



Collect Care Center

Malin Johansson & Seat Ni Chiu
Group 12

ARK263 - Future visions for healthcare
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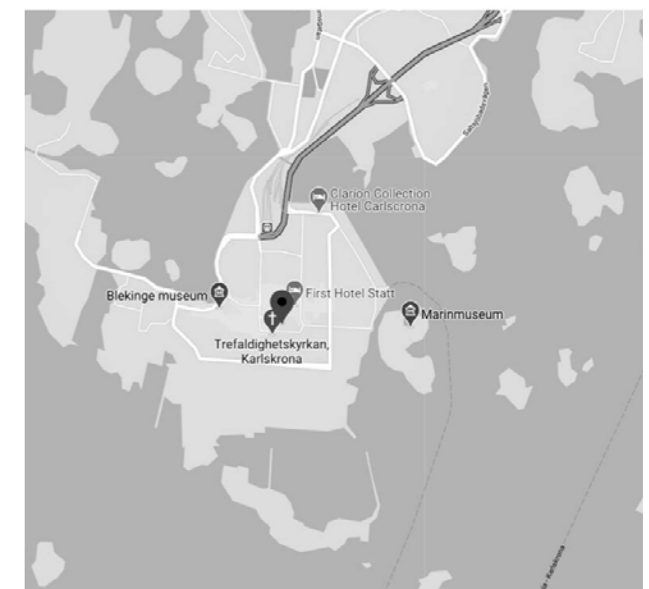
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The task is to design a new health center at Kungsplan in Karlskrona and the client is Region Blekinge. Kungsplan is a historical center in Karlskrona and an important part of the city's urban structure. It is important to take into account the cultural environment and the cityscape when designing the building as it becomes part of the city's structure.

The program consists of various departments where the total BTA may not exceed 4500 sqm. A medical center, a women's health center, a child care center, a rehabilitation unit, a dental center and common area. Region Blekinge's goal is to increase patient safety, more efficient care process and create a care environment that is future-proof.

We strive to design a health center with high-quality architecture. Based on our strategies, our goals have been to design a health center that encourages good physical and mental health, efficiency, sustainability and a center that respects the historical context. We also wanted to strengthen Kungsplan's position in Karlskrona by shaping our proposal as a node and signature building.



Site Analysis



Site: Kungsplan Kungsgatan: - - - - Scale 1:8000



1. Trefaldighetskyrkan



2. Fredrikskyrkan

Stortorget is Karlskrona's main square and is connected to Kungsplan via Kungsgatan. On Stortorget are the two baroque signature buildings Trefaldighetskyrkan and Fredrikskyrkan which are part of Karlskrona's world heritage.



Scale 1:4000
Landmarks located around the site and a railway with historical value crosses the site.



1. Karlskrona trainstation



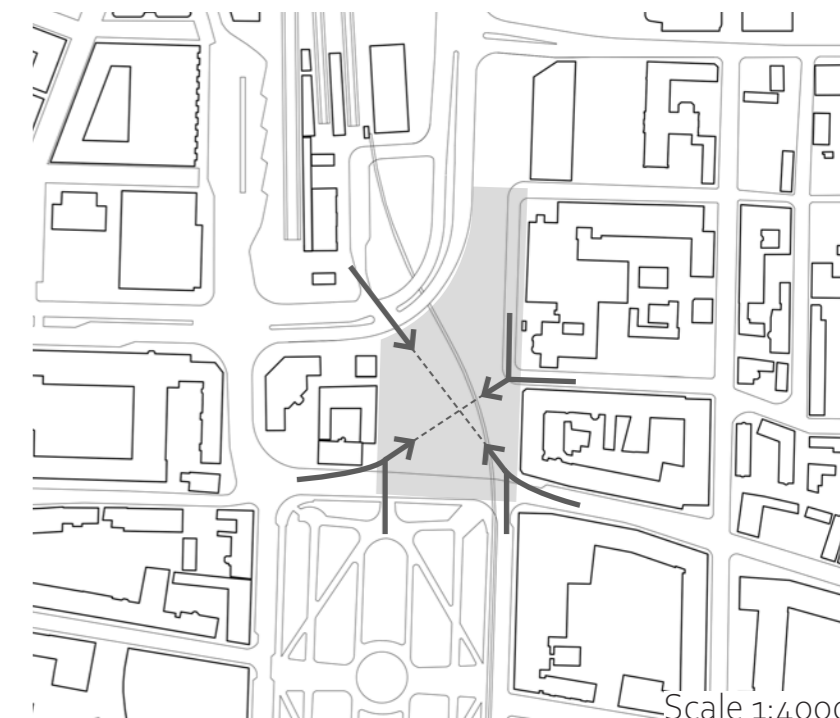
3. Karlskrona Hot bath house



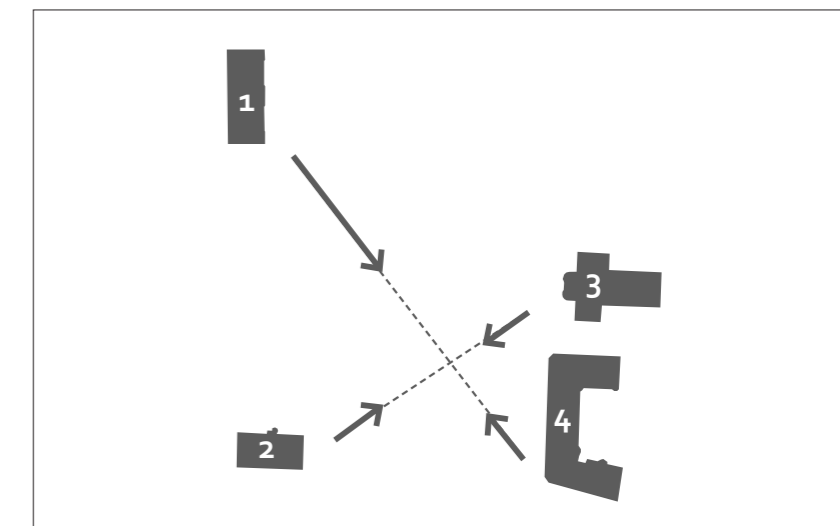
2. Ehrnbergskas gård - An old merchant's farm



4. Fribergsska huset - An old residential building



Scale 1:4000
Pedestrians approaching the site.



Analysis results: Kungsplan has the potential to become a new square with its own signature building and that there is a connection between the landmarks and how to approach the site.

Design Strategies

Site & Context

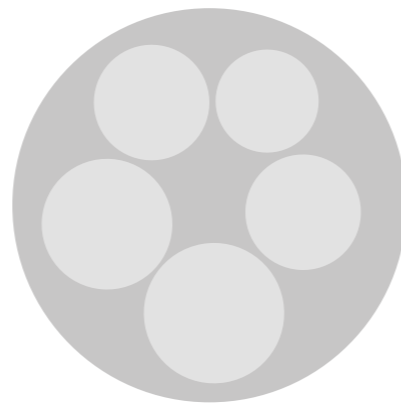
Take into account and use the cultural environment by:



Simplified orientation through landmarks

Brief & logistics

Increase efficiency and patient safety by:



Seperated programs

Health promotion

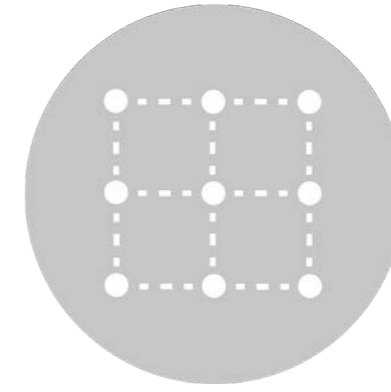
Increase health promotion by integrate:



Greenery

Sustainability & future proofing

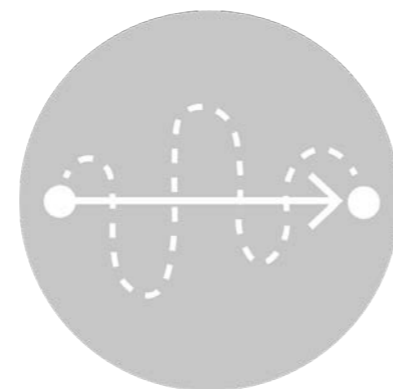
Work with a construction that can withstand future changes with:



Grid



Architectural continuity



Seperated flows

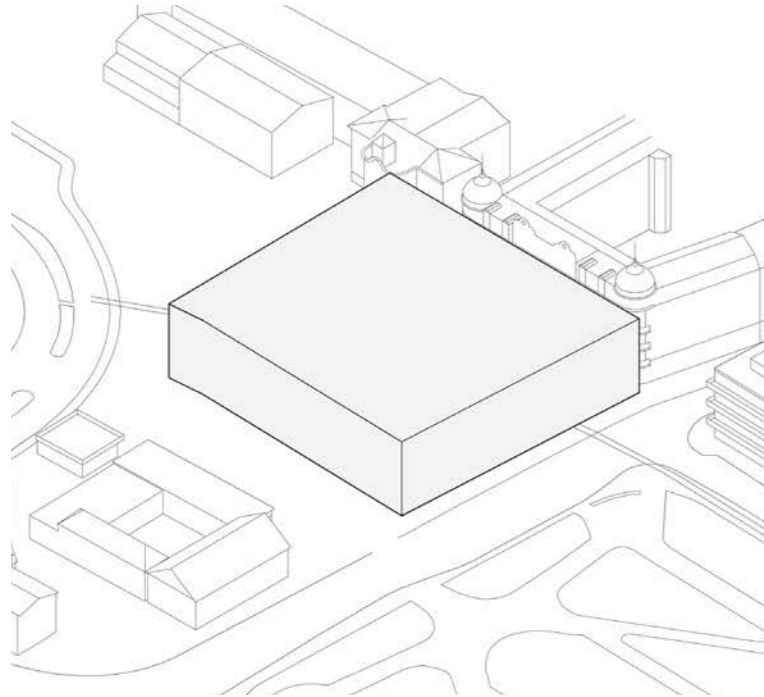


Promote movements & social interactions

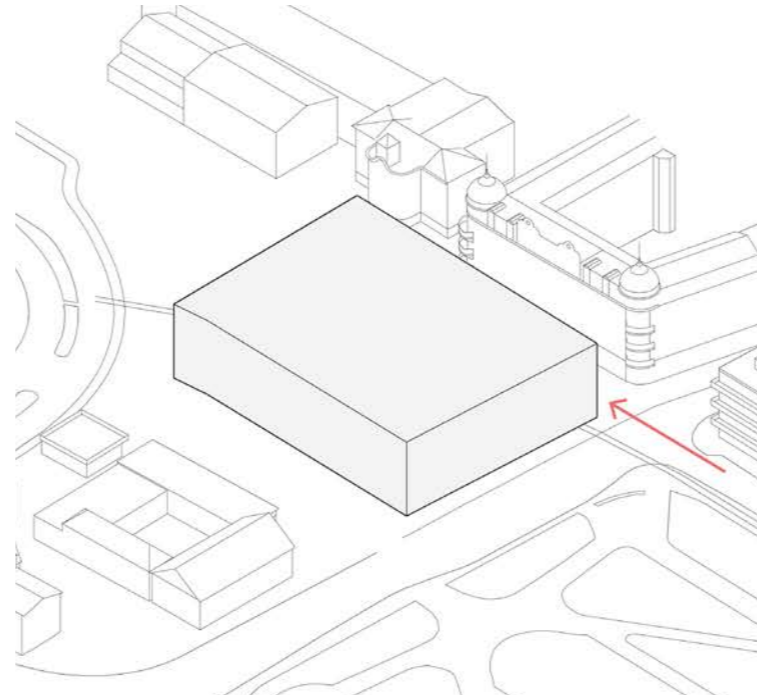


Collector -Sun & Water

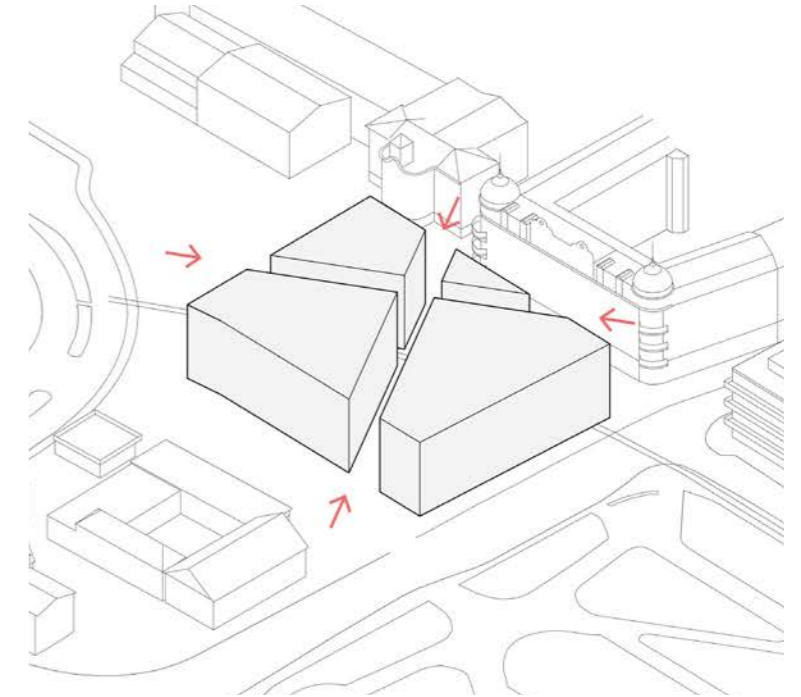
Design Concept



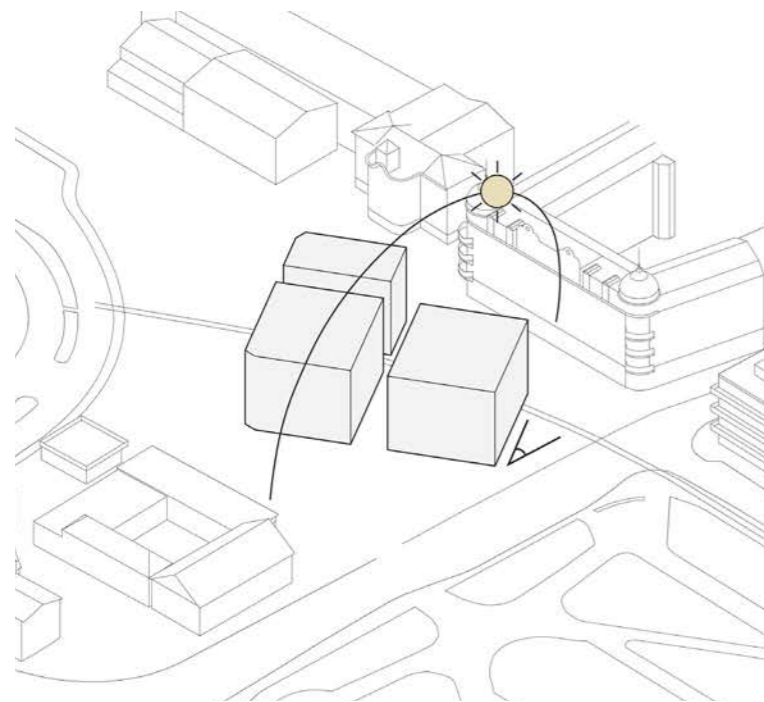
1. The total building volume on site



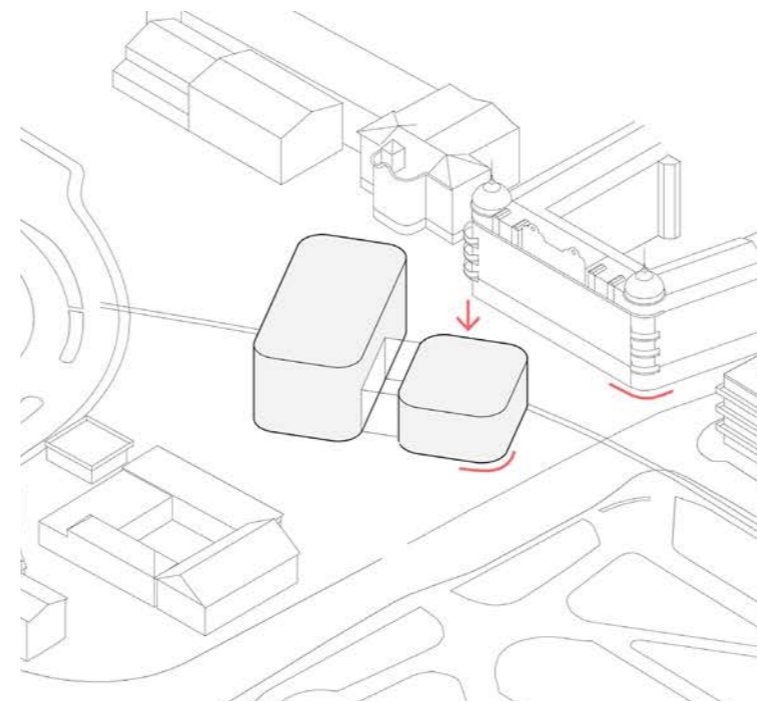
2. Open in the direction of Kungsgatan to connect to Stortorget.



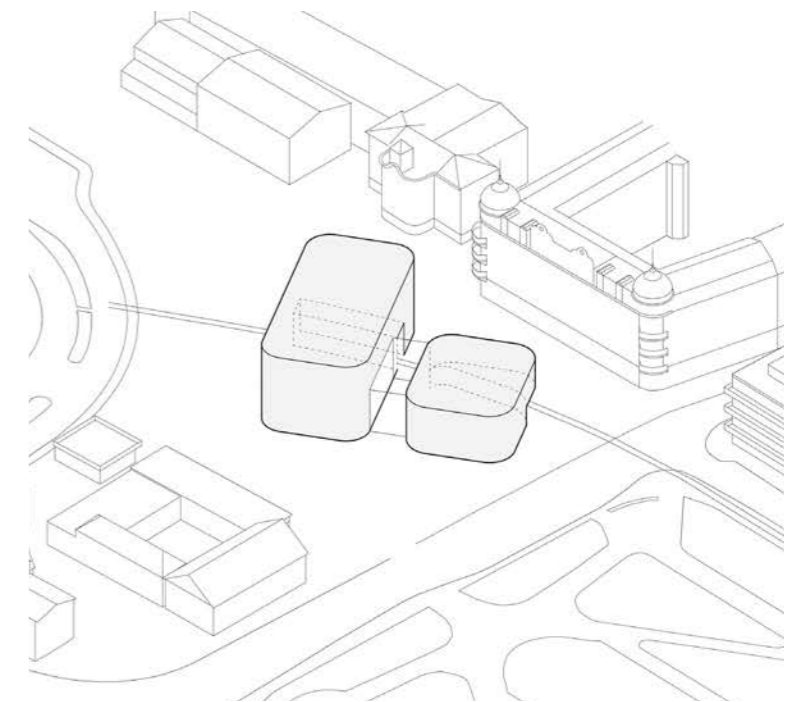
3. Open in the direction of the landmarks as these have a connection to how you approach the site. This will simplify the orientation.



4. Cut the corners so that the facades face the landmarks. The building will be angled at 30 degrees, the ultimate location in relation to the sun.

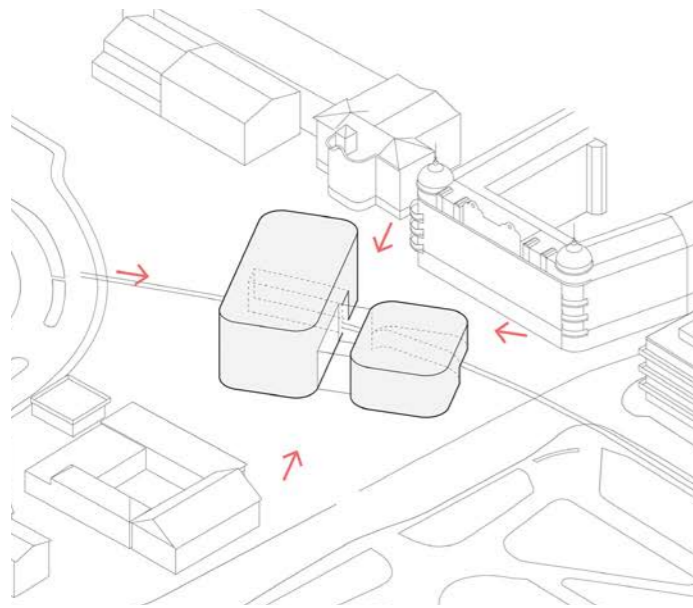


5. Connect the volumes with a glass channel. Push the volume down to the south to maximize daylight. Curve the corners to connect to the baroque elliptical shapes.



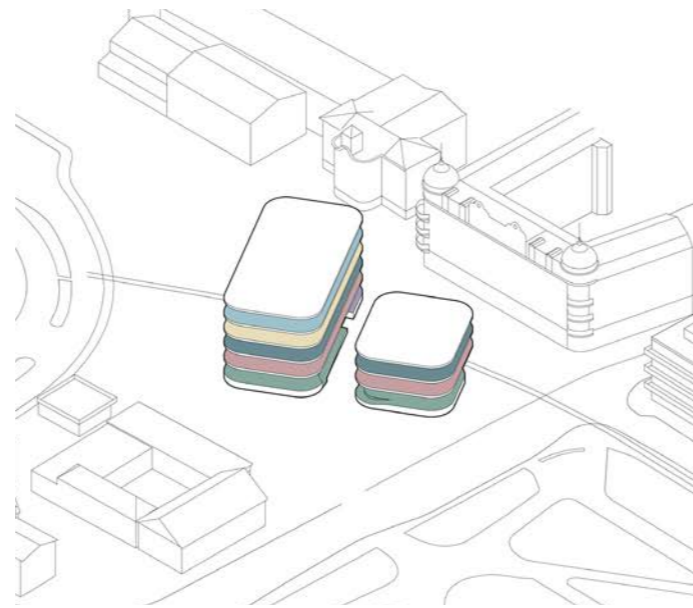
6. Carve the building in the shape of the railway as it has an important historical value and wish to be preserved.

Implemented Strategies



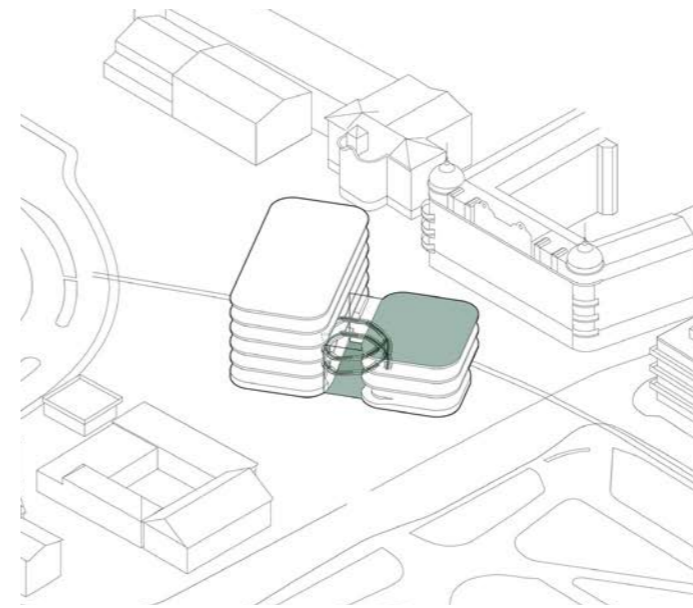
Simplified orientation through landmarks

As there is a connection between the location of the landmarks and how you approach the site, the entrances will be located in connection to the landmarks.



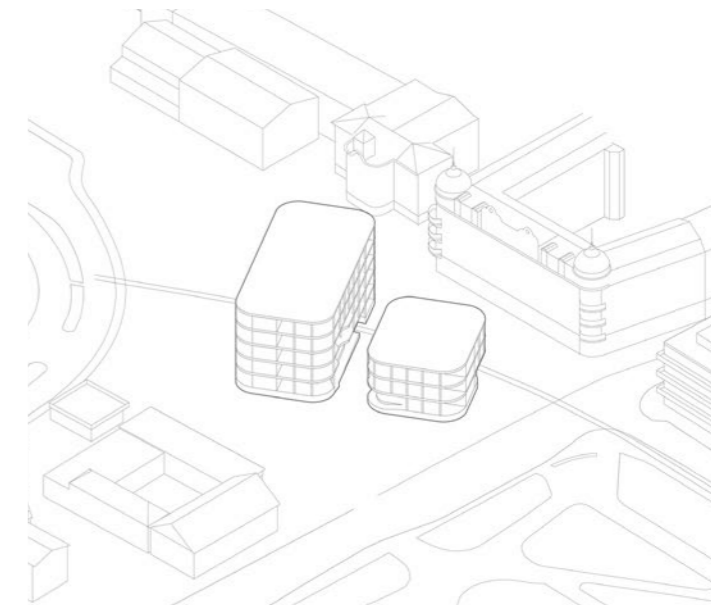
Separated programs

To create more efficient flows and simplify the orientation in the building the programs will be separated.



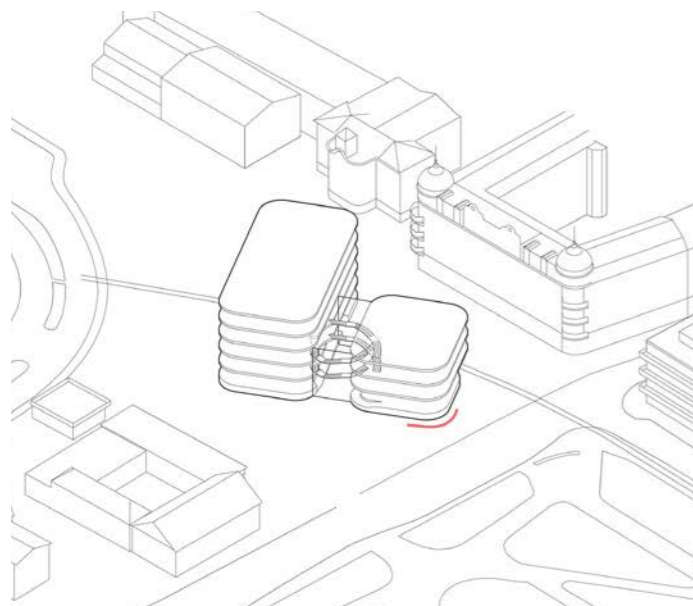
Greenery

A winter garden will be added in the entrance hall and a roof terrace at top of the lower volume.



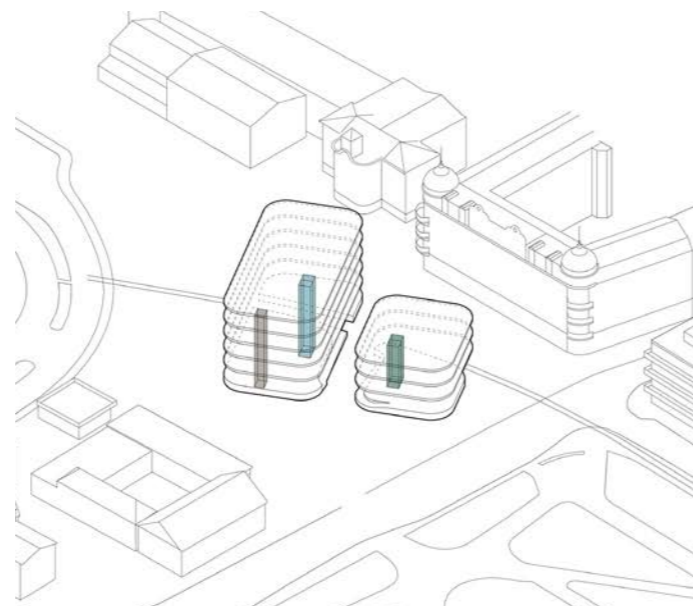
Grid

Create a future-proof building by working with a grid with a long span and repetitive window replacement. This will contribute to flexible floor plans as it will be easy to move walls after internal needs.



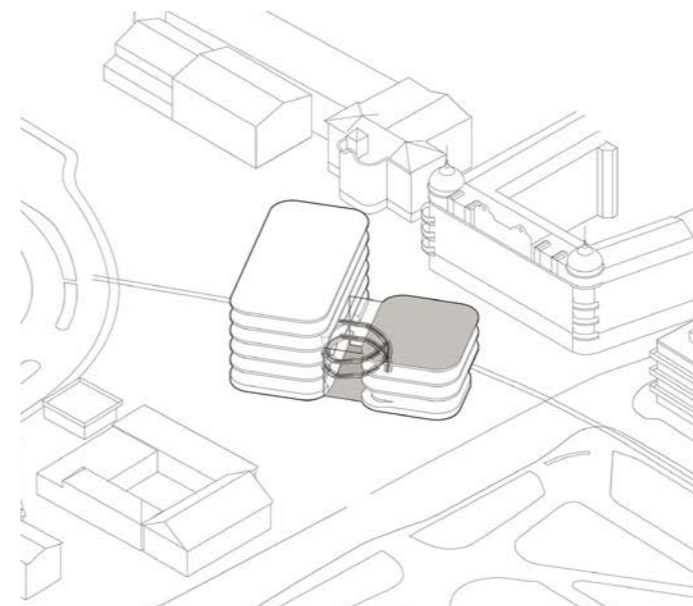
Architectural continuity

The building will be a new signature building on Kungsplan in a modern interpretation of the Baroque. The corners will be curved and a large baroque staircase will connect the volumes.



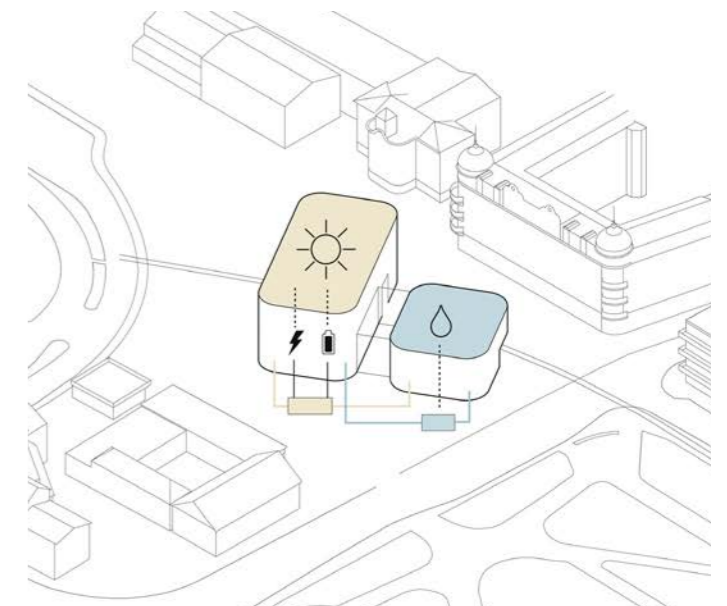
Separated flows

To increase efficiency and patient safety, the flows will be separated.



Promote movements & social interactions

The entrance hall will become a place for social interactions. The staircase will promote movements and an outdoor gym will be added at the roof terrace.

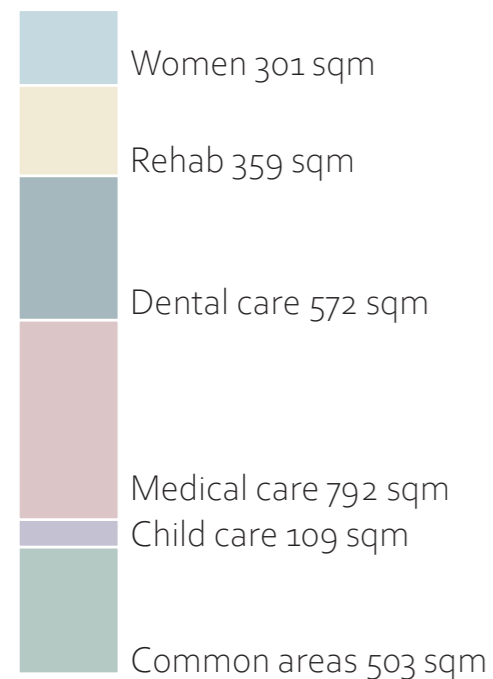


Collector - Sun & Water

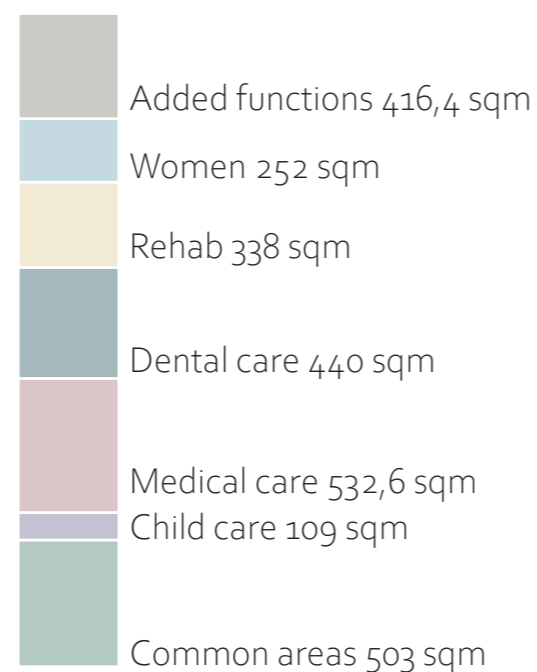
Solar panels will be added at the higher volume to recycle and store energy, therefore it is important with the placement of the building in relation to the sun. The roof terrace at the lower part will collect rainwater that will be filtered and recycled.

Program & Flows

Original: BTA 4500 sqm



Proposal: BTA 4310 sqm



Department

Flows

Plan 5	Women care	Patients
Plan 4	Rehab Added function-Terrace/Grym	Staff
Plan 3	Dental care	Logistics
Plan 2	Medical care	
Plan 1	Common Child care Added function-Wintergarden	
Plan -1	Technical rooms Parking	
Plan -2	Parking	

Area reduction

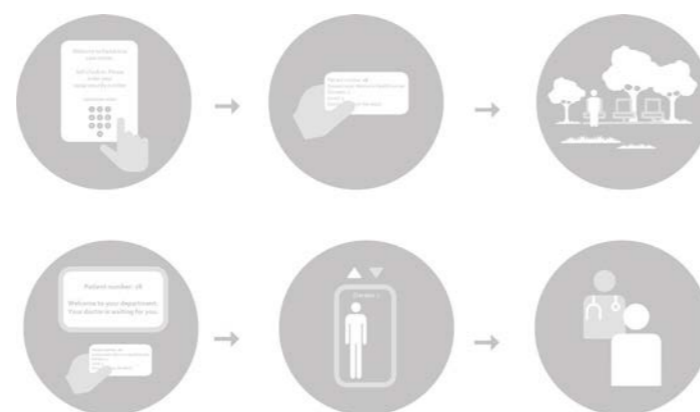
The original program contains 5 different departments and a common area. These areas must not exceed 4500 sqm. One of the requirements from the client was to add an extra function and to do so it was necessary to reduce the department area. The largest reduction in the area has been made by removing all waiting rooms and receptions from all wards except childcare. These waiting rooms and receptions are available in the Added function which also functions as a winter garden.

Some examination rooms in medical care have been replaced with e-booths as e-health will have a greater role in the future.

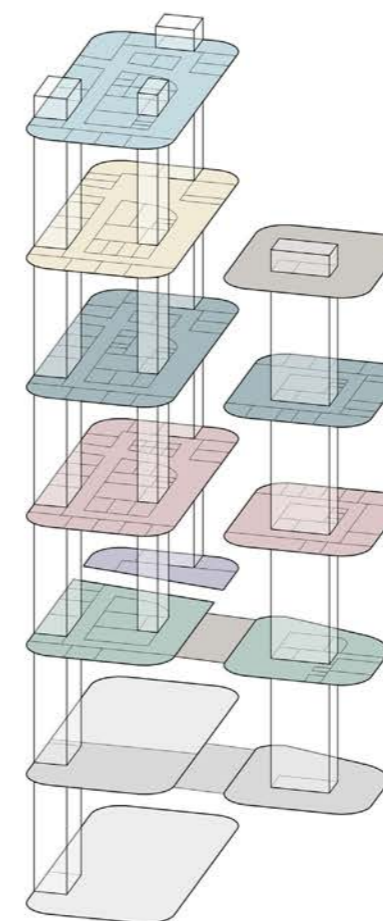
The Collect Care Center will also use self-check-in system. This gives the patient a more pleasant waiting time which in some cases can be very stressful and unpleasant. Instead of sitting in a crowded room facing other patients, you are now sitting in a large and bright Wintergarden. This also simplifies the work for doctors and nurses as they do not have to spend time running around looking for their patients.

Self-Check-In

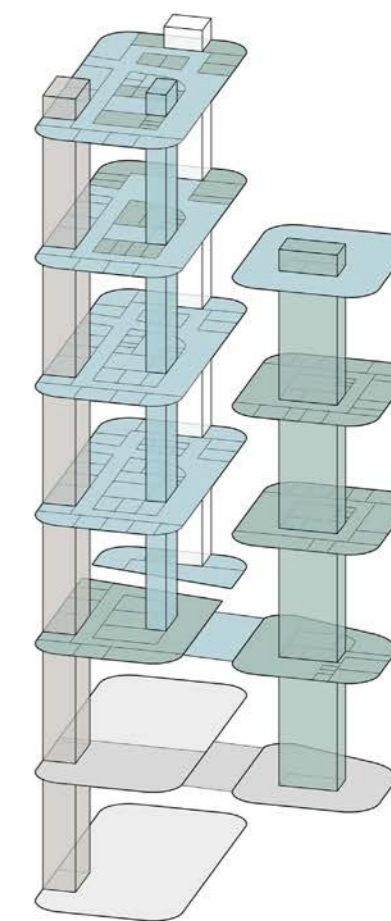
1. Check in by entering your personal ID
2. Receive a note with a queue number, which elevator to use, which department and doctor/nurse.
3. Wait in the beautiful wintergarden.
4. When it is your turn your queue number will turn up on a screen.
5. Go to the department.
6. Doctor/nurse are ready to receive you.



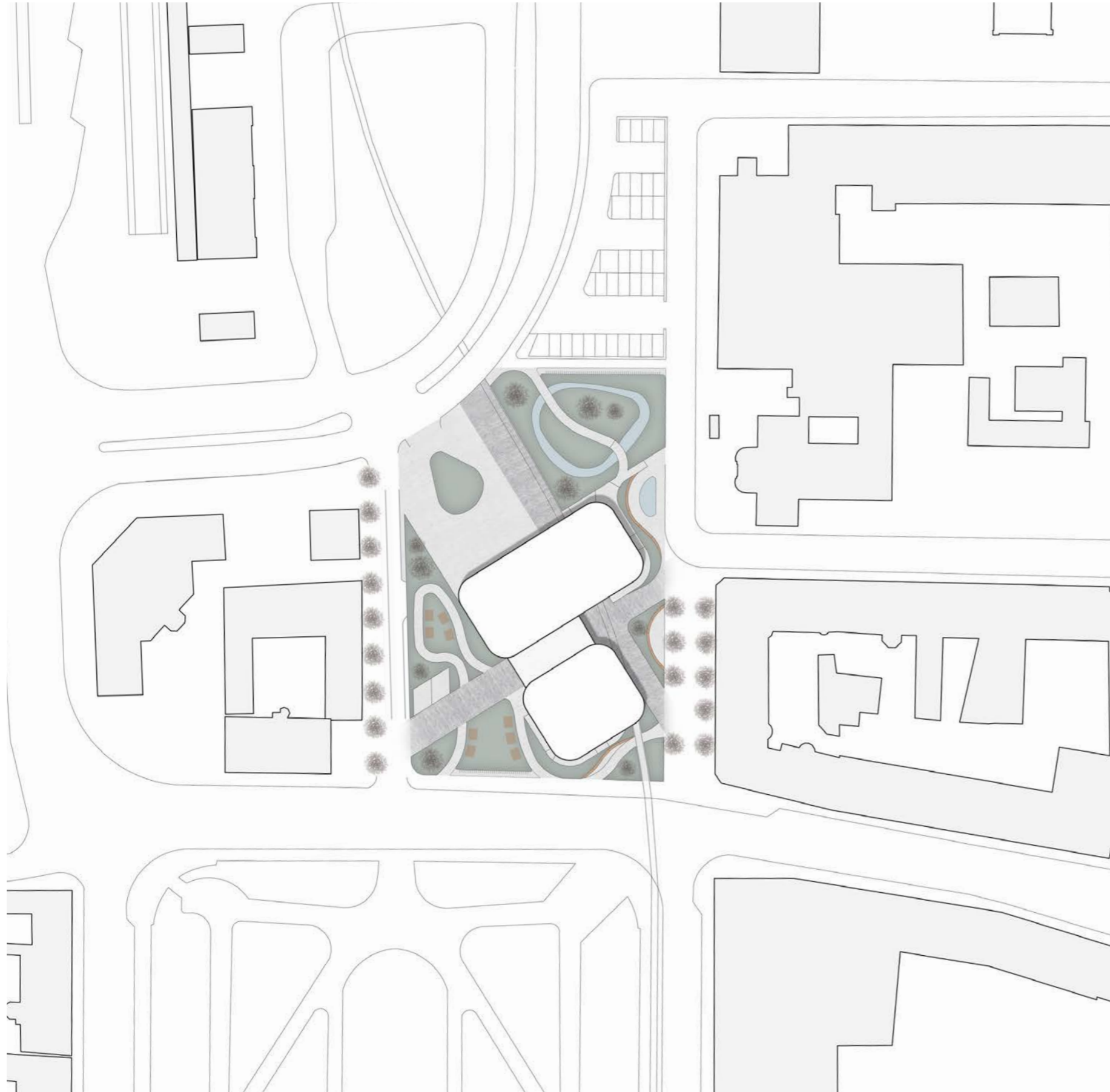
Location of the departments



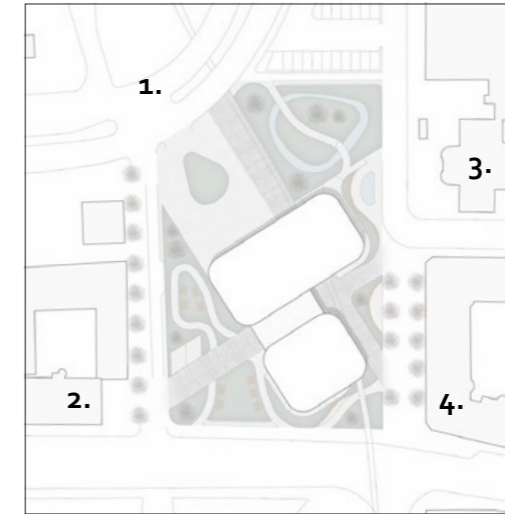
Vertical flows



Site Plan 1:1000 (A3)



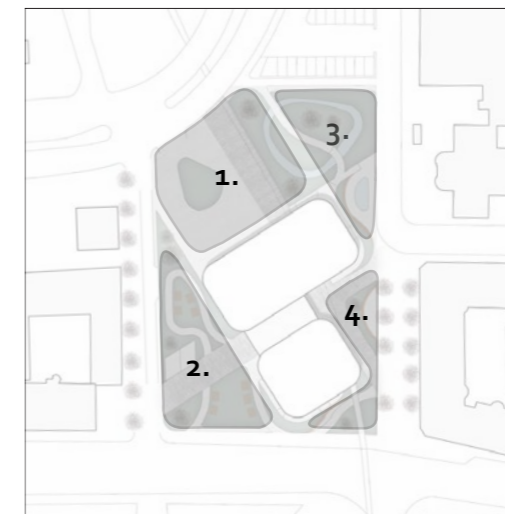
0 10 20 30 40 50 100 m



Entrances

Entrances located in connection to a landmark.

1. Karlskrona station
2. Ehrnbergiska gården
3. Hot bath house
4. Fribergiska gården



Areas

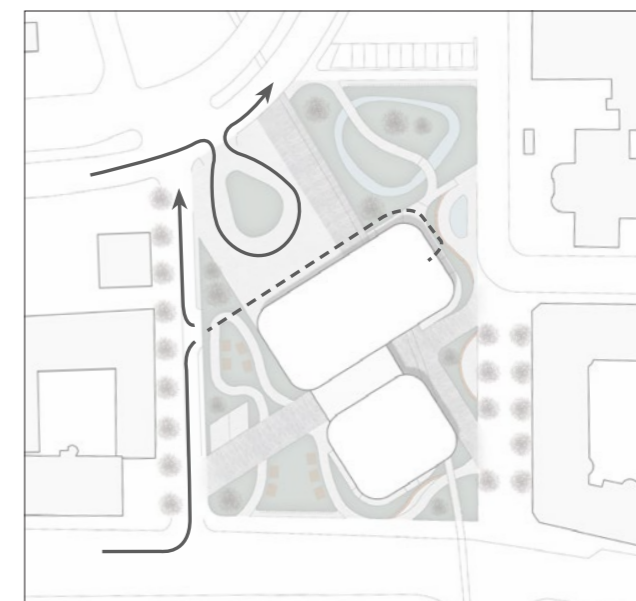
While cutting off the corner of the building mass, it creates areas towards the landmarks. These areas will be characterized by landmarks and set the theme of the area:

1. Karlskrona trainstation - transportation area.
2. Ehrnbergiska gården (an old merchant's farm) - Pop-up markets.
3. Hot bath house - Water park.
4. Fribergiska gården (residential building) - Public living room.

Site Plan 1:500 (A3)

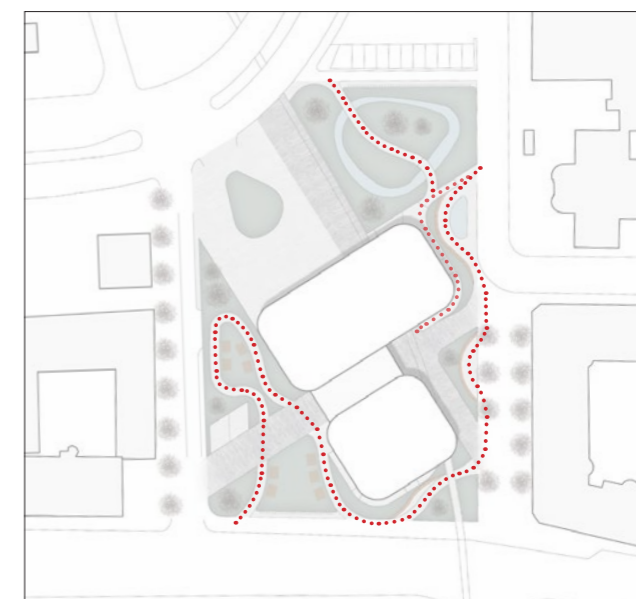


Paths



→
Transportation (vehicle)

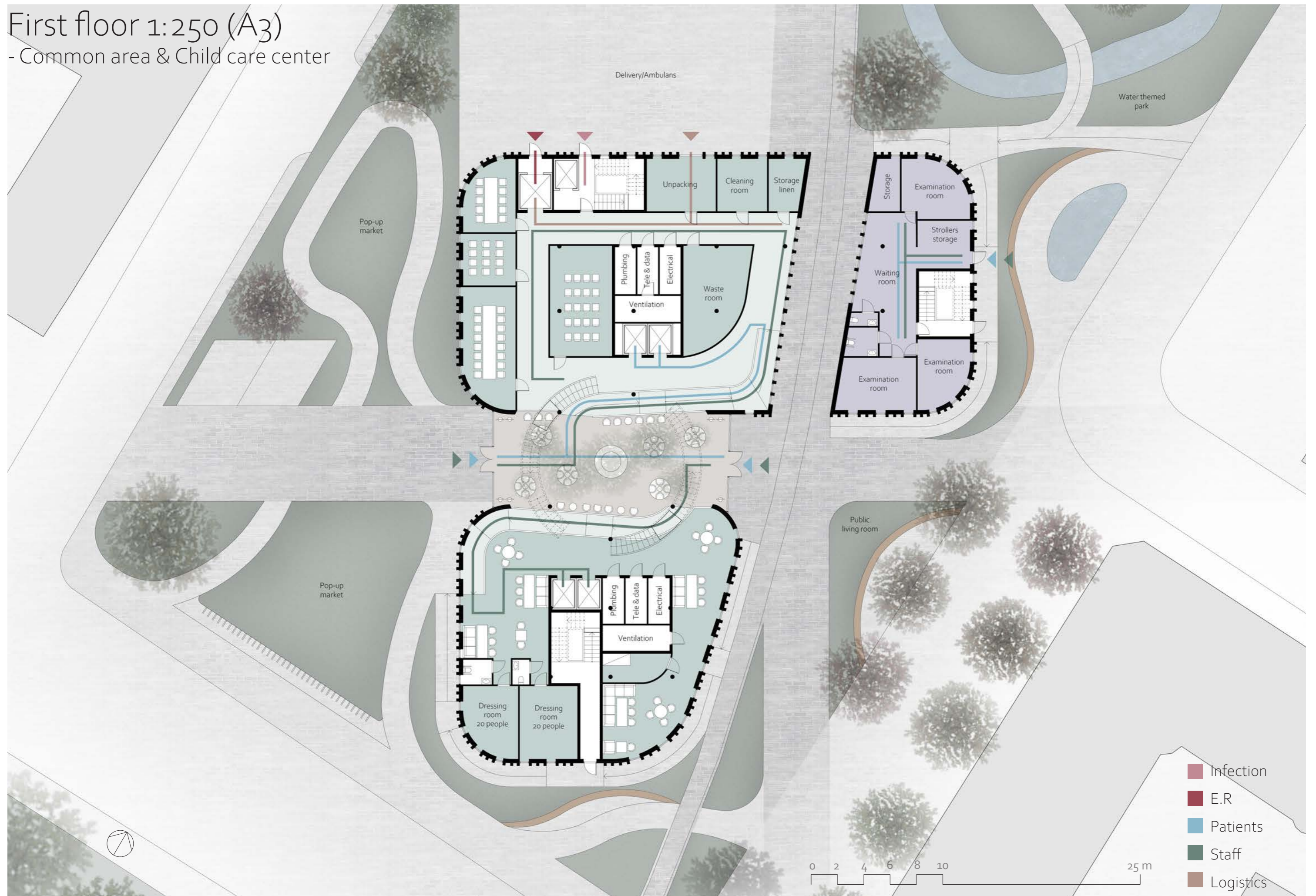
Way to parkinghouse (under ground)



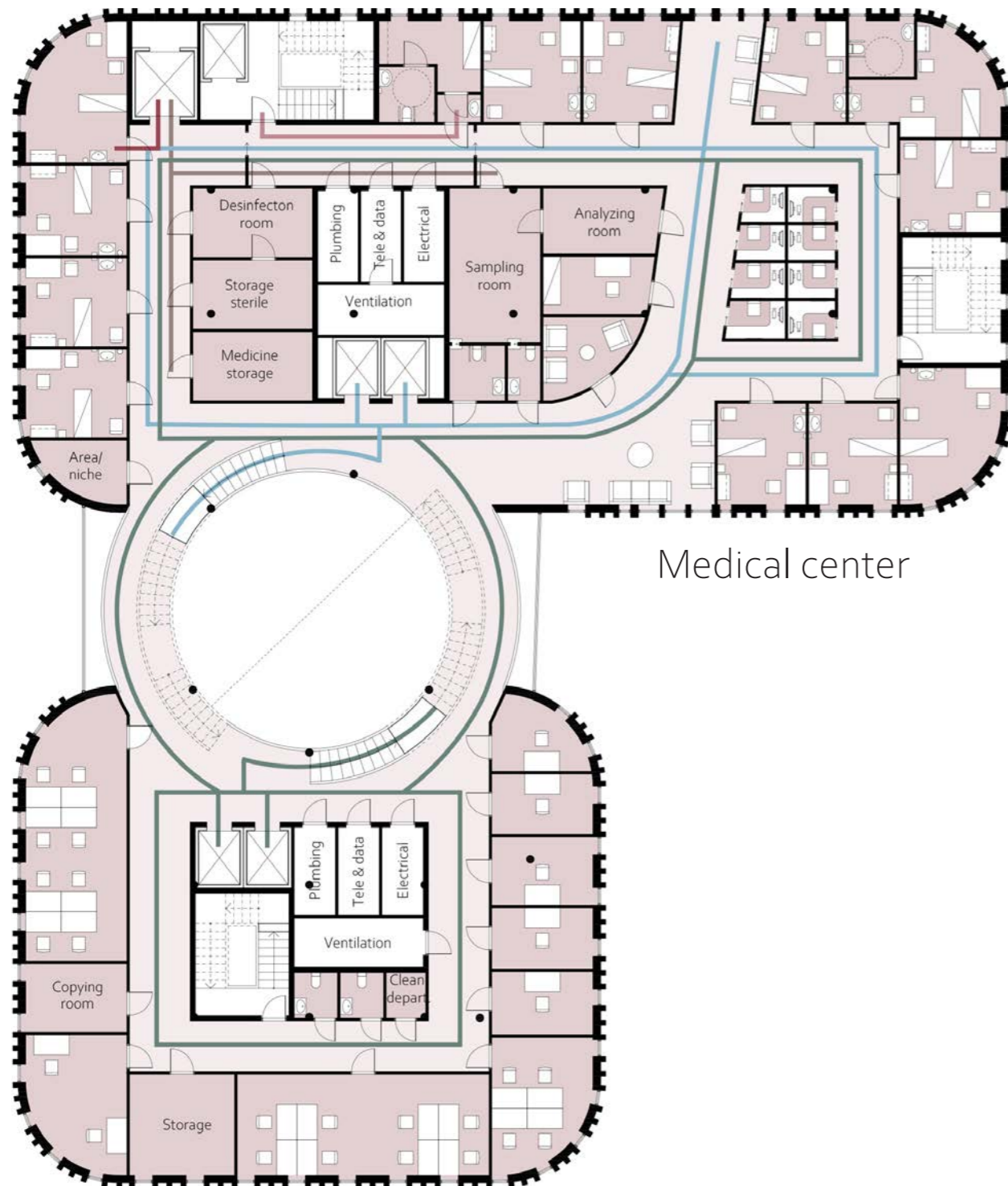
.....
Walking paths - This walkingpath takes you for a walk through the site. It takes you through the pop-up markets, the public living room (with benches and where you can hang out) and finally to experience the water park.

First floor 1:250 (A3)

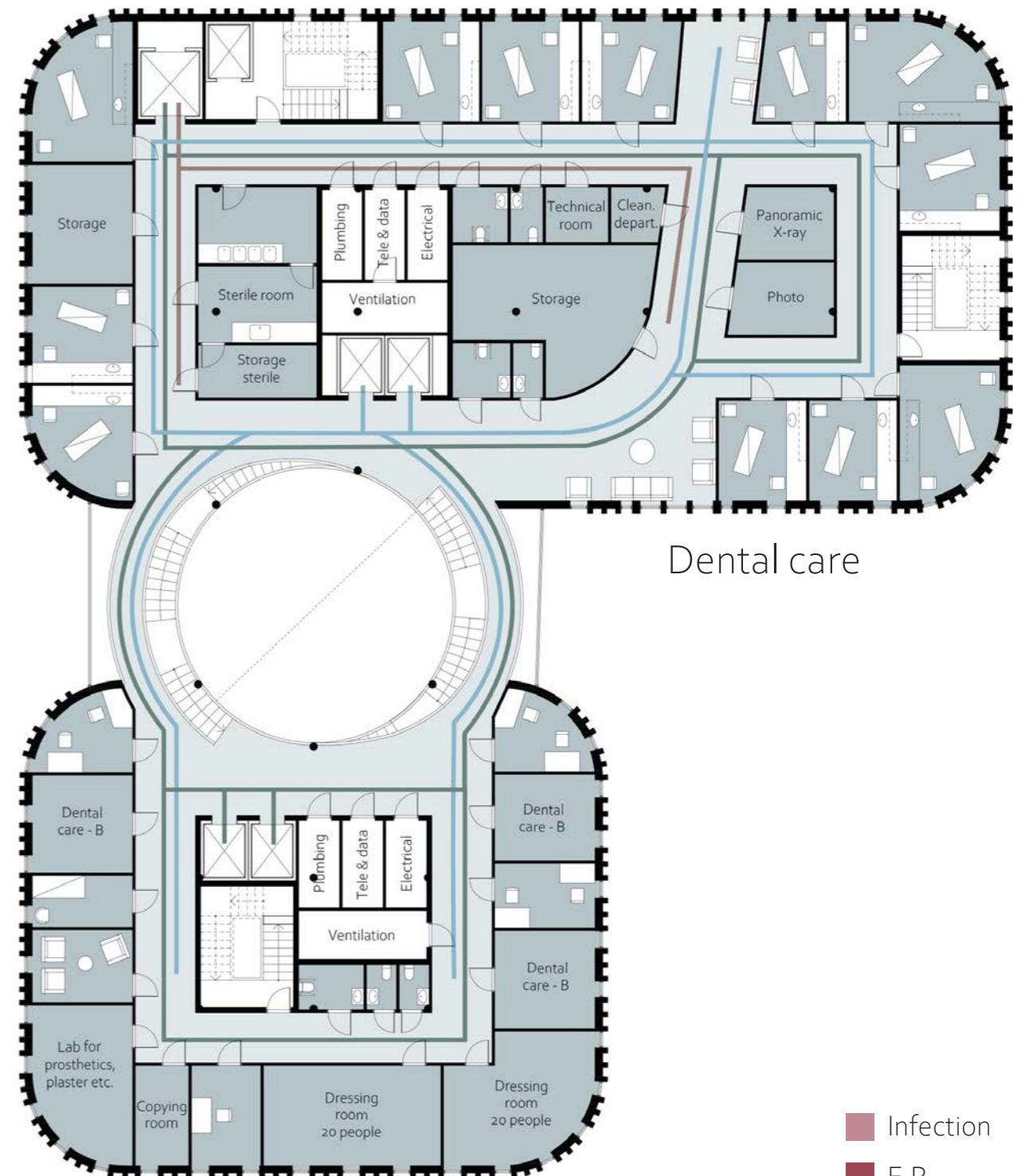
- Common area & Child care center



Second & third floor 1:250 (A3)

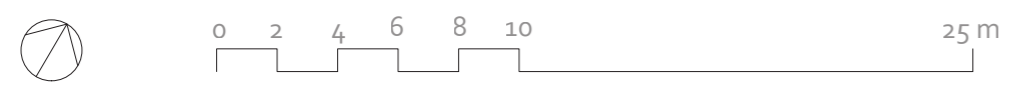


Medical center

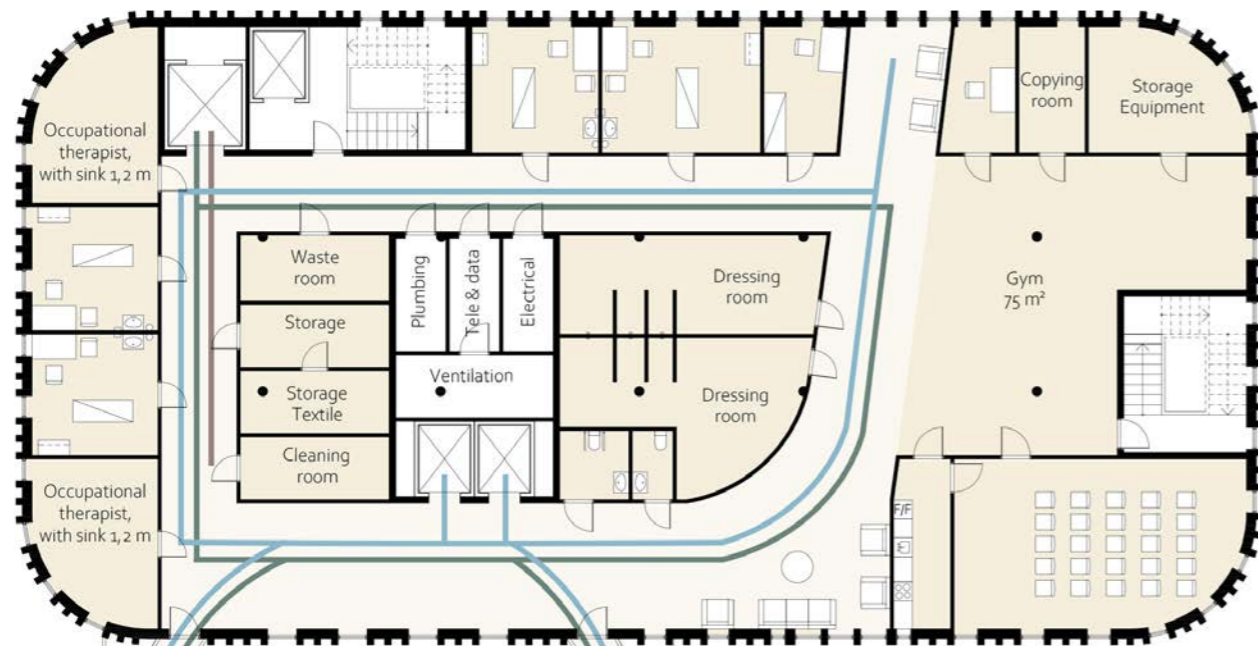


Dental care

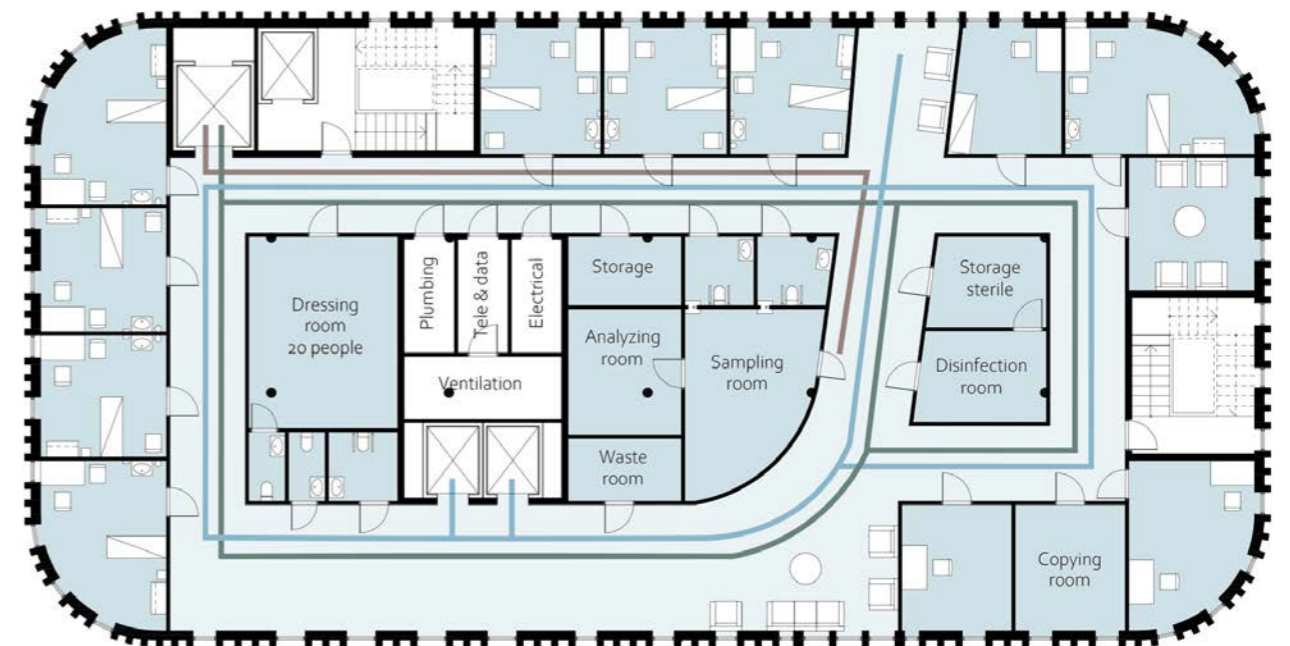
- Infection
- E.R
- Patients
- Staff
- Logistics



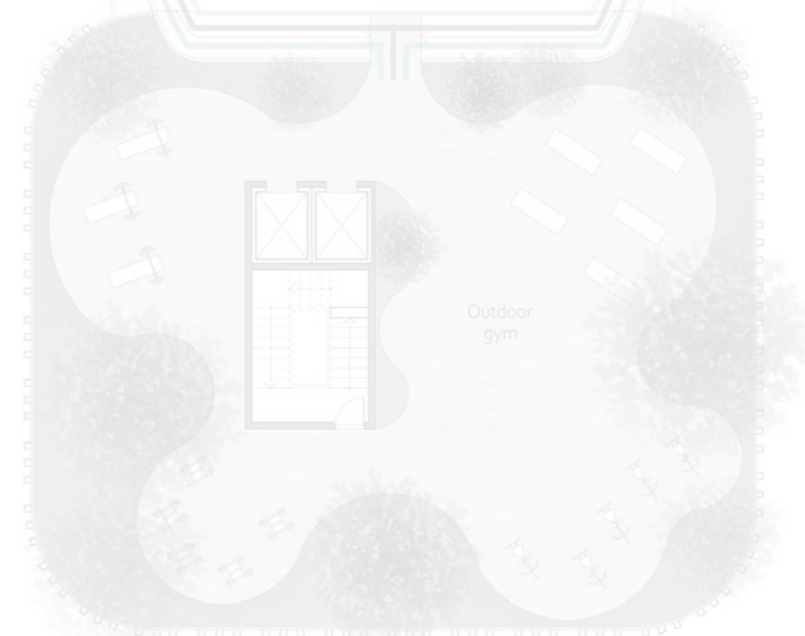
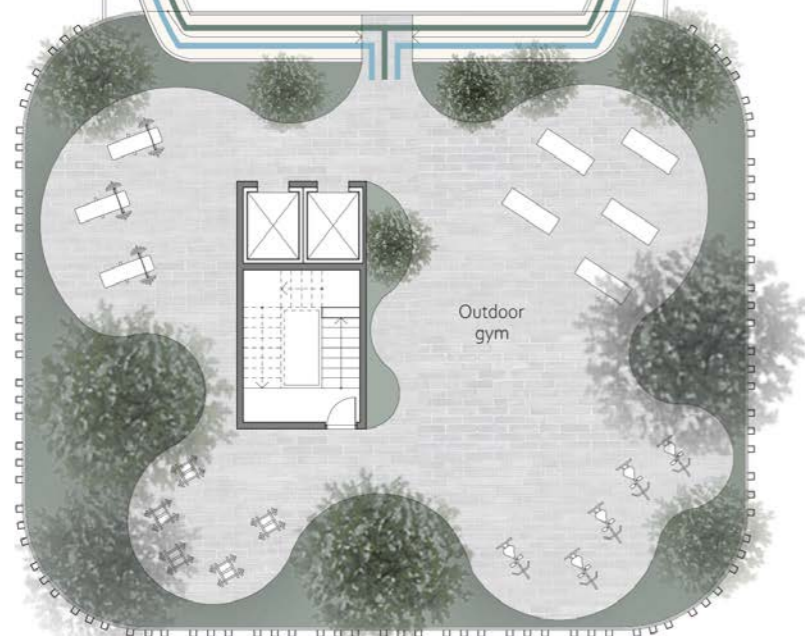
Fourth & fifth floor 1:250 (A3)



Rehabilitation

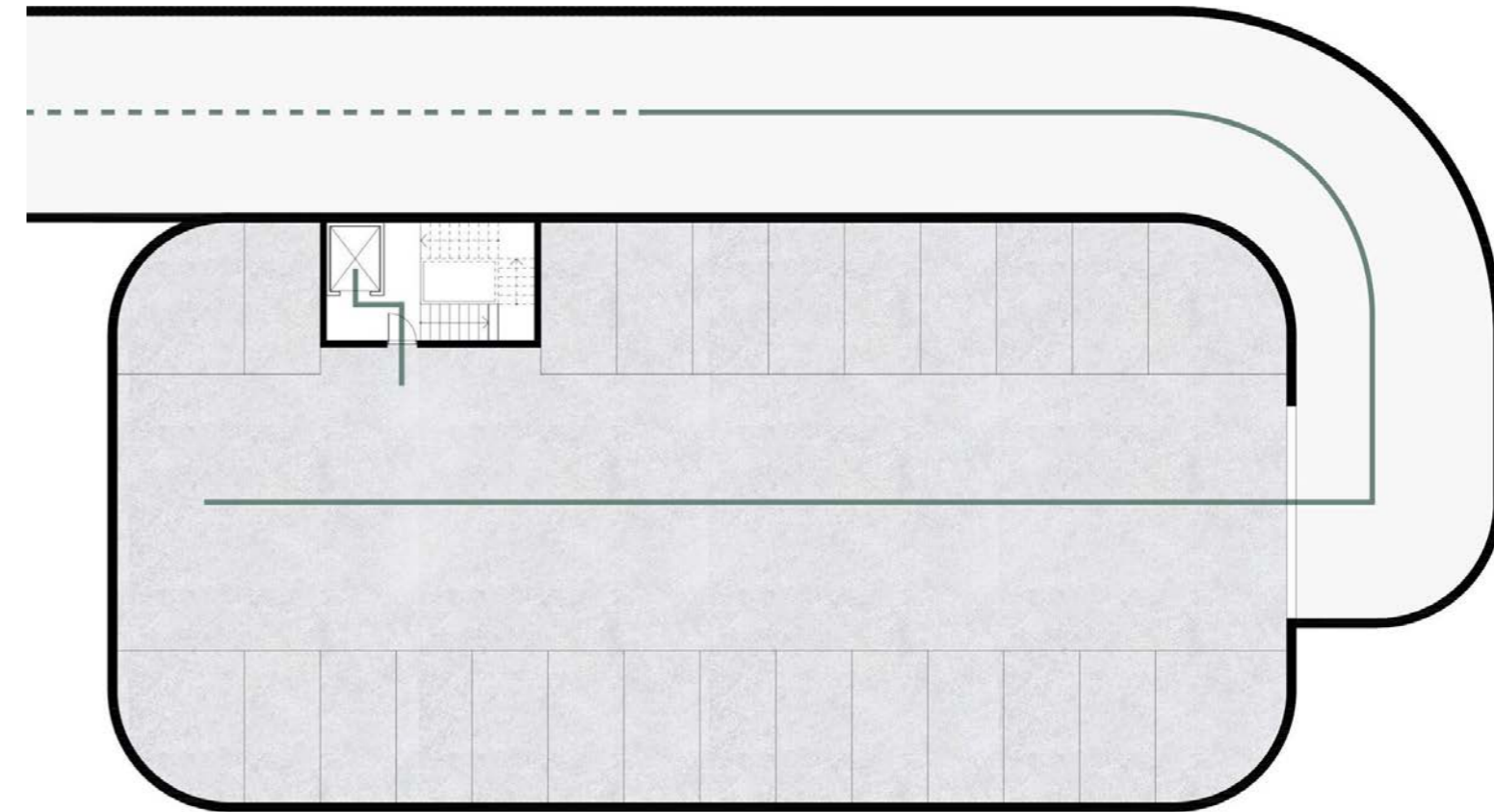
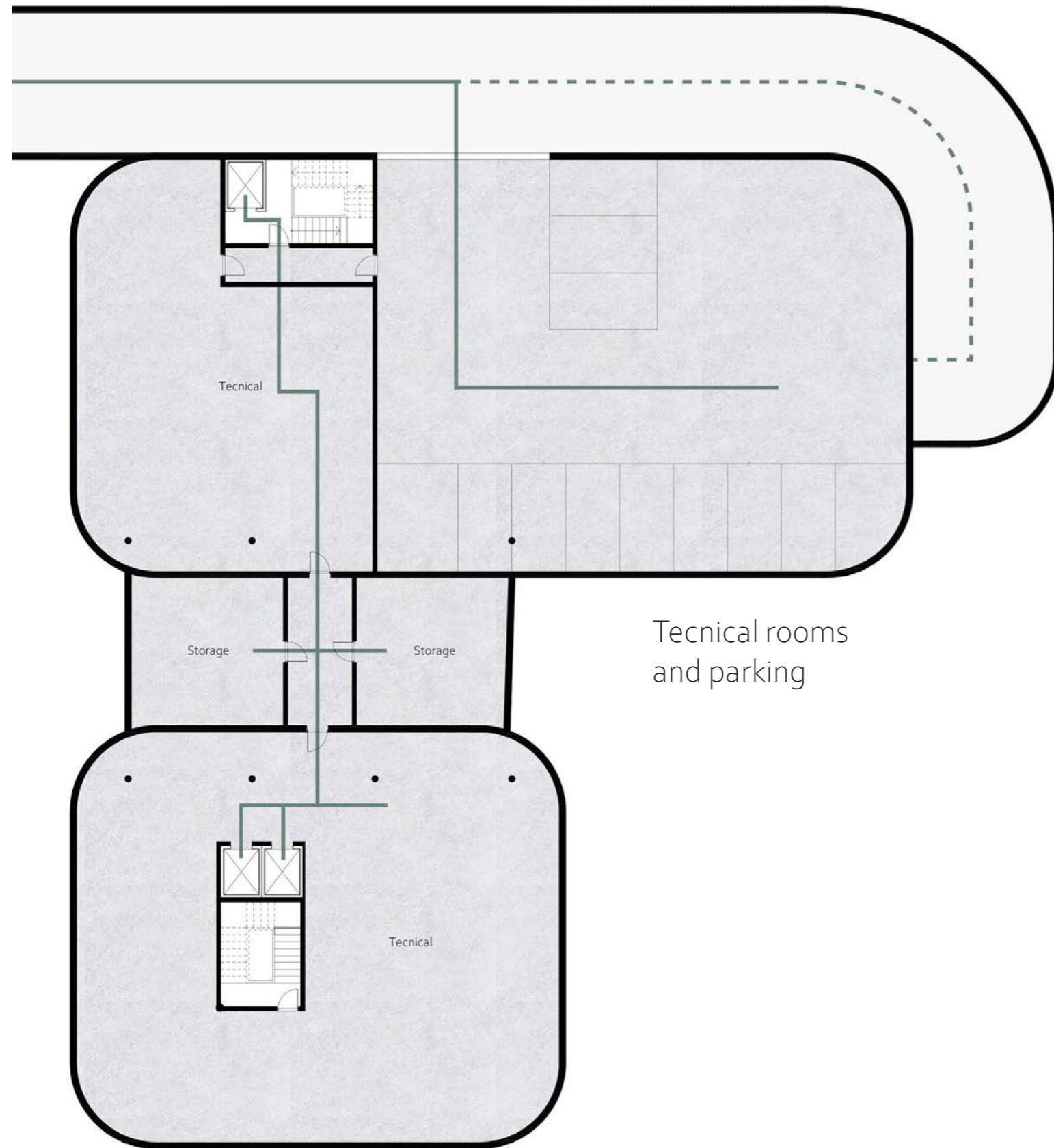


Women's health



- Patients
- Staff
- Logistics

Basement floor one & Basement floor two 1:250 (A3)



- Staff
- Logistics

Construction & Detail 1:50 (A3)

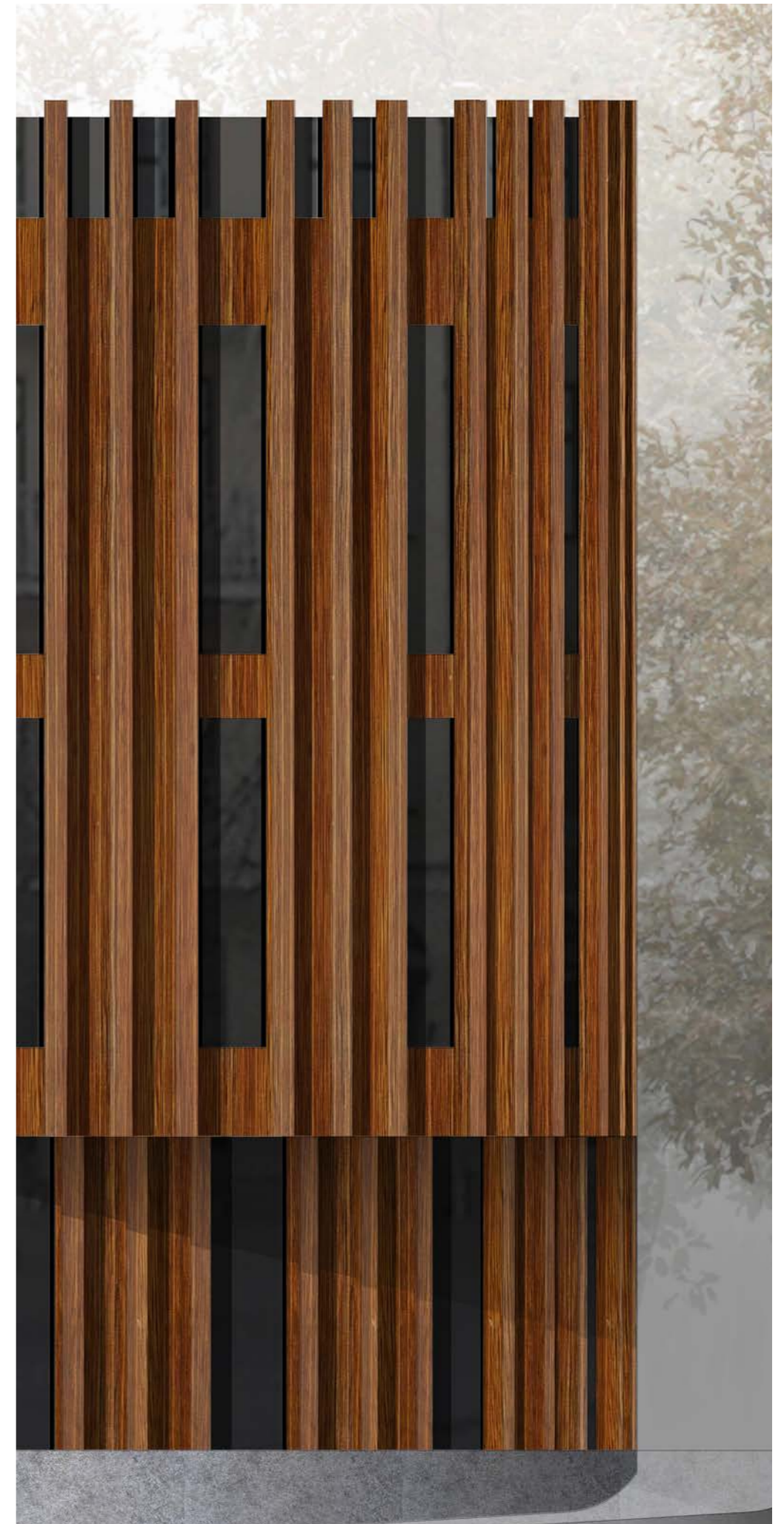
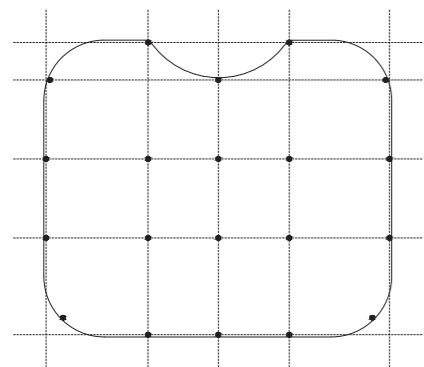
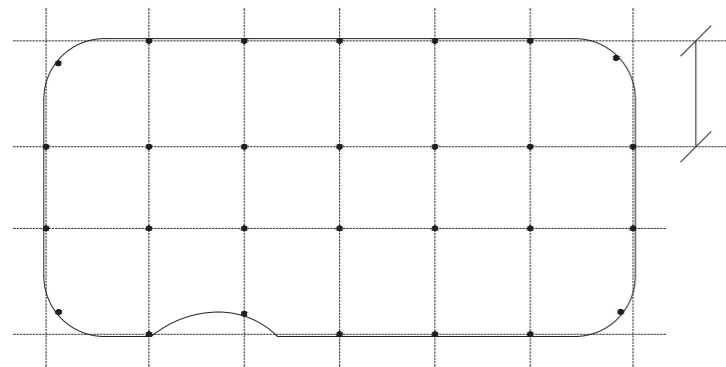
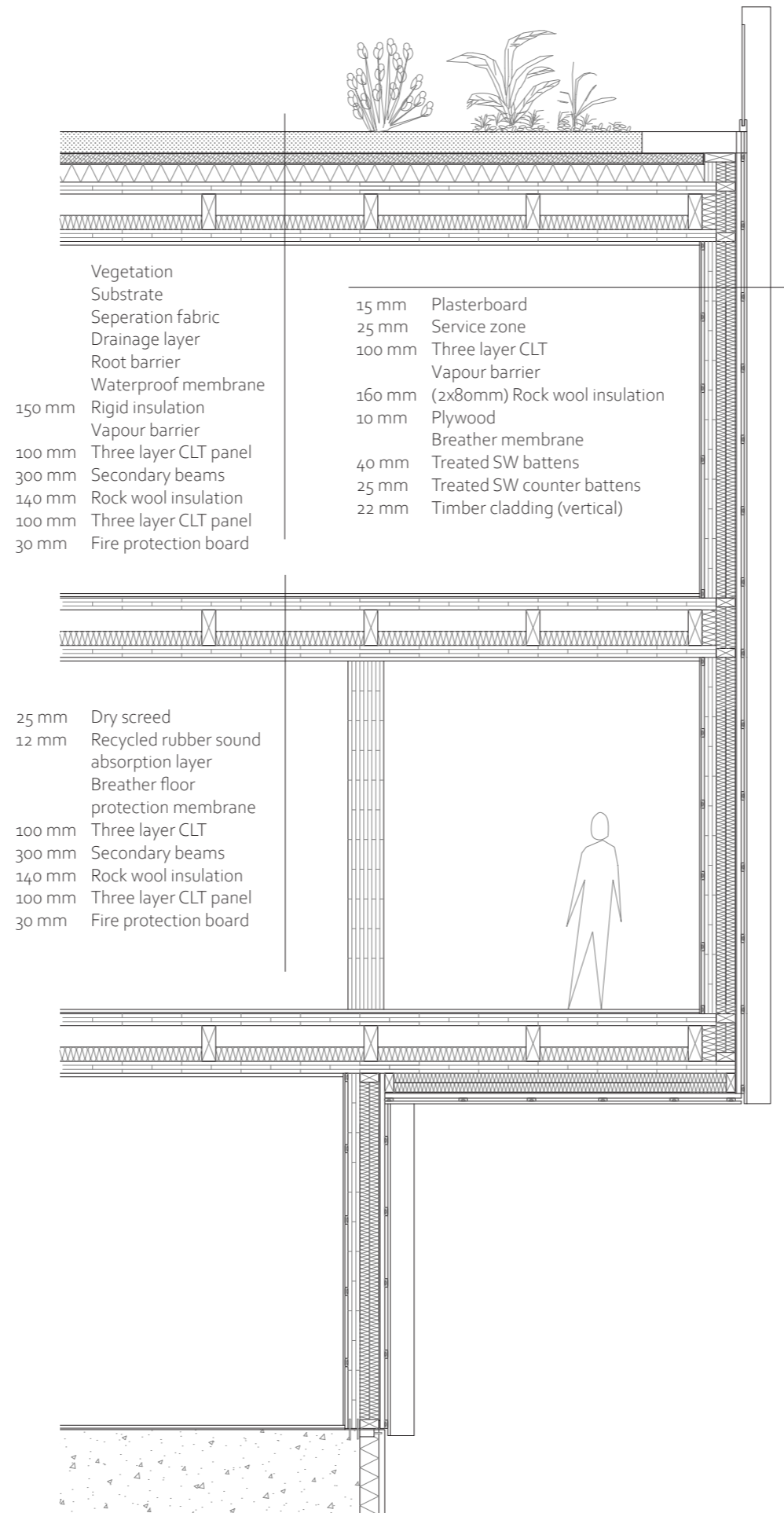
With the longest span of 6 m and the repeated placement of windows, the construction provides flexibility in floor plan as it becomes easy to move interior walls.

Working with sustainability by choosing material right for its purpose. Therefore there is a mixture of materials adapted for its use.

Construction - Floor 1-5- wooden CLT-construction
Basement- concrete construction (due to floodings).

Facade - Charred wood facade (Yakisugi) without need for maintenance.

Green roof - absorbing carbon dioxide and collecting rainwater.



Sections 1:250 (A3)



The building has a maximum of 5 floors above ground with a height of 20 m above the ground.





Perspective Waitingroom/Wintergarden

Facade North-west 1:250 (A3)



Facade South-west





Photomontage from the trainstation



Exterior perspective from Ehrnbergsgården