



# HÖRKE -

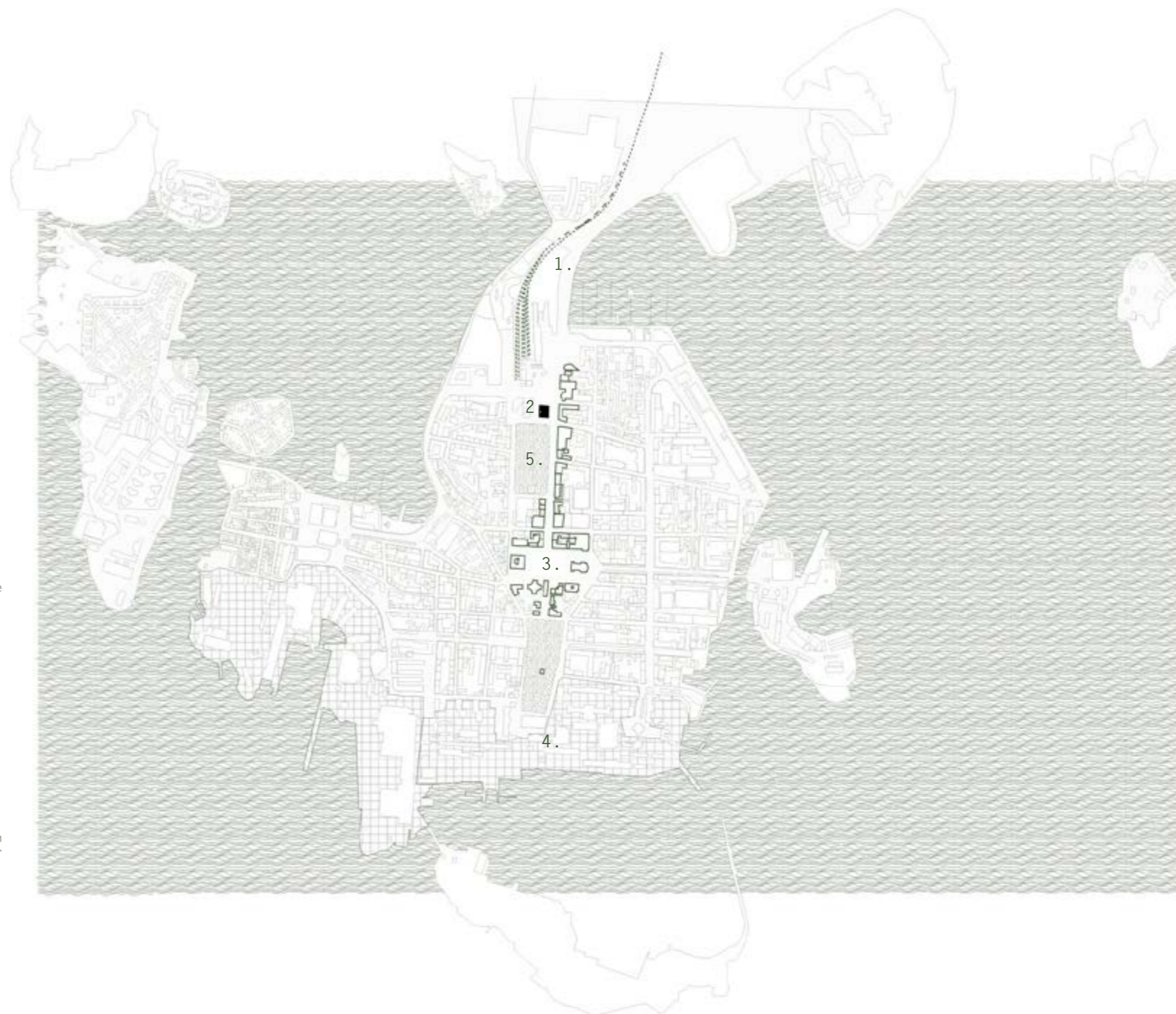
ENVIRONMENTS THAT INSPIRE TO WELLBEING AND TAKES CARE OF BOTH HUMAN AND CITY



## THE SITE

Karlskrona is a 400 years old city in the south of Sweden. It has played an important role in the Swedish history since it has always been and still the base for the Swedish Navy. Because of its importance there has been big investments in the built environment of the city. Today a big part of the city center and its old beautiful buildings are listed on Unesco World Heritage.

The city is located in the archipelago of Blekinge with the city center on Trossö Island (the big Island on the map). Since Trossö only has one connection with the mainland, all traffic arriving to the city center (both train and car) comes by the same bridge (1). The first thing that meets the visitor arriving on the island is our site Kungsplan and Hörke (2). Karlskrona has a baroque city plan and an axis connects our site of Kungsplan with the main square Stortorget (3). Along the axis runs preserved old railway tracks that were used for transporting soldiers and deliveries from the railway station to the Navy in the south of the island (4). The old tracks run diagonally through our site. The biggest parks in the city center are also located along the axis, with the baroque style Hogland Park just south of our site (5).



# DESIGN STRATEGIES

HÖRKE STARTED WITH THESE 8 STRATEGIS, WHICH WERE DEVELOPED INTO IDEAS, SKETCHES AND DESIGN ELEMENTS. THE STRATEGIES CAN BE DIVIDED INTO THREE THEMES



-SITE & CONTEXT  
Kungsplan, Karlskrona and Blekinge



-BRIEF, LOGISTICS & HEALTH PROMOTION  
Who uses the building and how?



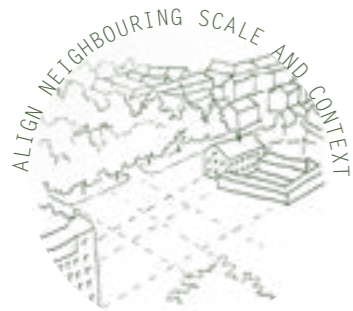
-SUSTAINABILITY AND FUTURE PROOFING  
What will happen in Karlskrona in 50 years?



## -BRIEF, LOGISTICS AND HEALTH PROMOTION

A friend once said after a visit at her health care center in a hundred years old hospital that she felt like a royalty climbing the beautifully decorated stairs of the building. Her story has inspired the design of Hörke and we want our visitors to have the same experience as she had. We want to create an environment that takes care of the patient before, during and after the visit at the doctor or nurse. We have put a lot of effort in making the main entrance and the staircases welcoming and airy. The waiting room is crucial for the patient's experience, we want the patients not to feel in the way, or forgotten, neither exposed. Therefore we have placed the waiting room in a lane around a courtyard. Another important aspect is the feeling of having control, not getting lost. We want the travel from the entrance to the examination rooms to be as short as possible for the patient. The last part of the patients visit to the center is after the examination, here we learned from IKEA's motto "you are happy when you are not hungry" and placed a café in a nice location at the ground floor. The human centered approach also means a care for the staff working in the building. To give them a good working environment they have a nice common restaurant and microwave space on the top floor in a relaxing environment. The staff's way of working has been taken into account in the planning of examination rooms and offices so that they can work undisturbed in both places.

## -SITE & CONTEXT



The site is a challenge to work with: It has no backsides but four different sides where we need to consider neighbouring buildings with high cultural value, a baroque city plane, heavily trafficked streets, Hogland park and the railway station. To meet these four different sides we have decided to give the sides four different characters and divided our volume into different smaller volumes. To make the places around small scale and reminiscent of the cosy Karlskrona urban space we need to have a building with a big footprint. On the south side of the site we Hogland Park is located, here we have placed a sunny square.



We want the building to inspire both the community, visitors and staff to live a healthy lifestyle. Therefore we have added functions such as a café, a Tourist information and a skatepark outside. The gym connected to rehab has been placed so that visitors can have access when the rehab unit is closed. Much effort has been made to make the staircases attractive to climb instead of taking the elevator. To bring nature closer and give much daylight to the staff, many and big windows with outlook towards the outside and the courtyard surround the facades. To encourage the staff to bicycle a fresh-looking bicycle storage has been placed on the ground floor protected from cold, rain and snow. As a small gesture to passers by to be health promotive we have planted apple trees outside of the facade along Norra Kungsgatan.



Karlskrona has a rich culture and interesting history that can be understood and read in the city. Materials, decoration and details of the building has been inspired by the buildings of the city.



We believe that sharing spaces between the different functions will promote meetings and cooperation between different professions among the staff. Therefore the restaurant and the microwave are common for all of the staff and at the nicest location of the building, the top floor. The different units of the building share the same office space and some smaller rooms with the same funktion.



# DESIGN STRATEGIES

## -SUSTAINABILITY & FUTURE PROOFING



The site at Kungsplan is located on an island, close to the sea. With climate changes and sea level rise the building has a high risk of being flooded. Therefore we have placed a water reservoir in front of the main entrance and on the north side of the site a stormwater bed, both can absorb and store much water during heavy rain when the stormwater system can't handle all. Since the building is constructed of wood the basement and half the ground floor is made of concrete that can be flooded and dry out damage to the construction. To protect the functions inside all health care units has been elevated 1,3 meter above ground floor.



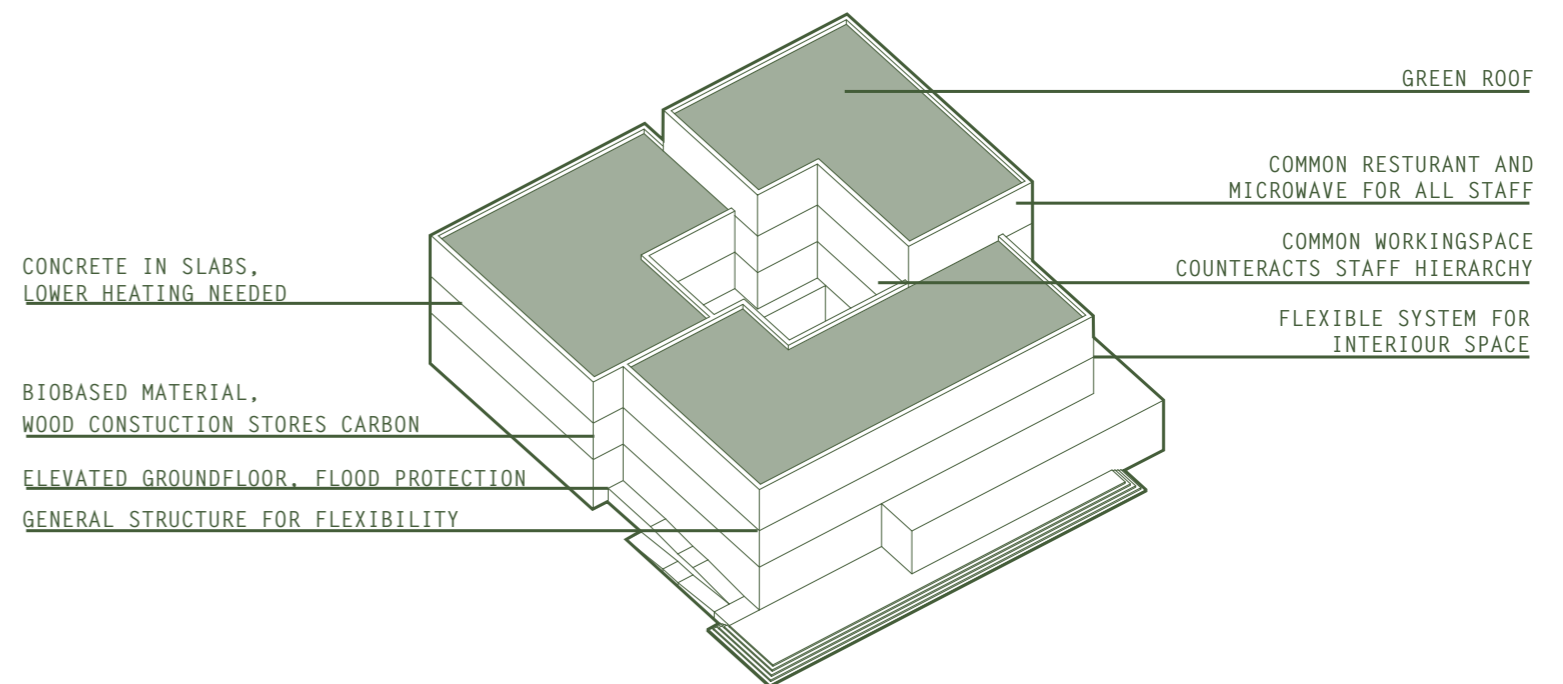
Wood is both a material that stores carbon in its molecules and that has low carbon emission during production and construction. Hörke is constructed of wood pillars and beams with concrete in the slabs. The concrete enables the wooden beams to handle a bigger span. It is also a material with a higher thermal mass than wood which means that it can store warmth and thereby reduce the need of heating.



It is difficult to say how healthcare will develop and change in the future, if the needs will be bigger or smaller or just different. To be able to meet an uncertain future much effort has been made to make the structure of the building general. The floor planes are rational and stairs and elevators have been placed symmetric. The load bearing structure gives a general floor height and is placed in a grid that can be seen in the lath in the facade. All interior walls and windows have been placed aline with this grid so that the lath in the facade frames every window. This enables the interior walls to be moved without changing the windows and new windows can be inserted without a bigger impact on the facade.

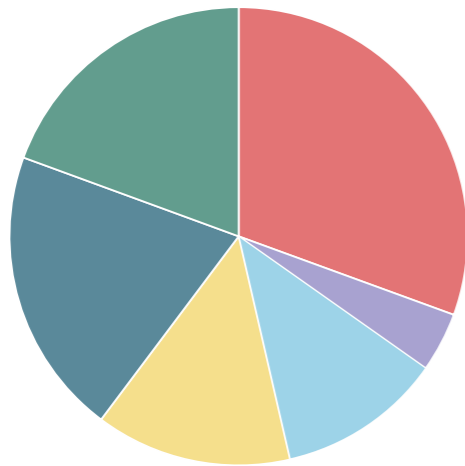


## -ECOLOGICAL, ECONOMICAL & SOCIAL SUSTAINABILITY

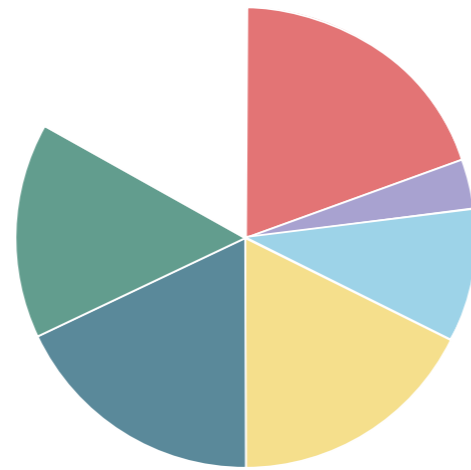




## CHANGES IN THE BRIEF



● MEDICAL CENTER:	792 kvm
● CHILD CARE CENTER:	109 kvm
● WOMEN'S HEALTH CENTER:	301 kvm
● REHAB:	359 kvm
● DENTAL CARE CENTER:	527 kvm
● COMMON AREAS:	503 kvm
<b>TOTAL:</b>	<b>2591 kvm</b>



● MEDICAL CENTER:	462 kvm
● CHILD CARE CENTER:	109 kvm
● WOMEN'S HEALTH CENTER:	266 kvm
● REHAB:	359 kvm
● DENTAL CARE CENTER:	495 kvm
● COMMON AREAS:	404 kvm
<b>TOTAL:</b>	<b>2095 kvm</b>



● MEDICAL CENTER:	462 kvm
● CHILD CARE CENTER:	109 kvm
● WOMEN'S HEALTH CENTER:	266 kvm
● REHAB:	359 kvm
● DENTAL CARE CENTER:	495 kvm
● COMMON AREAS:	404 kvm
● ADDED FUNCTIONS:	263 kvm
<b>TOTAL:</b>	<b>2358 kvm</b>

### LARGEST CHANGES ARE FOUND IN THE MEDICAL CENTER

1. REDUCED AMOUNT OF EXAMINATION ROOMS FROM 20-12, REFERRING TO KEY FIGURES FROM MARIE LARSSONS LECTURE 15/10

"EXAMINATION ROOMS ARE MOSTLY USED BY A PATIENT APROX, 20 % OF THE MEDICAL CENTER'S OPENING HOURS." - WE ASSUME THAT THIS WOULD BE THE CASE EVEN IN THIS MEDICAL CENTER.

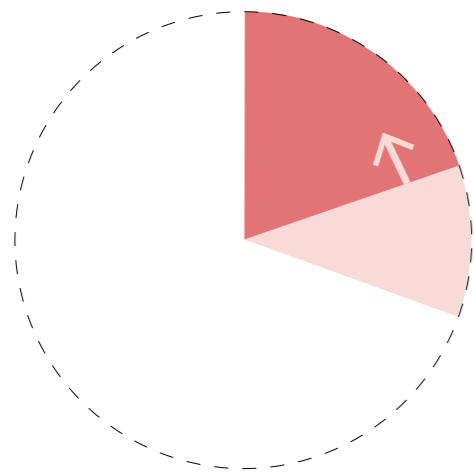
IF WE CHANGE THAT NUMBER TO 33% WE ONLY NEED 12 ROOMS.

- STILL ENOUGH TIME TO TO ADMINISTRATION RELATING TO THE PATIENT IN THE ROOM AND THEN HAVE TIME TO CHANGE

2. MOST OF THE ADMINISTRATION RELATED TO PATIENTS ARE DONE IN EXAMINATION ROOMS. OTHER ADMINISTRATION WILL TAKE PLACE IN AN ACTIVITY BASED OFFICE SPACE SHARED WITH OTHER UNITS.

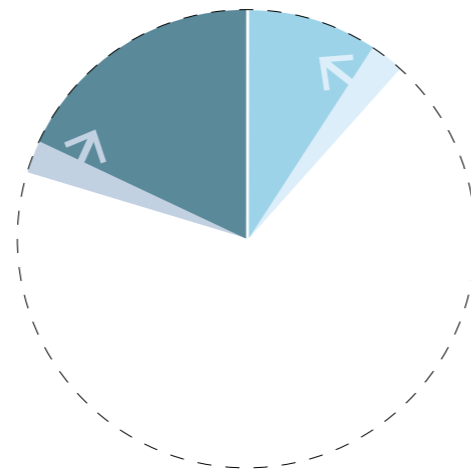
HERE WE COUNT 11,2 sqm/ STAFF

## MAKE THE USE OF SPACE MORE EFFICIENT...



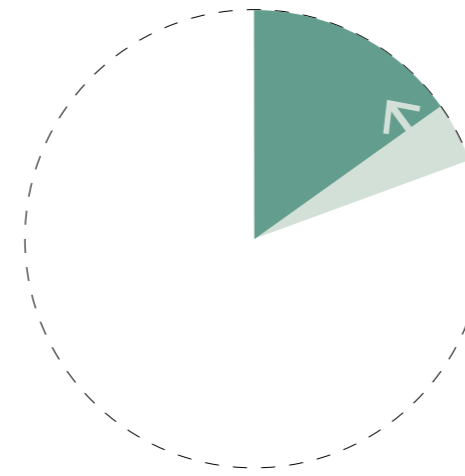
### MEDICAL CENTER

BEFORE:	792 sqm
AFTER:	462 sqm



### DENTAL CARE AND WOMEN'S HEALTH CENTER COMMON USE OF SOME SPACE BETWEEN UNITS

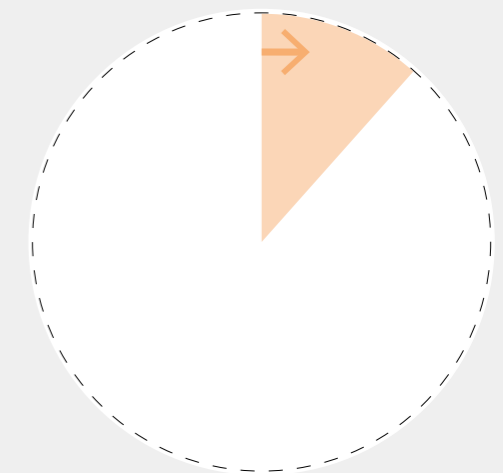
BEFORE:	527+301 sqm
AFTER:	495+266 sqm



### COMMON AREAS

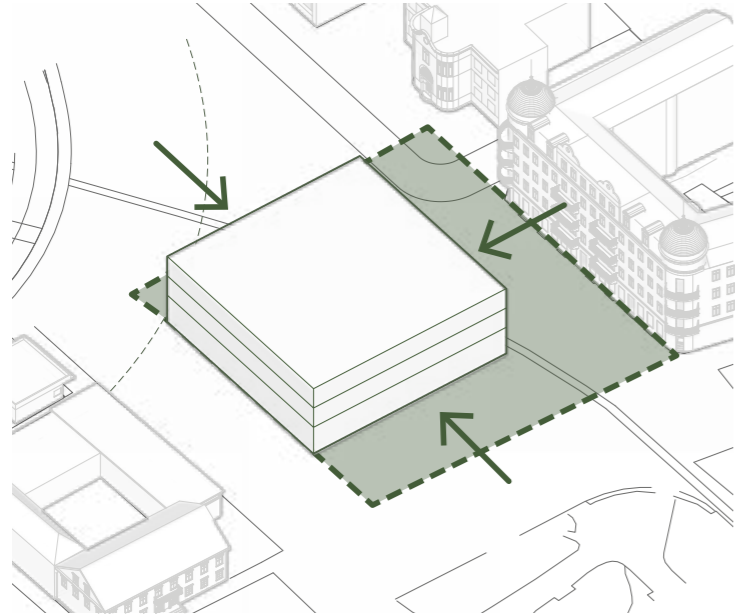
MOVING STAFF'S CHANGINGROOM TO BASEMENT AND HAVING A LARGE CHARED STAFFROOM ON TOP FLOOR	
BEFORE:	503 sqm
AFTER:	404 sqm

## ... AND THEN ADDING

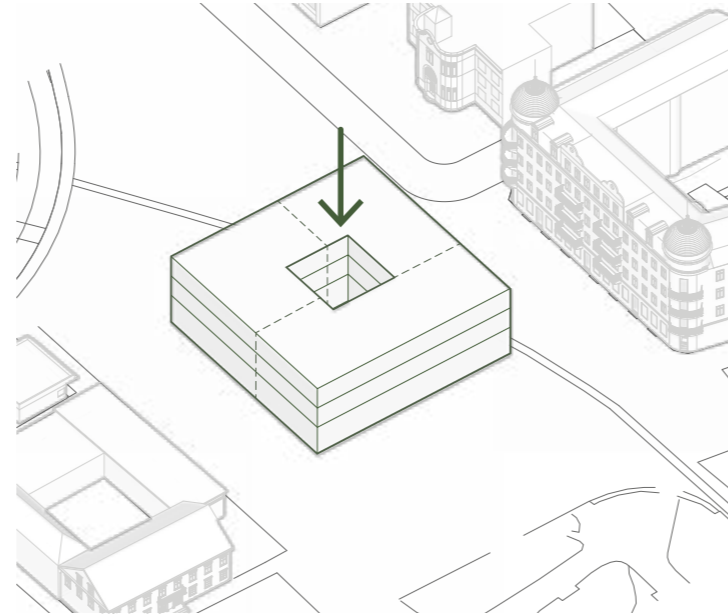


### NEW FUNCTIONS

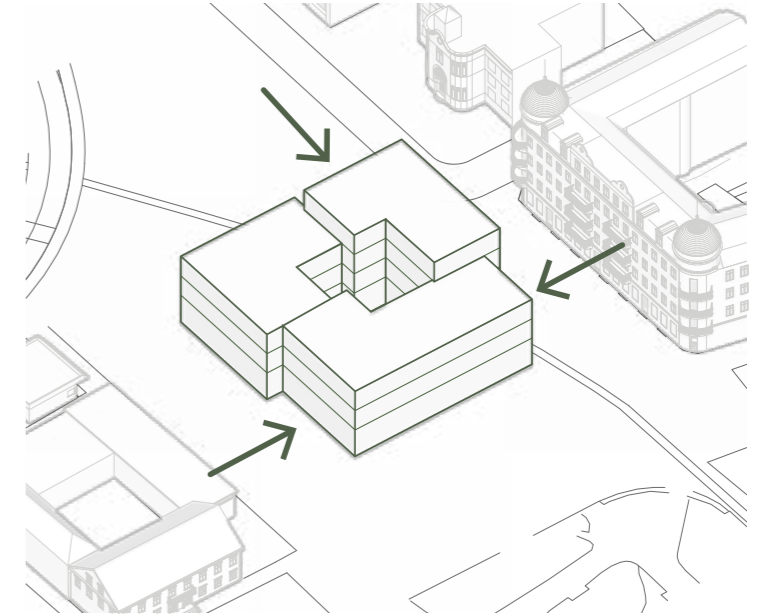
ADDING A PUBLIC CAFÉ/RESTAURANT OF ca 210 sqm AND A TOURIST INFORMATION OF ca 50 sqm	
BEFORE:	0 sqm
AFTER:	263 sqm



1. THE VOLUME CREATES FOUR URBAN SPACES WITH A SUNNY SQUARE IN THE SOUTH AND TWO COZY STREET LANDSCAPES ON THE WEST AND THE EAST SIDE.



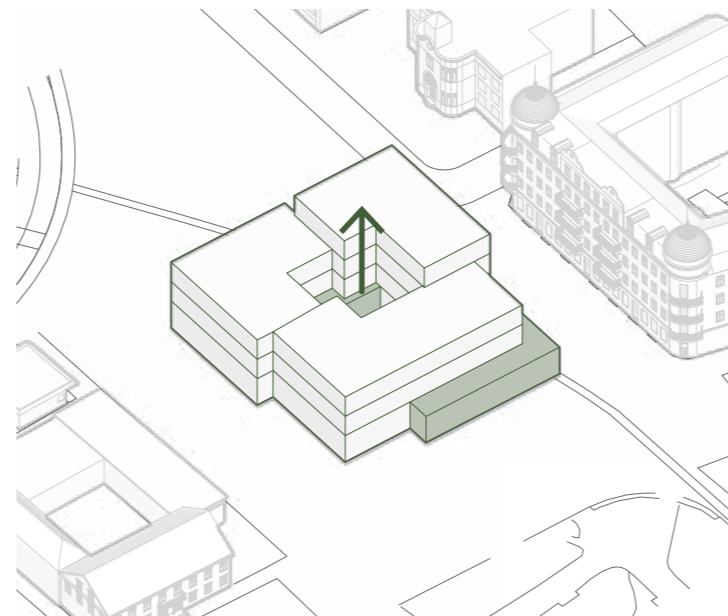
2. A COURTYARD IN THE MIDDLE OF THE VOLUME GIVES LIGHT TO THE COMPACT VOLUME.



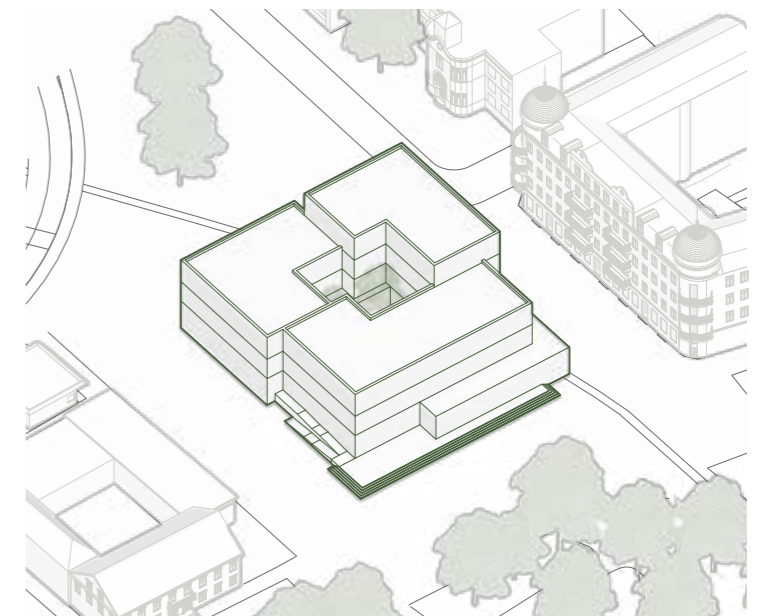
3. TO A LINE WITH THE SCALE OF THE NEIGHBOURING BUILDINGS THE VOLUME IS DIVIDED INTO THREE SMALLER VOLUMES THAT IS OFFSETED FROM EACH OTHER TO CREATE SMALLER SPACES AND NICHES IN THE URBAN SPACE DESIGN.



4. OUR VISION IS TO DESIGN WAITING ROOMS IN A ROW THAT ARE FACING A COURTYARD, BOTH AS A WAY OF USING THE COURTYARD FOR OUTDOOR WAITING AREA AND TO GIVE THE PATIENTS SOMETHING NICE TO LOOK AT WHILE WAITING.



5. THE COURTYARD IS PARTLY ELEVATED SO THAT OUR VISION OF THE WAITING ROOM CAN BE REALISED ON THE SECOND FLOOR. A LOWER EXTENSION TO THE THREE VOLUMES IS ADDED ON THE SOUTH AND THE EAST SIDE TO MEET A HUMAN SCALE ON THESE TWO SIDES.



6. LET US INTRODUCE *HÖRKE*.

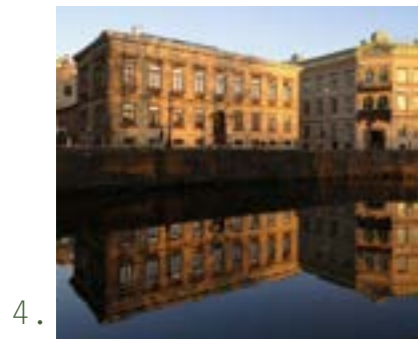






View from Norra Kungsgatan. On the east side of our site lies the cultural valuable building Friberg'ska huset that dominates the urban space. The rainwater reservoir in front of Hörke's entrance will mirror friberg'ska huset in the water.





1. SUNNY SQUARE
2. STORMWATER PARK WITH REED GRASS AND WATER PLANTS
3. SKATEPARK
4. WATER MIRROR/  
WATERMAGAZINE

SITEPLAN  
1:500



Hörke is a building without backsides. As a tool of designing a building that turns towards all directions we developed four different characters on the four different sides. Each side is designed to meet the neighbouring buildings and urban spaces on that side.



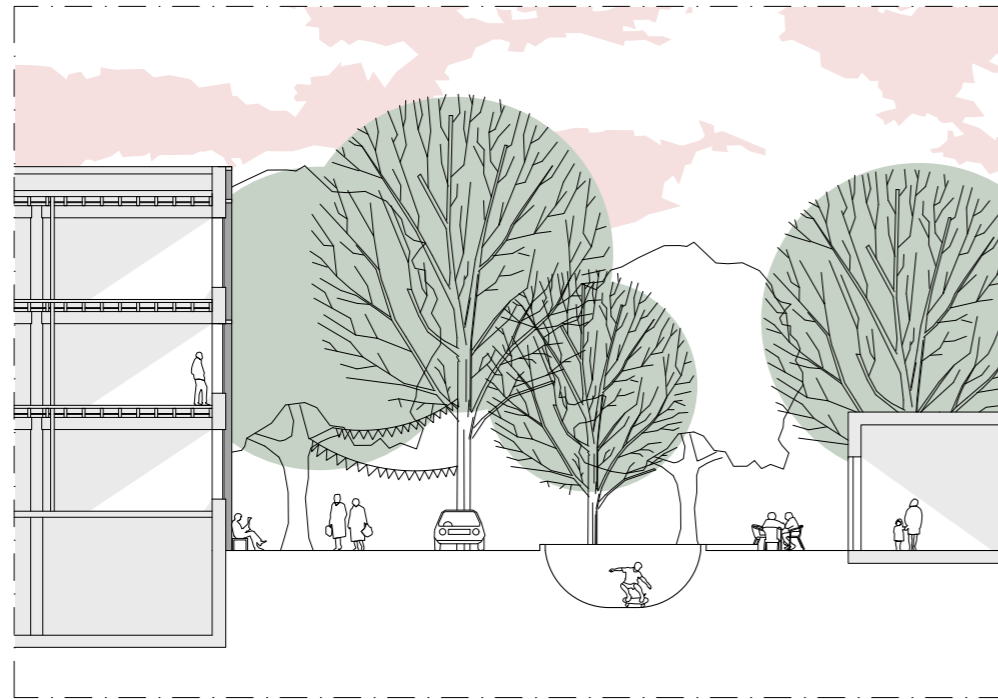




1- CONNECTION TO THE HOGLANDSPARK



2- THE WETLAND PARK



3- THE BACKYARD STREET



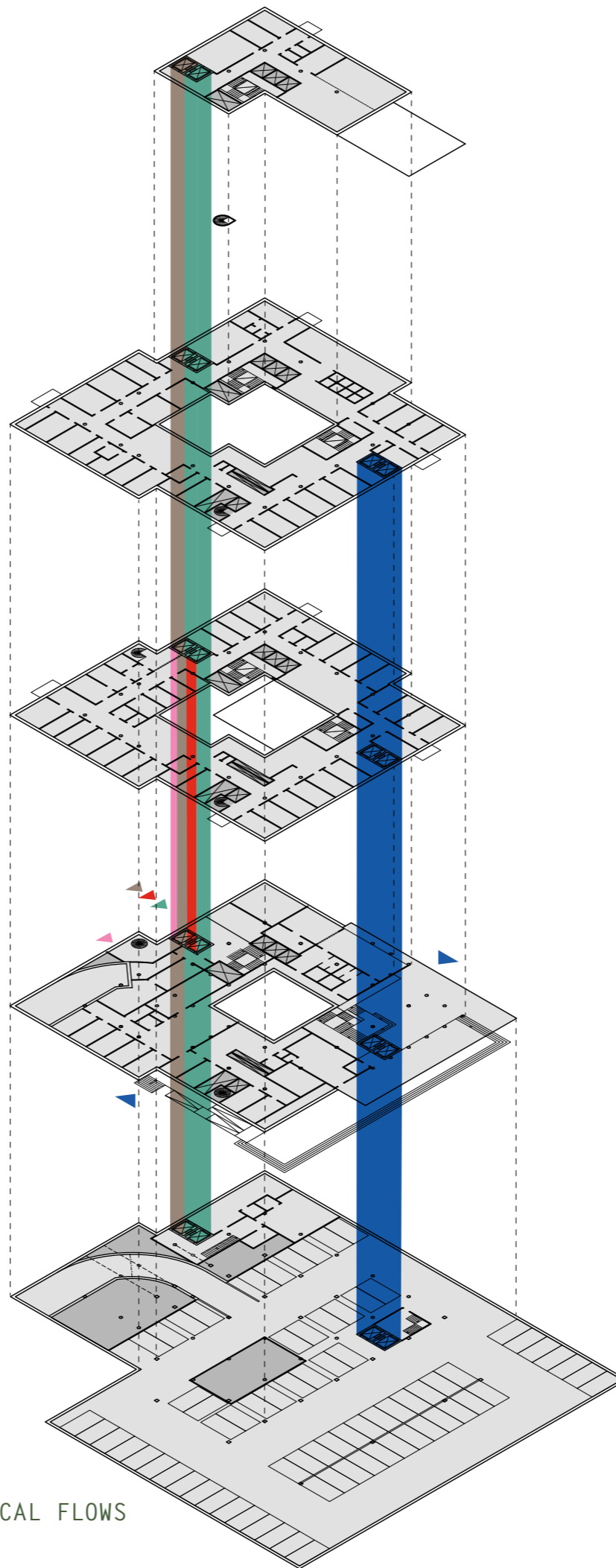
4- THE GRAND MAIN AXIS AND THE URBAN CITY STREET

SITEPLAN SECTIONS- THE 4 CHARACTERS

1:250



UNITS



VERTICAL FLOWS

4th FLOOR

3rd FLOOR

2nd FLOOR

GROUND FLOOR

BASEMENT

UNITS

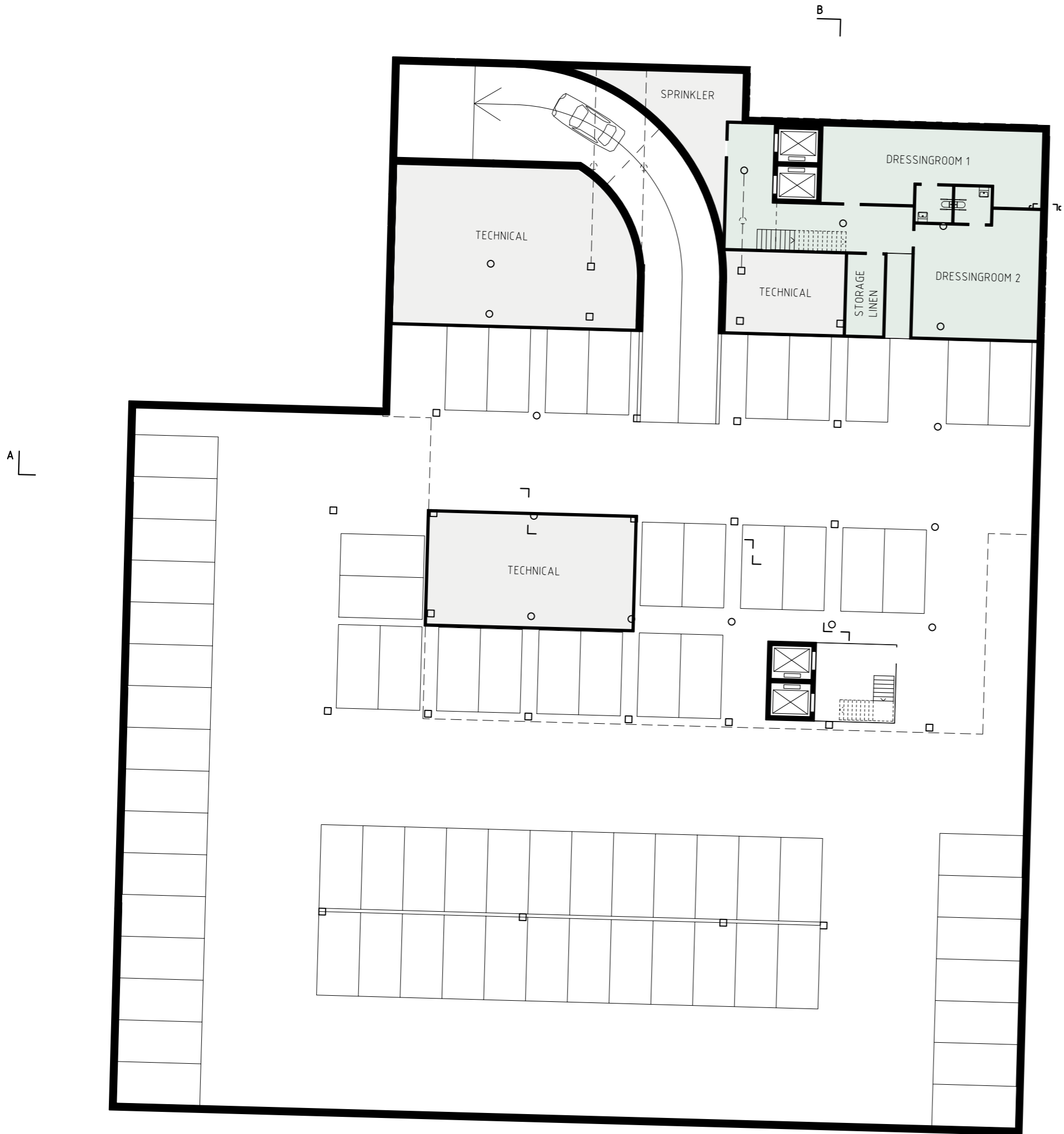
- MEDICAL CENTER
- CHILD CARE CENTER
- WOMEN'S HEALTH CENTER
- REHAB
- DENTAL CARE CENTER
- COMMON AREAS
- ADDED FUNCTIONS

FLOWS

- PATIENTS
- STAFF
- DELIVERIES
- INFECTION
- E.R.

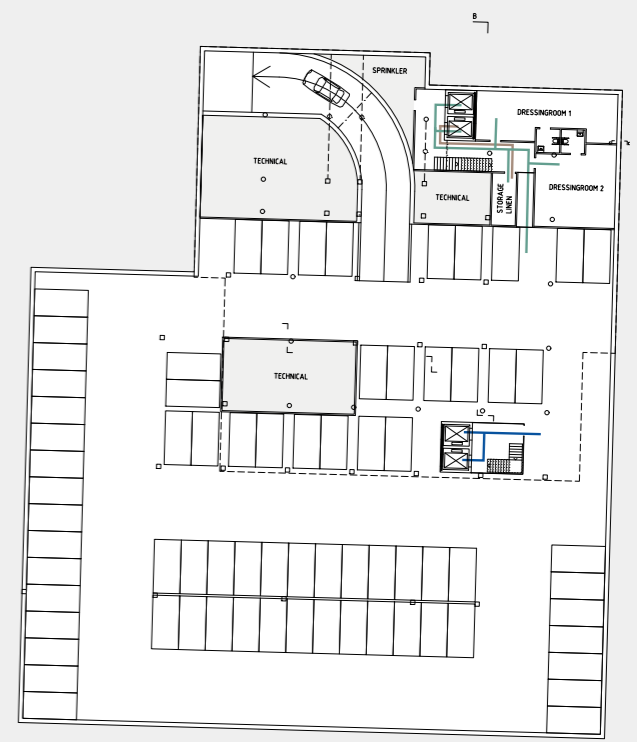




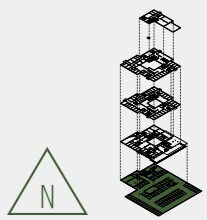


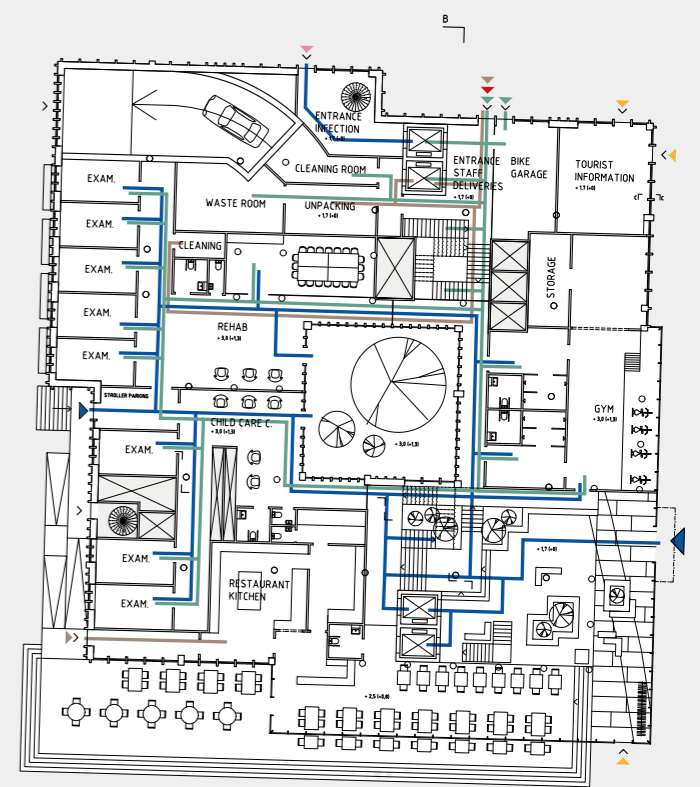
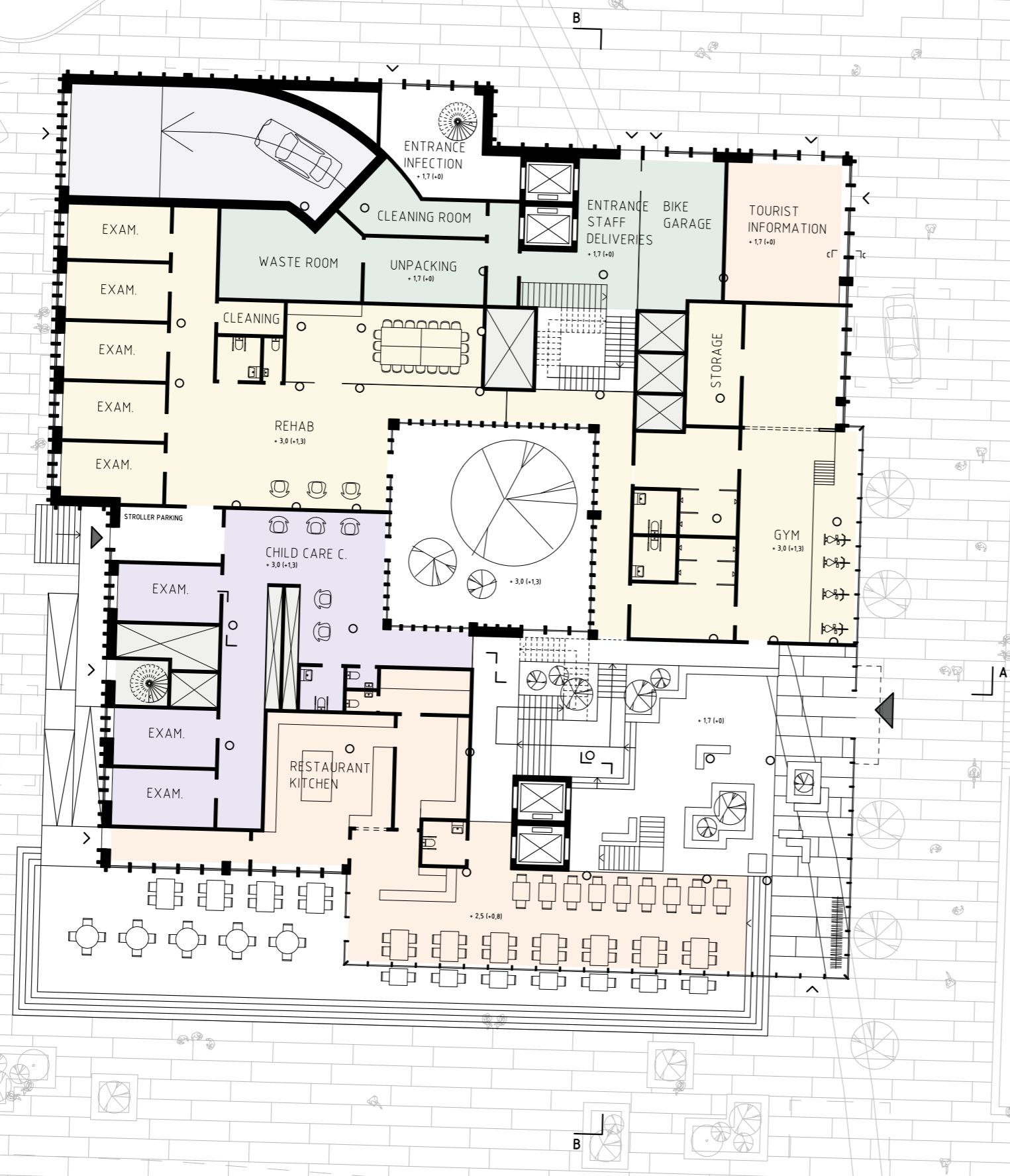
BASEENT

1:250



- UNITS
- COMMON AREAS
- FLAWS
- STAFF
- DELIVERIES

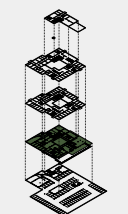




- UNITS**
- CHILD CARE CENTER
  - REHAB
  - COMMON AREAS
  - ADDED FUNCTIONS
- FLows**
- PATIENTS
  - STAFF
  - DELIVERIES
  - INFECTION
  - E.R.
  - ADDED FUNCTIONS

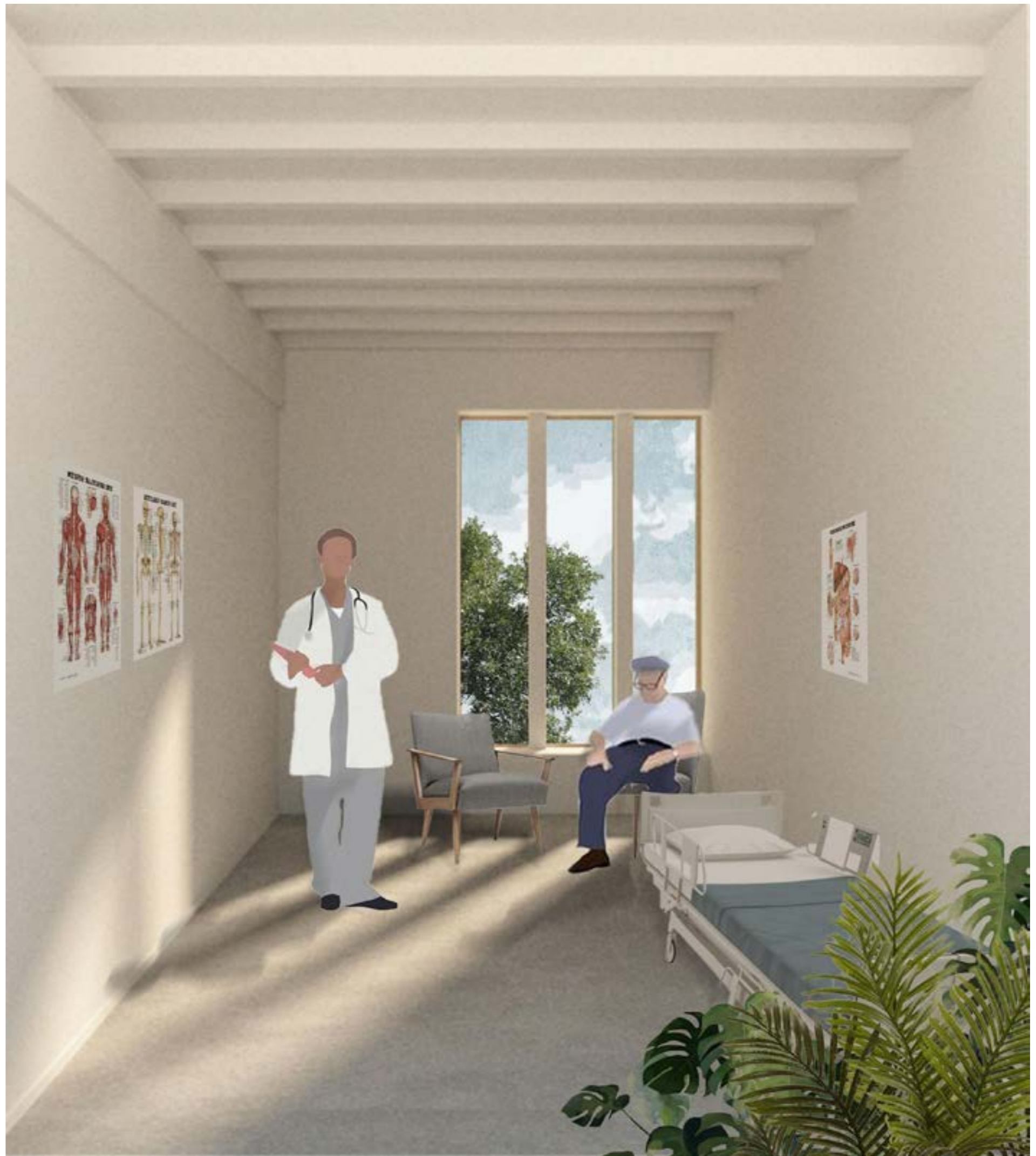
GROUND FLOOR

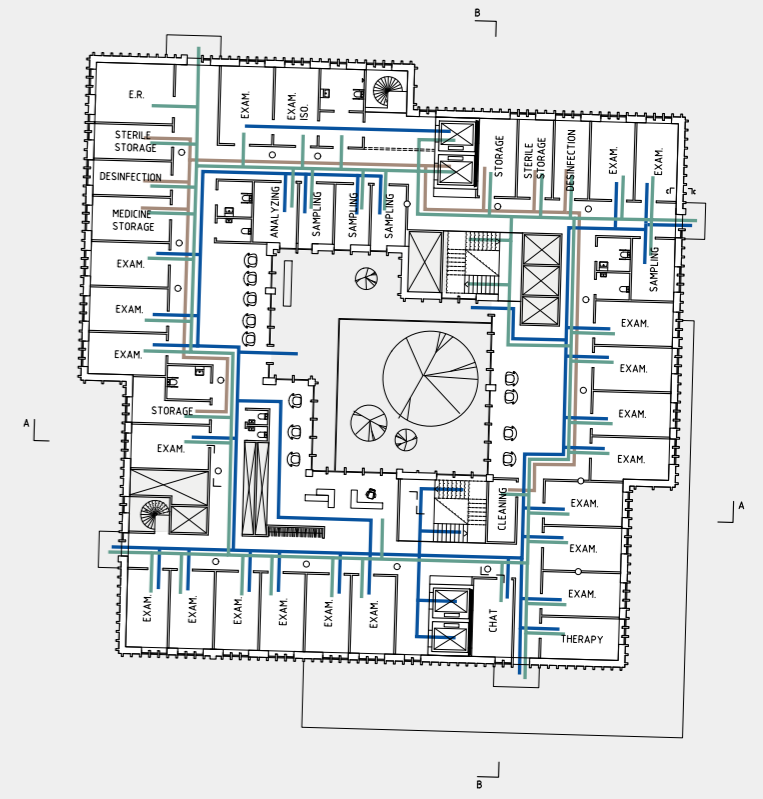
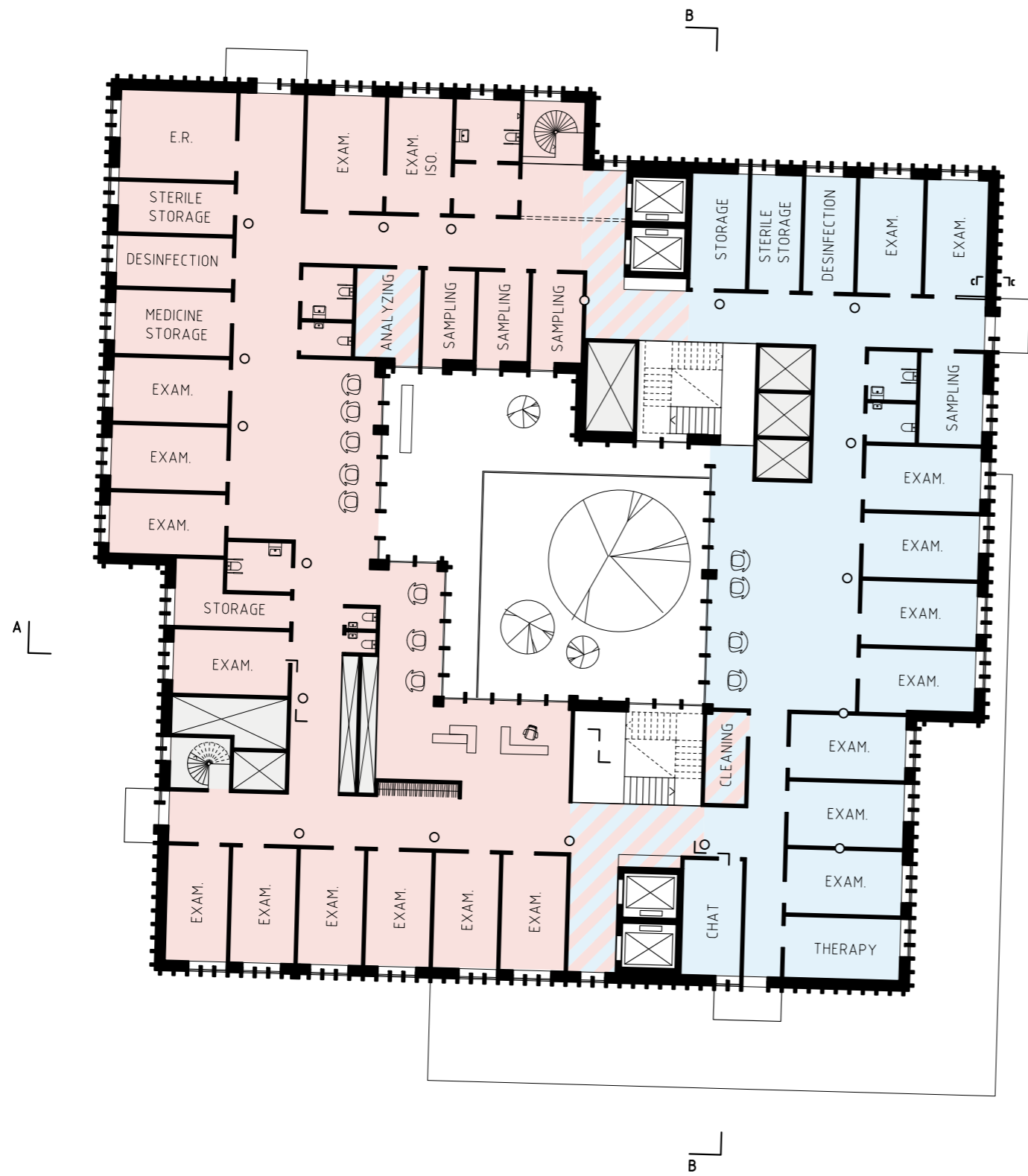
1:250





EXAMPLE OF AN EXAMINATION ROOM





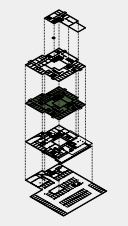
UNITS

- MEDICAL CENTER
- WOMEN'S HEALTH CENTER

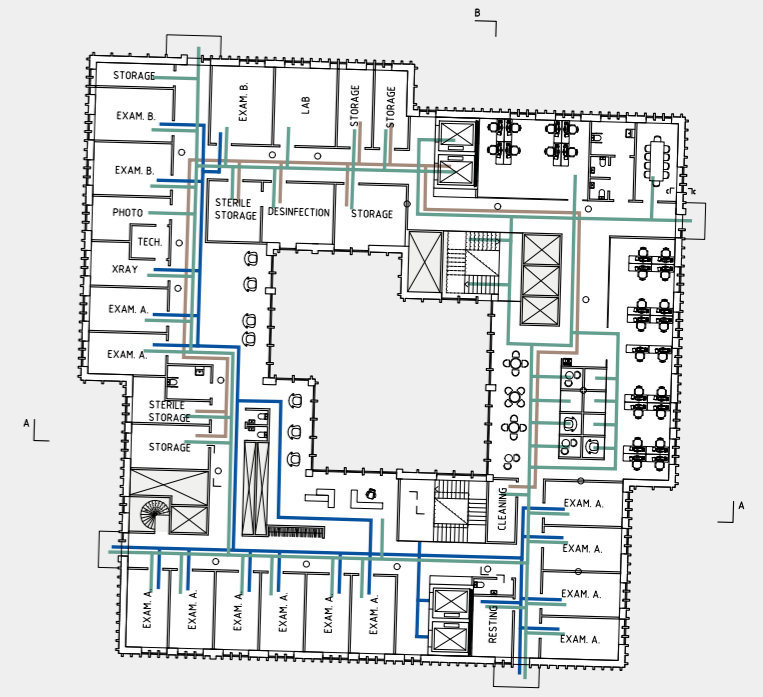
FLOWS

- PATIENTS
- STAFF
- DELIVERIES

2nd FLOOR

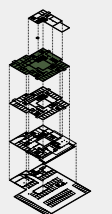


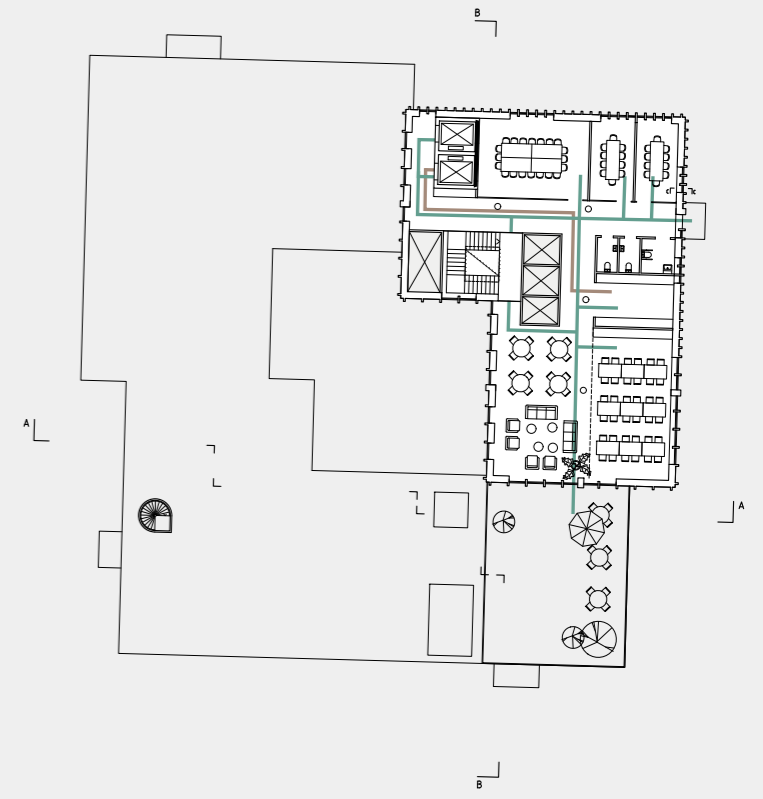
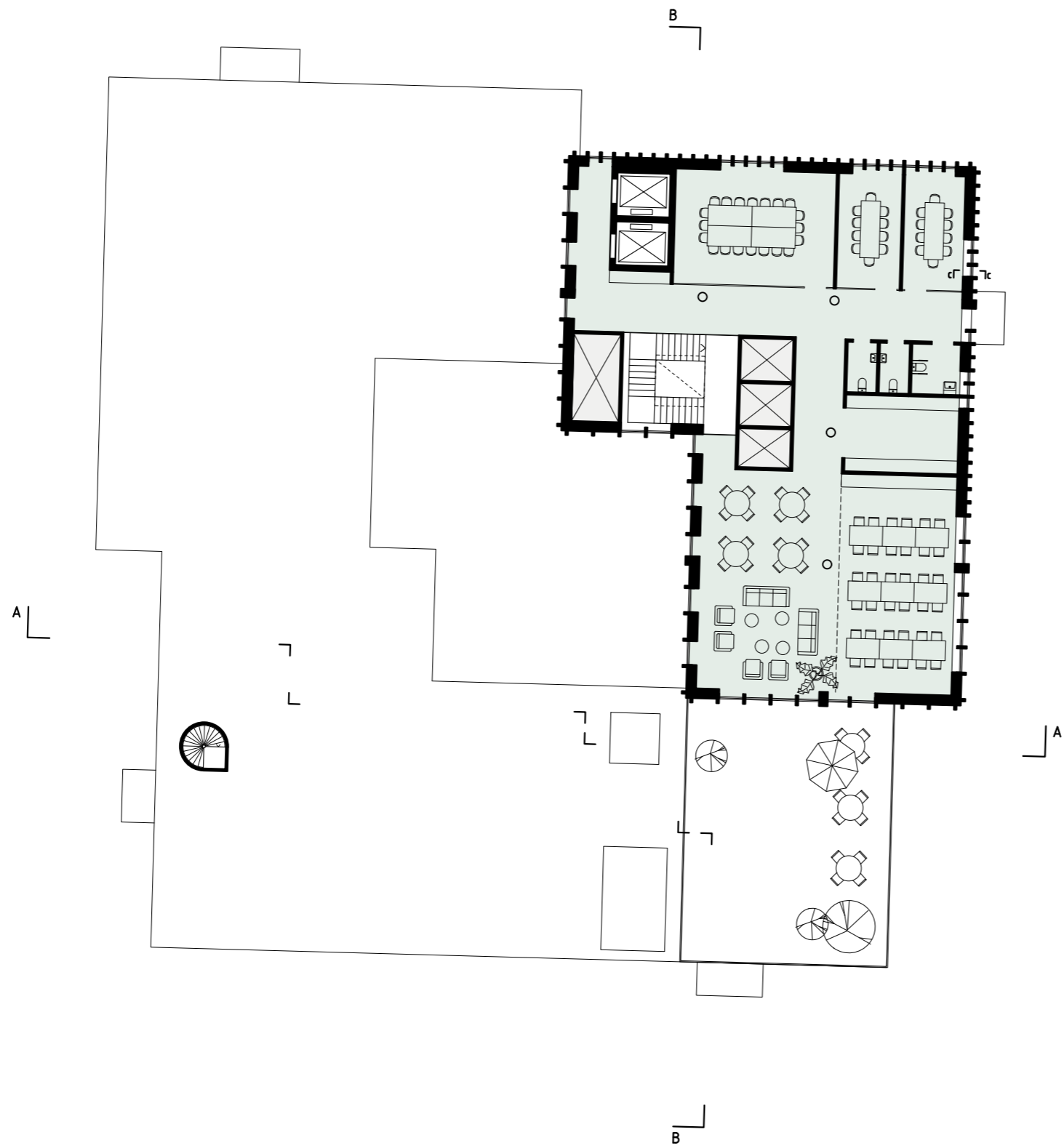




- UNITS**
- DENTAL CARE CENTER
  - COMMON AREAS
- FLOWS**
- PATIENTS
  - STAFF
  - DELIVERIES

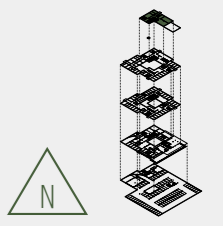
3rd FLOOR





- UNITS
- COMMON AREAS
- FLAWS
- STAFF
  - DELIVERIES

4th FLOOR

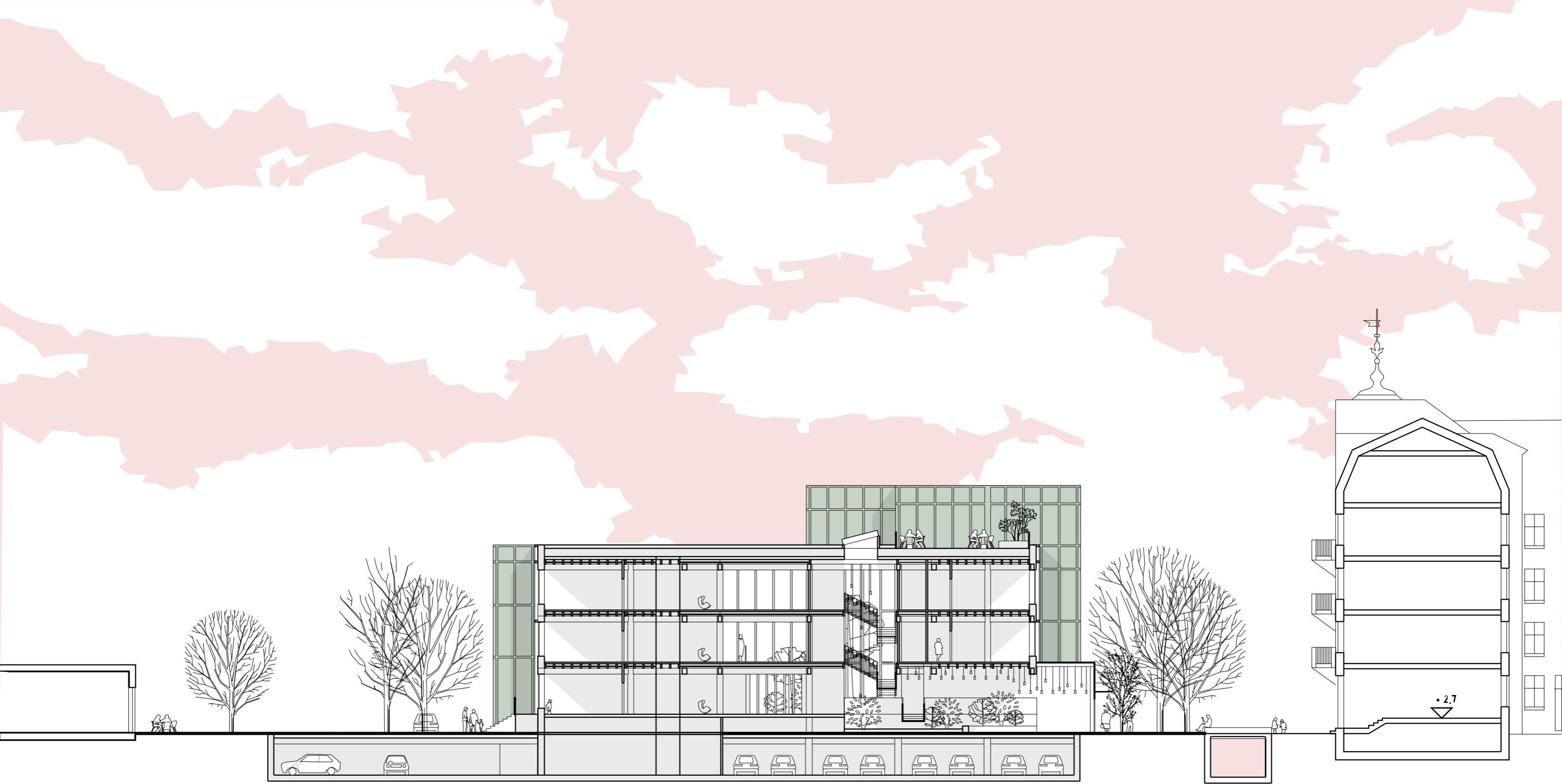






All waiting rooms are facing the courtyard, offering the waiting patients a nice and relaxing view while waiting.

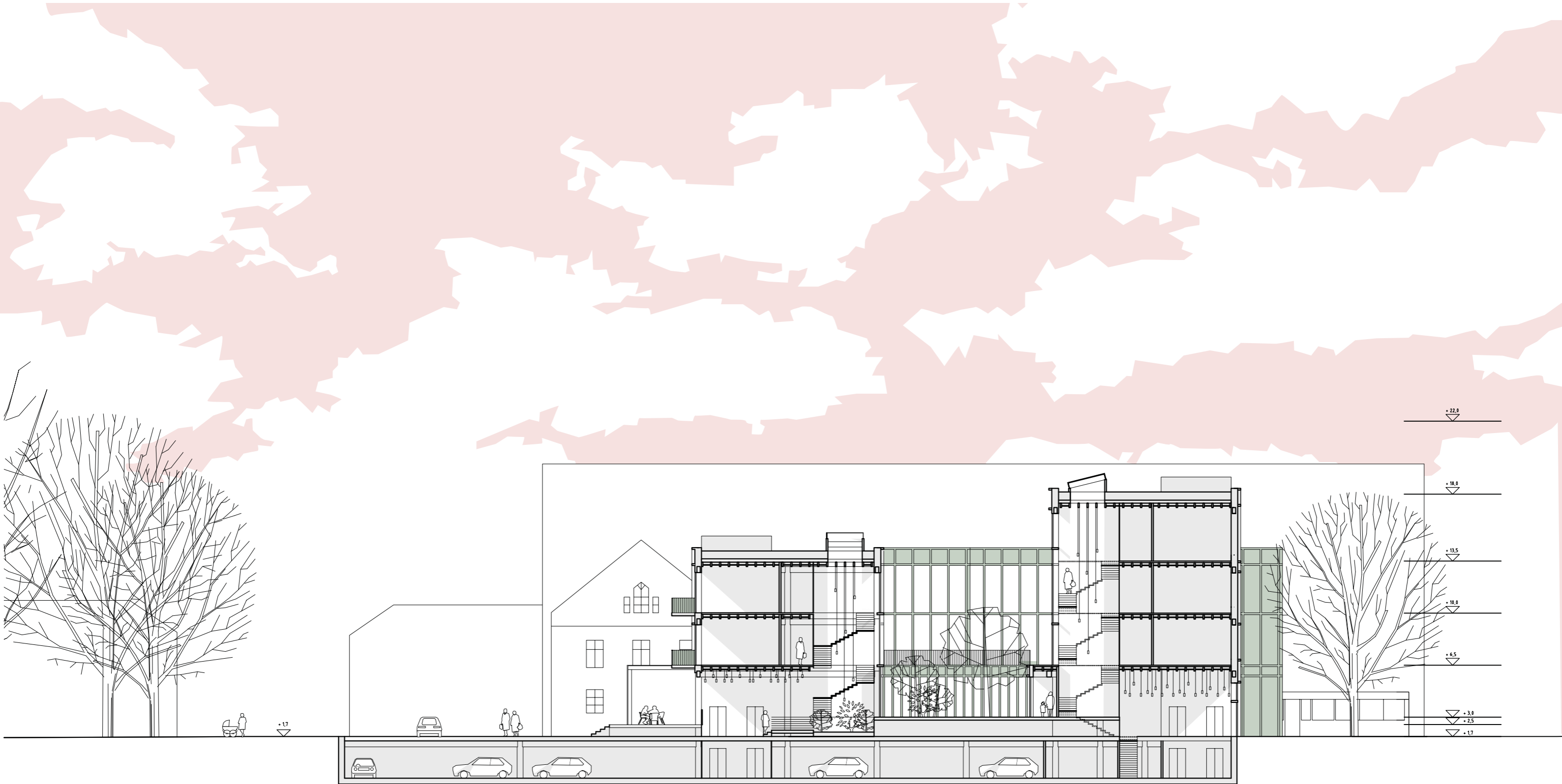




SECTION A-A

1:250 

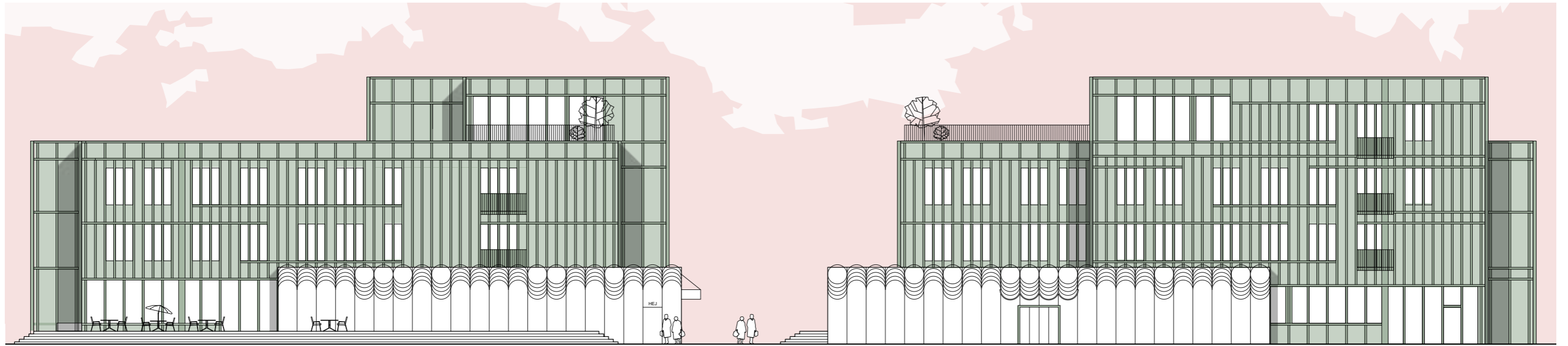




The staircases are the dominating vertical communications and are supposed to inspire visitors and staff to use them instead of taking the elevators.

SECTION B-B

1:250



SOUTH FACADE

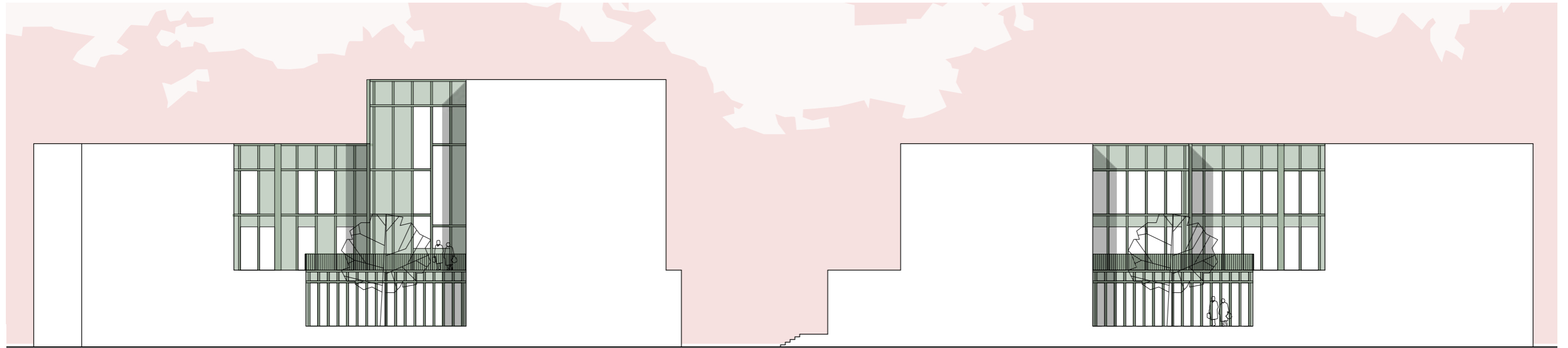
EAST FACADE



NORTH FACADE

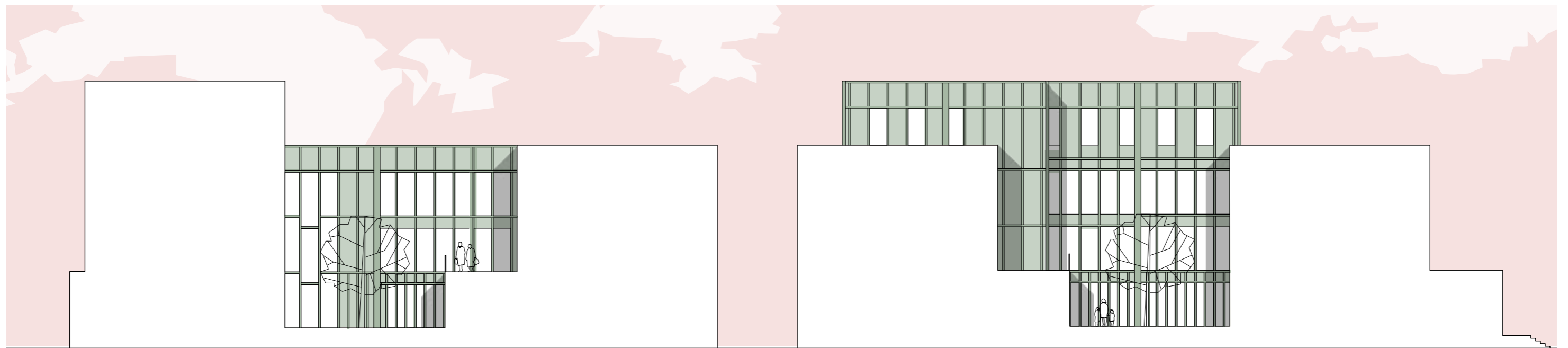
WEST FACADE





SOUTH FACADE, COURTYARD

EAST FACADE, COURTYARD



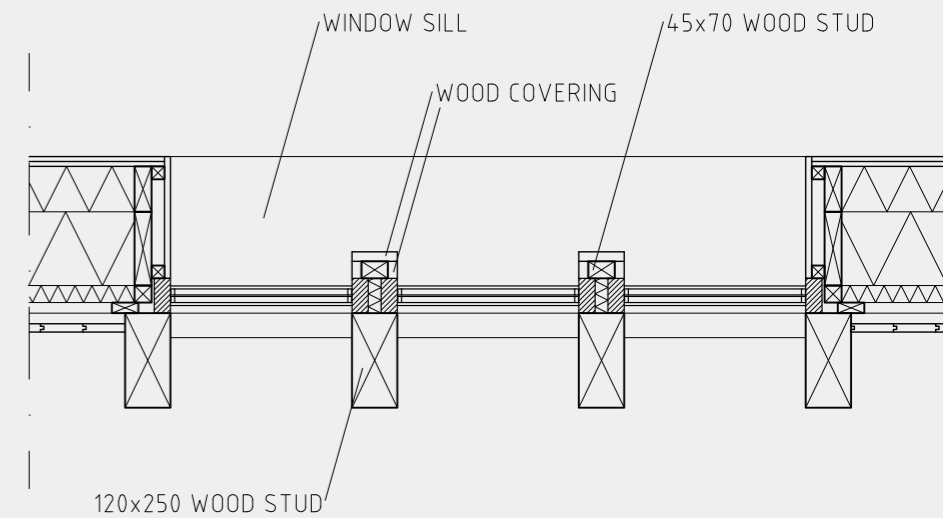
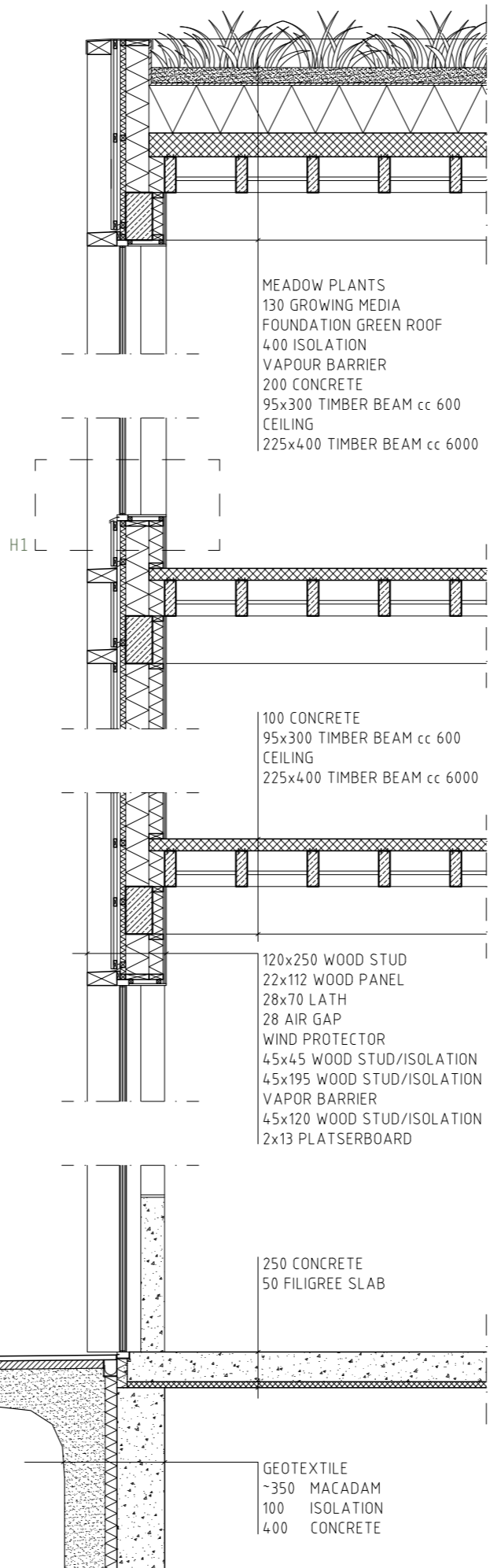
NORTH FACADE, COURTYARD

WEST FACADE, COURTYARD

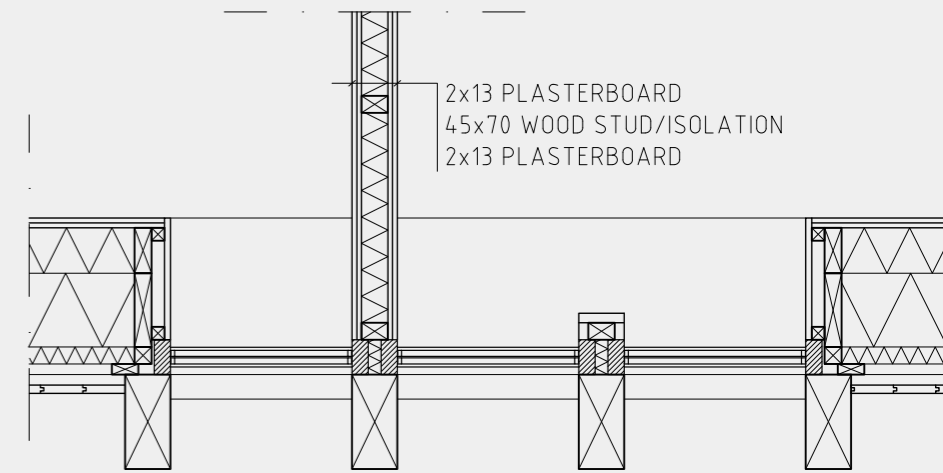


SECTION C-C AND FACADE

1:50



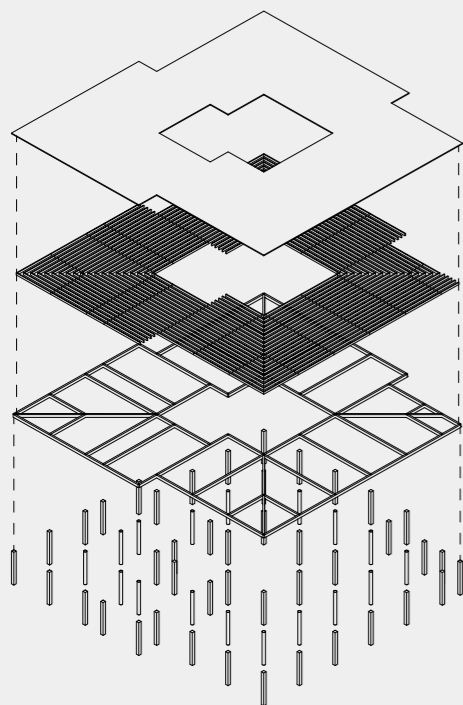
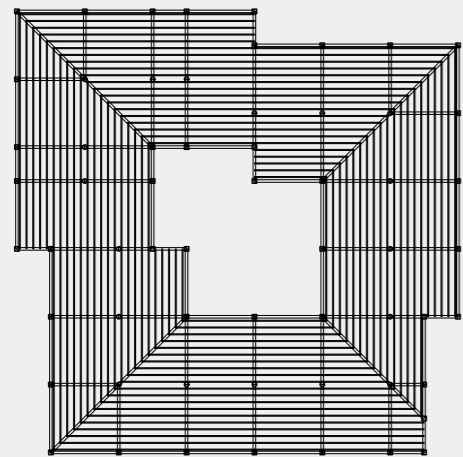
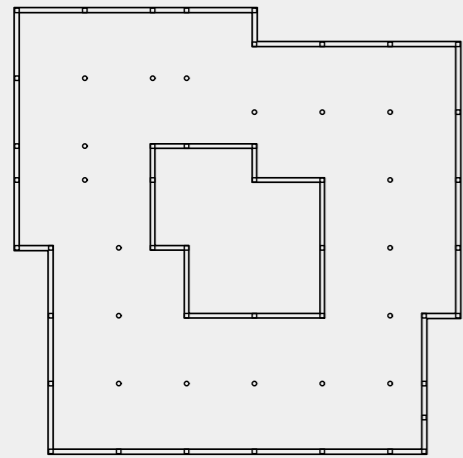
HORIZONTAL CUT 1



IF A NEW WALL IS NEEDED

1:20



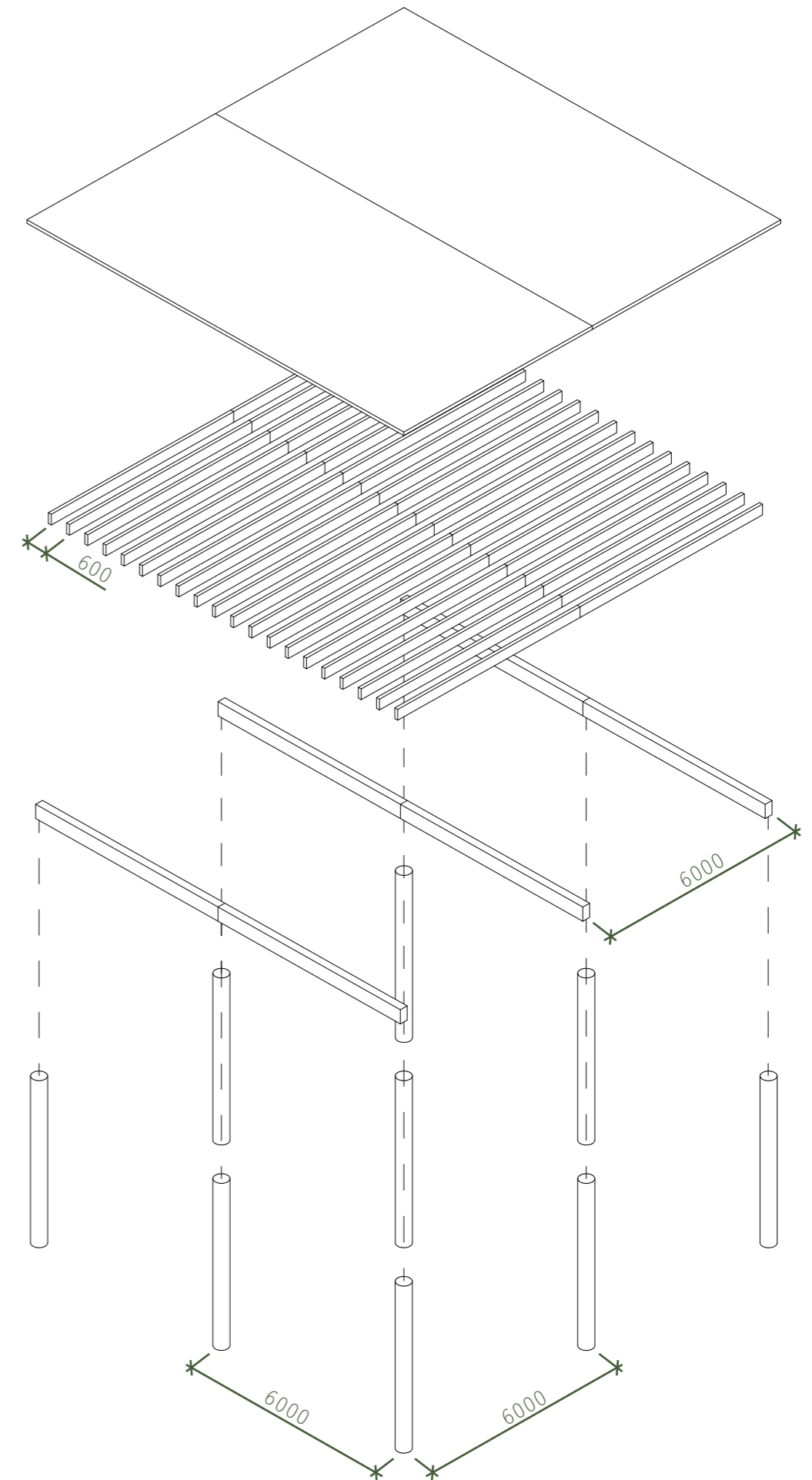


## CONSTRUCTION

Hörke is constructed of wood pillars and beams with concrete in the slabs. The concrete enables the construction to handle the big span of 6 meter between the pillars. On top of the pillars lay two layers of beams in different directions, both are visible in the ceiling of the interior, creating a direction in the corridors. On top of the beams is the thin concrete slab. Concrete is a material with a higher thermal mass than wood which means that it can store warmth and thereby reduce the need of heating, compared to a construction entirely of wood. To be able to adapt the building to an uncertain future and new needs the load bearing structure has been made both general and the interior organisation flexible. The floor planes are rational with stairs and elevators placed symmetric and the floor height is made general. The placement of windows and interior walls align with a grid of small squares of 600 X 600 mm, which can be seen in the lath in the facade. All interior walls align with the grid and the lath and windows have been placed so that the lath in the facade frames every window. This enables the interior walls to be moved after the grid without changing the windows and new windows can be inserted in the grid without a bigger impact on the facade.



CONSTRUCTION VISABLE IN THE CEILING







TROSSÖ HEALTHCARE CENTER- HÖRKE  
JULIA SVENSSON & LINNEA ALENIUS