

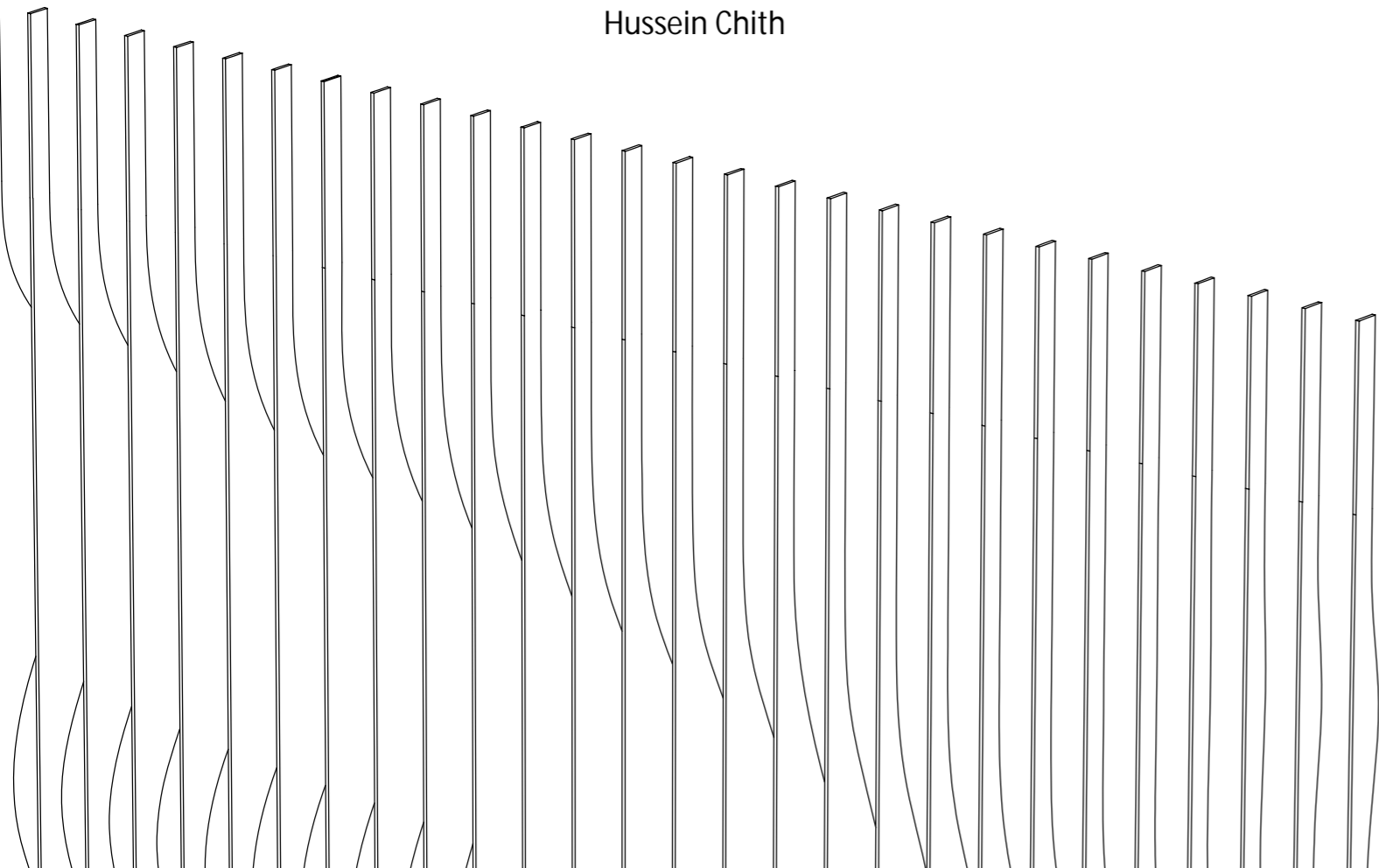
Including Simonsland

Upgrading of a central, yet remote site in the city of Borås

Master thesis at Chalmers School of Architecture and Civil Engineering
Masters program of Architecture and Urban design
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Author

Hussein Chith



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Author: Hussein Chith

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Examiner: Joaquim Tarrasó
Supervisor: Emílio Da Cruz Brandão



Student background

Bachelor studies

BSc. Architecture – Chalmers University of Technology
BSc. Building Engineering – University of Gävle

Master studies

Masters program of Architecture and Urban design

Special thanks to my beloved family for their unconditional love,
and to my dear friends for their invaluable support

Abstract

Our cities are growing in a significant rate. Much needs to be built in a short amount of time, a situation similar to the one Sweden experienced in the 1950's, before the million program. Today we might have the tools needed to confront this challenge in terms of advanced tools and economical strength, but are we taking this opportunity to include societal needs in our project proposals? Or are we too busy focusing on the satisfaction of our clients and fulfilling the needs of the market?

The following thesis aims to investigate how a complex site in the very center of Borås city could be transformed into an attractive node for the broad population.

The purpose is to propose a project that manages to re-activate an underused parking lot by the addition of a building. A building that will fulfill an actual need of the market but also give something back to the city in terms of social value. This is important because of the effects that a rapid transformation of a city might have in terms of unintentional social exclusion and thereafter gentrification.

An important part of this project has been the link to reality. The whole idea was to propose a project that tried to reflect the many different interests in this area. This was achieved by having a close dialogue with actual stakeholders. Those were several and involved all from project developers, users and even local social workers. The analysis was further done by several site visits and through statistical research.

The formative process will be based on the method of research by design. I hope to discover if a transformation of this site could come to act as a link between different areas in the city and invite people to interact, intentionally or not. Thus providing the possibility to cross social barriers, promote a wider understanding of the present diversity, and re-activate a central spot in the city.

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Introduction

Aim of the thesis

The purpose of this thesis is to investigate how a remote site in the central of a city could be transformed into a more inviting place for the wider public. The purpose is also to widen the perspectives of actual stakeholders and inspire them for future decision making.

The aim is to propose a project that wishes to re-activate this forgotten site, and thereby challenge the way city planners in Borås look at it today.

The final result is a student house with parts of the building spared for public programmes. The building is meant to reduce the shortage of student apartments in Borås, but also invite people to visit and interact.

A more overall concept is to let this building act as a physical, but also a mental, link between the inner city core and the sub-urban million program area of Norrby. This is important because of the effects that a rapid transformation of a city might have in terms of unintentional social exclusion.

Delimitations

The idea of proposing a project in a pre-industrial area surrounded by infrastructure awakens many complex questions. Therefore the extent of these questions made it necessary for me to delimit my project due to a short amount of time. As a result, this provided me with the opportunity to focus on a few prioritized issues relevant for the context.

The main challenge was to find buildable spaces while taking into consideration existing regulations and legislations. Reaching outside of these or even ignoring them would lead to a more conceptual approach for my project and I wanted to avoid that. Therefore they became factors of importance and delimited my work till a certain extent.

However, as I didn't want to get stuck with technical details and bureaucracy, I decided to prioritize the larger context whenever I reached a point of uncertainty caused by a diffuse regulation.

The design was limited to the advised site and the main analysis was done on its closest surrounding.

Thesis question

- Could a complex site, with strict building restrictions, be developed into an inviting node that gives something back to its surrounding community? Can this be done with the support of actual stakeholders and even the city council?

Sub-questions:

- Which are the regulations, set by Swedish planning and building industry, for projects close to infrastructure?
- How may the design of a building contribute to the historical identity of a city?

Method

The ongoing transformation of the area named Simonsland is an actual project in Borås. One of the firms involved in the process is an architectural firm where I previously did my internship. The intention was to take advantage of my colleagues deep understanding of the area and then use that to propose a separate project seen from my own perspective.

The method used in this project goes in terms of research by design. The idea has been to let the project relate to reality as much as possible, yet keep the size and detailing near to a level of what is relevant for a student project. Therefore the project wanted to touch the true frameworks of safety regulations and other conditions such as ecological sustainability and economical adequacy.

To set the base for this approach, a good analysis of the city and the site was needed. This was achieved via several site visits, interviews and statistical research.

Yet the best understanding of the area was achieved through open dialogues with a diversity of affected stakeholders. This is important if I wish to understand the true absences and needs, but also the functioning programmes. Not before a good understanding has been reached may I propose something out of relevance and value.

Background

The expansion of cities

Almost two hundred years ago 90% of the Swedish population lived on the countryside. Today it is almost the opposite, 85% of us live in a more urban context. This is the result of the process named urbanization. A movement that is based on the transformation from the farming society through industrialization and further on towards today's urban lifestyles.¹

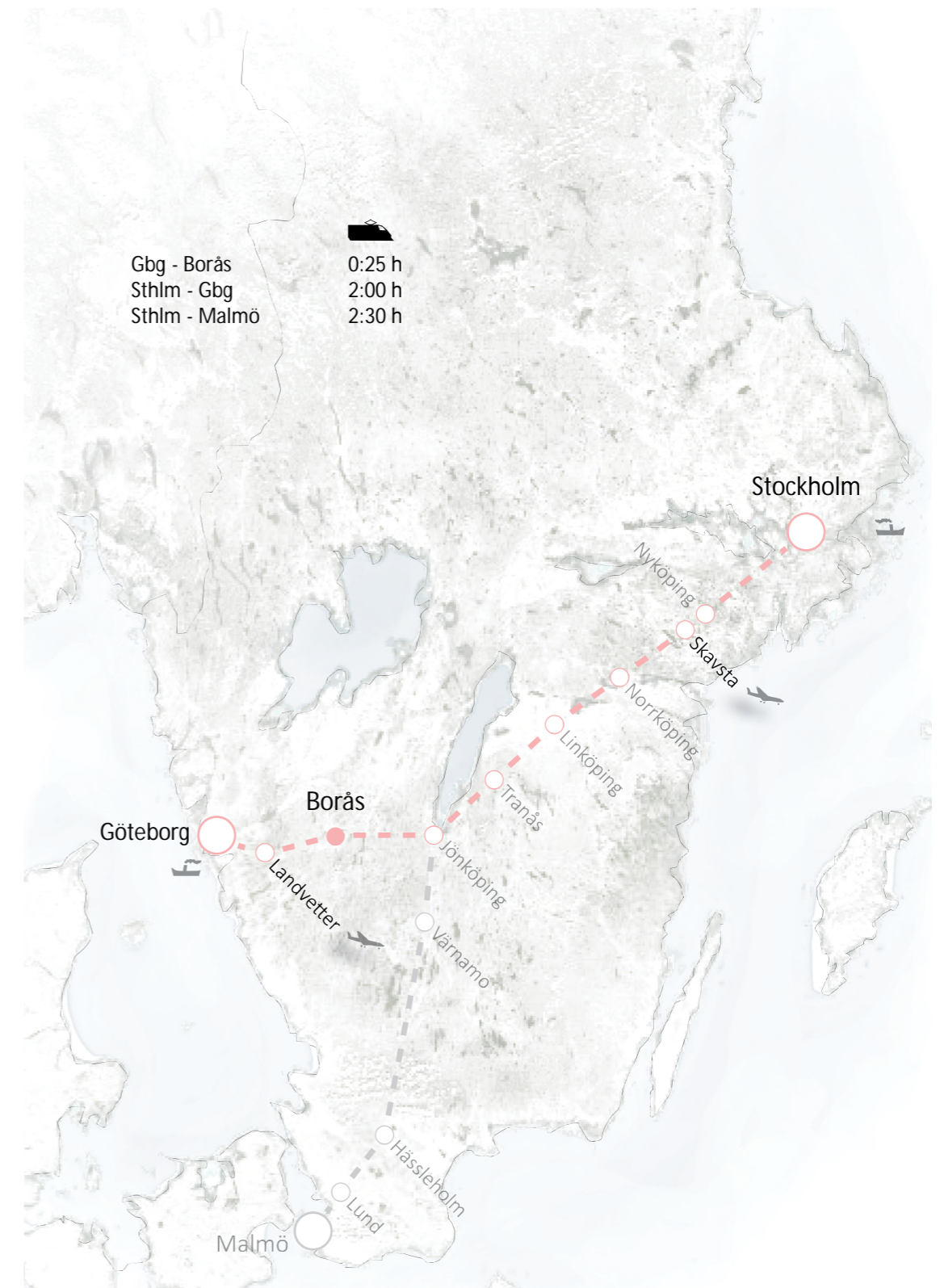
In 2011 statistics showed that 49% of the country's population were localized to the regions of Stockholm, Gothenburg and Malmö. Analyses appreciate that in year 2025 this number will be around 52%. Apart from immigration and an increase in birth rate, the main reason for a continuous expansion is the localization of educational institutes and career opportunities.¹

With further expansion follows greater liability on infrastructure. One of several visions for greater connectivity and a continuous growth is named Götalandsbanan (see map). A high speed train with a maximum speed of 320 km/h that will reduce travelling time and "erase the borders between big and small cities."² Making it possible to live in one city and work in another one.

This strengthened connection is envisioned to generate thousands of jobs and has already motivated affected cities along its path to agree to the building of around 100 000 dwellings in total. Dwellings and office buildings that is primarily meant to densify the inner cores of these cities. One of these cities is Borås.

Suddenly the focus is again directed towards the already dense city cores and ambitious projects are being envisioned on previously untapped land. In this context, it is crucial to be aware of the kind of environments we might create if we only build for the market and forget about the societal needs and the values of the local communities.

¹SCB. 2015.
²Götalandsbanan. 2018.



Vision Götalandsbanan 2035

Segregation & social exclusion

Sweden is known for its persistent struggle for equality and social inclusion, but in recent years the picture of an increase in segregation has emerged. Most clear in the suburbs of major cities and many times in million program areas that today house an above average amount of foreigners. This itself is not a problem, instead problems occur first when these inhabitants unintentionally embraces a mental state of non belonging.

The EAPN, a network of organisations and NGOs fighting against poverty and social exclusion, defines the term social exclusion in this way:

“A term that is used to emphasize the processes which drive people to the edge of society, limits their access to resources and opportunities, and curtail their participation in normal social and cultural life leaving them feeling marginalised, powerless and discriminated against.”³

The consequences of this has in recent years become evident and it is today seen as a great but important challenge to reach a change. A change meaning to strengthen the connectivity between cultures but most importantly create a general feeling of belonging and inclusion.

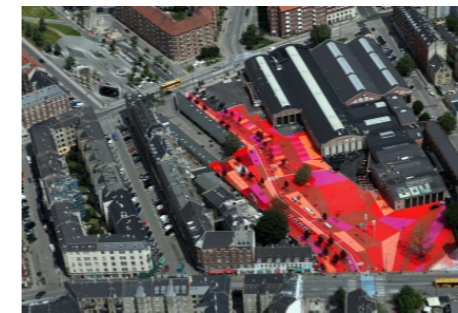
Because of the project sites near location to the area of Norrby, a million program area well known for its social problems, the project will include aspects that tries to combat the issue of exclusion. The motive is to propose a project that plays along the strategy of inclusion, this by creating something serving a variety of people.

³EAPN. 2014.

Reference projects & inspiration

The two main references used for this project are both types of projects that wished to solve social difficulties within unique sites. In both cases this was achieved by including a variety of people and programs.

Superkilen, Copenhagen



Superflex. 2016

A half a mile long urban space wedging through one of the most ethnically diverse and socially challenged neighborhoods in Denmark.

An urban installation of objects referring to the representation of nations in the area. By that providing a sense of belonging to both users and visitors.

SL11024, Los Angeles



Baan, Iwan. 2015

A student apartment complex that pays homage to its preeminent neighbours while providing the community with much needed housing and gathering spaces.

Following conversations with clients and local activists, the architects developed a scheme that responds to the considerations of the neighbourhood, the clients requirements and the uniqueness of the site.

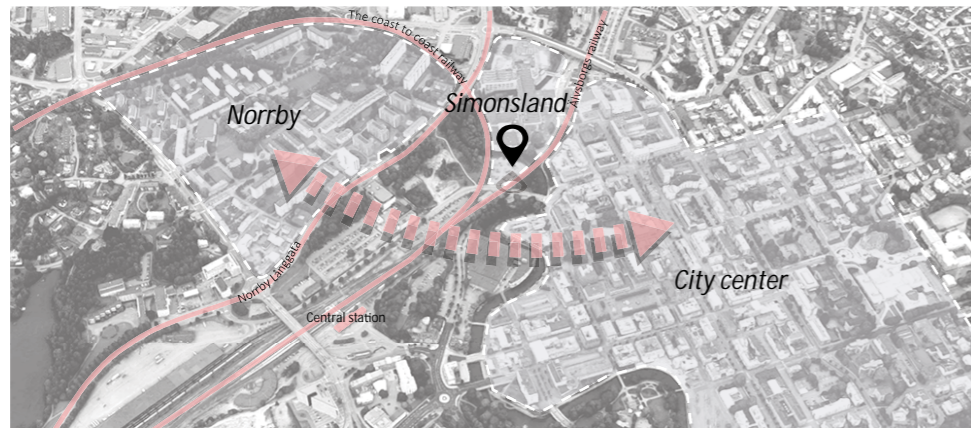
The context

Overview and vision

The core of Borås is the river Viskan. A river that over history has been of great importance for the city's development and this is where the city originated from. Today the city has expanded in all directions. The city center is much alike any common small town center with housing sharing the streets with commerce and educational institutions. In the northwest of the center we find the residential area of Norrby. One of many million program areas built during the 60's. In between these two areas is located the small area of Simonsland. A pre-industrial area that is currently ongoing a transformation and now hosts several actors of importance for the city.

Apart from the river being a source of attraction, it still does act as physical barrier between areas. Same does a handful of other physical barriers in the city. Relevant for this project are mainly the railway tracks, enclosing both the project site and Norrby with a u-turn. Secondly there is Norrby Långgata, a heavily trafficked highway routing along the eastern edge of Norrby, complicating a pedestrian crossover.

The challenge is to strengthen the connectivity between these two central areas, both physically and psychologically. The vision of the project is the creation of a "link" via the upgraded area of Simonsland.



Central areas and their relation to each other - Red stripes simulates the railway with its separation, and the highway along the south eastern edge of Norrby.

History of Borås

Numbers are connected to the maps on the following page

Borås (Torpa) was founded in 1621, as a consequence of trade not being allowed outside the borders of a city. The location was chosen close to the river Viskan, which would come to play an important role for the future development of the city. Because of severe fires the city map had to be redrawn several times. The first map on the following page is from the 17th century. ①

The lime-rich water of Viskan was proven to be suitable for processing water and the fruitful textile businesses were partially therefore situated along the riverbed. When the railway was built in 1862, it allowed the small businesses to transform into large scale factories. ② A need of work force encouraged immigration from the countryside and neighbouring countries. Most of them settling in the northwest, a newly settled area called *Norrby gårde*.

Just like the river had its importance for the industry, the railway came to play a significant role after its arrival. During the 1940's the industry was flourishing and factories were introducing all along the riverbed. At its peak the city counted a total amount of 236 factories. ③ In the early 60's Norrby was decided to be developed as part of the million program project. The whole area was planned according to ideas of that time.

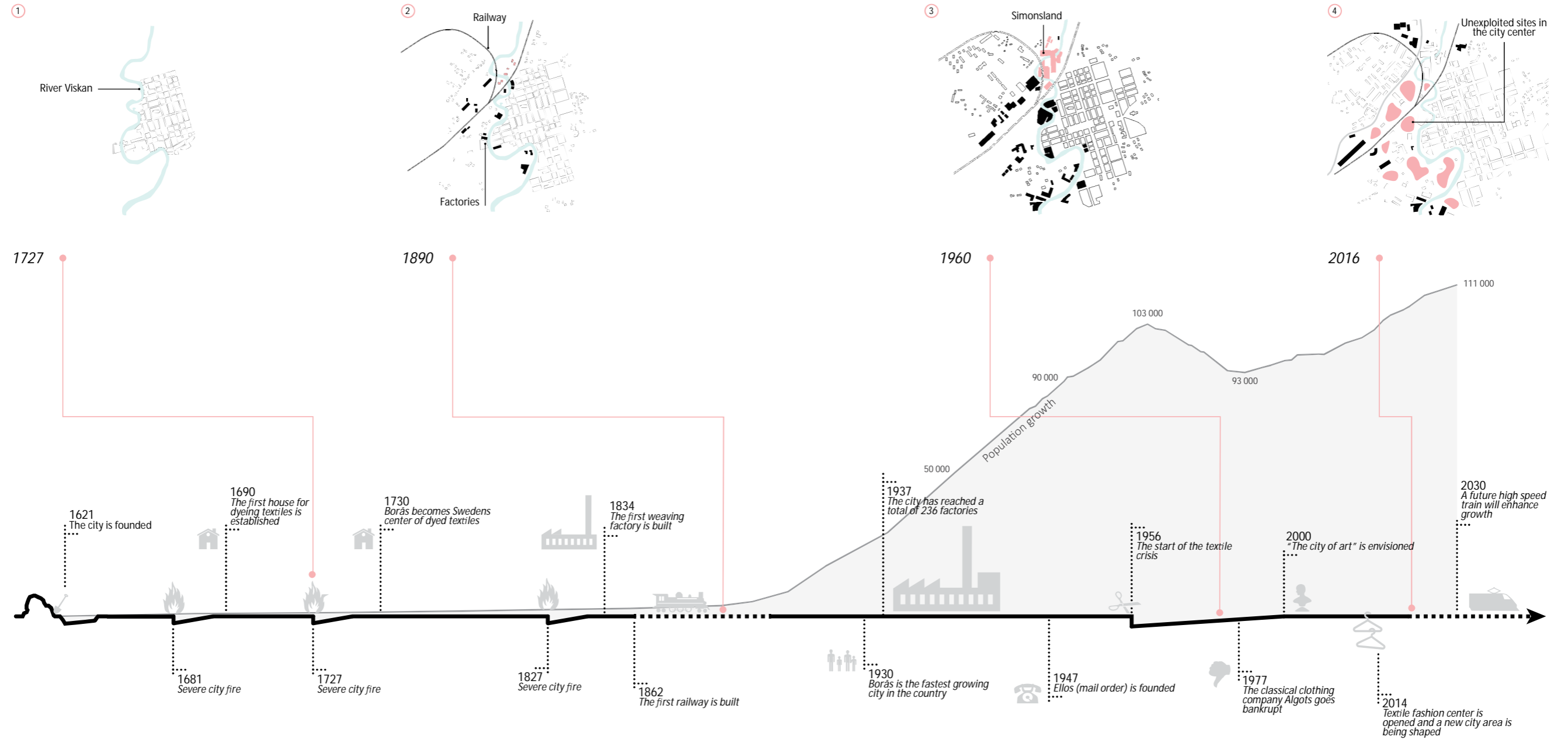
The textile crisis of the 70's forced most factories to close down, leaving a city without its renowned identity of textiles. A setback that took some years to reform. Today the city has found its way back to progression by focusing on education, innovation and business growth.

When the industry moved out from the city it left attractive spots in the center for future exploitation. However, the vicinity to infrastructure created physical barriers between areas and today many sites are complicated to exploit.

A future high speed train is planned to route via Borås and enhance the city's connection nationally. Borås is therefore expecting growth. ④

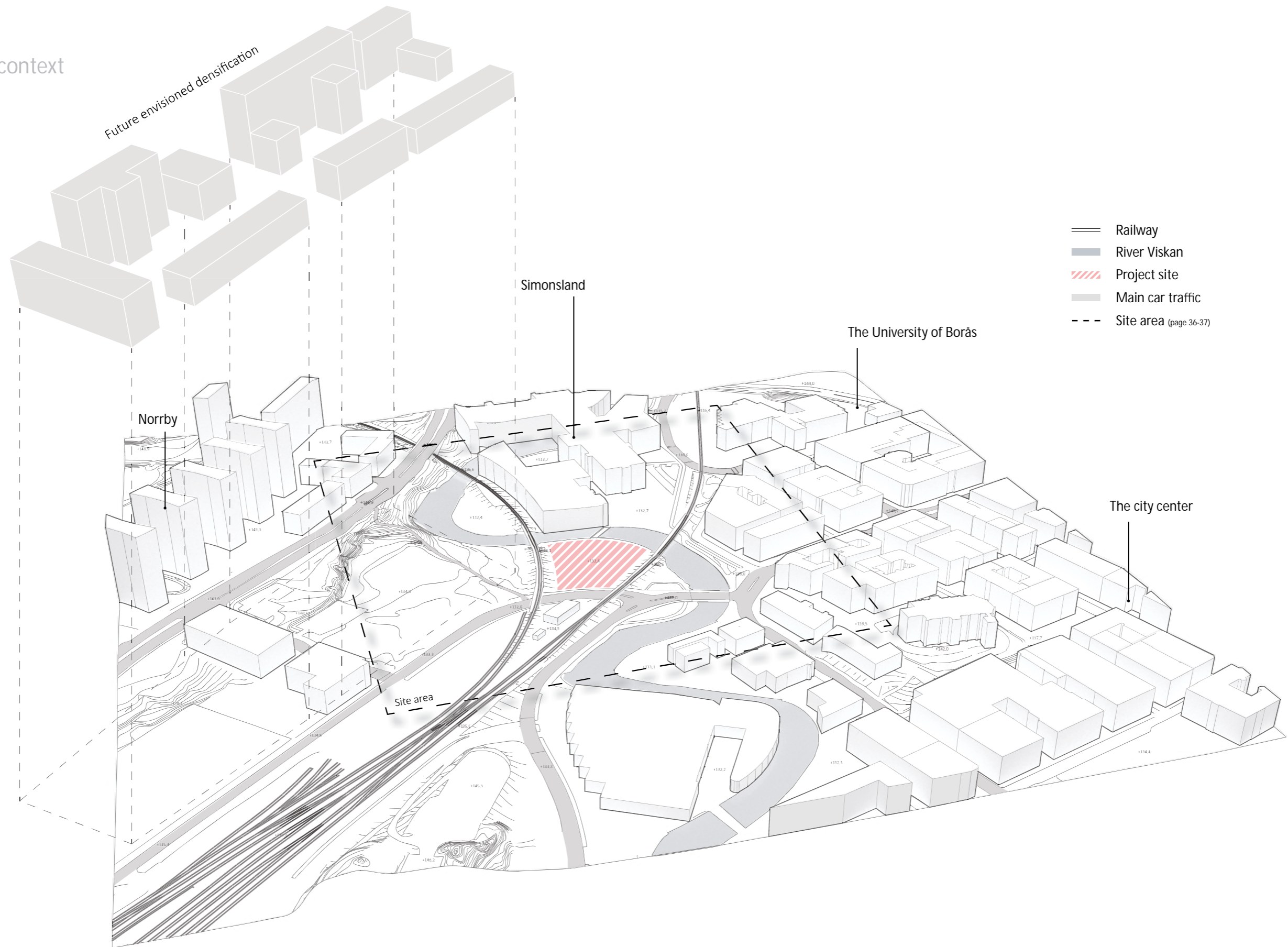
The context

Timeline



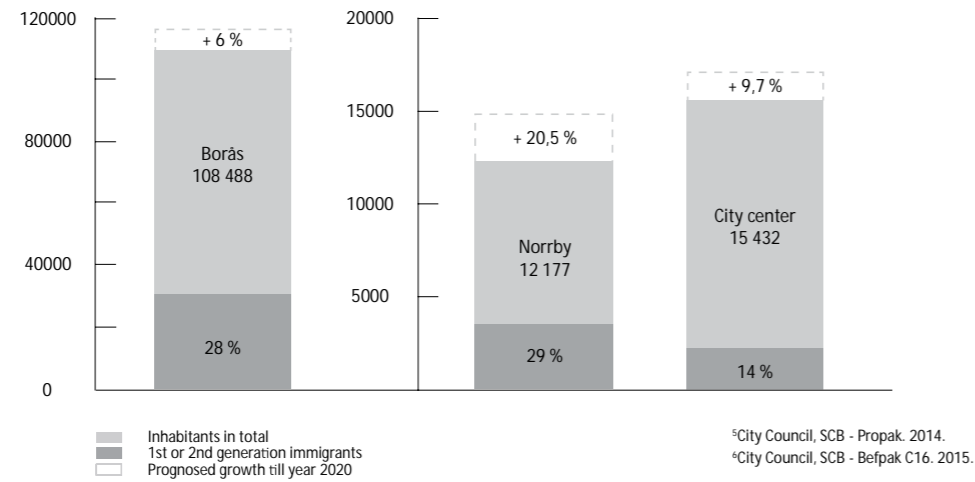
4Haggstrom. 2004.

The context

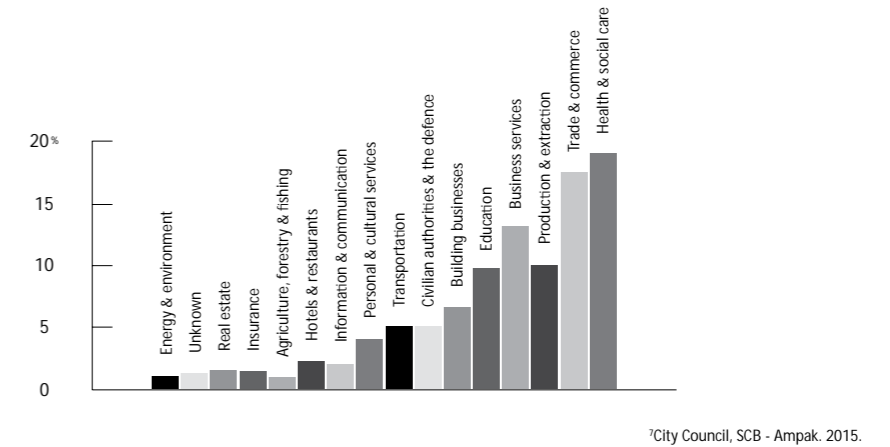


Statistics

Inhabitants



Job chart

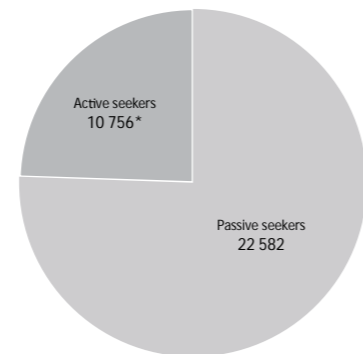


Housing shortage

"-Queuing time is approximated to 4 years for an apartment in Borås. 7 years is the approximation for an apartment in the city center."

"-There are no numbers for the shortage of student housing since there is no separate queue for students. The renting process is systemized via the method of first come first served."

"-Sometimes a vacant apartment isn't available on the website for longer than one hour and housing companies approximates a big shortage."



**Proven interest at least once during the year*

Informant 1: Administrative operator, AB Bostäder i Borås. Nov 2016. Phone interview.

Unemployment rate

Percentage of unemployed inhabitants. The (%) represents the total population of each area separately.



©City Council, SCB - Abetssökande. 2015.

Characteristics

1 Norrby

Programs



Chith, Hussein. 2016

Norrby is a typical million program housing area characterized by its high concrete structures and the close connection to its surrounding nature.



Norrby Livs. Origin unknown.

The inhabitants have a wide diversity in cultural backgrounds. Small businesses and restaurants are found around various corners and the range of goods varies much from what you may find in the city center.



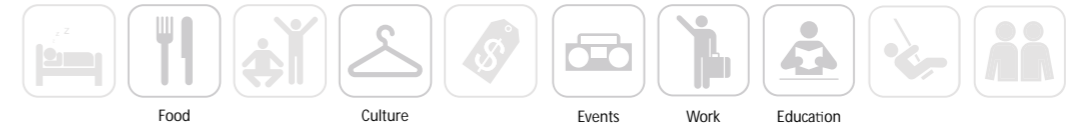
Norrby. Origin unknown.

Many inhabitants are troubled by social exclusion. A reason is believed to be the lack of social institutions and work possibilities.

The general citizen in Borås has a bad view about Norrby. Much because of an undifferentiated picture often shown by media.

2 Simonsland

Programs



Chith, Hussein. 2016

Simonsland is becoming a new vibrant area in Borås. In refurbished previous textile factory facilities you may today find the University of textiles, research labs, a textile museum, restaurants, start-up companies and much more.



Chith, Hussein. 2016

The renovation is skillfully done with great respect for the already existing. References to textiles are obvious throughout the design.

The area is under continuous development and more projects are yet to be realized.



Svenskt konstsilke AB. Origin unknown.

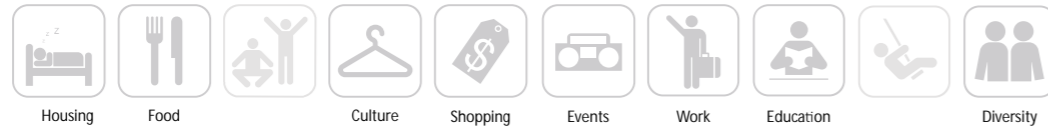
The campus breathes an atmosphere of textiles and contains a richness in history. This used to be the workplace for hundreds of people from the city.

The museum contains a well documented archive of pictures, machines, and stories.

Characteristics

3 The city center

Programs



Stora torget. Origin unknow

The city center is characterised by strictly organized brick buildings and axial streets leading to the town square.

Many people live here hence the area is constantly active. Common functions are education, commerce, business and events.



Kallioniemi, Ritva. 2015

The close connection to river Viskan adds to the level of attraction and in recent years the municipality has upgraded the river walk and created a more inviting situation along the river bed.



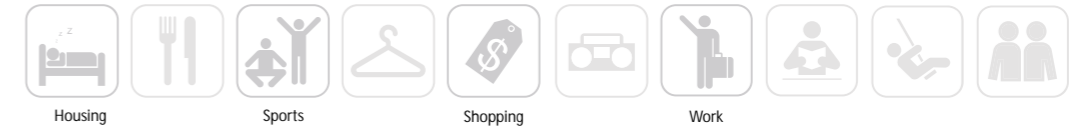
Kihl, Anders. 2014

In the search for new identities the municipality decided to further promote art, envisioning "a city of art".

Today sculptures are found in every corner and every second year is held an art biennale with public exhibitions and installations.

4 Future envisioned densification

Programs



The so called "No man land" between Norrby and the railway has been under the discussion of exploitation for many years. The municipality are curious about the possibilities, but at the same time aware of the risk of creating a new barrier towards Norrby.

Underneath is an envisioned proposal that proposes office buildings close to the railway and housing in the north, meeting existing structures of Norrby.

Because of ongoing discussions about the route of Götalandsbanans railway, all the potentially affected projects have been paused. One proposal meant to upgrade the existing railway path which would mean strict regulations for the surrounding built environment. However, as for now it seems as the passage will most likely be directed south of the city core instead.

Hjelm, Fredrik: forthcoming City Architect. Borås municipality. Oct 2016. Interview.

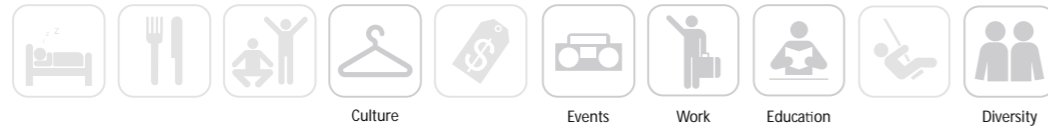


Snohetta & Vandkunsten, 2013. Visualisation of proposal for "Lower Norrby"

Characteristics

5 The University of Borås

Programs



The school is one of the country's strongest universities with successful educational and scientific environments. It has a strong profile in the terms of science for professions.

The school has its background in the cultural heritage of textiles and the education of librarians.⁹

The institute of textiles and research is located in the facilities of Simonsland, while the main part of the university is housed in facilities just on the other side of Skaraborgsvägen. A short walk of about 2 minutes.

Popular programs

- Textile & fashion
- Library & information science
- Economy & IT
- Pedagogics & teaching
- Technology & engineering



Numbers

Total students: ca. 11 000
Basic level: 86%
Advanced level: 14%

Total amount of programs: 80
Total amount of courses: 137

⁹University of Borås. 2017.

Dialogues

To reach a level of relevance this project was done in collaboration with actual stakeholders. The choice was appealing out of many aspects but the foremost was the opportunity to get a better understanding of what kind of obstacles a real project would face in a similar scenario.

To answer the thesis question; fulfilling an actual need of the market while at the same time give something back to the citizens, there was an obvious need to understand the perspectives of different actors. The different actors chosen to be involved in this project could simply be divided into three groups. City planners, real estate owners and the citizens. A further presentation is found in the upcoming pages.

Stakeholders

- Municipality p. 28
- Project developers and real estate owners p. 29
- Brygghuset - Local voices p. 30

Dialogues

Municipality

This relation was achieved via dialogues with city planners of Borås. Talks with the forthcoming city architect, Fredrik Hjelm, led to necessary information about the current situation, visions and plans for future development of the city.

"-Borås city are far gone in the planning for the future. There is a wide amount of documentation done for us to understand the needs, expectations and strategies to reach a sustainable development."

As a result there was published a document with visions and strategies of how to reach their goals. It was published with the title Borås 2025¹⁰. Underneath is a short summarize of the essentials from this document.

Hjelm, Fredrik; forthcoming City Architect. Borås municipality. Oct 2016. Interview.
¹⁰Borås 2025. 2016.

Borås 2025

Vision

"Borås is developing its future upon its heritage of textile and commerce. In Borås the focus is directed towards the meetings between people. Meetings where trust and respect are keywords and where we take advantage of the unique power of individuals, their knowledge, abilities and ideas. Borås is characterized by creativity and the courage to think and act in new ways. In Borås people live together, in harmony with nature and the surrounding. Viskan used to be the nerv of life which upon the industry based their future on. Nowadays the flow from Viskan inspire to recreation and experiences."

Seven strategical goals

- Encourage people to meet in Borås
- Businesses grow through collaboration
- We take common responsibility for children and youth
- We strive for a viable city core
- Let the citizens power of initiative activate the countryside
- Promote good habits of transport and attractive communications
- Ecological sustainability, locally and globally



Project developers

Kanico is a real estate company that develops facilities for a diversity of businesses. The company was founded in 1998 by Kjell Berggren and in 2004 he bought the first parts of the previous Swedish artificial silk factories, today known as Simonsland. At that time Simonsland was a forgotten pre-industrial area in the middle of the city.

The company is a small sized business of just a few people, but they have big visions in mind. They work by the motto of; nothing is impossible. What is done so far in Simonsland is considered to be the first stage. Yet to come and be developed is stage 2, 3 and 4.

Kanico has a wide network and they collaborate with many companies. What makes them appreciated is their humanistic view on projects and the similarities they share with the city about future visions. They believe in collaboration, diversity and an overall sustainable approach.

Their open minded and positive attitude towards student works has been of great contribution for the progression of this thesis. The main contact has been via building engineer Fredrik Andersson, whom has been of essential assistance in the search for a suitable project on a suitable site, but mainly in terms of communication.¹¹

¹¹Handelsklubben. 2016.



Dialogues

Brygghuset - Local voices

Early in the process it was understood that Brygghuset was a good place to start with for hearing voices of young locals. Brygghuset is a creative do it yourself-arena that provides young adults (16-29 y.o.) the tools needed to realize their own projects for free. The projects varies from art exhibitions to concerts and even fashion events. The promoted concept is learn by doing and this aims to teach the importance of responsibility and taking own initiatives.

Personel is always present here acting as supporters and advisors. Other initiatives provided at Brygghuset are leadership trainings, summer schools and even "after schools" to name a few.

A prominent employee at this place is Yankuba Daffeh. A charismatic guy who seem to be open for anything that brings good. Yankuba is himself from Norrby and has a wide understanding of the area. His network is big and he sometimes sees himself as a bridge between youngsters and the adult society.

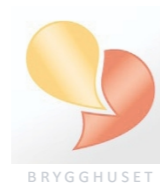
What he and others at Brygghuset feel is missing in Borås are spontaneous meeting places where people of different backgrounds may interact.

"There do exist meeting places in the city already, but most are homogenous and directed towards a selective public."

The idea of a place that attracts both people from socioeconomically weak areas, and likewise the general inner city public, to interact on common grounds puts a smile on his face.

" - I would go there everyday!"

Daffe, Yankuba: Social worker. Brygghuset. Oct 2016. Interview.



Summary of the dialogues

The outcome is an understanding that all actors have similar visions. They all speak about the importance of a sustainable approach concerning environment, sociology, economy, etc. They speak about the importance of *diversity, inclusion* and *collaboration*. They all mention the topic of a growing city and the opportunities this brings along.

Where they differ is mainly within their strategies, which is logical since they are quite different from eachother as professional actors.

The municipality is trying to reach its vision by trying to promote more projects and initiatives that aims to *include* people. They're also trying to strengthen the *identity* of the city and prepare it for the foreseen expansion. With the expansion comes the responsibility to plan with a sustainable approach.

The project managers are planning, building and developing facilities to reach their visions. Their focus is on taking healthy decisions for their *business*, however alongside the visions of the city. They're open to take in consideration local voices and needs.

Many citizens are using the strategy of letting their voices being heard. This through organized *events* and projects, thereby trying to influence local politics.



Dialogues

Concept

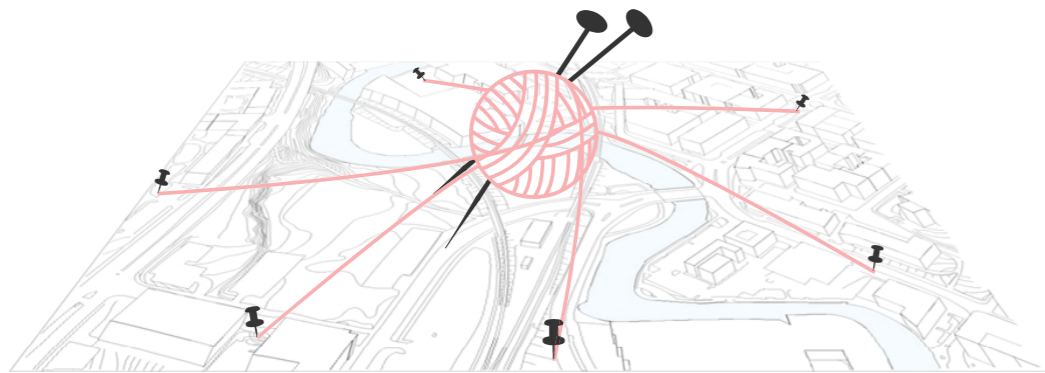
The essence of the information gathered from the stakeholders is filtered into my concept, which is the idea of allowing a variety of functions into the same building.

A multifunctional, semi-public place that aims to attract people of different backgrounds to engage in various programs or events. By doing this, the hope is to re-activate the site and enhance the probability for people from different areas of the city to meet, interact and cross psychological barriers.

The main function of the building will be student housing, answering to the great need of the market. Other internal spaces will be designed flexibly to enable a varied usage. Those spaces are meant to be available for renting by private actors, organizers, associations or even institutions.

One intention is also to let the visitors reflect upon the city's cultural heritage of textiles. A heritage that today isn't highlighted much in public.

The overall vision is to let this site reach out towards society and implement a feeling of belonging. This to show that it is possible to build for the market but still with the citizens kept in mind. Where the citizens feel invited and curious to engage.



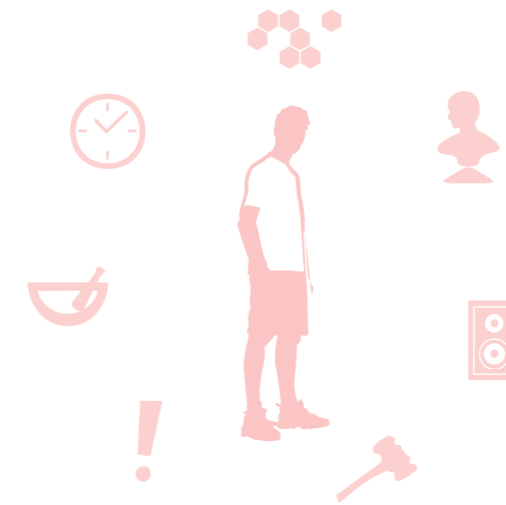
Program

Why student housing?

The main reason for choosing a program such as student housing is the general understanding of the lifestyle that many students live by. With this I state that the typical student is seen as curious, ambitious, active and many times willing to engage in projects outside of school programs. This lifestyle goes well together with the concept of introducing multiple programs within the building. Imagine visiting a flea market in your own yard!

Another reason of importance is the simplified building regulatory that covers student housing, in comparison to general apartments. The slightly simplified regulatory covers apartment size, height requirement, noise pollution, and more. These simplifications are of utmost value on sites that are already heavily restricted.

The third but still influential reason is the stakeholders' actual interest in investigating the possibility for future student housing somewhere around this area of Simonsland.

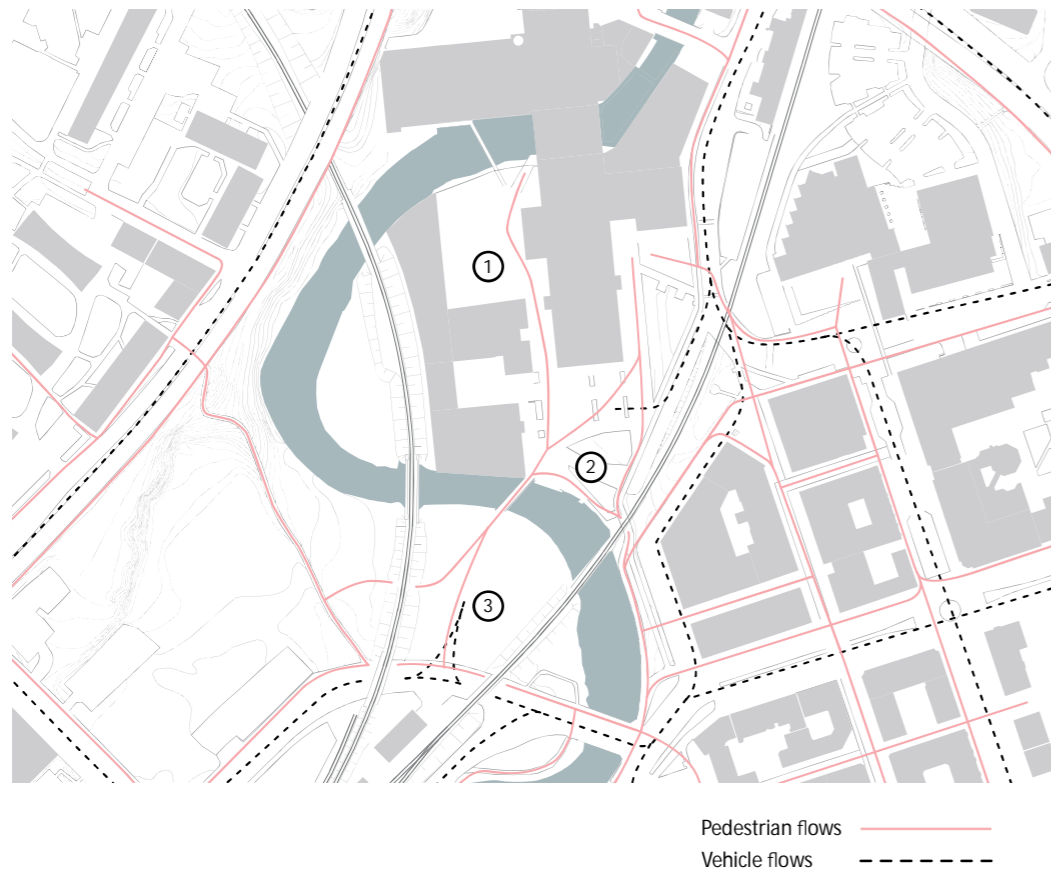


The site

Suggested project sites

Three sites were provided by Kanico as realistic spots for future exploitation. The choice was made after discussions with Kanico, guidance from previous colleagues at the firm of Krook & Tjäder and my own analysis of the differences between the three sites. Site number 3 became the site of choice for this project, mainly because of the possibility to fit my conceptual ideas.

The choice is backed-up by the result of executed S.W.O.T. analysis. Yet another decisive reason for this choice was the land owners future vision of actually exploiting this site. Therefore they welcomed a deeper analysis and a proposals that could inspire their development.



S.W.O.T. - Analysis of suggested sites

- Strengths**
Central position in Simonsland. Connection to the river. Wide space for a new volume.

Weaknesses
Isolated from the rest of the city. Few connections.

Opportunities
Creation of a new square and destination. A new volume won't stick out much.

Threats
May enclose the connection to the river up north.
- Strengths**
May be reached from several directions. Connection to the river. Close to the University and the city core.

Weaknesses
Noise and vibrations from trains. New volume might hide the original structures.

Opportunities
Creation of a new front facade. Better usage of a current parking lot.

Threats
May enclose the area further and "turn its back" towards the southwest.
- Strengths**
Connection to existing flows. Central location in the city. Connection to the river.

Weaknesses
Noise and vibrations from trains. Remote site today.







Opportunities
A good spot for a program that is for else people than only users of Simonsland. Better usage of a current parking lot.

Threats
Regulations of building allowance close to infrastructure.

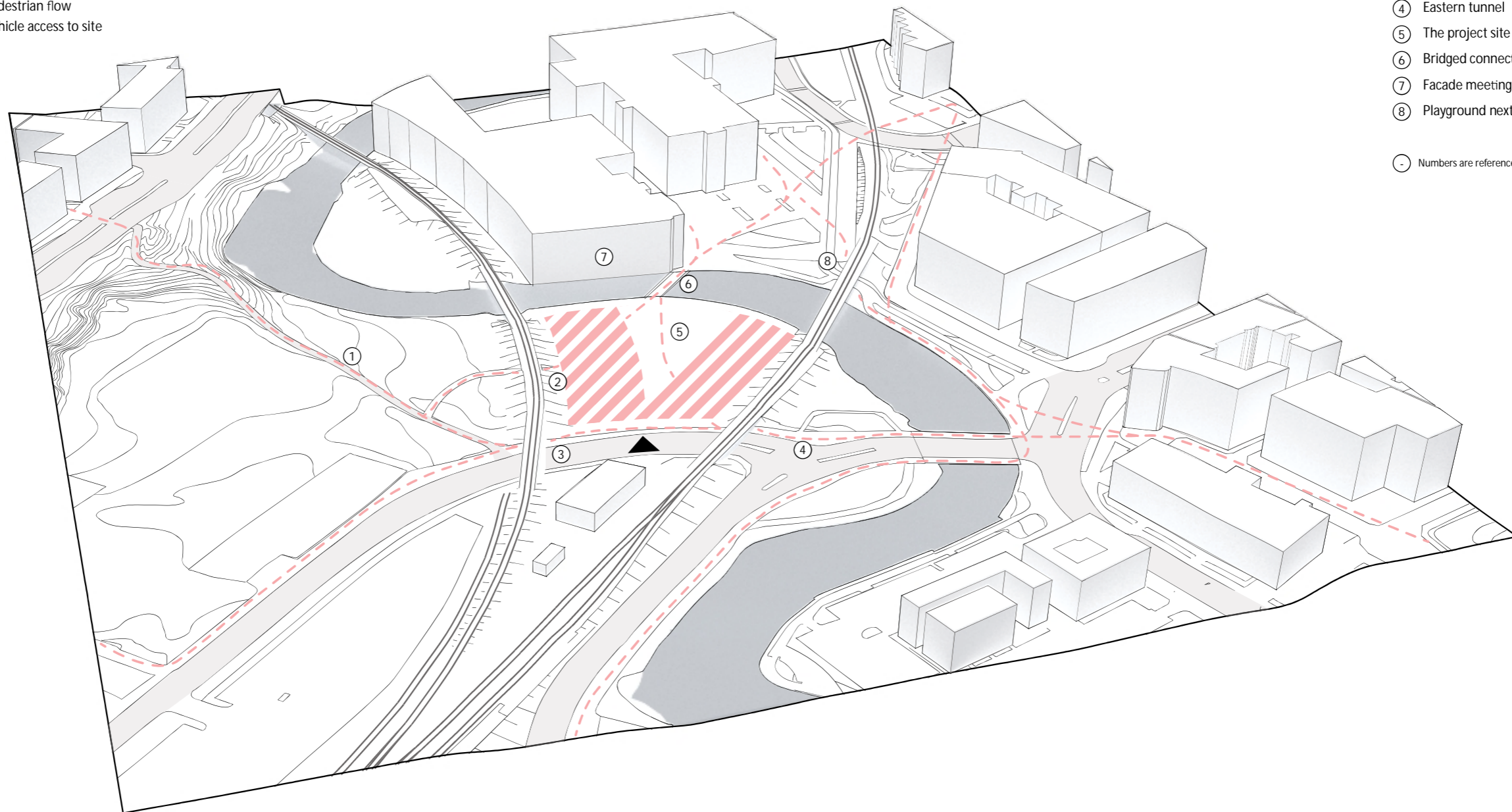
Site of choice

The site

Analysis of site No. 3

-  Railway
-  River Viskan
-  Safety zone - advised kept unexploited
-  Car traffic roads
-  Pedestrian flow
-  Vehicle access to site

- ① The Norrby trail
- ② Remote pedestrian tunnel
- ③ Western tunnel
- ④ Eastern tunnel
- ⑤ The project site
- ⑥ Bridged connection
- ⑦ Facade meeting the river
- ⑧ Playground next to riverbed
- ⊖ Numbers are referenced on the following page



The site

Characterization of project site



Chith, Hussein. 2016

The Norrby trail is the most frequently used pedestrian and bike path connecting Norrby with the city center.

The path is considered uninviting since it's enclosed by trees and tall bushes. At night it is poorly lit up.



Chith, Hussein. 2016

This small tunnel under the western railway used to be a shortcut for workers walking to the factories of Simonsland.

For many years this tunnel was blocked, but the current landowners re-opened it because of a will to strengthen the connectivity.



Chith, Hussein. 2016

The passage under the western railway track.

A well trafficated situation with pedestrians, bikes and cars sharing the space. Above them is a constant roll of trains.



Chith, Hussein. 2016

The situation of the eastern passage is similar to the western (see above).

In the background you can see the city center taking shape. Proving the close relation to the site.



Chith, Hussein. 2016

The project site as seen from a distance. It is today a parking lot with unclear rules of pedestrian movement. It is however an important port towards Simonsland (the white buildings in the back).

Not an inviting scene for a pedestrian bypasser.



Chith, Hussein. 2016

The connection north of the site, allowing movement over the river via a bridge.

Well proportioned and inviting in its shape.



Chith, Hussein. 2016

The view from the bridge confirms the close connection to the water and enhances the value of this area.



Chith, Hussein. 2016

Along the river has been installed seatings, hang-arounds, and even playgrounds to create a stronger link to the water.

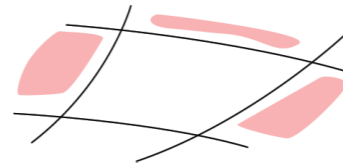
This activates the area and brings good qualities.

The site

Usage and general lacks

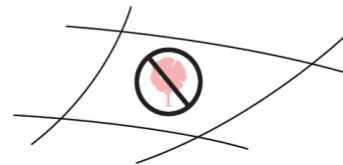
No identity

Located in the crossroads of three areas and squeezed in between infrastructure gives the site an unclear sense of belonging.



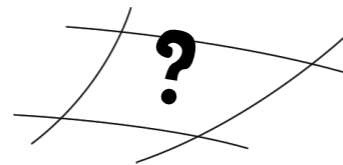
Green life excluded

Most of the site is covered by asphalt. The few parts of greenery are forced towards the very borders of the site.



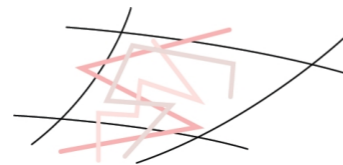
Unclear program

The site is today mainly used as a parking lot. Acting as an asphalt desert during the weekends.



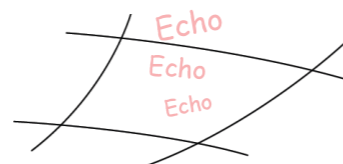
Diffuse hierarchy of paths

The site allows a common usage by pedestrians, bikers and cars. However, the open space questions the rules of movement.



Lack of social interaction

Since the site is only used as a transit spot, no man stays here longer than necessary. With other words; It is empty most of the time.

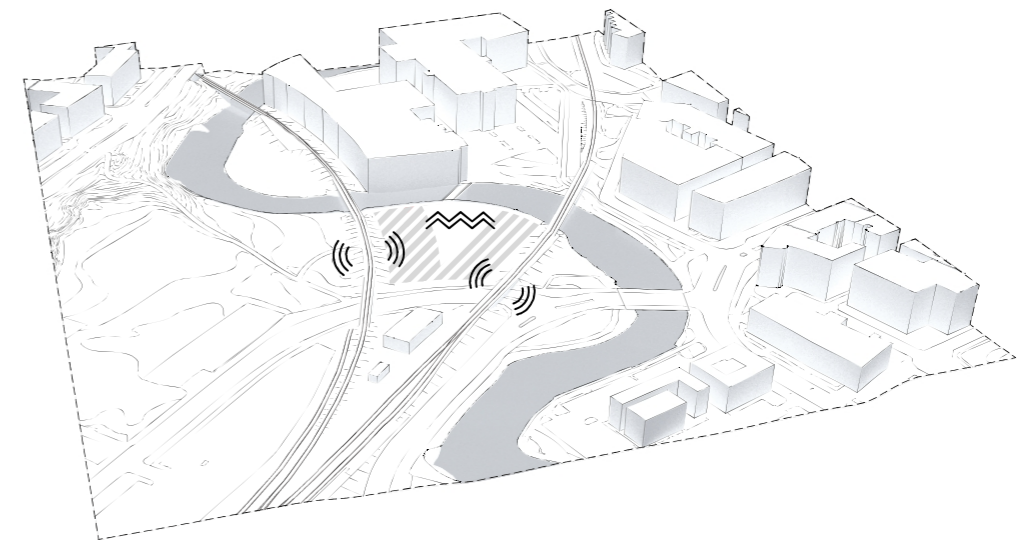
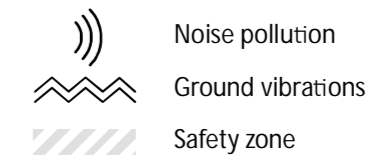


Regulations

Disturbing factors

Because of vital factors of disturbance the project site is today used as a parking lot. Spots like these are usually heavily regulated. This is a way to uphold a healthy and secure livelihood in case they would come to be exploited. This does aggravate the future planning of many sites but the regulations are important for maintaining comfort and safety for future users.

Factors of disturbance are always unique to each site and the issues covers a wide range. All from smell, smoke, weather, leaks, explosions, etc. The main problem here is the close connection to bypassing trains, on both the eastern and the western side of the site. With their bypass comes issues such as noise pollution, ground vibrations and safety distances in case of an accident. In this project the focus will be on these three current factors.



Regulations

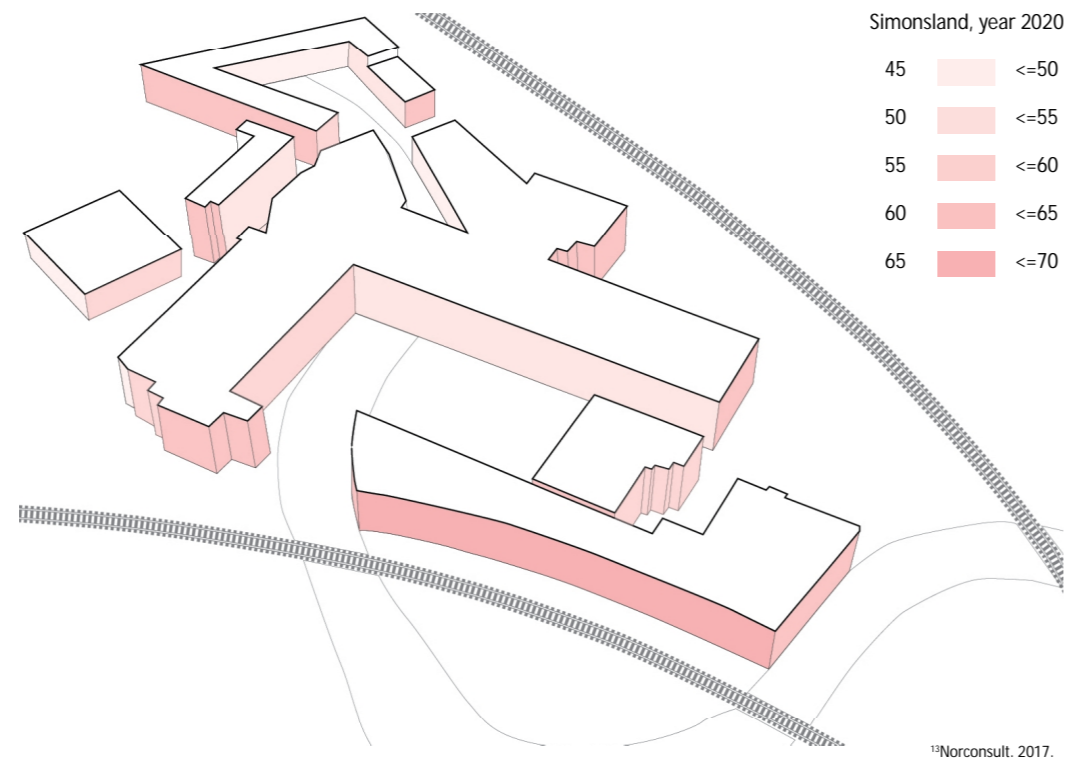
Noise pollution

Following guidelines are for newly built housing (under the conditions that it is technically possible & economically reasonable to take measures needed for reaching these levels)¹²

- 30 dBA equivalent level indoors
- 45 dBA maximal level indoors night time
- 55 dBA equivalent level outdoors (at facade)
- 70 dBA maximal level outdoor space connected to habitation

¹²PBL, 2016.

Approximation of equivalent sound level dB(A) at facade



Safety distances

In general it is said that there should be no newly built structures within 30 meters from the closest railway. This distance would allow safety personnel to operate comfortably within this zone in case of an accident.¹⁴

However, depending on the security actions taken in advance these distances are adjustable in discussion with city planners of the municipality. The building allowance may therefore be discussed and decided first after a proposal is done.

¹⁴Trafikverket, 2016.

Distances for building allowance



The table illustrates recommendations given by Trafikverket. The gradient part of the arrows shows distances that is a matter of judgement from case to case.

Regulations

Vibrations

The site is most likely exposed to values higher than average because of the continuously passing trains. However, it is not believed that the values are big enough for any unease.

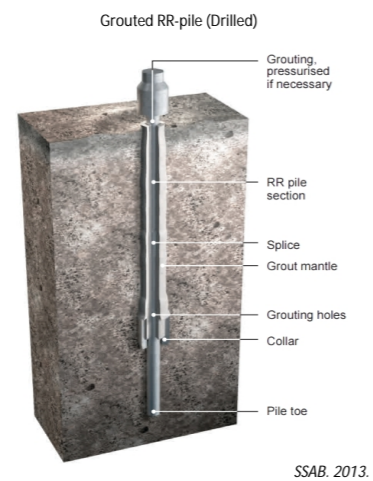
Regulations for new constructions is guided to manage 0,4 mm/s weighted RMS (Root-Mean-Square) in areas were people stay habitually.¹⁵

The landfill of the site is mainly sand and mud. Deep underneath comes a layer of friction soil before reaching solid rock, ca 6- 14 m down under.¹⁶

¹⁵Trafikverket. 2014.
¹⁶Golder Associates. 2017.

"- A recommended technique for reduction of vibrations is the usage of drilled piles. A drilled pile will maintain the balance in the earth instead of compacting it. Only the outer pipe will be in direct connection to the earth so the vibrations will not reach the inner steel core, and thereby the vibrations are reduced."

Ekblad, Alf; Expert in vibrations. Trafikverket. Dec 2016. Phone interview.



Space of consideration

When summarizing the previous safety recommendations, our buildable area is widely reduced and we end up with a triangularly shaped site of ca. 965 sqm. To maintain the approach of a realistic proposal, the proposed building should not grow outside of these borders. In case of overpassing, the reasons ought to be very good and strong workarounds would need to be shown.¹⁴

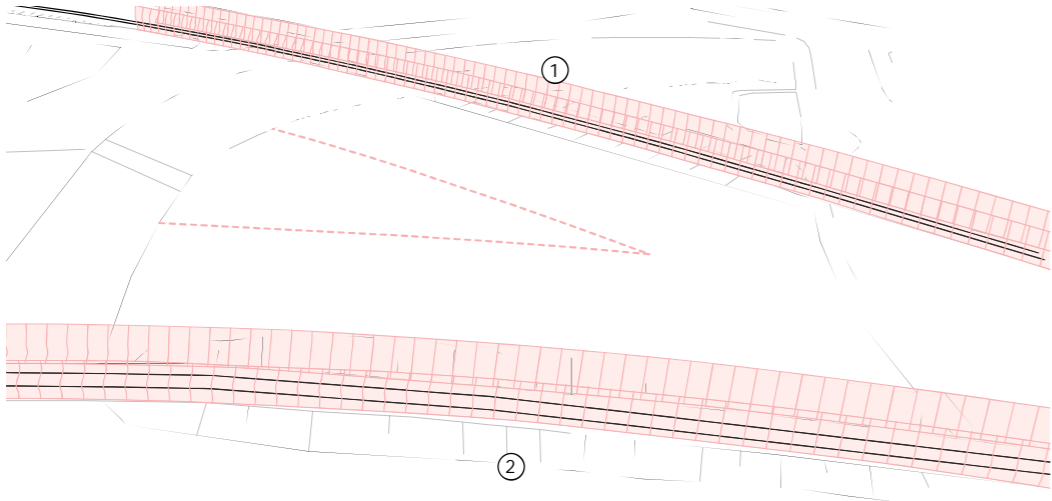
¹⁴Trafikverket. 2016.



Strategies

Acoustic barriers

To create a reasonable living situation in the area, the noise pollution must be reduced. Most frequent solution for this would be an acoustic barrier. To not enclose the site, but maintain an open feeling of connectivity, it is important that this barrier is visually transparent. This will be achieved by the usage of glass barriers along the track.



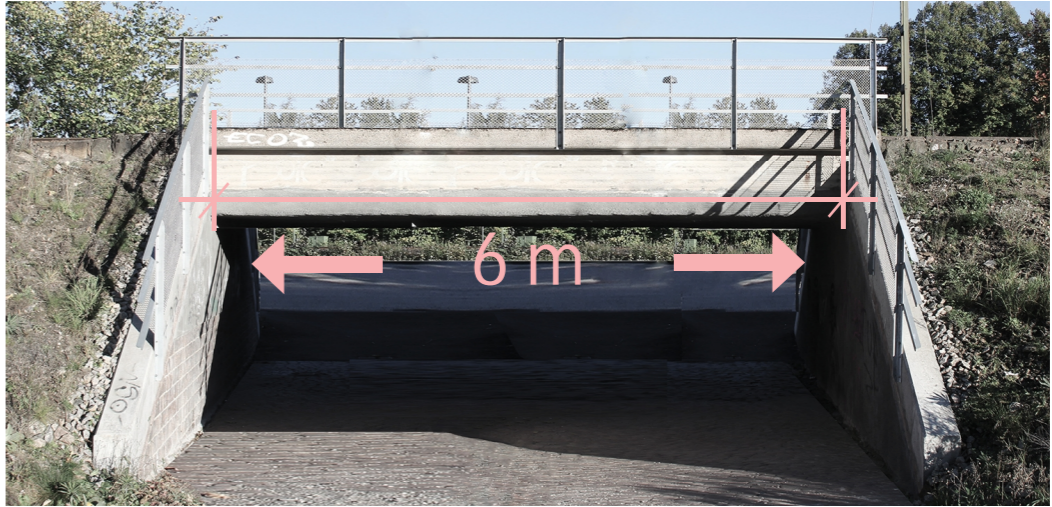
An acoustic barrier that aims to reduce the noise but still allow visual connection

Inviting passages

Another change of importance for activating this site is the accessibility through the western tunnel. Today the tunnel is seen as uninviting because of it being narrow and dark. An expansion is important since it would promote a more natural flow and strengthen the connection to the Norrby trail. A wider and more inviting tunnel would also appeal to more spontaneous visits.



Today - A narrow and remote tunnel under the railway



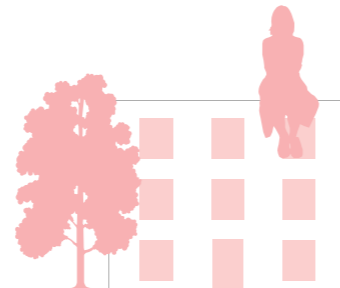
Tomorrow - A more inviting scenario, creating a natural link and allowing bigger flows

Strategies

Programming the building

Strategical methods

- ① Introduce student housing
- ② Provide unprogrammed space
- ③ Create public meeting spots



Student housing

A centralized campus where students find home but also identity. This reduces the pressure on the housing market and strengthens the presence of life around the area of Simonsland. Also activating the site during all day.

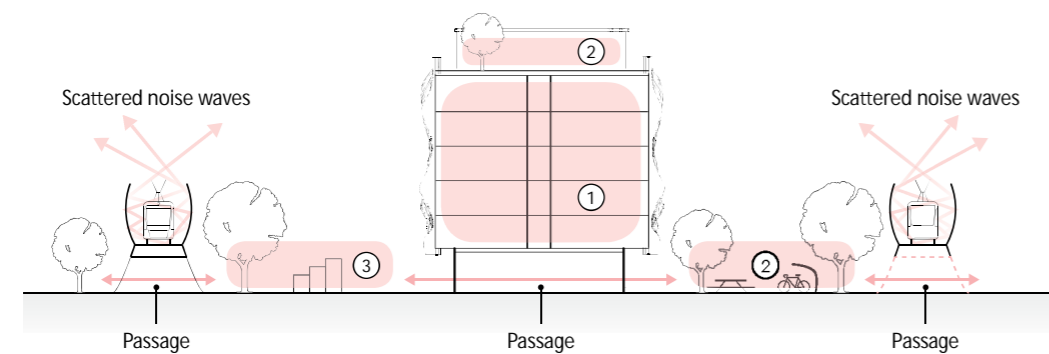
Unprogrammed spaces

Spaces that may be rented and used for a diversity of programs. Allows people, other than students, to visit the building and engage with each other and/or with students. Enhancing the possibility of spontaneous interaction.

Public meeting spots

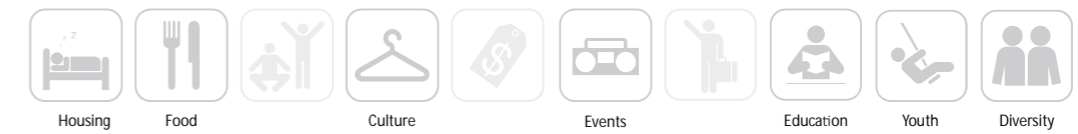
The accessibility is increased and flows are linked to existing paths. Public programs are implemented in the design and allows people to interact, henceby visit for a reason. An increase of greenary brings nature closer and also reduces noise from bypassing trains.

Connections

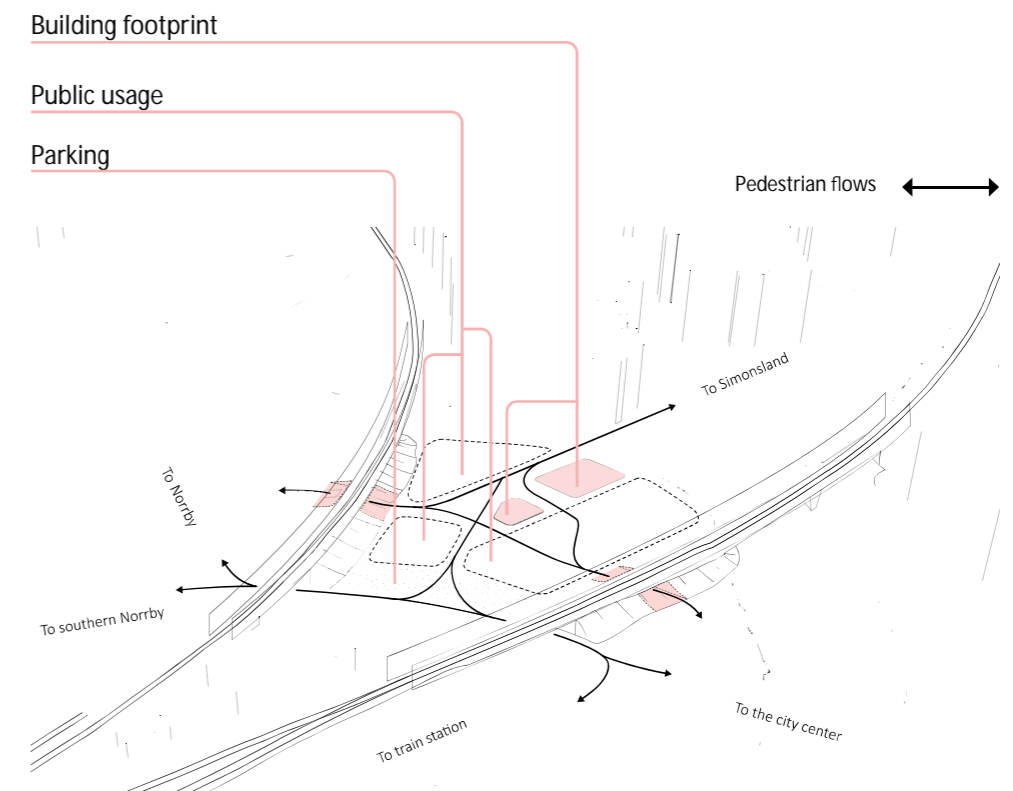


Programming the site

New programmes



To activate the social life of the site the transformation should result in a spot to welcome a temporary presence of people. The proposal will e.g. include a public gym, an outdoor grill, a park, a playground and space for different activities or events.



Design

Textile in architecture

Most people have at one time spent the night in a tent and have benefited from the protection provided by its fabric, while at the same time enjoying the sensation of being separated from nature by nothing more than a thin shell. Textile forms of habitation have a long history and represents an original form of building which has endured to the present day. Textiles are light, easy to convert or dismantle, and they provide protection against wind, sun and rain.

When the demands of building functions increased, the fields of where the usage of textiles was suitable was narrowed into the interiors of a building or towards projects such as installations, temporary extensions, pavillions, etc. The use of textile in architecture has however been an obvious source of inspiration throughout the works of many skillful architects.

For the last several decades, expanded by recent technological advances in textiles, the craft of using textiles conceptually and visually has been gaining recognition, reframing its domestic connotations and the confines of the interior. The next generation of textiles is heralded by technological interfaces, programmable surfaces and architectonic capabilities.¹⁷

As a rejection of European modernism and ideas of universality, textiles as a craft is covering new conceptual ground. Textiles are forging an ever closer relationship with architecture, the two disciplines merging with surface and structure. Computer technology is inviting new relationships between craft and architecture¹⁷

¹⁷Textiles and Architecture. 2013.

References - Architecture inspired by textile



Modlar. Origin unknown.

The Olympic Stadium, Munich 1972

The roofing of the Olympic Stadium is the creation of Frei Otto and his office. Mr. Otto is often referred to as the master of tensile structures.

Mr. Otto was himself a soldier in w.w. II and his experimentation is said to have started already in the war camps, with him customizing tents into bigger shelters.



Nebuta Museum. 2012

Nebuta house, Aomori 2010

This exhibition center in Japan is a good example of how a simple geometrical structure may appear elastic just by the coverage of a skillfully designed outer.

The building is surrounded by steel ribbons, twisted and bended to form openings for light, views and passageways. Imitating the behaviour of fabric and drapes.



Mulla, Althe. 2013

Don café House, Prishtina 2013

The walls of this bar are organically shaped like a coffee sack, while the chandeliers are shaped and darkened to give the impression of coffee beans inside the sack.

The design, the cutting and assemblage of the 1365 pieces of plywood used in the project was made possible by the usage of modern computer softwares.

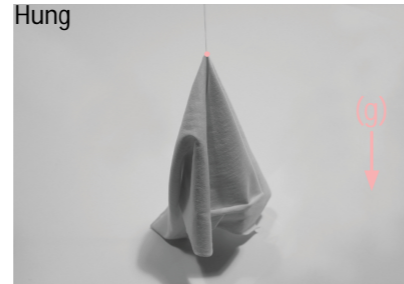
Design

Textile study - Behaviour of fabric

Pulled



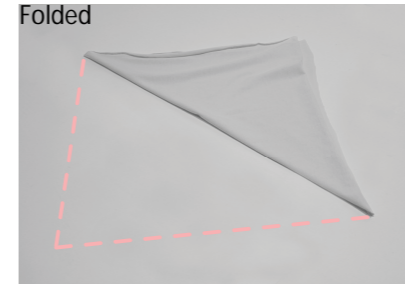
Hung



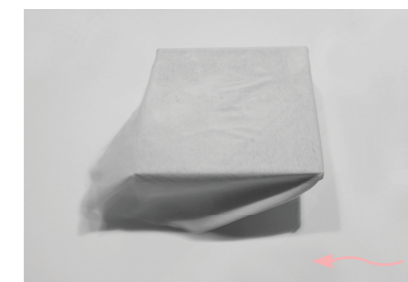
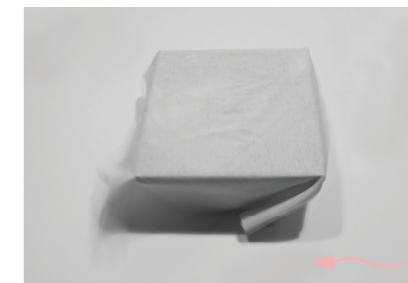
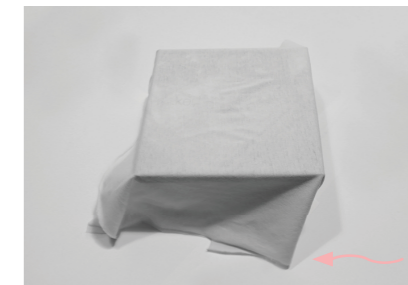
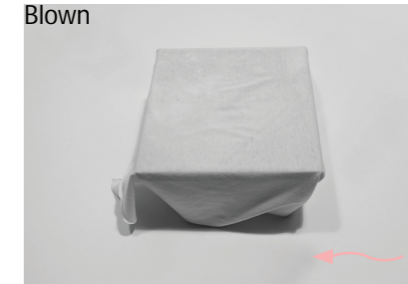
Stretched



Folded



Blown



Design

Extracts from study

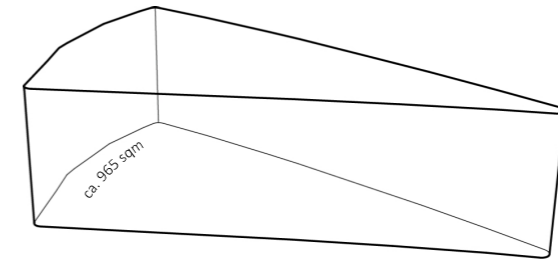


The formation of a fabric pulled in one direction is comparable to waves in movement along the surface of water. This awakens the idea of letting the design not only relate to the behaviour of textiles, but also to the movement of the river nearby.

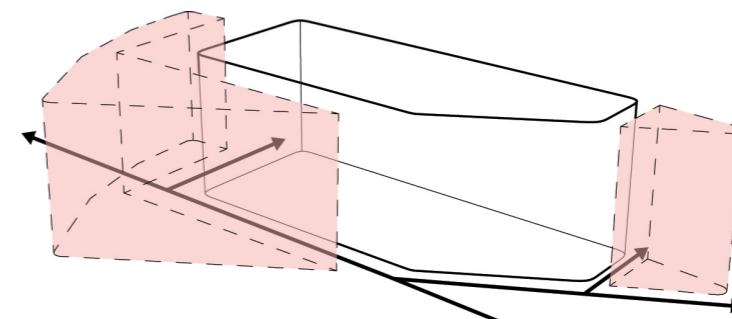


A stretched fabric forms itself quite similar to a pulled one. A clear difference however is that a stretched one adapts to a more strict formation. Another interesting aspect is that when stretching a fabric the tissues expands and allows a bigger transparency than before.

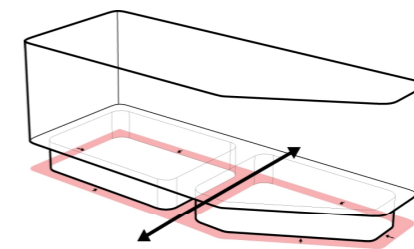
Shaping the building



- ① Maximized usage of site. Height approximated to 5 stories. Similar to its surrounding

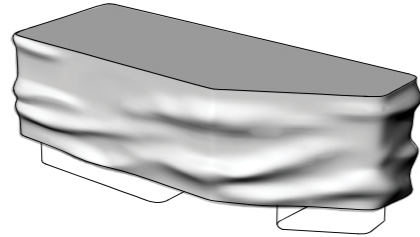


- ② Volume shaped and adapted to maintain current pedestrian flows

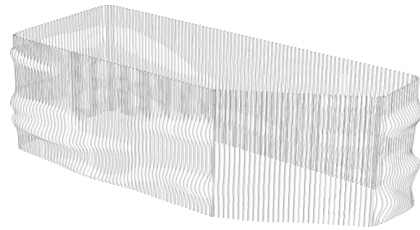


- ③ Ground level indented and separated to allow movement through the building

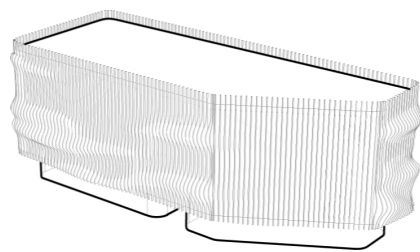
Design



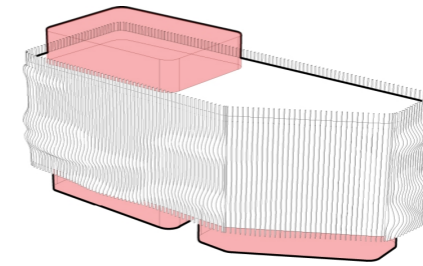
- ④ Draping of the volume. Designed to imitate behaviour of a pulled fabric and waves from the river



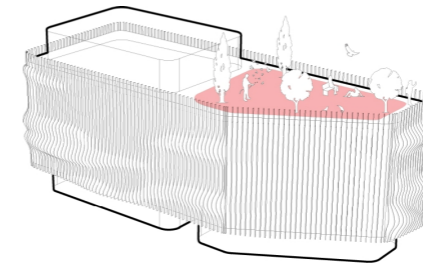
- ⑤ The conceptual shape is translated into vertical facade elements that allows transparency



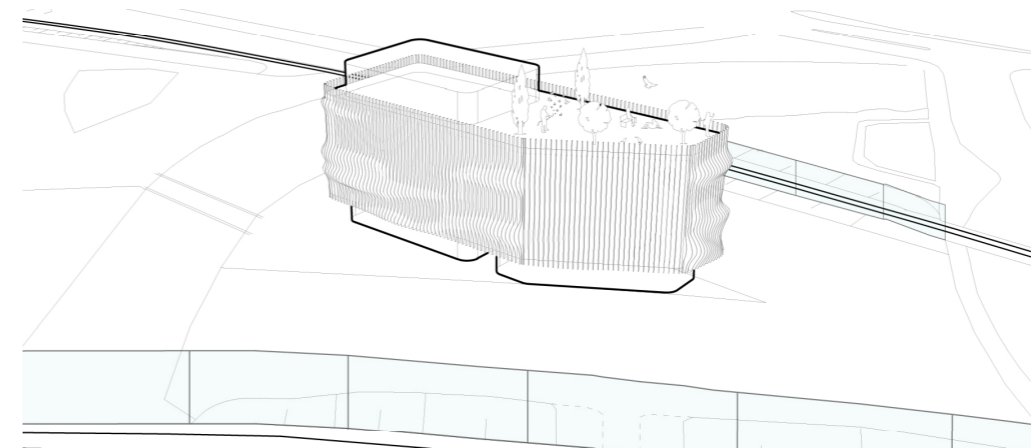
- ⑥ Elements placed in front of bearing structure



- ⑦ Three volumes of flexible operating spaces designated for other than the main function

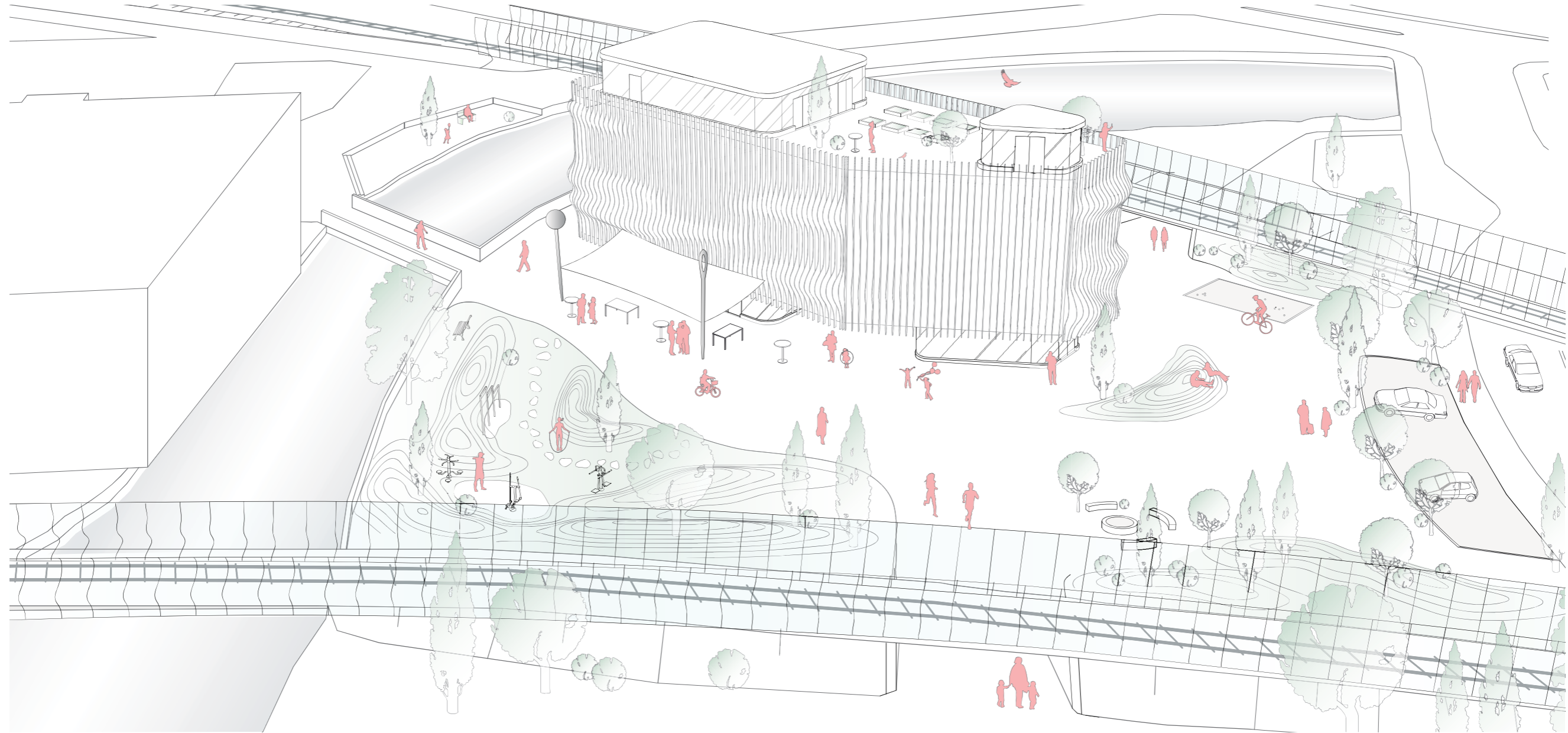


- ⑧ A public rooftop garden to connect with the surrounding nature and to provide a view



- ⑨ The transparent noise barrier allows vision of the building with its flowing design

Proposal



User experience



Kamal, 42
Technical engineer

"I live in Norrby but I have my workplace inside Textile fashion center - Simonsland. I usually walk to work but the walks aren't particularly inspiring. It is therefore nice to see how this spot has been transformed and now become more inviting. It gives something to the whole area.

On my way home it's always something going on here. Students having a barbeque, music being played or someone exercising in the outdoor gym. I even know some of the people and I sometimes stop for spontaneous chats."



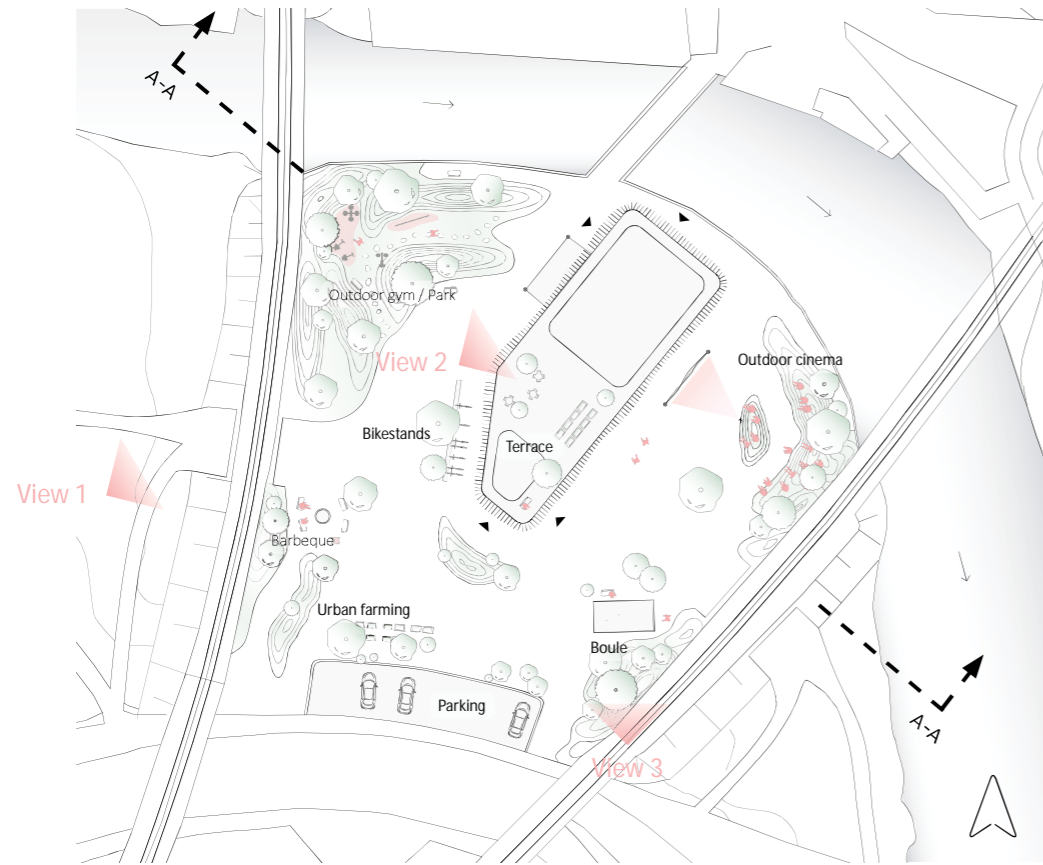
Claes and Agneta, 66 and 62
Pensioners

"We both live in Norrby. We always bypass this site when going to the city. It is so much nicer to see a useful building here instead of that boring parking lot that used to be.

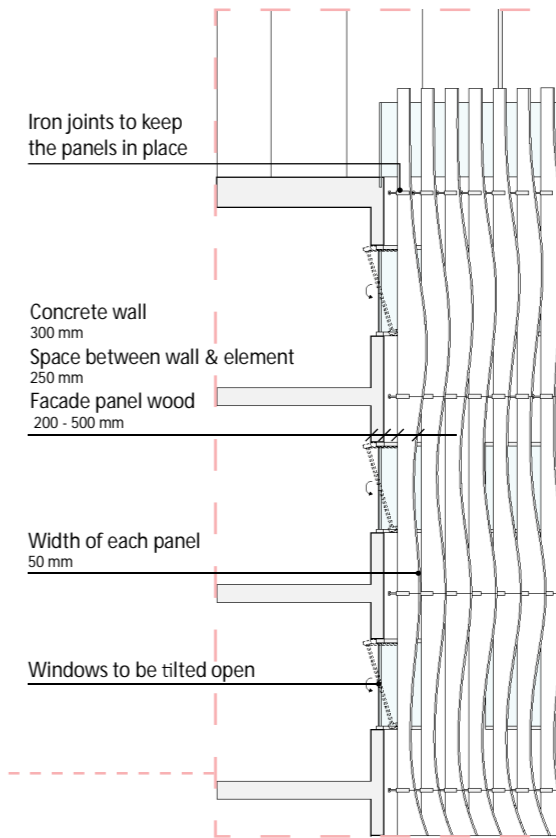
Last week we had a board meeting with our association in the campus building. We booked the room on the rooftop. Such a nice view! Outside on the terrace some youngsters were struggling with their urban farming. Agneta got the possibility to show her gardening skills and went out to give them some much appreciated advices."

Proposal

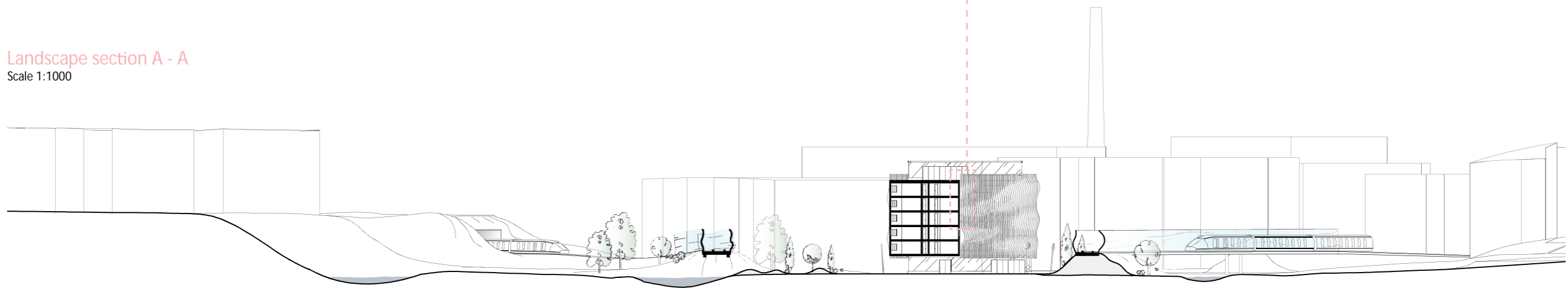
Siteplan
Scale 1:1000



Detail section
Scale 1:1000

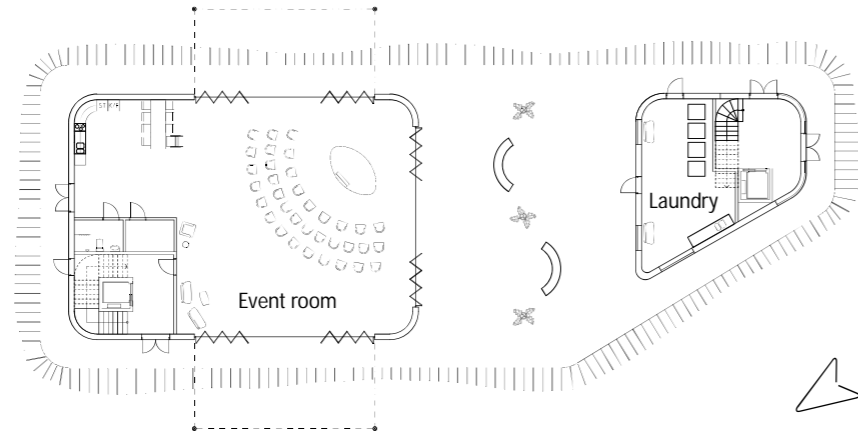


Landscape section A - A
Scale 1:1000

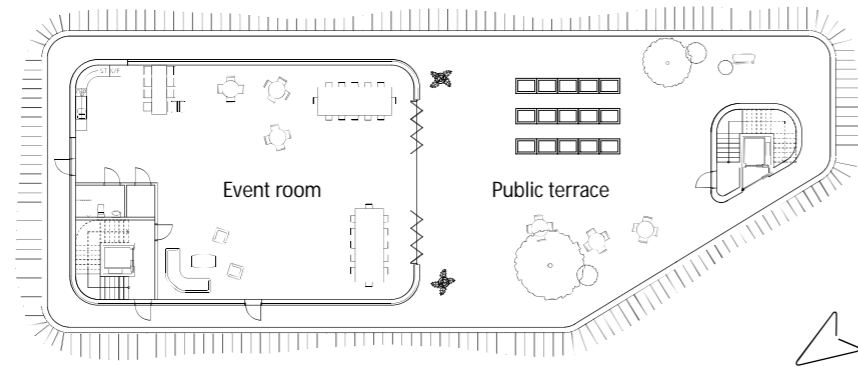


Proposal Plans

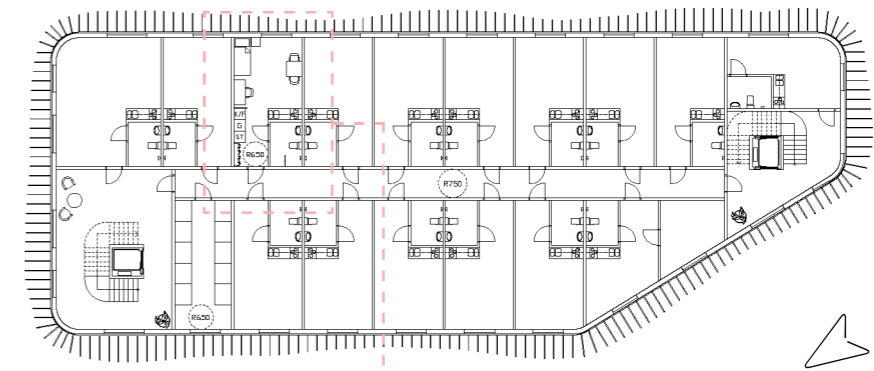
Entrance level
Scale 1:400



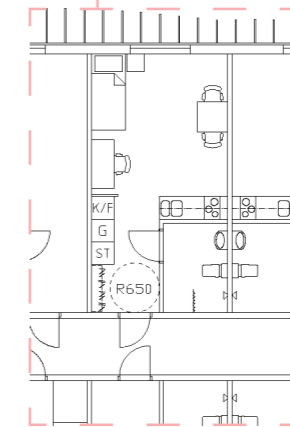
Roof top level



General floors 2 - 6



Standard apartment - 25 sqm
Scale 1:200



Visualisations



View 1

Visualisations



View 2

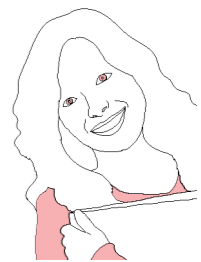


Michael, 18
Football player

"I live in Trandared, it's south of the inner city. A comfortable place but not particularly vibrant. I play in Elfsborg football club and we practice almost everyday. Our stadium is located north of Norrby and I always bypass the new campus while biking there. I get the feeling of something always going on at the campus. It makes me intrigued about the student life. I think I'd like to study in the future. It will be my Plan B if I don't go professional within football."



View 3



Nicoline, 23
Erasmus student

"I live in Campus Simonsland. It's quite a vibrant campus which suits me well. In France, where I'm from, we are used to more social atmospheres. My feeling is that Swedes seem more restricted. Therefore, I appreciate this kind of living."

"My favorite happening is when the weather allows us to use the outdoor cinema. Even the locals come to join and it gives me the possibility to engage with the outer society instead of only students."

Reflections

Discussion

The million program was the result of great visions put forward by visionaries and good designers of their time. The fundamental ambition was out of good will and the idea was to lay a strong foundation for a sustainable future. However, despite all the qualities that the program endorsed, and still does, the million program areas are today considered widely problematic.

Much of the problems are direct consequences of the physical barriers, such as infrastructure, that laid the foundation for what have come to be seen as isolated communities within or outside our cities. As if the physical barriers weren't strong enough with their existence, they come with strict regulations of how their surrounding should or should not be exploited. The nearest grounds surrounding them has therefore either been left untouched or exploited with unhabitable structures like warehouses e.g.. These uninviting environments have reduced the connectivity between areas and has by time led to segregation between communities within the cities.

If we are serious in our societal strive for inclusion, openness and accessibility then these physical barriers are crucial to be included in each and every future urban development plan. A site is never only a site, it is and must always be seen as part of that constant transformative organism called a city. Yes, regulations are crucial. Few would ever advocate for them to be removed, but they must always be up to question if the winnings of that decision ought to be bigger than the consequences. Such could be positive influences on a big societal scale. This perspective isn't always seen by decision takers of our times and sometimes even purposely ignored by urban developers due to aspects such as financial difficulties. An approach that must be changed and could so be done if we as designers always spoke about the bigger picture.

My thesis tackled this difficulty by proving that a good project may be developed into becoming something more than just a market provider, how complex the site may even seem. This was also my aim. I did this by interviewing decision holders, collaborated with land owners and discussed with inhabitants about what they felt was lacking and needed. I involved a diversity of people, no matter their real possibility to actually affect the outcome. It gave me a lot of valuable fuel for arguing upon my upcoming proposal.

It is apparent that this is a strategy that could be applied on many other projects, if not a necessary one. If this could become a more standardized approach and if it becomes widely accepted within the profession that analysing matters like these were allowed the time they needed, I am sure that the end result would be more thoughtful and sustainable.

When reflecting upon how this could be achieved in a more professional situation I quickly realize the difficulties of putting in the effort and time to listen and consider many different actors in every single project. Who would be the one to decide which actors are relevant to include in each discussion? When is it suitable to propose an overview of the regulations? What would be the frameworks? Who would pay for this?

My presumptions would be that very little of this would happen by the actors own good will. Since much is dependent on the market it becomes crucial to prove, through projects like this, how a bigger effort could result in a bigger payoff. I believe this project succeeds in doing just that, maybe the presentation of visions like these shouldn't firstly be directed towards developers but instead politicians with decisive powers?

Reflections

Conclusion

When I started this thesis I had big ambitions. I wanted to work on different scales, start with the wider picture, explain the development of Swedish cities, scale it down to Borås and then finally down to the project site itself. I wanted to do this with a realistic approach, meaning that the end result would be practically feasible and not only stay on a conceptual level. I simultaneously wanted to take in consideration different societal aspects and include them all into a final design proposal that aimed to respond well towards all actors involved.

Looking at it afterwards I'd say that having this ambition for a thesis project isn't really a good idea. The main thing I learned is to narrow things down and chose the most relevant questions to work with. A lot of stress and energy would have been spared.

With this having been said, I am satisfied with the outcome of my work. I managed to find a good level of detail and succeeded in answering the topics I had aimed to solve. Even if some deeper than others. It has been hard to know where to direct my focus and much time was spent doing research and finding information that didn't even make it to the pages of this booklet. It did however make me grow in my understanding and when it all comes around, this is what a thesis should do, make you learn and grow further with your competence. Therefore I am pleased.

Through my interviews I received a clearer understanding of the diverse perspectives from all actors involved. It did add to the complexity of ambitions but at the same time provided me the opportunity to confront the actors with arguments, and try to direct their thoughts towards a more sustainable direction. However, I later came to think that their optimistic response might have urged out of the fact that they knew this was a thesis project. Which meant that there was little for them to lose by giving me the space I wished for in terms of thinking outside the box.

It is hard to be objective in whether the most suitable solution for this project was even the proposal of a new building. Nonetheless, if I managed to plant a seed in the minds of the actors for a future project with bigger ambitions concerning sustainability, I am satisfied with that.

This thesis raises several questions that would be interesting to investigate further. One is how to know when it is suitable to question regulations and when it is not? What could be the consequences of playing around too much with these recommendations and what symbolic message could it send to others struggling with their specific legislations? Maybe there could be found a method for how to handle this?

Another interesting question is whether business owners and developers actually see any value in working like this or, is it it mainly a wish from visionary planners and architects? I sure do understand that economy stands as a high priority for a businesses, but maybe some things in life are more important than money. Just maybe.

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