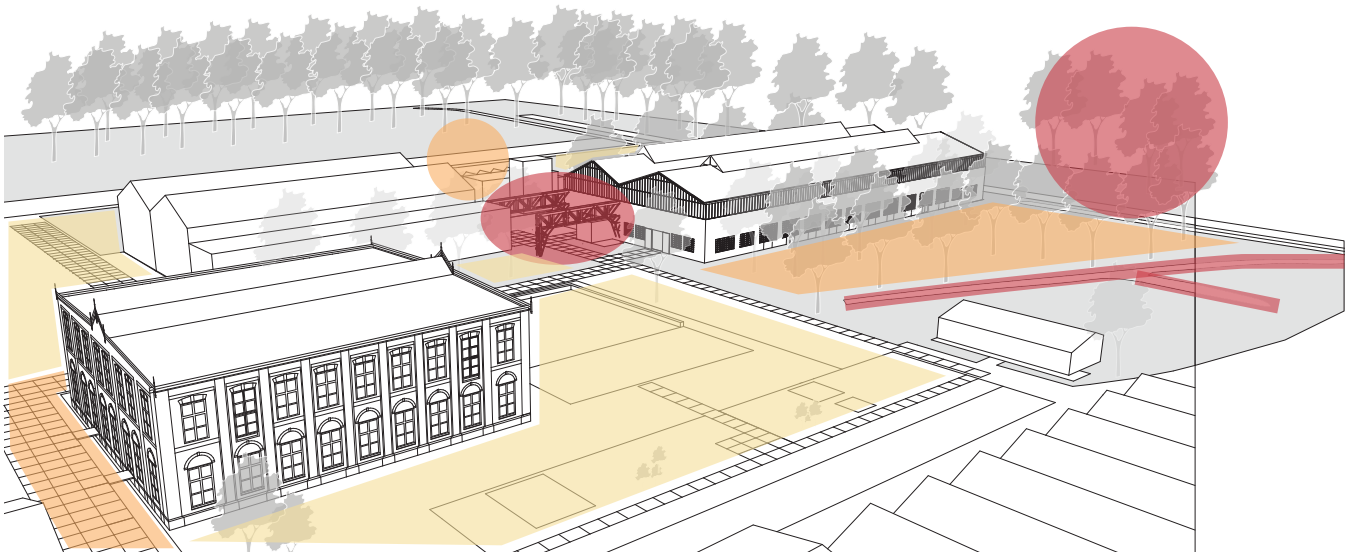
2 %

01-04

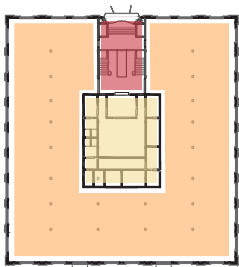
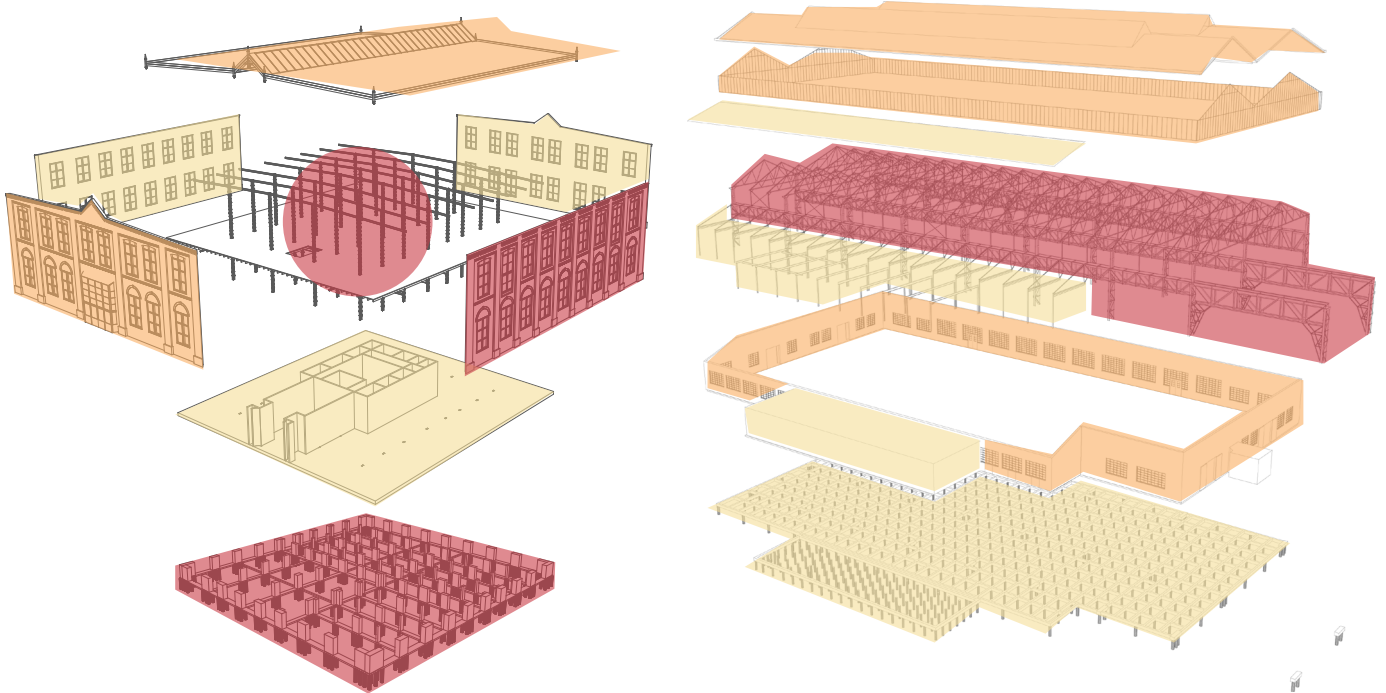
Sound Pollution



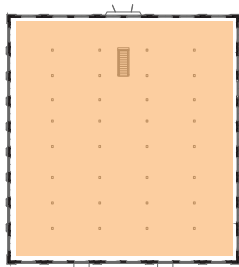
Value Assessment



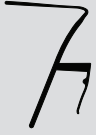



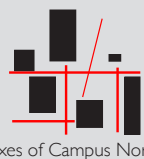


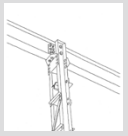

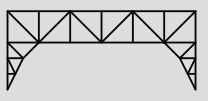




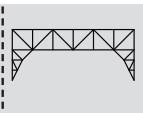
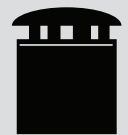


Site



Weapon Depot



Machine Hall

Cultural Value Matrix	Age value	Historical value	Non intended commemorative value
Surrounding/ setting	 Water structure	 Plofbos	 The roads where the train tracks used to be
Site	 Monumental tree	 Axes of Campus North	 Position Weapon Depot by demolition of 309
Skin (exterior)		 Typology of façade Weapon Depot	
Technical Structure	 State of the art engineering	 Cranetrack & columns Machine Hall	 Extruded crane as visual guide landmark
Space plan		 Lengthwise Machine Hall	
Surfaces (interior)			 Floor tiles of Weapon Depot
Services	 Integrated ventilation Weapon Depot	 Hoist beams Weapon Depot	 Extruded crane Machine Hall
Stuff		 Watchtower 217	
Spirit of place		 Trees next to Machine Hall	 Low Density

al value Matrix

Use value

Art value

Rarity value

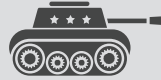
Other value



Parking lot



Typologies



Hembrug as old military terrain



Connection to the main roads



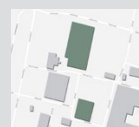
Connectivity of buildings through public space



Axes road/ viewline to Weapon Depot



Ensemble on border of Hembrug



Stand-Alone Campus Structure



Changing of entrances Weapon Depot



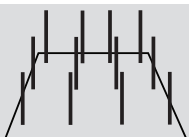
Decoration Façade Weapon Depot
Reconstructed eaves Weapon Depot



Uniform façades Weapon Depot



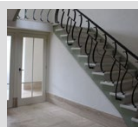
Assembly of the trusses



Spatial freedom



Skylight



Entrance hall Weapon Depot



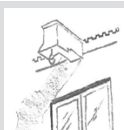
Tiles Weapon Depot



Transport doors Weapon Depot



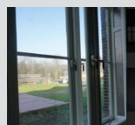
Extruded crane of Machine Hall



Hoist beams Weapon Depot



Sliding doors Machine Hall



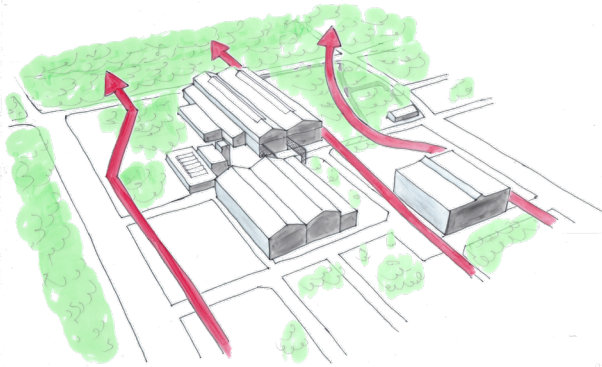
Lighting



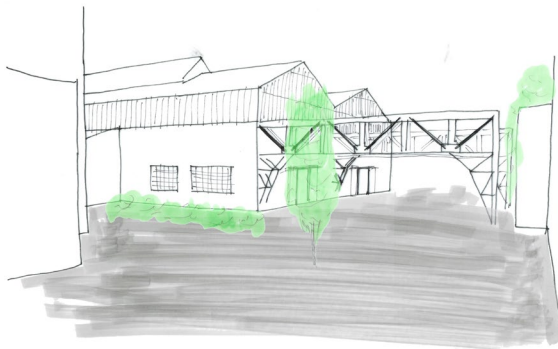
Loading docks of Weapon Depot

Week 3.9
09-04

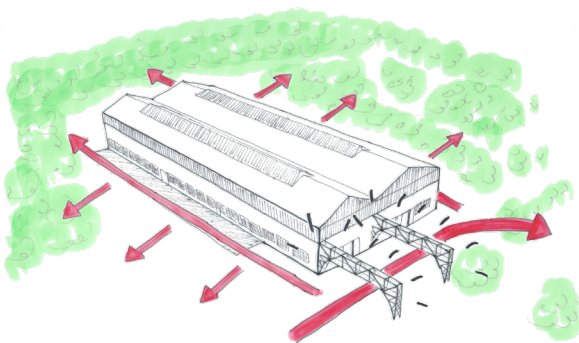
Personal Values



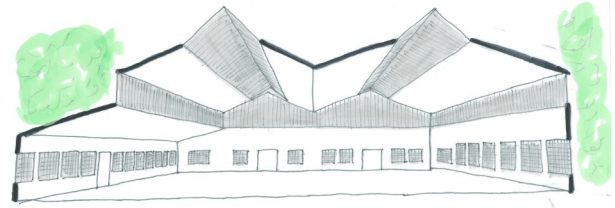
Connection to the forest



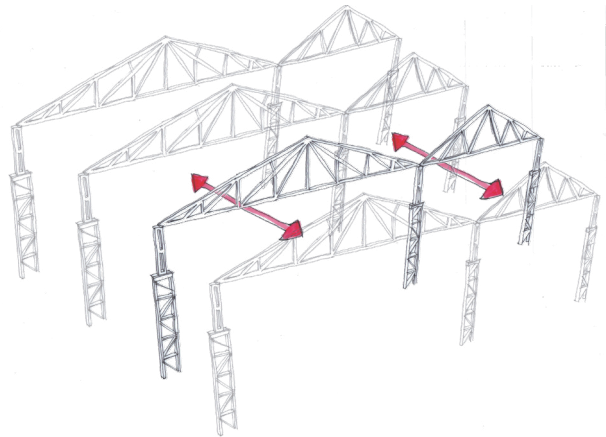
Shared public spaces



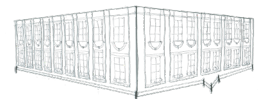
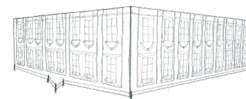
Interaction with the surroundings



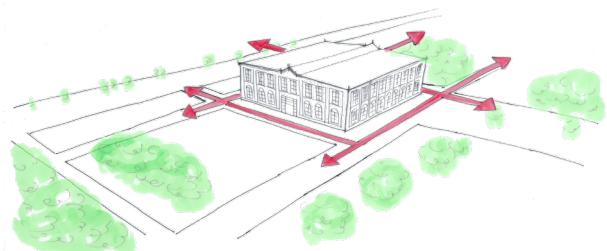
Transparency, openness and relationship with the outside



Open and flexible structure



Typology as blocks in the field



Approach to buildings

My etude

For me it's about the two faces of the site, on one hand the open campus structure: the freestanding buildings in the public space, orientated towards all directions, the repetitive patterns alongside all faces and the mix of typologies, which together form an uniform unity. On the other hand the forest, with his history and roots deep inside the past, gives the area its curious atmosphere. A roof of leaves penetrates the area and is meeting the open shared space in its core. It's about the connection of those two worlds and how we as users are part in this. The forest was always a save haven, a place to shelter and to protect yourself when the sky was falling, but nowadays it can watch over you when you are escaping for modern society and find yourself peace and happiness. To see all of this your eyes are going troughs the buildings, light is falling on you, when your eyes are reaching trough the twigs. Sight lines are racing past you and disappear between the trees in the horizon. All of this is lying in different time layers on the area and now a new layer is painted over the area but we can still see his original soul through his eyes, because they are the only things that never change.



Design



P1

Week 3.10
15-04



H E M B R U G
Campus North



. Conclusion

By analysing all this information and relating it to the main question of this research "How did the functional logic of the Artillerie Inrichtingen influenced the character Campus North has today? we can determine the following:

We can conclude that the structure that is still visible is directly related to the functional logic of the site. Characteristic objects, like the tower, Stelcon plates and the crane structure are designed as functional objects, but are nowadays important elements of the character of Campus North. The typography and the development of the area had not only visible traces like the water structure to drain land, but also in the subsurface where different soil composition can be found which resulted in different foundations of the buildings. The functional structure, related to the rational grid the area is developed on, are still present in the current situation. Because Campus North is placed on the former edge of the terrain, the different expansion periods of the terrain can still be recognized.

In the current situation Campus North consists mainly of large industrial buildings built in the third building phase. The appearance of those buildings is characterised by the production of weaponry and civilian machinery. The weapon depot in contrast, is built in the first building phase and distinguishes itself by its neo-renaissance military building style. Several buildings of the first and second building phase have been demolished and replaced for the larger manufacturing halls that were needed for the new production of heavy artillery and civilian machinery. Since this third building phase several buildings have been demolished that resulted in the low density of buildings and the large amount of open space the ensemble has nowadays. .

The Weapon Depot has always had an important position in the Hembrug area. Since the change of its function from an depot to an office, it was used as the headquarters of the factory, and as the location of the headquarters, Campus North was also of importance. Especially when the square in the heart of the Ensemble was created after the demolishment of building 309 and the main entrance was changed from the south border to the north, Campus North became a landmark position.

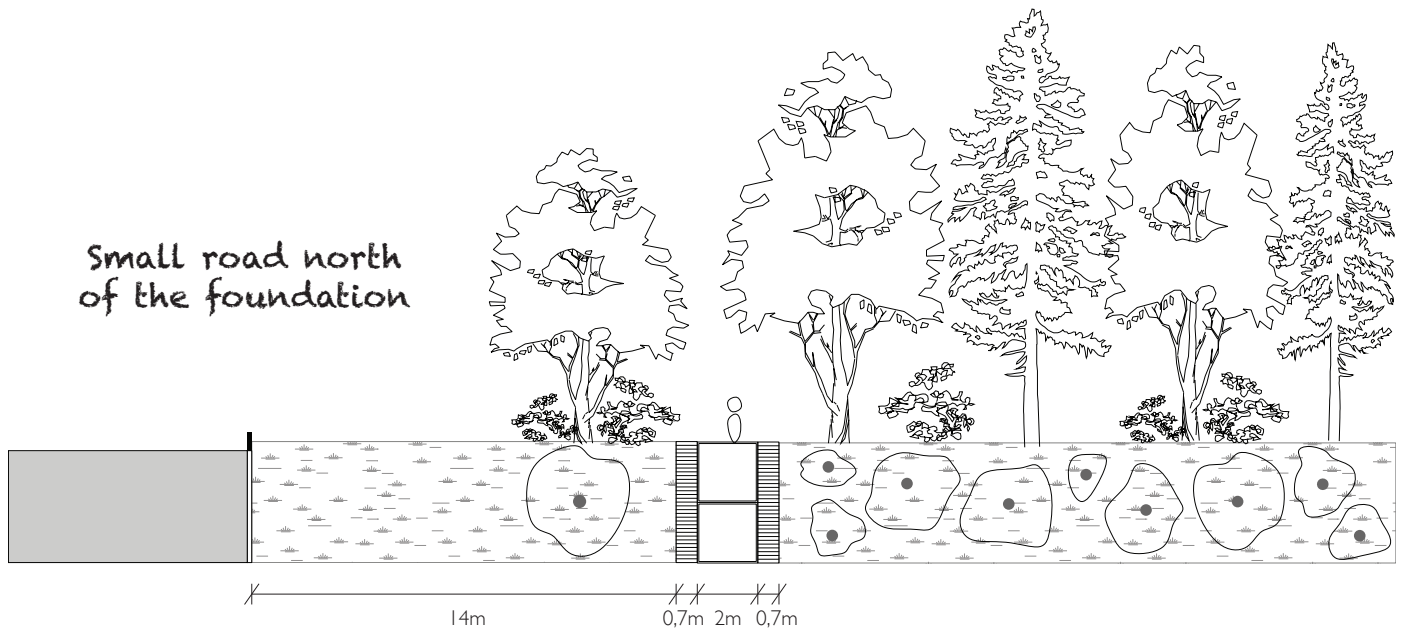
For the Machine Hall we can conclude that the function of the building has been a strong influence for its appearance. The machine hall is a clear example of the change in production that followed after the third building phase as it is one of the largest buildings on the whole Hembrug site. The building has fallen into disrepair, but the size, construction and appearance of the building form still a clear reflection of the production of heavy civilian machinery tools.

All these findings contribute to answering our main question. In the future we would like to analyse what is the tolerance of change. By doing so we would like to see what the tolerance of change for adapting the campus is without losing its characteristic value that we attributed as being of higher value for cultural and historical significance.

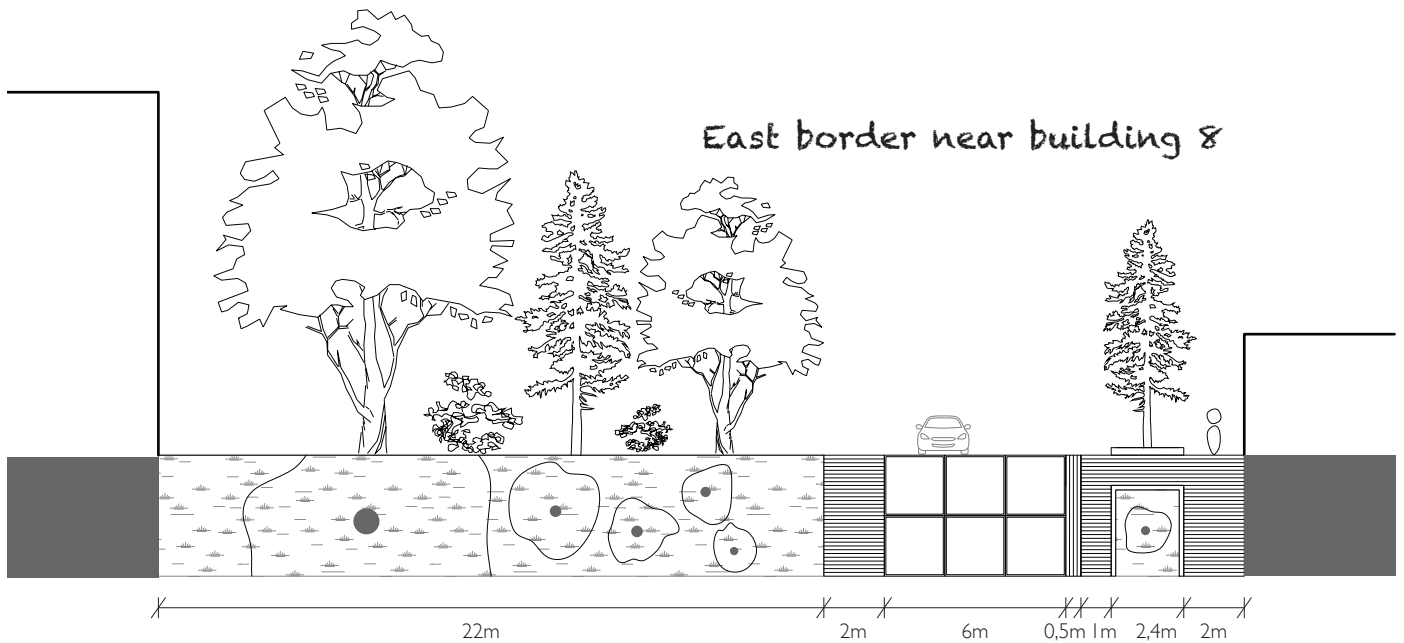
Week 4.1
22-04

Spring break, Throwback

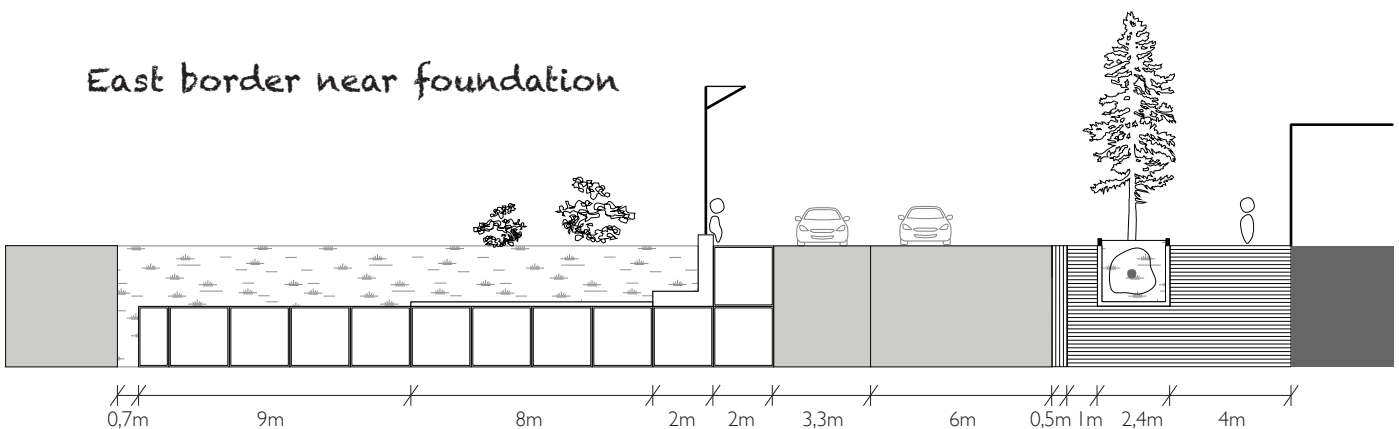
Small road north
of the foundation



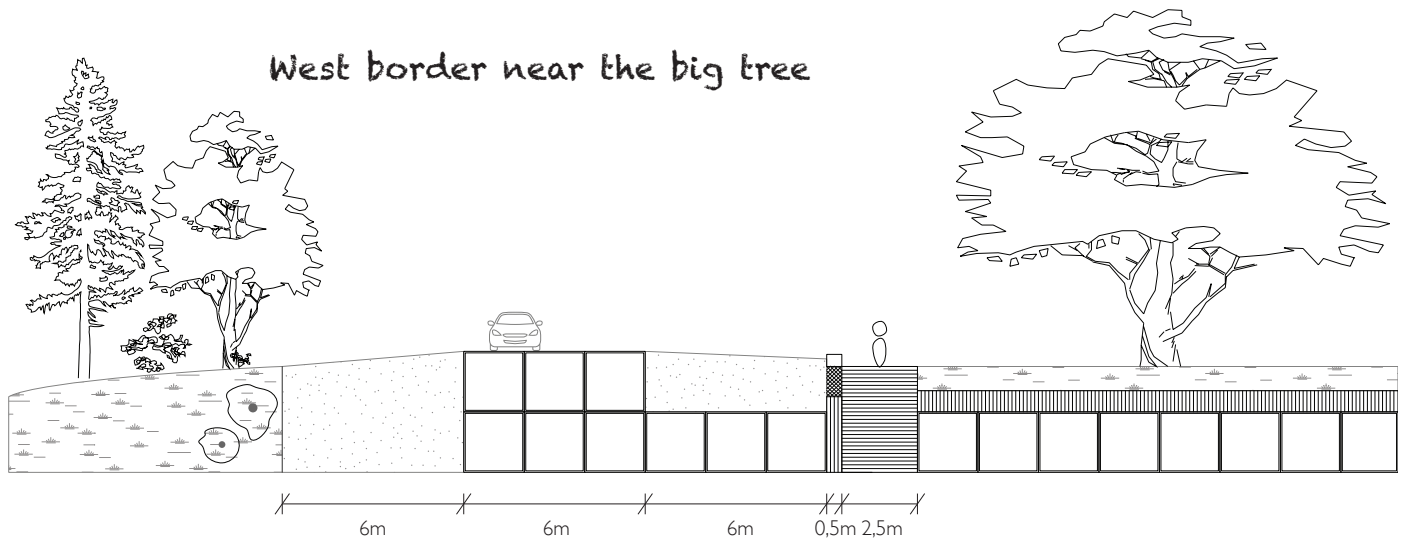
East border near building 8



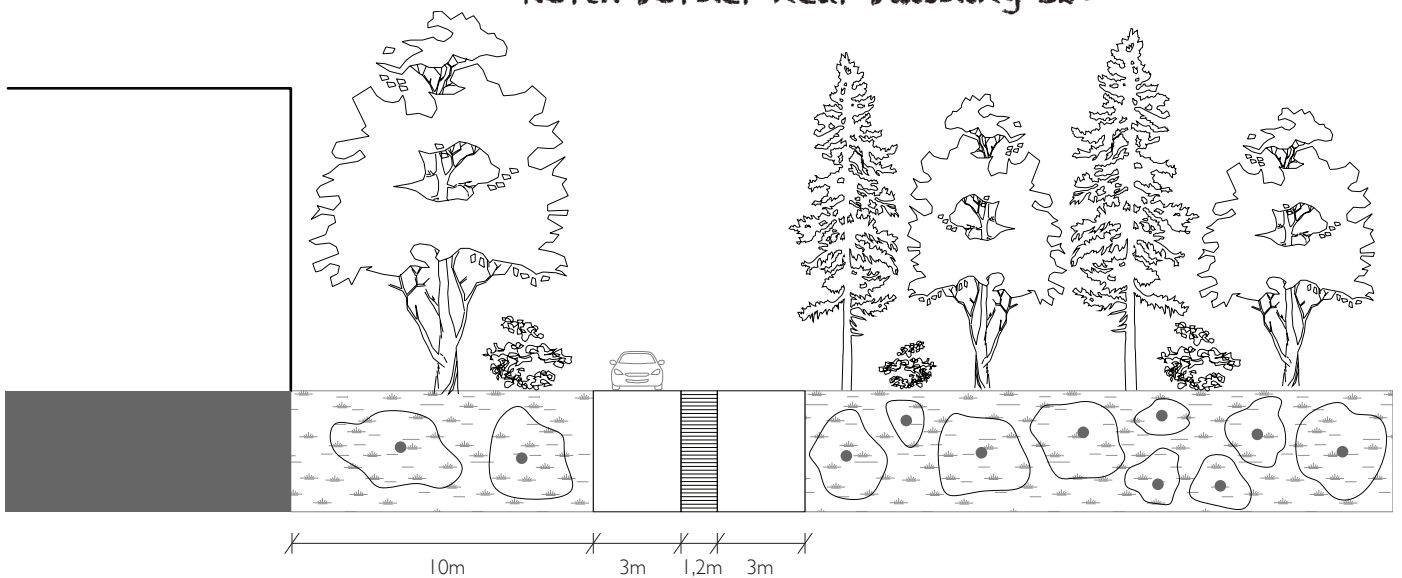
East border near foundation



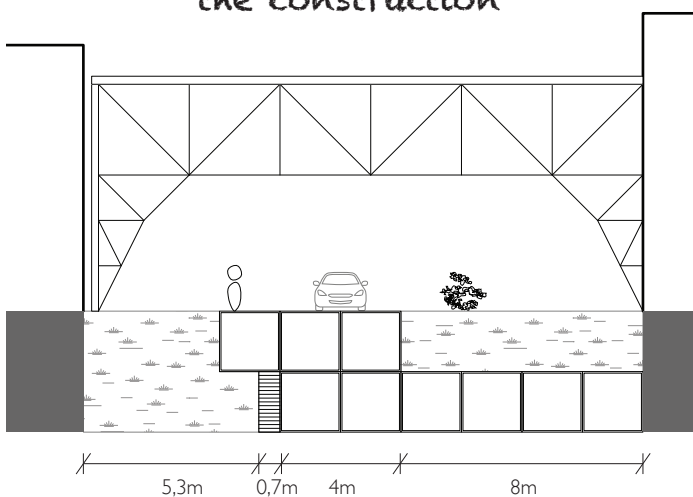
West border near the big tree



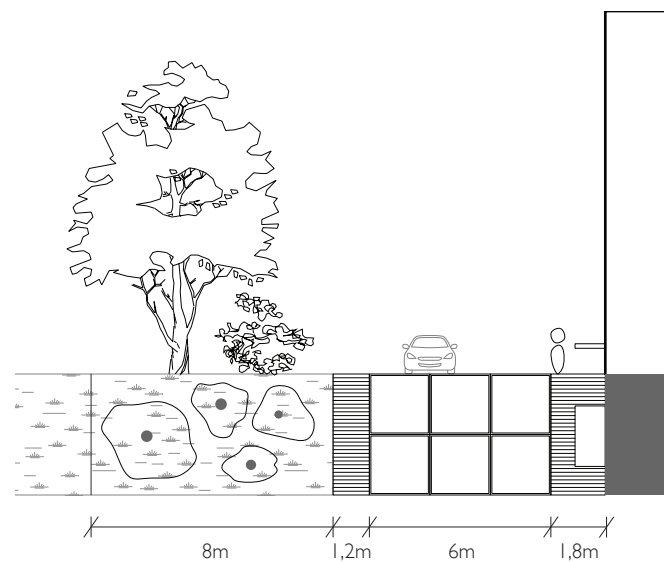
North border near building 320



Road in front of building 320 near the construction

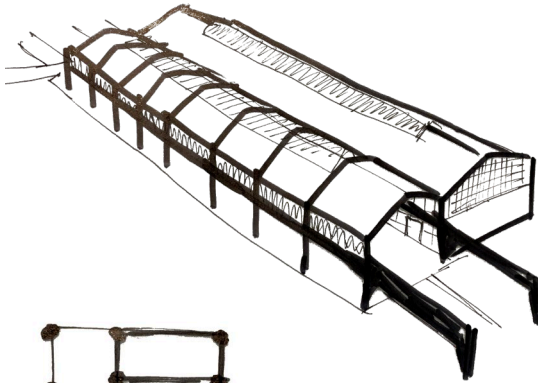


South border near building 8



Week 4.2
29-04

First program for campus North

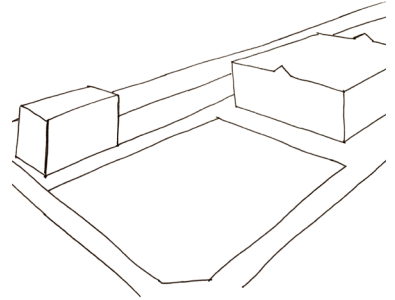


New Building

Old 0 m²
New 1500 m²

Demolishing of the foundation, new building of 15m by 30m with 3 floors

New building will be 4/5 apartments each floor around 100/125m

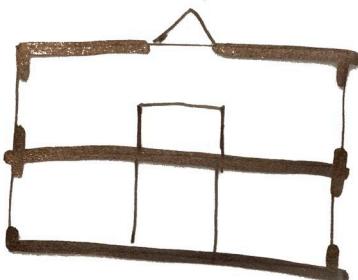
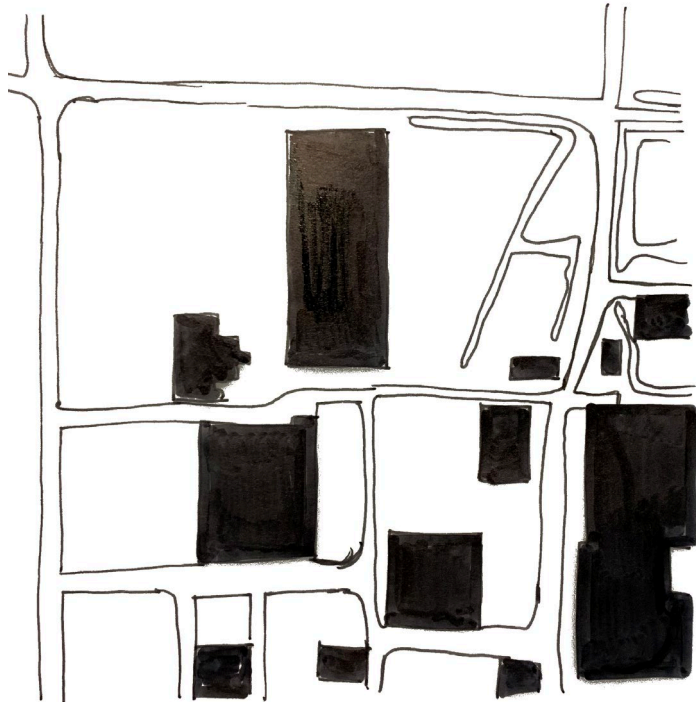


Buildings 320

Old 3900 m²
New 3000 m²

Demolishing of the annex on the west and opening the building

Left part will be a public boulevard connection with the forest
Right part will be 7 shops of 240 m²



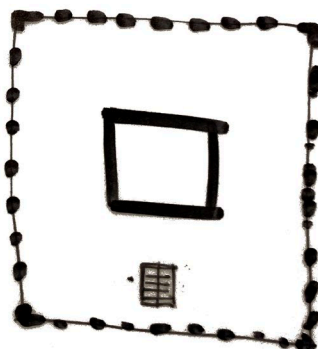
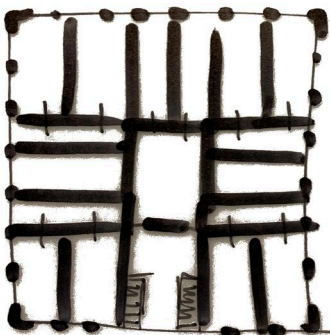
Buildings 8

Old 2300 m²
New 2300 m²

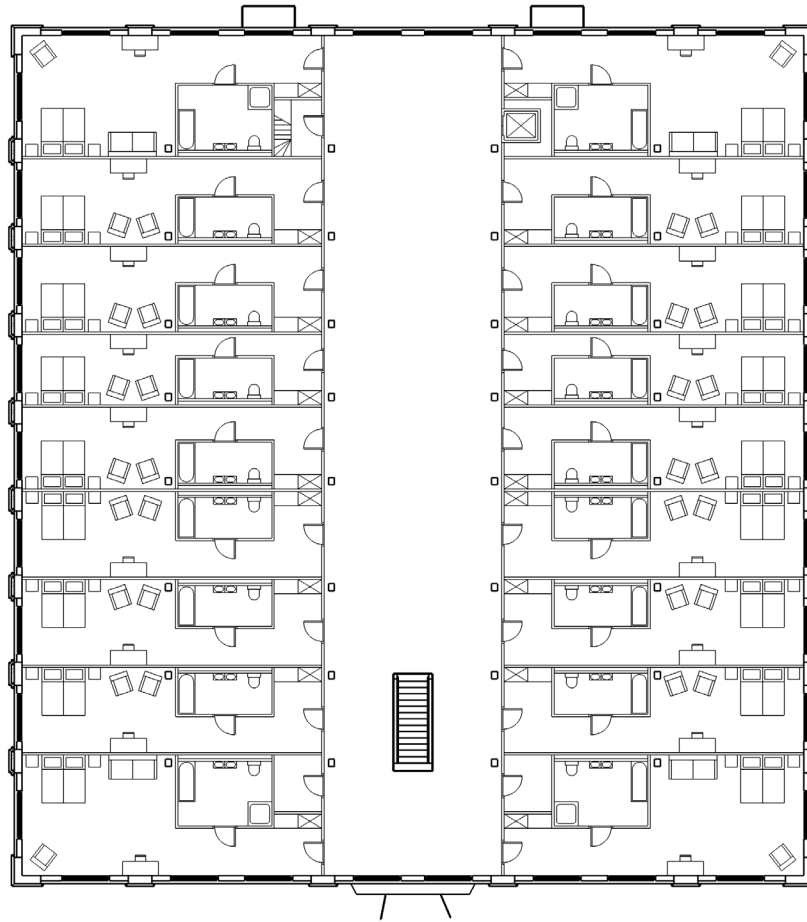
Nothing is demolished an additional service space is placed in the center of the first floor

Ground floor will be a hotel with rooms of around 20 rooms each 40 m²

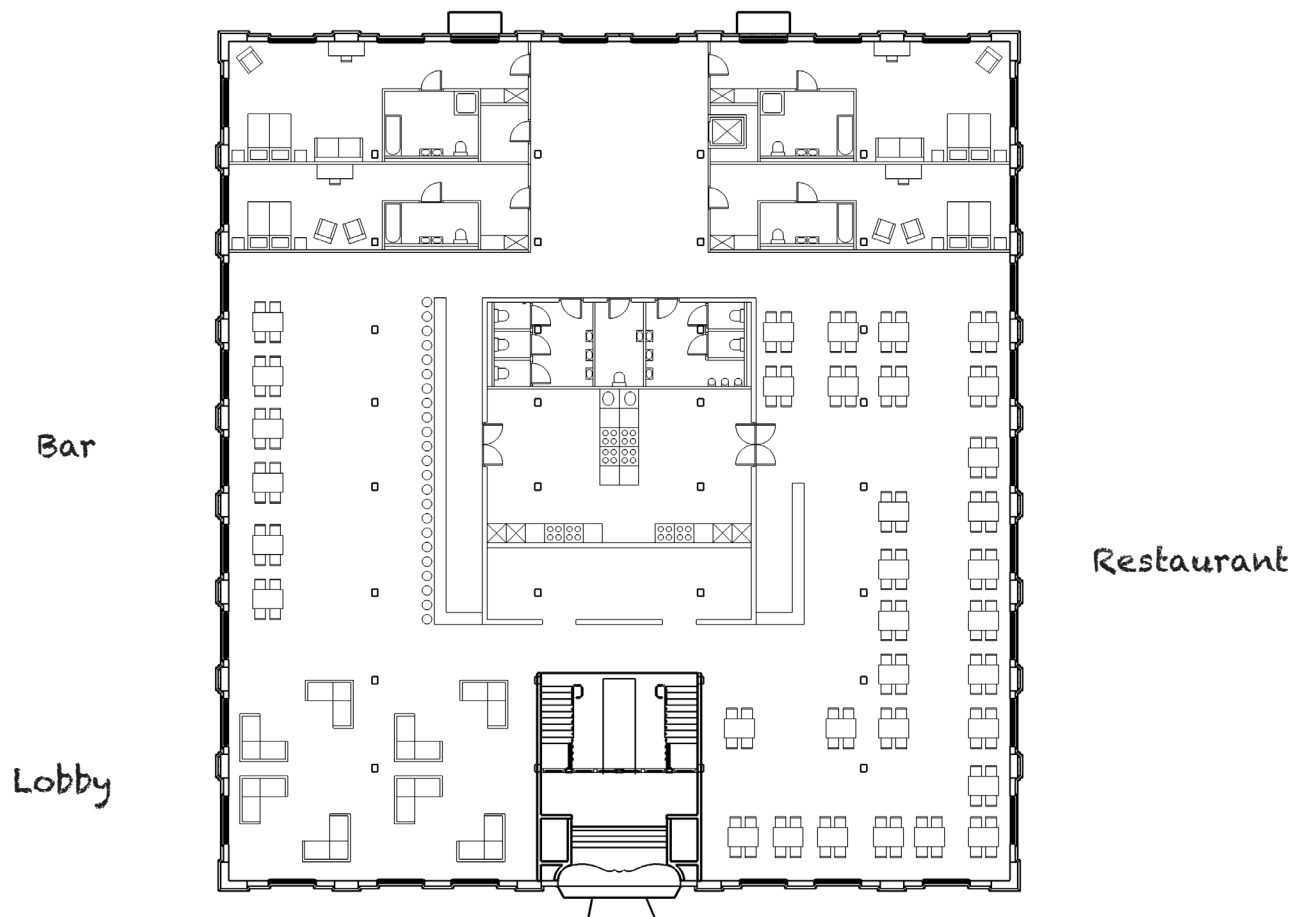
First floor will be 2 big restaurants/bars/lounges of 500 m²



Hotel Restaurant-Bar Hembrug



22 hotel
rooms



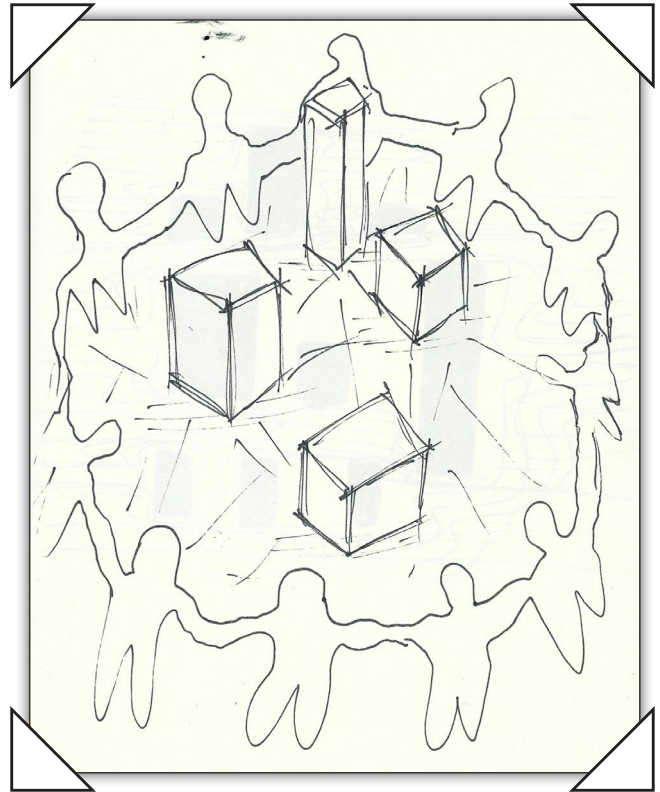
Bar

Restaurant

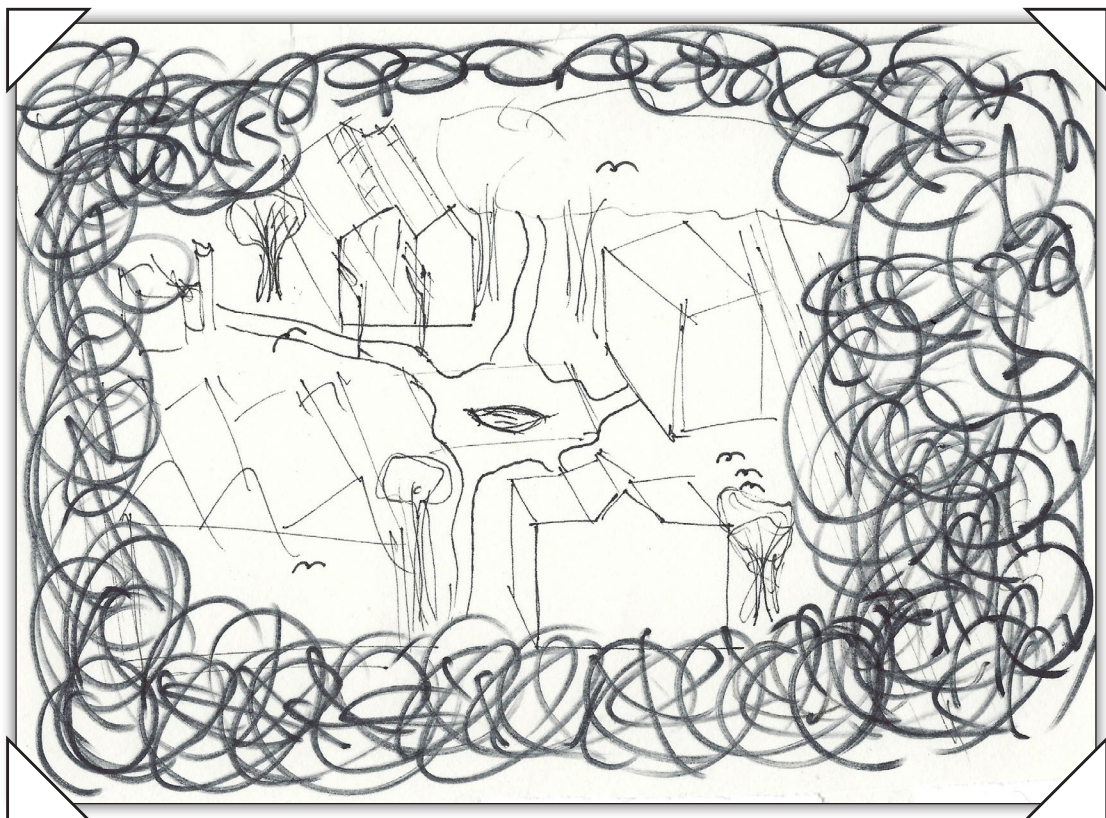
Lobby

Week 4.3
06-05

"The forest was always
a safe haven, a place
to shelter and to
protect yourself when
the sky was falling,
but nowadays it can
watch over you when
you are escaping for
modern society and
find yourself peace
and happiness".



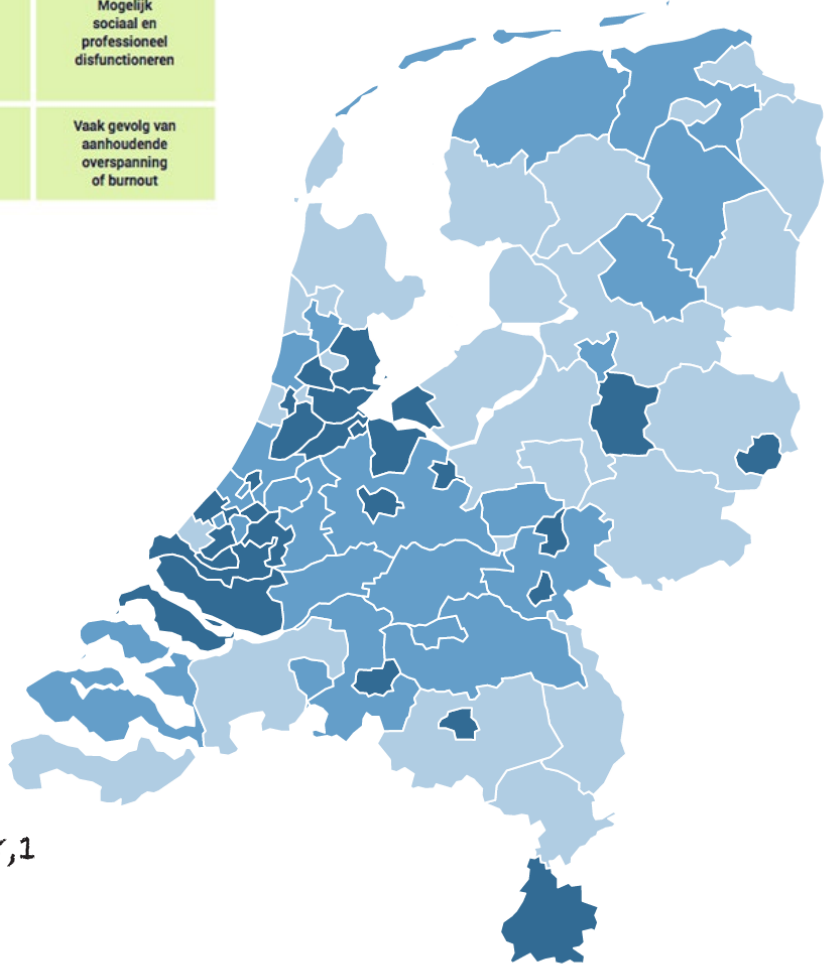
Society???



STRESS	OVERSPANNING	BURNOUT	DEPRESSIE
Alert	Concentratieproblemen	Concentratieproblemen	Concentratieproblemen
Inslaap-problemen	Inslaap-problemen	Inslaap-problemen	Doorslaap-problemen
Niet somber	Niet somber	Niet somber	Somber, Denken aan dood
Kortdurende overbelasting werk en/of privé	Aanhoudende werk- en/of privé-gerelateerde problemen	Altijd aanhoudende werkgerelateerde problemen	Interne problemen
Vermoeid	Uitputting	Uitputting	Uitputting
Vermoeide indruk	Vermoeide indruk	Vitale indruk	Doffe indruk
Sociaal functioneren en professionaliteit intact	Sociaal (mogelijk professioneel) disfunctioneren door verlies van grip op complexe probleemsituatie	Altijd afgenomen professionaliteit	Mogelijk sociaal en professioneel disfunctioneren
Directe reactie op overbelasting + negatieve stress	Aanloop is kort (soms weken tot maanden)	Aanloop is lang (soms jaren)	Vaak gevolg van aanhoudende overspanning of burnout

Mental health diseases

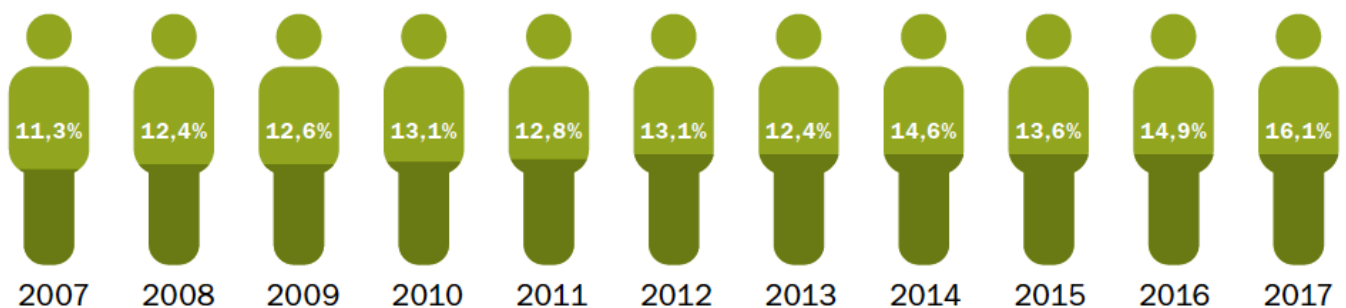
Burn-out symptoms per municipality



Average 17,3 %

1. Almere 23,9
2. Haarlem 23,2
3. Amsterdam 23,1
4. Haarlemmermeer 20
5. Zaandam 18,6
6. Groot Amsterdam 18,1

Growth burn-out symptoms



Week 4.4
13-05

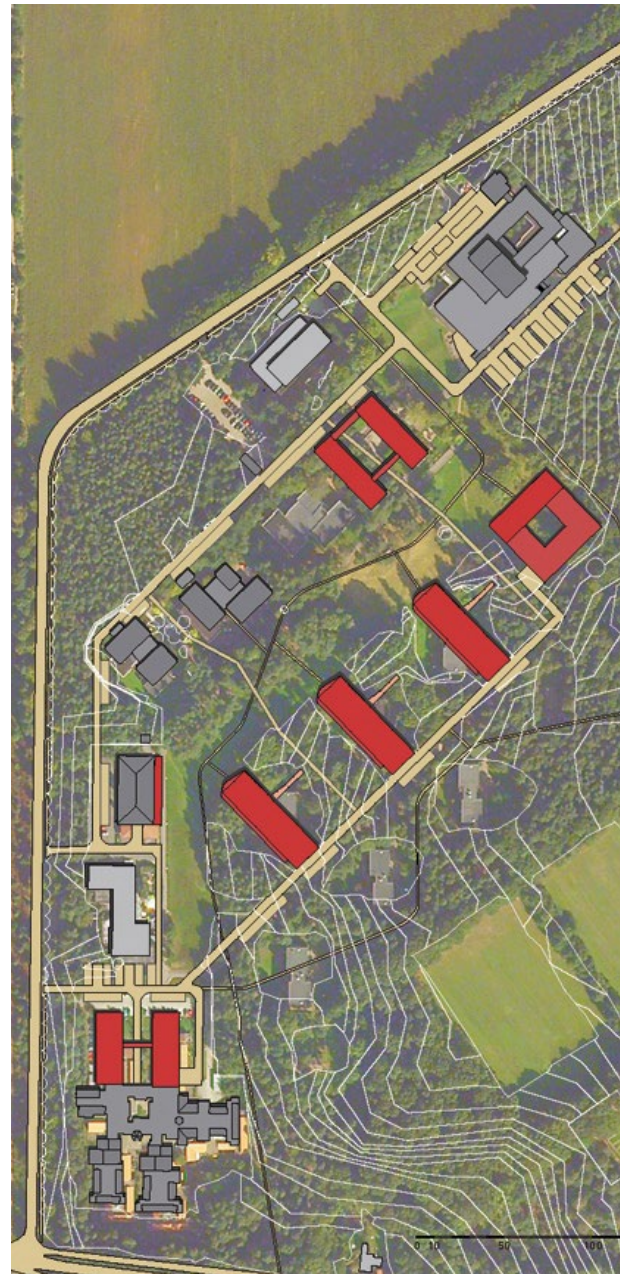
GGZ Nijmegen

Master-plan

- 15 ha
- 254 Patients

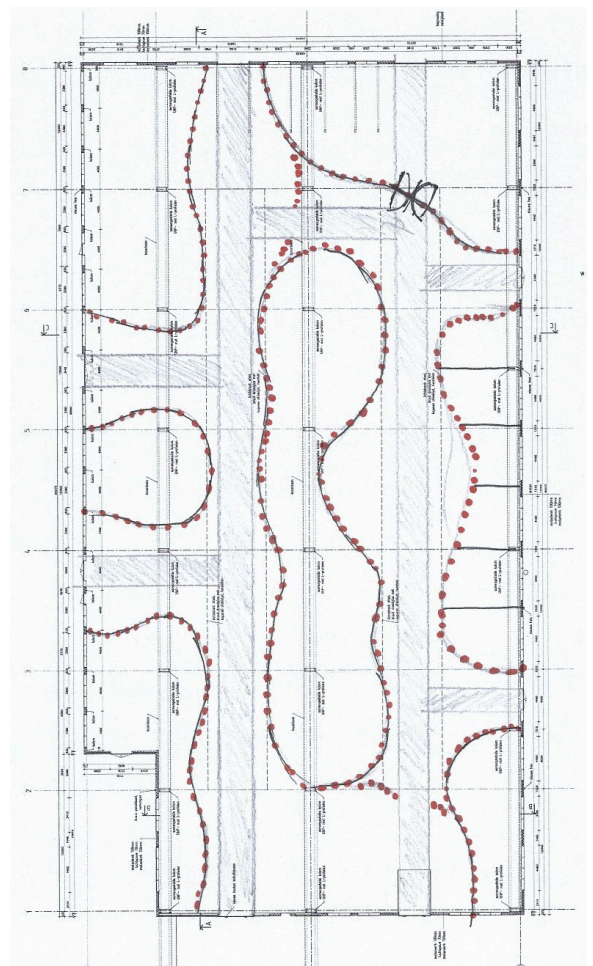
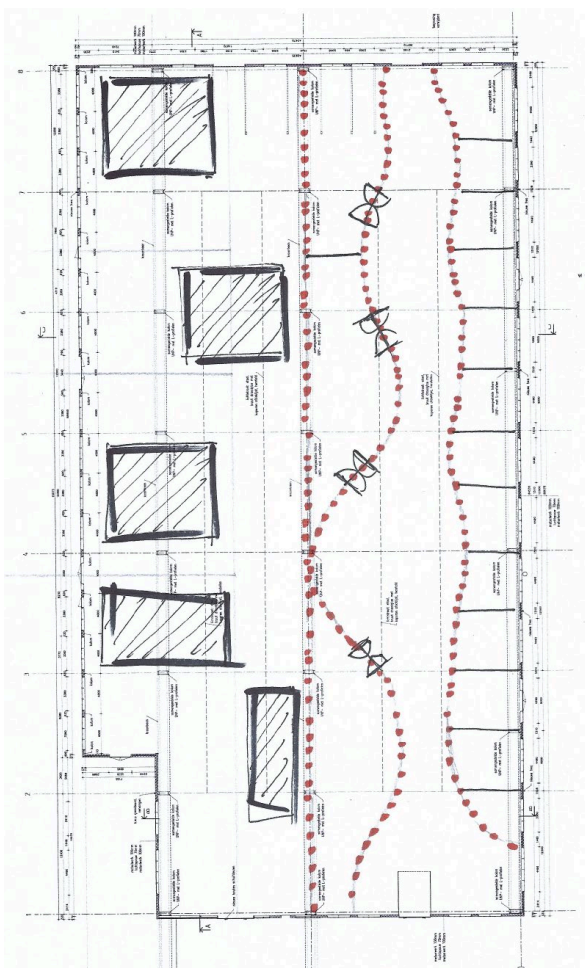
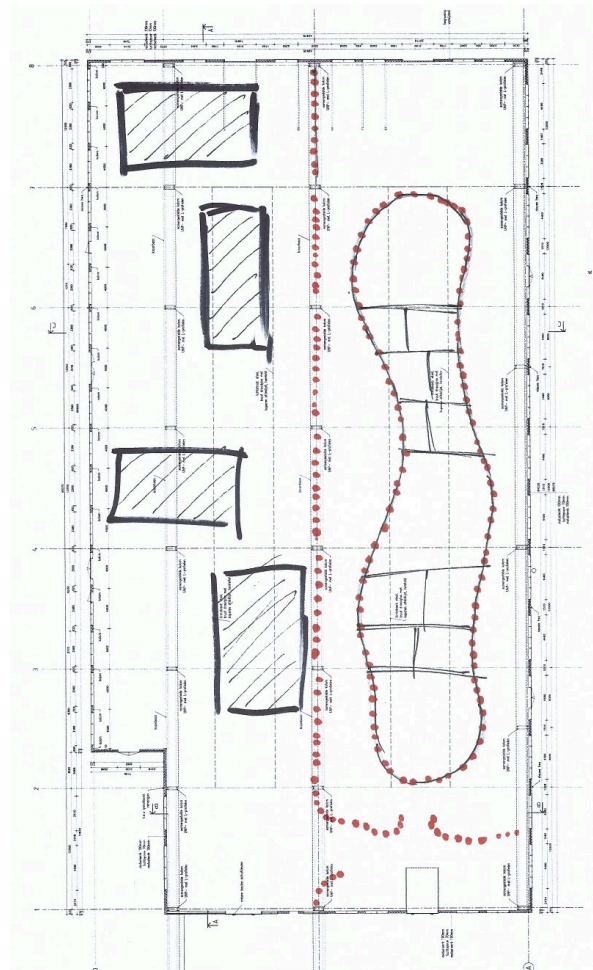
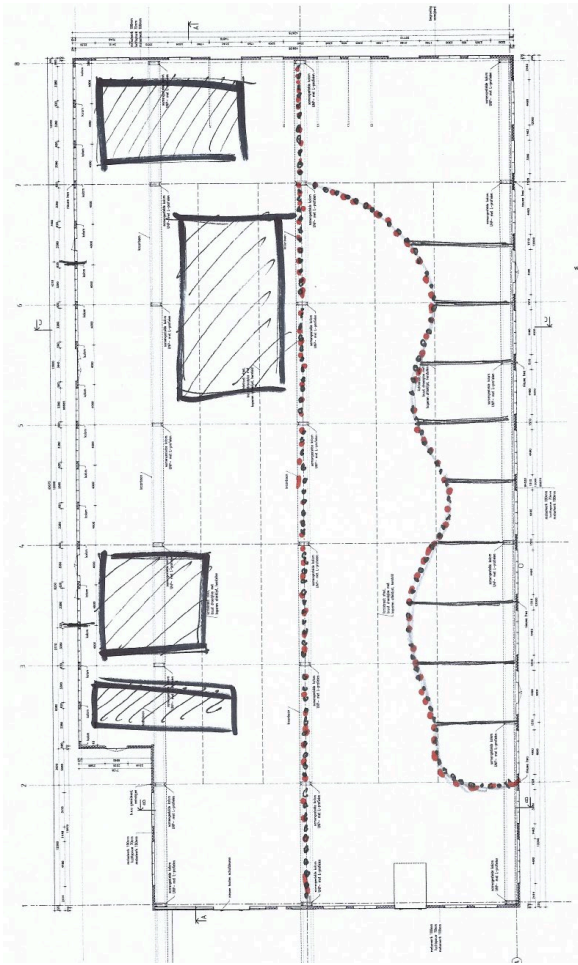
Treatment and patient building

- 3.200 m²
- 39 Patients
- Public vs Private
- Day vs Permanent
- Individual vs Group



Reception	Audio and visual room	Showers
	Group therapy rooms	Sporthal
Toilets	Changing rooms	
Individual therapy rooms	Kitchen	Music room
Waiting rooms	Livingrooms	Theater
Garden	Dining	Costume room
Petting zoo	Conference room	Creative spaces
Archery	Luchroom	Storage rooms
Log cabin	Offices	

First sketches



Self-Assessment on the use of narrating and materializing in the research on Hembrug

I INTRODUCTION

Already at the start of the study in the bachelor research methods where provided by teachers and lecturers. Subconsciously the first methods like research by design were used in the form study courses, where the design was created by constantly reflecting on the models you made and use them as an input in the next model. Later, heuristic techniques like architectural mapping became part of the research. In most of the cases an architectural map, like for example a Nolli map, was made, which was analysed to find the essence. In my research and design process, I saw already at the end of my bachelor that my process not only a continuous interaction between analysing and designing was but also an interaction between concretizing and abstracting.

Some of the research methods provided by the lecturers were sometimes already subconsciously used in my research but because of the lectures I can now put those research methods in a framework. Especially the lectures of Klaske Havik on Spatial Narratives and Eireen Schreurs on Material Culture and Culture of Materials were interesting for my own research project. This has to do with the studio of Heritage where I am in. The studio differs itself from the others studio because there is already an existing situation, you are not only dealing with a location but also with its buildings. The location for this project is the former Artelerie Inrichtingen in the Hembrug area in Zaandam. Important for a heritage project is to address its cultural value and the elements, which ensure this value. As a tool to analyse this values the cultural value matrix is given to clarify all this values and to arrange all this values. One of the most important values for a heritage project is the historic value. In the lecture on Material Culture, Schreurs quoted Tim Ingold "An artefact is an materialisation of a thought" and in this quotation, two of the most important aspects of historic value are couched.

The reason to grasp this cultural value of the site is to make an argued decision to preserve or demolished an element. What are the limitations of the design to preserve its cultural value? Important for this is to find the elements, which are containing the historic narrative, but this works also the other way around in a design. Not only in a way how a narrative can be materialist in a design but also in the way an investigated narrative can be materialized in a research. Because how do you show the value of a narrative? This interaction lead to the subject of this self-assessment on the research methods I used in the research on the Hembrug area in Zaandam. The main research question I asked myself is:

How is in the research on the Hembrug an interaction used between narrative and materialisation to address the historic value? Tschumi already addresses this impotence, he says on this: "Architecture does not exist without drawing, in the same way that architecture does not exist without texts."¹

In the first part the research methods will be discussed that are used in the research on Hembrug. The second part will be a reflecting on how other people used these methods in order to achieve their goal. In the last part my own research will be relate to this methods and how they are used.

II RESEARCH-METHODOLOGICAL DISCUSSION

It would not be peculiar that a Heritage related research mainly is focused on doing architectural historical research. Wang describes historical research as an interpretation of the historian's point of view and the output of this research is a narrative.² According to Lucas a historical precedent can be used to substantiate present practice of architects. By understanding the past we can argue our present day actions. Especially focused on the historic value, research can clarify a decision of maintain or demolish an building or element.³ Because in heritage you are dealing with an existing context, this research is starting with this current situation so the base is a context led research. In this research we as a researcher have an important roll in the research on the historic value. Because the historic value has to do with the way in communicating a narrative, we are the receiver of this narrative, making it an emic research.

The way of researching in heritage is a four-step process.⁴ The first step is the chrono-mapping. In this phase the historical and current data is collected and mapped out in words, maps or diagrams. The reason behind it is to give insight in how the site evolved in its current state and what we can still see and trace back to the past. The second step is the value mapping. The goal of this value mapping is to give an overview and structure to organize all the values found during the chrono-mapping. As a tool you can use the cultural value matrix made by the department of Heritage and Architecture. There are more research tools like this one, for example the Burra Charter and the Nara Grid. The last one does have lot similarities with the cultural value matrix but is much more focused on conserving instead of designing.⁵ The third step is the Mapping Levels of Significance. Where in the Value Mapping it is about the qualitative research to address the values, it is in the Levels of Significance about the quantitative research on how important the values are and how they are arranged in relation to each other. The last step is to Defining Dilemmas. Because of some values are conflicting with the modern requirements and contemporary visions.

A way to organize these values is the division according to Riegl his values. In his essay on Cultural values he sees the values as different lenses in which way you can look at the monuments. He argues already the similarities and differences between a historical and an artistic value. The most important difference is that the narrative that is behind the monument is brought to the viewer his conscious. This can be done with the use of the visual materialisation or a narrative inscription. Most of the time this is an interaction between both methods, which amplify each other.⁶

Value is an important aspect in the meaning of a building in its context. These landmarks, how Lynch is calling them, are determined for a major part by there historic value. He says: "Once a history, a sign, or a meaning attaches to an object, its value as a landmark rises."⁸ It is even possible to give the building a not excising value, just by planting a narrative in the viewers conscious. An great example is the 'I am a monument' (fig 1) by Venturi in his Leaning from Las Vegas research.⁷ People are seeing value where they want to see value.

In more recent publications is often searched for an explanation of this historic value and how it can be found, addressed and visualized. Most of the time there is an overlap between historical and age value but the main differences is that the age value just has to do with time and that historical value has to do with event. Paul Drury defines the historical value with: "Value deriving from the ways in which past people, events and aspects of life can be connected through a place to the present".⁹ This indicates that the place or element has a connecting roll in communicating this history to the present people.

III RESEARCH-METHODOLOGICAL REFLECTION

One of the most challenging aspects is the method to show these historical values. Because how do you express values or even architecture in a narrative and how do you visualize a narrative? I focused on two different types of researcher and both have their own personal view on the use of a narrative and a material and the interaction between both.

Trachtenberg has written a book on architectural history and architectural monuments where he tries to reveal those historic buildings to the reader. He uses a combination of word and images. On the 'word' he says: "To describe the building a mastery of specialized vocabulary of architectural writing is needed." For a non-native speaker like me this is much harder than a native speaker because it requires a very high level of vocabulary to describe architecture because in architecture it is much more about experience and feeling. To understand a building the images is for most people much easier to understand, but how do you capture an architectural monument in illustrations? He divided the image in two types, photographs and diagrams. Photographs are the most common method to understand a building, but in most photographs you lose a lot of important information and details, which are essential to show a building his value. Trachtenberg says: "Traditionally, architects have been deeply involved in the design and crafting of detail, which was a major means of architectural expression." He even argues that a Greek temple or Renaissance facade can be seen as a giant intricate sculpture made entirely of detail. To show those details, which are the most important part to understand those values, he use a combination of detailed photographs and diagrams. In diagrams he shows the structure, space and proportions of the buildings. Tools he uses are the: plan, elevation, cross-section, the isometric projection and the perspective drawing.¹⁰ A thing he don't address is the difference between the loss of information and the reduce of information. Because in most of the cases a picture or a sketch can also be seen as a lens or a filter which reduces the information to show the essence of a building and its value.

In words and buildings, Forty talks about the relationship between architecture and language and how words can be used to describe architecture. One of his aspects was the relationship between language and drawing. The conventional view of the process of architectures shows a chronological relation between drawing and language.

Idea → Drawing → Building → Experience → Language

In this case the language can be seen as a step in the process to evaluate the design but actually is language a tool tot use through the research and design process. Words are for example used to give the idea to the architect and are used to describe the plans to other stockholders. With the use of pictures and words you always have a kind of data loss of the original building, so the pictures and words could never replace the actual building. This problem you can also see in our research because we where not allowed to go in a building because of the asbestos. Despite that we had historical drawings, plans and pictures of the inside of the building we were missing a kind of experience and understanding of the building.

Because of the differences between using words or drawings an interaction of methods can help you in your design. A drawing is very exact; it can help you to be precise and concrete, and language is much more vague but this can help you to describe difficult elements like mood and atmosphere. To show differences a word can help much more then a drawing, because almost every word has its opposition, for example light and dark, and open and closed, but the opposite of a drawing is still a same expression of a drawing. Another feather of language is the use of metalanguage. We can use words to explain our words so we have the same interpretation of the word. Drawing on the other hand can have multiple interpretations by all the viewers. The effect of time and sequences does also differences in the methods, while the drawing is a one-moment shot, a sentences has a start and an end. Also experiencing a building it is not possible in one moment but it is a sequences of moving and looking. At last a drawing show much more then you can tell with words. To describe all the date of a plan in words you need much more then just one drawing.¹¹ If you relate this to historic values the way of defining this value depends on the degree of concreteness. Values that have to do with the surroundings, site and spirit of place are much easier to express in words than in drawings. On the other hand, concrete materialized values such as skin or structure related, could easer be addressed with the use of pictures or drawings.

IV POSITIONING

At the start of my research I was mainly focussed on heuristic technics. Before we focused on the area we analysed case studies in order to create a toolbox of references for our own research. After the case studies we started with analysing he area. Because we didn't know what we where looking for heuristic methods where a good start to grasp the location. I stared by mapping the location in sections and plans like a Nolli map. (fig 2) With the chrono-mapping it was a lot about collection rough (historical) data.

The lectures and the literature gave me a new interesting view on dealing with this data. The distinction between analysing a building with words and to give a narrative a materiality intrigued me. I used this in the research on the borders of the area. (fig 3) To use this method on the borders was really helpful because the borders have the problem that they are on the one hand very concrete, there is a line and that is the border, and on the other hand has the location of this line to do with the feeling and how you experience the border. This can be related on the differences Forty address between the use of words and drawings. After the boarders were analysed in drawings, the use of words was used to show the differences and to connect all the elements in an annalistic drawing. (fig 4)

This way of analysing is also used in the way of presenting the research. Firstly my personal narrative based on the research is materialized in the form of a creative expression. (fig 5) I combined make-up and architecture to give a materialized expression of my thoughts with my own face as the canvas for the design. After this 'drawing' a play with words is used to describe this idea in a narrative way. It was interesting to see that the drawing, without saying anything, brought up different ideas and interpretation by each person. None of these interpretations was wrong but they addressed different elements of the same concept.

With the use of this method, values, which are normally hard to explain in heritage because they have to do with feeling and experience, can be pointed out quite exact. A narrative can help a building or element to show its historical value and a historic narrative can be materialized in a detail or expression of the building. In heritage one of the key elements is to understand the meaning of a building or a place. If you can figure out what the story is behind the building you can trace this story back to the elements telling this story.

If I look back on the research question: How is in the research on the Hembrug an interaction used between narrative and materialisation to address the historic value? You can see that both methods are part of a heritage related research. Both are used is a complementary way and not supplementary. They are not telling both half of the story because, either the narrative is not understood or either the narrative has many interpretations. To understand the historic value a combination of word and the physic material is needed because the experience is an important part in the value determination. As I said in the beginning, for me research and design is a continuous process of concretizing and abstracting and with the use of narrative and materialisation you can contribute in this process.

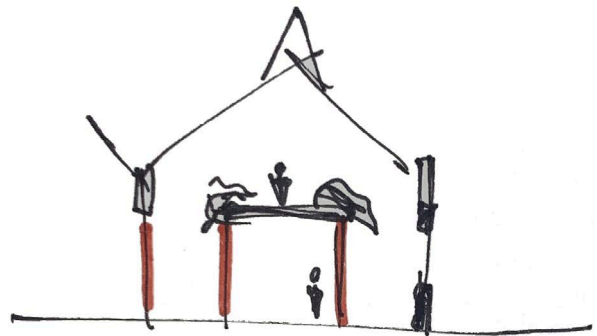
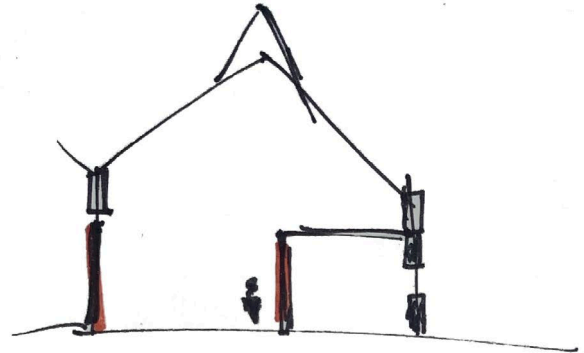
Week 4.6

27-05

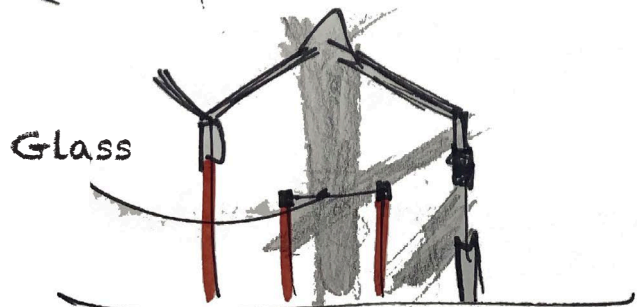
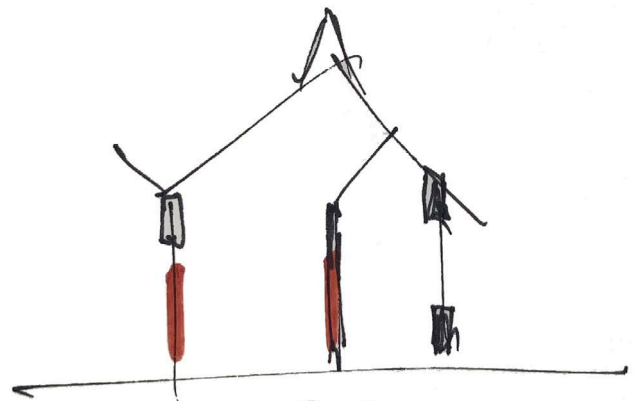
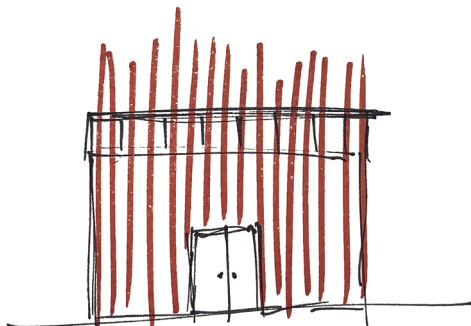
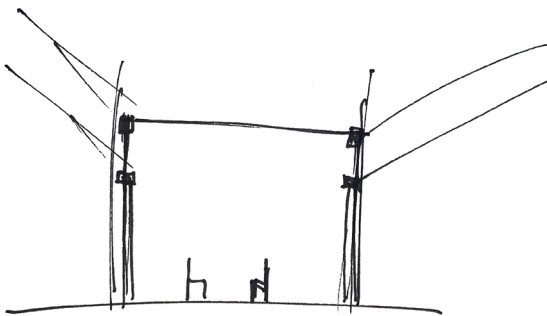
Program

Entrée with desk two employees
Seats in entree
Toilets x2 (men, women, disabled)
Seats in the hall
4 creative rooms
6 living/relax rooms
Music room
Large sport hall
Small sport room
changing rooms and showers
6 therapy/workshop rooms
Offices
1 on 1 rooms
Pet farm
Technical room
Theater room
Costume room
...
...

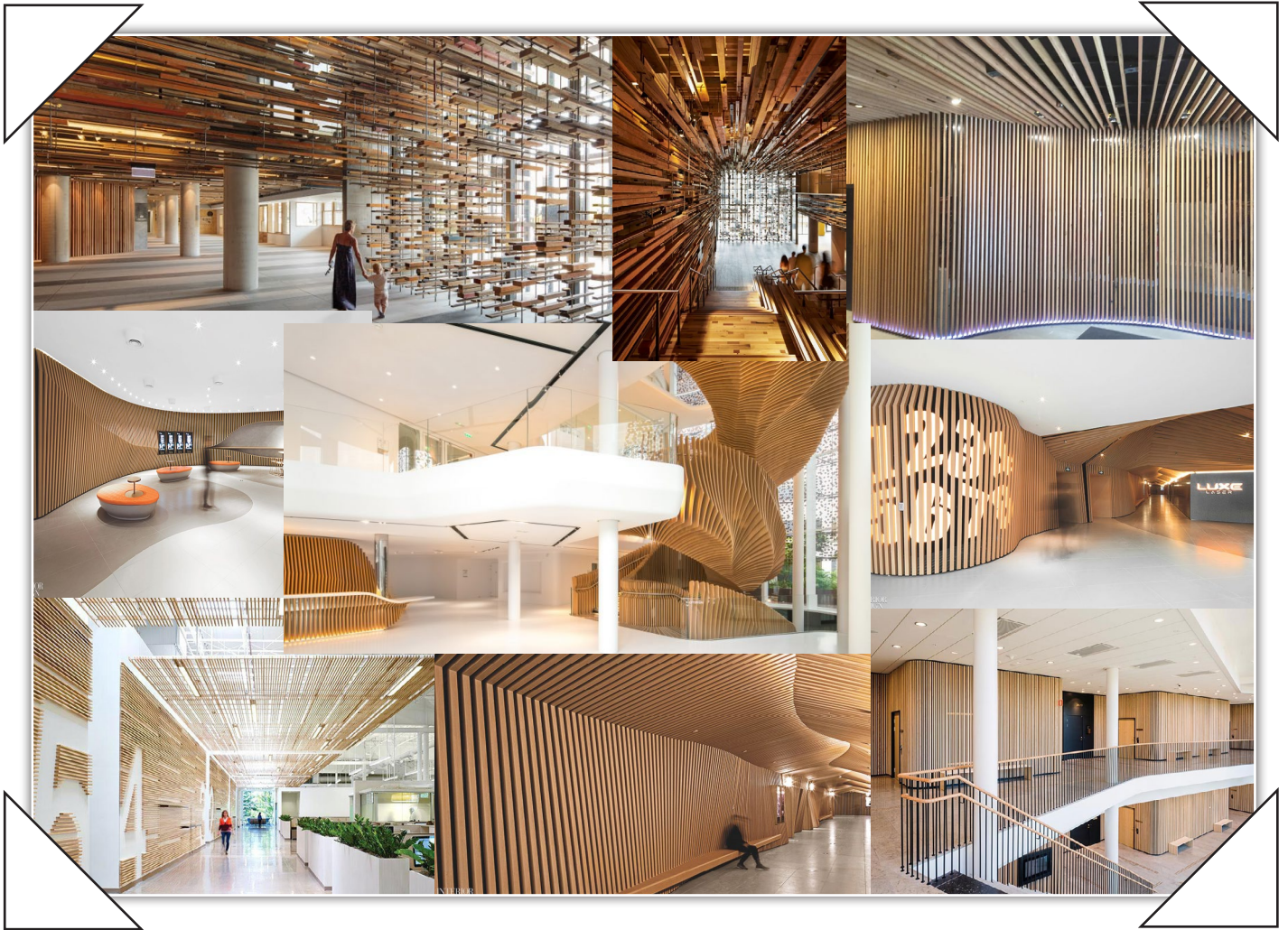
Box in a Box



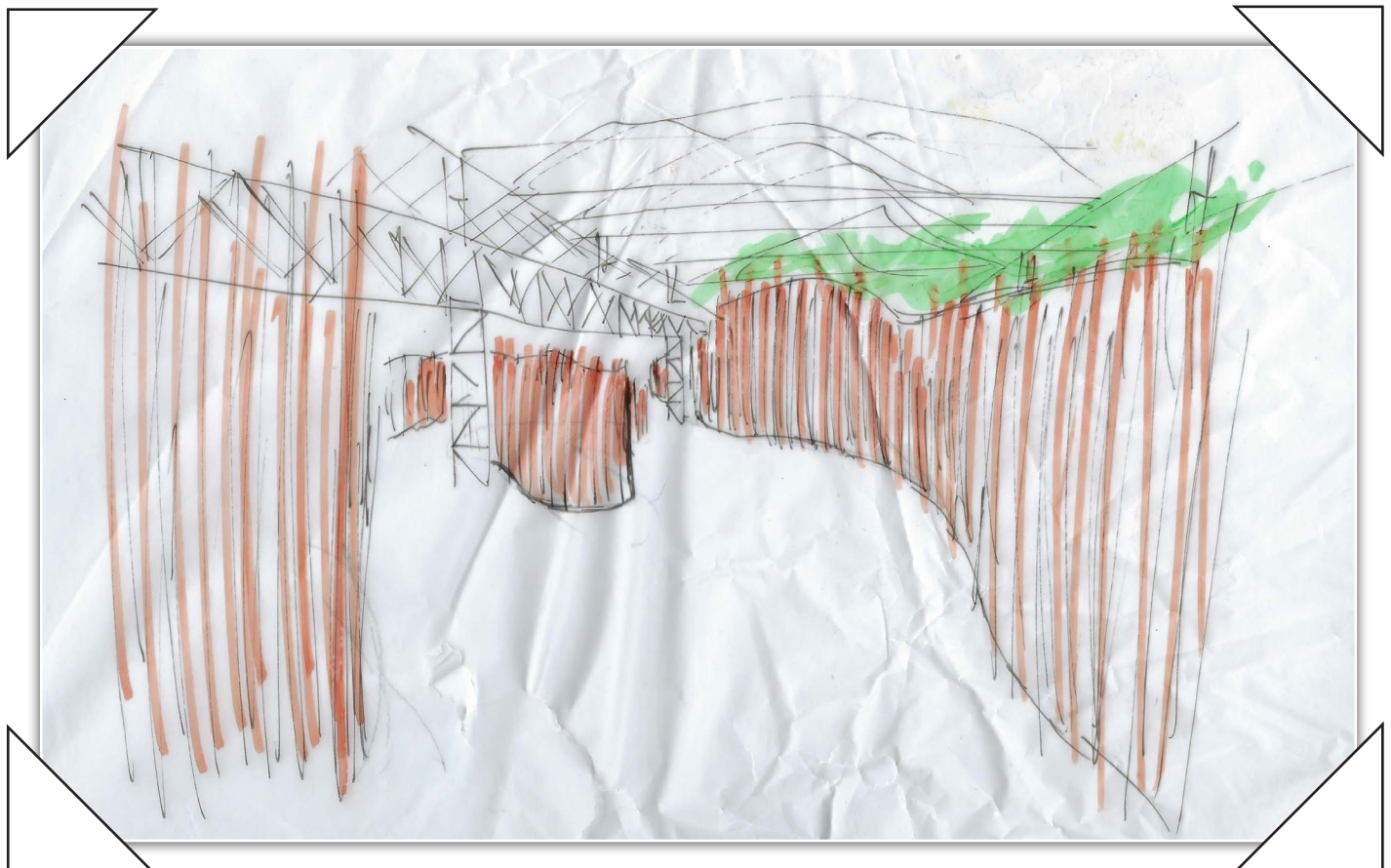
Privacy vs Light



Glass

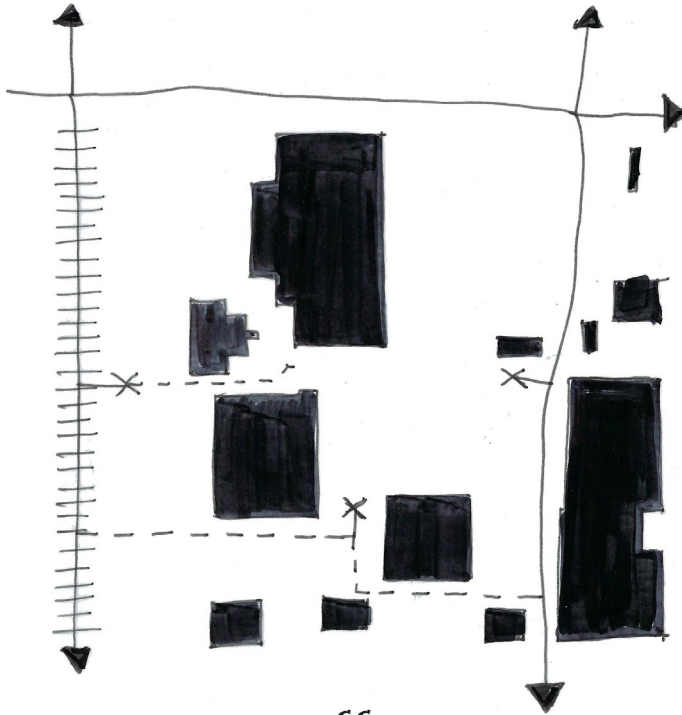


Impressions

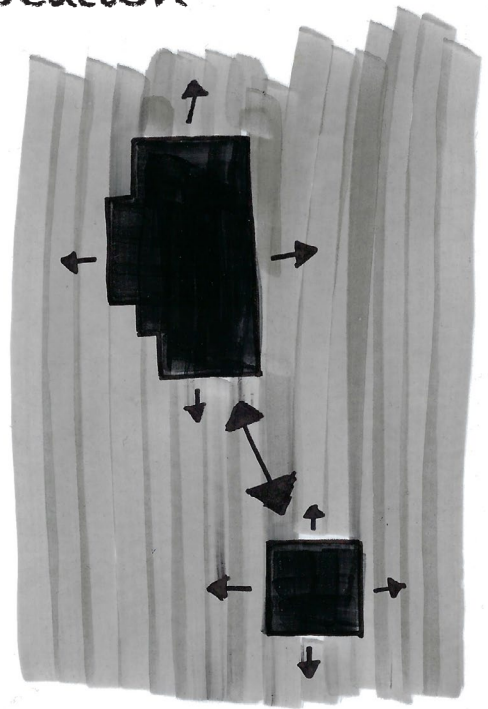


Week 4.7
03-06

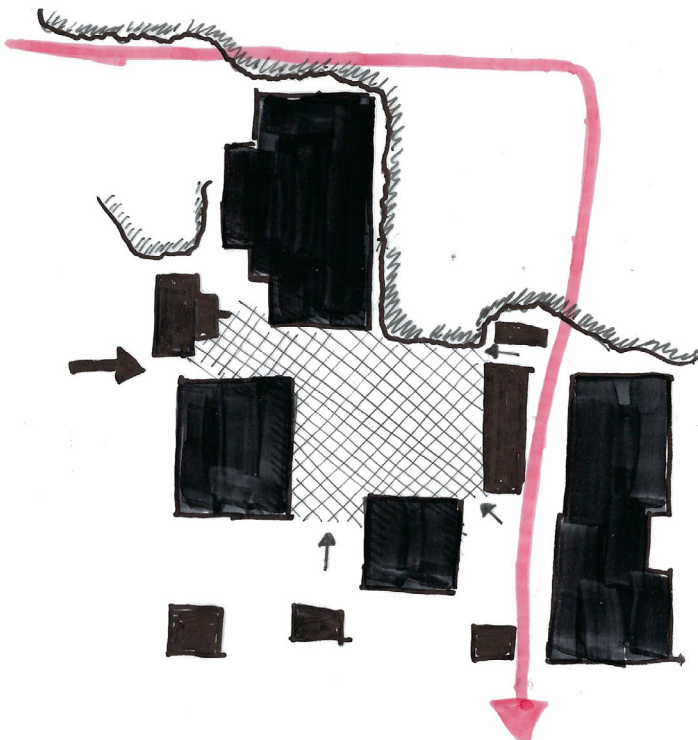
Concept for the location



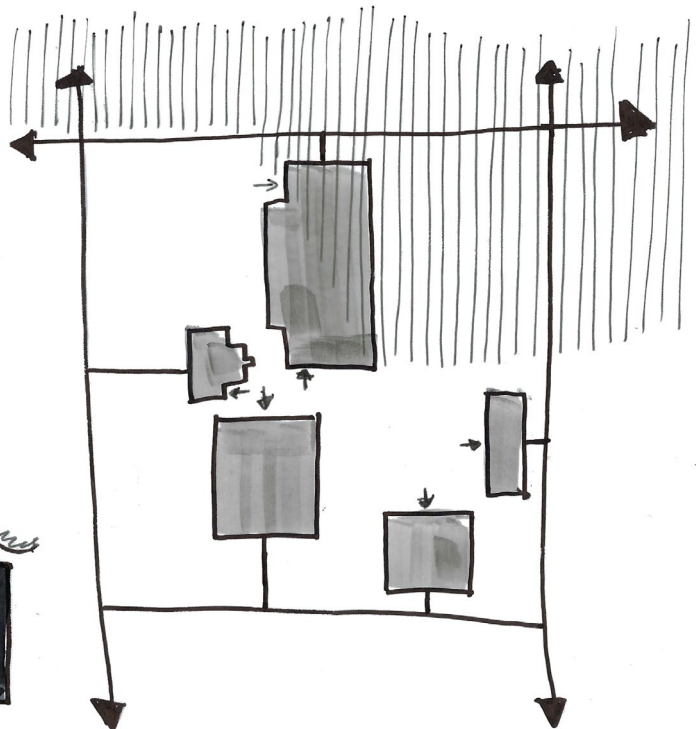
Traffic



Orientation

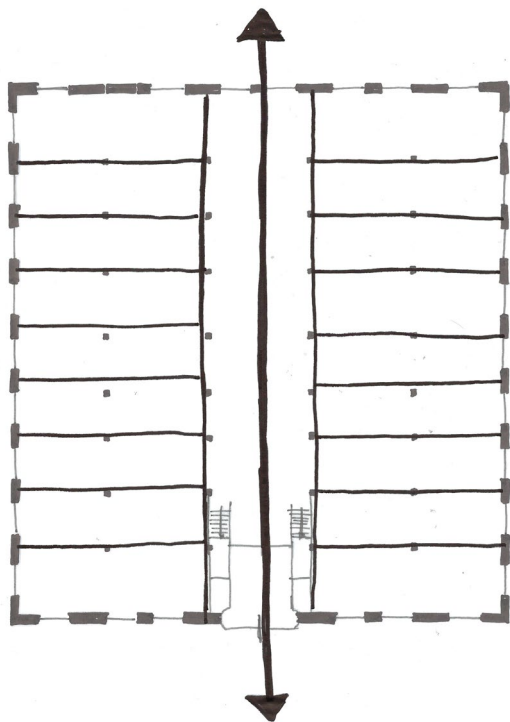


Extra mass

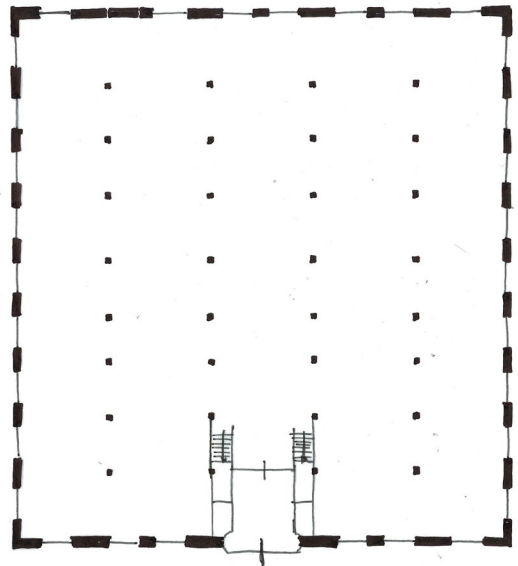


Infrastructure

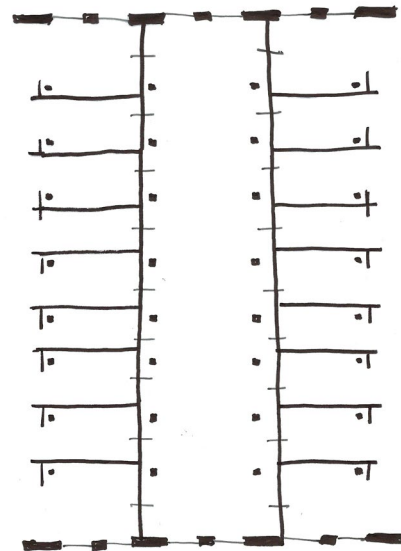
Concept Weapon depot



North-South orientations

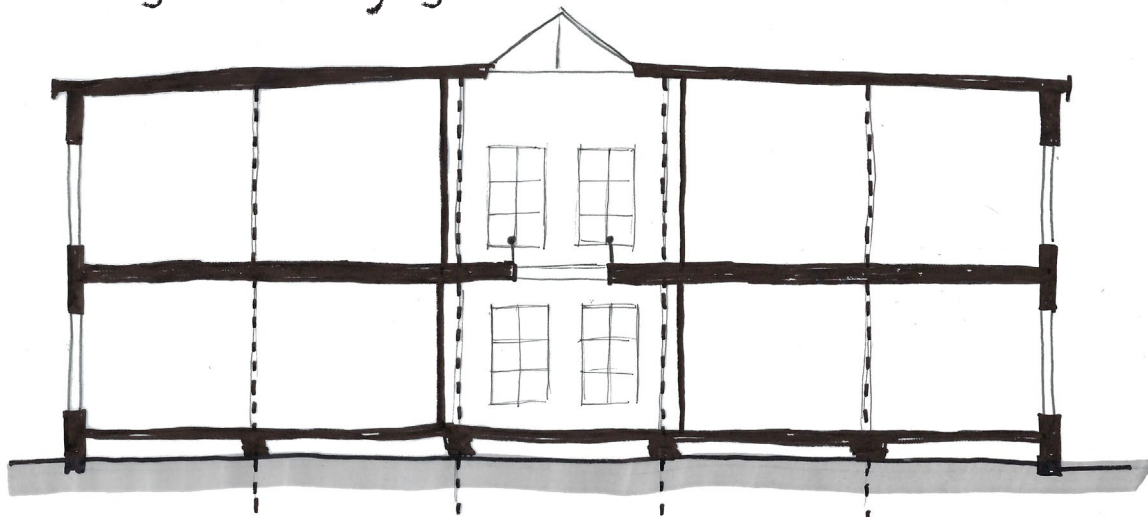


Removing the concrete core

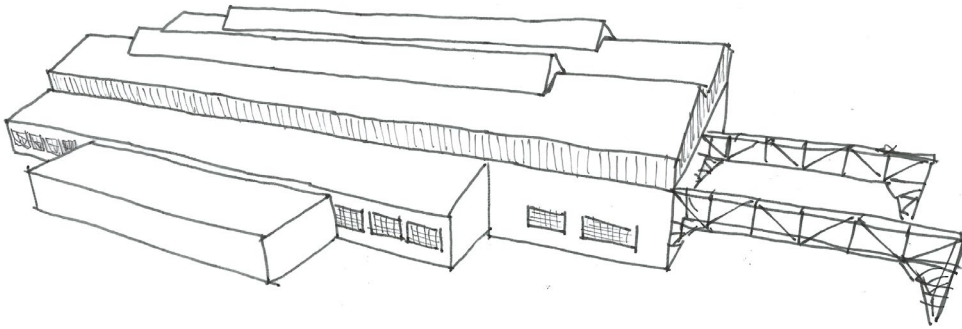


Rhythm and construction

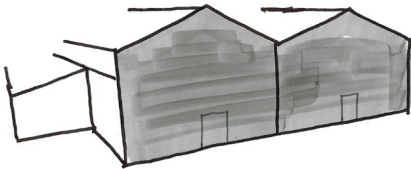
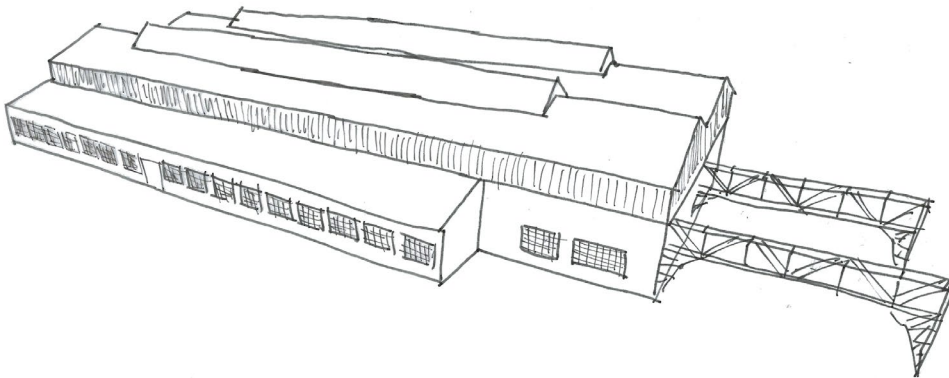
See-through and daylight



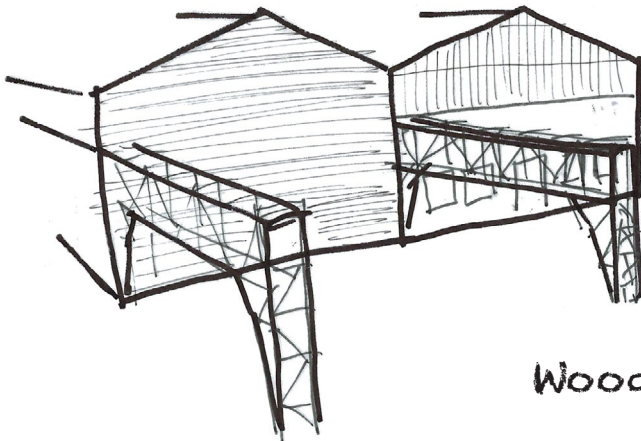
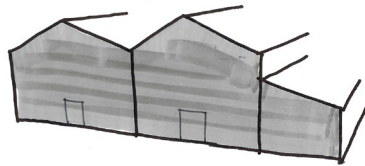
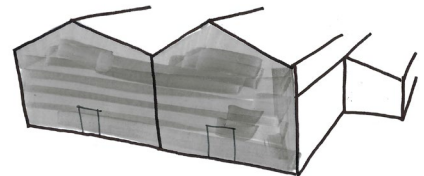
Concept Machine hall



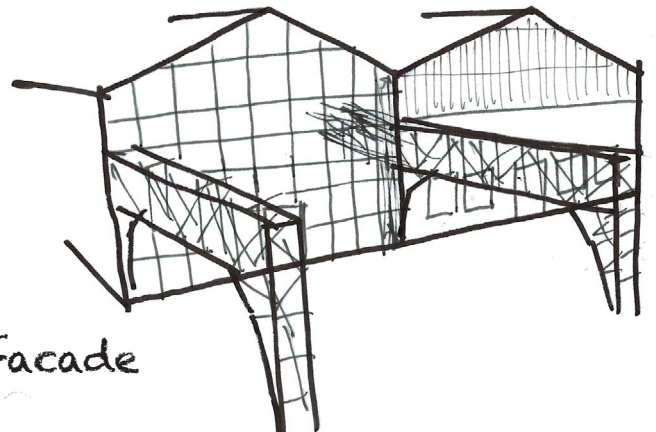
Annexe
and
Windows

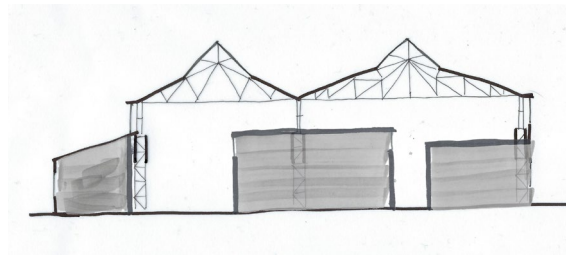
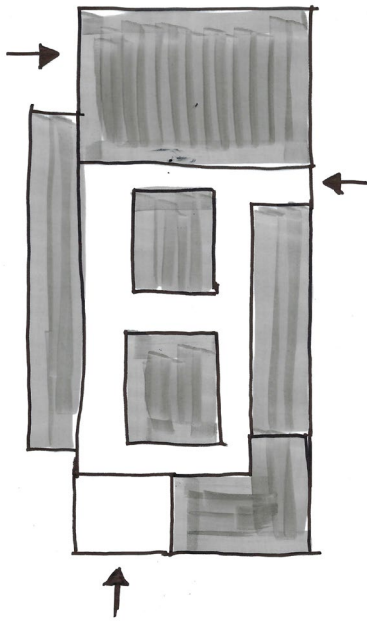


Typology
and
Symmetry



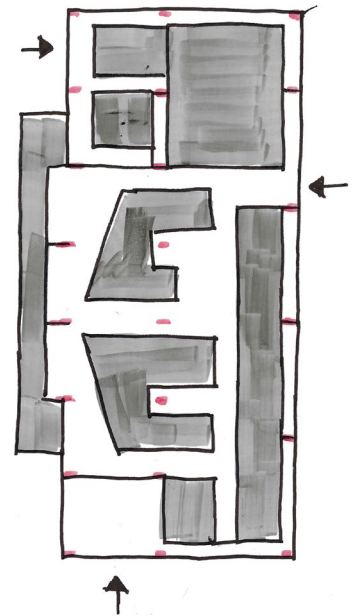
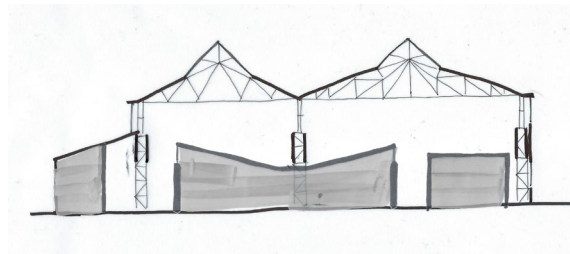
Wooden facade



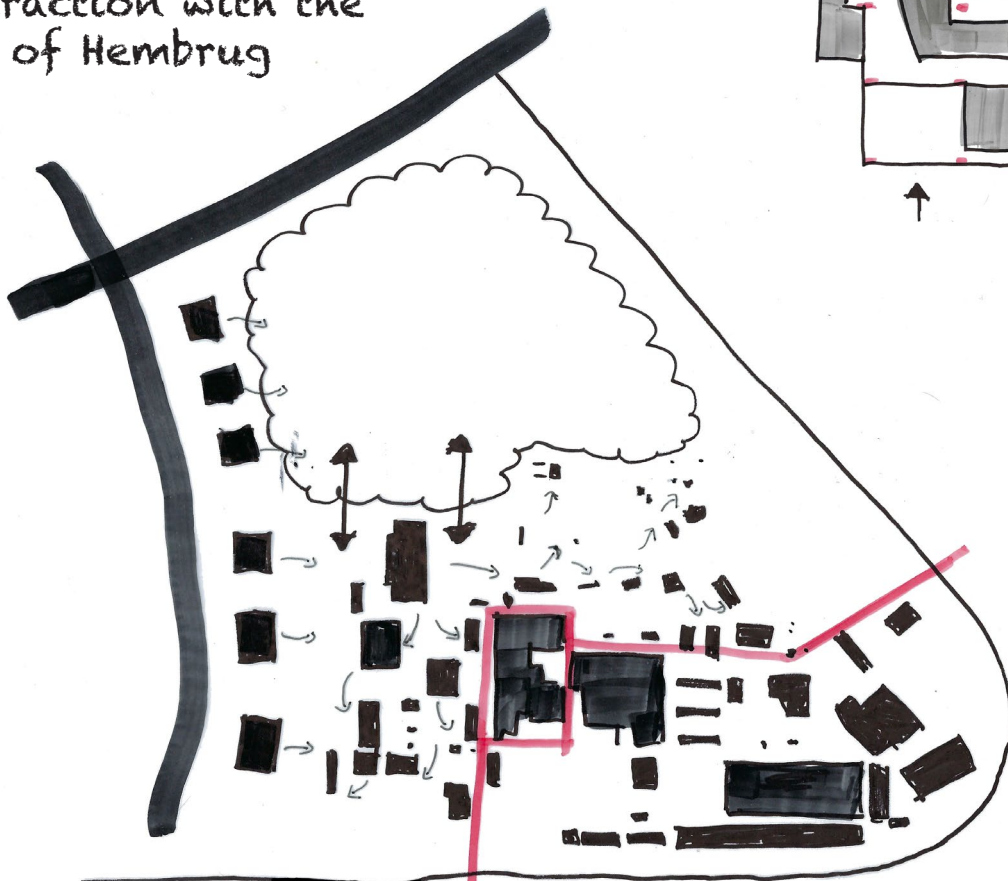


Functional plan

Influence of the construction

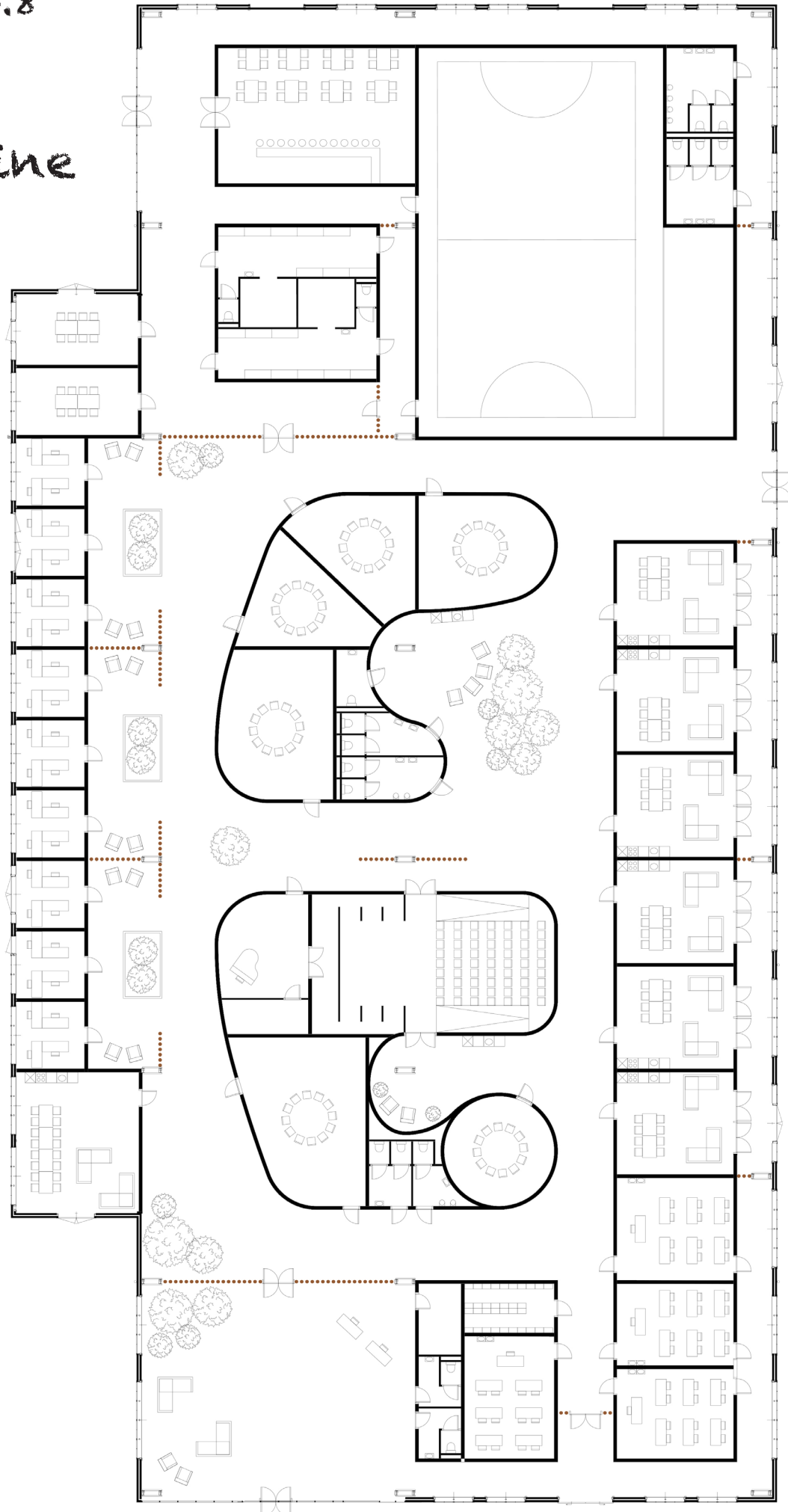


Interaction with the rest of Hembrug

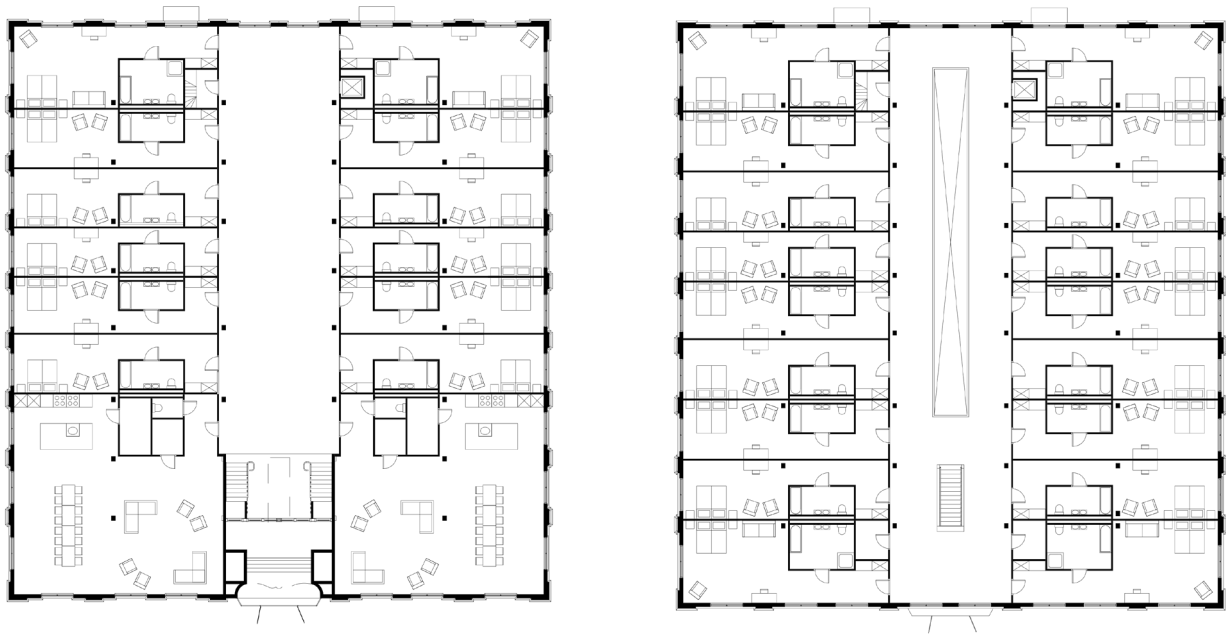


Week 4.8
10-06

Machine hall



Weapon Depot

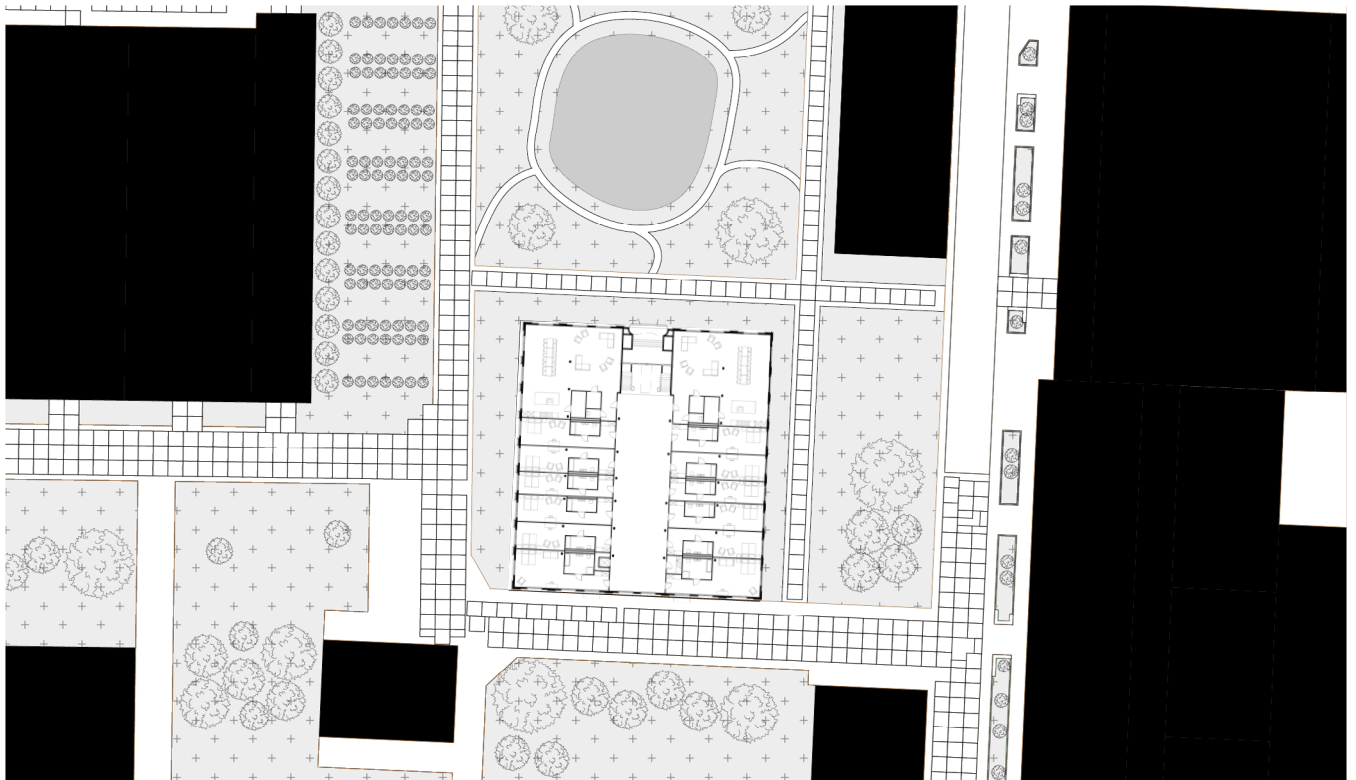


Urban plan

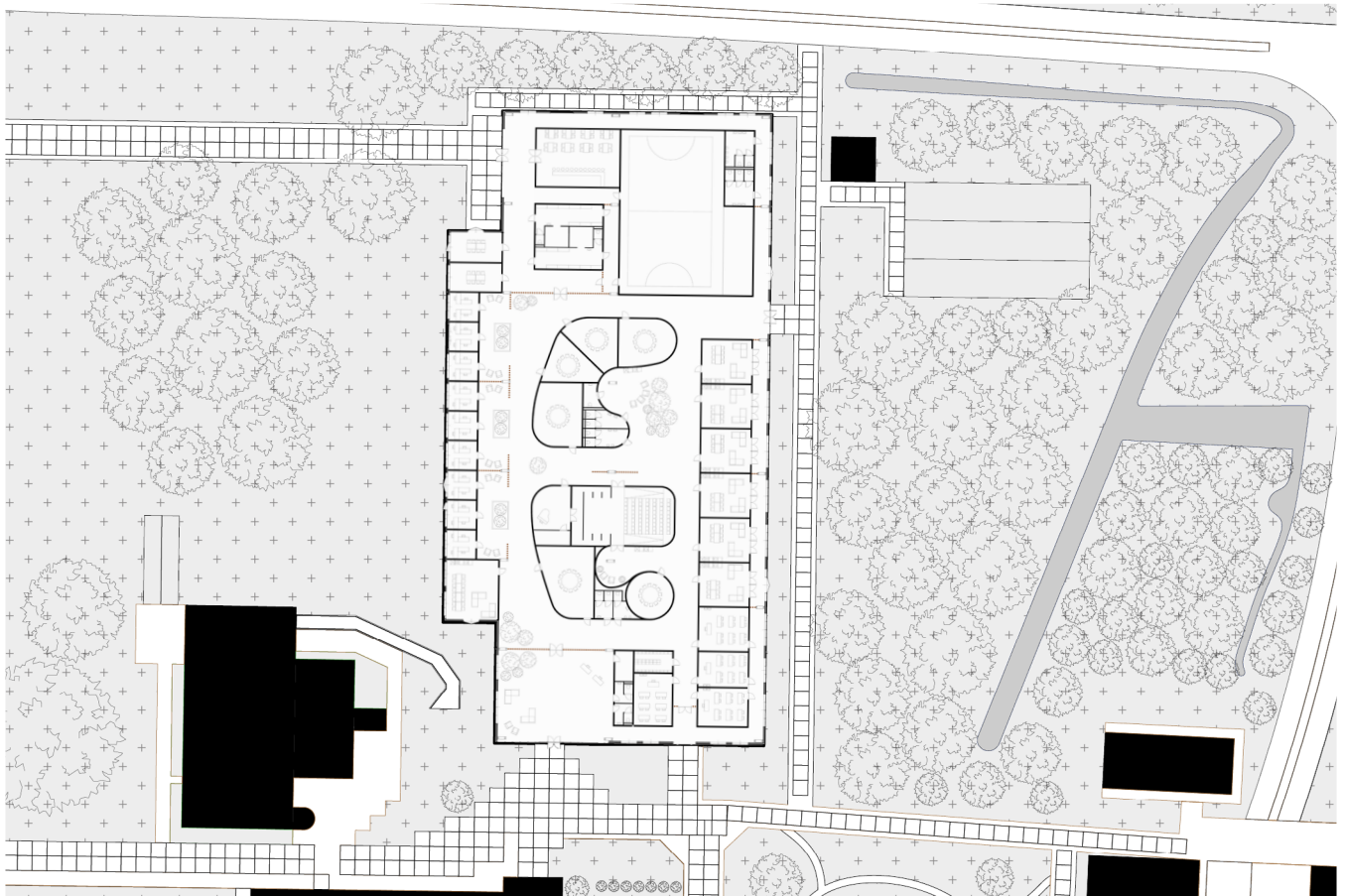


Week 4.9
17-06

Site Weapon Depot



Site Machine Hall





Site model
1:500



P2

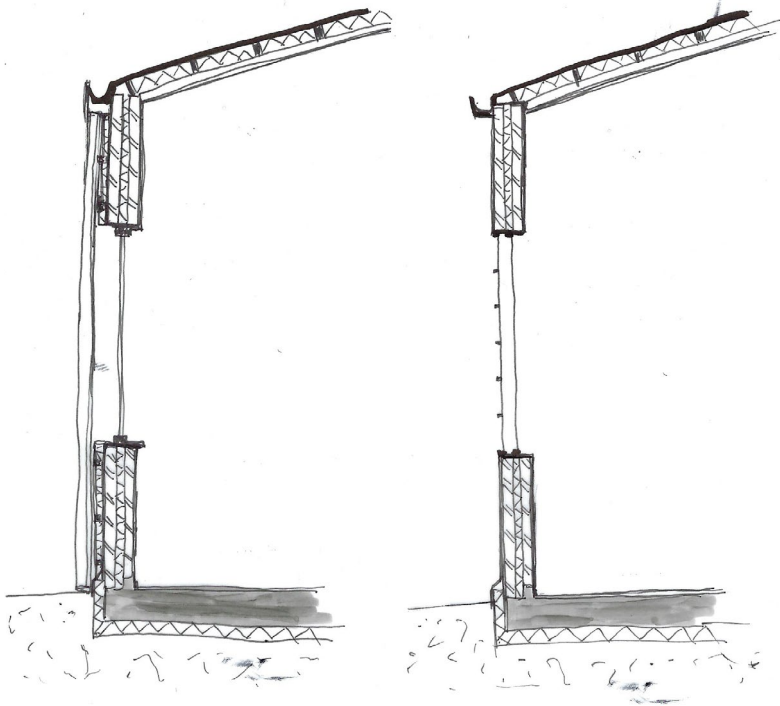
Week 1.1
02-09

Visit to De Hallen in Amsterdam

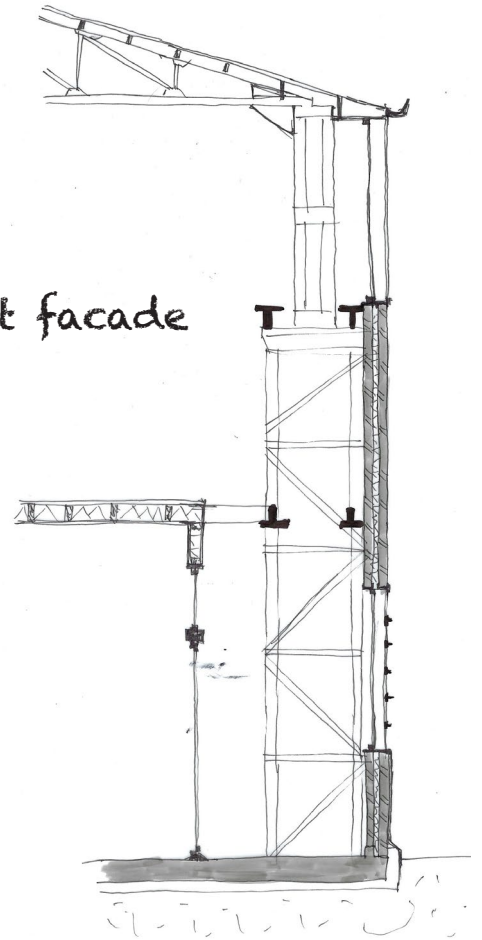


Workshop Detailing

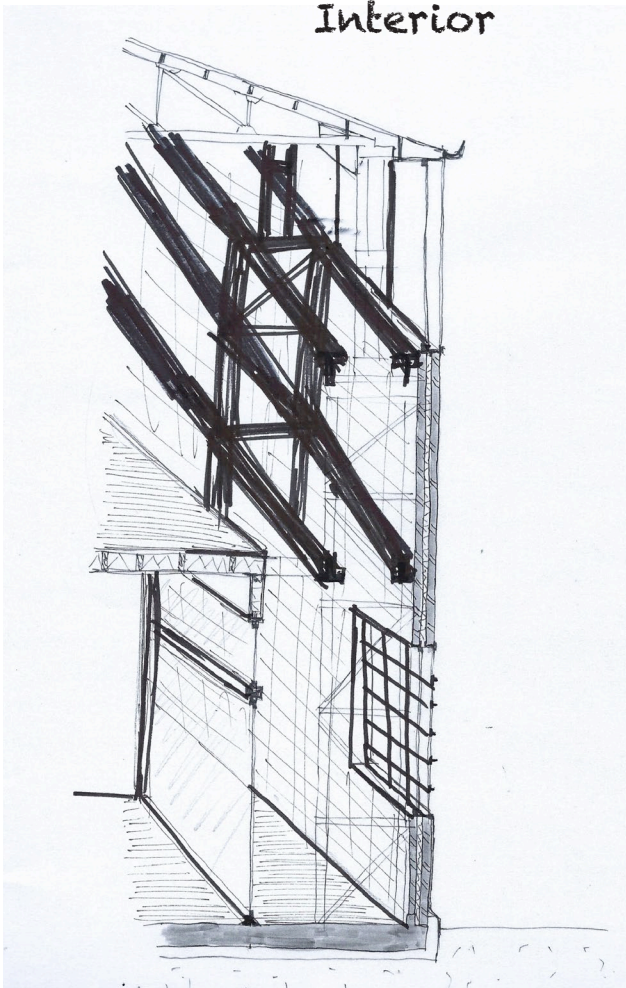
West facade



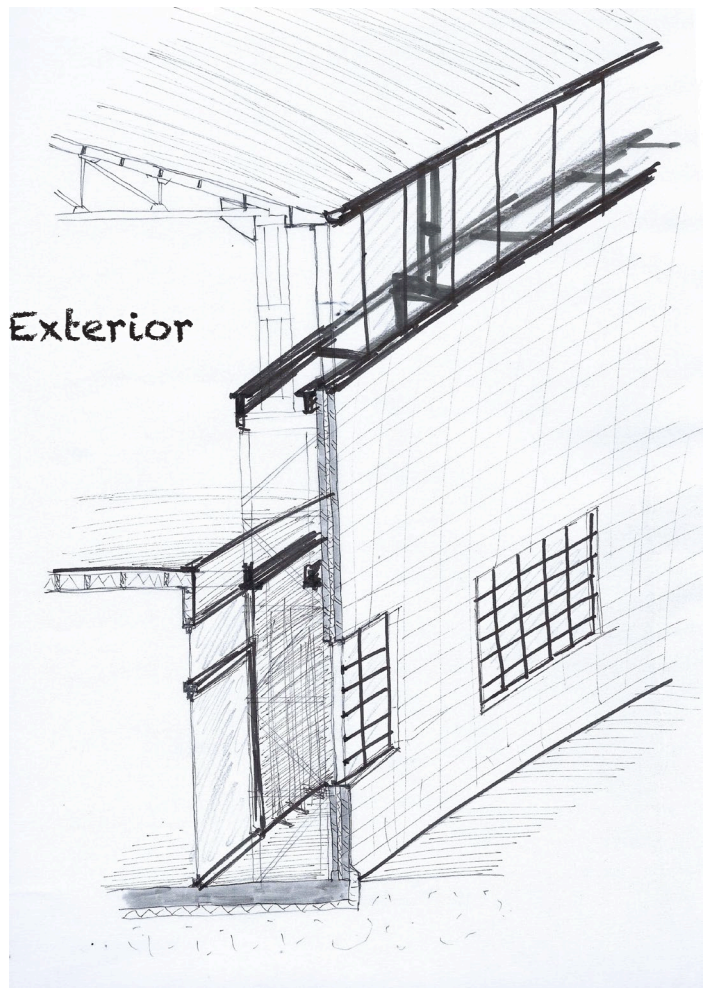
East facade



Interior

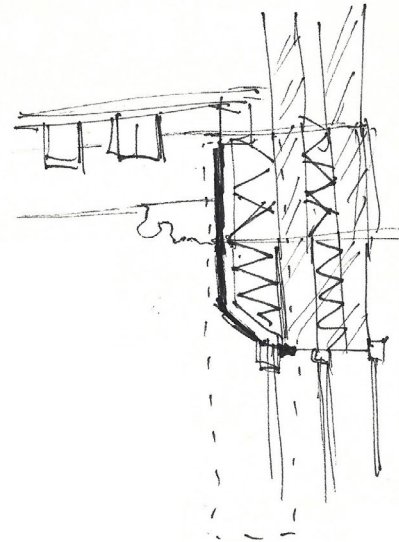
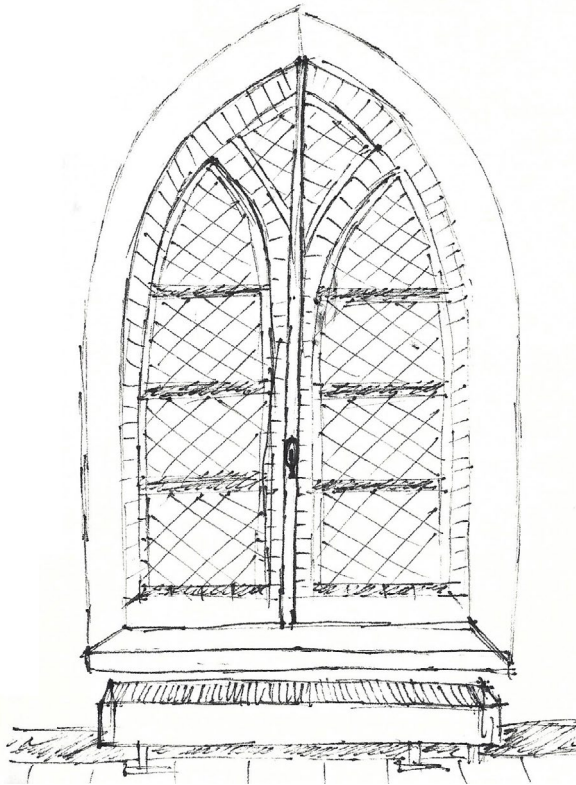


Exterior



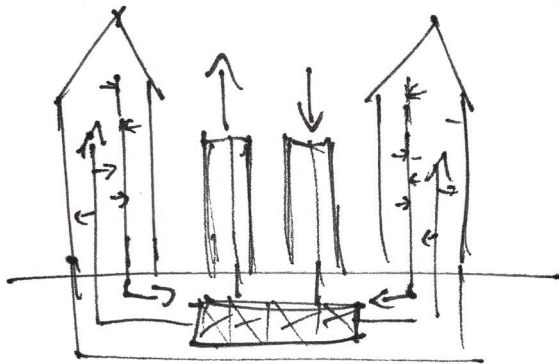
Week 1.2
09-09

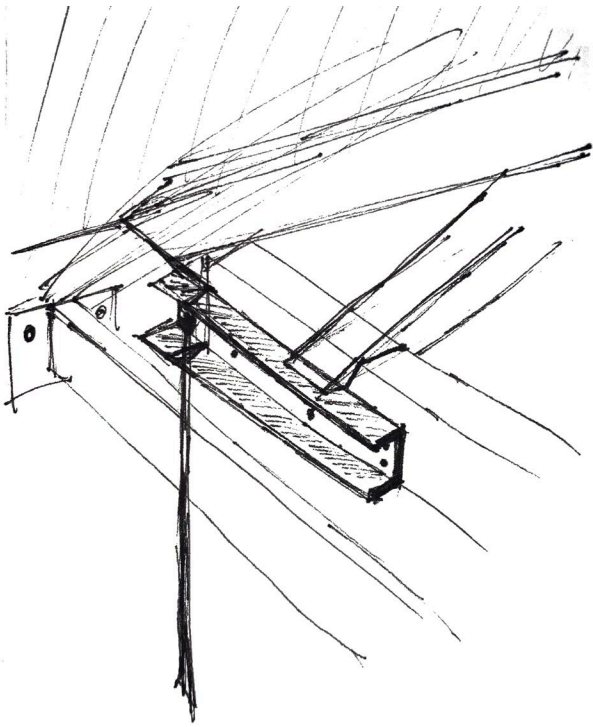
Visit to Janskerkhofcomplex and Letterenbibliotheek



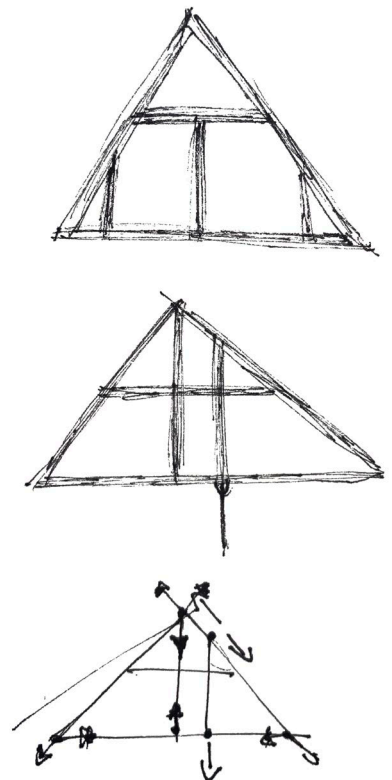
Time layering
old window

Ventilation
concept





Reinforcing
construction



Week 1.3 16-09

how to establish
the human scale?

+1

How to transite the
immense space to human scale?

Very clear set-up
of materials,
consequences and
dilemma's! A general
overview would have
been helpful.

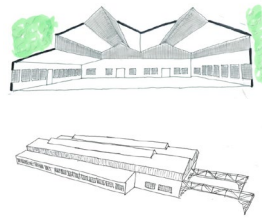
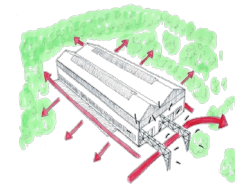
the white and the
green plants/trees
How do you define
the border (or overlap
or blanding)?

Nice
Approach!

1. Make clear:
"Why connect?"
in stead of
contrast?
2. Green, does it also
count for sustainability?
+ and what does it mean?
- what is expression?

GLASS

Value: The buildings are orientated towards all directions with a repeating pattern and a grid.
Problem: The windows don't meet the current requirements for insulation and the glass has to be replaced.
Dilemma: Replace, Raise, Re-use or Redesign?

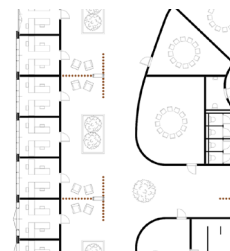


Questions

- How to increase the connection between inside and outside?
- What to do with the steel window frames?
- How does the type of glass relate to privacy?
- How can the skylights be improved?
- How are the openings related to escape routes?
- How is the glass entrance connected to the façade on the horizontal external truss.

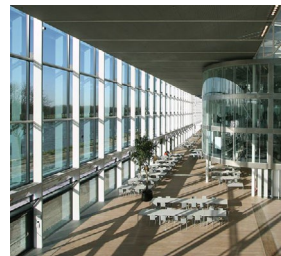
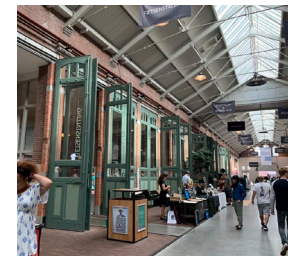
BRICK

Value: The materiality of the buildings in the same style of bricks connects the buildings and creates, despite all the different types of typologies, unity in Hembrug.
Problem: The brick facades don't meet the current requirements for insulation
Dilemma: Inside or Outside?



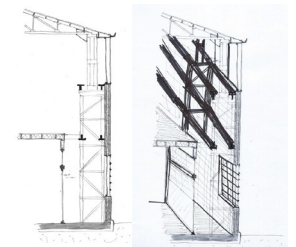
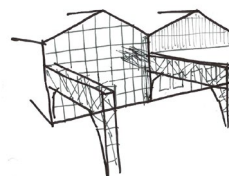
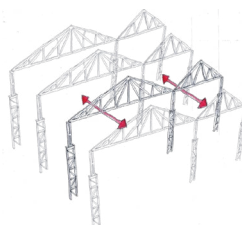
Questions

- How does the insulation of the bricks relate towards the function?
- What is the value of the interior brick?
- How can the climate system be used to decrease the insulation needs?
- How is the HWA integrated in the brick façade?



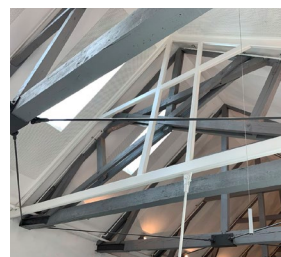
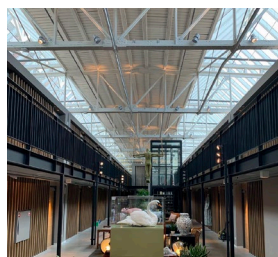
STEEL

Value: The steel construction gives a spatial and historical value to the building.
Problem: The steel construction is not fire resistant and without the crane the horizontal truss is not carrying any loads and is only there for stability.
Dilemma: Useful or useless?



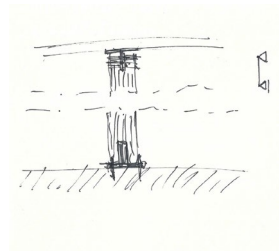
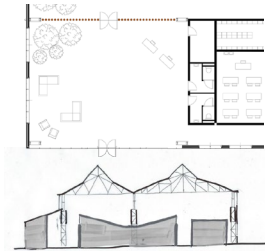
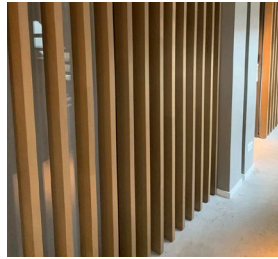
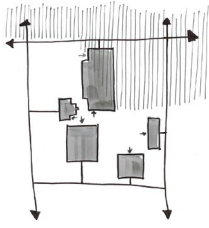
Questions

- What effect does the colour of the fire resistant paint have on the experience of the construction?
- How can the horizontal truss be part in the interior design of the building?
- How to connect the exterior and interior truss with a minimum cold bridge?
- How can the external horizontal truss be used to decrease the sun entry on the glass entrance façade?



WOOD

Value: The openness and freedom is a spatial quality and the natural materials create a peaceful environment between the rooms and create a contrast with the construction to emphasize this more.
Problem: There is lack of human scale in the experience of the space
Dilemma: Height or to high?



Questions

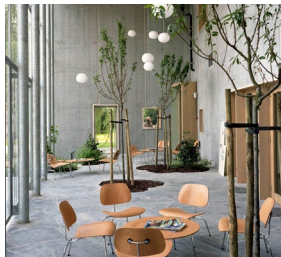
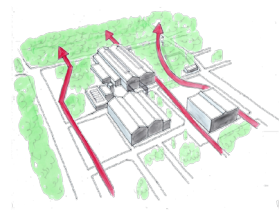
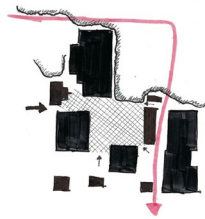
- How to connect the steel construction and the wood?
- How do the shape, dimensions, directions, pattern and materialization of the wooden elements affect the experience of the space?
- How does the appearance of the wood effect the experience?
- How can wooden elements be used to translate structural urban elements in a building? (Building as a city)

Do you think of the dilemmas as opposites or do you think a balance can be achieved?

Why would wood create chaos for the people?

GREEN

Value: Nature is taking over the area and creates a pleasant climate and the forest is a natural backbone for the area.
Problem: To mechanical climatize the whole building a lot of energy is needed.
Dilemma: Greenhouse or Green in house?



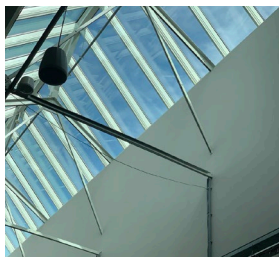
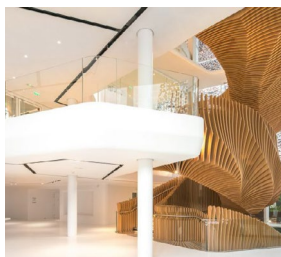
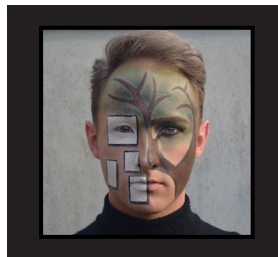
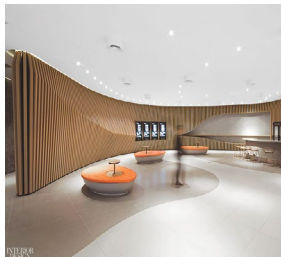
Questions

- Which climate is preferred for the in between space?
- How are the green elements connected to the building?
- How are the green elements be watered?
- Which type of green can be used and fits the location a climate?

You have chosen very elaborate spaces while dealing with this issue. Why?

WHITE

Value: The Hembrug area is a peaceful oases of the chaos of the city where you can find yourself peace and happiness.
Problem: The construction and all the wood can create chaos for the people who will be treated there.
Dilemma: Show or Hide?



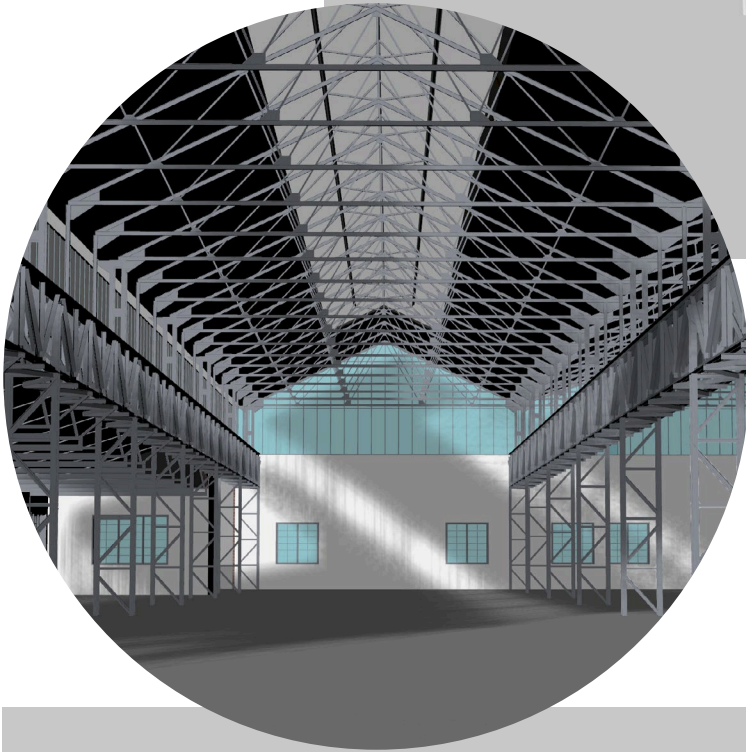
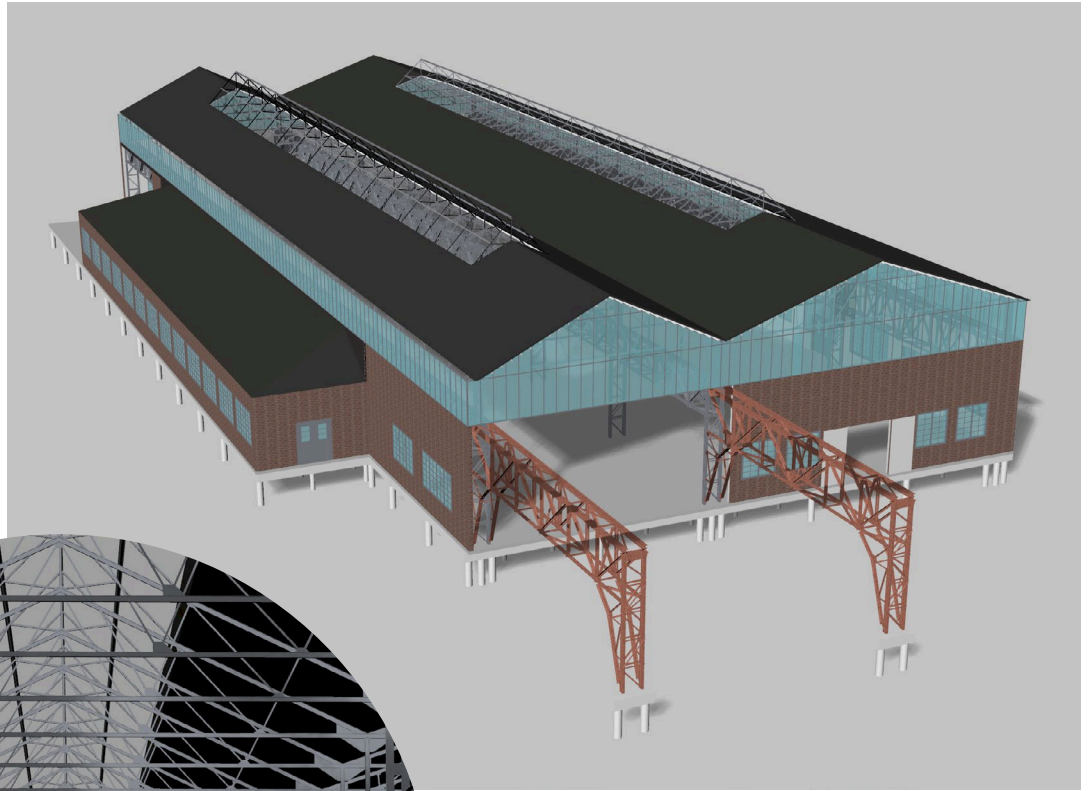
Questions

- How is the counterpart of the steel and wood, the white, materialized?
- How can white be used to hide something and gives peace in the building?
- How is the steel and wood connected with the white?
- What is the experience of the different group session's rooms?

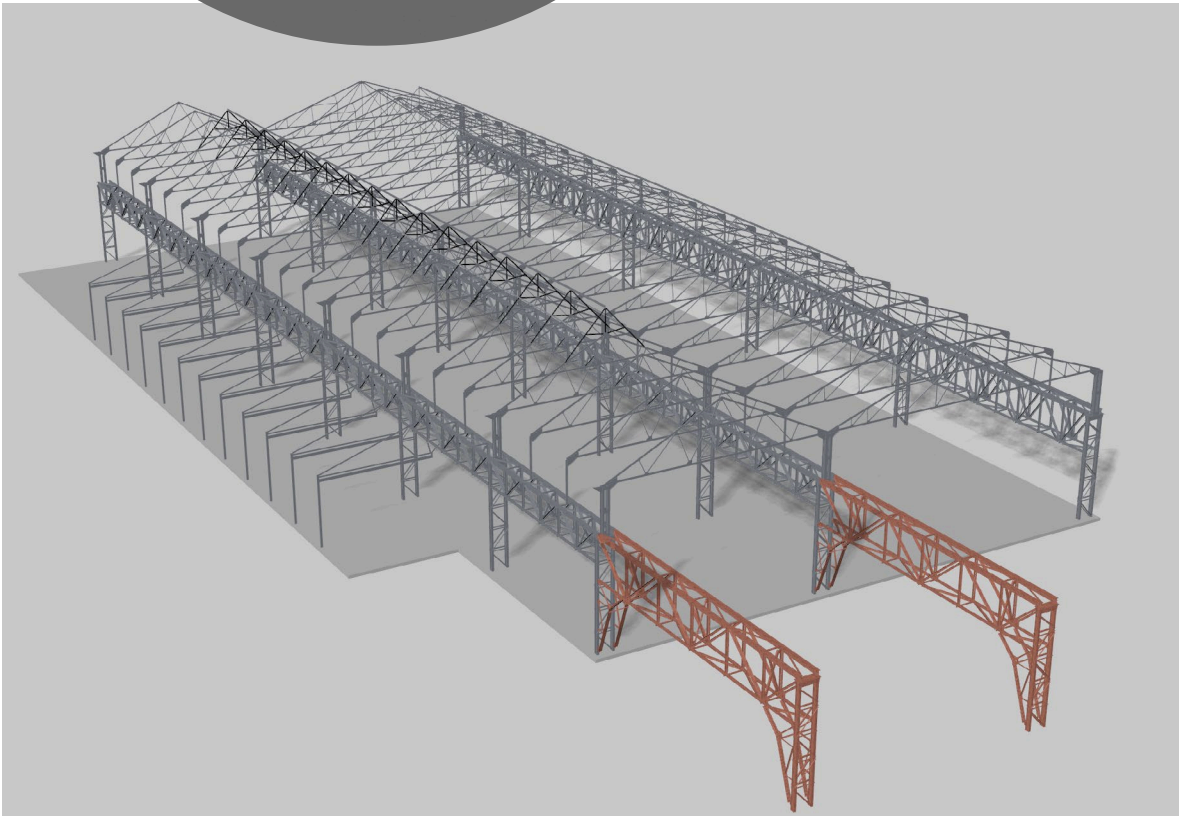
Beautiful and clear presentation. You know what you want and are critical as to how it can work by asking all these questions yourself.

How can the greenery contribute to the spatial experience in the building?

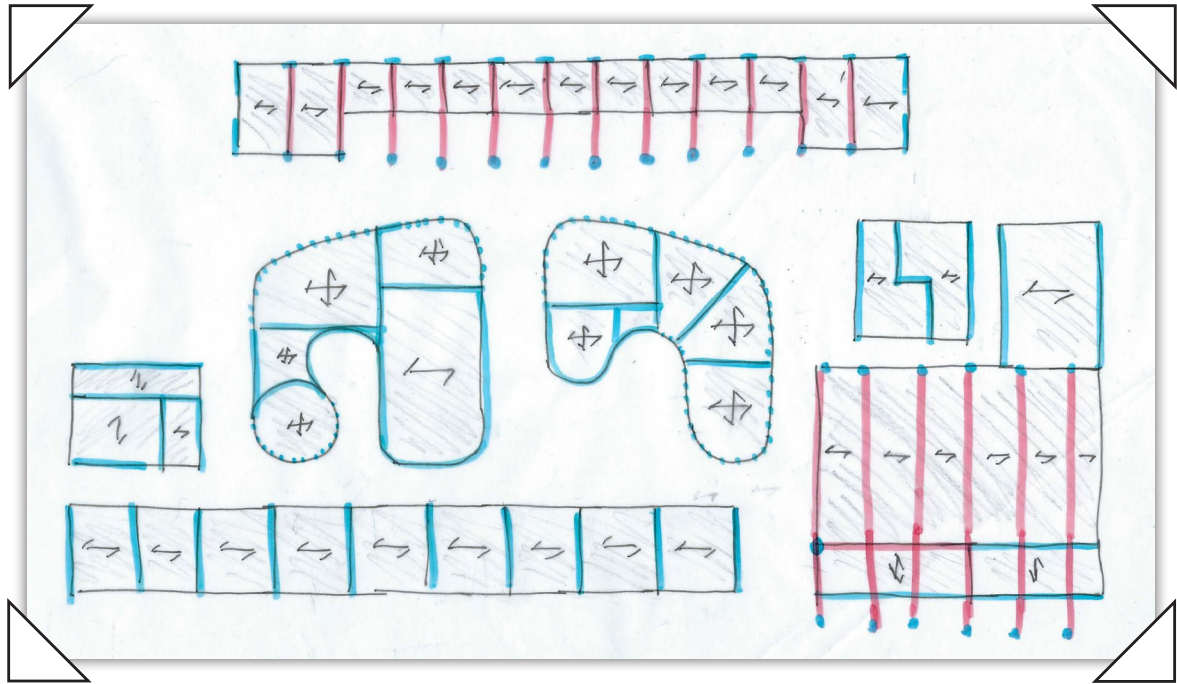
Week 1.4
23-09



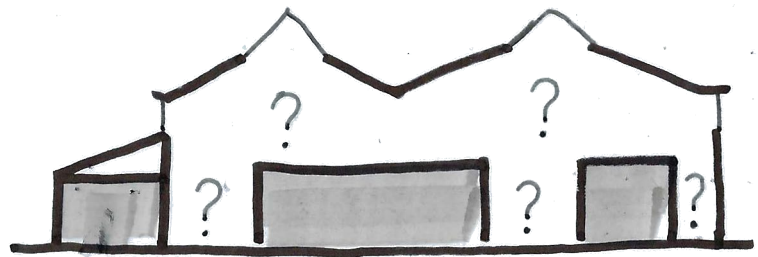
3D base
model



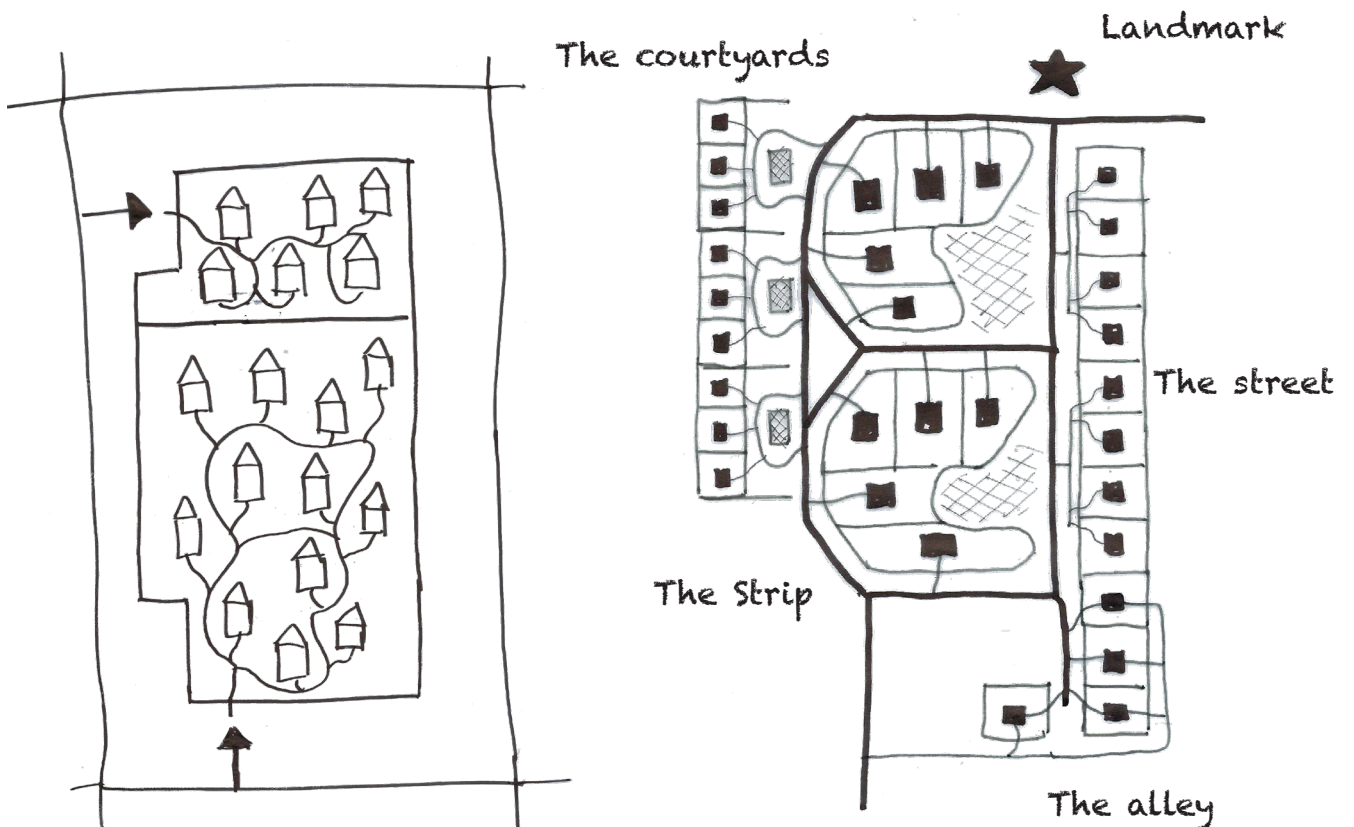
Construction



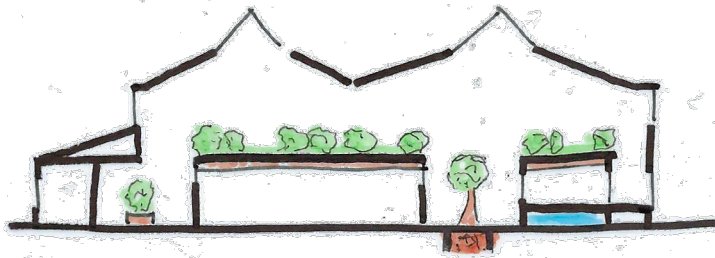
How can the human scale be brought back in the redevelopment of large and open industrial heritage by treating the building as a city?



Building as a neighbourhood

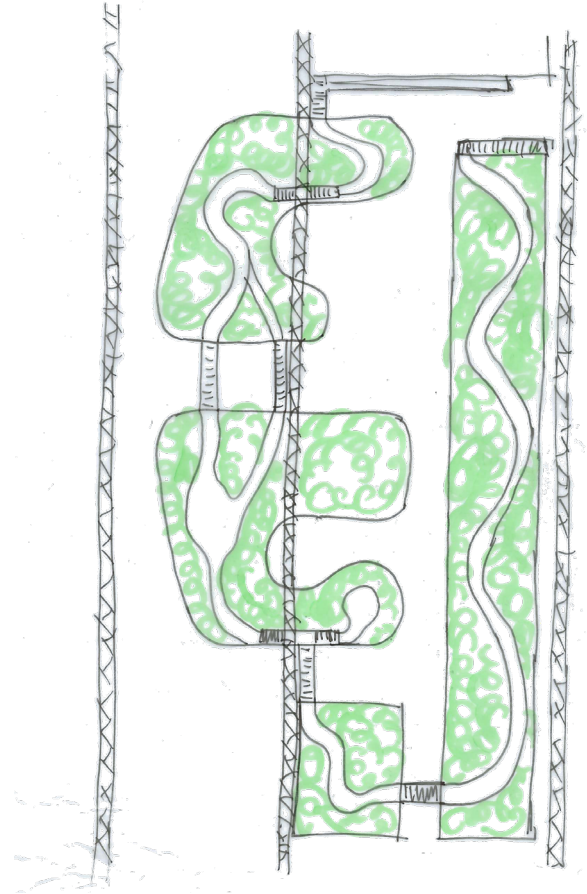


Week 1.5
30-09

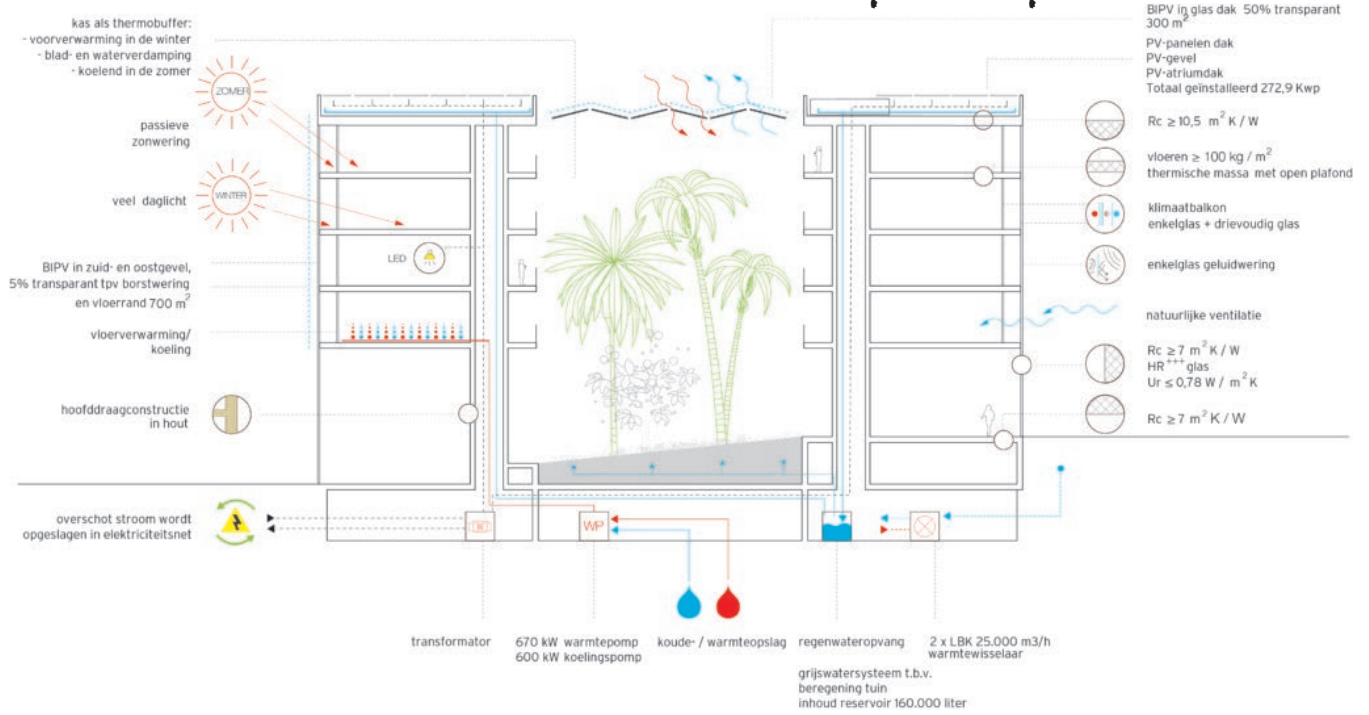


Green roof park

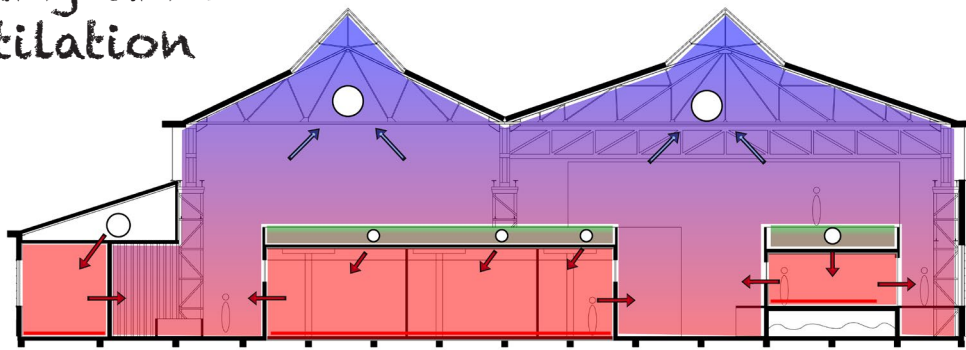
Impressions



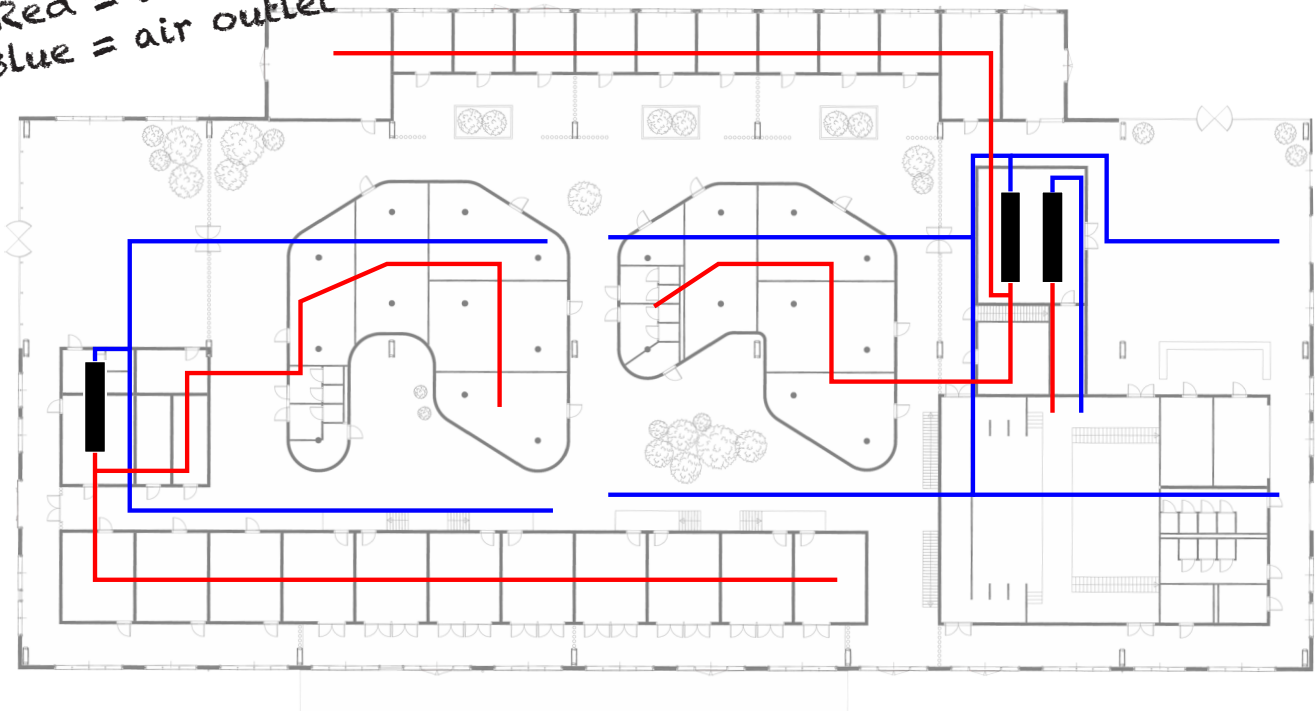
Hotel Jakarta climate principle



Heating and ventilation

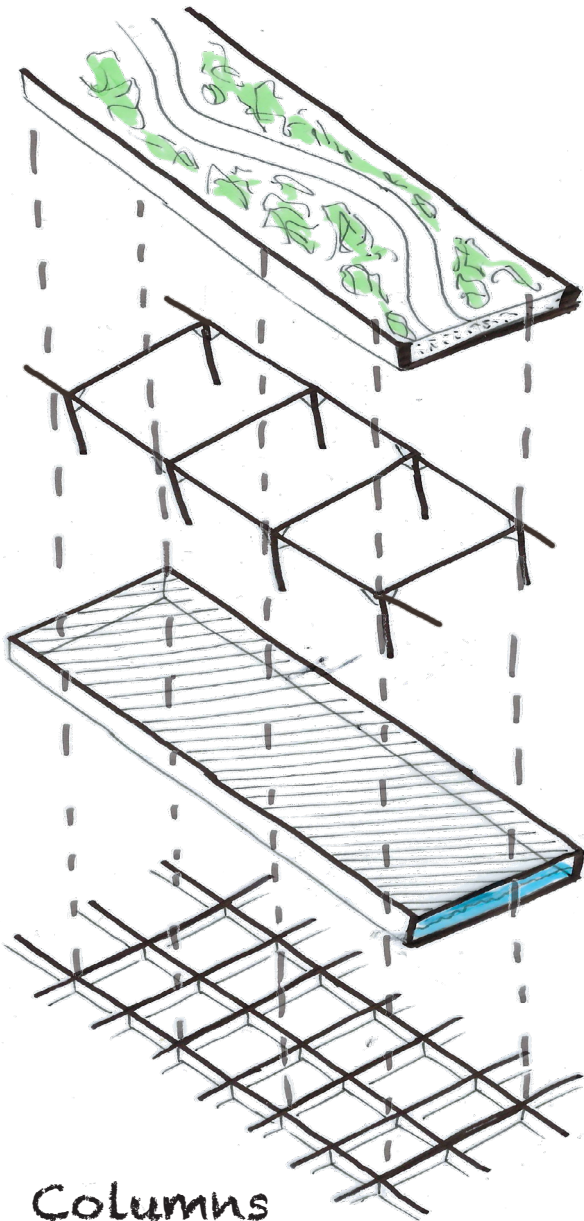


Red = air inlet
 Blue = air outlet



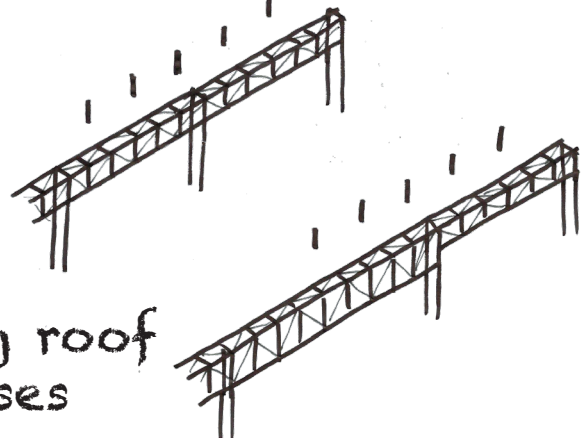
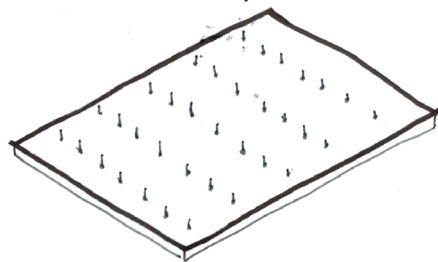
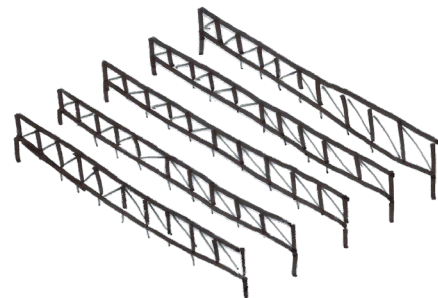
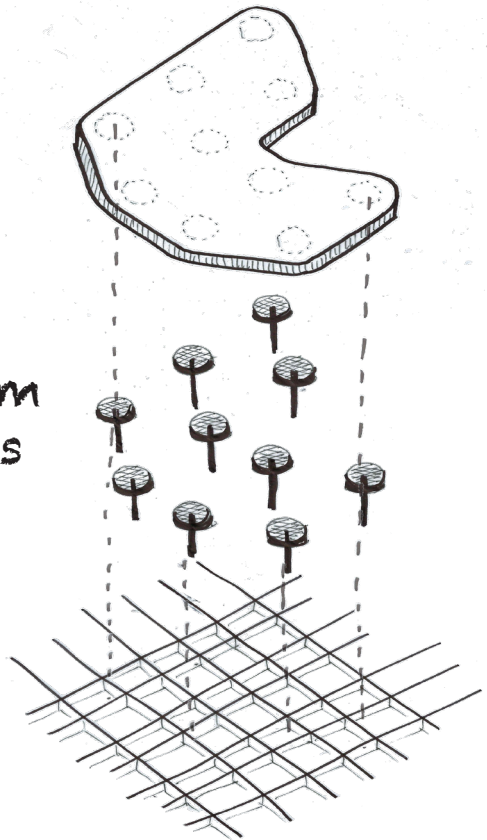
Week 1.6
07-10

Constructions



Columns
and Beams

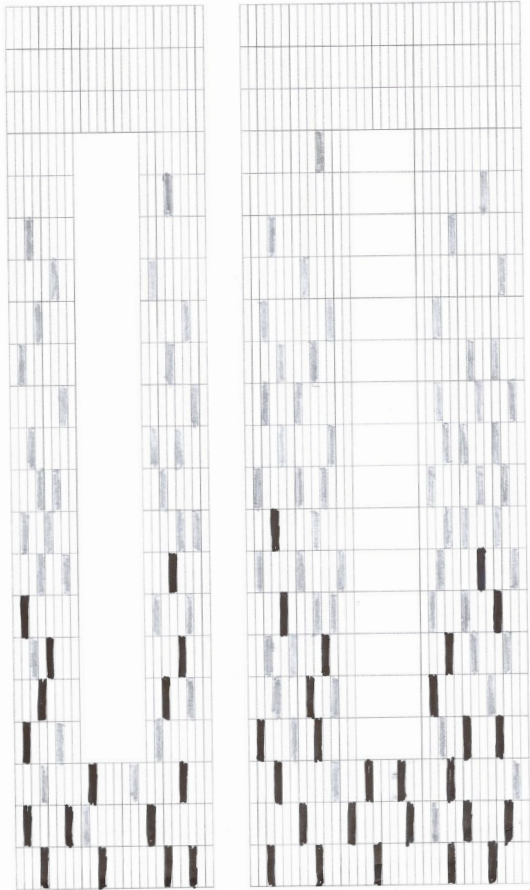
Mushroom
Columns



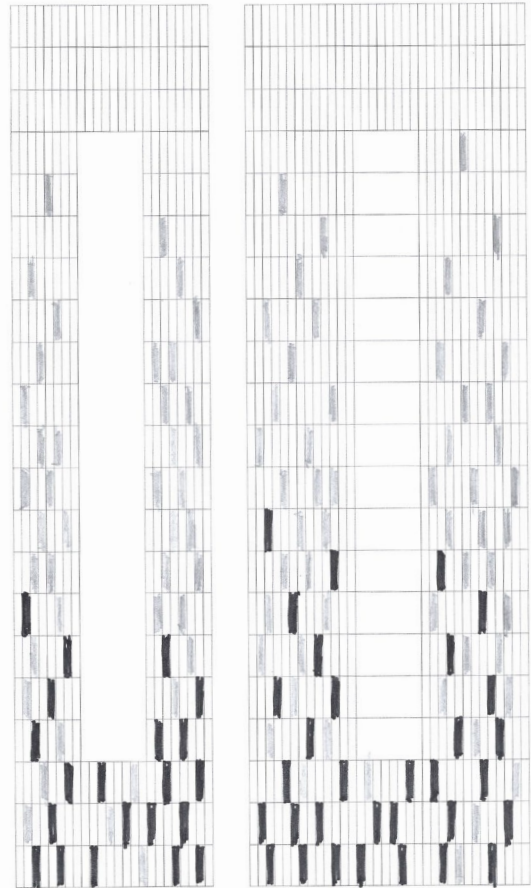
Hanging roof
trusses

Roof pattern research

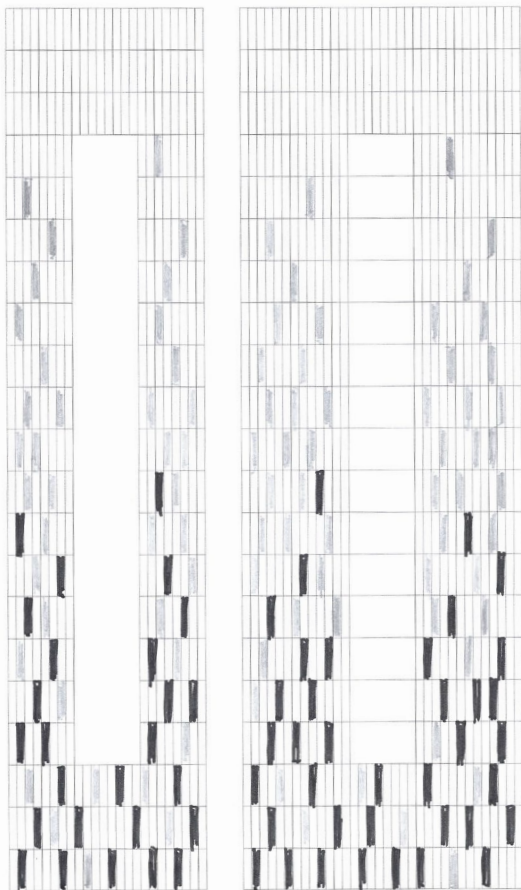
1



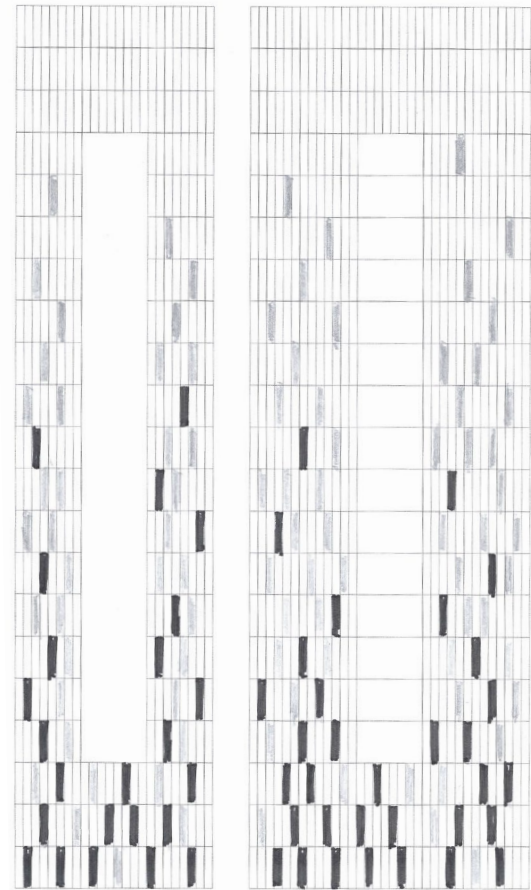
2



3



4

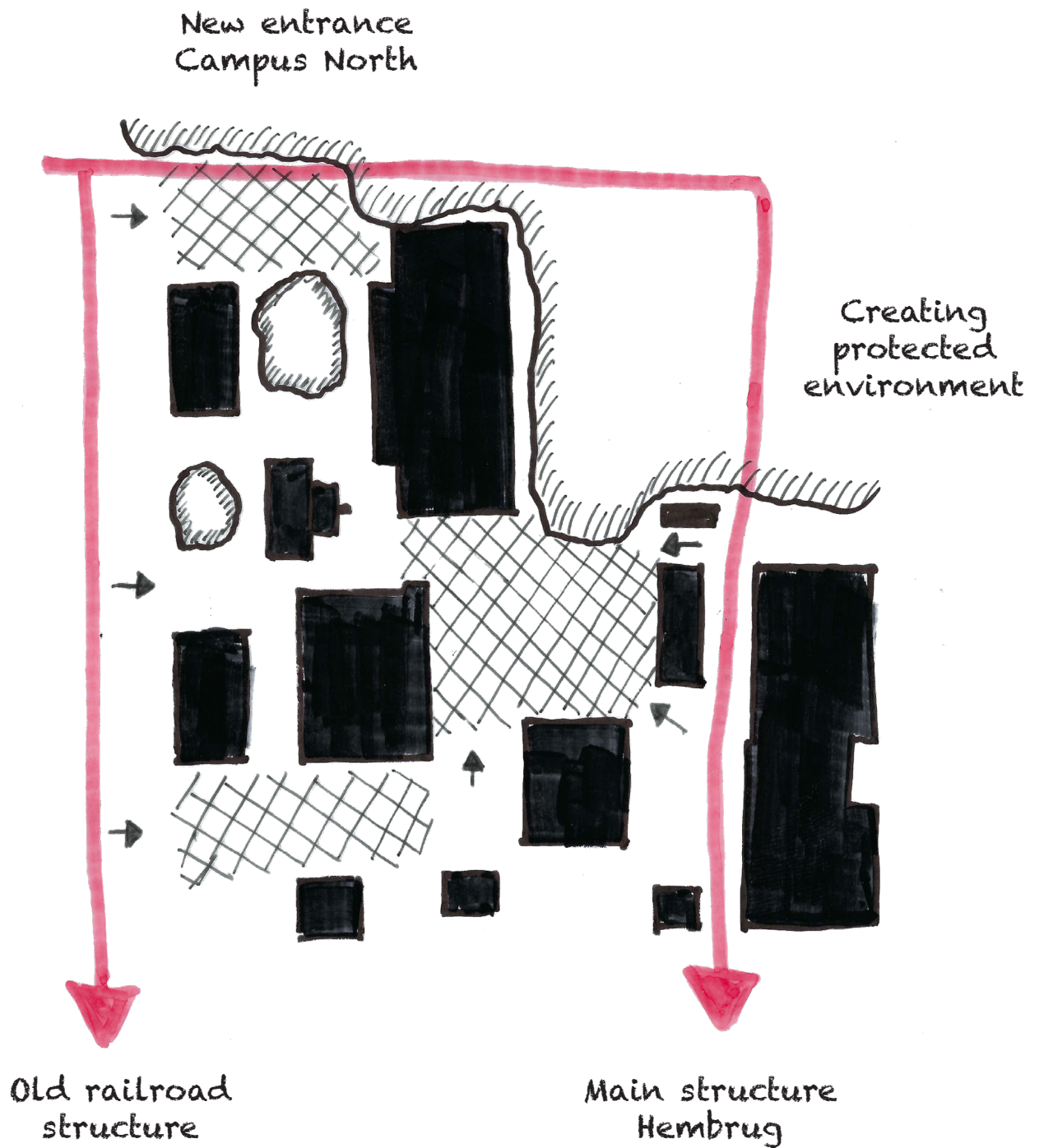


Grey = glass solar panel

Black = clear glass

Week 1.7
14-10

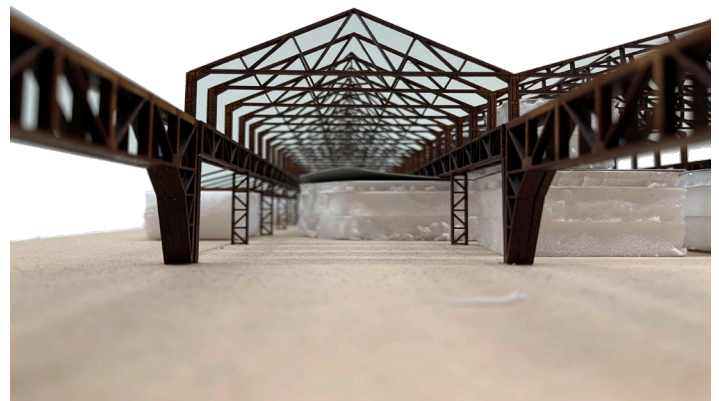
Concept re-thinking



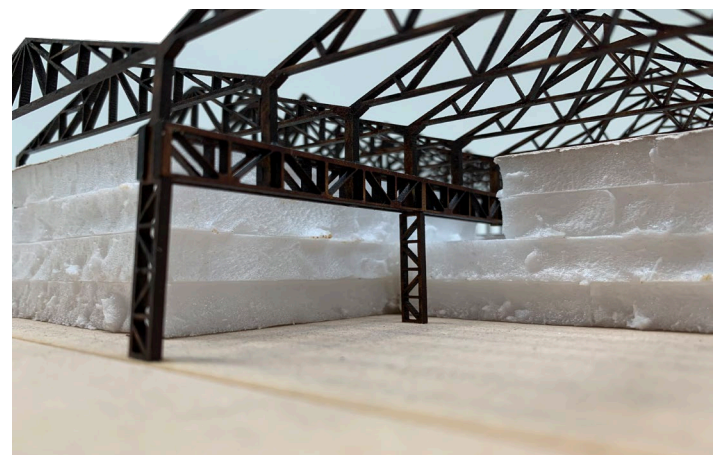
Construction model 1:200



Top view



GGZ Entrance



Theater foyer

Week 1.8
21-10

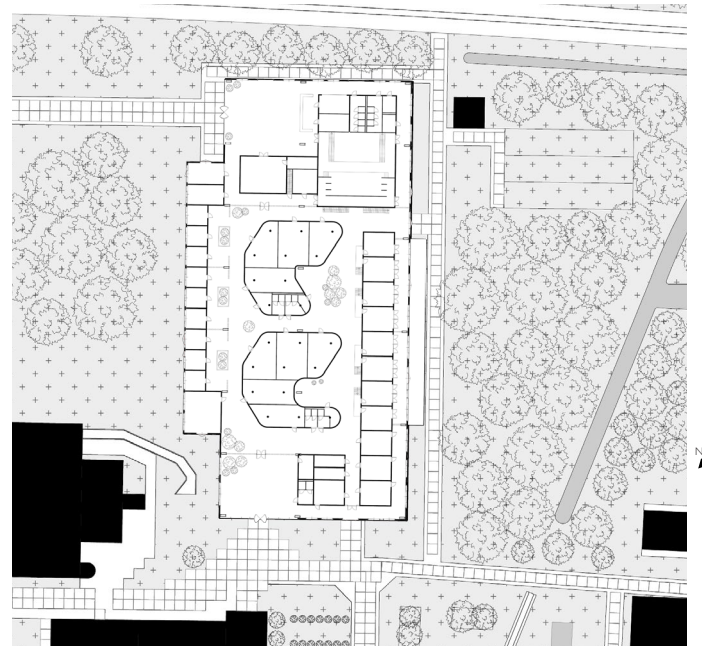
Mental Health Center Hembrug

Revitalizing Hembrug, to revitalize society

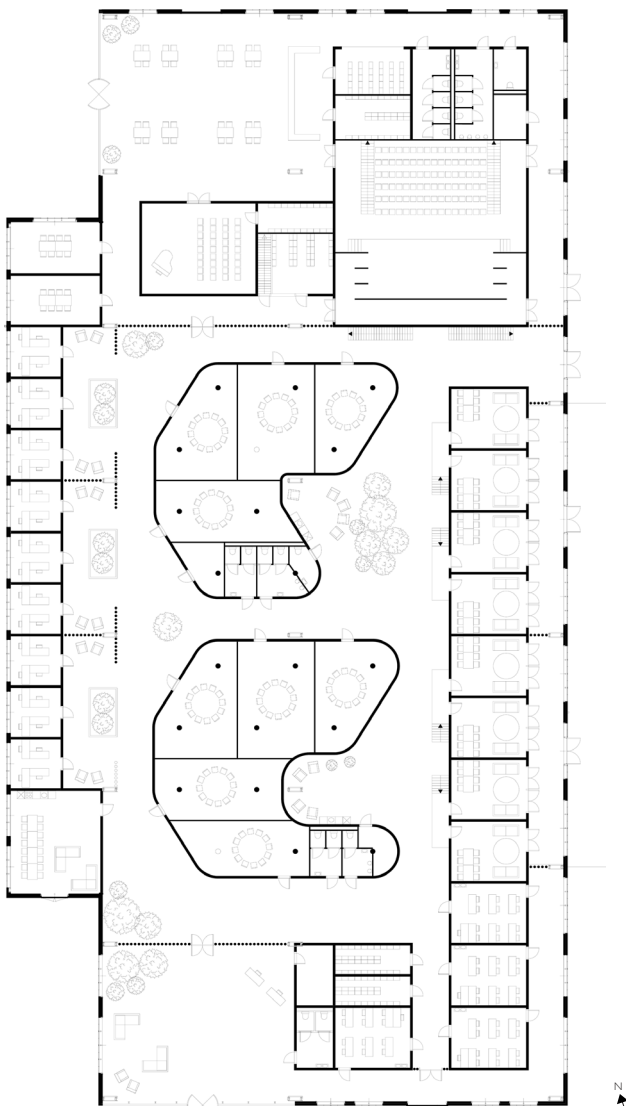
P3 Job van den Berg



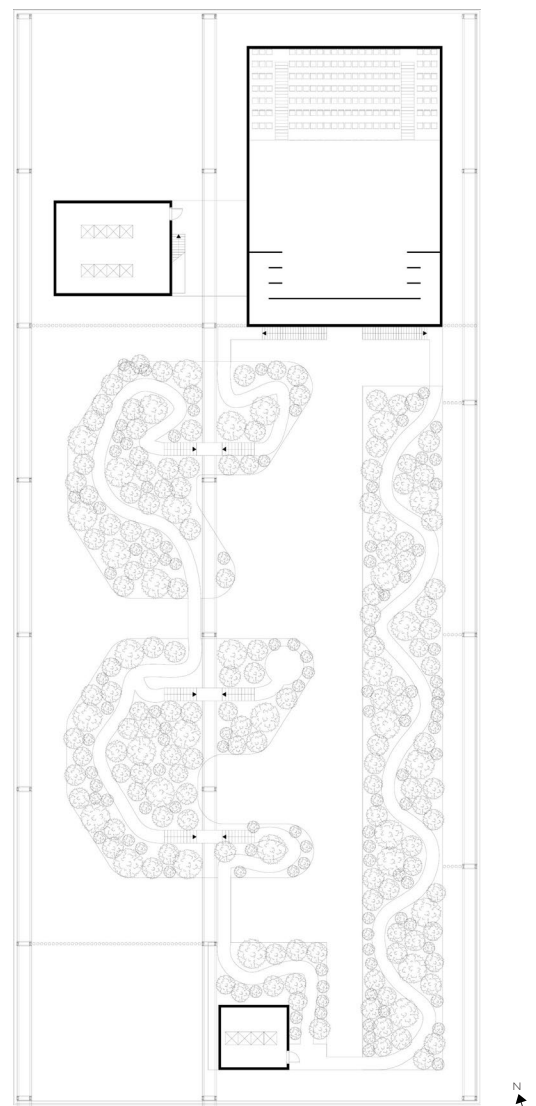
Campus North 1:1000



Machine hall 1:500



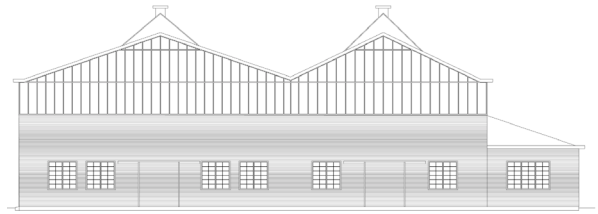
Ground Floor 1:200



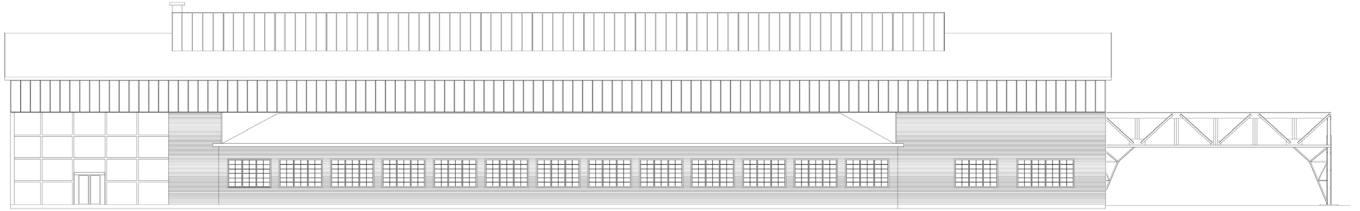
First Floor 1:200



South Facade 1:200



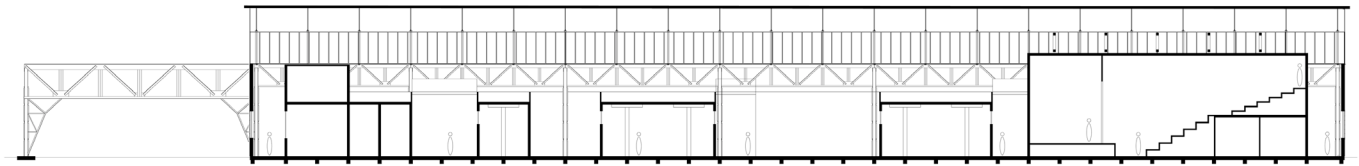
North Facade 1:200



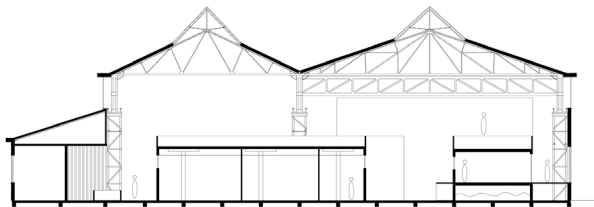
West Facade 1:200



East Facade 1:200

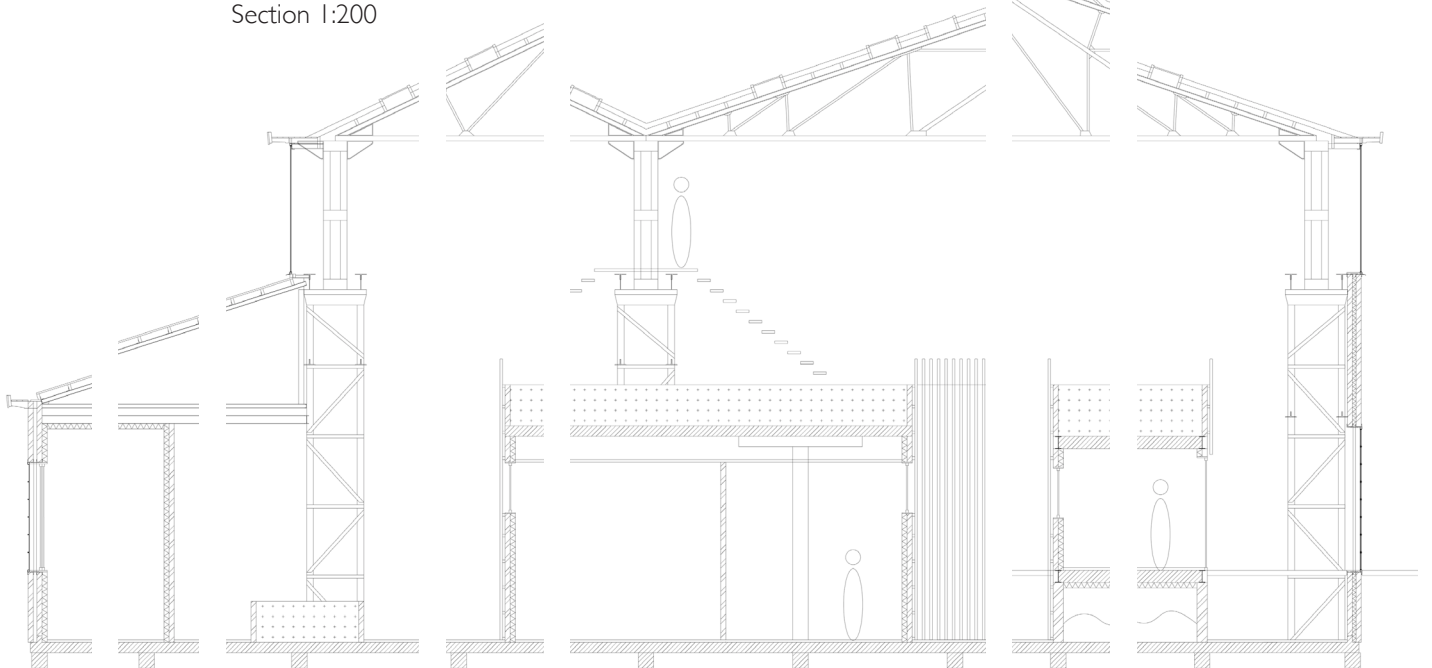


Section 1:200



Section 1:200

P3



Section 1:50

Week 1.9
28-10

Reflection Ideas first directions

Aspect 1

The relationship between research and design.

- Research and design is for me a continuous process of concretizing and abstracting. You have to dive in the research to give a concrete answer on a design question. With these findings you zoom out again and reflect on the bigger picture. I want to use the information on my view on this in my AC3 paper and how this is used in my graduation project.

Aspect 2

The relationship between the graduation topic, the studio heritage, the master track Architecture, and the master program Architecture, Urbanism and Building Science

- Beside the relationship between each layer I want to elaborate on the relationship between Architecture and Heritage, because in this perspective you can make from heritage architecture, but how can architecture, urbanism or building technology become Heritage? Is this organization structure a pyramid or a circle?

Aspect 3

Elaboration on research method and approach chosen by the student in relation to the graduation studio methodical line of inquiry, reflecting thereby upon the scientific relevance of the work.

- This was the subject of my research method thesis. We used the CV Matrix to find the values but how can cultural values be addressed? During my research I discovered that a combination is needed of both a narrative and materialization. They don't tell both half of the story but they have to be combined to understand the whole picture. To do this, a combination of visualization (pictures, drawing or better the actual thing, because the other two can be helpful to highlight and see the object through a filter but you will always have a kind of data loss) and words is needed. To have value, the object has to have a narrative and this narrative has to become acquainted in a way by the observer.

Aspect 4

Elaboration on the relationship between the graduation project and the wider social, professional and scientific framework, touching upon the transferability of the project results.

- With a surplus of vacant industrial buildings the re-use of these buildings is a hot topic these days. We don't live in a time anymore where we can demolish with no reason and build a new suitable building on the same place. We need to find smart solutions to deal with these buildings in the form of re-use, redevelop and redesign. Most of these massive industrial buildings are missing the human scale. The results of my research on this can help architects in the future with the transformation of large industrial buildings. How can a building that is made for big machines be transformed to be made for people.

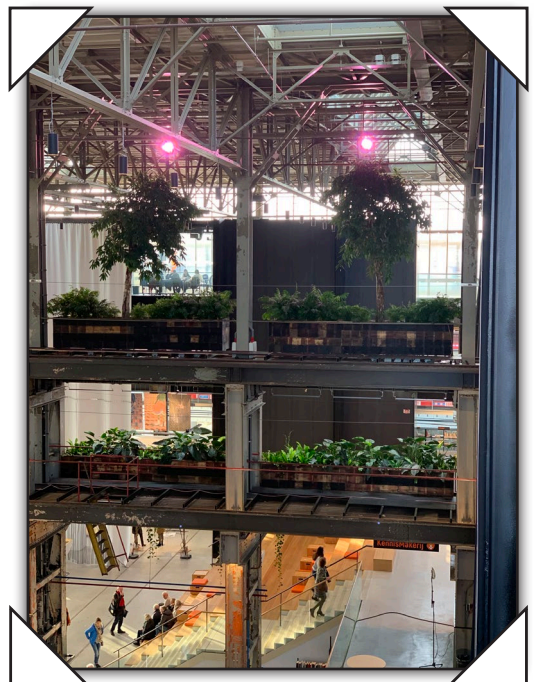
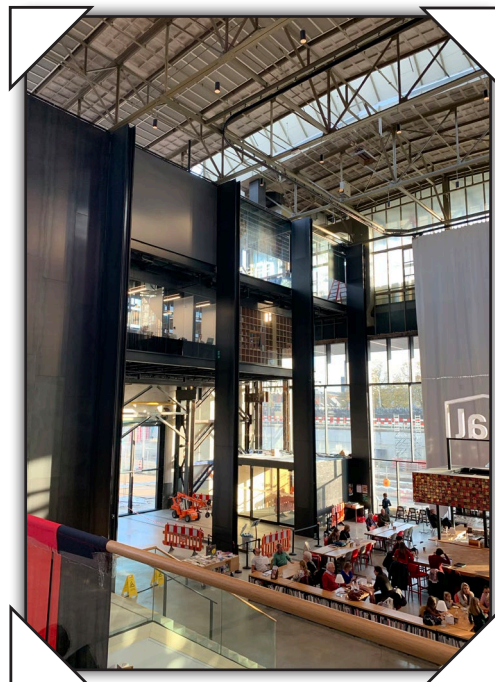
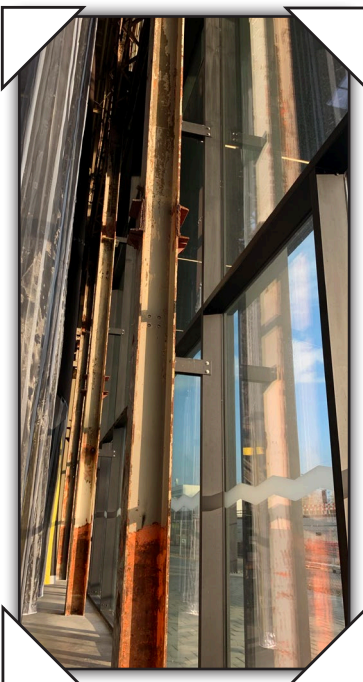
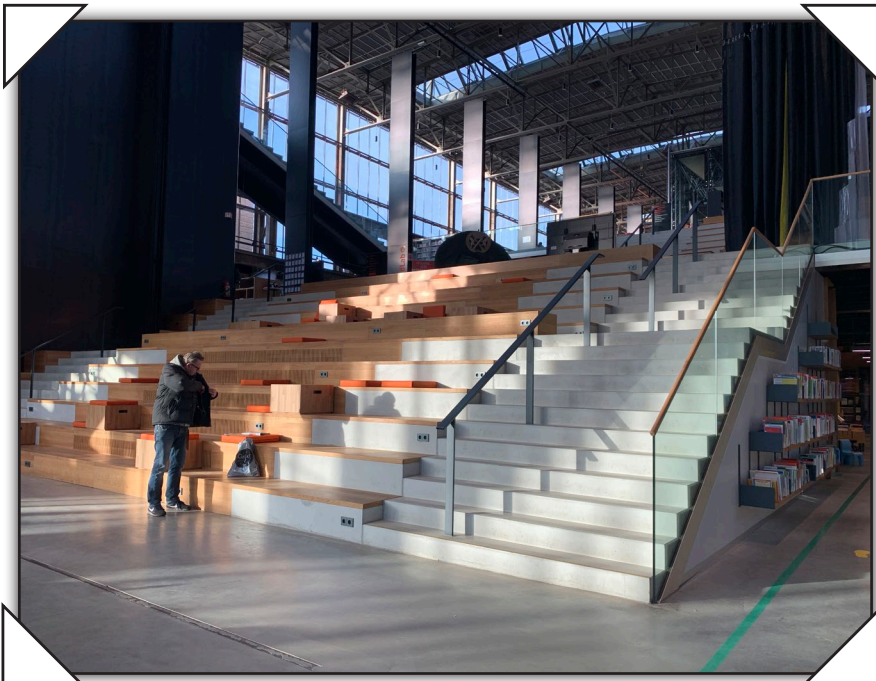
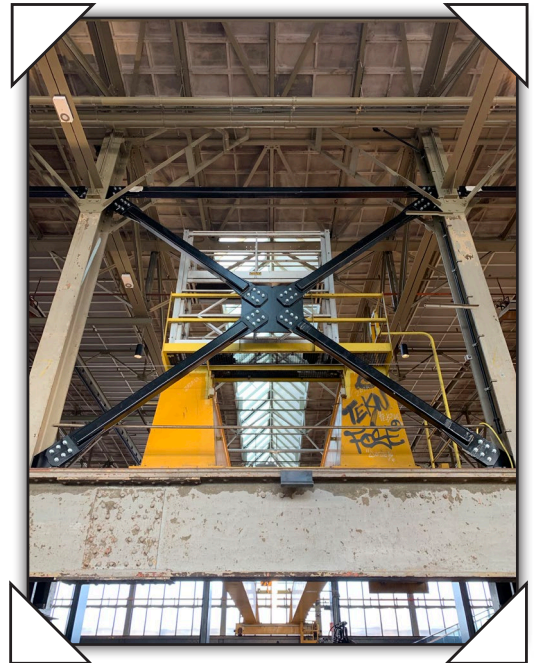
Aspect 5

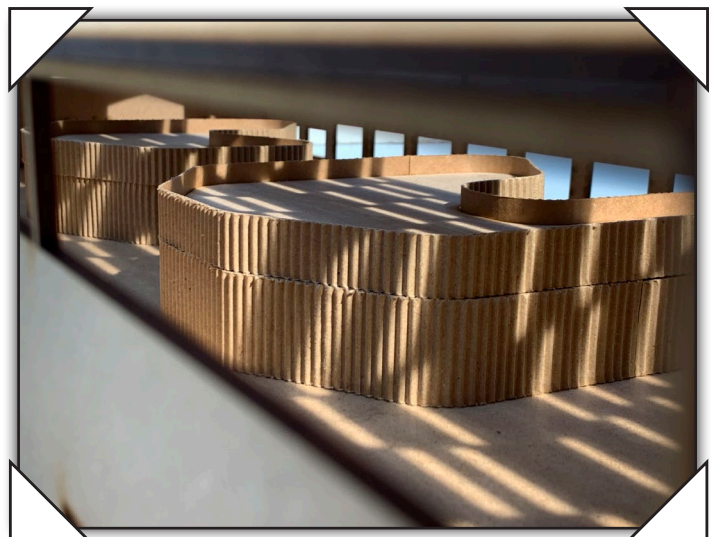
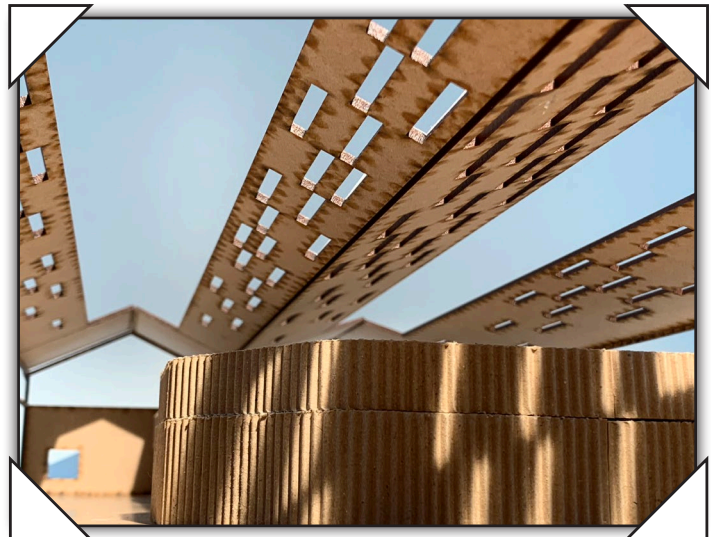
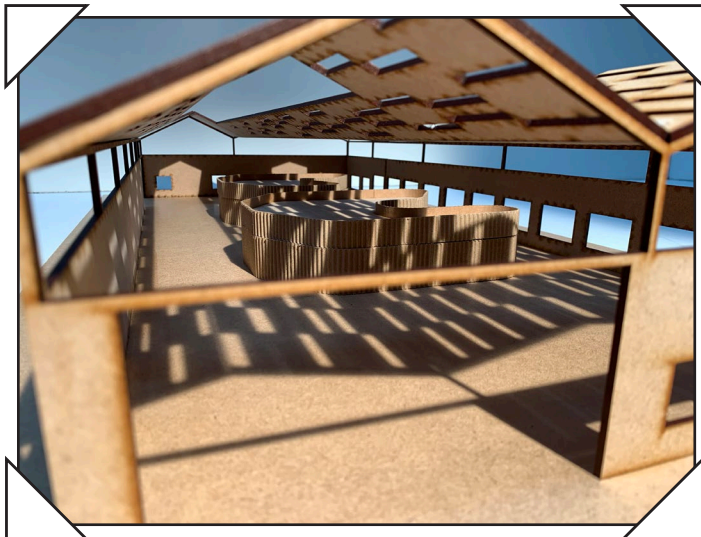
Discuss the ethical issues and dilemmas you may have encountered in (i) doing the research, (ii, if applicable) elaborating the design and (iii) potential applications of the results in practice.

- With the use of the CV Matric in the research you will come across conflicting values. Because these values are qualitative and not quantitative to rank these values is quite hard. The researcher has to compare these values and organize them in an ethical way and argue why one value is more important than the other.
- In the design you have to put yourself on the edge between what is the tolerance of change without losing its value. Because in my opinion a building can have a very high value, without a function it is worthless. Buildings are made to be used and not to just stand there and be pretty. We as architects can better make smart interventions in the original design if the outcome becomes a useable building.
- In the application of the results in practice, the results can help to make the ethical decision between demolishing and re-use because the results are showing the possibilities and opportunities.

Week 1.10
04-11

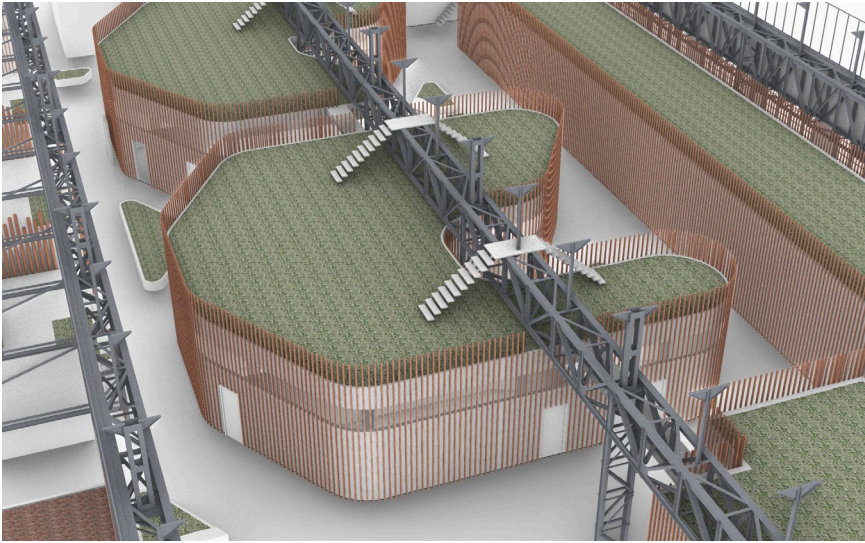
Visit to the Lockhall in Tilburg





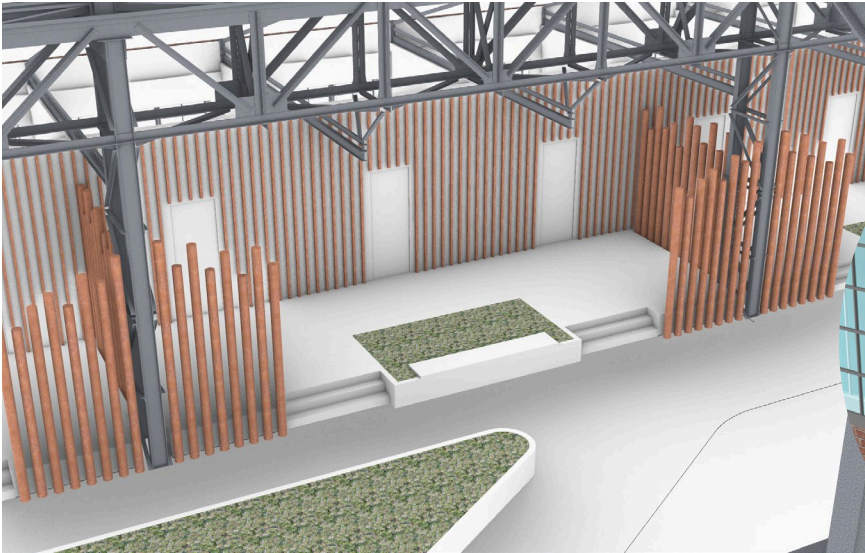
Roof intervention
daylight model

Week 2.1
11-11

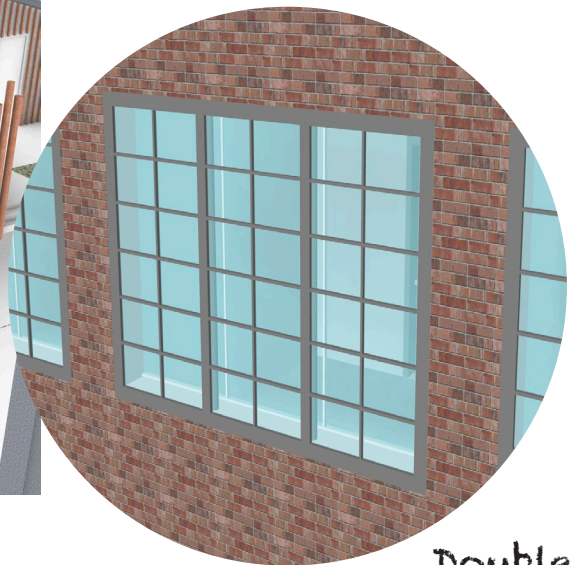


Therapy rooms

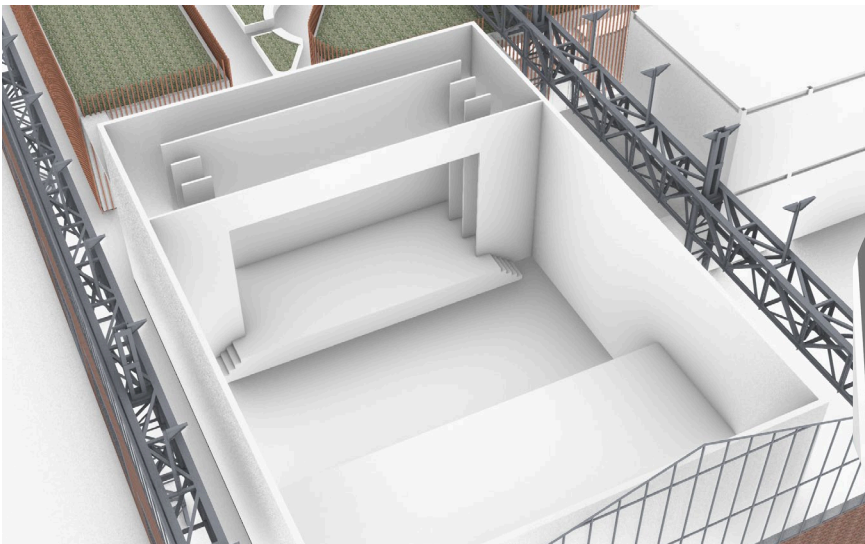
3d Model
progress



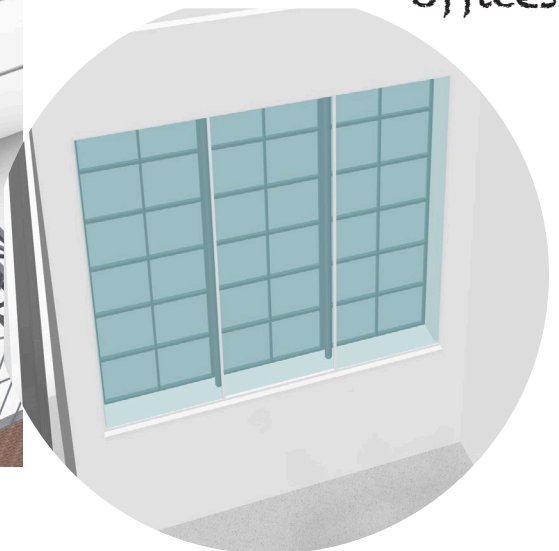
Waiting areas offices



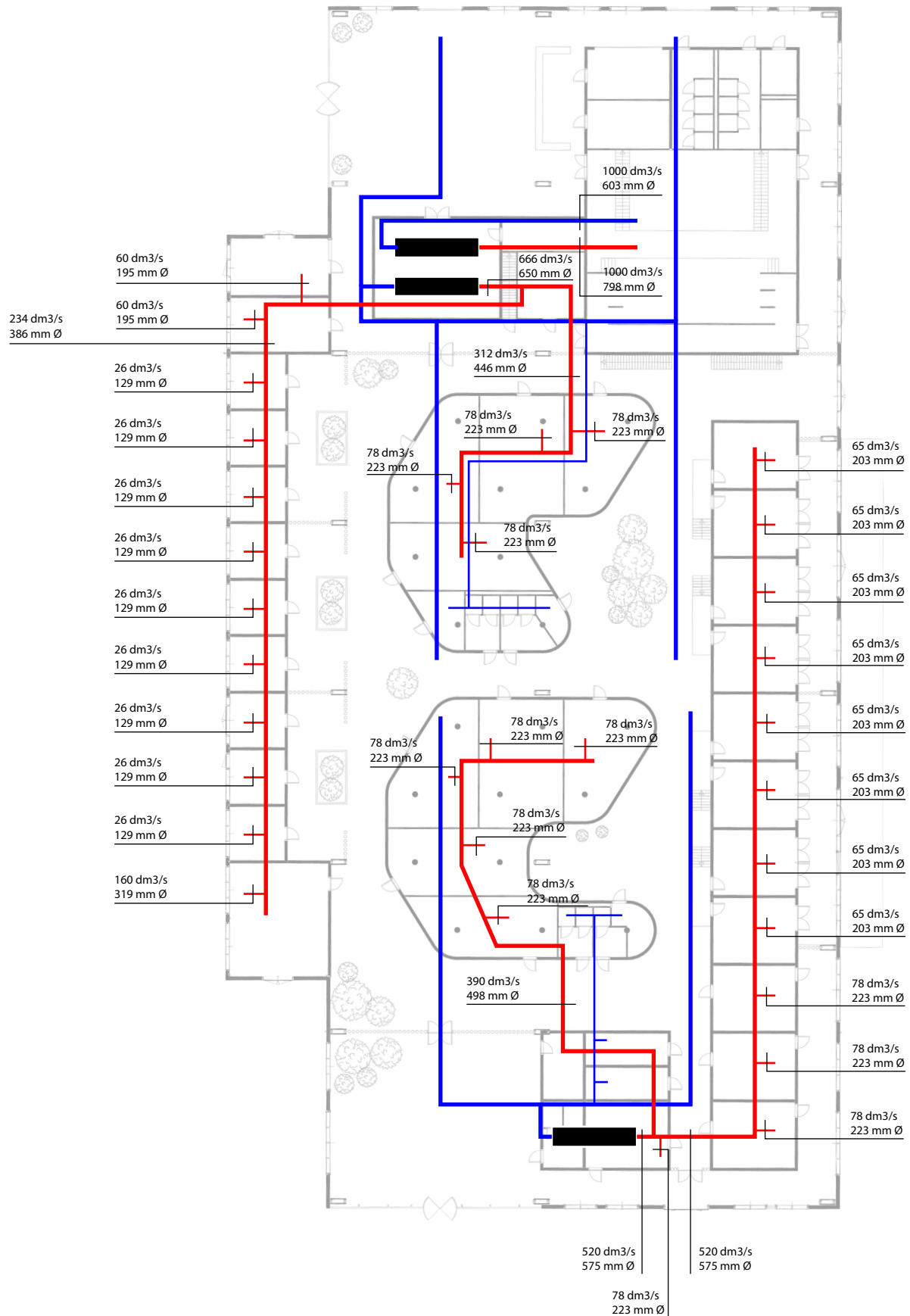
Double
windows
offices



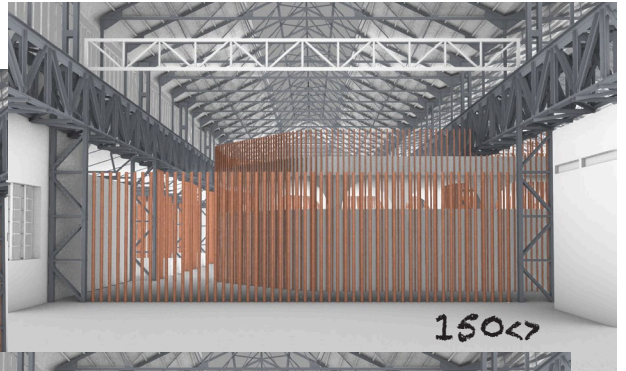
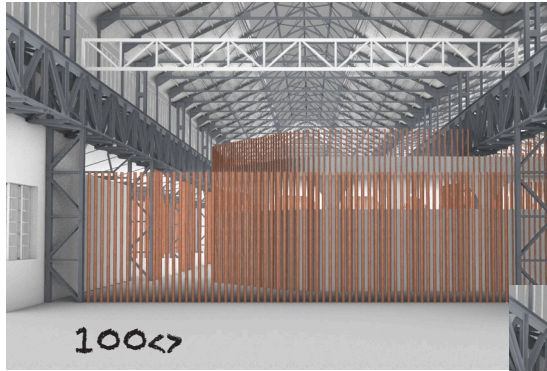
Theater



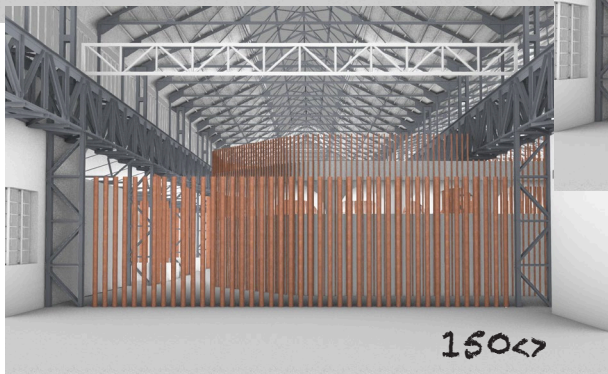
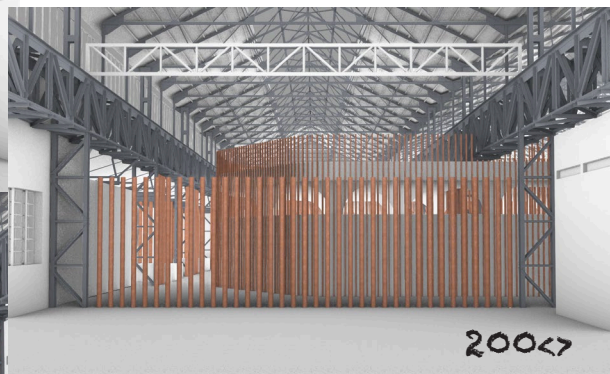
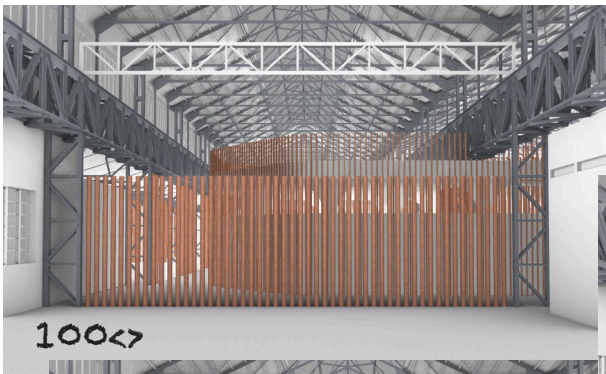
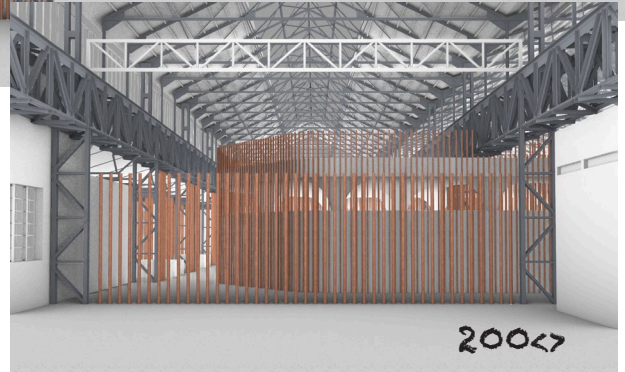
Ventilation ducts



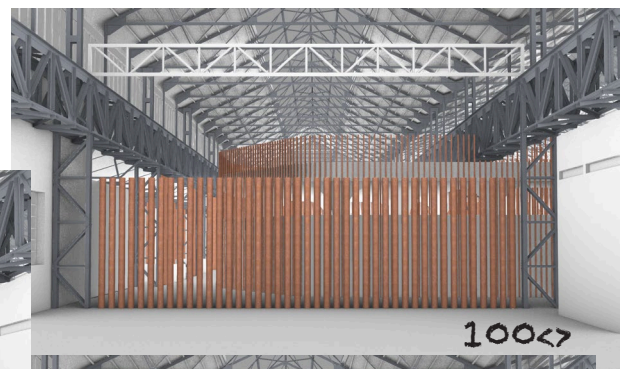
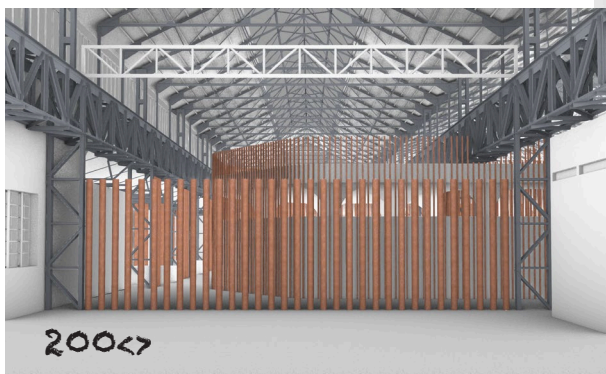
Week 2.2
18-11



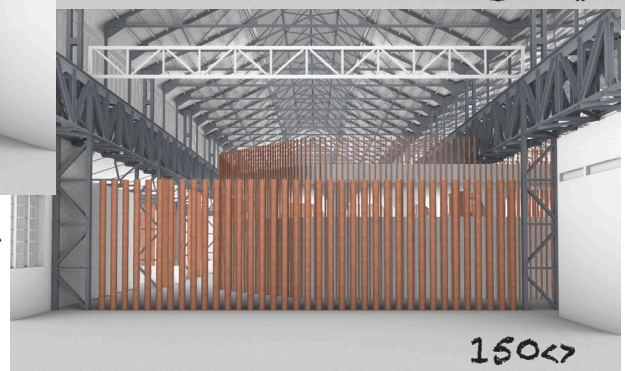
Pole
Dimensions
Analysis



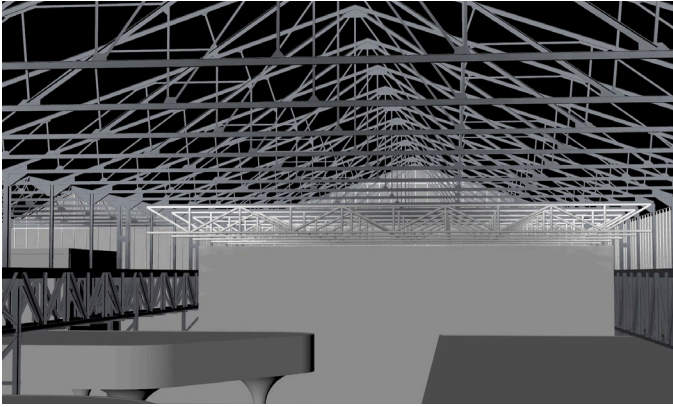
150 ϕ



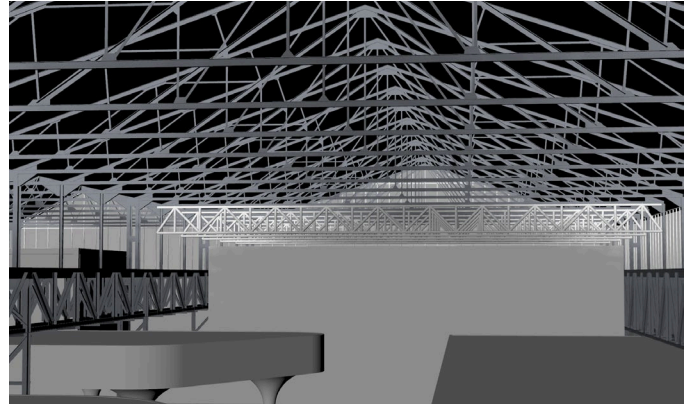
200 ϕ



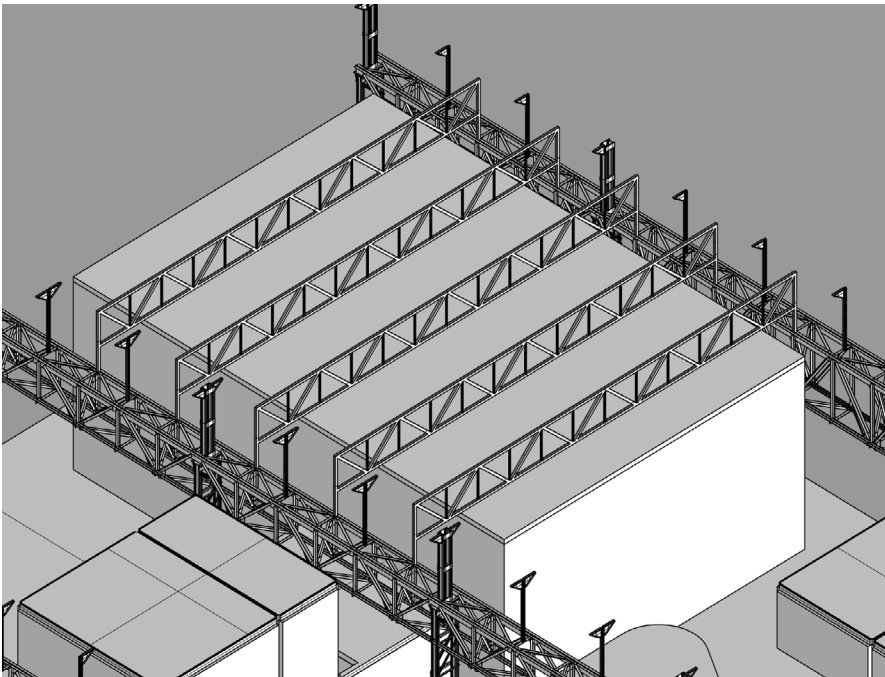
Construction types



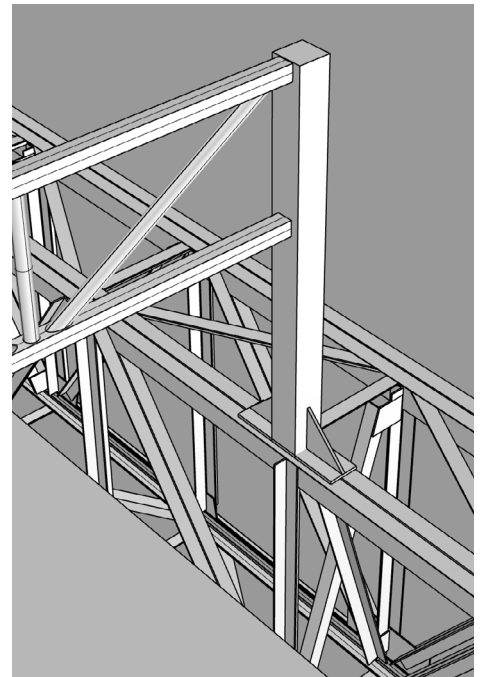
Option 1



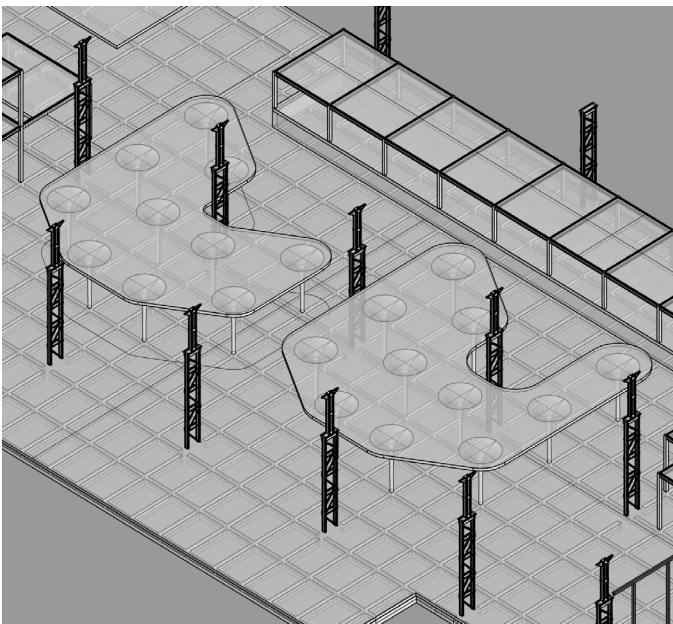
Option 2



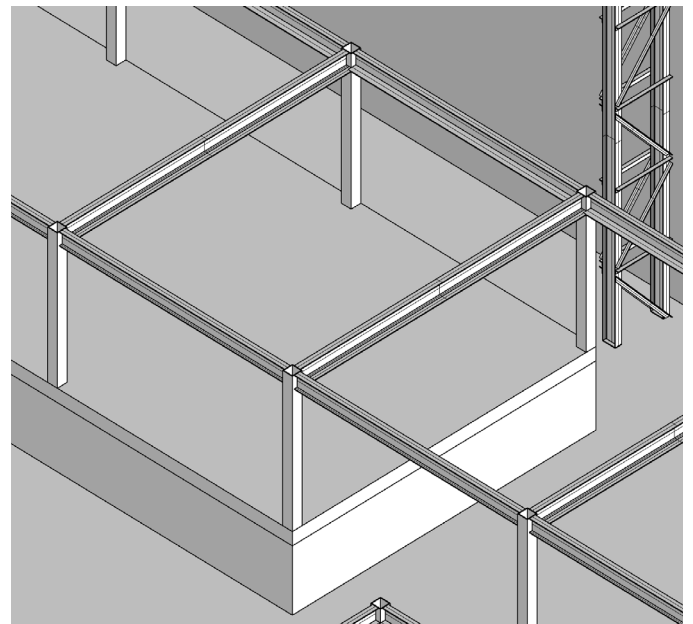
Hanging roof trusses



Detail



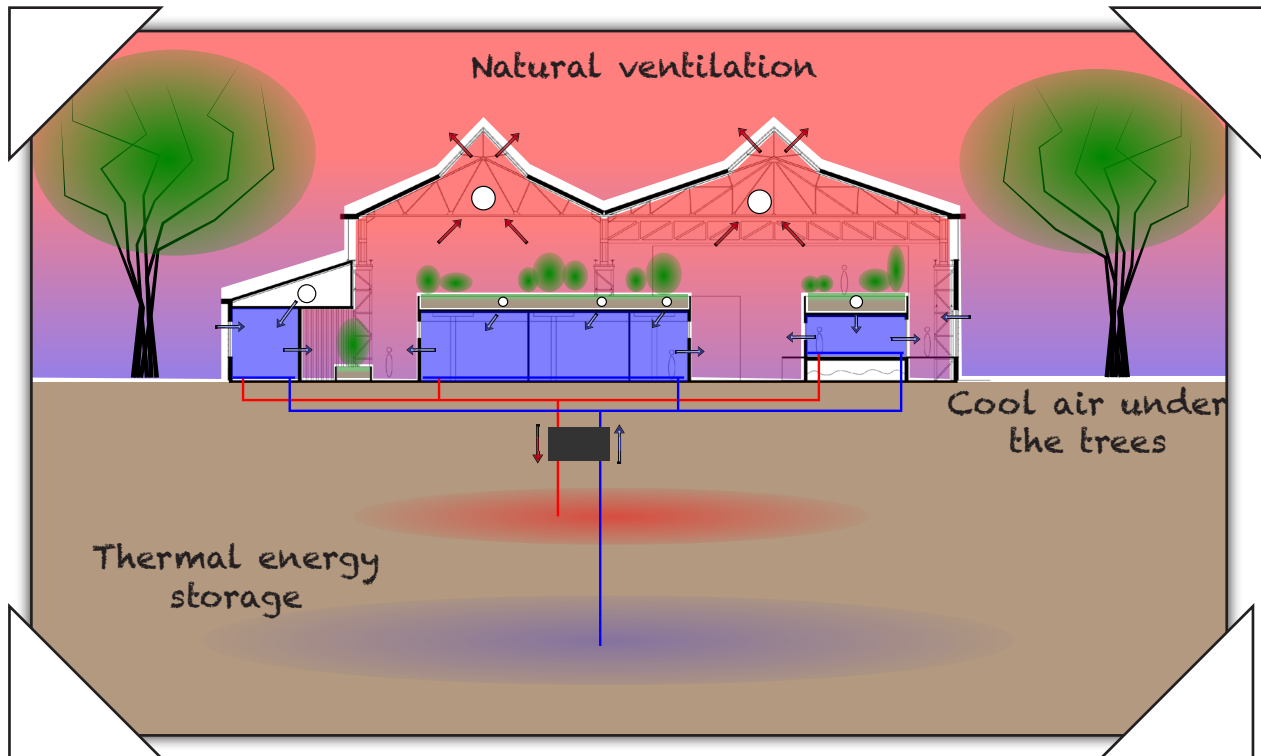
Mushroom Columns



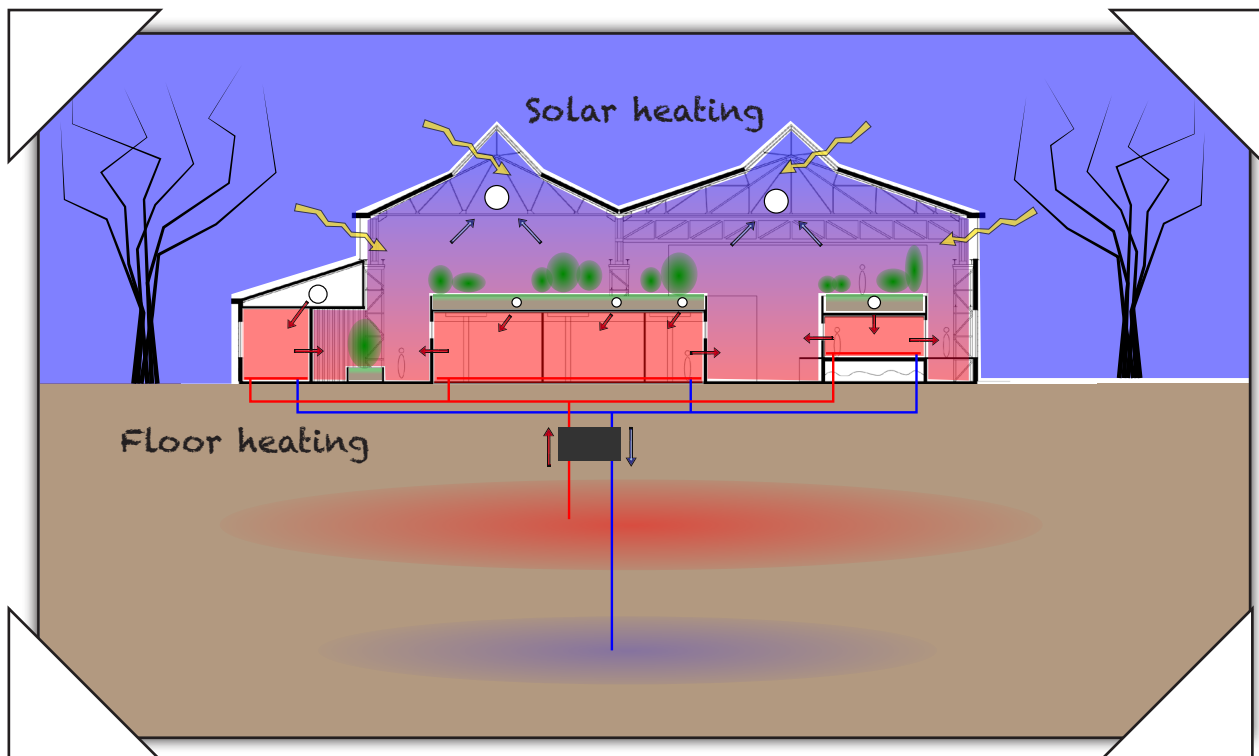
Water storage with
Columns and Beams

Week 2.3
25-11

Climate system

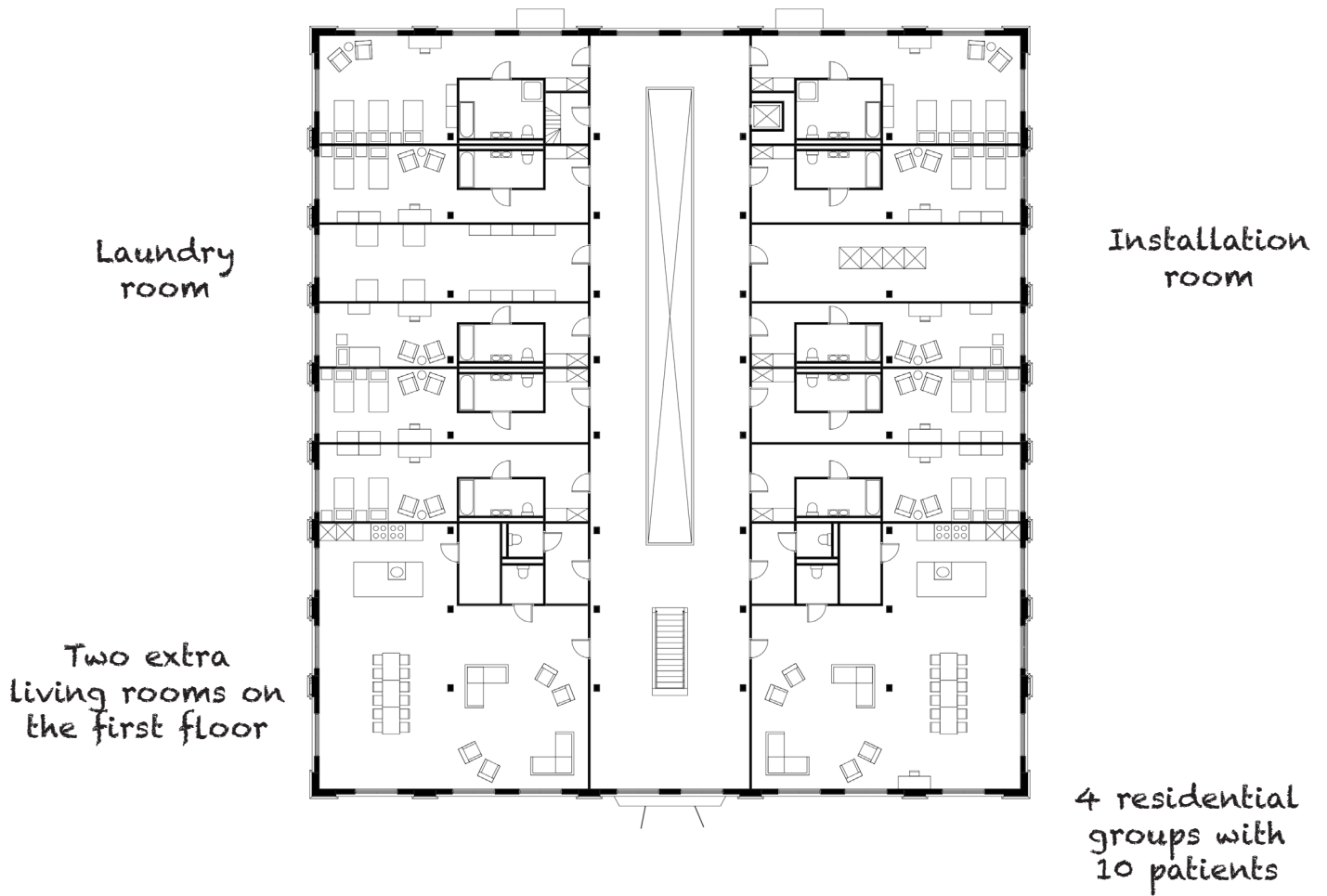


Summer

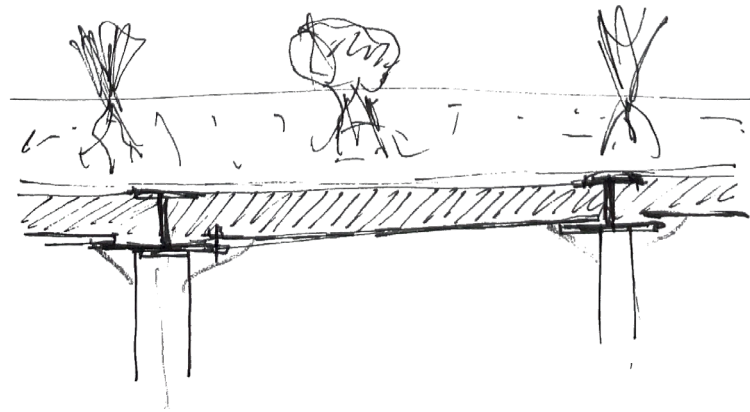


Winter

New functional plan Weapon Depot

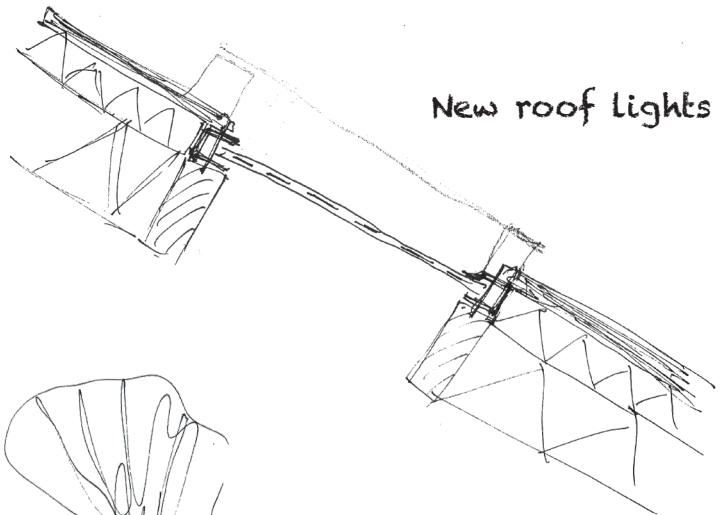


Week 2.4
02-12

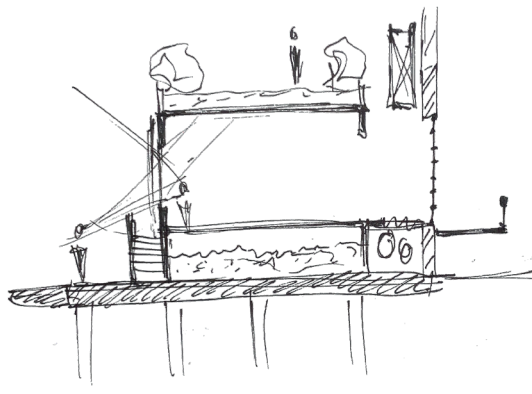


Construction
green roof

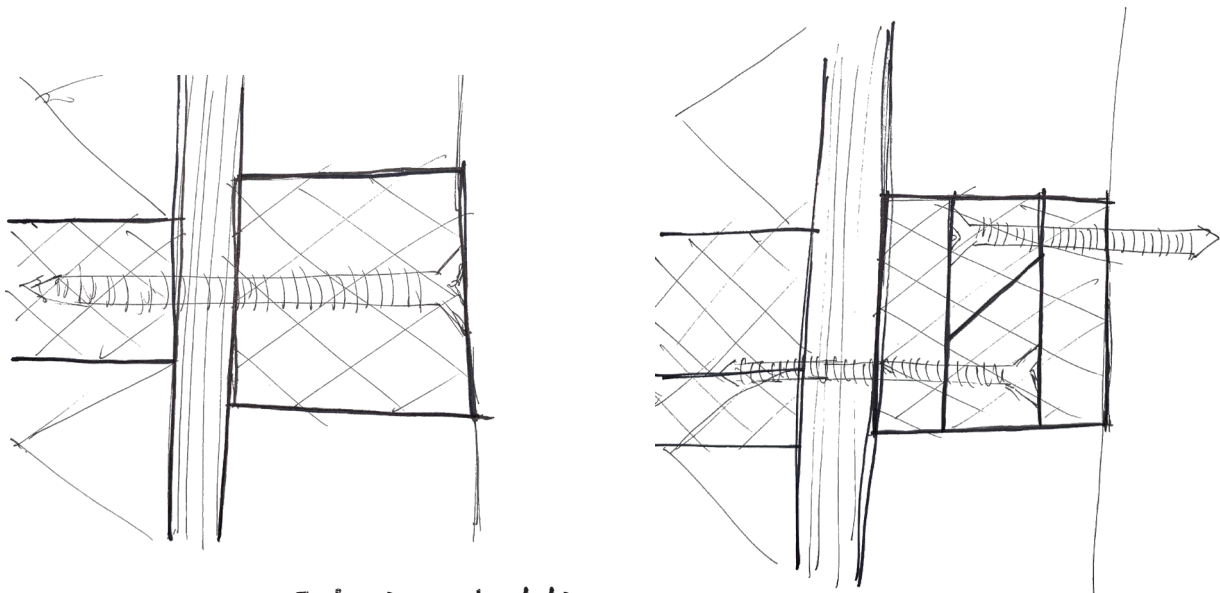
First sketches detailing



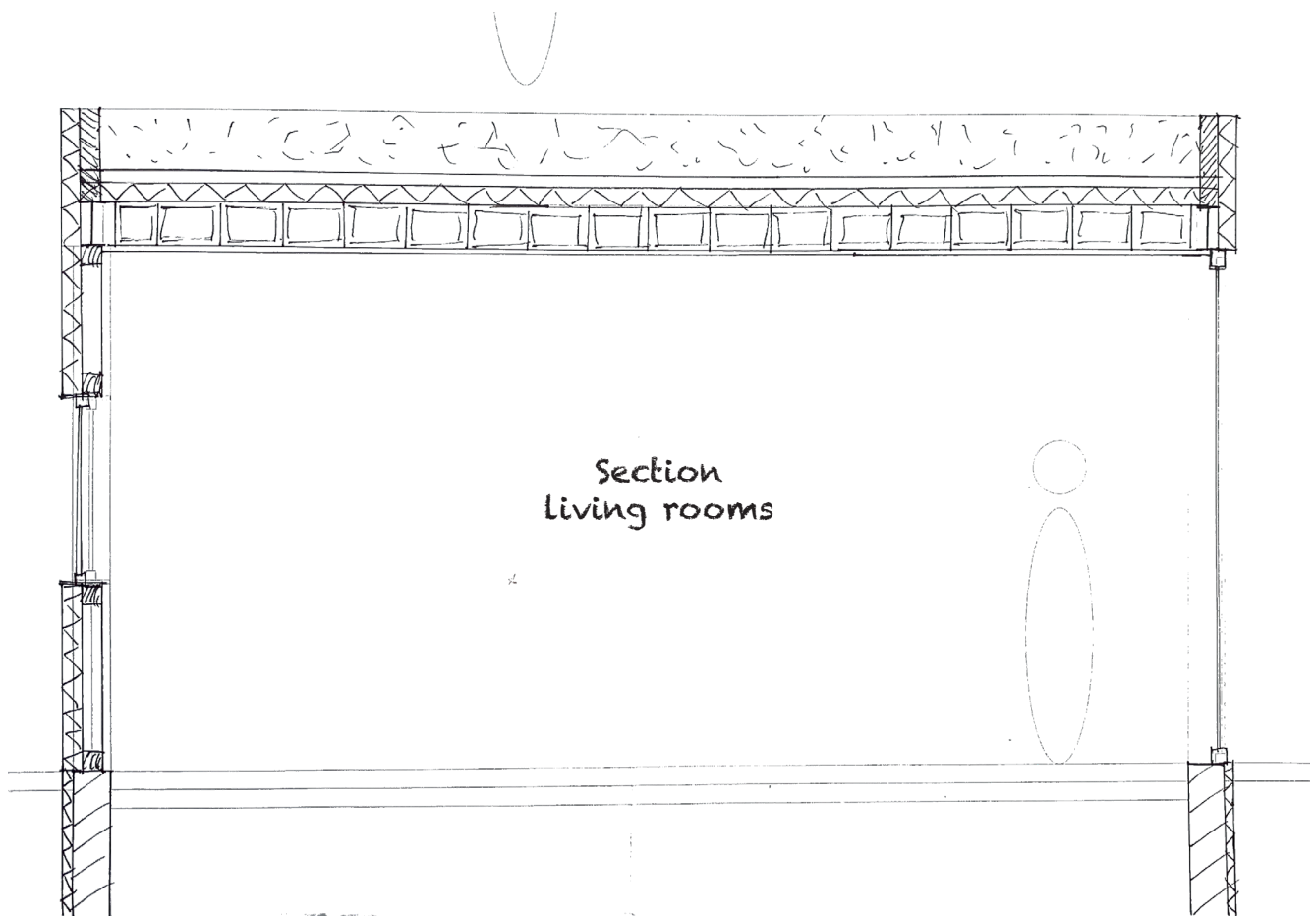
New roof lights



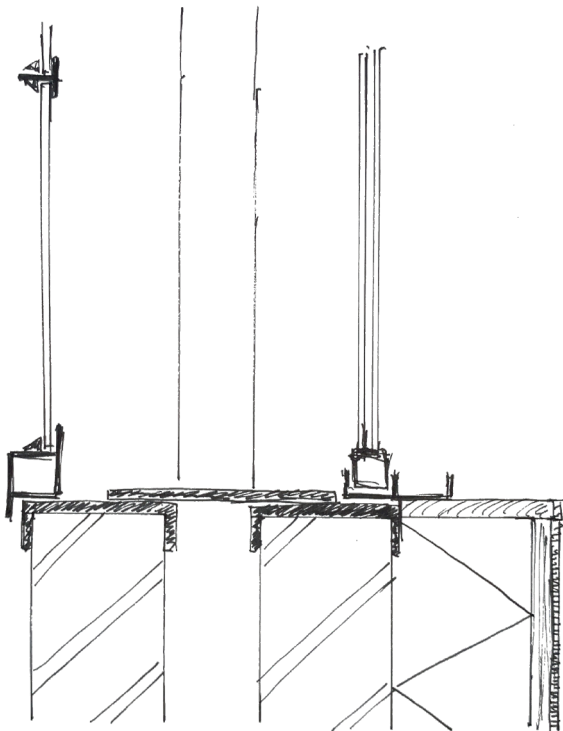
Living rooms



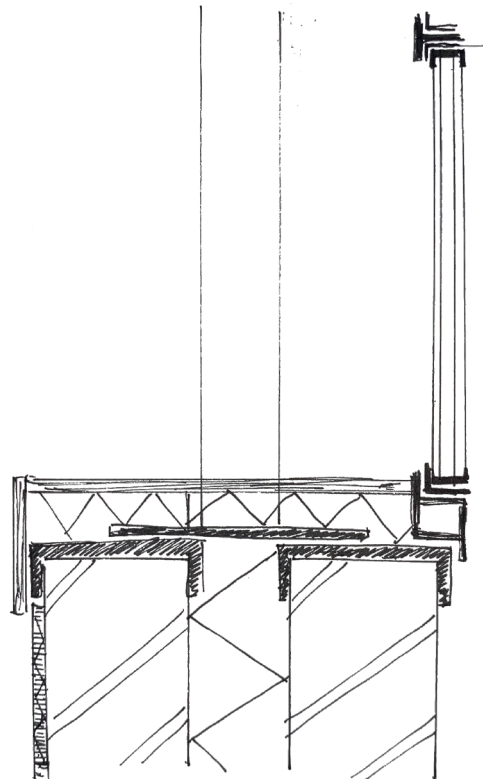
Interior cladding



West facade

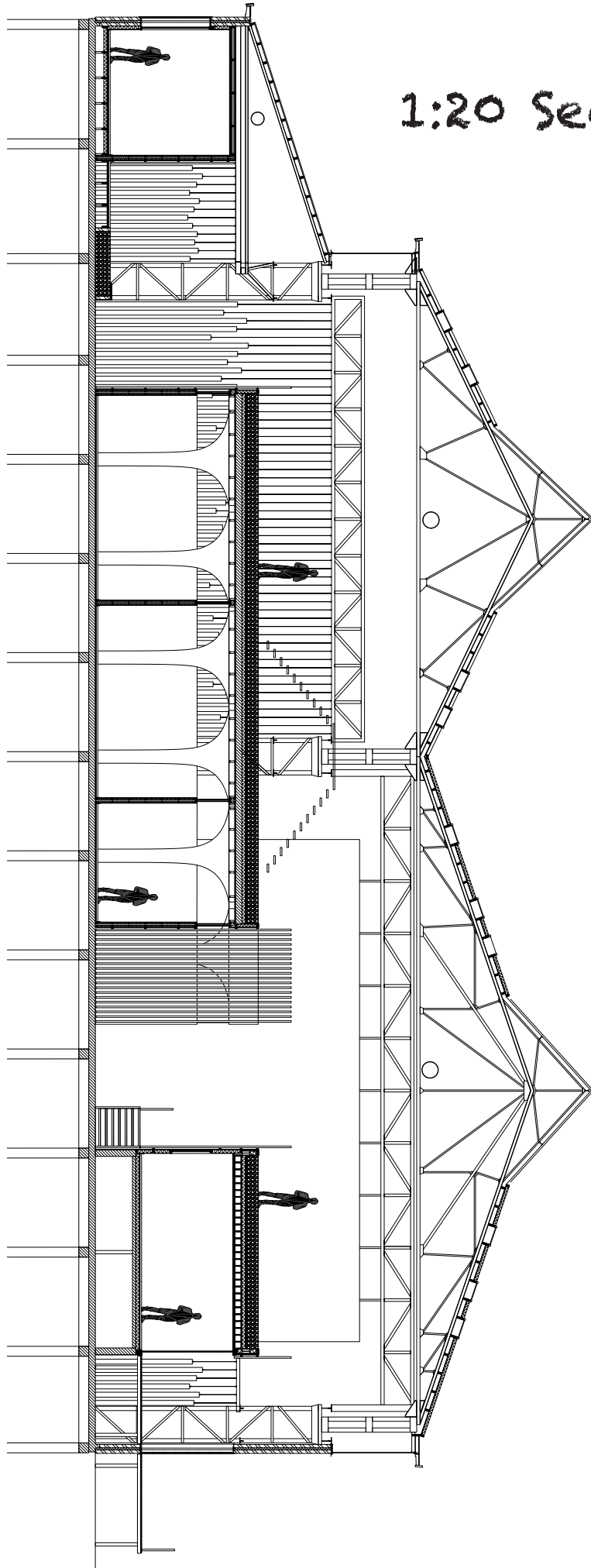


East facade

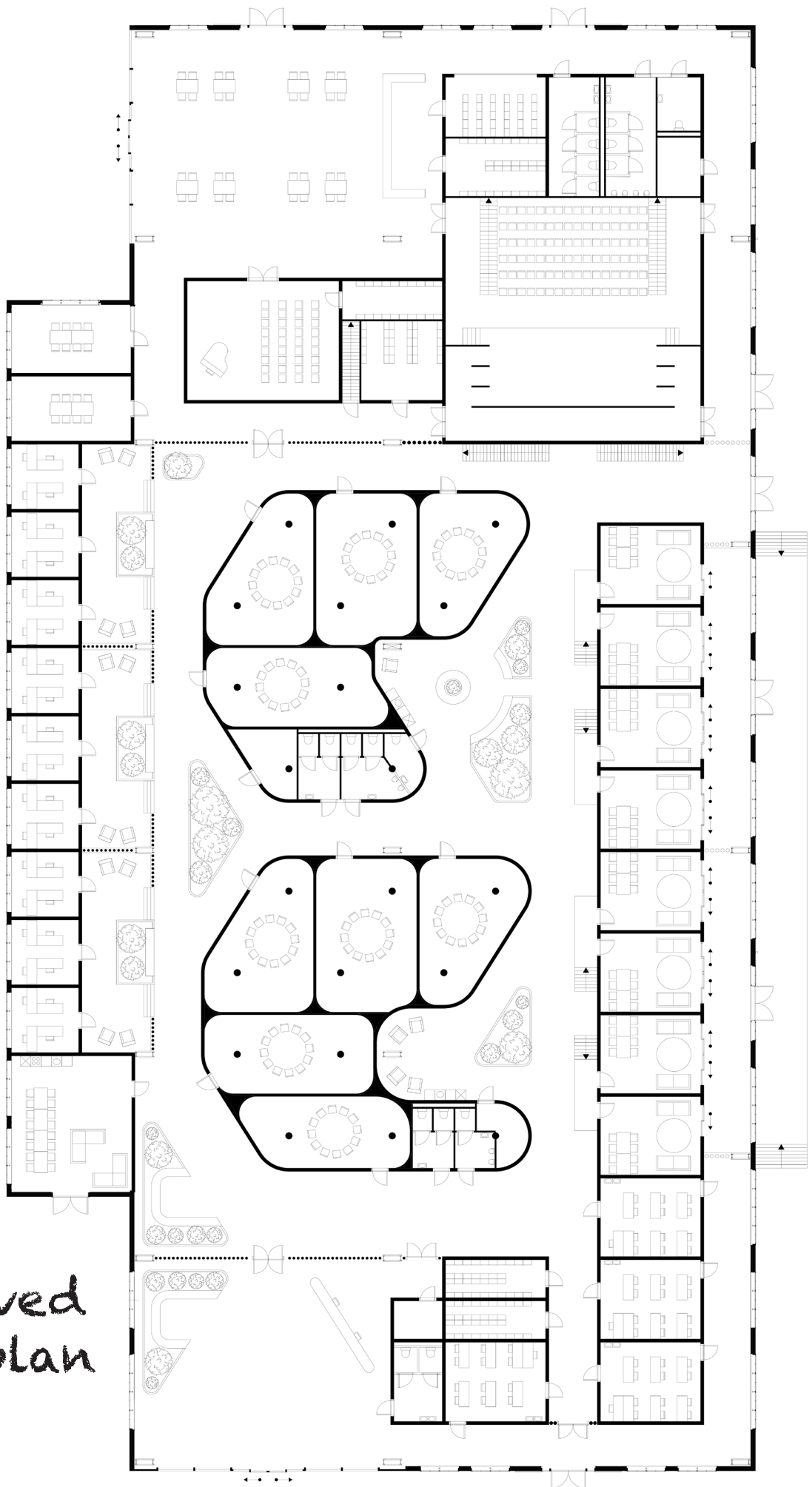


Week 2.5
09-12

1:20 Section



Improved
floor plan



Week 2.6
16-12

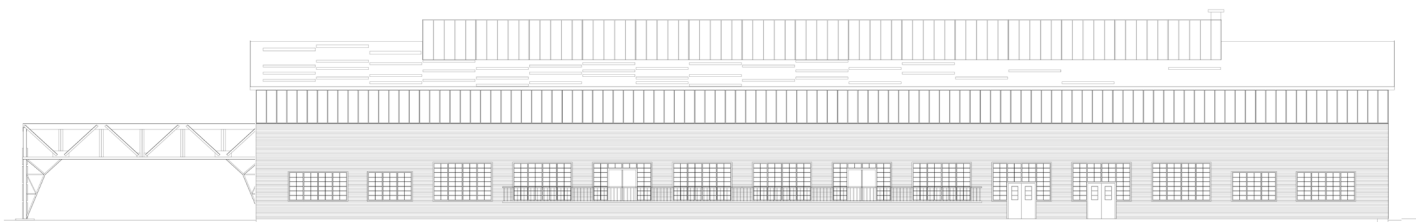
Improved elevations



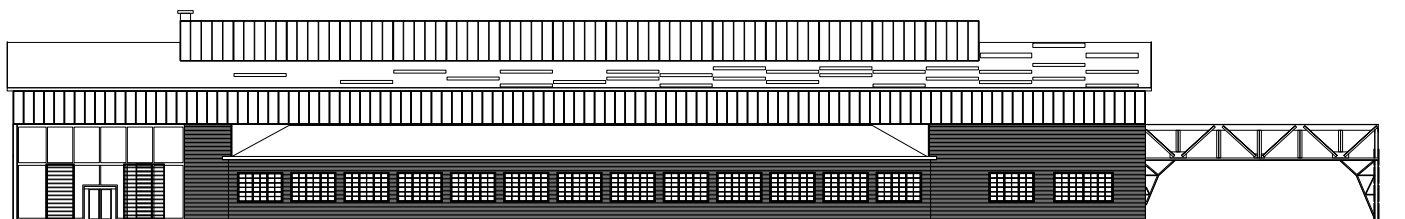
South facade



North facade

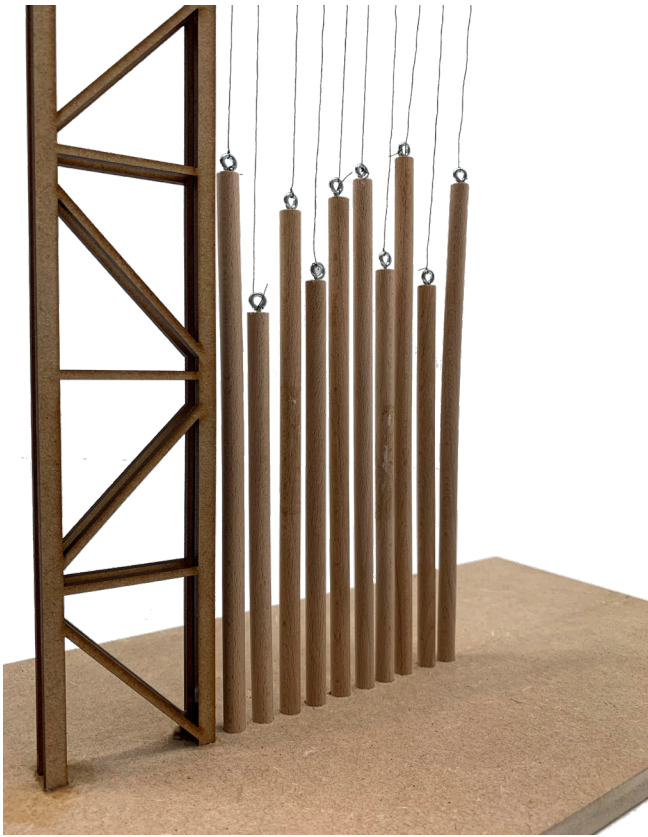


East facade



West facade

Room dividing poles model

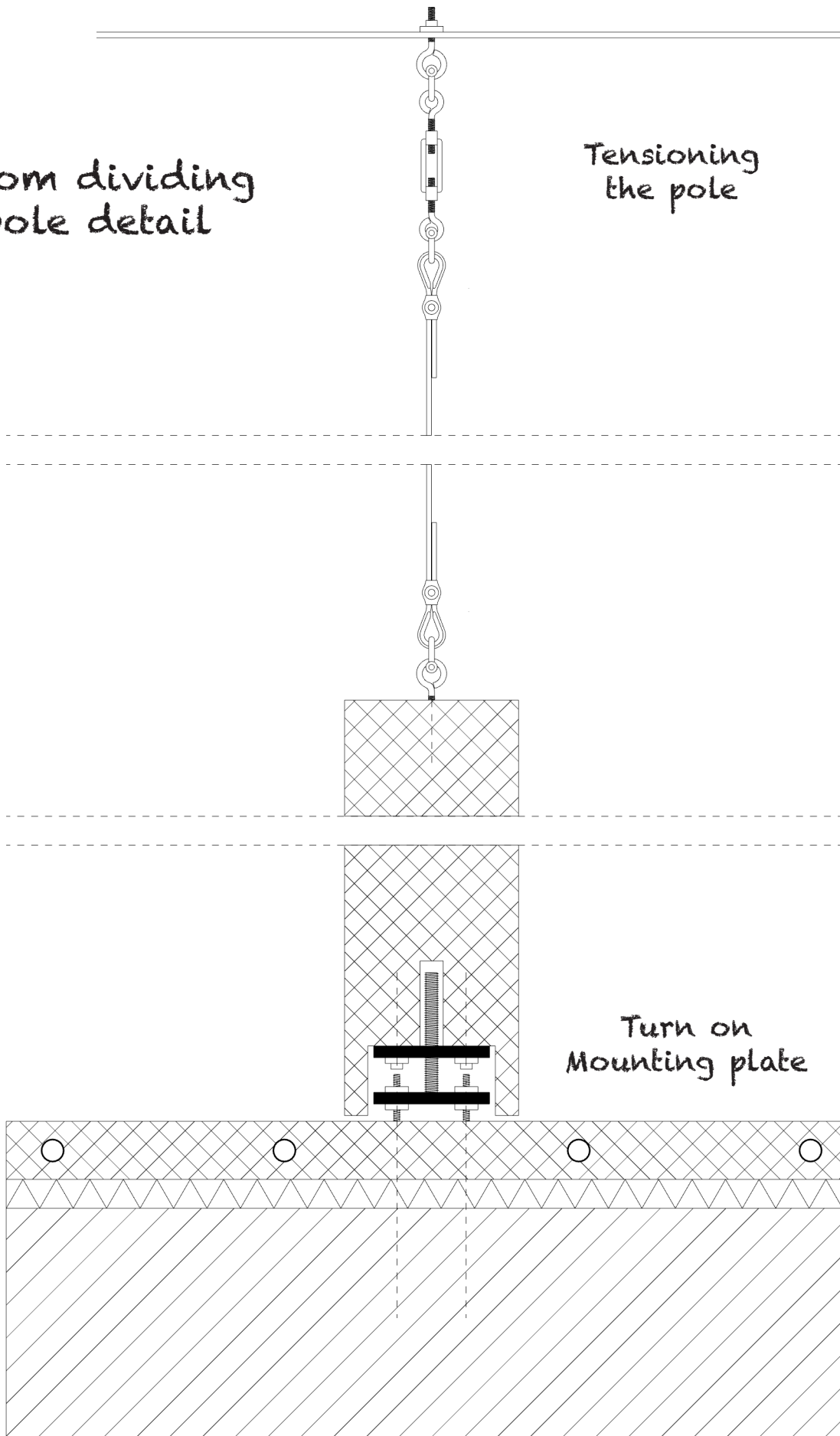


Week 2.7
06-01

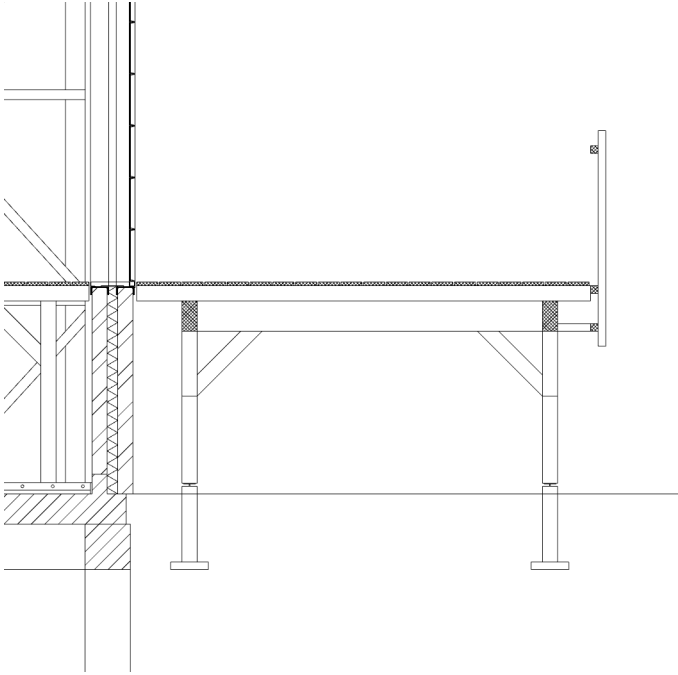
Room dividing
pole detail

Tensioning
the pole

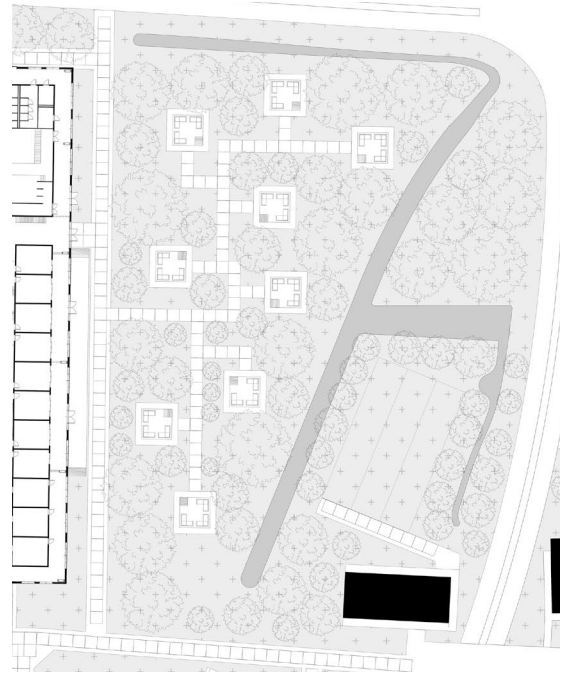
Turn on
Mounting plate



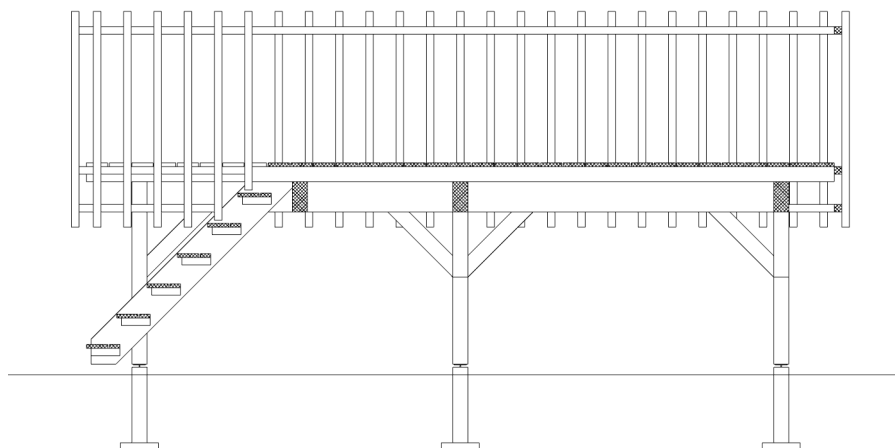
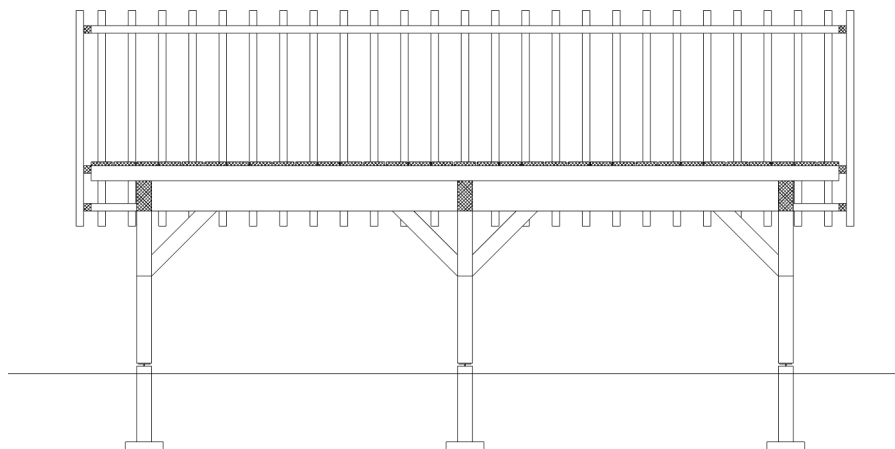
Balcony and pavilions



Balcony section

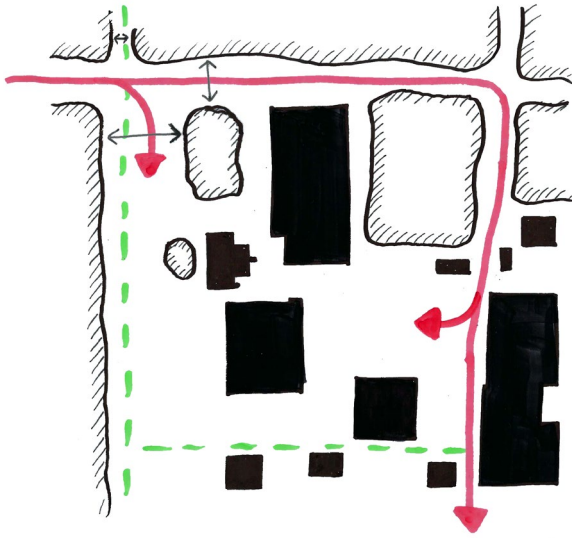


Forest pavilions

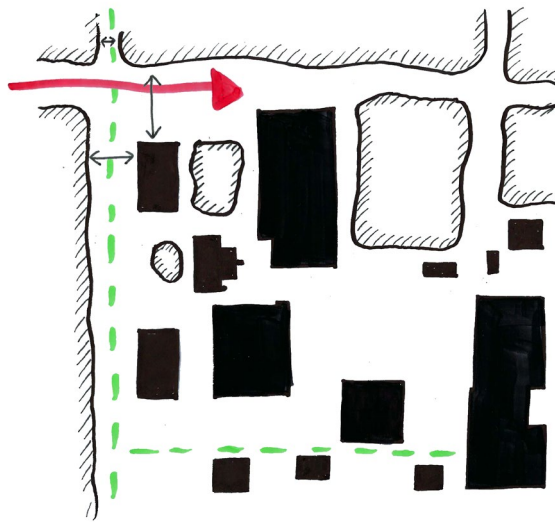


Section pavilion

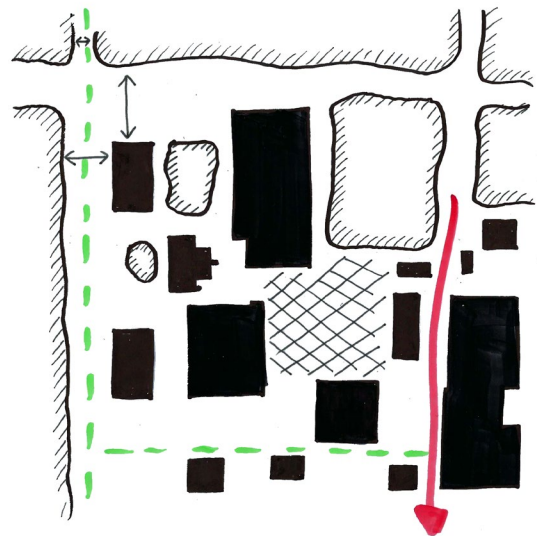
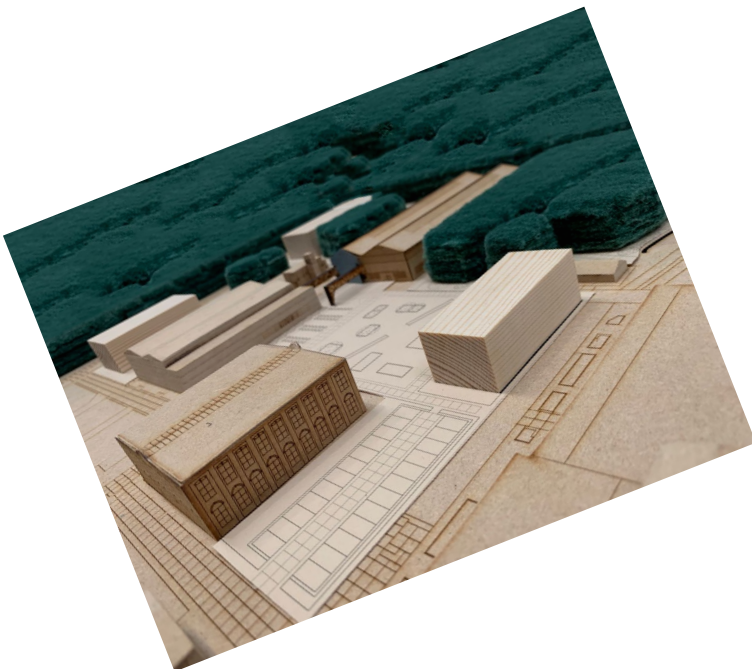
Week 2.8
13-01



P2



GO!



Mental Health Center Hembrug

Revitalizing Hembrug, to revitalize society

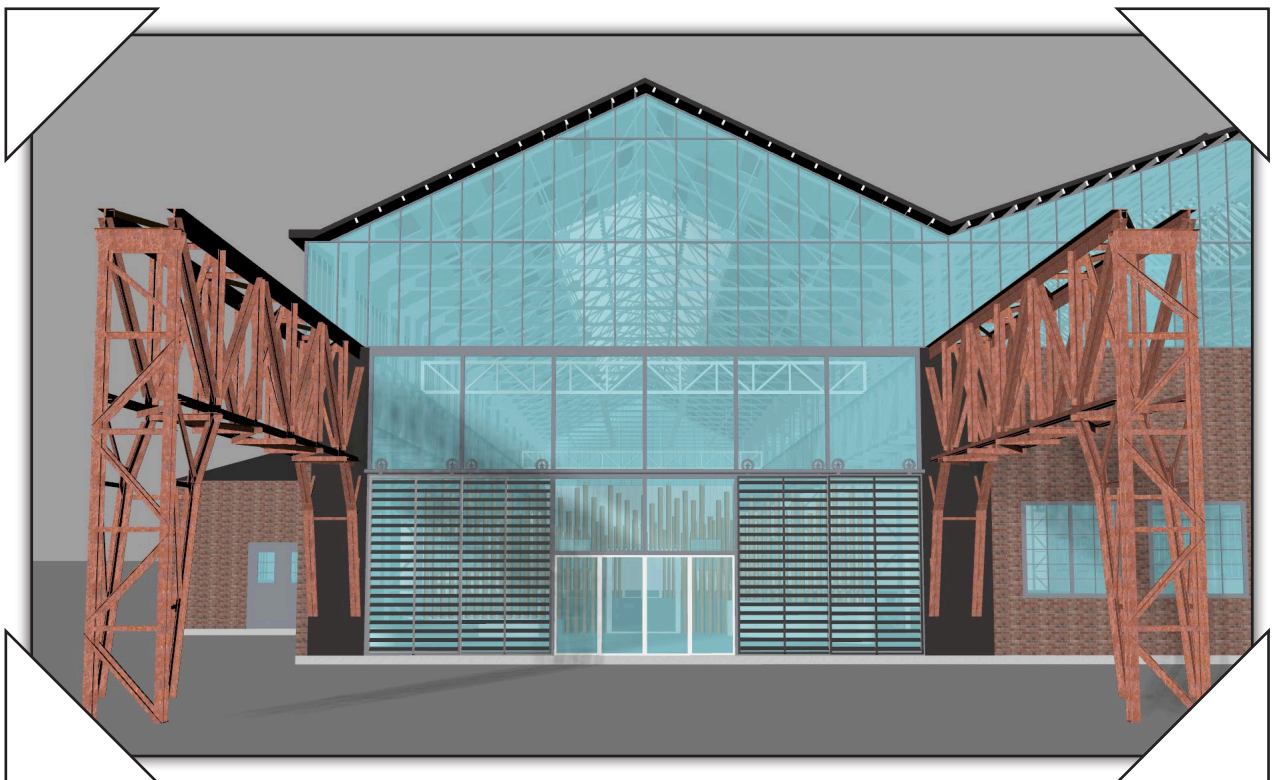
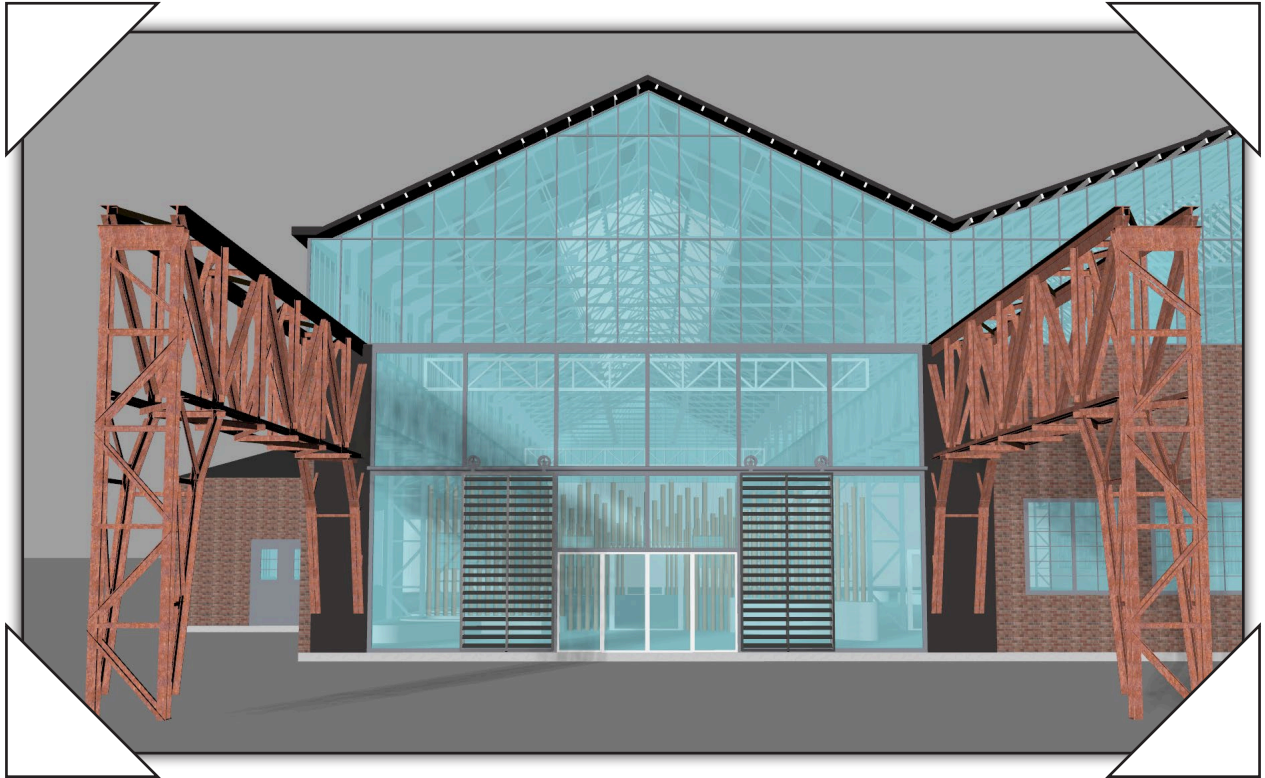


Masterplan Campus North 1:500

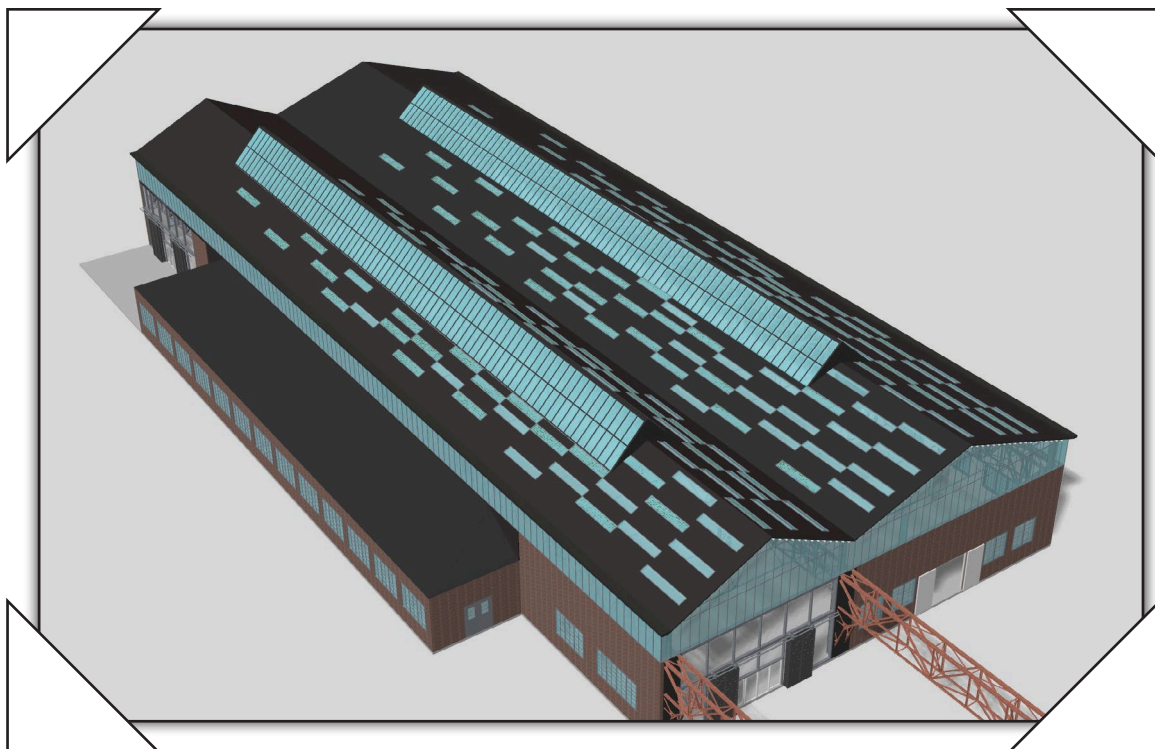


Week 2.9
20-01

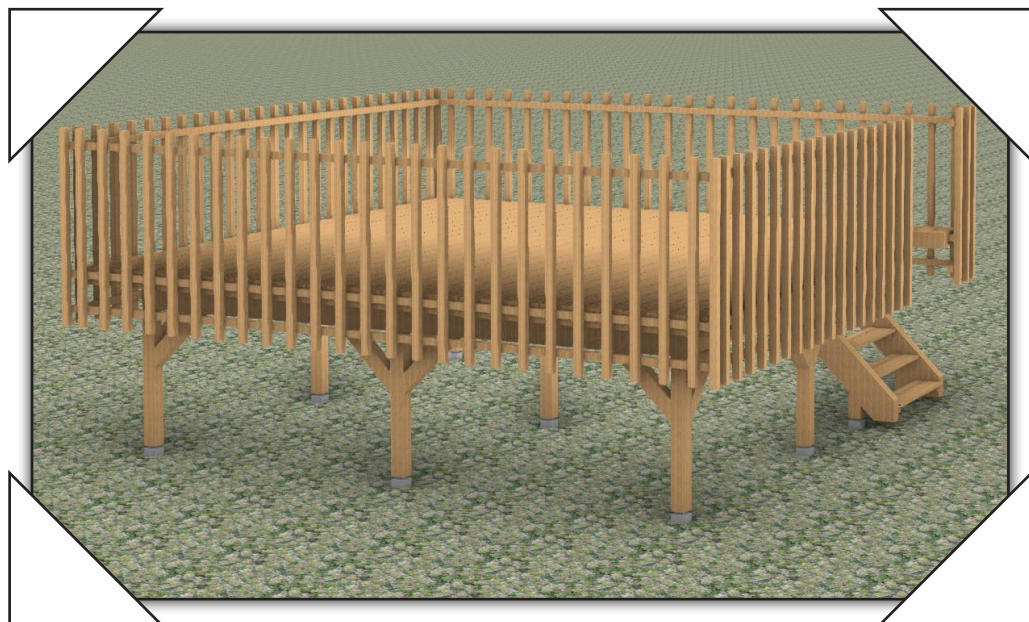
New entrance



Roof
design

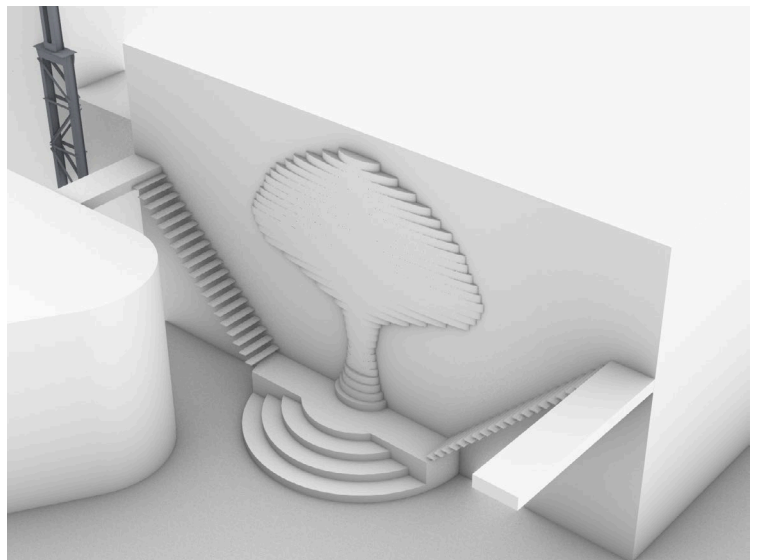
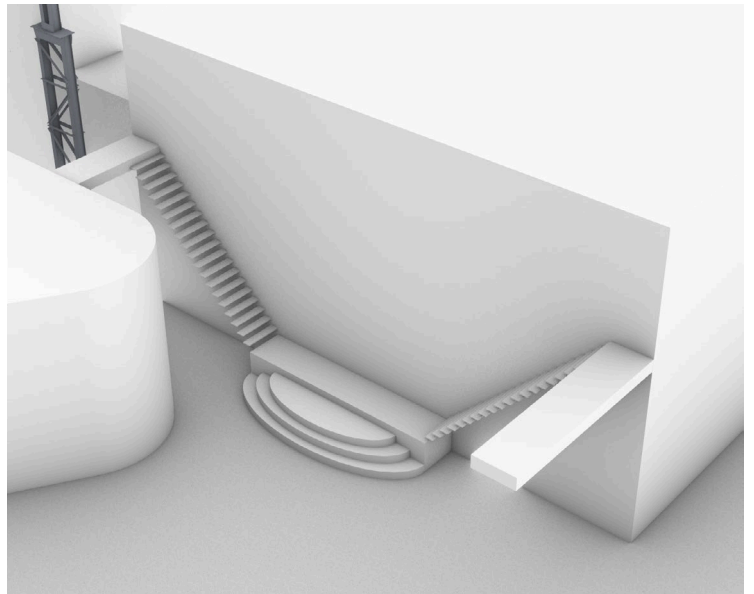
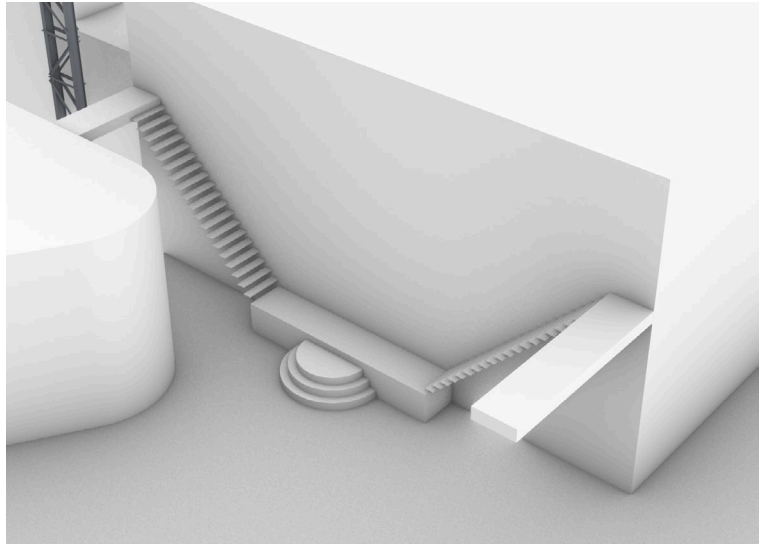


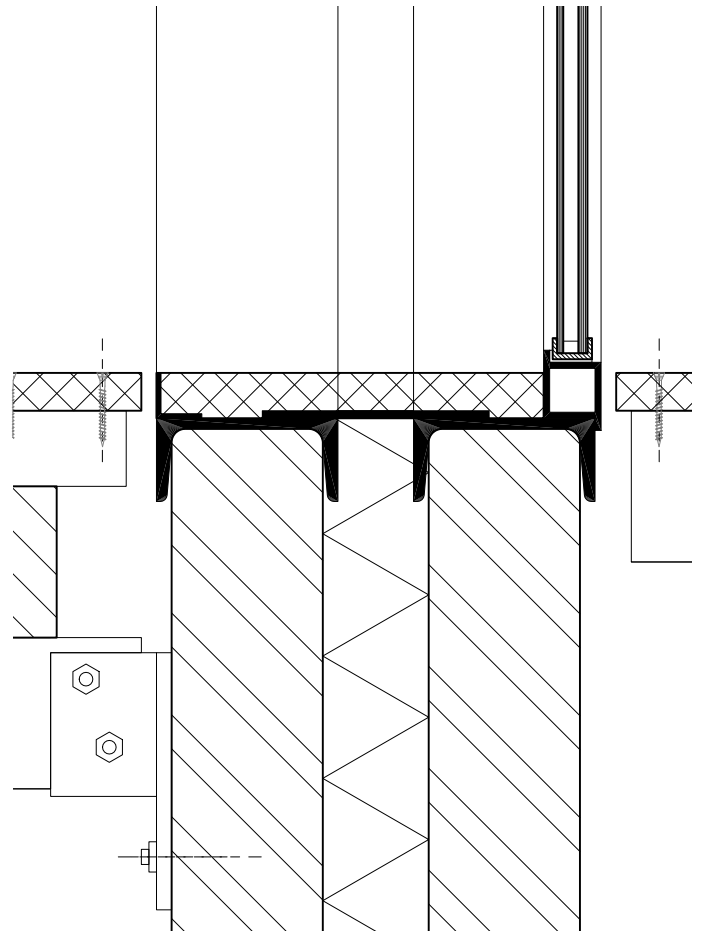
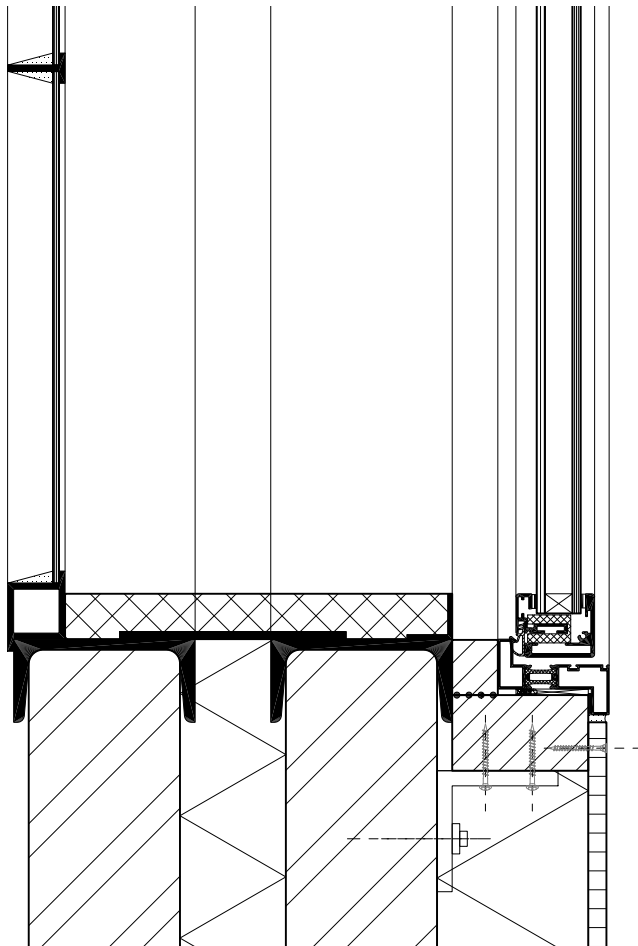
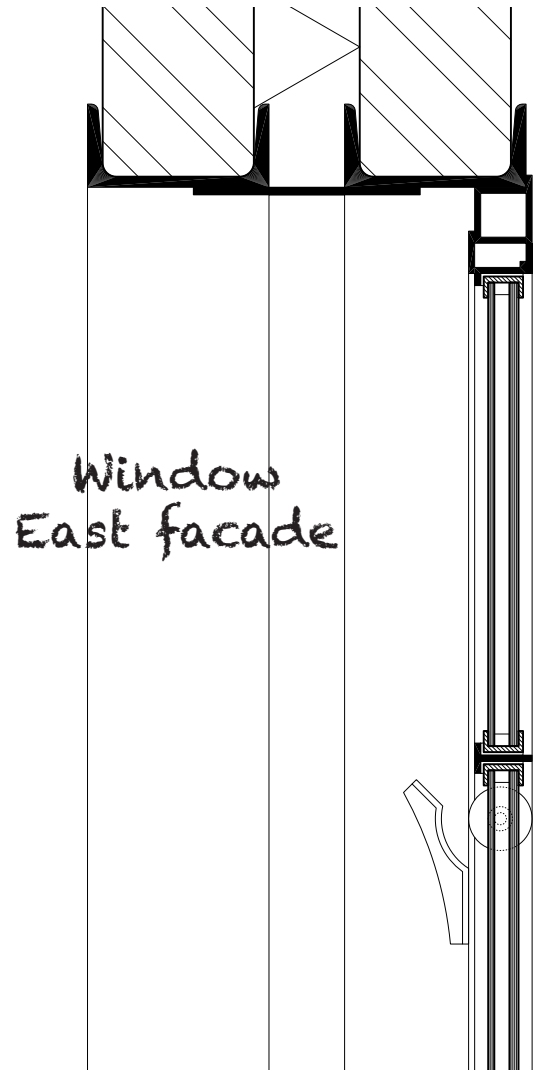
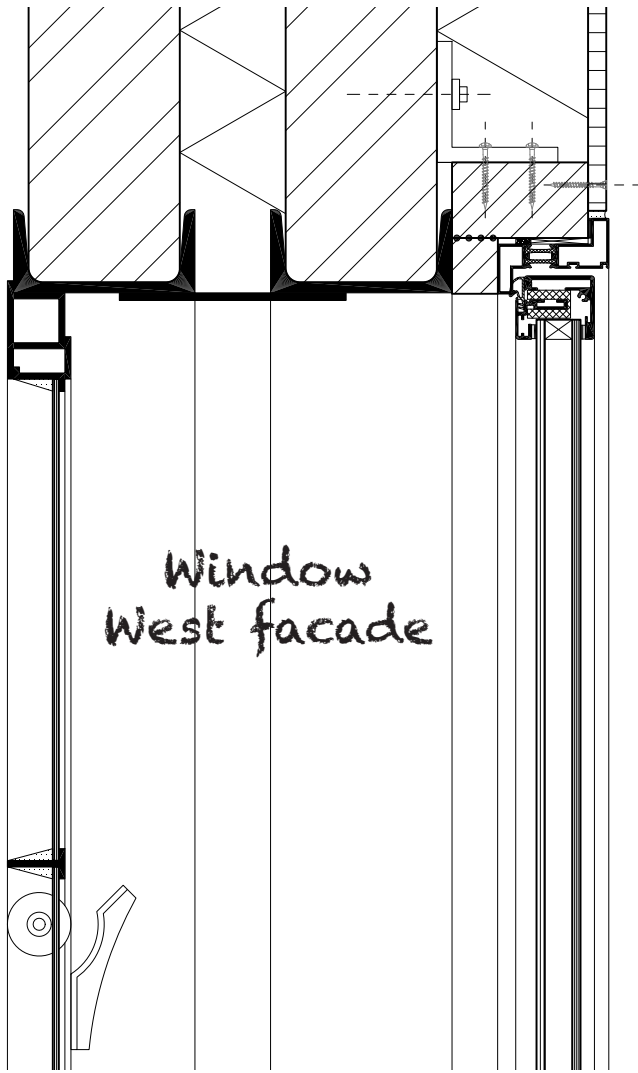
Forest
pavilion



Week 2.10
27-01

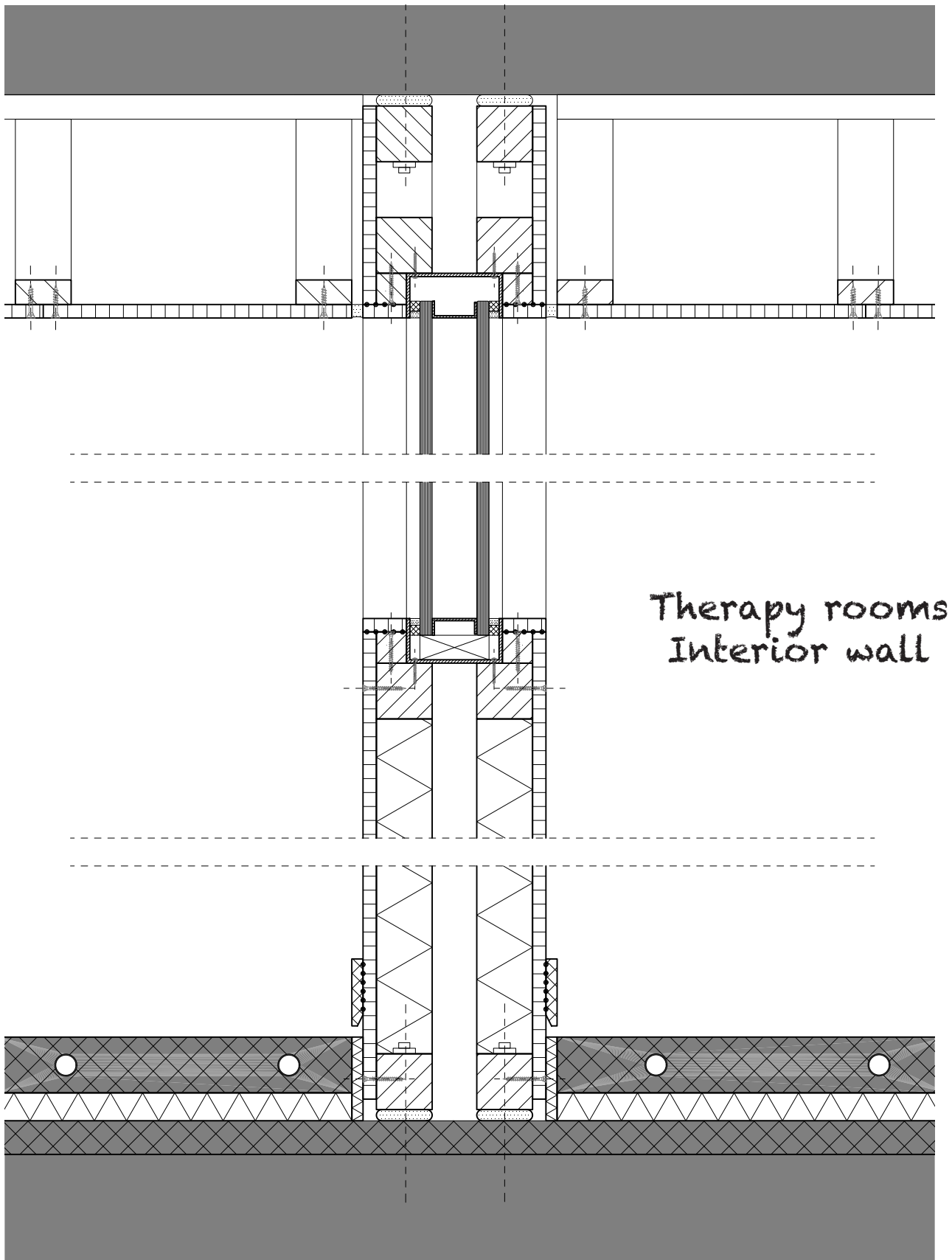
Artistic staircase experiment



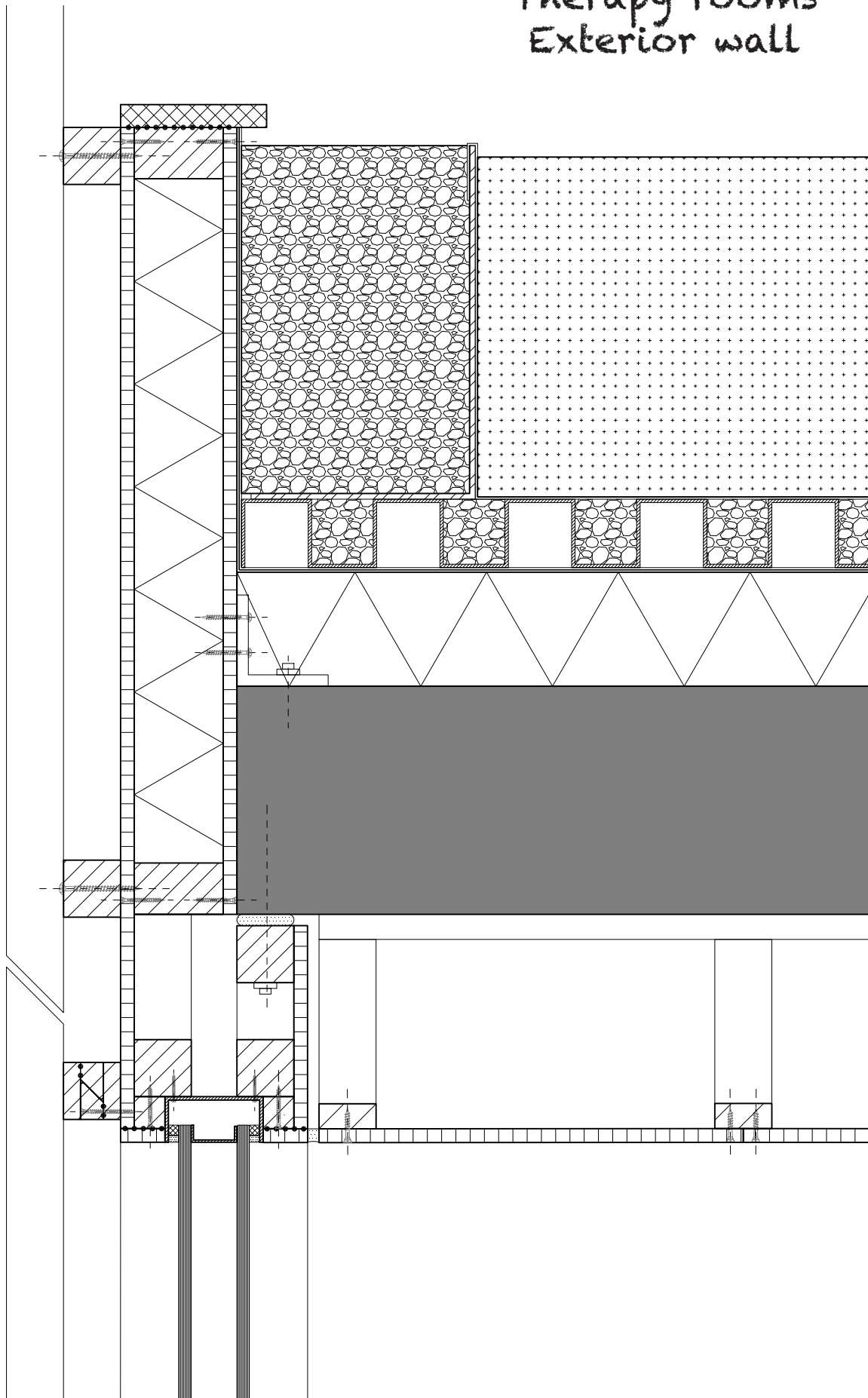


Week 3.1
10-02

Detailing

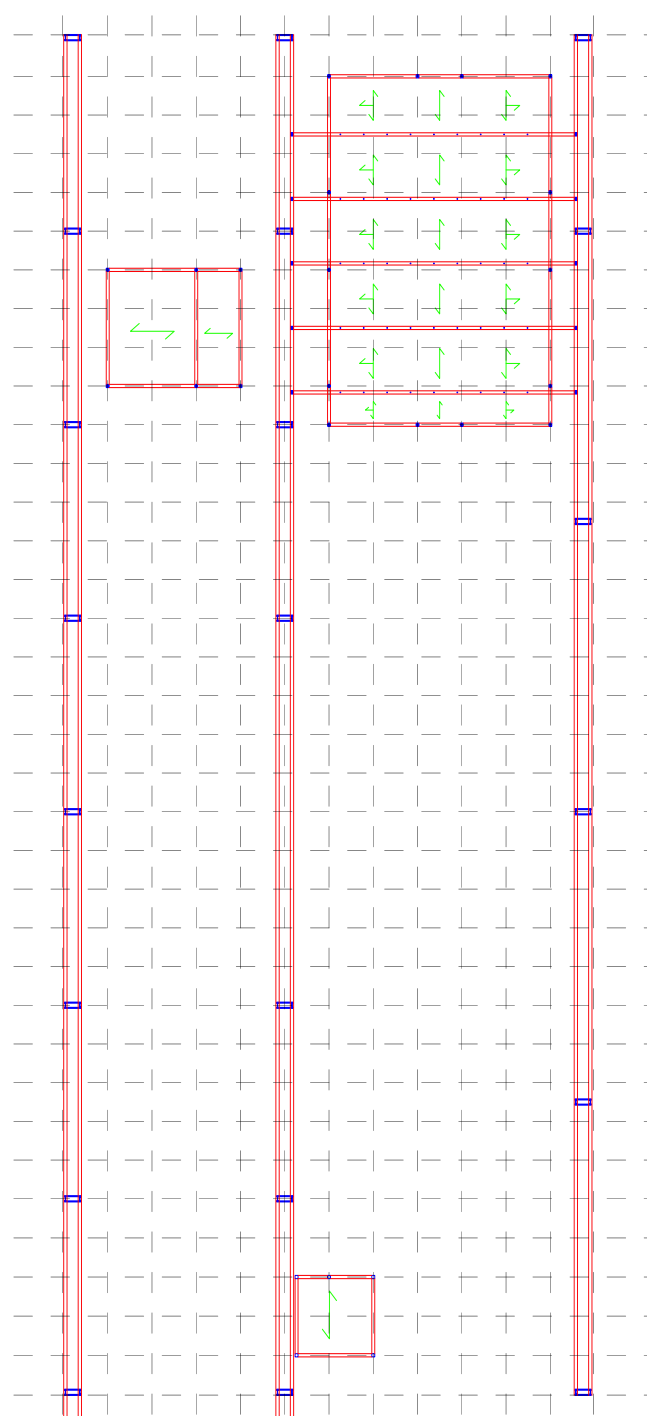
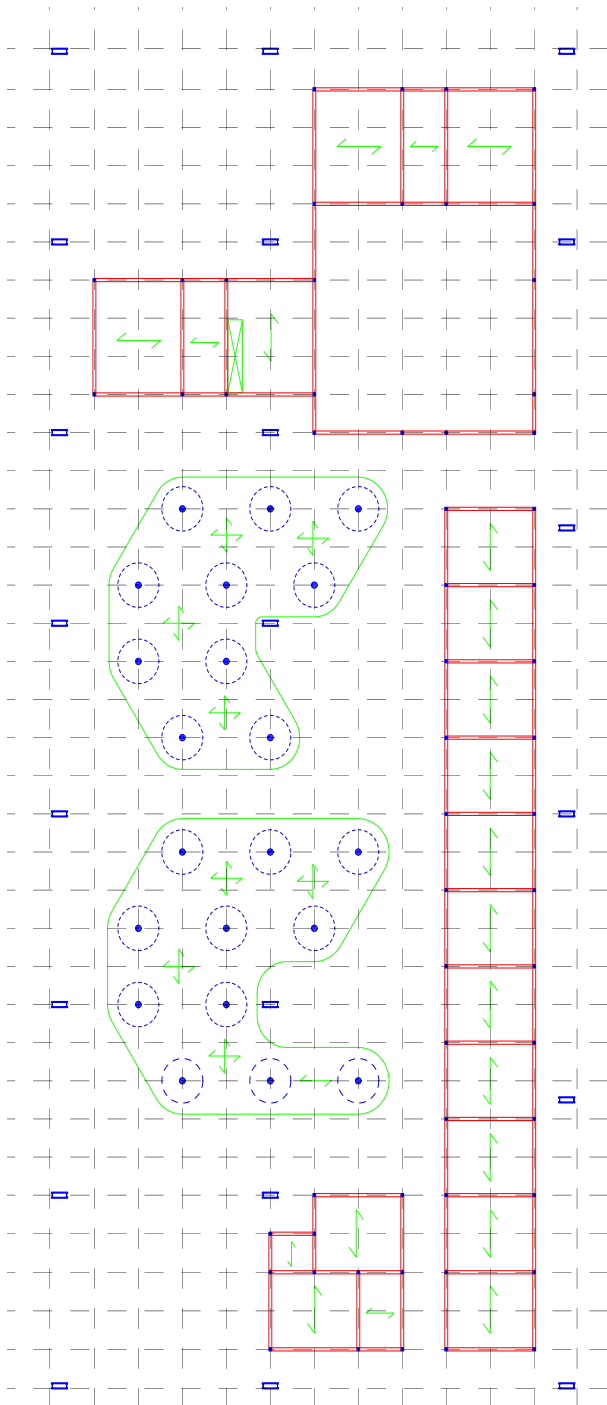
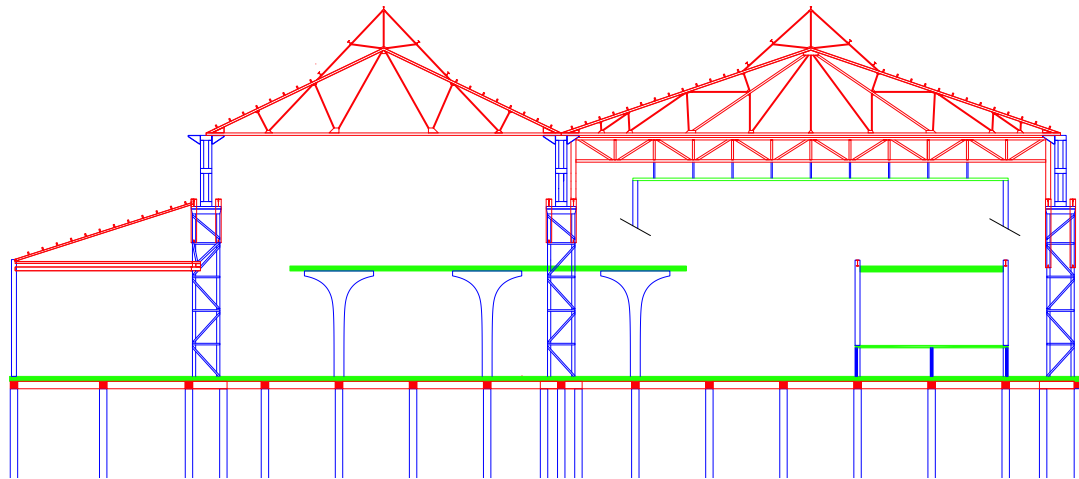


Therapy rooms Exterior wall



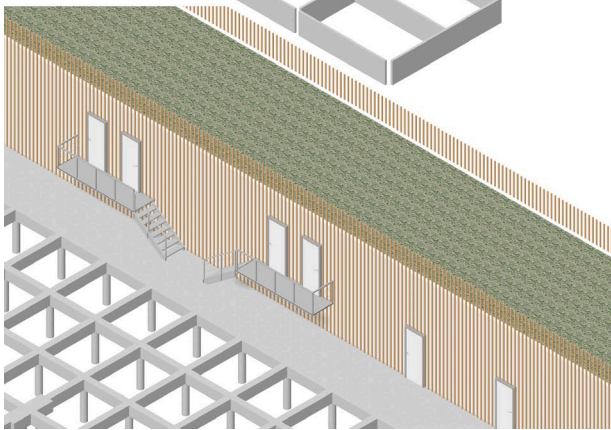
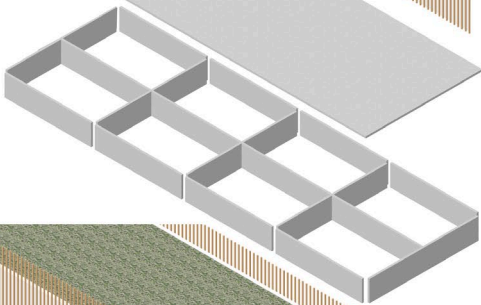
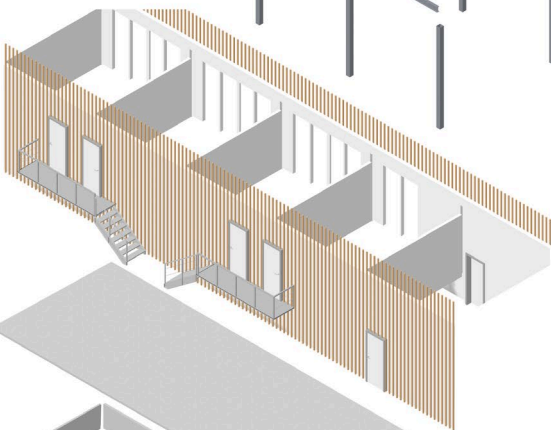
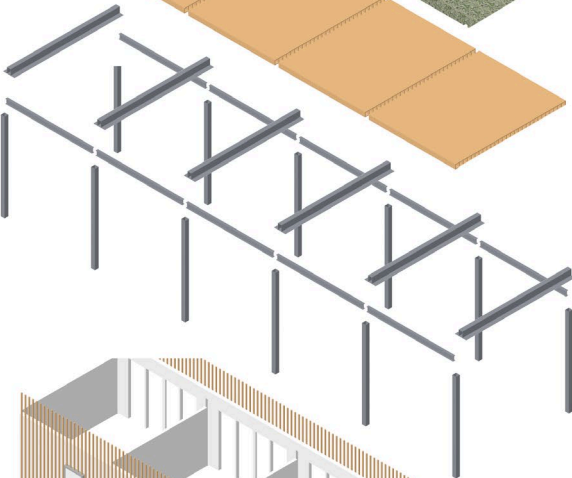
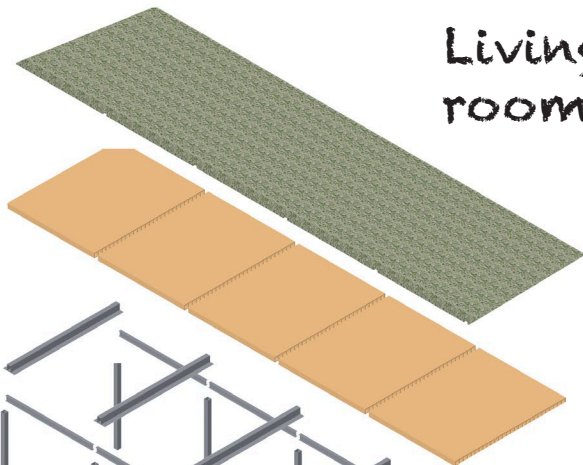
Week 3.2
17-02

Construction

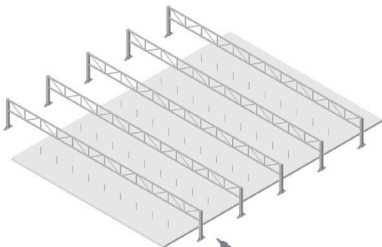
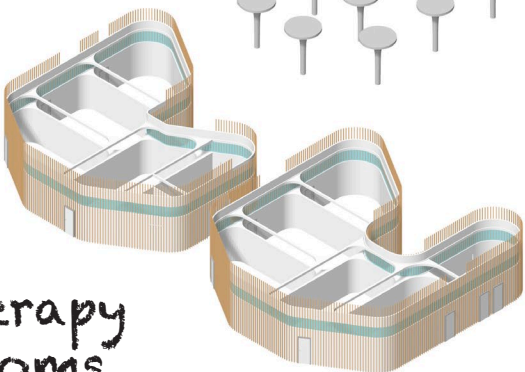


Isometric exploded view

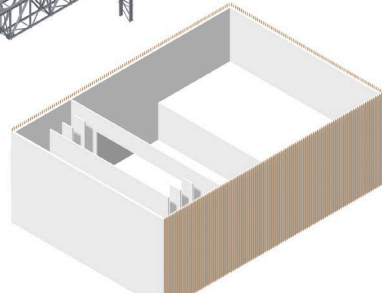
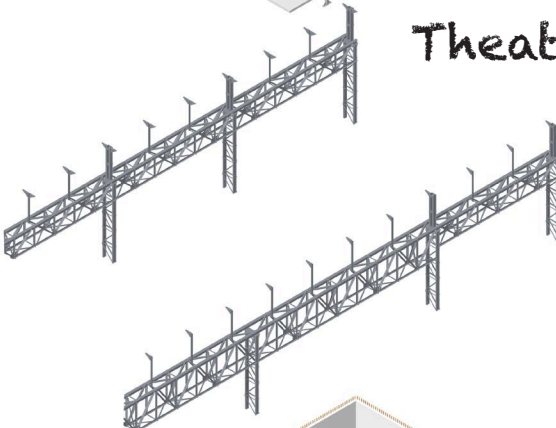
Living
rooms



Therapy
rooms

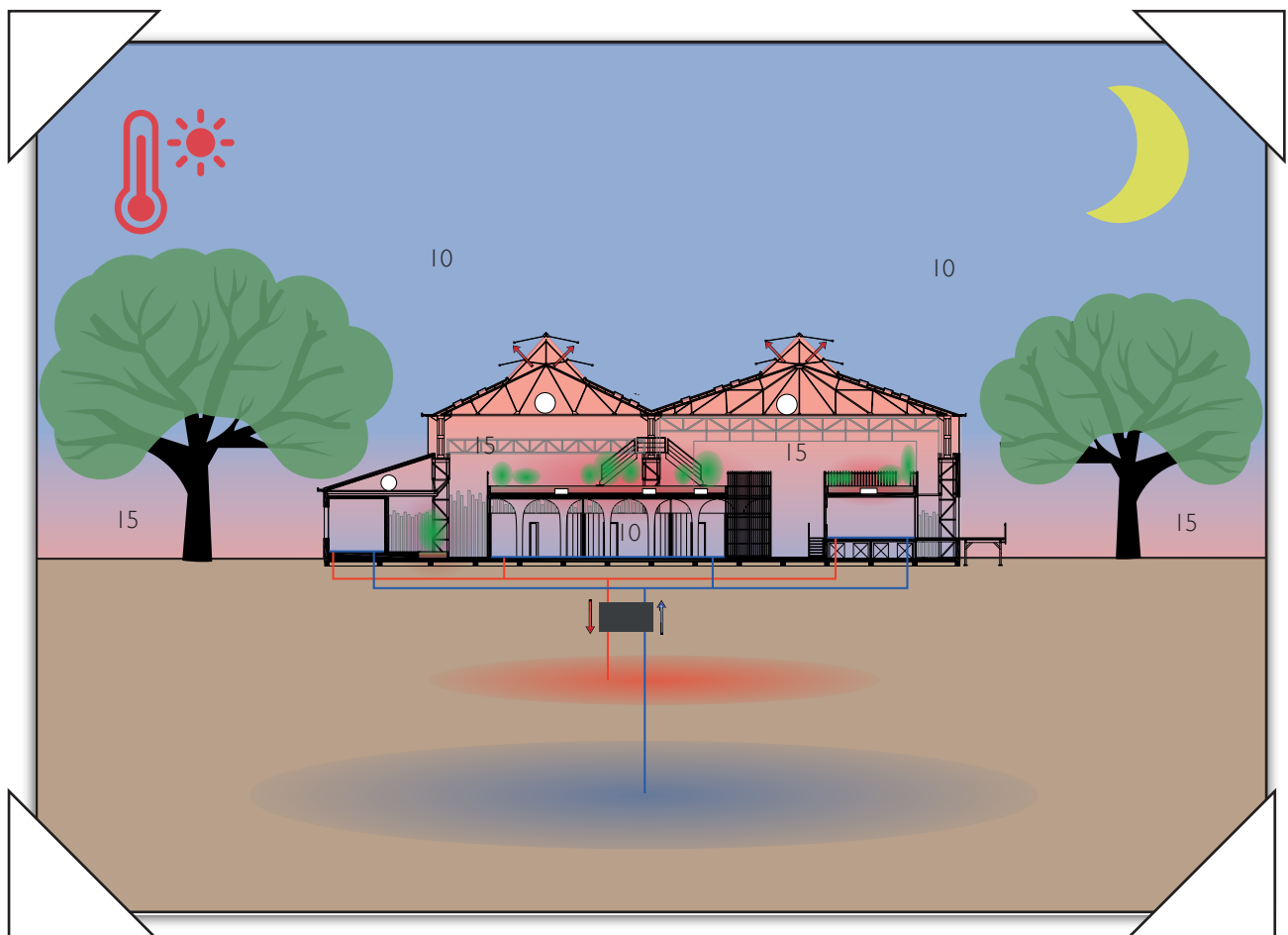
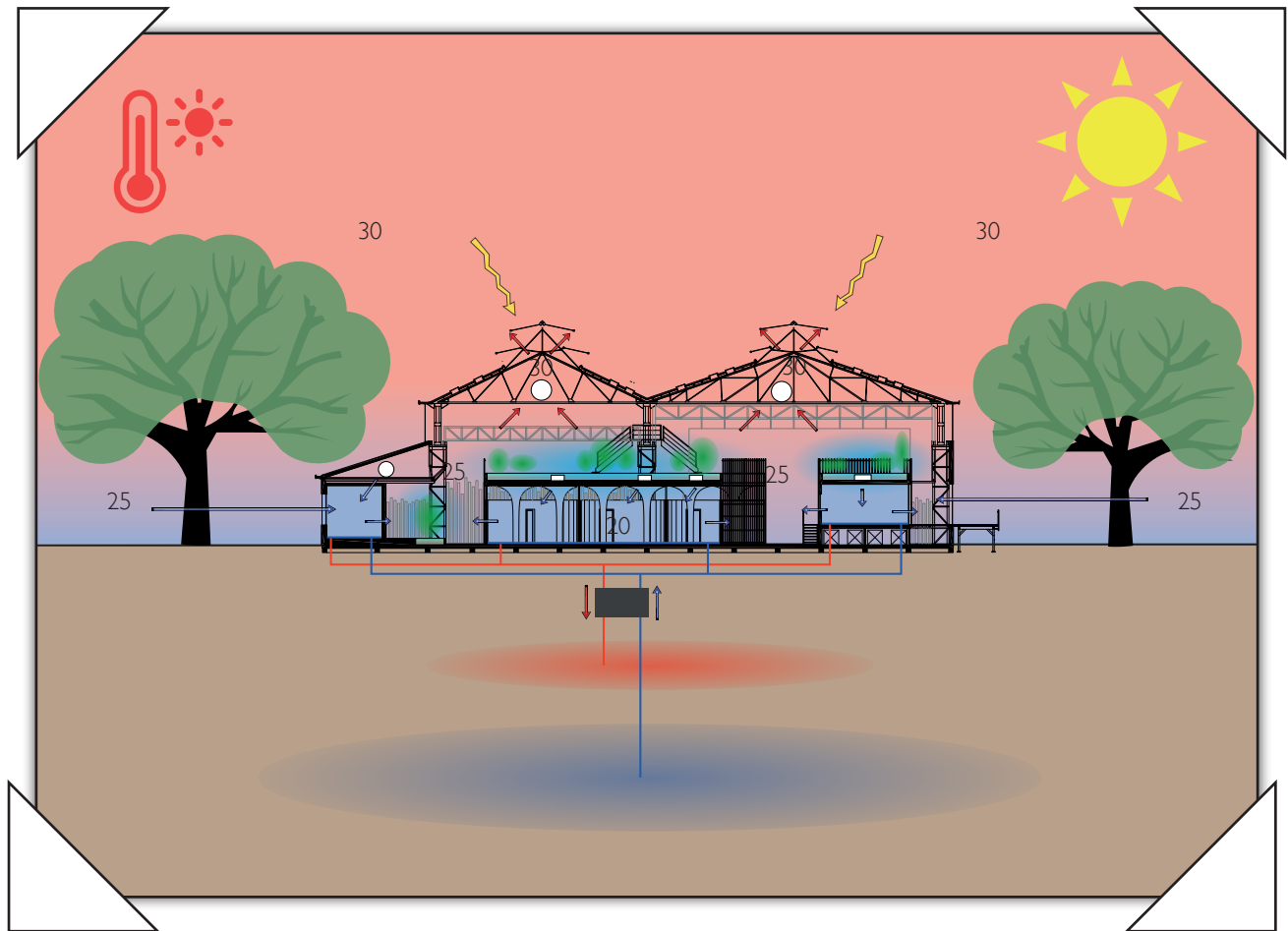


Theatre

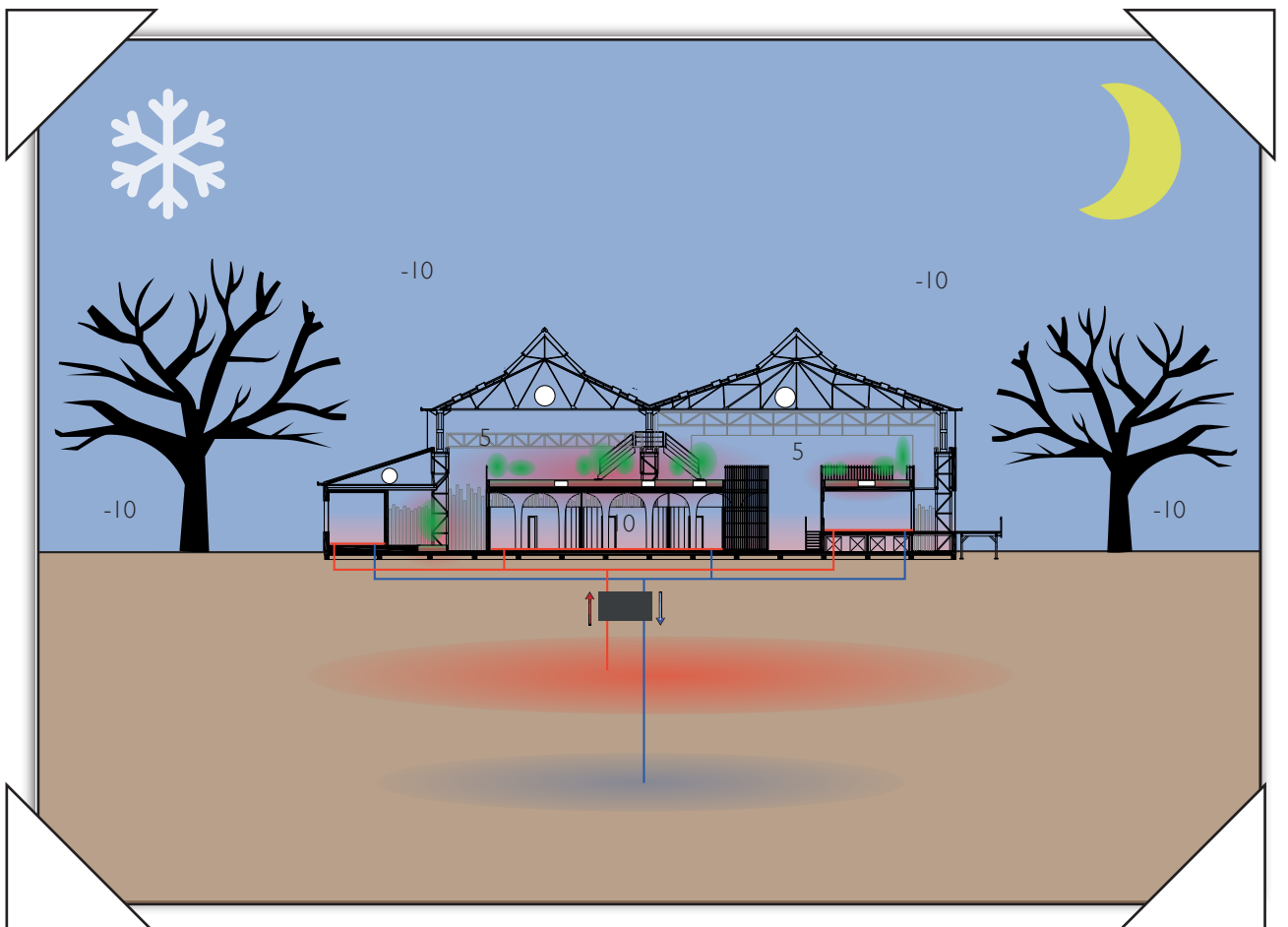
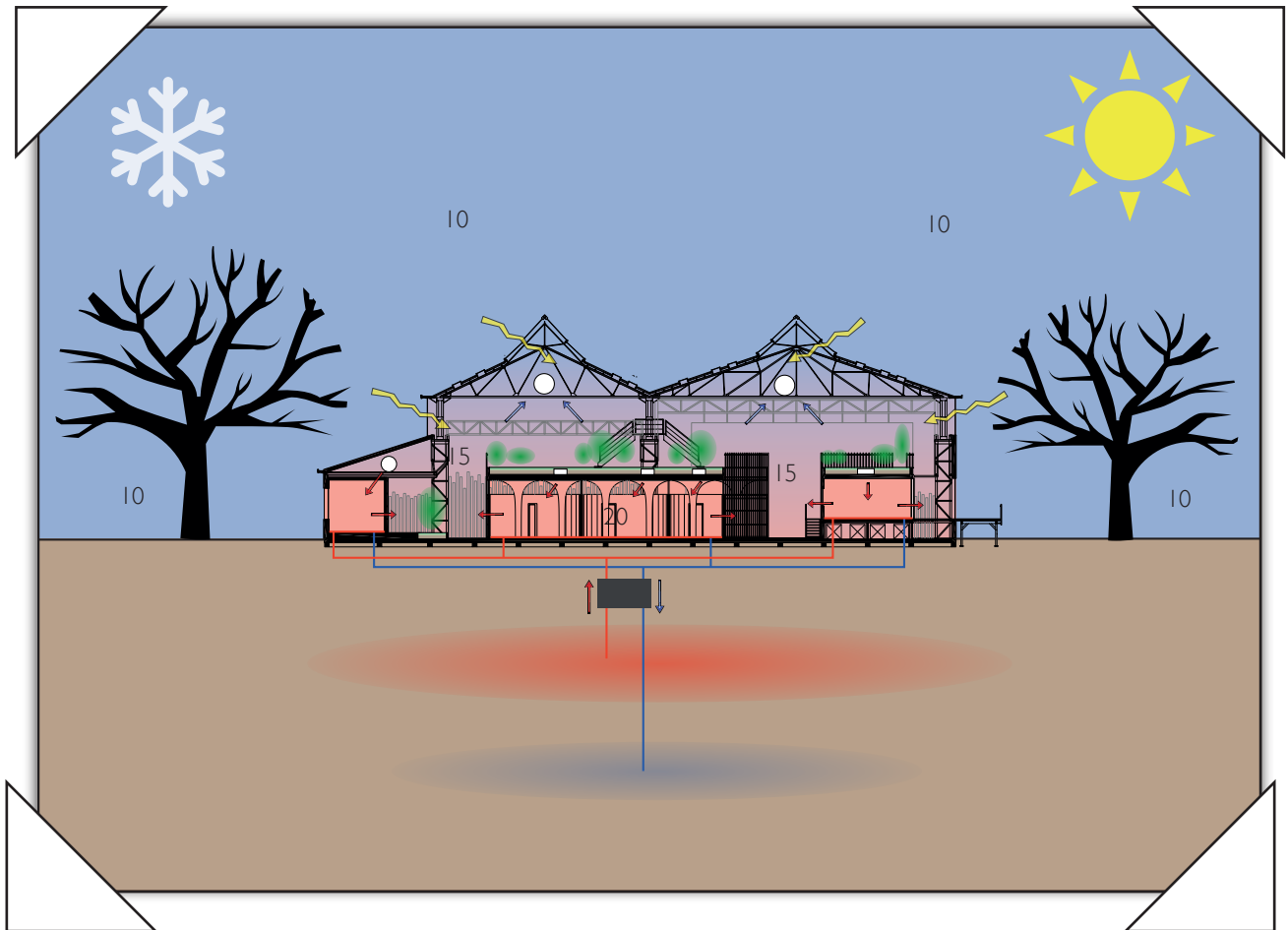


Week 3.3
24-02

Summer

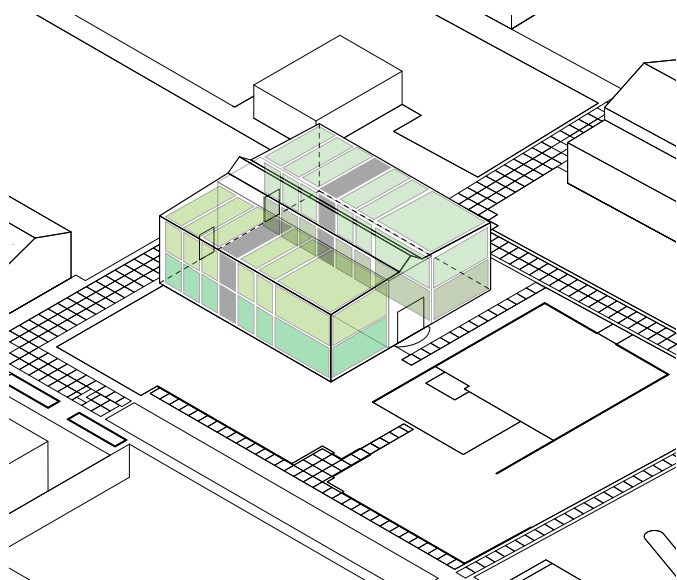
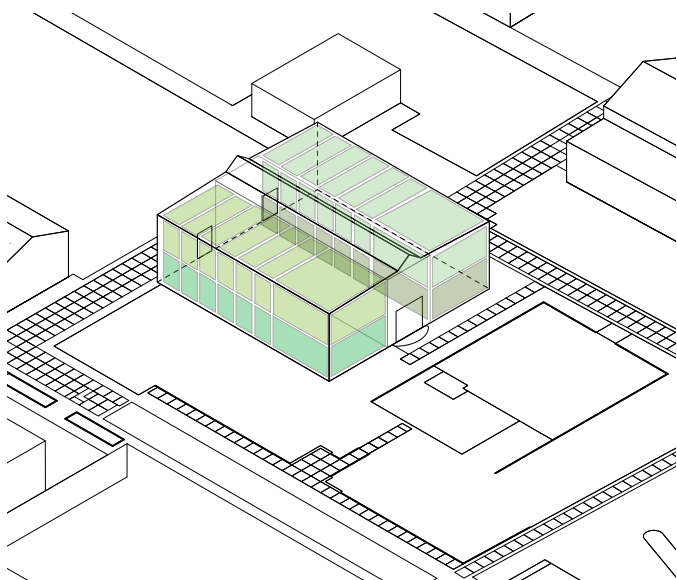
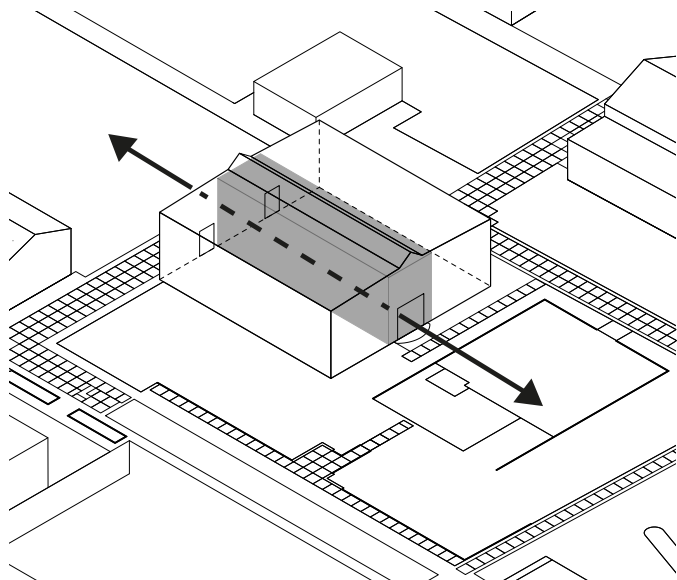
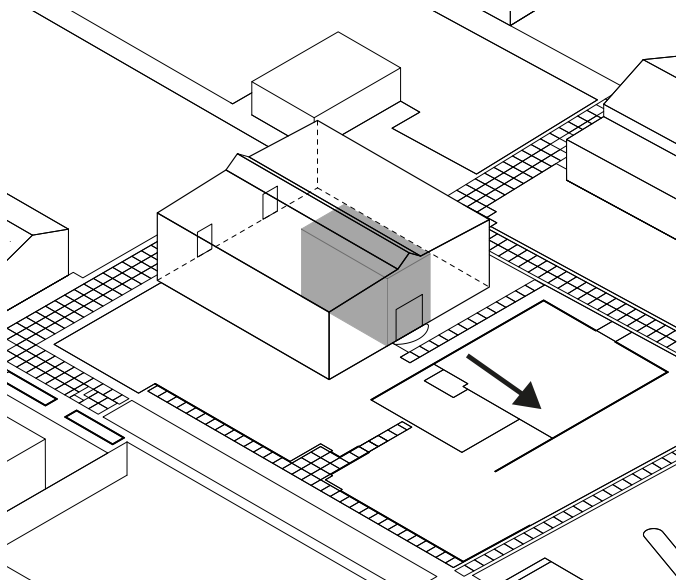
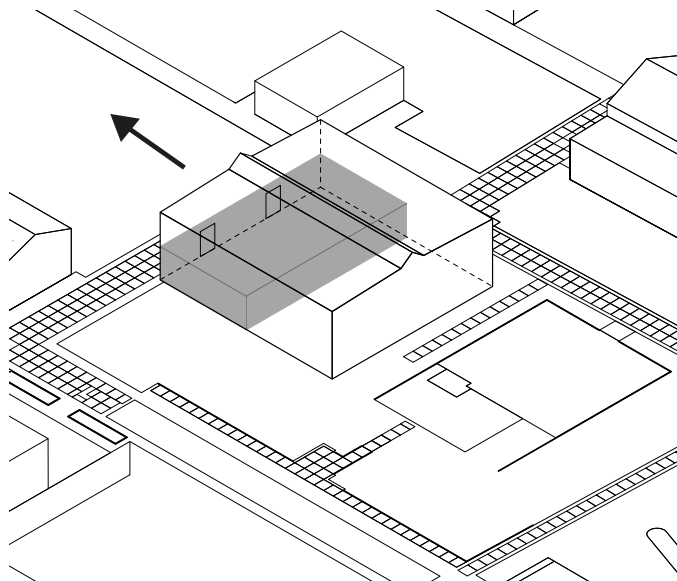


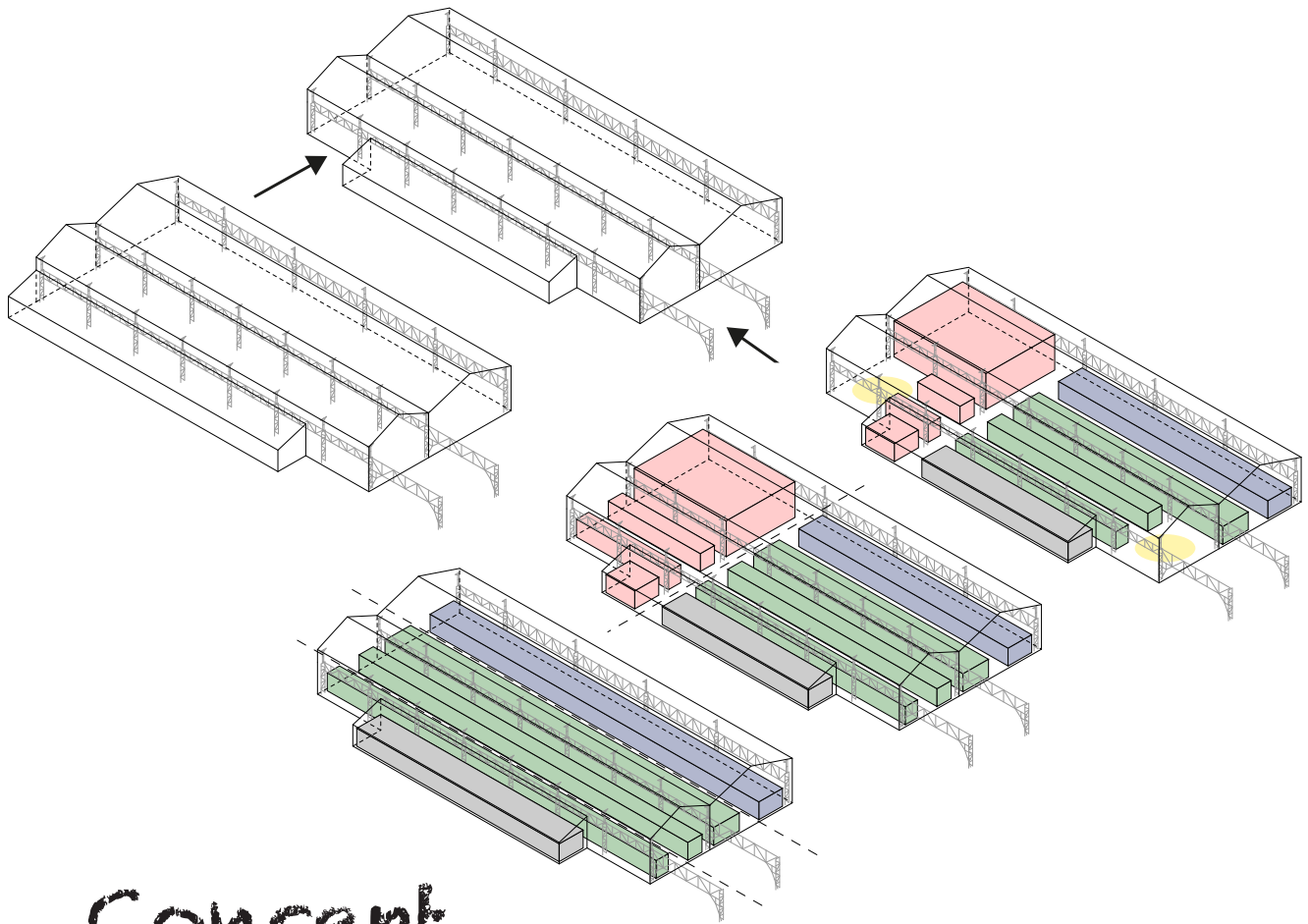
Winter



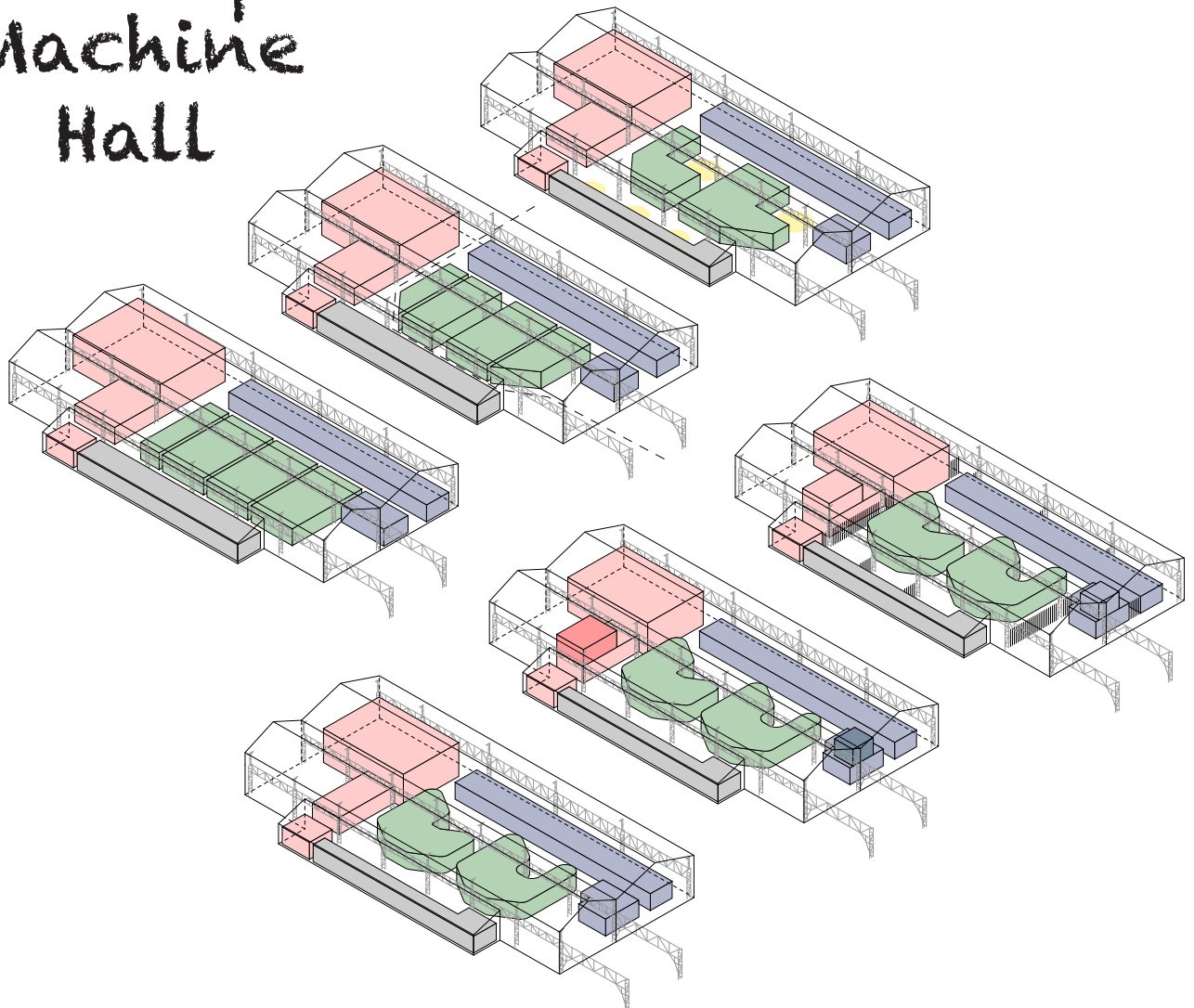
Week 3.4
02-03

Concept Weapon Depot





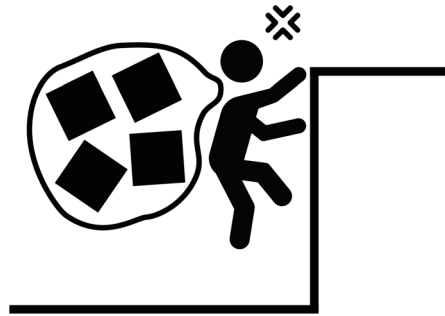
Concept Machine Hall



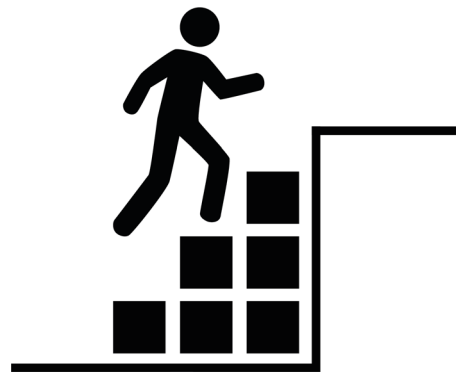
Week 3.4
02-03

Concept

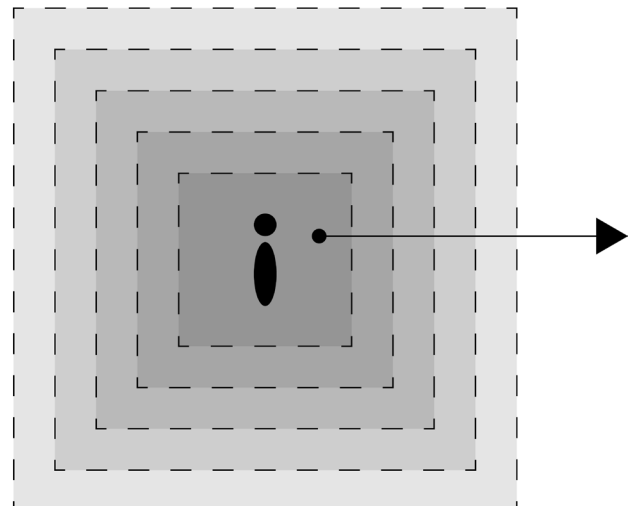
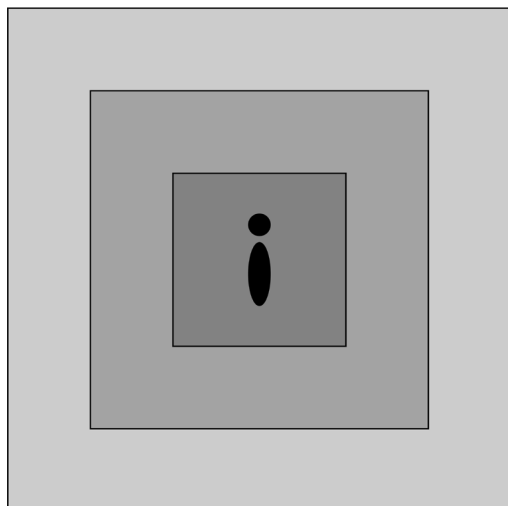
"The past cannot be changed,
forgotten, edited or erased ...
It can only be accepted"



"Hembrug was always the
place which gave the people
the tools to defend them-
selves"

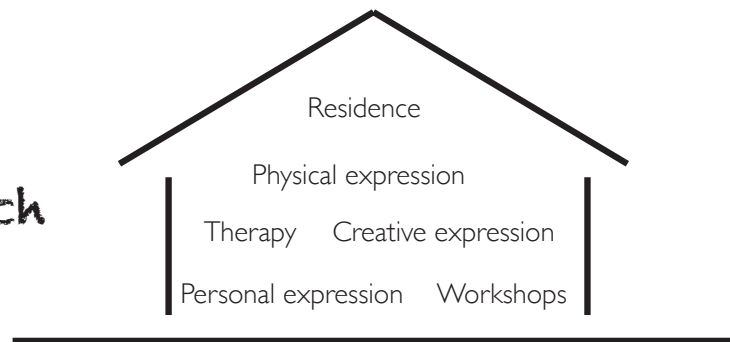


Layering in creating personal space and
a protected environment

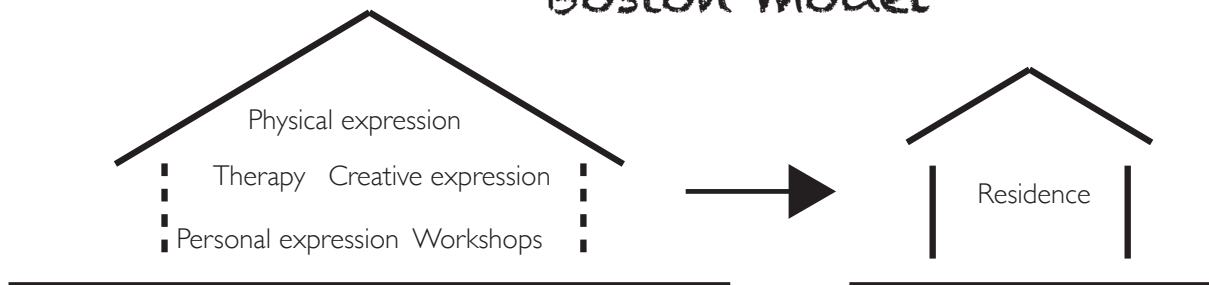


Functional concept of a mental health care

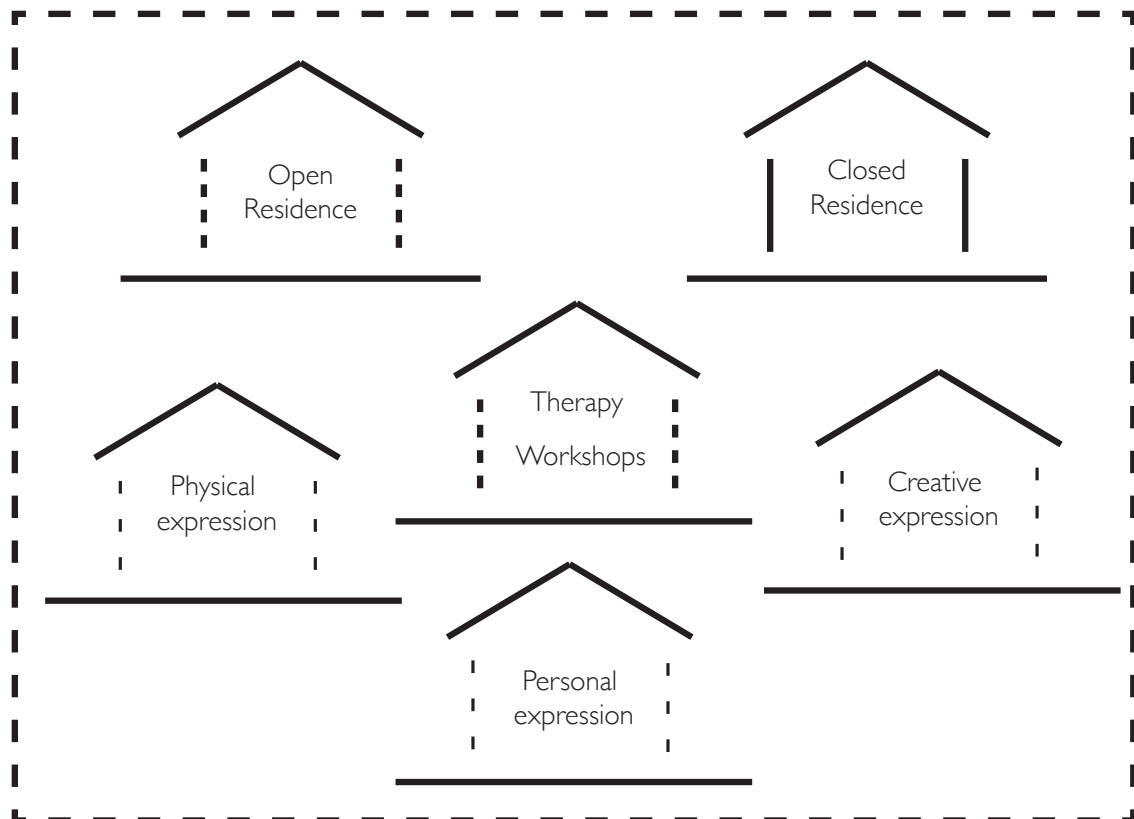
Original approach



Boston model



Multifuncional use 'open campus'



The 5 aspects

Utilitarian
The function of
architecture and the
project

Complementary architecture
Interdisciplinary designing in
a search for complementary
interaction

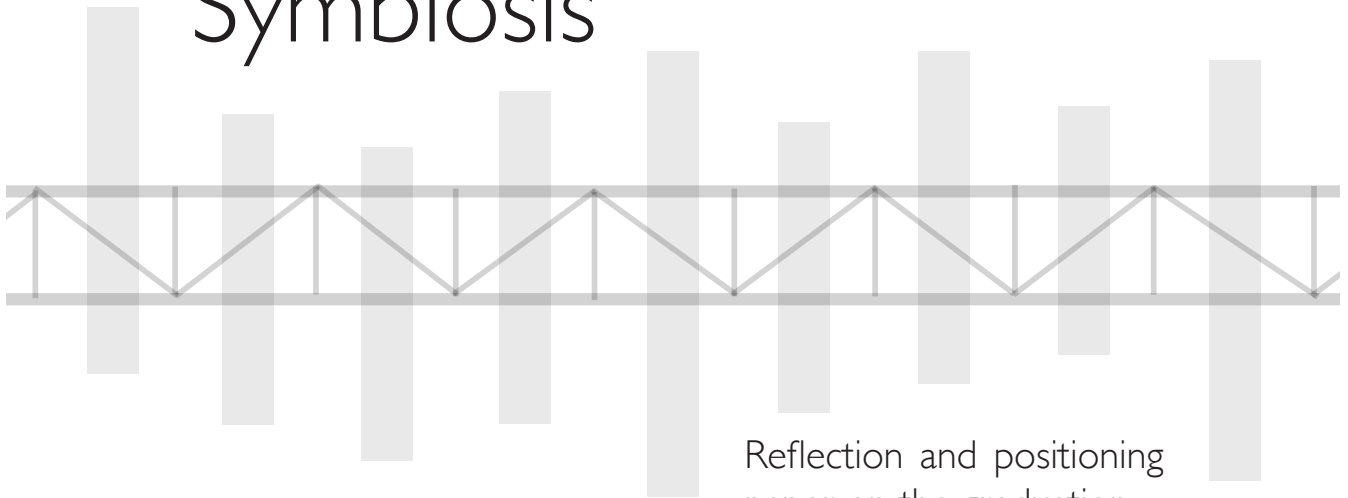
Narrative Buildings
The use of narrating
and materializing
in the research on
cultural values

Ethic
Functionless and
fake architecture

Raison d'être
Research as a tool to
justify the design

Reflection paper

Symbiosis



Reflection and positioning
paper on the graduation
project 'GGZ Hembrug'

Symbiosis

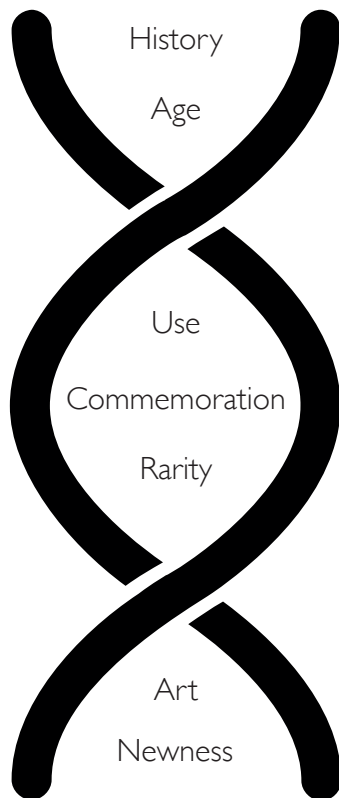
1 "The relationship between two different living creatures that live close together and depend on each other in particular ways, each getting particular benefits from the other."

2 "A relationship between people, companies, etc. that is to the advantage of both"

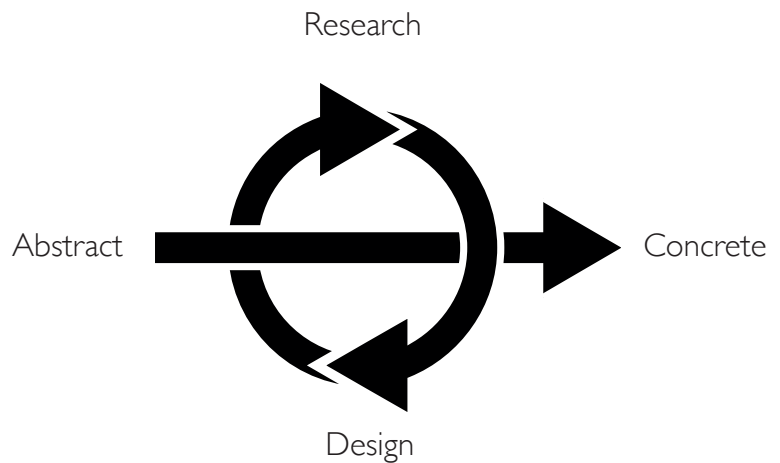
Conclusion

How can different research and design elements work in complementary way to substantiate the project?

In the graduation project is mostly search for a way of research and designing where multiple aspects can benefit from each other. By looking at a project from this point of view architecture can work in a complementary way instead of a supplementary. Especially in heritage the new intervention can work as a symbiosis. The old and the new interact with each other and both achieve benefits from each other. In this way of thinking, one plus one is not two, it is three. The DNA of the old Building, his heritages, merges with the DNA of the new intervention and in this way new architecture is created with an even greater value.



The cultural values as DNA of the building,



The research and design process in a circular motion moving from abstract to concrete

Week 3.5
09-03



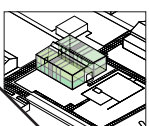
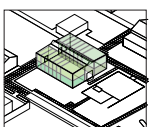
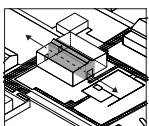
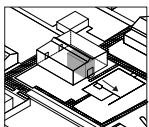
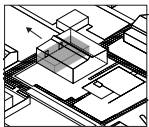
P4

GO!

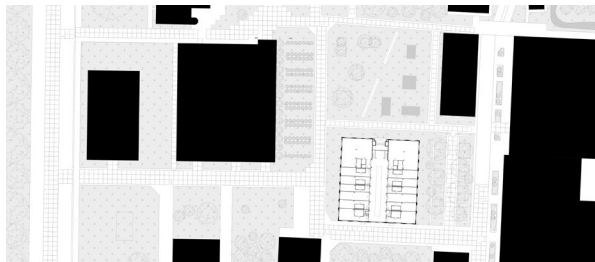
Mental Health Center Hembrug

Revitalizing Hembrug, to revitalize society

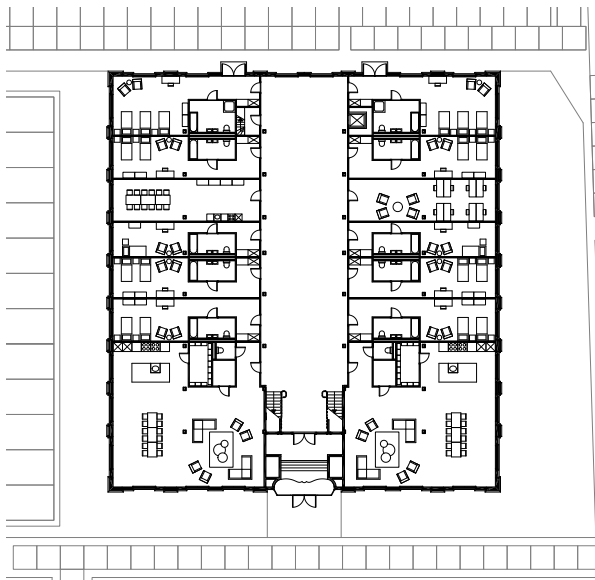
Concept



Site 1:500

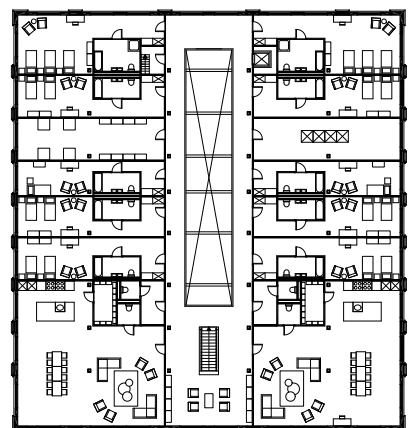


Ground Floor 1:100

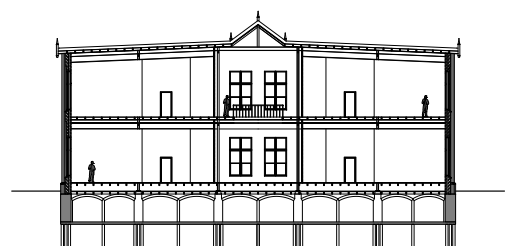


Weapon depot

First Floor 1:100



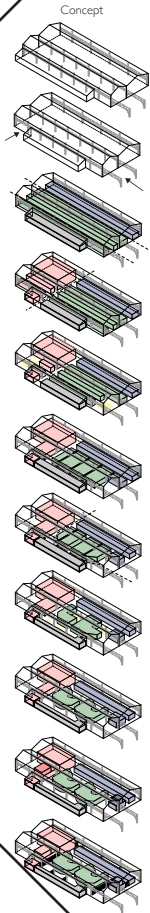
Section 1:100



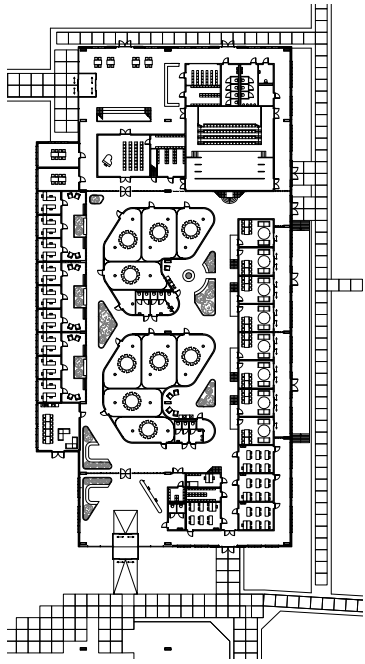
Mental Health Center Hembrug

Revitalizing Hembrug to revitalize society

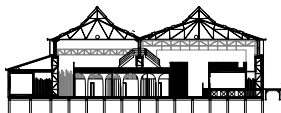
Concept



Ground Floor 1:200

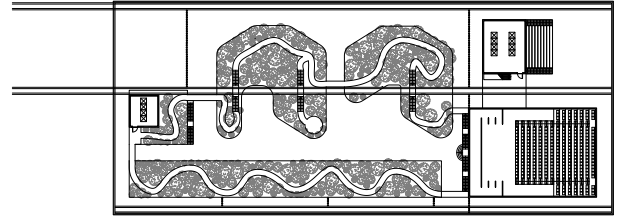


Section 1:200



Machine hall

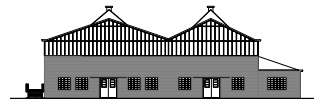
First Floor 1:200



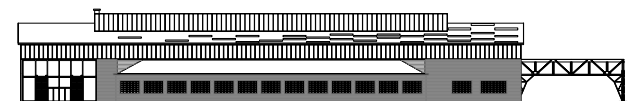
South Facade 1:200



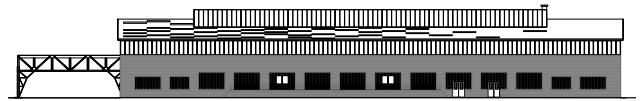
North Facade 1:200



West Facade 1:200



East Facade 1:200



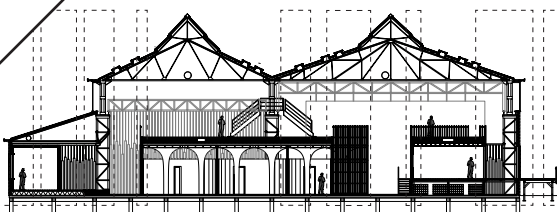
Section 1:200



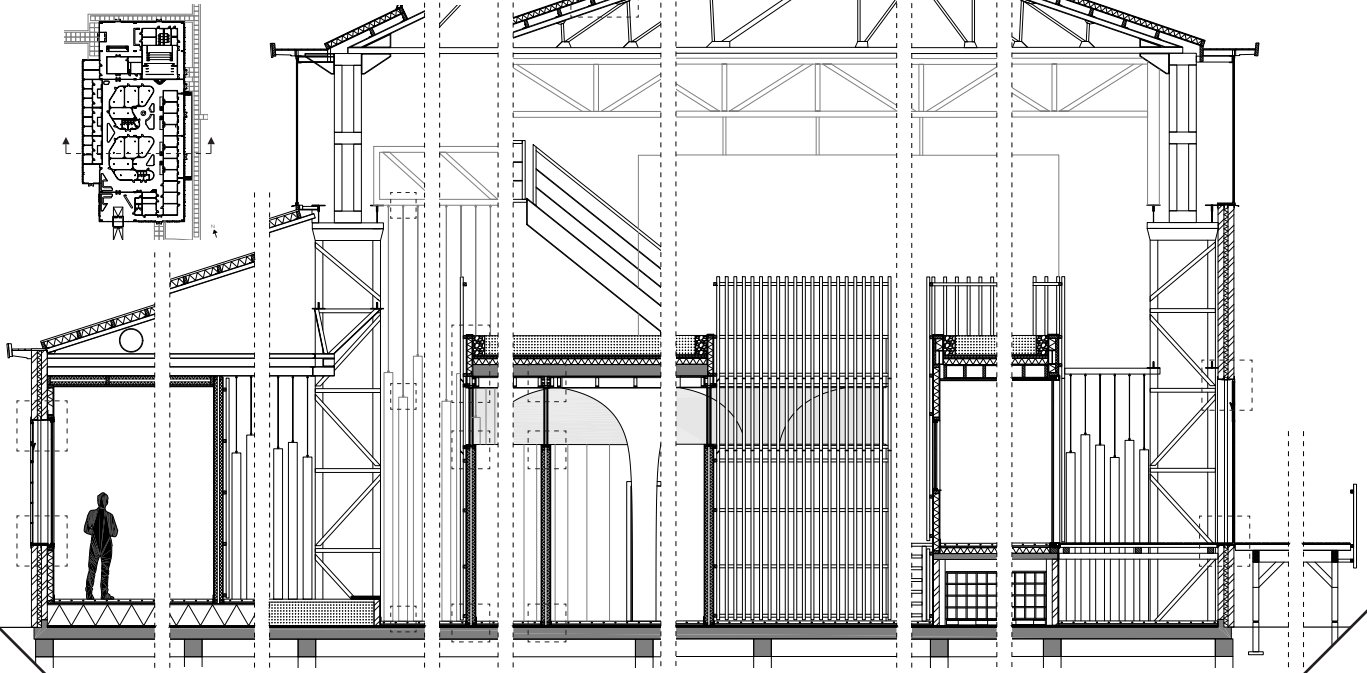
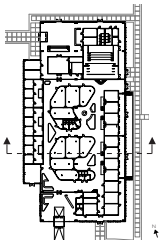
Heritage and Architectue, Revitalising Heritage, Hembrug

Job van den

Section 1:100



Ground floor 1:500



Architectue, Revitalising Heritage, Hembrug

Job van den

Machine hall

Section 1:20

