



BACK TO THE ROOTS

The bridge between the past and the future

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Academy of Architecture & Urbanism Tilburg

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2021-2022

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STUDENT

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TUTOR

Ben Westenburger
Architect at Rothuizen Architecten | Middelburg

TUTORS PRIMARILY

Jan-Willem Kuilenburg
MA+U Master of Architecture+Urbanism | Tilburg

Pieter Feenstra
MA+U Master of Architecture+Urbanism | Tilburg



MATHIJS DE WIT

My name is Mathijs de Wit, I am 26 years old and I was born in Rosmalen, near 's-Hertogenbosch. Since my childhood, I have been very fascinated by historic architecture. The story that this architecture tells is what fascinates me enormously. Because these buildings of the past are still there, we are subtly reminded of a time before the present. In daily life, we are reminded of the past, which provides an identity for a place or space.

Currently, I am studying at the master's program Architecture (MA+U) in Tilburg. I also work in professional practice and combine it with following an educational program. The combination of the educational program and the professional life gives me an in-depth experience, and it stimulates me to develop myself as a designer. This volume is created to provide a clear overview of my graduation journey during the fourth year at the academy.

My graduation project arose from this passion for historic architecture. My goal is to take a new step in consorting historical architecture.

WORK EXPERIENCES
GROSFELD BEKKERS VAN DER VELDE ARCHITECTEN
Assistent Designer
October 2021 - now

LIVINGSTONE VILLABOUW
Assistent Designer
October 2019 - October 2021

LIVINGSTONE VILLABOUW
Architectural Modeler
June 2018 - October 2019

MDW DESIGN
Owner
August 2015 - now

INTERNSHIPS
BURO KADE
Architectural Modeler
Internship + Graduation
January 2017 - February 2018

HENDRIKS COPPELMANS BOUWGROEP
Project Engineer + Assistant executor
Internship
August 2014 - January 2015

NIKOS BAKALBASSIS ARCHITECTURE
Assistent Designer
Internship
April 2013 - July 2013

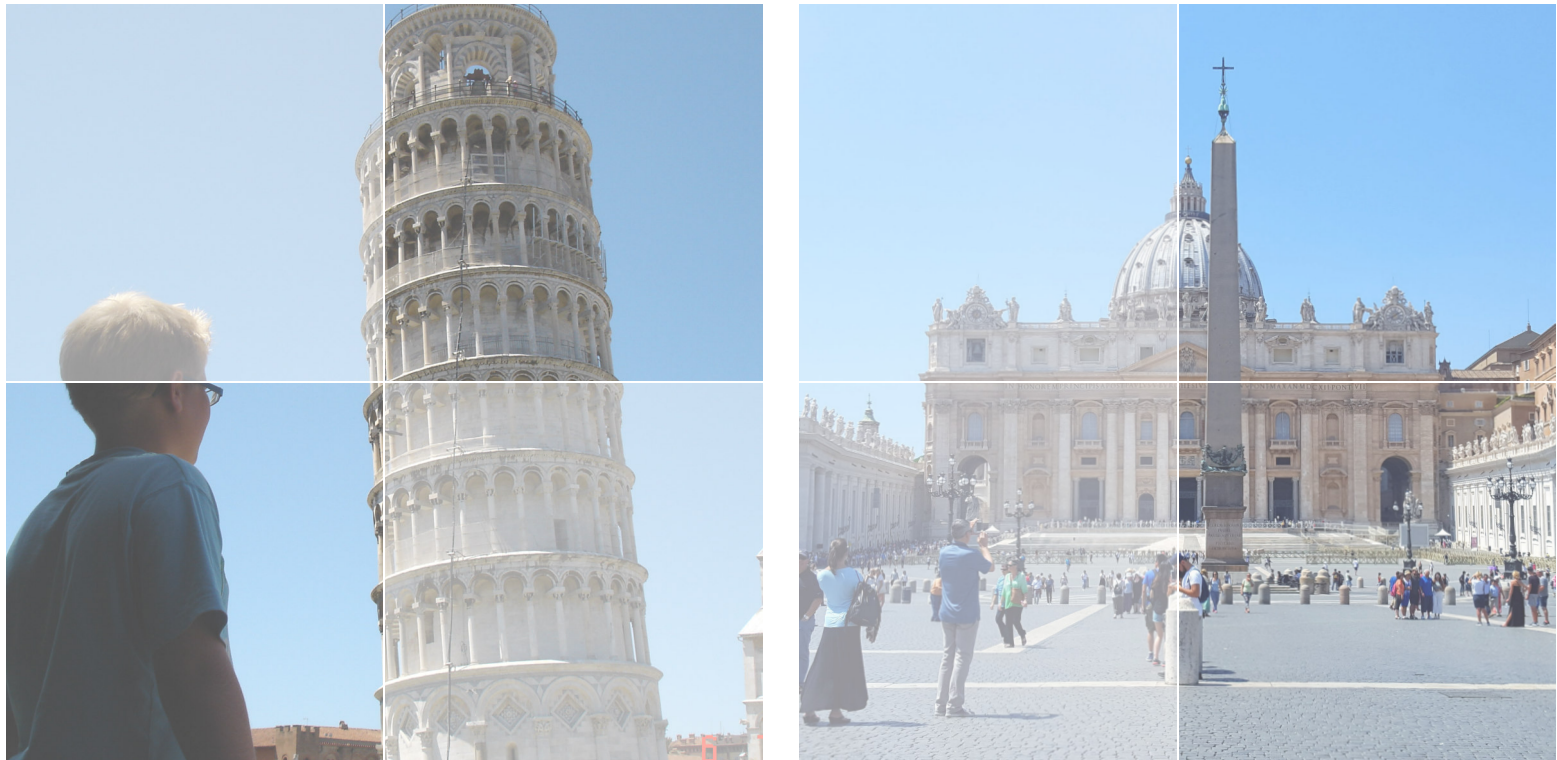
HOEDEMAKERS BOUW & ONTWIKKELING
Assistent Designer
Internship
June 2011 - July 2011

SKILLS
Revit, AutoCad, Lumion, InDesign, Illustrator, Photoshop, Premiere, Sketch-Up Pro, V-ray, MS Office. Sketching, Design, Technical Drafting

EDUCATION
MASTER OF ARCHITECTURE
Fontys University of Applied Science Tilburg
2018 - now

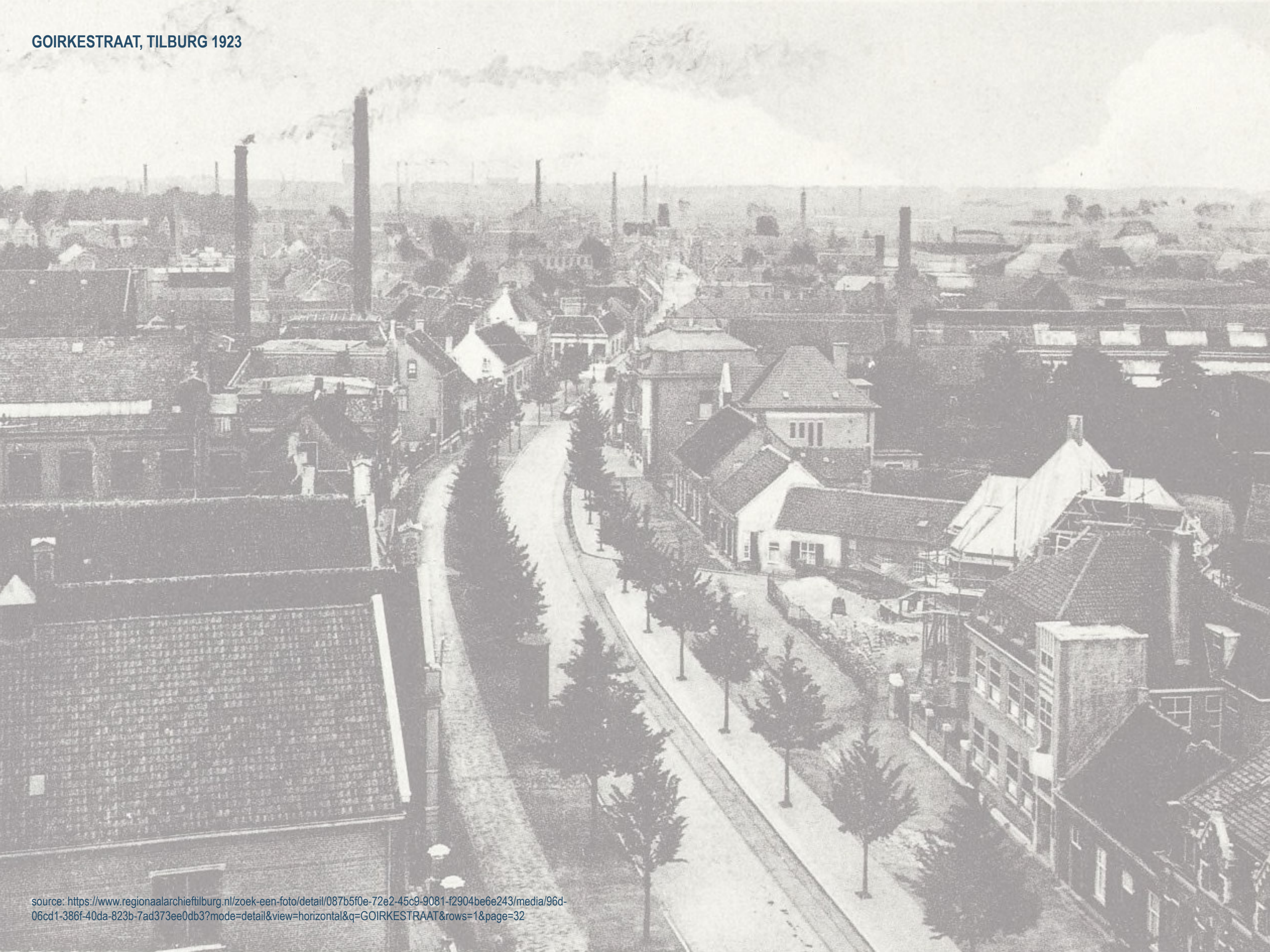
BACHELOR ENGINEERING - ARCHITECTURE
Avans hogeschool 's-Hertogenbosch
2014 - 2018 (Gratuated)

MIDDLE MANAGEMENT FUNCTIONARY ENGINEERING/ ARCHITECTURE
Koning Willem 1 College 's-Hertogenbosch
2011 - 2014 (Gratuated)



Since I was young, we often went to Italy in the summer holidays. During these holidays we have visited many historical places. Despite my young age, that was very interesting, and I felt that I was in exceptional locations. Such characteristic of today's place, but conceived so long ago. The influence these buildings have on the present and the future remains extremely special. I remember well that I once had thought, imagine these buildings could talk. What stories would we now know and be able to hear? What could we all learn from these buildings? Even though these buildings can't speak, they do tell a story. Just by being there, they already mean so much about the past and the roots of the place.

What I remember most about visiting these places is that I was privileged to have been able to see these places even though I was young. Because of this, I always feel "small", and I have respect for historically important places. Because these buildings have been preserved, they keep the thought and connection with the Renaissance alive now and in the future. This is a fascinating thought; the pride in heritage plays a critical role in preserving heritage. We in the Netherlands should be more proud of our heritage. It has indispensable historical values and should not be lost in the future



source: <https://www.regionaalarchief Tilburg.nl/zoek-een-foto/detail/087b5f0e-72e2-45c9-9081-f2904be6e243/media/96d-06cd1-386f-40da-823b-7ad373ee0db3?mode=detail&view=horizontal&q=GOIRKESTRAAT&rows=1&page=32>

PROEM

I have worked for several companies in Breda in recent years, and I live in Tilburg. Since the beginning, I have noticed differences between the people from these two neighbouring towns. What struck me most was that the people from Breda do not speak positively about the city of Tilburg. Breda is a city with history, identity and a beautiful story. Tilburg can contrast this with the story of textile history, but this seems to be slowly disappearing into the background. Largely industrial heritage demolished this history in Tilburg on a large scale in the eighties. As a result, the history of Tilburg is much less visible than it could have been. So I started to wonder if the people from Breda knew this. And I began to think, would people from Tilburg be more proud of their city when its history and identity were preserved for the city? Would people be proud to talk about Tilburg?

What struck me was the people from Tilburg I spoke to all started talking about textile history, how proud they are of that history and what it meant to them. They also say that little of this is visible in present-day Tilburg. So, in my opinion, it is time to restore industrial heritage to make the people of Tilburg proud again.

MY POSITION

As a future architect, I am afraid that we will lose much more connections with the past and realize massive new construction in the future—huge high-rise buildings without any attention to the environment and history. Instead, I see myself as a link to increase the awareness of people, policymakers and municipalities for this priceless history.

MY POSITION FOR THIS ASSIGNMENT

We must stop simply demolishing valuable heritage within Tilburg. This heritage ensures that the connection with the past remains visible in the future streetscape. Without this connection to the past, cities lose identity and a living story. What happened to textile history in Tilburg is the most poignant example. In my opinion, there is a way to bring back the connection to the past by rebuilding lost heritage.

THESIS

By rebuilding cultural heritage and creating a bridge between the past and the future, the identity of the city of Tilburg can be preserved. Focussing on housing will ease the pressure on the housing market. In this way, the past and the future developments are connected.

TYPE OF PROJECT

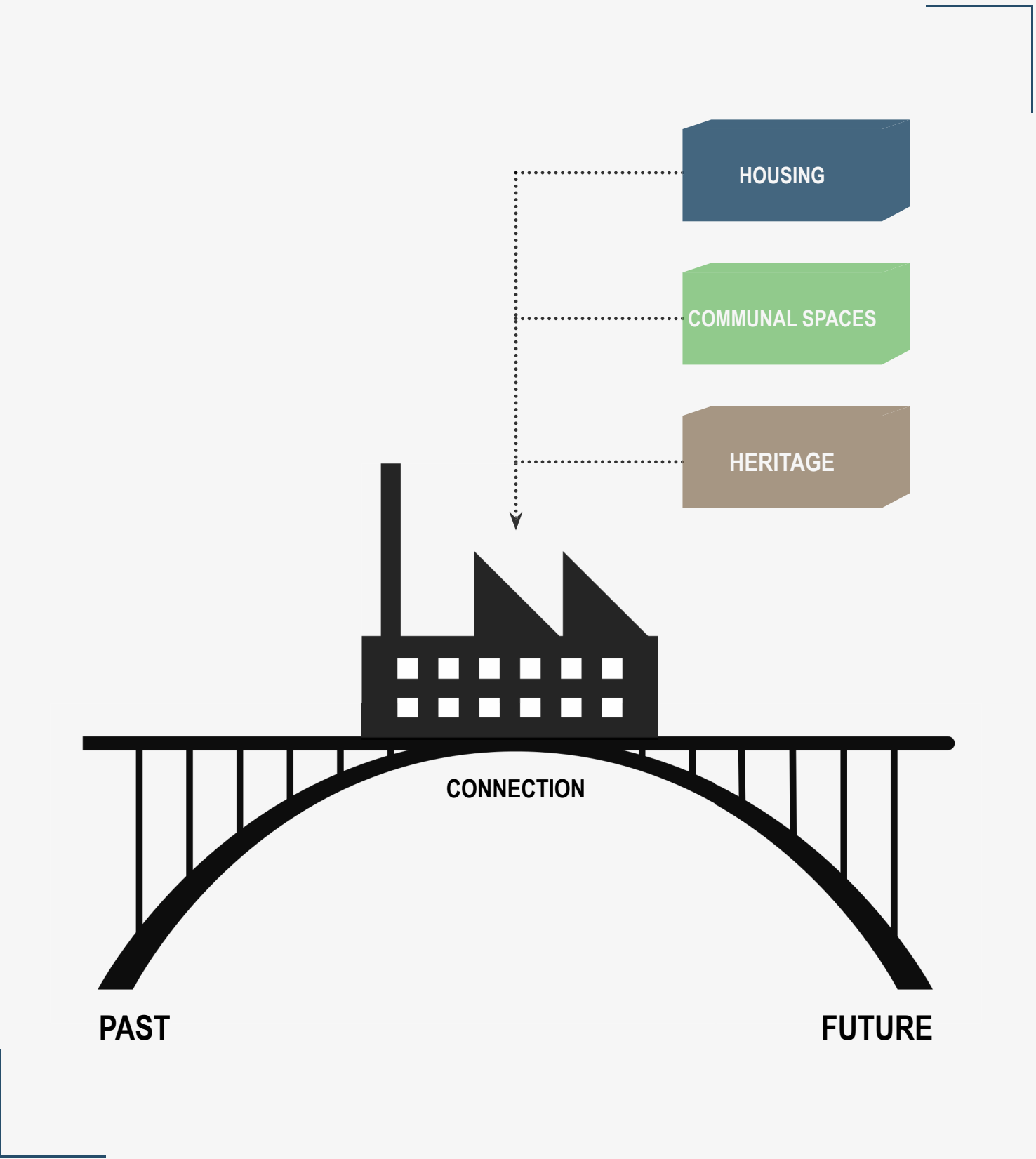
The project aims at creating a connection between the past and the future by architecture. Also, connecting different functions and groups of people is vital within this project. The starting point is rebuilding a textile factory, with additions and adjustments to make it futureproof. The historical values are essential and need to be preserved and shown in this project.

GOAL

My goal is to create a bridge between the past and the future by rebuilding a textile factory. I want to make the factory future proof by creating housing in combination with public spaces. By reconstructing industrial heritage, it should not be forgotten where the city's origin comes from. I need to make additions and adjustments to the original design of the textile factory to make it futureproof. It won't just be a building for the residents. The structure needs to be attractive to visit by using public areas and a connection with the surrounding.

SCALE

Within this project, both architecture and urban planning are essential. The architecture will have to provide the connections between the past and the future. In addition, urban planning will also play a role in my project. A good location is of great importance when it comes to connection.



TILBURG’S LOST CONNECTION WITH ITS TEXTILE HERITAGE

When comparing Tilburg to other cities in the region, such as Breda or 's-Hertogenbosch, you will find out that today's Tilburg has less history in the inner-city layer and, therefore, less identity than its peer cities. This is strange because Tilburg has indeed had a unique history. In the field of the textile industry, the city of Tilburg was progressive and leading for decades in the last century. It is a significant loss that only a few features of this impressive history are visible today compared to fifty years ago.

We must not lose connection with the past. It is crucial that in 100 years and beyond, it is still possible to see where the roots lie and why the city of Tilburg is the way it is. In my opinion, one should not forget where the identity comes from. The municipality should preserve this much better than has been done in the past. A lot of history has been lost forever since the 1980s. As a result, the city loses the soul and identity it once had, and a mishmash of attempts is created in the contemporary streetscape. In today's street scene, it is noticeable that the connection with the past is slowly fading. Over the years, much valuable architecture has been demolished to make way for massive housing construction without considering the definite consequences of removing it. Looking back on the events of the last century, restoring the connection with Tilburg's past is the biggest challenge. By reconstructing heritage, I want to create a bridge between the past and the future of Tilburg. Reconstruction is the way to bring back the heritage of yesteryear, to give Tilburg back the identity and soul it deserves.

The theme of sustainability plays a significant role today, and this role will only increase in the future. Sustainability is also an essential aspect of preserving buildings in the field of heritage. Industrial heritage covers a specific form of sustainability by being functional for a long time. But in terms of energy performance, heritage is often a huge challenge to make sustainable for the future. In the Netherlands, there has been an enormous housing shortage for some time now. There is also a growing shortage in Tilburg. The prognosis is that in 2030 there will be a shortage of more than 7,000 homes in the municipality of Tilburg (Dingemans, 2019). This deficit is expected to increase further in

the years that follow. The need is high, especially for one-person, two-person households and first-time buyers. This is one of the reasons why it is an essential theme within the project—the combination between heritage reconstruction and reducing pressure on the housing market.

THESIS

By rebuilding the cultural heritage and creating a bridge between the past and the future, the identity of the city of Tilburg can be preserved. Focusing on housing will ease the pressure on the housing market. In this way, the past and the future developments are connected.

(INDUSTRIAL) HERITAGE TILBURG

Tilburg still has a worldwide reputation as a textile city (Lahaye, 2017). The city owes this designation to the rich textile industry from the past. Less and less of this is visible in today's Tilburg. This is because a huge amount of industrial heritage was demolished in the 1980s to make way for new construction. The most striking new movement is the spatial cultural heritage roadmap of the municipality of Tilburg (Gemeente Tilburg, 2017). This roadmap has been drawn up to preserve the heritage known to the municipality for the future and to map out the valuable places. The aim is to keep the story of Tilburg alive for current residents and generations to come. This sounds like music to my ears; the critical note I would like to add is that this is too late. It is good that there is a growing responsibility within the municipality. At the same time, several iconic villas on Bredaseweg (Gotink, 2020, 2021), have been demolished in the recent past. In my view, this creates friction between the heritage policy of the municipality and what the municipality actually allows to happen.

In my opinion, this means an incredible loss. The municipality of Tilburg has learned too less from the lessons of the past and continues to demolish heritage. Therefore, it is not surprising that the city of Tilburg has lost the identity of a textile city. Nevertheless, valuable heritage continues to be wiped off the map without thinking carefully about the historical values of what is being demolished. This is striking given the textile history that people have known in Tilburg; these traces were also wiped out on a large scale in the 1980s and replaced by new construction. In my view, the policymakers in Tilburg do not see what they are doing to the city.

Inhabitants should be proud of the heritage that the city has/had. This heritage gives the city an identity, an image and a recognizable image. Unfortunately, the policymakers at the time made a huge mistake by destroying so much heritage on a large scale and replacing it with new construction. This new building had no affinity whatsoever with the past, a connection with what used to be in those places or a way in which one could continue to see how it once was. Tilburg is still known as a textile city due to the stories of generations that are slowly disappearing. The stories of people who have worked in the factories (van der Heijden, 2012), experienced it and lived in the heyday of the textile age are dying out just like the people. We must not forget these stories of the past in the future.

RECONSTRUCTING HERITAGE

Much has changed over the years when it comes to dealing with heritage. More heritage is preserved and repurposed for new functions and uses. This is a good and positive development. In this way, the heritage can be preserved, and it is given a new function so that it is preserved in the cityscape. In this way, the connection with the past is preserved. Reconstructing (de Volkskrant, 2017) heritage is something that is not (yet) done much in 2022 (stedelijketransformatie.nl, 2019). Currently, the heritage that is no longer there is lost; there are still a lot of opportunities here if it is up to me.

In my view, it is an outstanding development that heritage is often preserved in the Netherlands. By preserving the heritage, the connection with the past remains, which keeps the story of the city alive. But what do we do with the heritage that is no longer there? The heritage that has been demolished by, for example, a rebellious alderman to push through the plans for new construction at a rapid pace. This heritage will be lost forever in the current way of dealing with heritage. How we deal with heritage should change forever; preserving heritage is the first step in this transition, but rebuilding lost heritage can be a whole new step. In this way, it is possible to bring back lost heritage.

In my opinion, it is possible to reconstruct and restore lost heritage. In this way, it is possible to bring back lost heritage in a new future-proof way for the future. By reinterpreting lost heritage, it is possible, for example, to keep sustainability high on the agenda. This is much more difficult to realize with redevelopment or the like. Reconstruction of lost heritage is possible, in my

view. Completely authentic recreating the lost heritage is not what I mean by that. My vision for the reconstruction of the factory consists of reinterpreting the complex in the new urban fabric. For this, the ensemble has to be rearranged relative to the original. This layout ensures urban integration, making new functions possible.

The factory volumes are reconstructed to the original; this is very important in connection with recognisability. This means that no adjustments are made, only mirroring or healing volumes is possible. The starting point is to use 95% of the original for the reconstruction and place it in a new urban layout. Creating a new layout has to do with the fact that (often) reconstruction will occur at a new location, and urban planning integration into the existing urban fabric is necessary.

The facades, construction and materialization, must also be reconstructed to the original. The reconstruction must be sustainable, and the use of sustainable materials is a must. These materials have the original appearance and ensure the original image but meet today's sustainability requirements. It is possible to make adjustments to the facades to make living possible. The original construction and layout of the building part must be taken into account here.

SUSTAINABILITY

For sustainability, cultural heritage can be divided into two approaches. First, because heritage often exists for a long time and can be used for multiple functions, heritage is sustainable. Heritage usually lasts more than 100 years, and as a result, the emissions released during construction are one-offs. But it is also possible to look at the sustainability aspects of heritage from a different perspective. In terms of energy consumption, most heritage is a disaster. They do not meet current energy standards and consume an enormous amount of energy. It is often possible to take additional measures to reduce the energy loss somewhat, but this is often not sufficient.

In my view, heritage is an area where there is still a lot to be gained in sustainability. Partly because the existing heritage was built at a different time with different energy requirements and the like, only the difference between the value of sustainability then and in the future will only increase. On the other hand, there are opportunities to make heritage more sustainable, to a certain

extent. Rebuilding heritage provides an entirely new perspective on making heritage more sustainable because the heritage can be preserved in an entirely future-oriented way and rebuilt by the sustainability requirements of the present.

By rebuilding heritage, it is possible to do the rebuilding with all possible sustainability requirements of the current time. I see this as an opportunity to bring back the heritage and contribute to the sustainability of the future. Through the rebuilding of heritage, an indispensable opportunity is created to adapt the heritage of the past and have it meet the future sustainability requirements. This is an important element that must be considered in reconstructing heritage. In this way, it is possible to connect with the past through the reconstruction of the heritage, to bring back a more sustainable total compared to the original.

LIFESTYLES OF THE FUTURE

In today's society, with the enormous housing shortage on a national scale, there is a trend that it is challenging to find housing. First-time buyers have hardly any chance of buying a home. A result, house prices continue to rise, and young people have no other option than to stay home and live with their parents. One of the causes of the shortage is that current homes are too often occupied by one person. Instead, they ensure that the flow stops and that the living space they occupy, which is actually on the large side, cannot be bought by starters and the like. What is also striking in the current residential landscape is the distribution of square meters per person. When this continues to grow, we all get into crisis.

In my view, the difference between rich and poor is an almost unbridgeable distance. If you have the money to buy a house, often much too large, they ensure that these precious square meters cannot be occupied by multiple starters. In my opinion, it is possible to share more facilities, so that not everyone needs a laundry room, parking space, etc. In this way, more space is created for living. Sharing washrooms, workplaces, etc. ensures that not everyone needs these spaces in the home separately, but that future residents can share them. This makes it possible to live in a smaller house, with a part private but also a part shared with fellow residents. I see this as an exciting solution as a housing form of the future.

In my view, the number of square meters per person should be drastically reduced. But, as is also described in the article by Florius (Florius, 2019), we are living smaller and smaller (Bergwerff, 2018). This is partly because the composition of households differs from 50 years ago. Families consist of fewer children, more single-person households, and the elderly continue to live at home longer. Due to these developments, the demand for smaller living spaces is growing. From a social point of view, a shared space where the focus is on meeting neighbours and fellow residents is an essential part of this form of life to combat loneliness.

Another critical starting point is the mix of target groups that live in these neighbourhoods. This is in line with the vision of the Municipality of Tilburg (Gemeente Tilburg, 2020), the mix of students and the elderly is necessary to keep the neighbourhood alive. In short, smaller living (25 -30 m²) (Zaanstad, 2018) with shared facilities. These communal facilities include a living room, kitchen, laundry room, parking garage and outdoor spaces.

MY CONCLUSION

Tilburg's textile past deserves more attention than it has been receiving in the recent decades. Over the years, too much heritage has disappeared through demolition and replaced by new construction. By reconstructing heritage, new possibilities arise to breathe new life into the connection with the past. In the field of sustainability, this offers enormous possibilities for adapting the heritage to the sustainability requirements of the future. It could create an opportunity to ease the pressure on the housing market and create a new chapter in preserving heritage. This is something that provides an advantage compared to the existing heritage.

PROJECT INTRODUCTION

My fascination for industrial heritage and history started a long time ago. Industrial heritage tells the story about its origins, and it says something about why the city is the way it is today. In my opinion, these buildings are precious and should not be lost to make a place for meaningless architecture, like housing. Industrial heritage can be used for multiple causes. I obtained to create a residential building, combined with public spaces and a connection with the surroundings. Since I moved to Tilburg, I have been fascinated by the textile industry heritage. I became attracted by the large chimney's, and I developed more curiosity to learn more about their past.

Since the year 1500, Tilburg started to develop itself as a textile city. They started developing because of an overpopulation of sheep in the rural lands surrounding Tilburg. Because of the increasing textile industry, many inhabitants began working as spinners or a weaver. The city's structure changed in 1827 when the first steam engine arrived. The developments were interrupted because of the bombings of the second world war. That is also why Tilburg currently has a modern city centre. The history of Tilburg resulted in a unique identity. Now, the municipality of Tilburg is encouraging to find innovative ways to repurpose industrial heritage buildings. They also see the value of their history and notice it would be a shame when it was forgotten over time. My goal is to create a bridge between the past and the future by rebuilding a textile factory. Finally, I want to make the factory future proof by creating housing in combination with public spaces. By reconstructing industrial heritage, the city's origin should not be forgotten.

During my search for a suitable building, I came across the old factory of Pieter van Dooren. This factory was located where the Elisabeth hospital is currently situated. The complex was first inaugurated in 1827. The founder of the company Van Dooren en Dams (Martinus van Dooren, former mayor of Tilburg) had a son and he had it built. In this factory, steam power was used for the first time to drive the machines. It later became one of the largest textile complexes in the city. In 1972 the company, which still employed 13 people, was closed. So the question that still arises now is, why was this complex once demolished and could it not be preserved as an industrial monument? I see enormous potential in rebuilding this complex to be still valuable and as a contribution to the heritage of Tilburg.



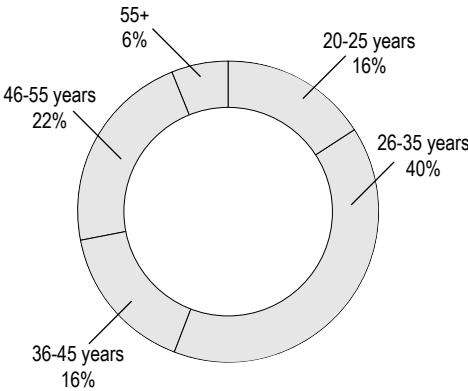
ONLINE SURVEY RESULTS

I started with an online survey. I wanted to learn more about people’s opinions about heritage and its role in the future.

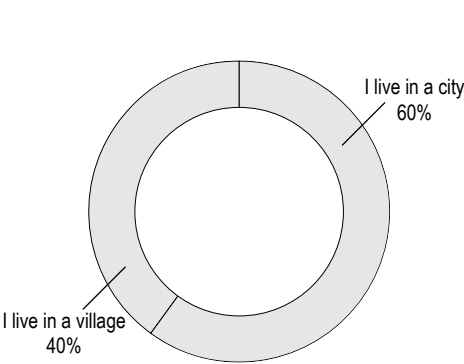
To start with, I asked about the age of the respondents. There is a good mix, and there is no connection between the connection with history and age group. Therefore, it is not the case that people in the latter categories consider history more important than the younger respondents.

Interestingly, more than 60% consider the importance of heritage in the future streetscape essential. This applies to people who live in villages and cities. This shows that people value the history and scars of the place where they live.

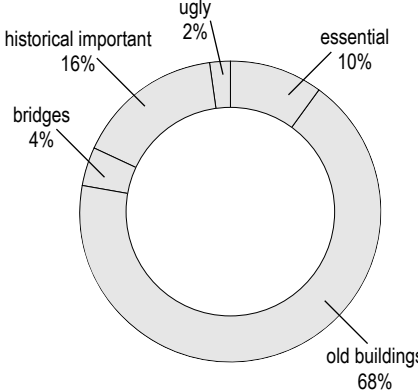
respondent's age



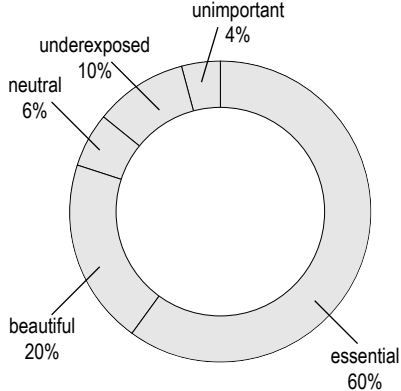
village vs city



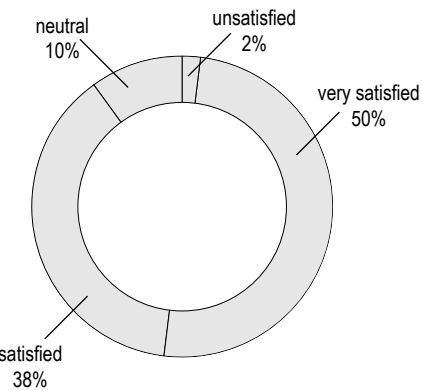
first word when thinking about heritage



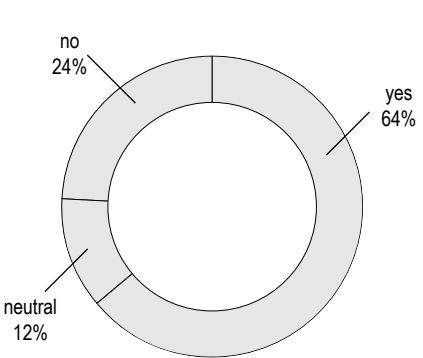
role of heritage in today's streetscape



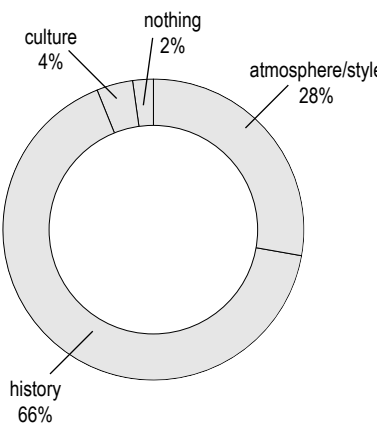
are you satisfied with the city of village you live?



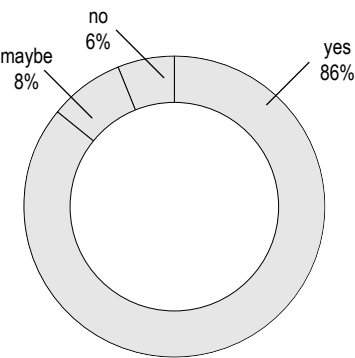
is the history of your city or village important?



why do we need to preserve heritage?



would you live in converted heritage?

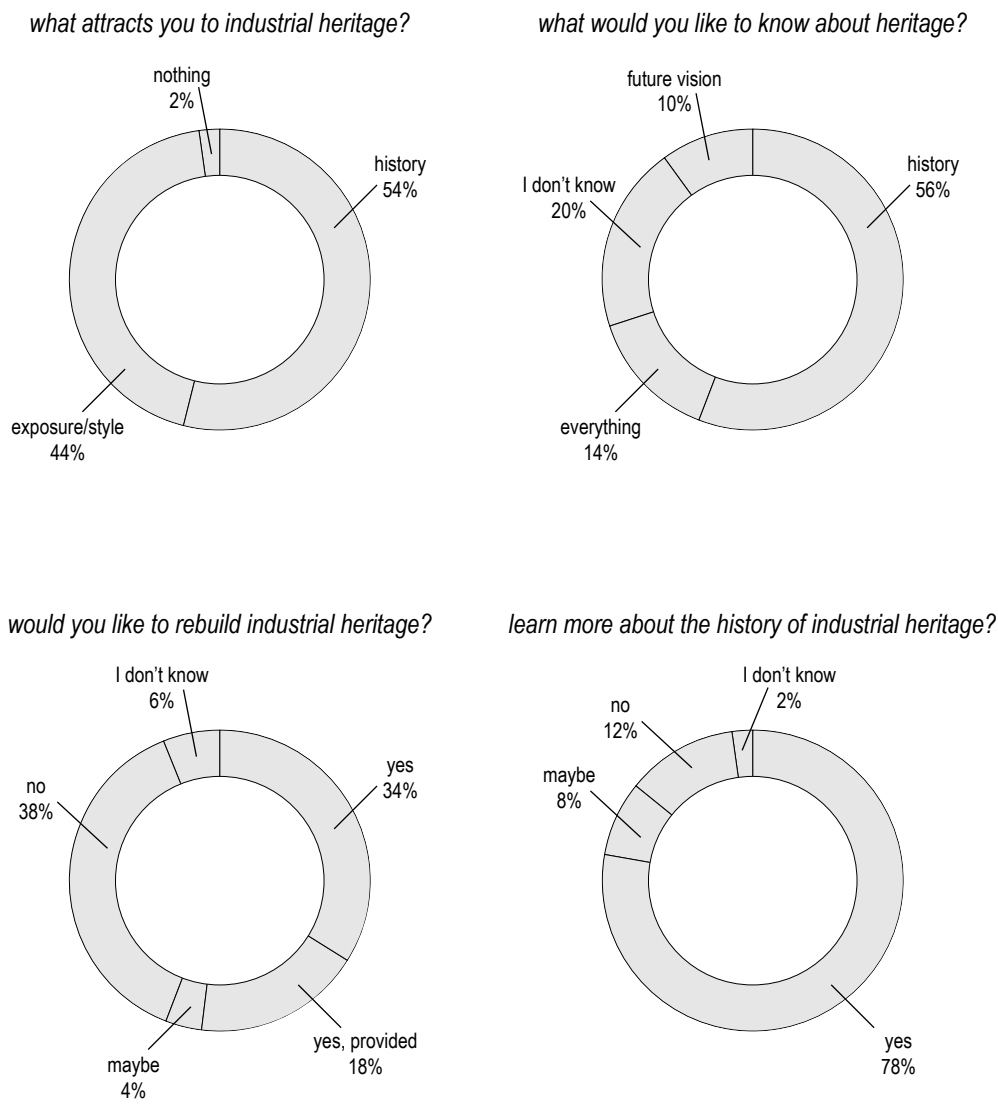


The respondents are approximately 90% satisfied or very satisfied with the village or city in which they currently live. This has to do with several aspects than just the amount of industrial heritage and the quality of these buildings in the streetscape. It is interesting to see that more than 60% of the respondents find history necessary in the village or city in which they live.

The history, also of a village, is considered essential. Partly because of this, most respondents want to preserve industrial heritage for the future because of its historical values. Almost 90% also want to live in transformed heritage if this ensures that the heritage does not have to be lost. An interesting finding: heritage has a future among the survey respondents.

Heritage and the link with history are essential for the current streetscape respondents.

Industrial heritage is elementary for a village or a city. The link with the past is essential, and the historical value is considered the most important of the heritage.



CONCLUSION

Industrial heritage is beautiful because of the distinct style and quality of buildings. Among the respondents, the demand for knowledge about the history of heritage is the largest, followed by a vision for the future and as much information as possible. This means that people are open to it; they would like to read literature or learn from history by seeing interesting buildings with history. When asked whether people are open to rebuilding heritage, there is more difference in the answers. The vast majority, almost 60%, would like to rebuild important heritage. The reason for rebuilding must be legitimate in 20% of these cases.

Some respondents do not know whether this is the right thing to do. I could have a conversation with these people due to my project. My project should convince this group; with this project, I want to show that it is possible and that this benefits the place. In short, exciting findings that have helped me a lot.

The respondents are interested in heritage and rebuilding it when it impacts the history of the city or village. It also helps when they know more about the heritage of their town or city.

INTERVIEW

ReSpace

Unknown employee

ReSpace

“We reinvent existing buildings. 30% of the global CO2 is emitted from the construction sector. ReSpace aims to make the construction sector radically more sustainable. The system allows us to combine the world’s oldest building materials with the world’s latest technology and innovations. They reuse existing buildings by transforming them and giving them a new purpose. ReSpace builds on past successes towards a greener future”

Interview conducted on September 28th, 2021

How do you deal with industrial heritage?

Thanks to the system we use, we can combine existing buildings with the latest technology. We reuse existing buildings by transforming and repurposing. In this way we build on the successes of the past, on the way to a greener future. We often say that ReSpace re-innovates buildings. Industrial heritage was successful and useful in the past, through the box-in-box system of ReSpace we can transform any building.

What are your experiences with industrial heritage transformation projects?

We have a lot of experience in transforming industrial heritage. There are good examples on our website. Take a look at, for example, project Sissy Boy, WSF or the cable factory. ReSpace works with a fixed step-by-step plan. In 6 steps and 6 months to delivery. The ReSpace system ensures a short lead time, depending on the scale and complexity of the project. Step 1 is to make a quick scan, to see if the property is suitable for the

system. Step 2 is to conduct a feasibility study. Step 3 is making a suitable design. Step 4 is applying for the necessary permits if necessary. Step 5 is the production and preparation of drawings and instructions. Step 6, also the last step is the realization.

How do you take financial feasibility into account?

From the first moment we start drawing. Because it concerns a building system, we can indicate at an early stage what the costs will be for the Respace installation package.

I plan to rebuild industrial heritage, how would you go about this?

Every real estate object has its own challenges. We can tackle many of these objects with the Respace box-in-box system. We have no experience with rebuilding (yet). For us, the focus is on transforming and repurposing existing buildings.

Where do you foresee the biggest stumbling blocks for my project?

In general, there are a number of things that keep coming back. Monumental status, condition of the shell and foundation, clear heights, soil pollution (remediation), insulation level (RC value of the building) and EPC, daylighting, fire safety and financing of the project are important pillars to scan in advance. The well-known StiKo are also very important.

Do you have any tips for my project?

The golden tip is to enable ReSpace for your project.

INTERVIEW

ToBa Architects

Martijn Tromp

Martijn Tromp

Martijn Tromp obtained his MSc title in 2002 by graduating from Delft University of Technology. Since then he has worked as an Architect/ self-employed person at ToBa. ToBa is a compact and flexible architectural office. They have a broad portfolio, they also have experience in the field of redevelopment and renovation. Especially the transformation of the monument the laundry in Woerden grabbed my attention. An interesting project with a link to my project..

Interview conducted on October 18th, 2021

How do you deal with industrial heritage?

Transforming existing (national) monumental buildings is something we have done several times. There are many challenges to meet the expectations of the client and to preserve the history.

What are your experiences with industrial heritage transformation projects?

We have carried out various transformation projects of existing (national) monumental buildings. Each project has its own problems. The biggest problems are in which comfort level the client wants and how to deal with the legally obtained level (building decree). Can you insulate while preserving monumental value and do you take sufficient account of the physical properties of the floor, facade and roof construction?

How do you take financial feasibility into account?

We take the feasibility of a project into account in every possible

way. If a proposal is made that is not financially feasible, we will not benefit from it. It is extremely important that a project must be financially feasible, otherwise it will not be executed. We will certainly take this into account.

I plan to rebuild industrial heritage, how would you go about this?

I don’t know how we would go about rebuilding. We have not done that yet, we have only done repurposing and transformation projects.

Where do you foresee the biggest stumbling blocks for my project?

Difficult to answer in advance. There are many challenges in feasibility and feasibility. I think that’s less of a focus for you right now. Difficult to find a suitable and good answer to this.

Do you have any tips for my project?

Please contact us again if there is a more concrete question in the field of design or rebuilding. We like to think along with you.

ReSpace is specialized in the reuse of industrial heritage. ReSpace has developed its system/method to approach these projects.

Reuse and costs are elements which cannot be seen separately.

TEXTILE FACTORIES

Situation 1950's

The factories are spread across Tilburg to a reasonable extent. It is striking that there are many factories that are concentrated on the Goirkestraat. This was the main artery of the textile industry in Tilburg. What is also striking is that there have been a number of factories in today's city center.

The larger factories can be found on the borders of the city. The factories on the Goirkestraat are almost connected to each other, concentrated in specific places.

TEXTILE FACTORIES

Current situation

Almost every textile factory was demolished in the 1980s. A number of factories have also been redeveloped, but the majority did not survive the 1980s. Much heritage was demolished in these years to make room for large-scale housing.



textile heritage



demolished factories

In the year 1950, in Tilburg, the textile industry was booming. There were textile factories all over Tilburg. A large concentration was located near the Goirkestraat and the city centre.

Many textile factories were demolished when comparing the maps. But what is interesting to see, all the still existing factories are re-used nowadays.

RELIGIOUS HERITAGE

Situation 1950's

The religious heritage is spread all over the city. This is a huge contrast to the textile factories. This is quite easy to explain, faith is spread through these places. It is therefore important that it can be distributed in as many places as possible. This was not necessary for the textile industry.

RELIGIOUS HERITAGE

Current situation

Compared to the textile factories, the religious heritage is still largely in use.



religious heritage



demolished religious heritage

The Catholic church was large, spread over the South of the Netherlands. Also, Tilburg has a rich Catholic history. In the 1950s, much religious architecture was still intact.

Compared to the textile factories, the religious heritage is still mainly in use.

INDUSTRIAL HERITAGE

Situation 1950's

The industrial heritage of Tilburg, the Spoorzone, is concentrated around the railway. This is because a large workshop of the Dutch Railways was located in Tilburg. There were several workshops for all kinds of work.

INDUSTRIAL HERITAGE

Current situation

Almost all of Tilburg's industrial heritage has been repurposed in recent years. It is striking that this heritage has not been demolished, but that the city has embraced this industrial heritage and wants to preserve it for the future. A huge difference with textile history.



industrial heritage



demolished industrial heritage

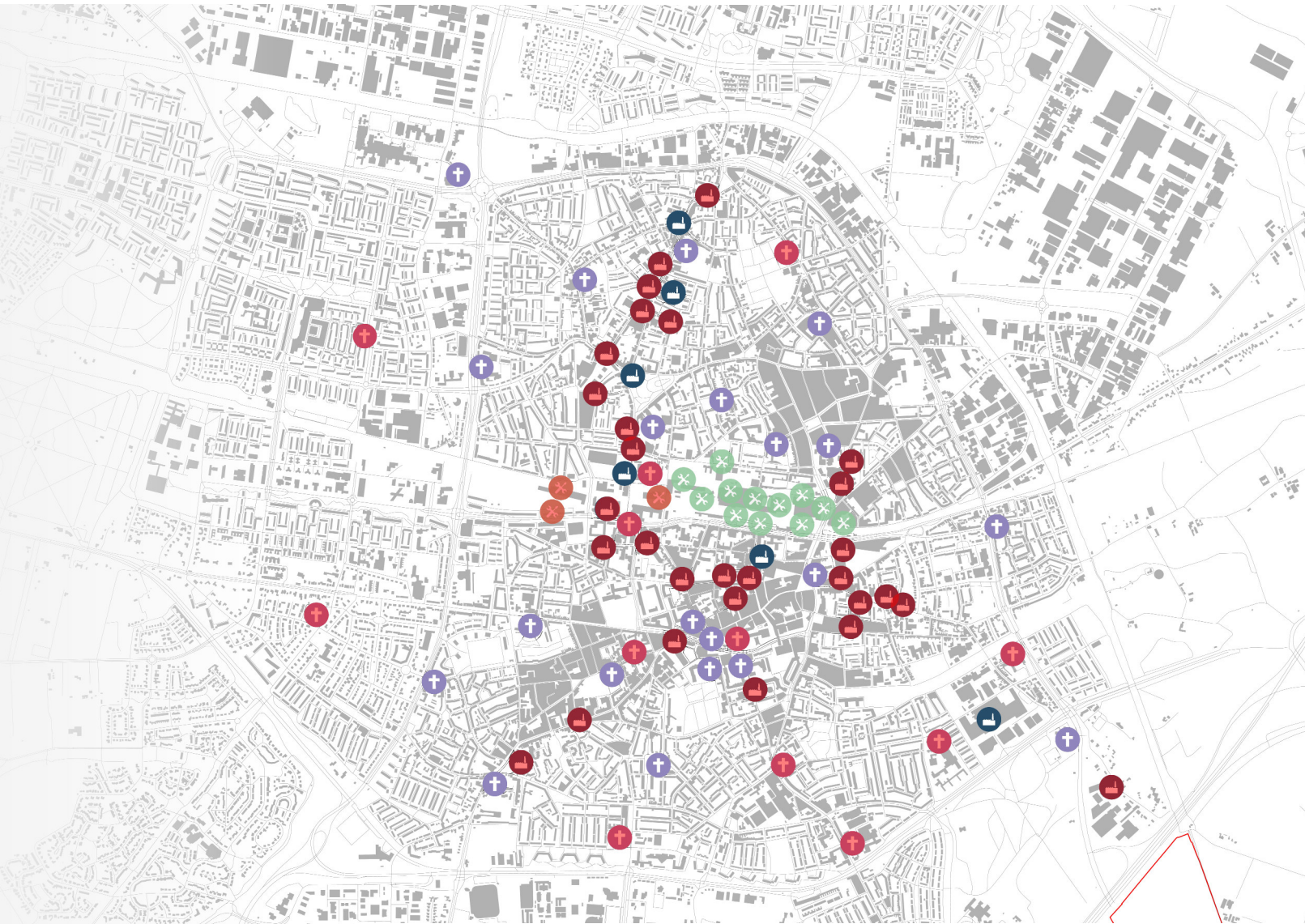
The industrial heritage was mainly concentrated near the train tracks. Many different buildings were located in that area, all connected to the textile transportation by train.

Almost all of Tilburg's industrial heritage has been repurposed in recent years. It is striking that this heritage has not been demolished but that the city has embraced this industrial heritage and wants to preserve it for the future. The municipality opened their eyes on time to preserve almost the complete area and opened it up for reuse.

TILBURG
Current situation

It is clear that Tilburg has a rich history in the field of industry and textile processing. Unfortunately, only fragments of this history are currently visible in the city. In the 1970s, many heritage sites were demolished to make way for housing.

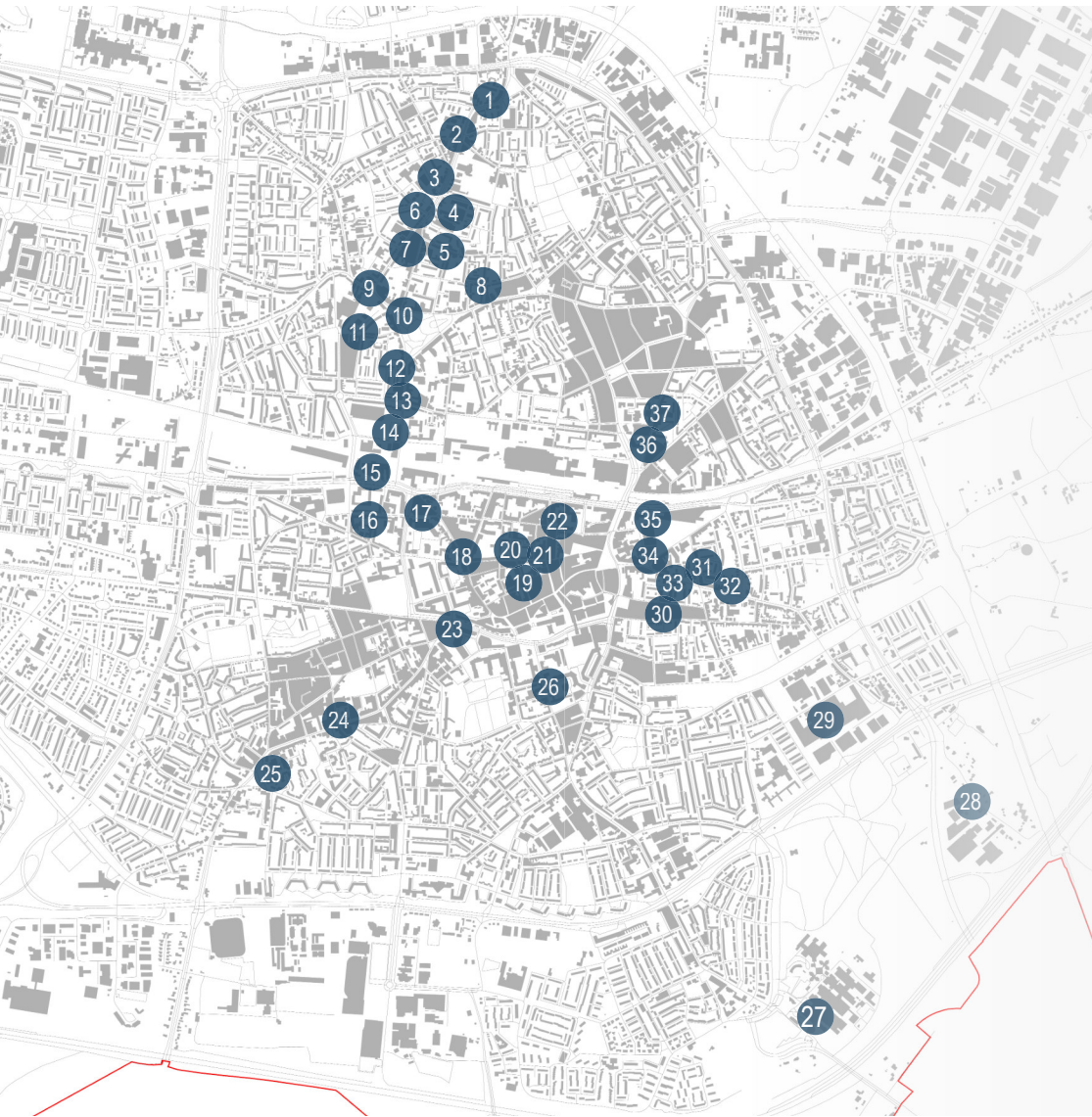
In recent years there has been an enormous change and the city of Tilburg is increasingly embracing the heritage. Plans are being made to give the heritage a second life for the future and to preserve it. I would like to build on this trend and take the next step. My goal is to rebuild the most valuable textile factory in Tilburg, which unfortunately no longer exists.



Tilburg and demolishing heritage is a combination which is easy to make. In the 1980, 's The municipality demolished most of its heritage. The new trend focuses on preserving the industrial heritage and making reuse possible.

TEXTILE FACTORIES TILBURG
Situation in 1950

1	Gebrs. Franken	20	Gebrs. Van Spaendonck
2	H. Eras & Zonen	21	G. Bogaers & Zoon
3	A. Franken & Zonen	22	Piet Smits & Co
4	George Dröge	23	Straeter
5	C. Mommers & Cie	24	Gebroeders Diepen
6	H.F.C. Enneking	25	Van Dooren & Dams
7	Simon de Cock & Zn.	26	Triborgh
8	M. van Beurden-Van Moll	27	Pieter van Dooren
9	De Rooij van Dijk	28	Verschuuren-Piron
10	Thomas de Beer	29	AaBe
11	Pessers van Zuijlen	30	W. Brands & Zonen
12	A & N Mutsaerts	31	L.E. van den Bergh
13	Swagemakers-Caesar	32	F.A. Swagemakers
14	Janssens van Buren	33	BeKa
15	E. Elias	34	J.A. Blomjous
16	M. Aelen	35	Wed. J.B. de Beer
17	Pollet & Zonen	36	Janssens De Horion's
18	J. Brouwers	37	André van Spaendonck & Zonen
19	J.A.A. Kerstens		



Tilburg has a rich textile history. This overview shows that there have often been large factories in the city center. These have all been demolished to make way for a more modern city

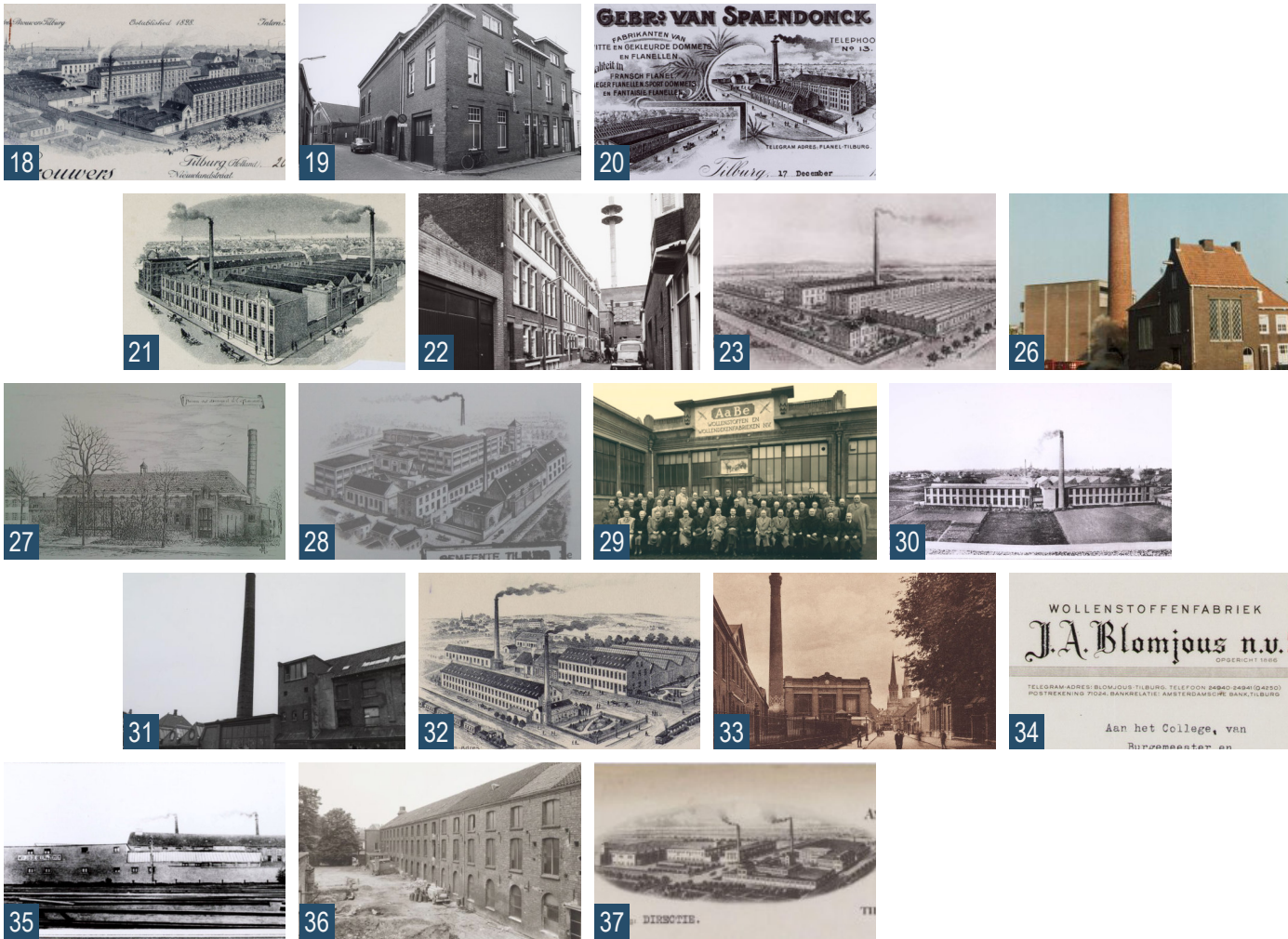
centre. It is interesting to see that the factories are often linked to each other by both the joint owner or the place of construction. There is a clear connection in place and factory name.

Tilburg counted on the peak 37 textile factories, and the Van Dooren family owned multiple factories.



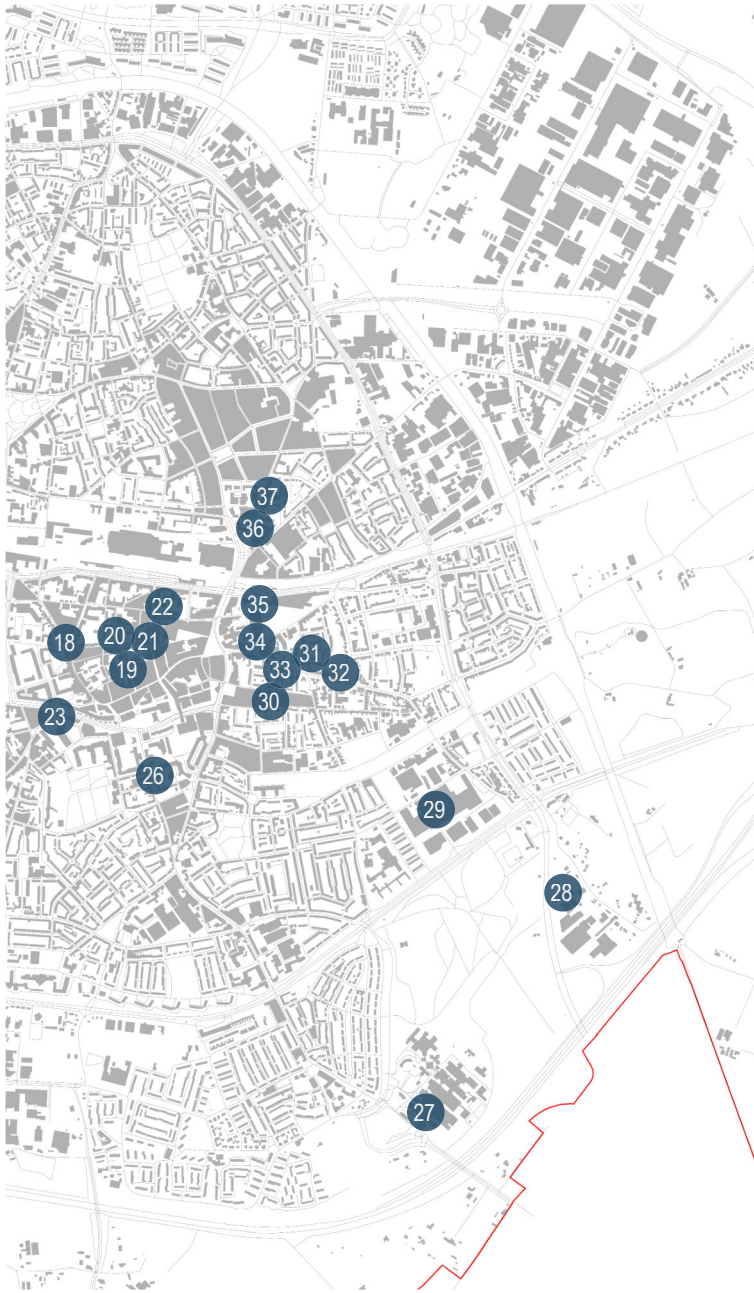
Many factories are located near or on the Goirkestraat in Tilburg. The reason for this is that it is close to the railway zone and the Goirkestraat was one of the few streets on this side of Tilburg at that time. There were considerably fewer streets above the track than below the track.

There is substantial diversity in the volume and style of the textile factories of Tilburg.



Interesting is the appearance and diversity in factories that this overview provides. There are factories with huge complexes and parks, but there are also very small-scale buildings. This overview gives an idea of how these buildings were designed in their heyday.

There is substantial diversity in the volume and style of the textile factories of Tilburg.



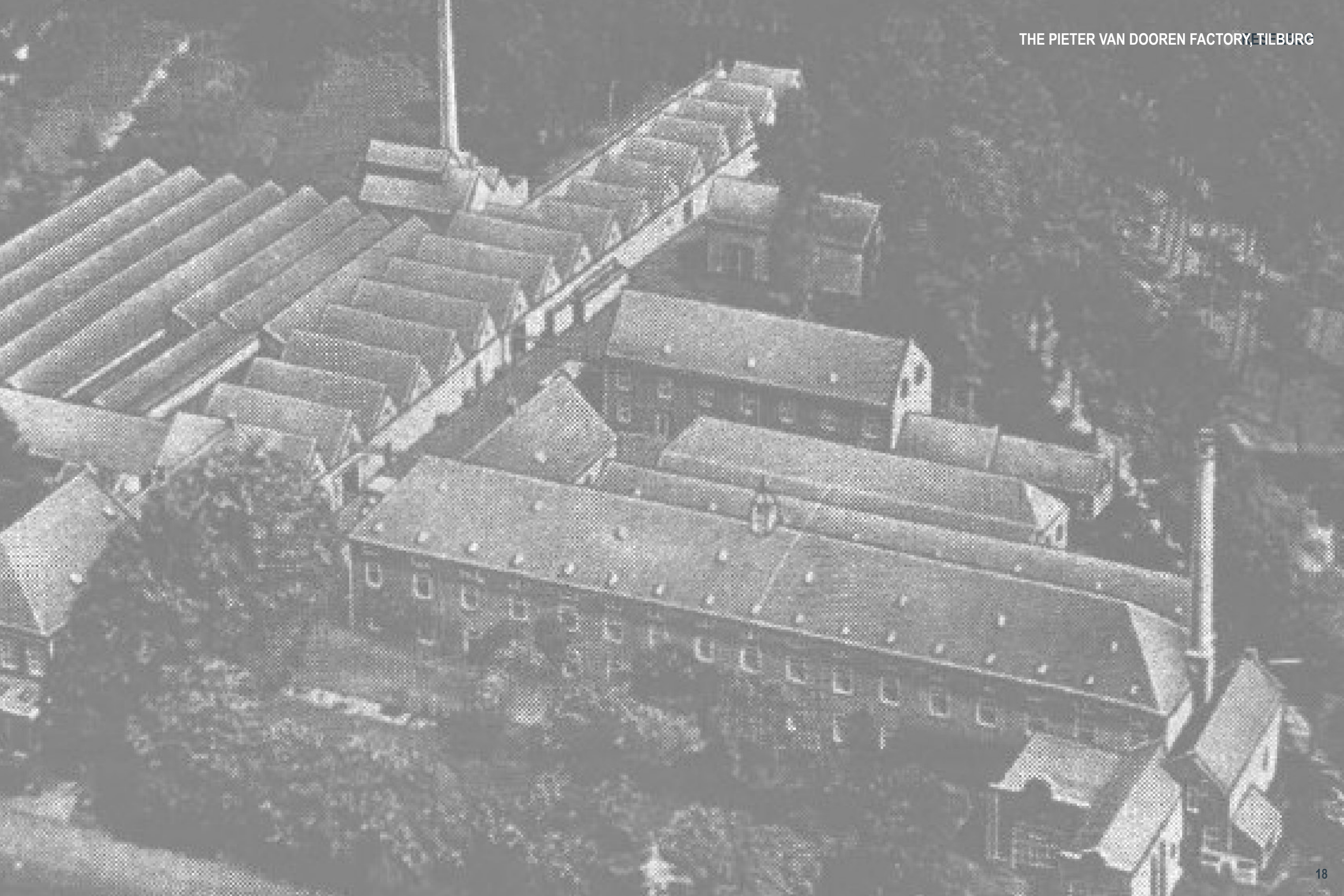
WHY THE PIETER VAN DOOREN FACTORY?

Tilburg has an eventful textile history, which goes back to the 15th century and experienced periods of weakness and revival until the end of the 18th century. It has undergone enormous development over time and has been in a less rosy situation since the last century. Originally, the Tilburg wool industry worked for Leiden and Amsterdam cloth manufacturers. In the course of the 17th century, Tilburg entrepreneurs increasingly started to work for their own account. Due to increasing mechanization, more and more production phases concentrated in one direction. Spinning and weaving remained organized as a low mechanized cottage industry for a long time. Around 1800 Tilburg was little more than a collection of hamlets and neighborhoods with the wool industry as the main branch of employment.

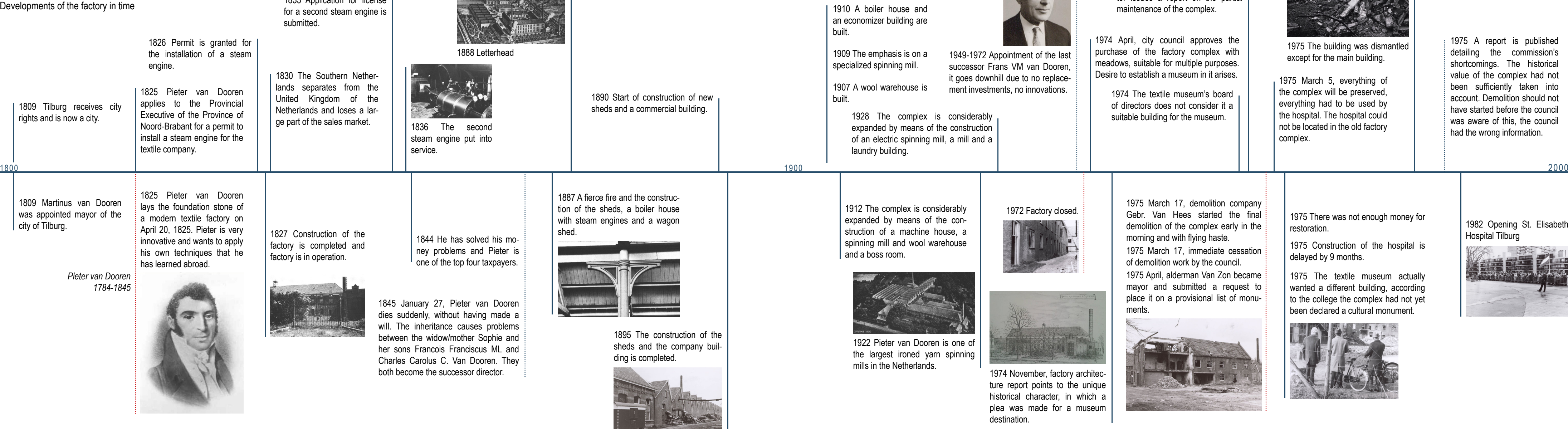
1825 was an important year for the textile industry. In that year, Pieter van Dooren founded his own company for spinning woolen yarns and fulling sheets. Pieter had been educated by his own father, this was common at the time. In addition, he had made many trips abroad, so he was well informed about the developments. Making these trips was considerably less common during this time. The introduction of a steam engine was partly due to these trips. At that time he was the first with such a steam engine.

Pieter van Dooren's factory came into operation in 1827. The company ran well until 1830, the year in which the Southern Netherlands separated from the United Kingdom of the Netherlands. The Tilburg textile industry lost a large part of its sales market. A small gain was the loss of the competition from Verviers. Despite this economic downturn, Van Dooren was not doing badly, considering the replacement of the steam boiler in 1833 and the application for a permit to install a second steam engine in 1834. At the beginning of 1836, this second steam engine was put into operation.

With the demolition of the factory, one of the most important industrial ensembles in the history of the textile industry in the Netherlands has been "cleaned up". This is undoubtedly a loss in an area for which no equivalent can be found in the Netherlands.



TIMELINE



Pieter van Dooren was very young when he started the textile factory. He was very innovative and wanted to take the lead in the development of producing textiles.

The end of the once so productive textile factory is odd, so to say. Just before obtaining the status of a monument, the complete factory was demolished during the night. Later they wanted to save what remained, but it was too late. It was all planned and necessary to create the new large hospital. The factory did not deserve this ending; the factory itself was a timeline of more than a hundred years of textile industry innovations.



CEES BECH
MAJOR
DESTROYER

Cees Bech is the major who decided to demolish the factory of Pieter van Dooren. Cees Bech is known for demolishing multiple historic buildings in and around Tilburg, his Nick-name, “Cees de Sloper”, is a result of these crucial decisions.



GERRIT BELTMAN
ARCHITECT
CREATOR

Gerrit Beltman is the Architect of all the expansions of the Pieter van Dooren complex. He was an Architect, his office was located in Enschede, and his office still exists nowadays.



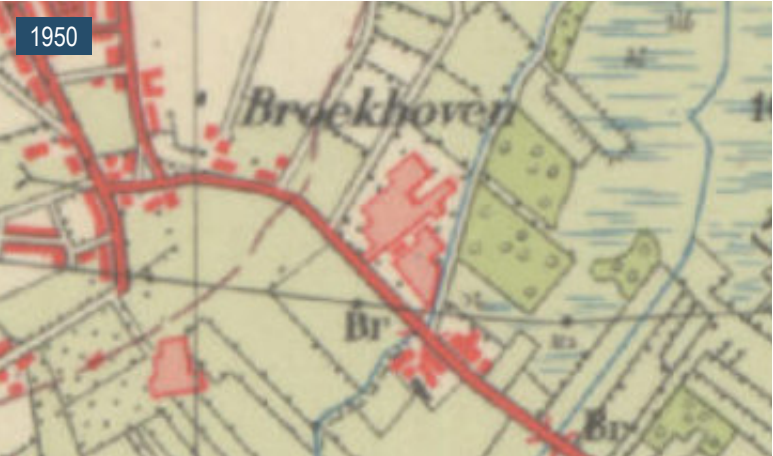
PIETER VAN DOOREN
FOUNDER
OPERATOR

Pieter van Dooren, the founder of the Pieter van Dooren factory. He founded the factory in 1825 and was highly innovative for that time, and he lifted the textile industry to a new level by using a steam machine for the first time in the Netherlands.

THE SITUATION OVER TIME

Former site of the Factory

The complex has also undergone several transformations over time. In the early years it was striking that a location was chosen well outside the city of Tilburg. This is in contrast to many other textile factories. This was chosen because there were more possibilities here for expansions if it was a success. The city grew towards the complex of Pieter van Dooren, expanding the city was often done by building new districts, the factory was not hindered by this.



All expansions that have been made have been realized on our own site. The ensemble of the factory changed a lot over time, the final final version of the factory was therefore the largest version of the complex. This version was demolished in 1970 to make way for the construction of the new hospital.

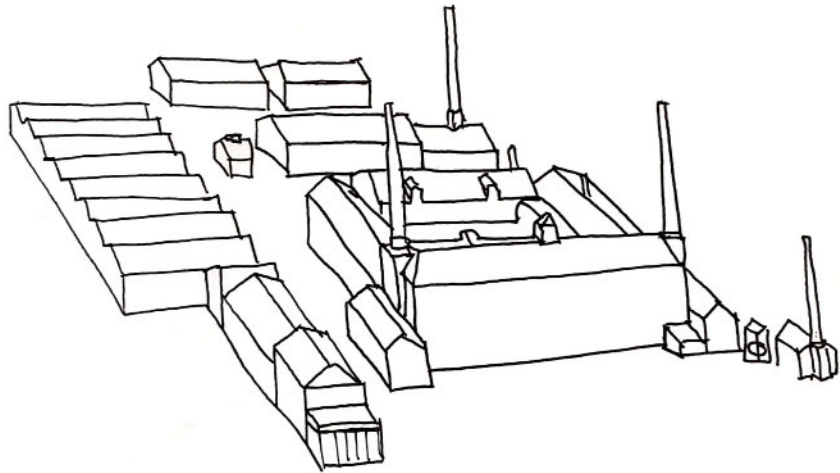
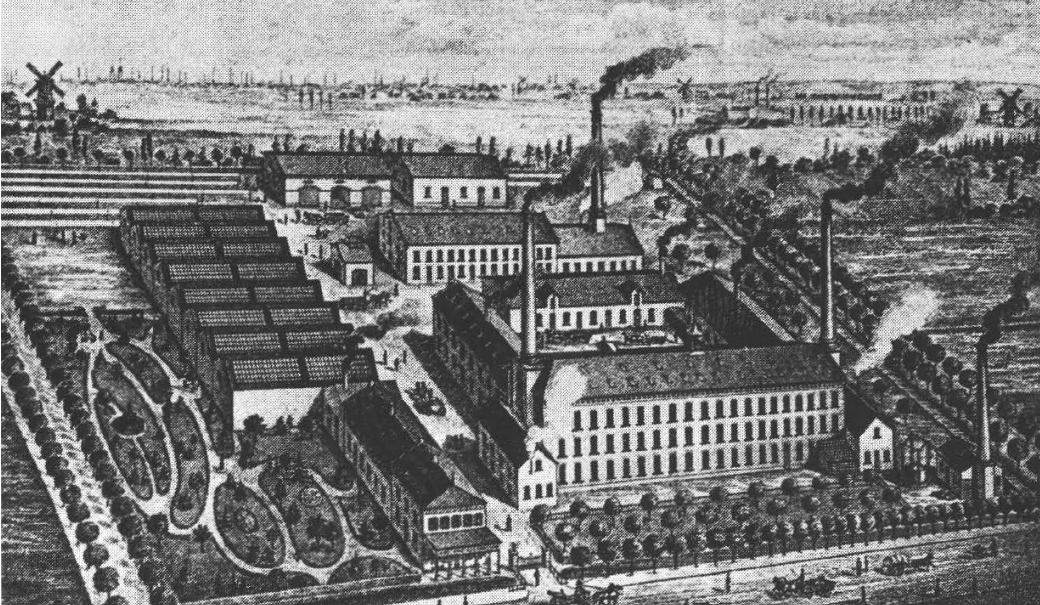
The factory has undergone multiple expansions over the years, and it is interesting to zoom in later to explore why these expansions were constructed.

The factory has undergone multiple expansions over the years, and it is interesting to zoom in later to explore why these expansions were constructed.

THE FACTORY

Situation of 1888

The complex was already on the large side in 1888. The letterhead gives a good idea of the diversity and unambiguous in architecture. The gardens are also part of the complex. It is striking that there are more chimneys to be seen comparing with the situation before demolition.

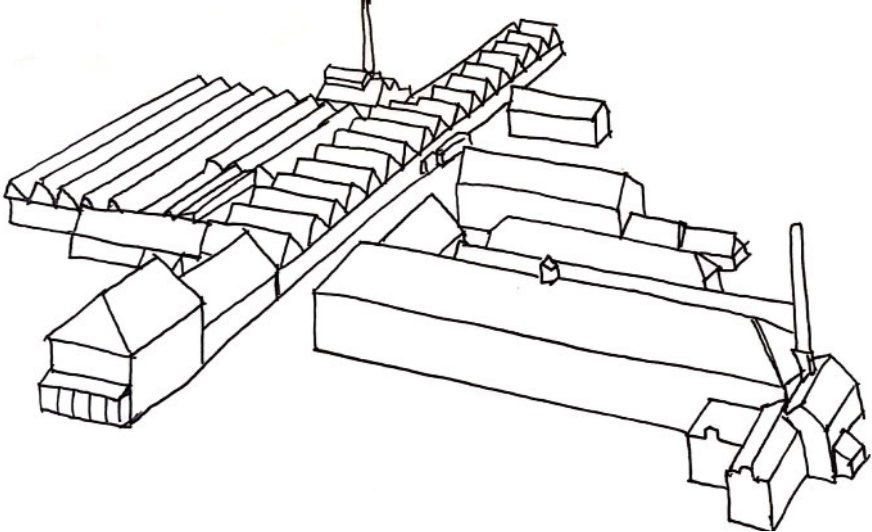
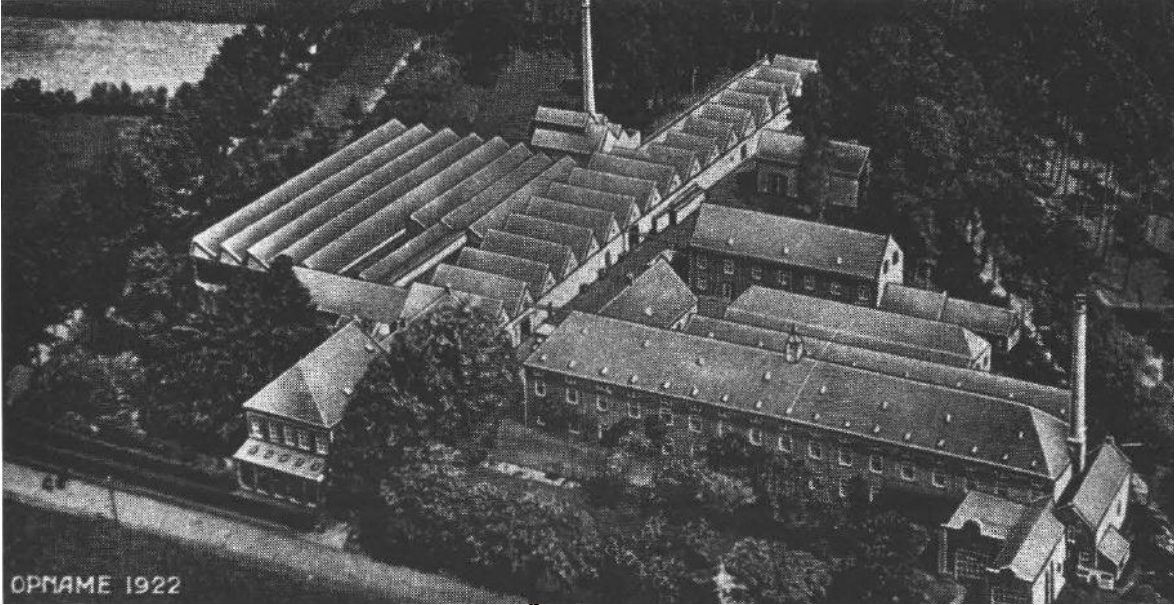


These letterheads are essential in my research to understand the development of the factory. These letterheads illustrate there have been demolishments over the years as well.

THE FACTORY

Situation of 1922

In the years before 1922, the complex had undergone several extensions. It is striking that more shed construction has been added to the complex and that chimneys are missing from the buildings. It seems that more space was needed for the processing of the textiles and that the existing building ensemble had to give way. Expansions in square meters were necessary to keep the factory running.

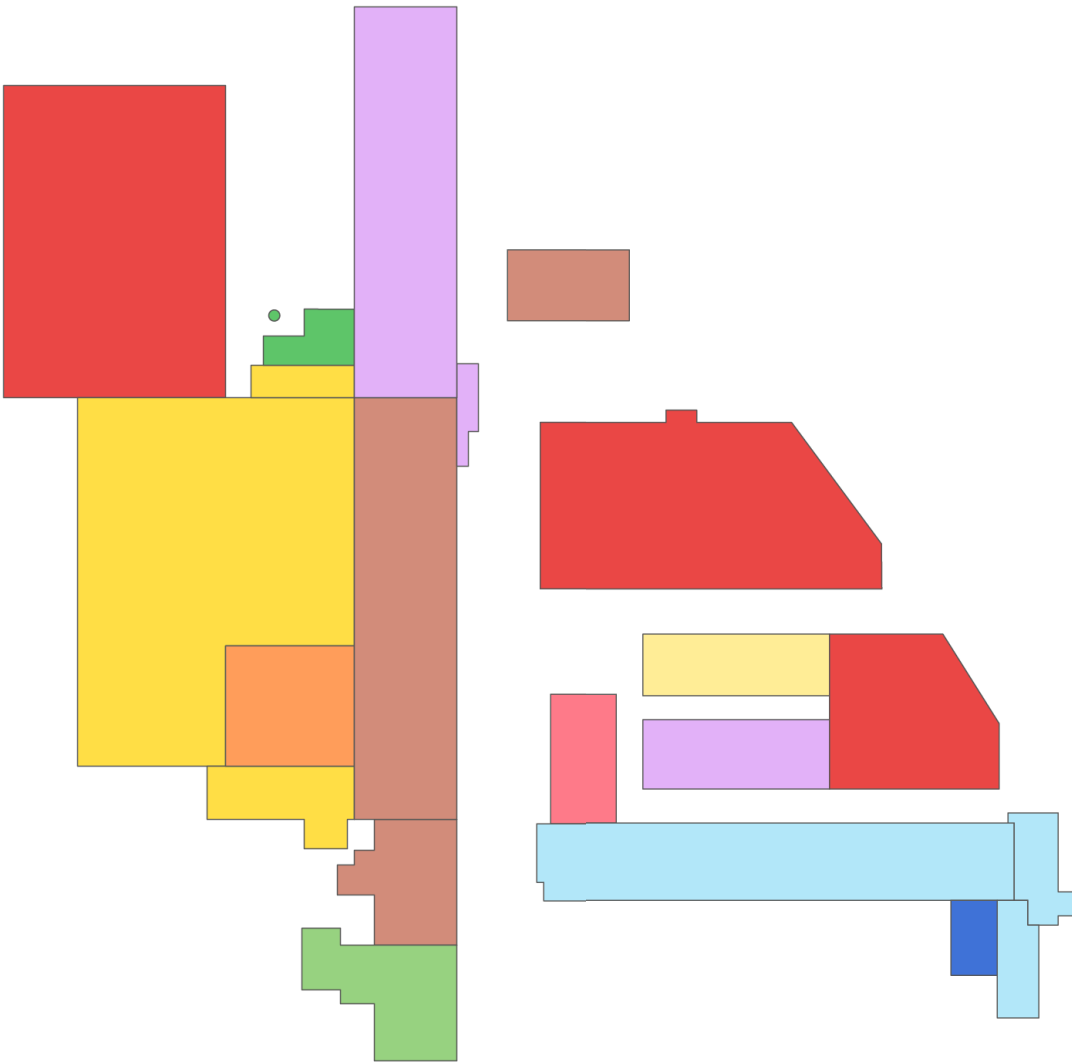
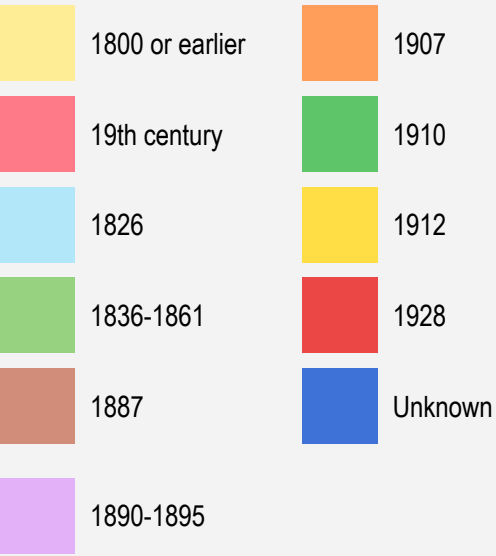


This aerial view shows the almost final version of the factory. This picture gave me countless insights and conclusions while reconstructing the factory complex.

ORDER OF EXPANSIONS

Expanding the ensemble

This overview of the factory complex provides an enormous amount of information about the expansion steps that the factory has undergone. The above list provides an overview of the extensions and the year of construction.



This overview of the factory shows the step by step expansion per year of the complex. The closer we come to the now, the larger the buildings became.

FUNCTIONALITIES OF THE FACTORY



- | | | | |
|----|--------------------------------|-----|---------------------------------------|
| 1. | Farm ca. 1800 or earlier | 7. | Wool warehouse 1907 |
| 2. | Forge ca. 19th century | 8. | Expansion of 1910 |
| 3. | First expansions | a. | Boiler house 1910 |
| a. | Factory 1826 | b. | Building for economiser 1910 |
| b. | Boiler house 1891 | 9. | Expansion of 1912 |
| 4. | Manufacturer's house 1836-1861 | a. | Machine house 1912 |
| 5. | Expansions of 1887 | b. | Spinning mill and wool warehouse 1912 |
| a. | Office 1887 | c. | Bosses room 1912 |
| b. | Sheds 1887 | 10. | Expansion of 1928 |
| c. | Wagon shed 1887 | a. | Electric spinning mill 1928 |
| 6. | Expansions of 1890-1895 | b. | Grinding mill 1928 |
| a. | Sheds 1890-1895 | c. | Laundry 1928 |
| b. | Company building 1890-1895 | 11. | Unknown |

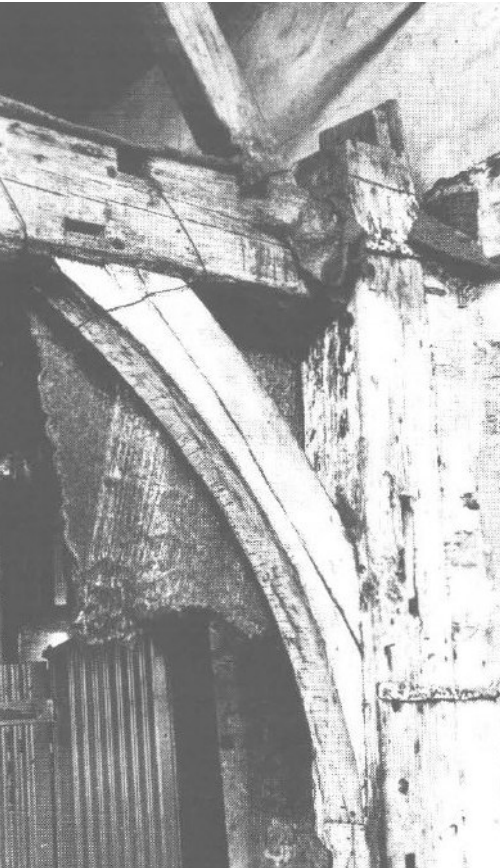
The graphic shown above is a result of research about the functions of these factory volumes.

“THE FARM”
The farm was probably the oldest building in the complex. Thanks to the three-aisled construction, this name has been chosen. This three-aisled construction was common in agricultural farm buildings in Brabant before 1800. The design of the anchor beam ribbons also seemed to tend to date the building from before 1800.

In the end, a renovation took place before 1888 to a single nave shape. This shape created a building consisting of a ground floor, first floor and an attic. In the facade were small frames with a subdivision using rods. At the time of demolition, there was only one dormer window with a lifting beam present. It is not clear what the original function of the farm was before Pieter van Dooren put it into use.



The photograph shows the oldest buildings of the complex. There is a lot of repetition in the facades, and a strong rhythm and coherence finish the strict style of these buildings. The curtain walls are also repetitive and have all the same ratio. The farmish kind of the building on the left gives me already the impression people used to live in these buildings.

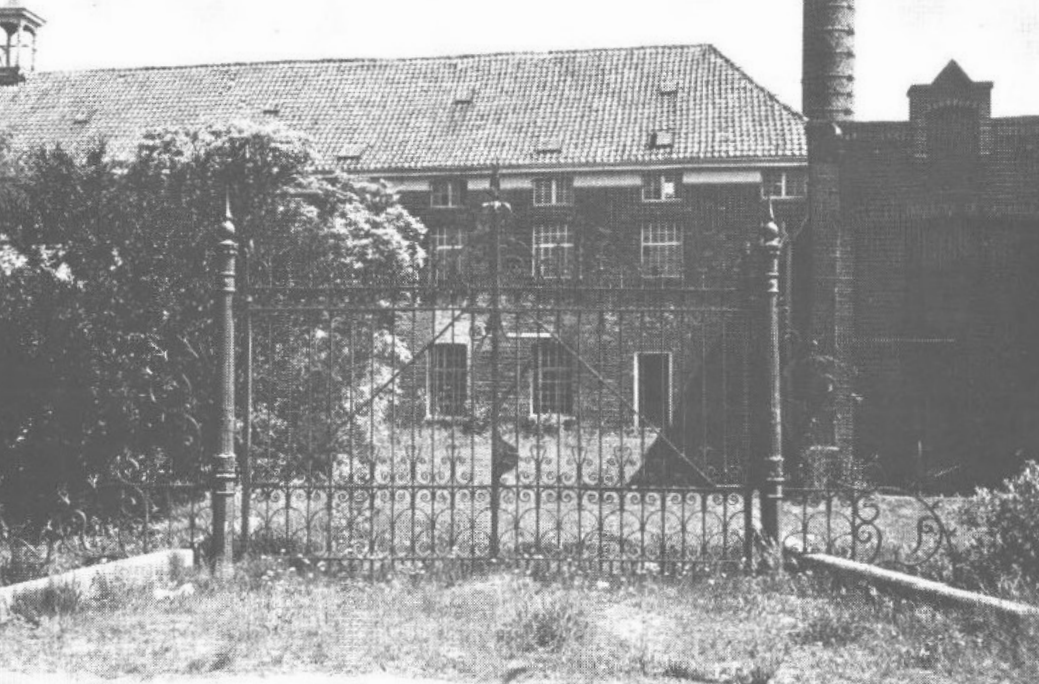


“THE FORGE”
The building, called the forge, dated from before 1832 because it was visible on the cadastral map of 1832. The building was characterized by its business-like, simple architecture. This was characteristic of smaller factory buildings of the 19th century. A lifting beam was present at the top of the end wall, with which the lifting beam lifted goods to the attic. The entire ground floor was used as a workshop. The first floor and the attic were

used as warehouses/storage. The building had wooden floors supported by wooden nuts and child beams. These were supported in the middle. Previous research has shown no textile or other machines in the forge. However, a forge fire has been found on the ground floor and other traces of an old-fashioned forge. It was unusual for a forge and textile production to be linked together. This was also the case at the time of its founding.



The method of construction developed over time. The wooden structure was used in the large factory in the 1826 building. The complete building was made from local materials. Also, this building had a lot of repetition in the facades, and a strong rhythm and coherence finish the strict style of these buildings. The curtain walls are also repetitive and have all the same ratio. These buildings were already on the location of the textile factory before starting the company.



“FACTORY 1826”
The factory in 1826 was the most characteristic part of the complex in the 19th century. The foundation of the Pieter van Dooren company in 1825 was the go-ahead for constructing the building in 1826. In 1834 Pieter van Dooren expanded the building to make way for a second steam engine. In terms of architectural history, the building was extraordinary. Thanks to its simple, businesslike architecture, it gave a good impression of the more significant factory buildings in the Tilburg region. The building

was built of red brick and had no decoration. At the location of the gutter, a horizontal band and a cornice were the only interruptions. Symmetry, long a feature of 19th-century factory architecture, came into its own in the building. Engine rooms were realized on both sides, each with its own chimney. Around 1888 the factory had the shape we have known it until its demolition. Apart from minor renovations, the internal construction had hardly undergone any changes.



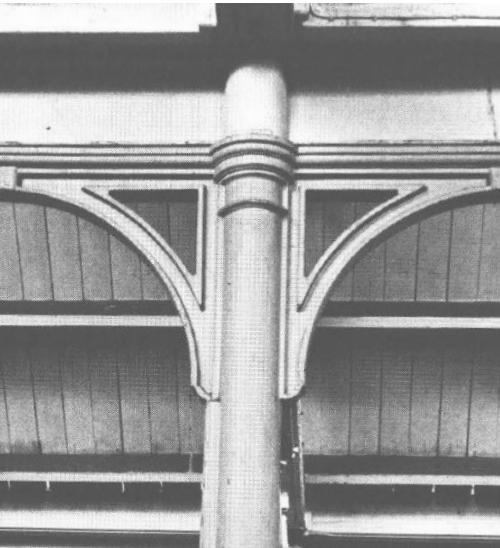
Because the building was lightweight and constructed of wood, every storage had open spaces with pillars and columns in the middle. All the rest of the room was completely open.



During the demolishments of the factory building, the roofing structures were perfectly visible, and repetition is shown in the facades.

“MANUFACTURER’S HOUSE”
In 1832, the manufacturer’s house was not yet on the cadastral maps of the municipality of Tilburg. When the municipality drew the following map four years later, the first outlines of the house were visible—the house dated from about 1835 and was designed with white plaster and small window openings. For a manufacturer’s home, the architecture is simple and austere. Partly thanks to the shape of the roof and the building mass, it gives the house a monumental appearance.

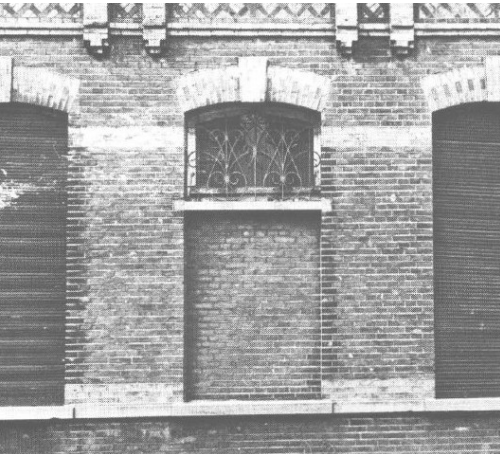
The facade also had a natural stone frame on both floors. The most exciting part of the house was the front porch. It had highly ornate narrow columns of cast iron. This fits perfectly with the rural/rustic appearance of the area at the time.



The manufacturer’s house was the building with the most prominent status. Later they painted the complete building white. It was the only white building in the area.

EXTENSIONS 1886-1890
The rear of the factory house was later expanded. The letterhead of 1888 provides more clarity on this. The office was built directly at the back. It is striking that the architecture of this building was more representative than the other buildings. More use was made of coloured bricks in decorative dressings. Very striking was the frieze-like connection of the facade to the underside of the gutter. Around the same period, a factory hall was built as an office extension. The same style was chosen for the facade but less spectacular. This shed construction was mainly used for the storage of wool.

In 1890, the shed construction was expanded on a large scale for the first time. The design of this new building was comparable to that of the existing sheds. The structure only was more modern.



Lots of detail has been lost during the demolishments. The masonry of the office building is extraordinary and has not been seen in other factory structures.

EXTENSIONS UP TO 1915

The sheds built around 1887 were now used as a spinning mill. This meant that a new place had to be found to store the wool. As a result, they wanted a new warehouse close to the factory's production line. The building was characterized by a flat wooden roof with a skylight. The building was constructed using a cast iron construction. In 1909 plans were made for the next expansion of the company.

The first step of this expansion was building a boiler house with an extension for an economizer. Compared to the previous architecture, this extension revolutionized the conception of factory architecture. A more business-like architecture emerged. For example, the front beam was left visible in the facade. What was noteworthy was using a steel construction for the first time.



FINAL MAJOR EXTENSION 1928

Just before the economic crisis of 1928, plans were made for the last expansion of the factory complex. This time plans were made for three extensions, an electric spinning mill, a mill and a new laundry. The new building was constructed in steel construction, supported by steel columns. Daylight entered through the skylights at the top. The use of materials for the latest extensions is striking because several materials were chosen together. The use of concrete, brick and steel was completely different from the previous extensions.

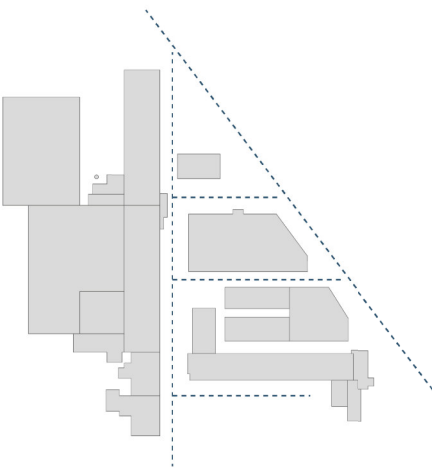


The detail was extraordinary in the buildings constructed in the late 19th century. A lot of exceptional masonries were used to create depth in the facades. The overall development of the textile industry architecture was visible in the complex. The final expansion had a steel structure, and it became possible to span more extensive measurements from this moment. Shortly after this expansion, the economic crisis made the factory lose a lot of terrain and go bankrupt.

LAYER ANALYSIS

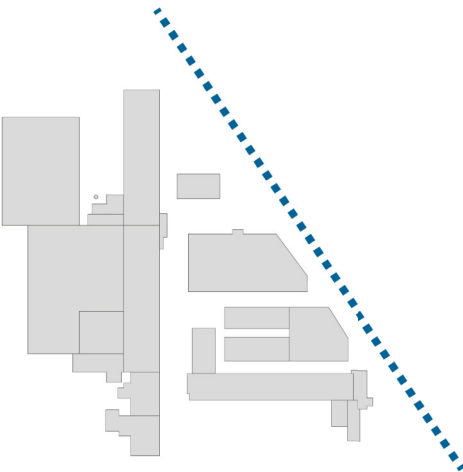
Analyzing the textile factory

To gather more information about the factory, I chose to make a layer analysis. In this way I can undress the complex and I want to get to know the power of the complex step by step. It is important to get to know the power of the whole, because this is important for the rebuilding of the complex.



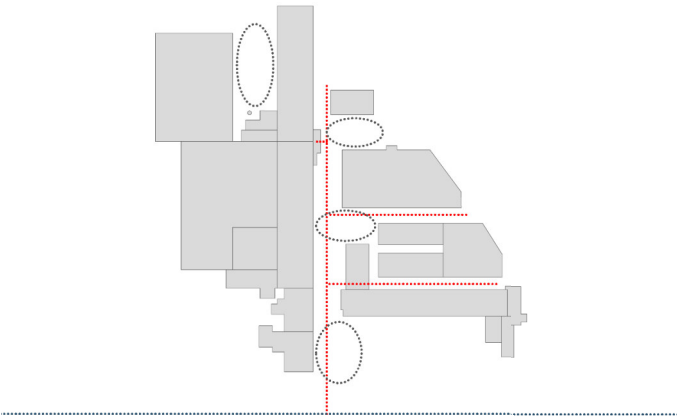
Axes

The factory complex has a number of strong axes. The most predominant is the axis from bottom to top. This creates a “separation” between the building parts and resembles a main street in a village. Other lines that stand out are at right angles to this main artery. They are connected to this main axis and run between the



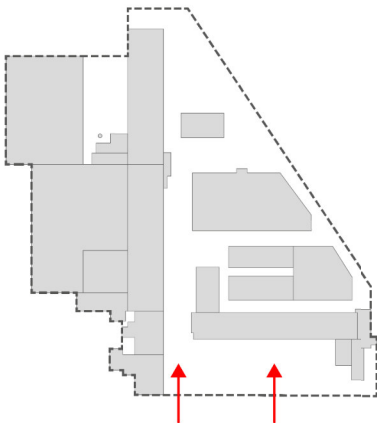
River

buildings. The last axis is an axis that originates from the river “De Leij”. This small river used to flow before the factory complex was as it was known at the time of its demolition. Partly because of this, the buildings have been adapted and run obliquely with the waterline.



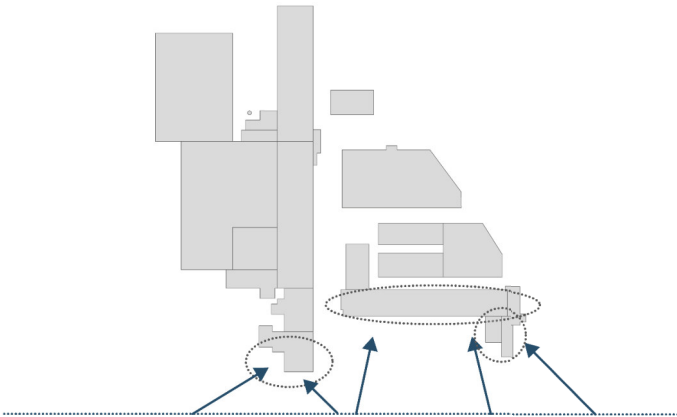
Circulation

In terms of circulation, the main axis is the most important main access artery to the complex. The entire complex can be reached via this road. Striking are these small “squares” between the roads and the buildings.



Accessibility - two metal gates

Access to the complex was made possible through two iron gates. One of these gates can be found elsewhere in Tilburg. It is striking that the complex was accessible from one side.

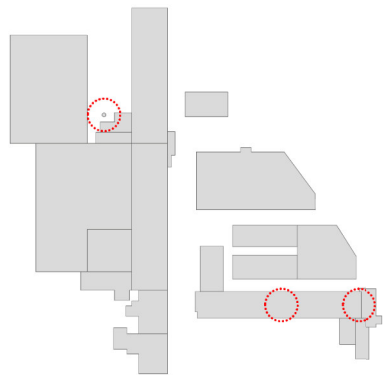


Lines of sight

In the past, if one passed the complex from the road, the entire complex was not visible. The stately white villa in particular stood out. The 1827 factory also received a lot of attention because of the size of the building. The rest of the complex was barely visible due to the low-rise buildings.

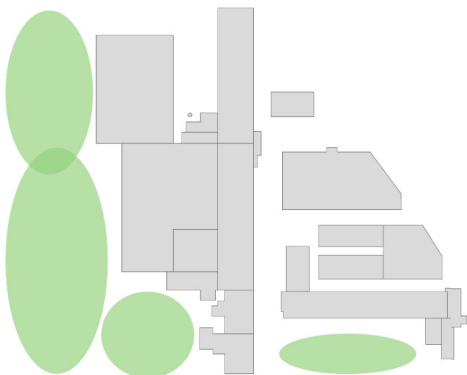
The central axis characterized the factory complex through the middle, and multiple more minor axes were perpendicular to this central axis. “De kleine Leij” resulted in an oblique shaped building next to this small river.

The complex was accessible by just one side. Because of this, the most attractive buildings were located in the front, near the main road.



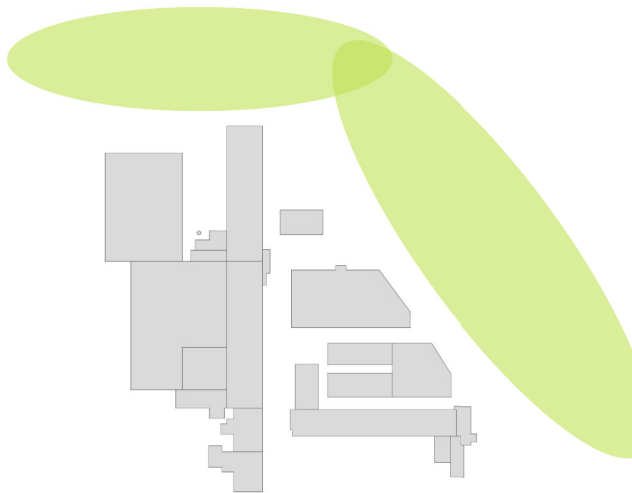
Peeks

The complex has a few towers or other high landmarks. At factory 1827 a small turret was visible in the middle of the roof. The chimney also stood out on the side of this building volume. Another chimney was present at the time of demolition. This was positioned near the engine rooms at the rear left of the complex.



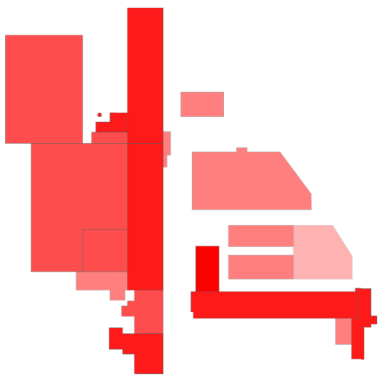
Factory gardens

Multiple illustrations from the factory's heyday show factory gardens to the left and front of the complex. These were highly structured and stood for order and structure. This was also visible from the road.



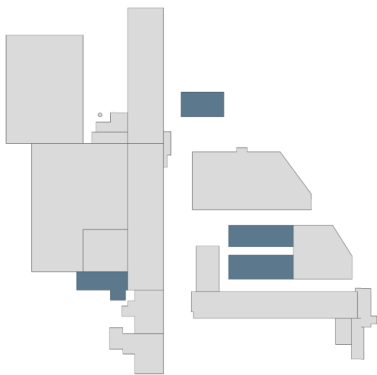
Forrest

The large amounts of forest around the complex were striking. This ensured that the complex was in a very green environment.



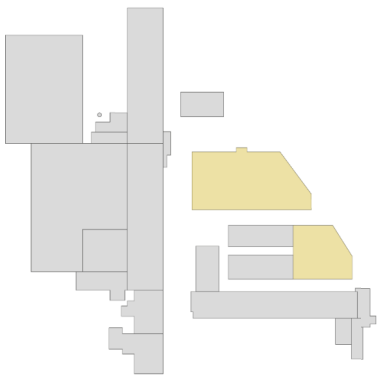
Monumental values

Each part of the building has an added value for the total ensemble. The darker the color the more important for the historical aspect in my view.



Building type - farm

Typical farm typologies were present on the site of the complex. The oldest part of the complex used to be a farm. Also as time went on, several farm-like structures were added.

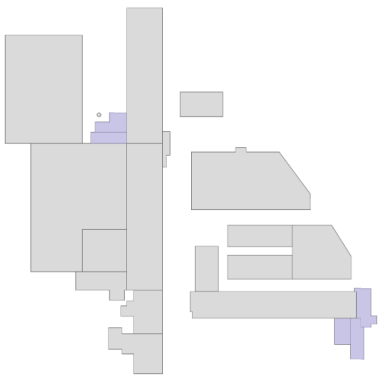


Building type - Factory

The later extensions represent new technical developments. Larger spans were possible by means of steel structures. This can be clearly seen in the extensions in the 20th century.

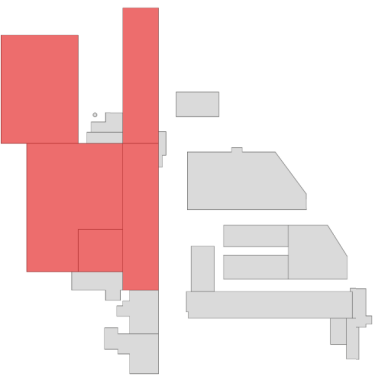
The complex was surrounded by nature. There was a factory garden on the left side and the front of the area. The complex was surrounded from the opposite side by extensive woods.

Different building types also mean differences in interior spaces—the construction period plays a prominent role in this.



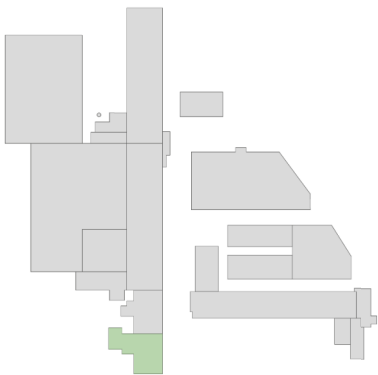
Building type - machinery

The complex had two engine rooms. The original was attached to factory 1827, this was also the site of the first steam engine. The second engine room is positioned on the other side of the complex, at the location of the later extensions of the shed roofs.



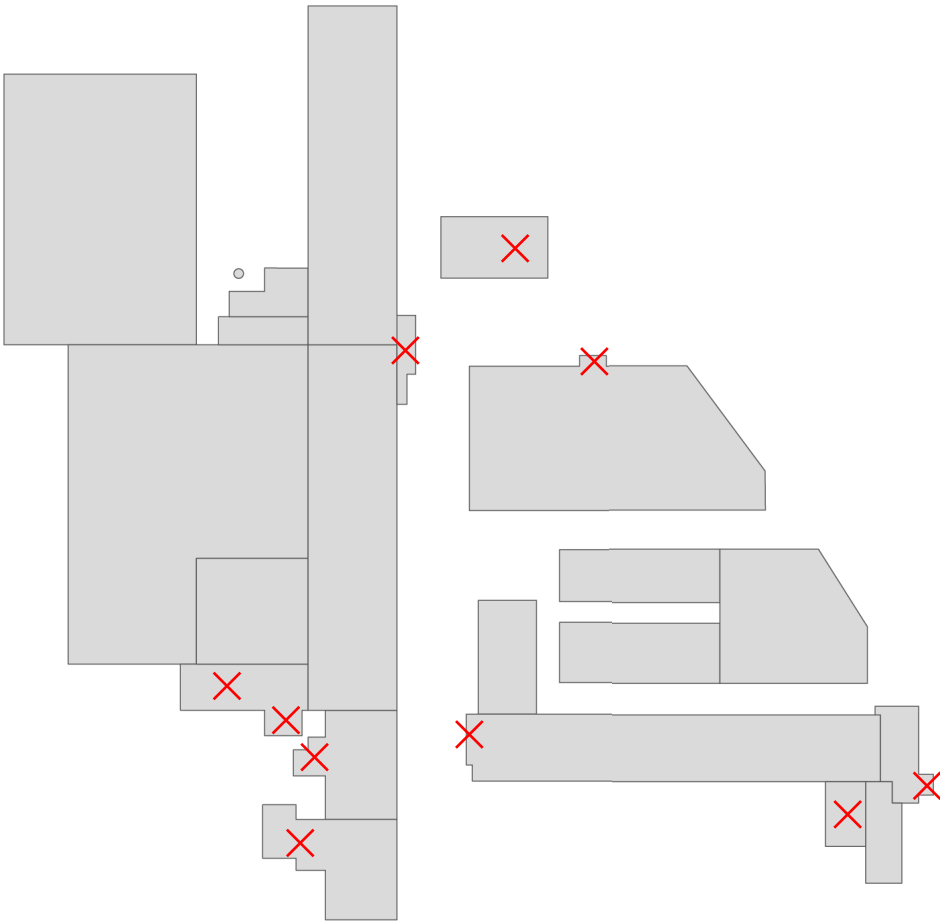
Building type - sheds

Shed roofs were frequently used. The extensions of the late 19th century were almost all covered with the highly recognizable sheds.



Building type - status

The white villa at the head of the factory exudes status. It's out of place compared to the rest of the factory.



CONCLUSION

Pieter van Dooren Factory

It was a diverse complex at the time of demolition. There are many possibilities for rebuilding the complex in the way it was once way ahead of its time. Due to the clear structure and order of the complex, there is a lot of rhythm in the whole. This is something that can be brought back to the future location in a timeless way. Almost all buildings contain elements that can be used for future housing. By means of this analysis, we have succeeded in making a reconstruction of the entire complex, including inner walls and interior. By studying old photos and drawings, it is possible to take the next step towards the design.

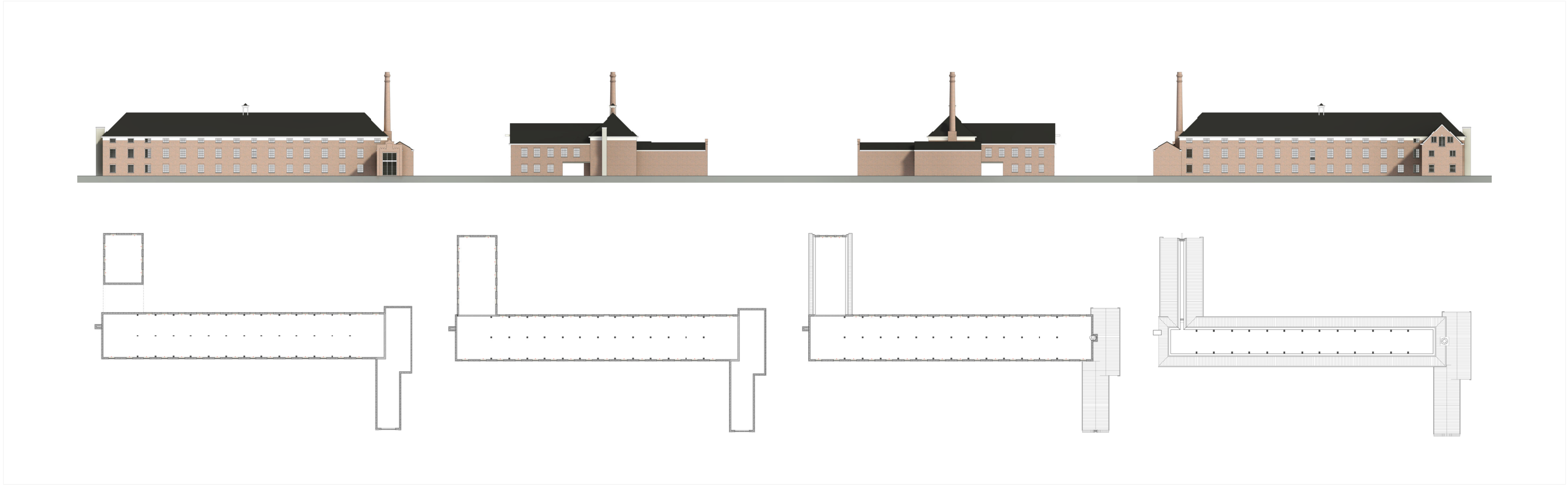
The research shows that Pieter van Dooren's complex offered an excellent sample of technical developments in the textile industry before its demolition. The complex provided an excellent picture of the development of the corporate architecture.

But that was not all, the buildings reflected the work of entrepreneurs and labourers, bosses and bookkeepers, of stokers and machinists; a reflection of a situation that radically changed the socio-economic structure, and therefore also daily life in the Tilburg region, especially between about 1820 and about 1930. This means, the complex was not only a historical monument, but also a historical document.

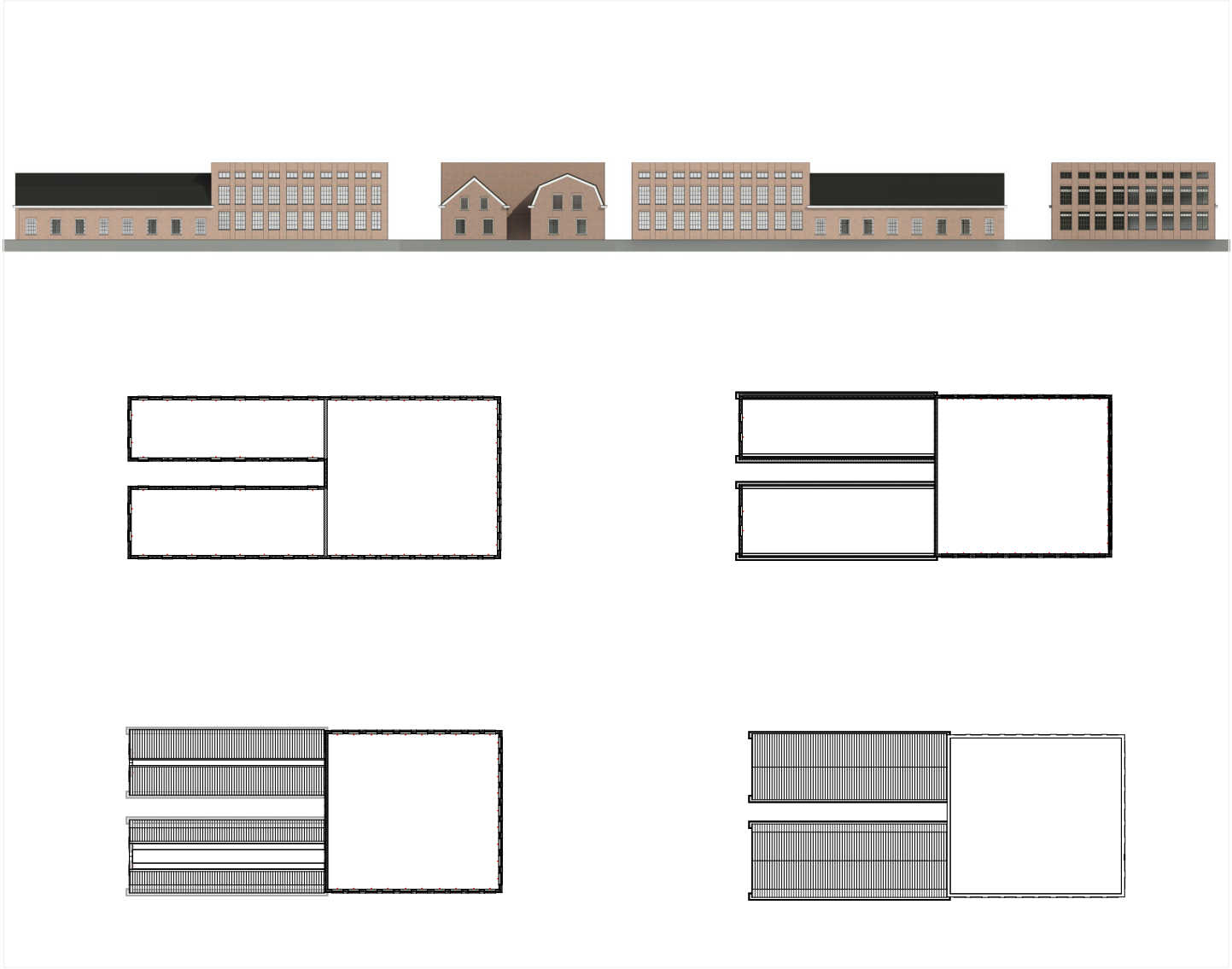
A loss in the area where no equivalent can be found in the Netherlands. On the other hand, a clear warning not to act too hastily when it comes to demolition of such things. This does not imply that all factory buildings must simply be maintained. We will, however, have to make haste to find out what is still to be seen in this area in our country. This is to prevent important things from being lost, while less important things are preserved. Let the "Pieter van Dooren Case" in this case be a warning.

The late expansions are recognizable by the large volumes, and steel structures made it possible to overarch more expansive measurements.

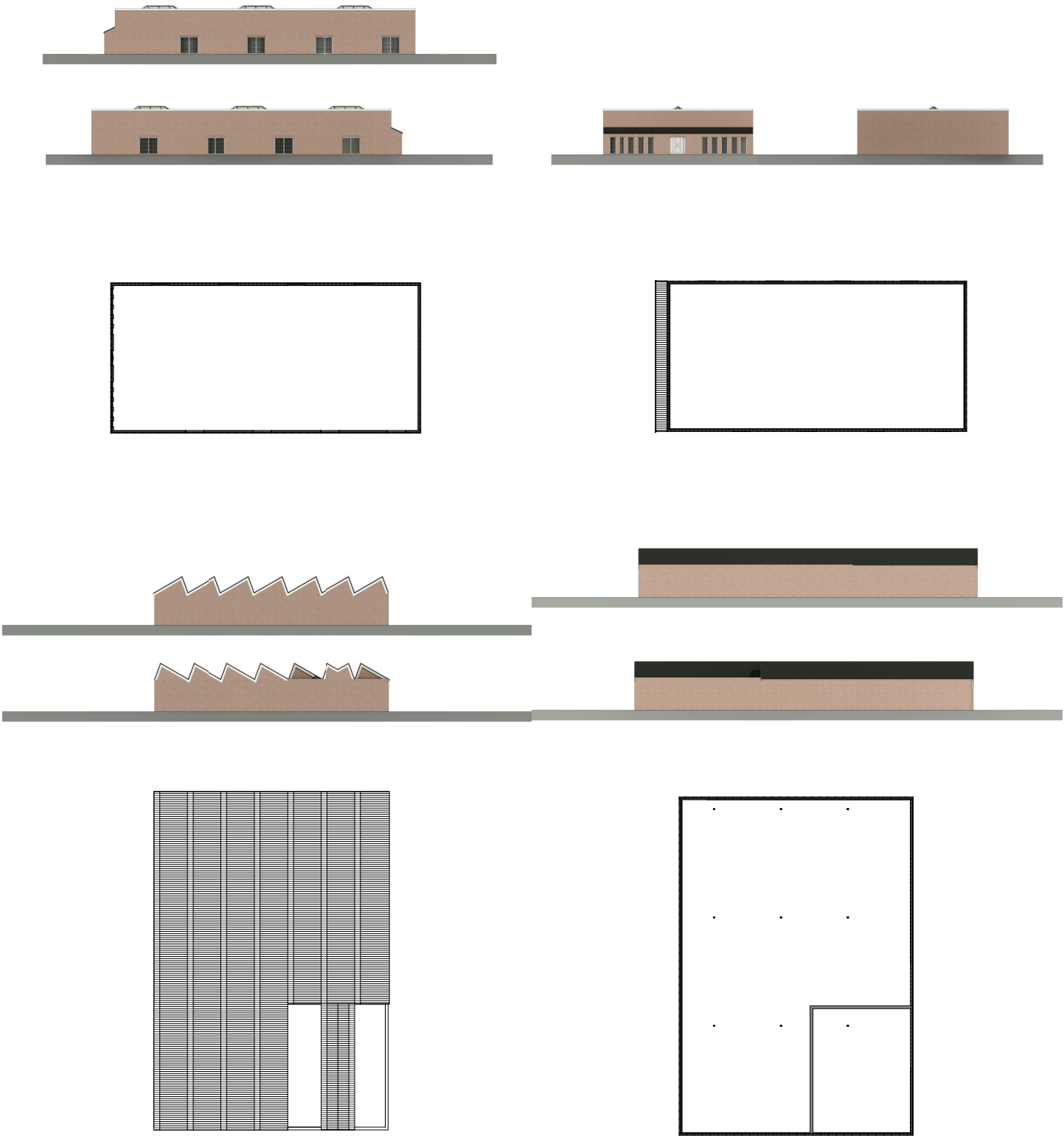
Not every part of the factory contains the same value. However, over time some expansions were realised which do not connect to the overall coherent architecture. So I decided to leave the small additions out of my reincarnation.



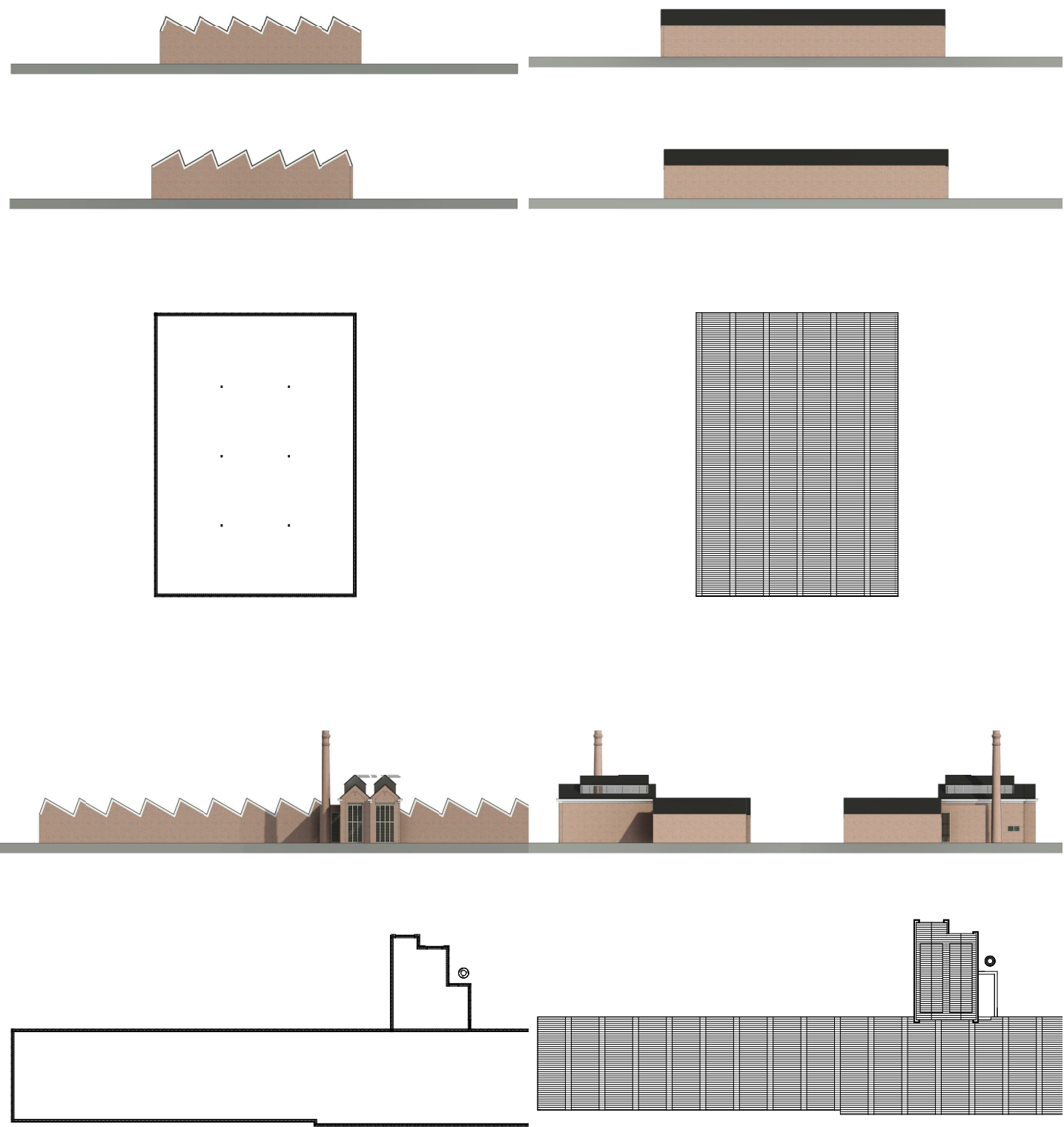
Factory Building A is pictured above. The reconstruction consists of recreating the details in the exterior facade, use of materials, construction, etc. In general, I want to make an overview to explain the ins and outs of reincarnation. How did I translate the original factory into the new layout and design?



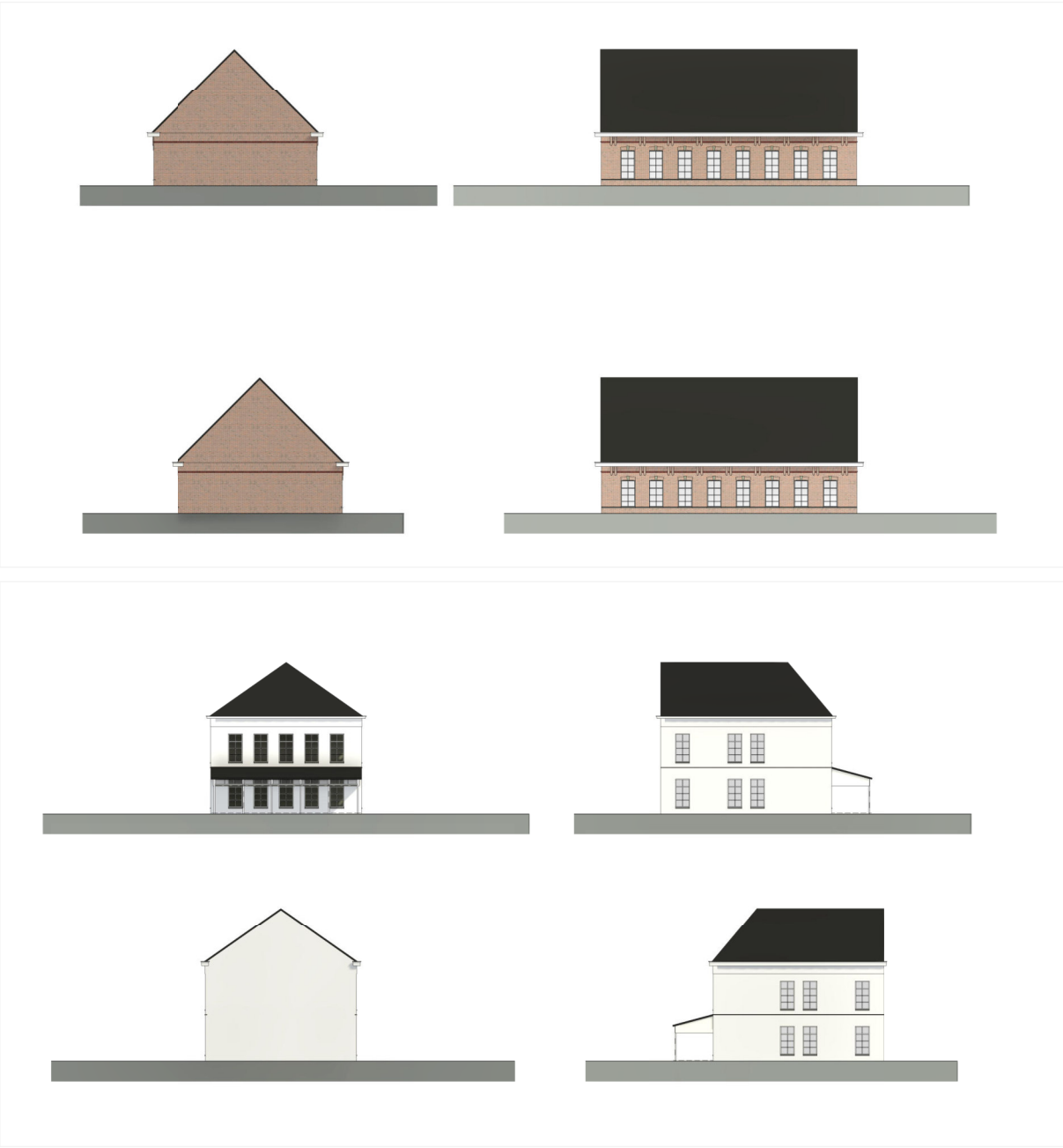
Factory Building B is pictured above. The reconstruction consists of recreating the details in the exterior facade, use of materials, construction, etc.



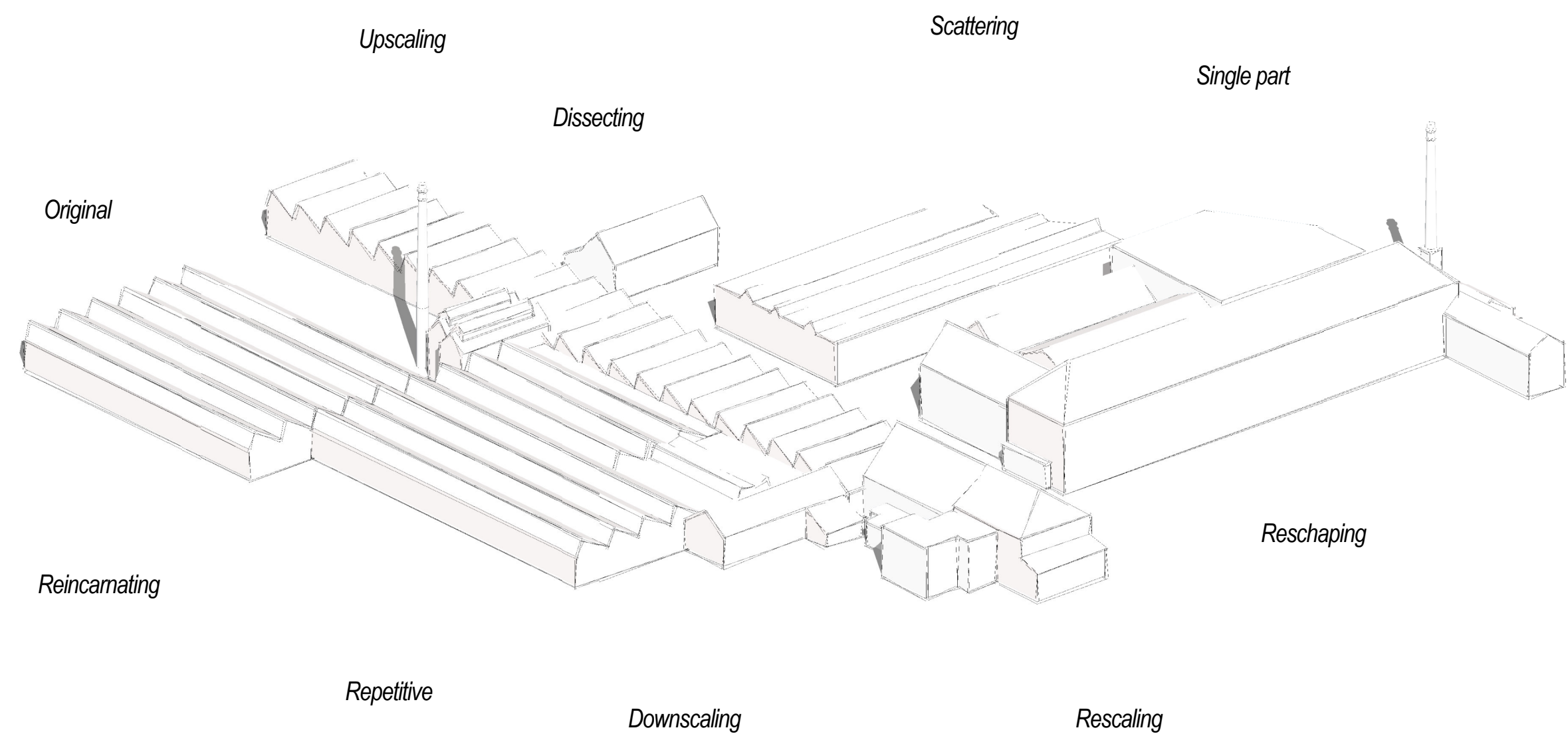
Factory Building C&D is pictured above. The reconstruction consists of recreating the details in the exterior facade, use of materials, construction, etc.



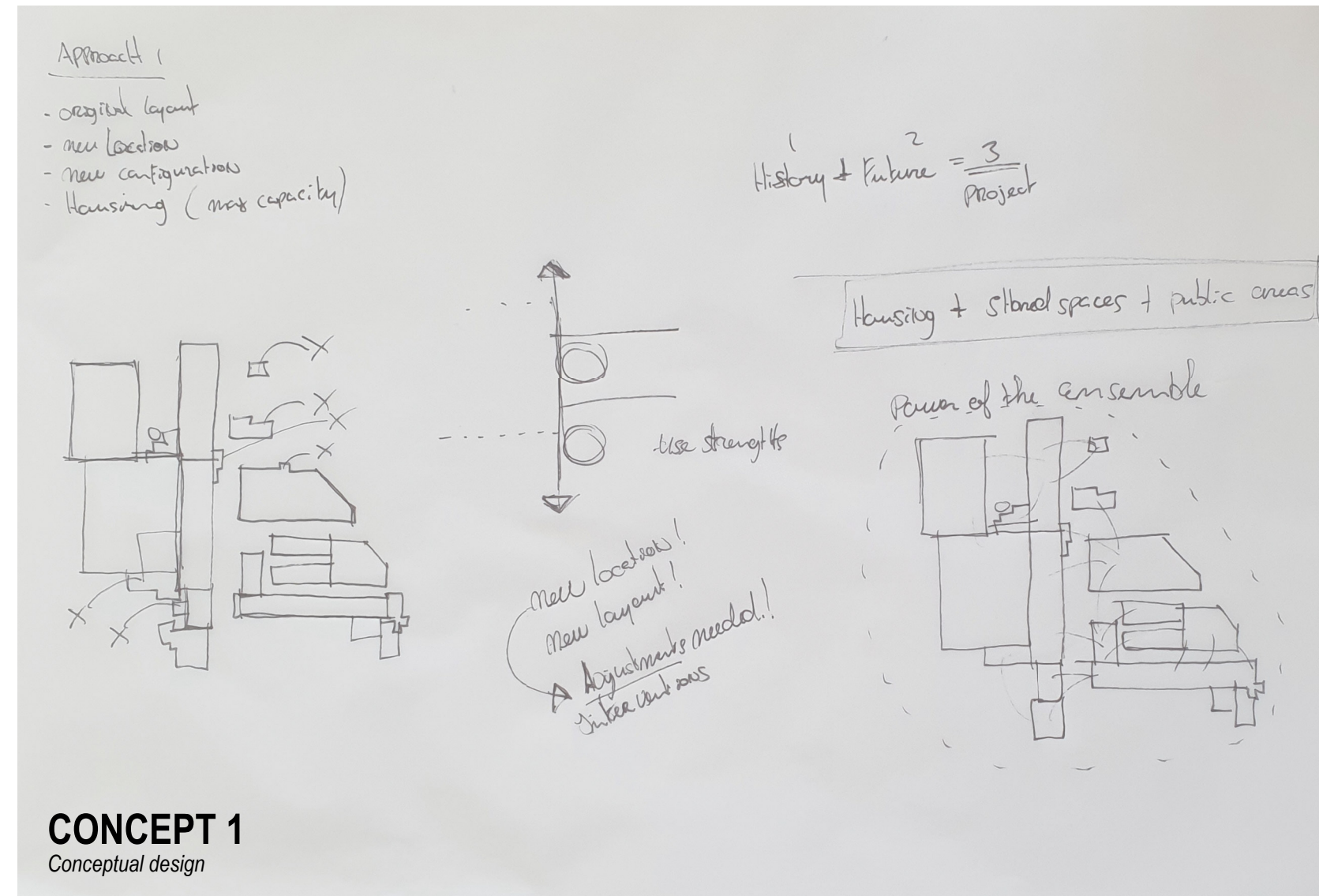
Factory Building D&E is pictured above. The reconstruction consists of recreating the details in the exterior facade, use of materials, construction, etc.

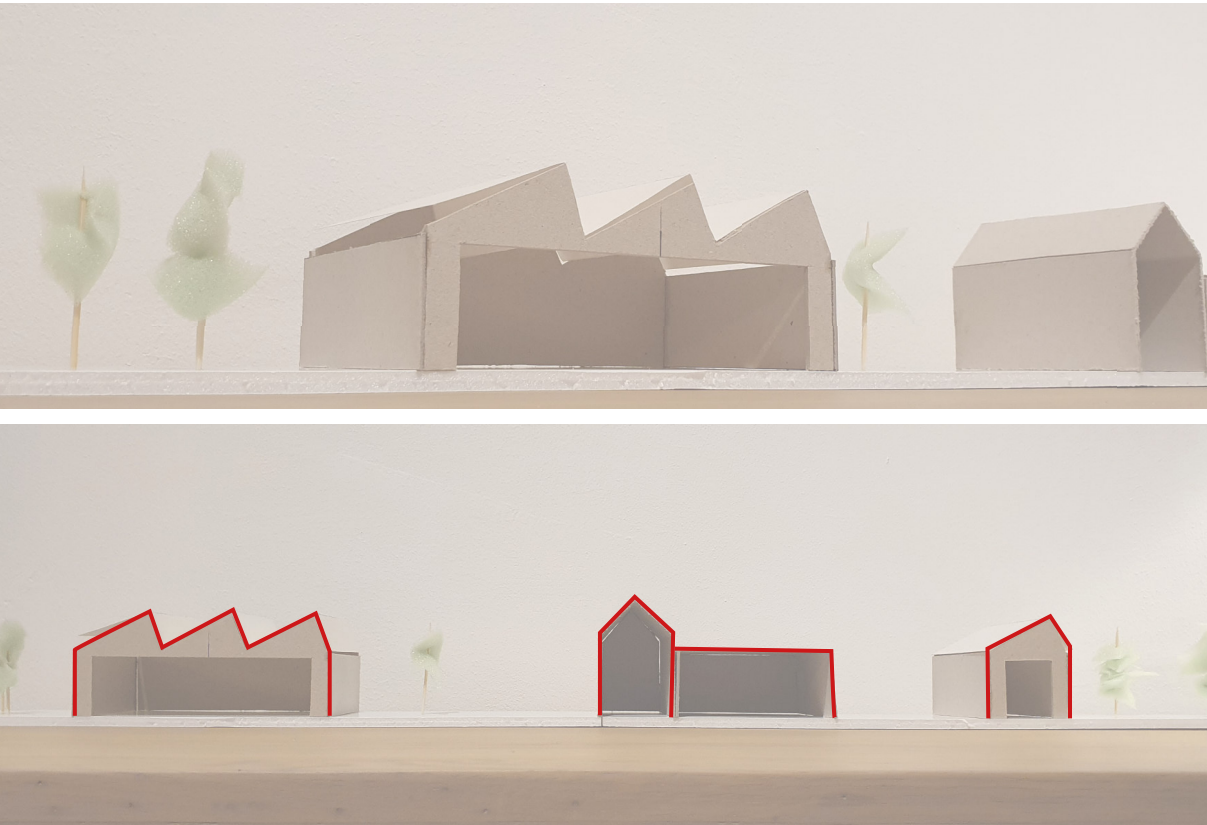
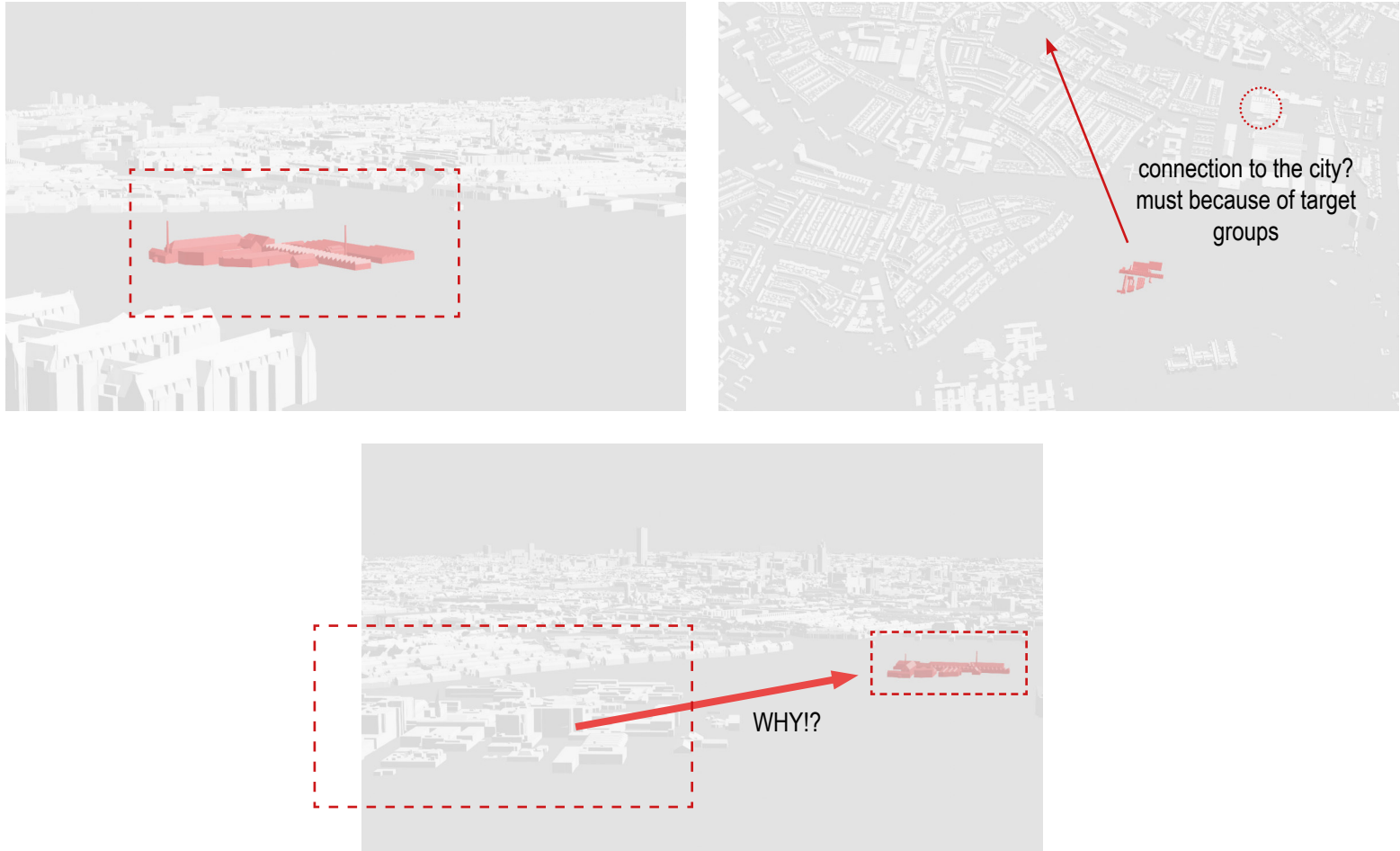


Factory Building F&G is pictured above. The reconstruction consists of recreating the details in the exterior facade, use of materials, construction, etc.



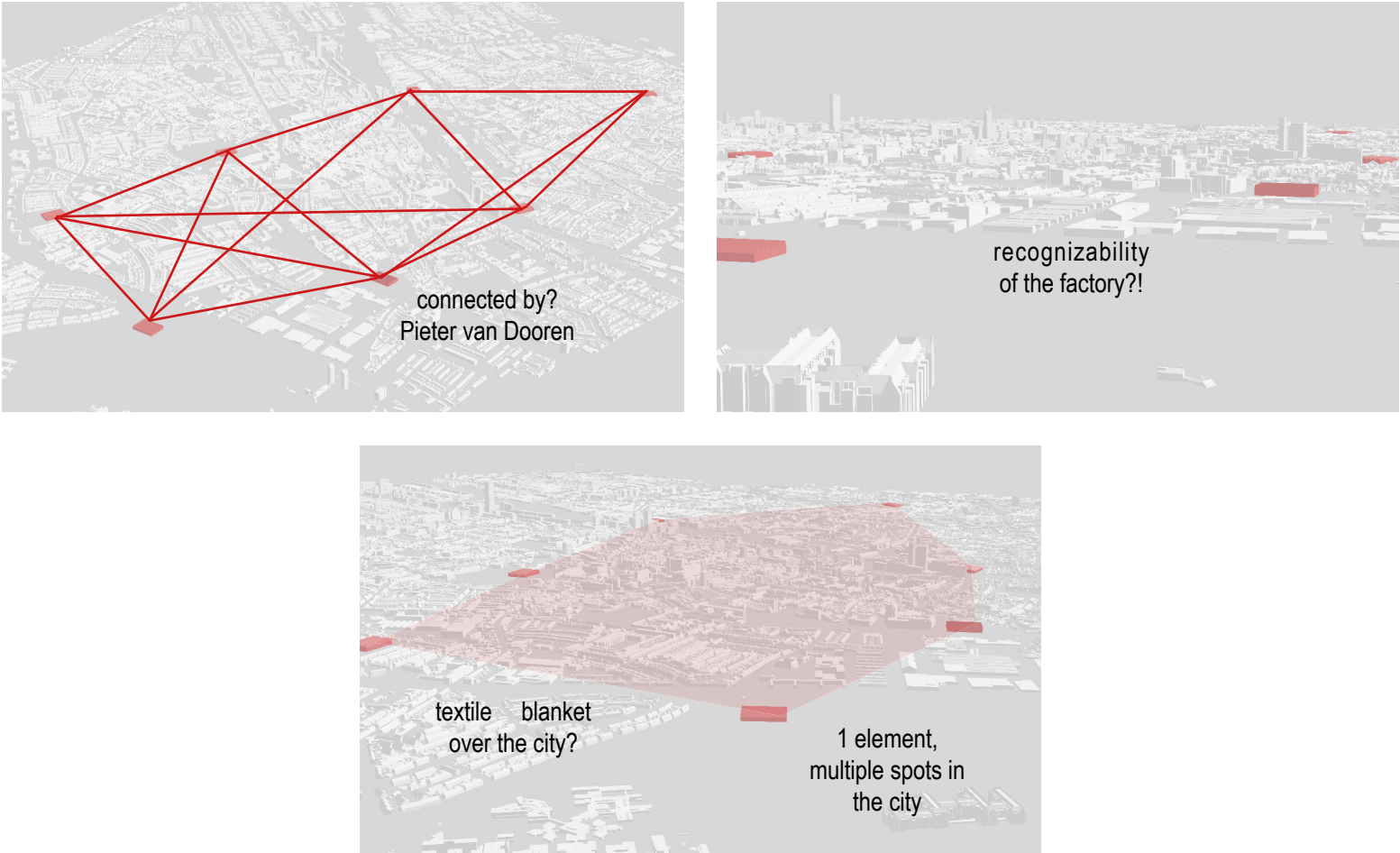
I mentioned multiple approaches during the brainstorm at the beginning of the conceptual design phase. During the phase, I thought through and presented them in the end. I decided to assign criteria for my perfect concept. In the end, I gave scores and picked one to create a hybrid concept,



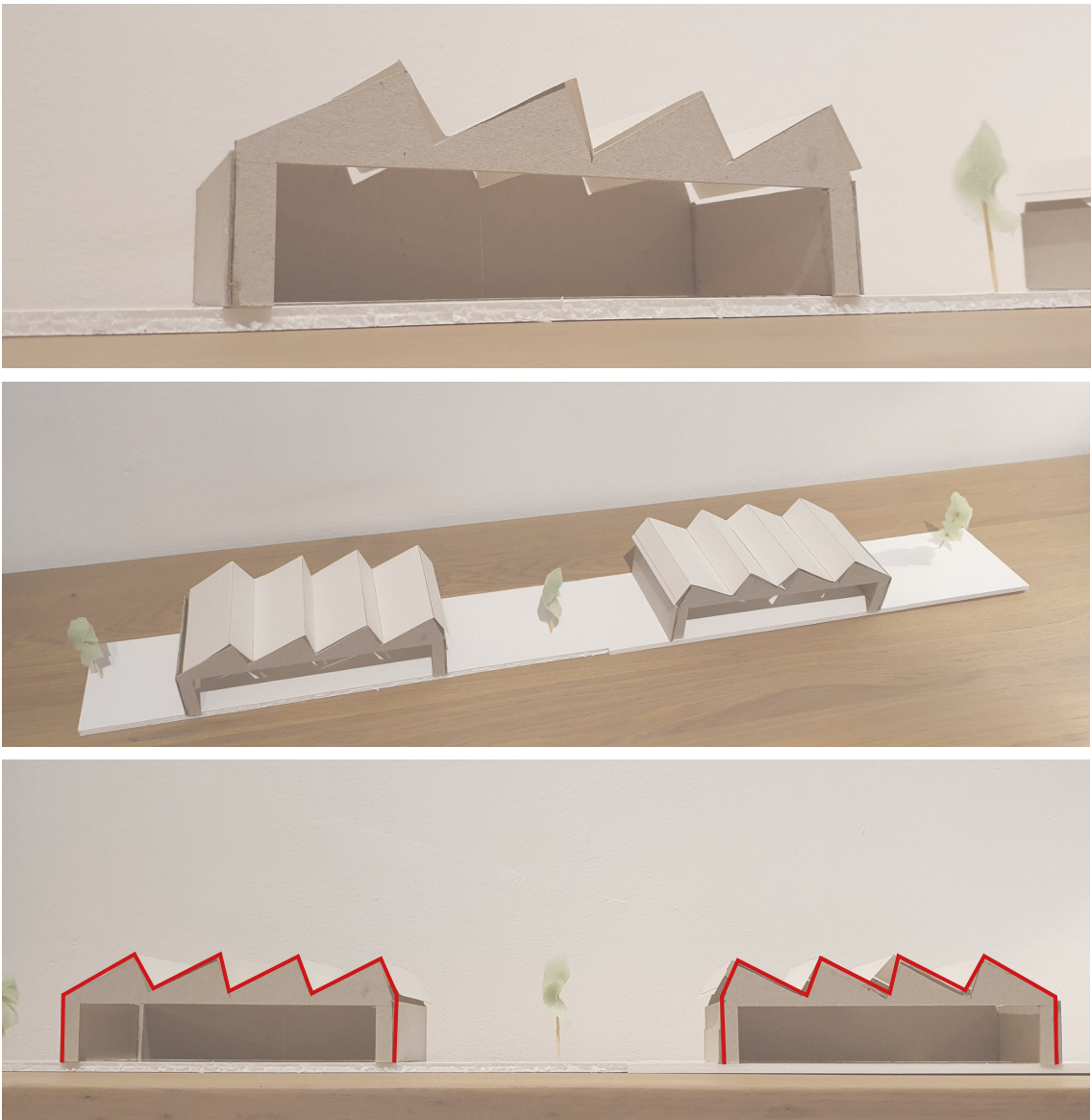


At the end of the conceptual design phase, I looked critical of the concept. Because of the target group, starters, students, single-person households and 55+, the connection towards the city centre is essential.

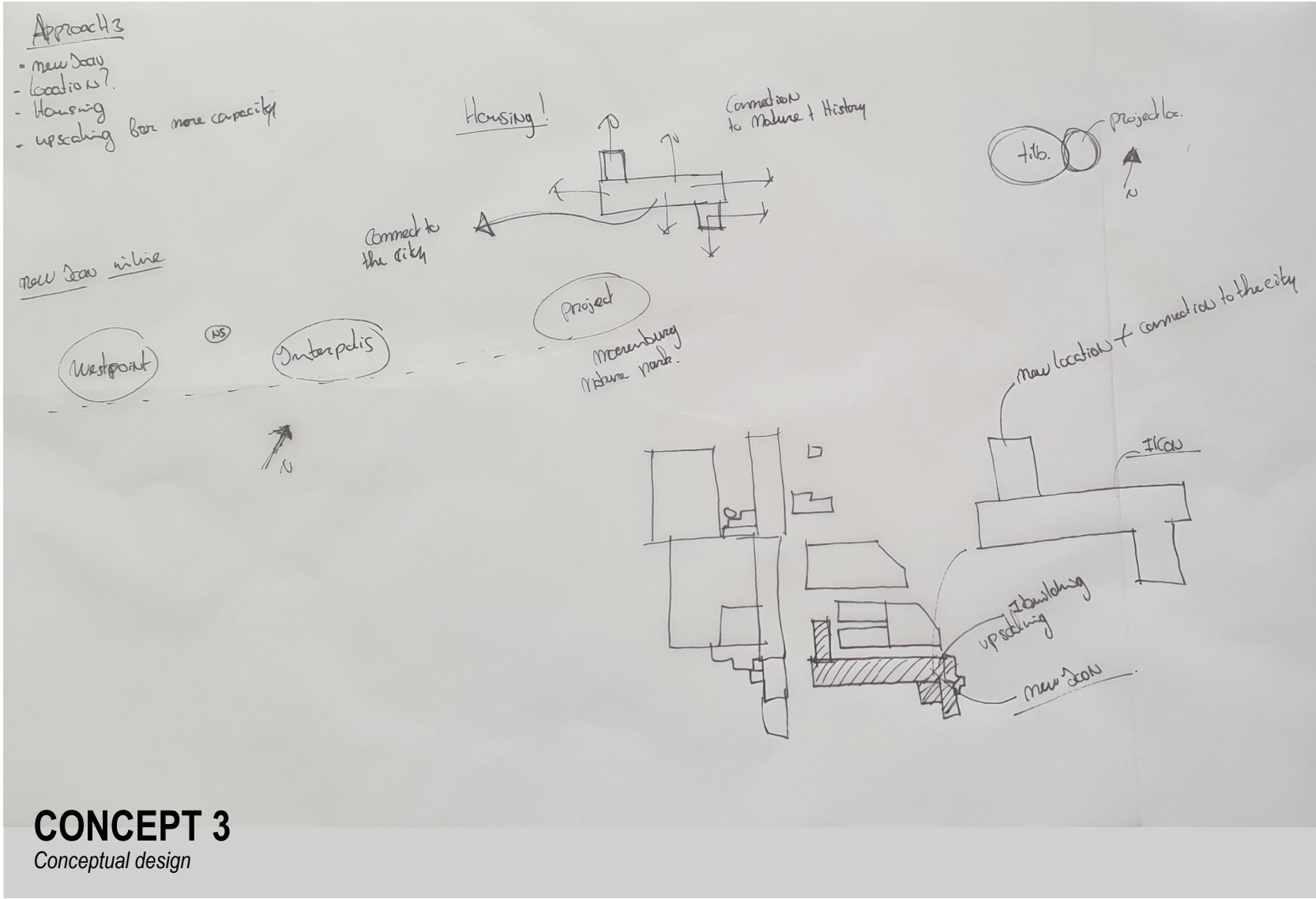
Big learning moment, these scale models gave me no new insights into the spatial qualities of the volumes. I need to approach this differently to experience the spatial attributes.



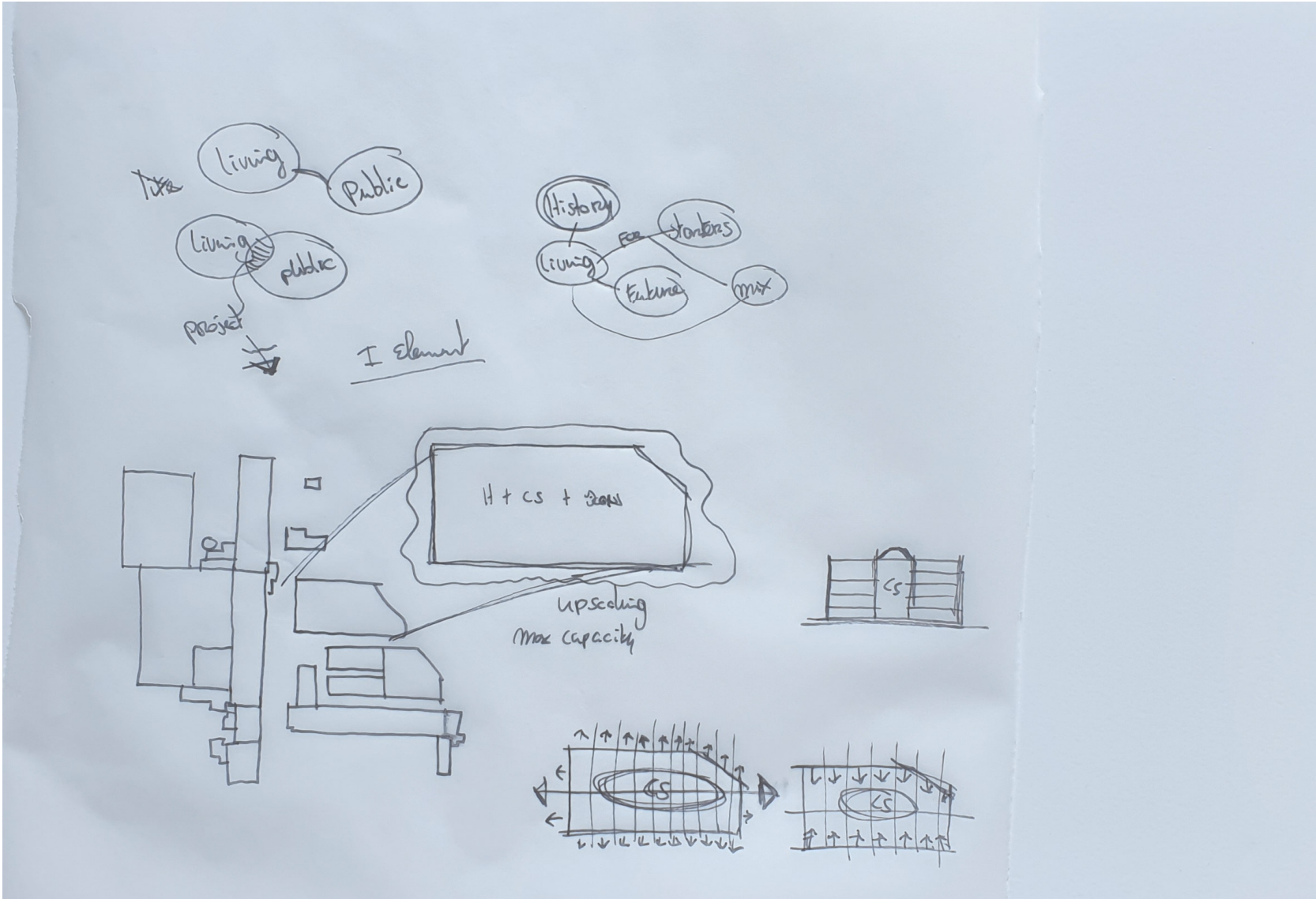
The recognizability of the factory was not at the aimed level in this approach.



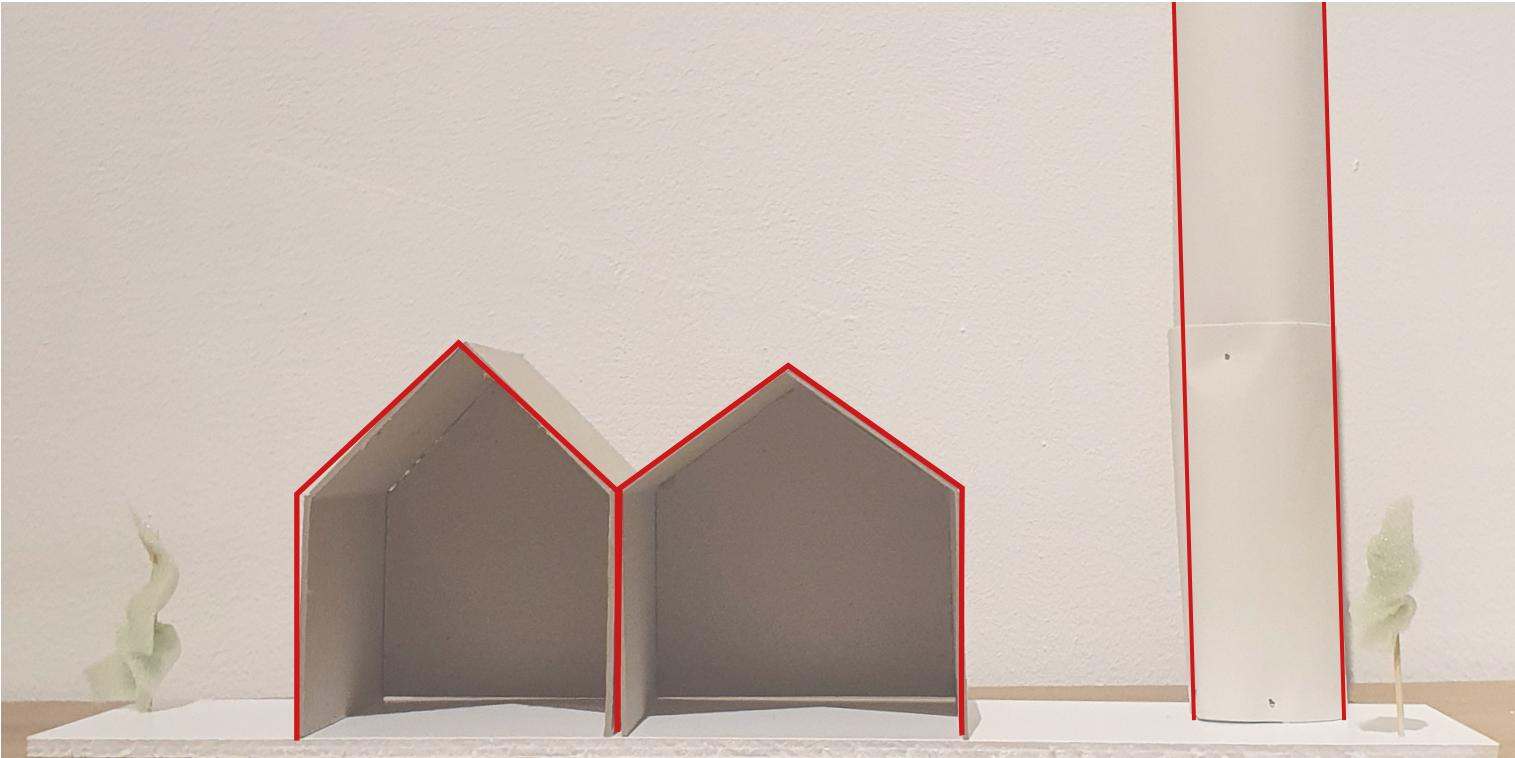
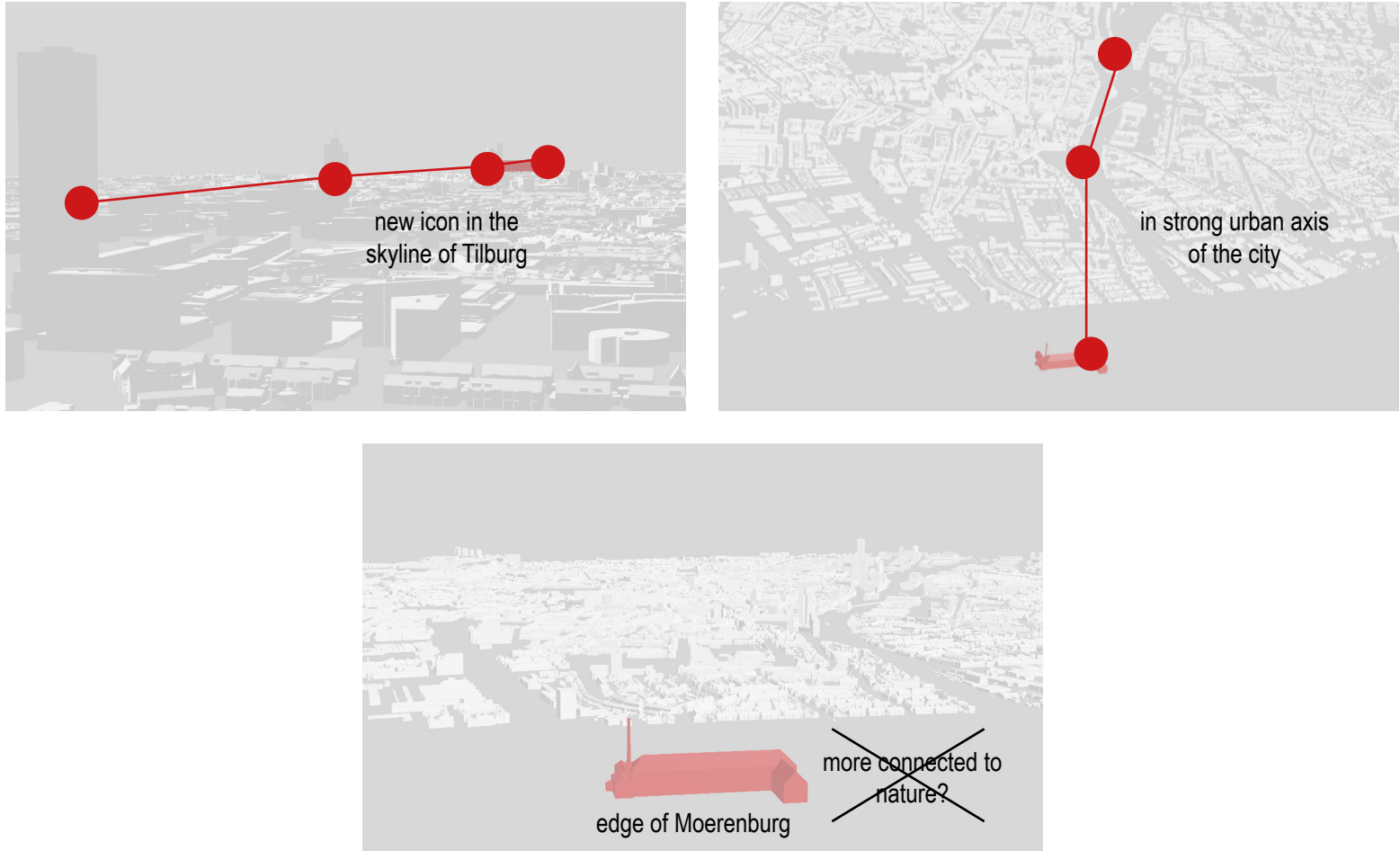
Big learning moment, these scale models gave me no new insights into the spatial qualities of the volumes. I need to approach this differently to experience the spatial attributes.



The third approach contained the idea of creating a new iconic building. This building could be placed next to the Interpolis office building, the Westpoint and the Spoorzone.



I had to scale the building up to provide new opportunities for a max capacity housing and living.



The recognizability of the factory was not at the aimed level in this approach. The idea of creating a new iconic building for the city kept cooking in my brain. Also, the location would be too far away from the centre and would not be the ideal location for the target group.

Big learning moment, these scale models gave me no new insights into the spatial qualities of the volumes. I need to approach this differently to experience the spatial attributes.

ASSUMPTIONS CONCEPT SCOREBOARD

To make a choice between the developed design concepts, I chose to do this via a score matrix. The concepts are tested against ten criteria, each criteria has a value. I have given a higher value to the criteria that I consider important because they are crucial to the project. The criteria consist of recognisability, reach, number of homes, history, densification, quality of life, location, education, public facilities and accessibility.

Recognizability
This part is very important for the project. I think it is important that the rebuilding of Pieter van Dooren's factory can be recognized as the factory that was demolished in 1975. It should be possible to see that the factory has served as the basis for the project. The value of importance is 3.

Reach
With my project I want to reach the city of Tilburg. I want to create a bridge between the past and the future by not letting the textile past of the city disappear, but by embracing it. I want to reach and inform as many people as possible. The value of importance is 1.

Amount of housing
More than 4000 homes should be built by 2040. To reduce the pressure on the housing market, I want to realize 1000 homes in this project. The loading capacity per concept is therefore crucial for the project. The value of importance is 3.

History
The connection with the past is important. I want to link the past and the future by rebuilding the factory of Pieter van Dooren. History is an important part to display in the project. Historical

truths should be present in the project. The value of importance is 3.

Densification
Tilburg's plan is to densify the city in the inner city. This means that space must be optimally used within the city limits, expanding to nature reserves is no longer desirable. The value of importance is 3.

Quality of life
The quality of life in the future complex is of great importance. It is not only about rebuilding the factory, but also about adding a quality living environment within Tilburg. The value of importance is 2.

Location
The location differs per concept. The location for concept A is located on a vacant lot near the Piushaven, a major development is planned on this site. This location has a strong connection with the nearby facilities and is close to the south ring road. The location for concept B is spread across the city. At various places in the city with connections to the past, one part of the factory is being rebuilt with the purpose of living. By spreading across the city, more people come into contact with the textile past. The location for Concept C is located on the edge of the city, in the Moerenburg nature park is a large meadow. A good place for the development of one iconic architectural building that represents the city of Tilburg. The value of importance is 2.

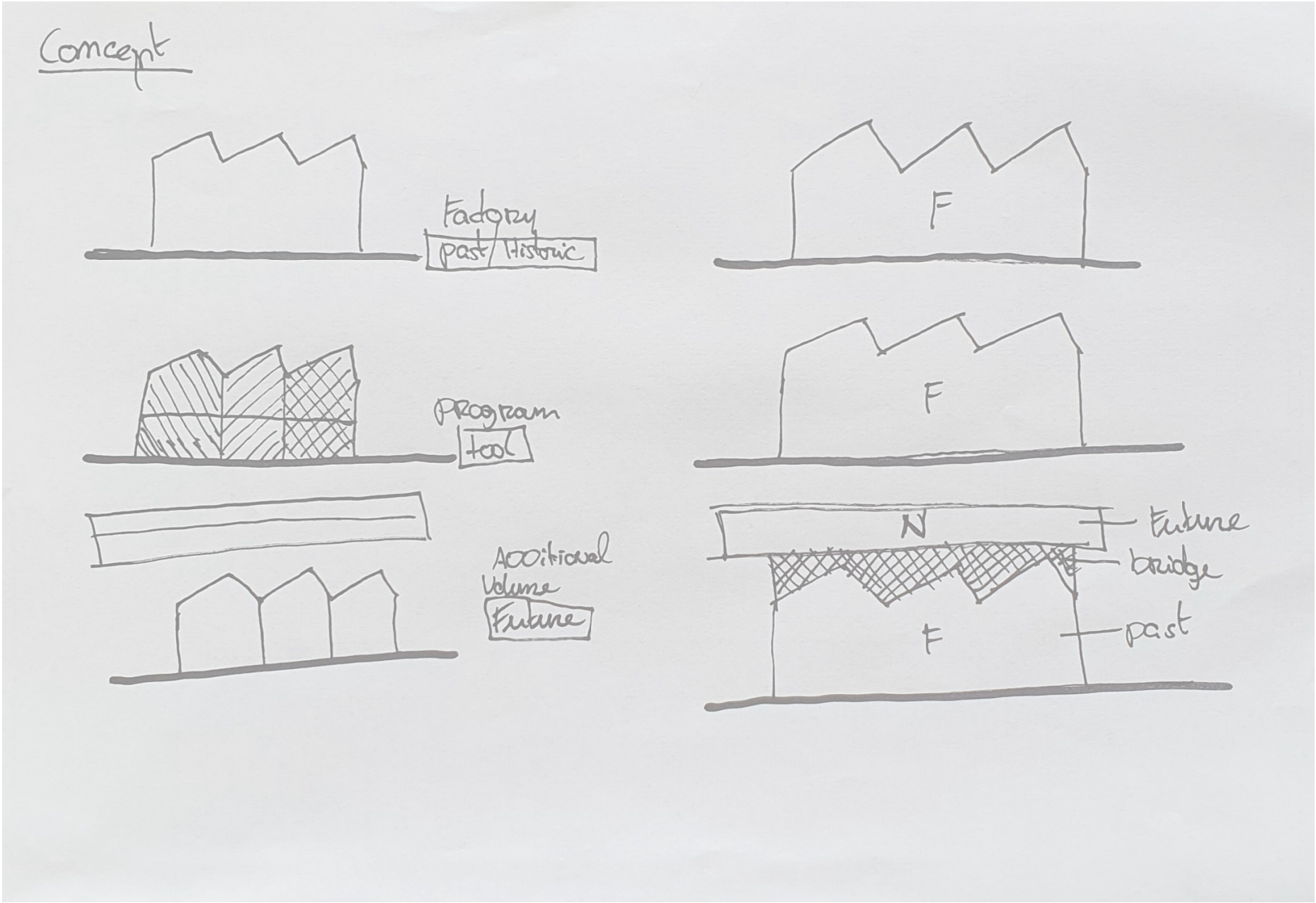
Education
It is important that the rebuilding contributes to providing information about Tilburg's textile past. The building should play a crucial role in this and should be informative for the environment. The value of importance is 2.
Public facilities

Public facilities improve the quality of life. This is directly related to the location and the opportunities that arise from it. These public facilities can be incorporated into the factory if they are not present on site. If these are present, the connection with these surrounding facilities and the factory and its use is important. The value of importance is 2.

Accessibility
This component is also closely related to the choice of location. It is important that the rebuilding of the factory fits in with the environment. The factory must also be accessible from the existing environment and must be appropriate within the existing environment. The value of importance is 3.

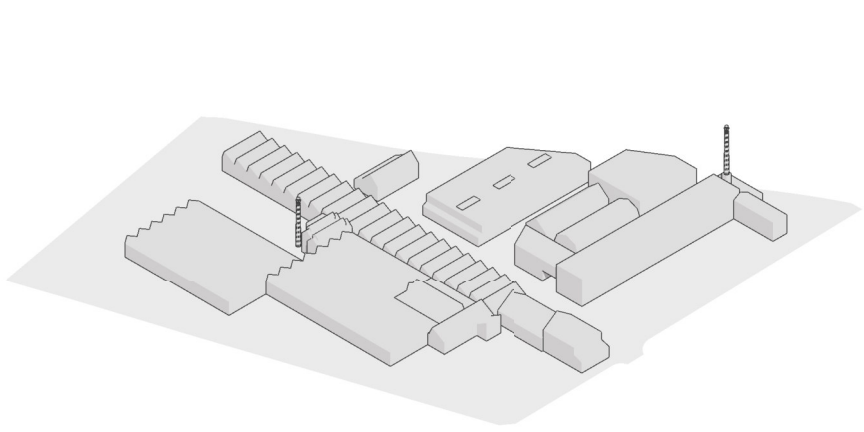
CONCEPT SCOREBOARD									
#	Criteria	Value of importance	Concept A Resurrection	Concept B Scattered City	Concept C Iconic				
1.	Recognizability	3	5	15	1	3	1	3	
2.	Reach	1	4	4	4	4	2	2	
3.	Amount of housing	3	4	12	4	12	2	6	
4.	History	3	5	15	2	6	2	6	
5.	Densification	3	3	9	4	12	1	3	
6.	Quality of Life	2	4	8	4	8	2	4	
7.	Location	2	2	4	3	6	1	2	
8.	Education	2	3	6	1	2	2	4	
9.	Public facilities	2	4	8	2	4	2	4	
10.	Accessibility	3	4	12	1	3	1	3	
totals			93	60	37				

Concept A has been chosen to continue.

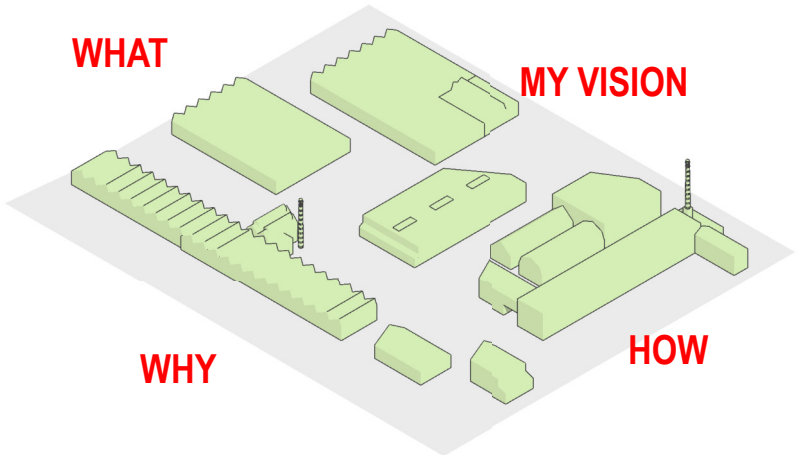


The first concept is consistent best with my values and starting points for the further elaboration of the project. That's why I decided to work further on the first concept but make some small other explanations in the concept.

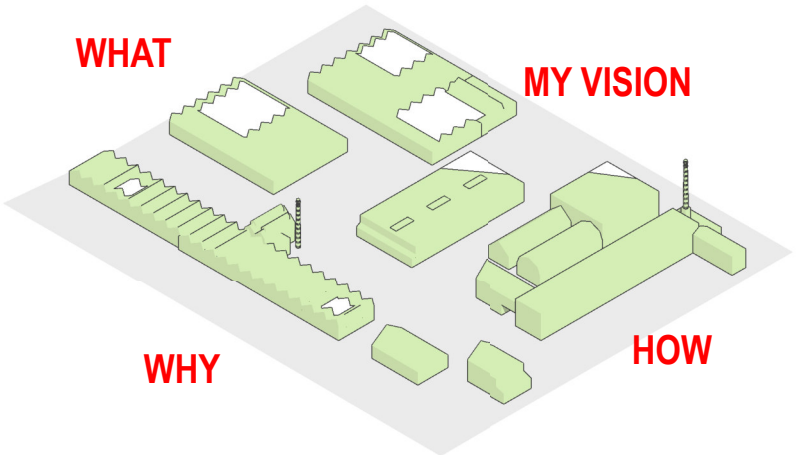
Based on the first concept, I continued to think about the function and approach of the factory and what it stands for. Then I came to a conclusion to use the factory to create a bridge between the past and the future. Then, we build on the past. By rebuilding the factory and adding new modern volumes, I want to shape this spatially.



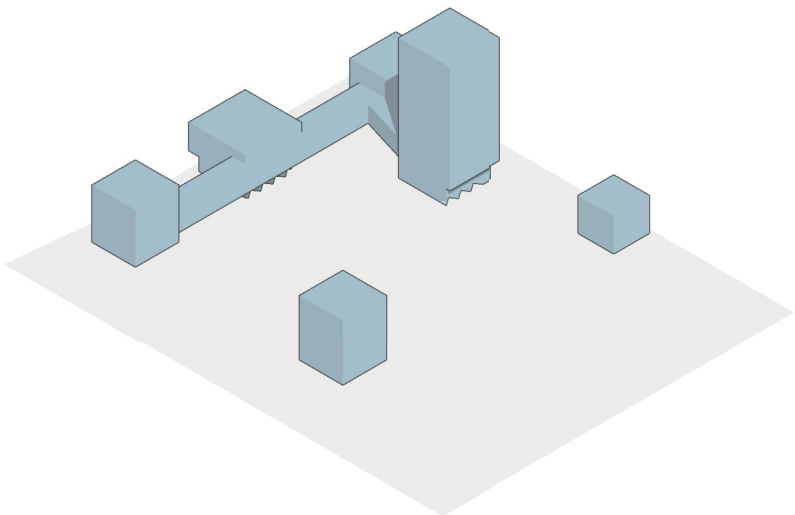
the original factory (original layout & location)



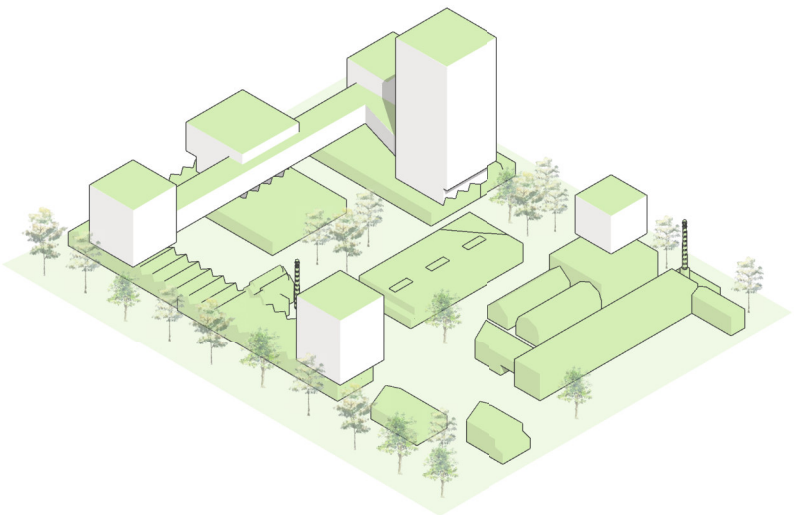
the reincarnation (new layout & location)



design interventions



new volumes, additions to the factory



final design

The concept of the project was developed further during the year. During the definitive design presentation I presented the final approach.

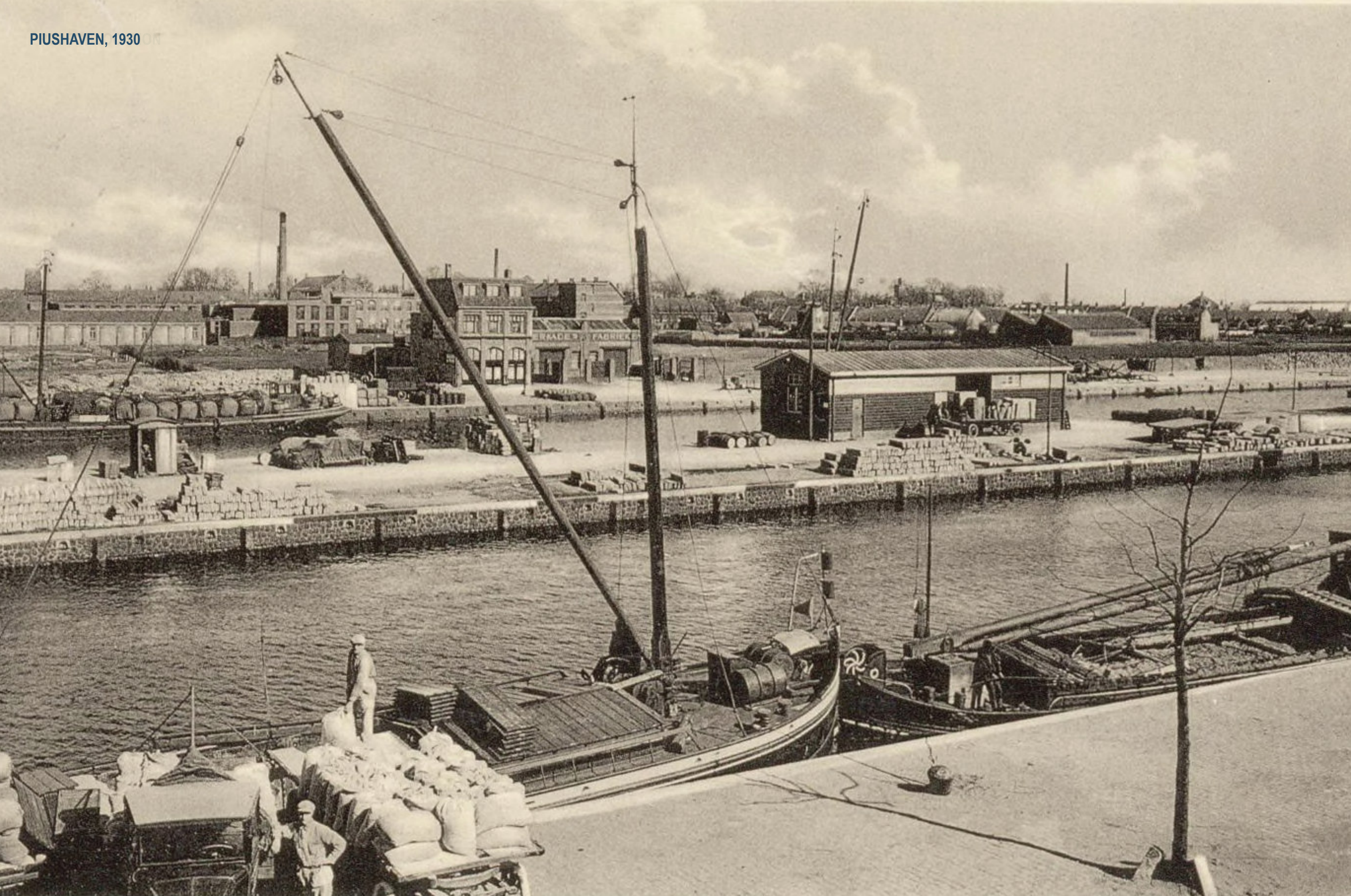
SITE ANALYSIS

Project location

The municipality of Tilburg (municipal code GM0855) has become larger from the municipality of Haaren during a municipal reorganization in 2021. The municipality of Haaren has transferred 10% to the new municipality of Tilburg. The former municipality of Haaren continued to the municipalities of Oisterwijk, Vught and Boxtel.

The project is in the Piushaven, located towards the Eastern side of the Fontys academy.





WHY THIS LOCATION?

Project location

The Piushaven in Tilburg is known for its industrial past. The port is also known for its redevelopments with a link to industry and factory history. Near the bridge “Den Ophef”, located between the Aabe factory and the water. At this location, the municipality has plans to realize a residential area called “the factory quarter”. I want to show the possibilities of this place. I will do this by rebuilding one of the most special and historically important textile factories Tilburg has ever known and by realizing large-scale housing.

- In short;
- The link with the industrial past of the Piushaven
 - Developments of “het Fabriekskwartier”
 - Inner-city densification as a spearhead from the municipality - Connection with the textile architecture through the adjacent Aabe factory.
 - Bustling place with many amenities and events.



SITE ANALYSIS

District - Fatima

About district Fatima
District Fatima has completed a total area of 53 hectares, of which 52 land and 1 water (100 hectares is 1 km²). The average density of addresses is 3,163 addresses per km². There are 1,690 households in the Fatima district. Neighbourhood Fatima is a neighbourhood in the municipality of Tilburg.



The graphics show an overview of photographs I made of the surroundings of the project location.

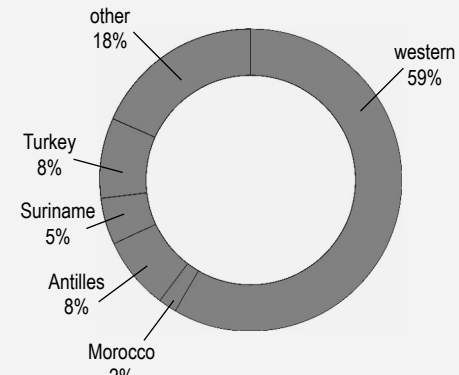


Outdated buildings with a dilapidated appearance characterize the area. There is little cohesion in the area, and there is also a lot of open terrain with differences in height. There is an immediate difference in the number of cars parked on the water compared to neighbouring streets.



This is because this street is not (yet) part of the inhabited area. The street scene on the water will become dilapidated and come across “after the fact”. Such a street scene does not match the rest of the port area. There are also some homes in the area. These should be retained in the redevelopment plans of the site. It is striking that almost the entire environment around the area is ready for the next 50 years. Only the space itself requires intervention.

migration background 2021



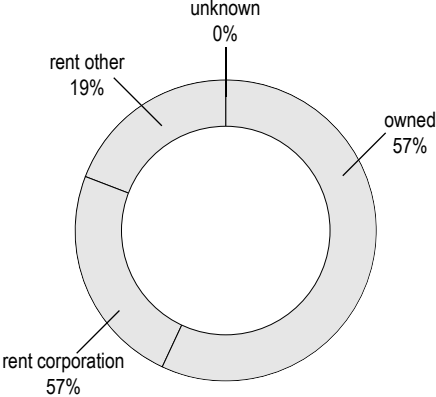
NUMBERS & FACTS ABOUT FATIMA

Number of inhabitants per year (growth from 18% to 3,255 inhabitants in 2021). The number of inhabitants for the Fatima district. Data for the years 2013 to 2021.

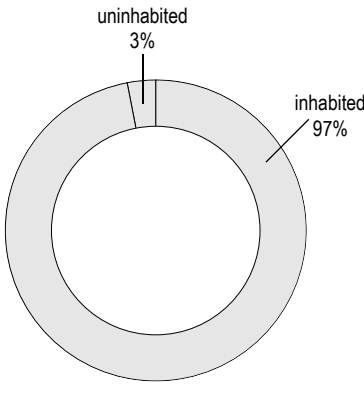
The number of inhabitants in the Fatima district has increased by 503 people from 2,752 in 2013 to 3,255 in 2021 (that is 18%). The number of inhabitants is the number of persons as recorded in the population register on 1 January. Characteristics of the 1,530 homes in the Fatima district. Average WOZ home value per year (large increase from 33% to €215,000 in 2020). The average of the WOZ values (Real Estate Valuation Act) for the Fatima district.

The average home value in the Fatima district has increased by €53,168 from €161,831 in 2013 to €215,000 in 2020 (that is 33%).

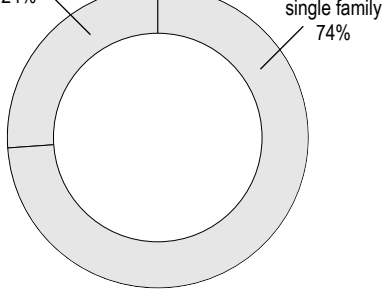
property



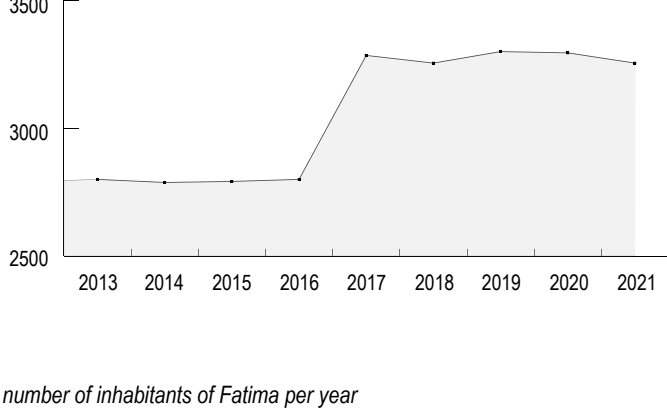
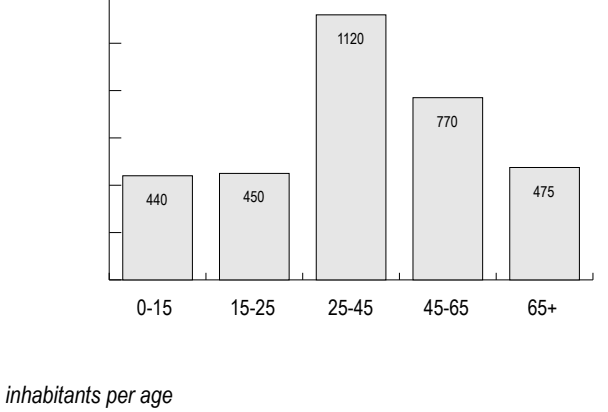
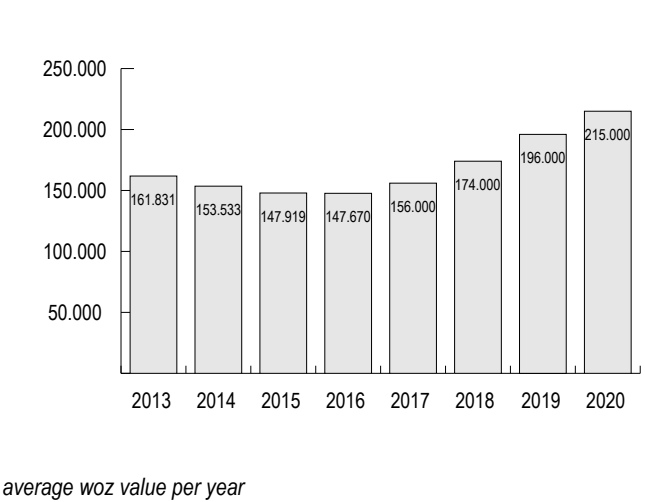
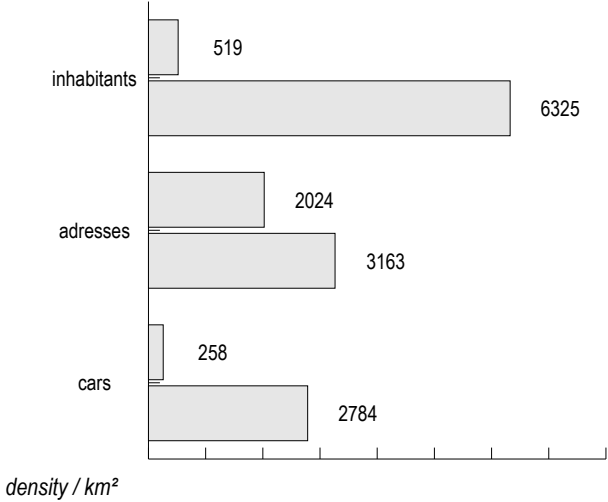
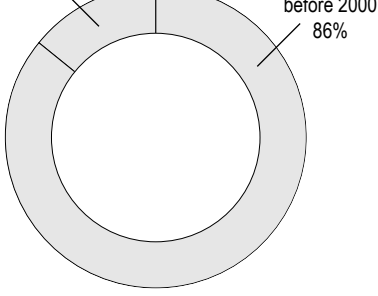
inhabitation



housing type



year of construction



Number of inhabitants per year (growth from 18% to 3,255 inhabitants in 2021). The number of inhabitants for the Fatima district. Data for the years 2013 to 2021.

The number of inhabitants in the Fatima district has increased by 503 people from 2,752 in 2013 to 3,255 in 2021 (that is 18%). The number of inhabitants is the number of persons as recorded in the population register on 1 January. Characteristics of the 1,530 homes in the Fatima district. Average WOZ home value per year (large increase from 33% to €215,000 in 2020). The average of the WOZ values (Real Estate Valuation Act) for the Fatima district.

The average home value in the Fatima district has increased by €53,168 from €161,831 in 2013 to €215,000 in 2020 (that is 33%).

The district is one of the fastest-growing in Tilburg. 86% of the dwellings are constructed after the year 2000. The main reason for this is the developments of the Piushaven.

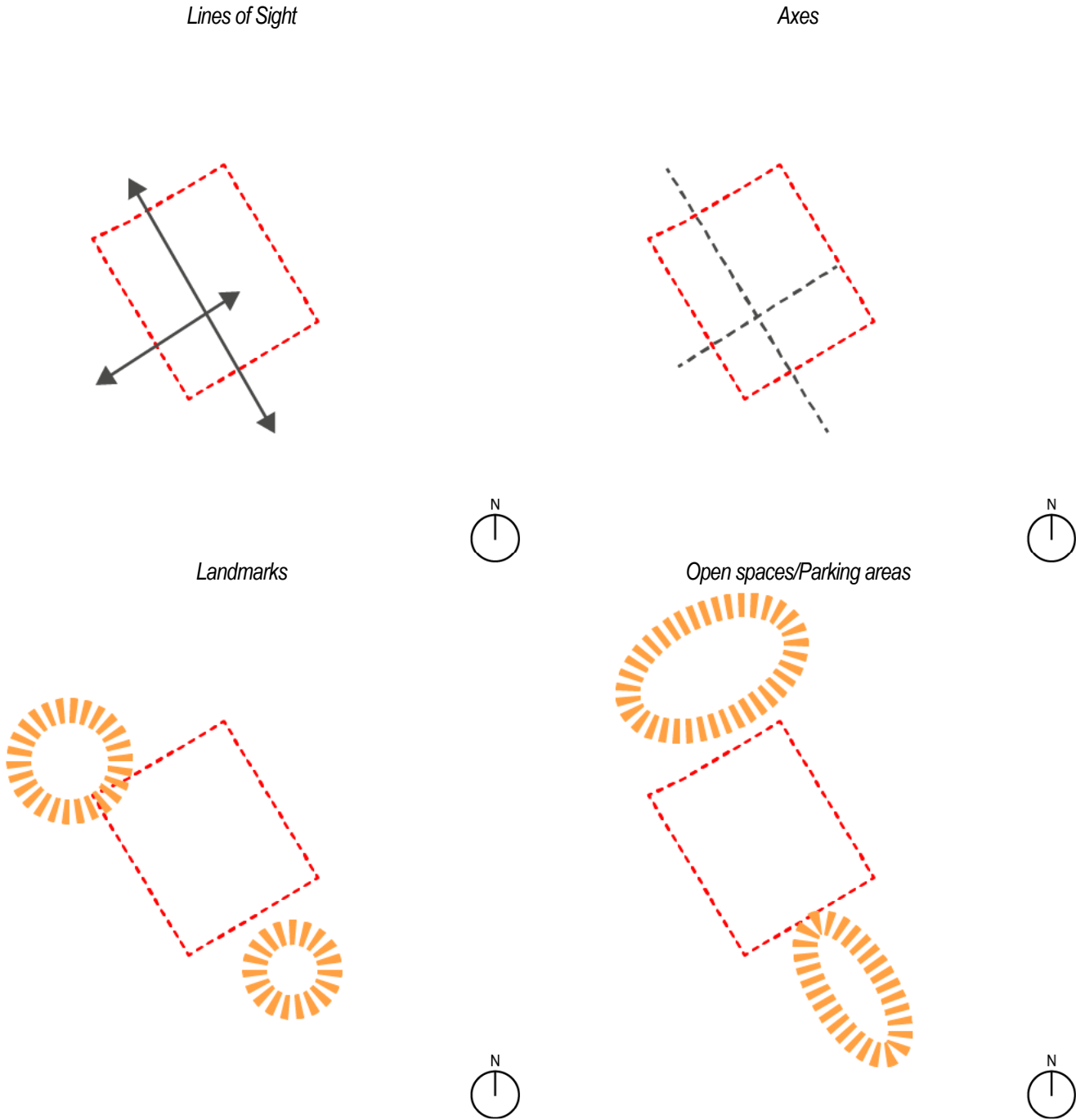
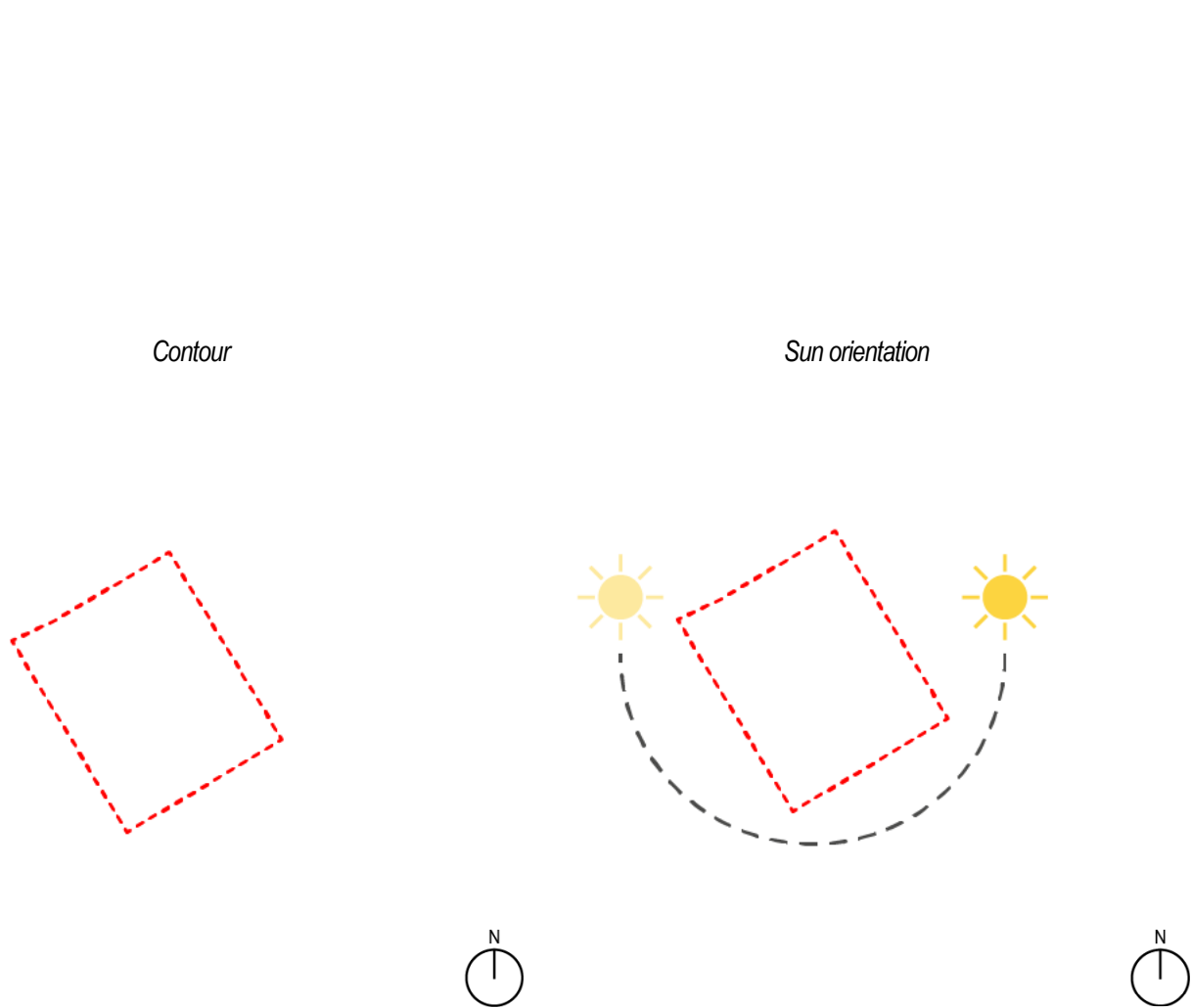
A large group of people between 25-45 years old live in the district. There are a lot of public services already for this target group, and because of this, this group will only grow shortly when possibilities are there.

LAYER ANALYSIS

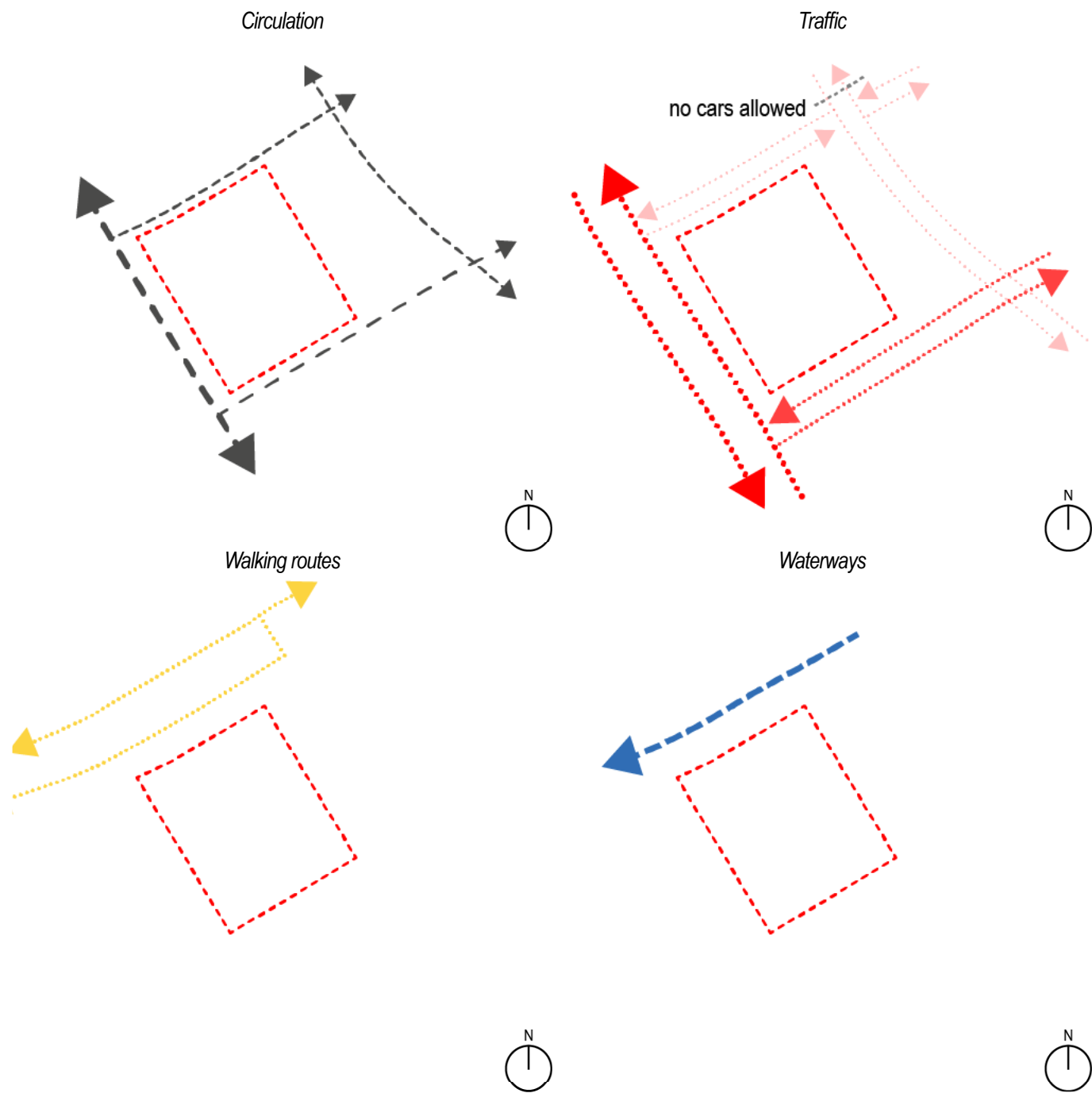
Project location

To analyse the area on several levels, I opted for the layer analysis. Through this method I get a better grip on the situation and the project location step by step.

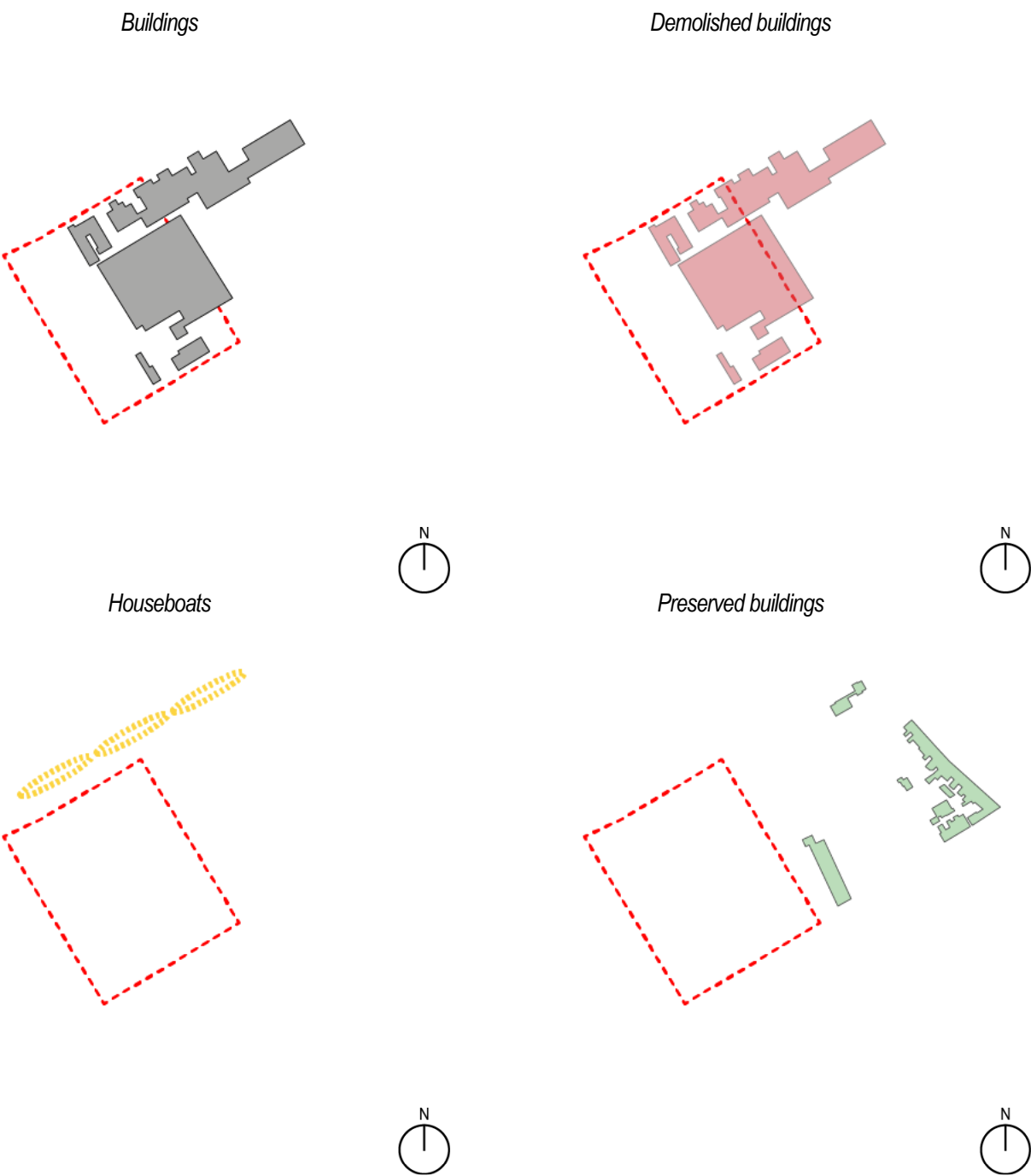
To begin with, the size of the project area. It is a pleasing shape to work with. I made a solar study to integrate the sun's position into the design at a later stage. It was unnecessary to include buildings in the solar research because it is generally low-rise.



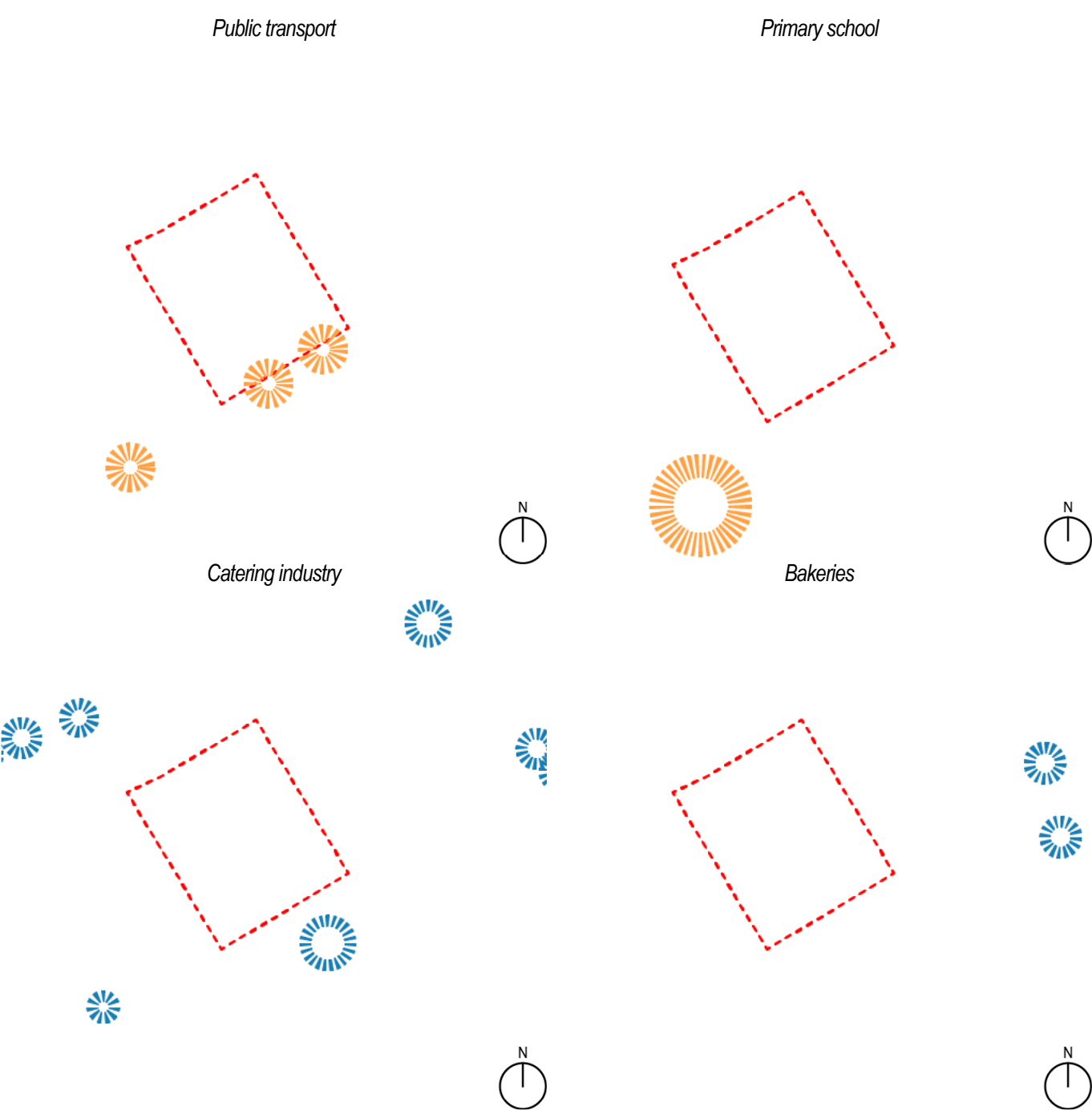
To get over the water, there are several places where a bridge has been placed to do this. One of these bridges is "den ophef", a pick-up bridge with an industrial character. This fits perfectly into the environment and the past of the area. The second unique bridge is a swing bridge. By turning this bridge, two sailing routes are created. Unique bridges that are still in operation utilizing an old technique. Icons that provide circulation within the port area in the Piushaven.



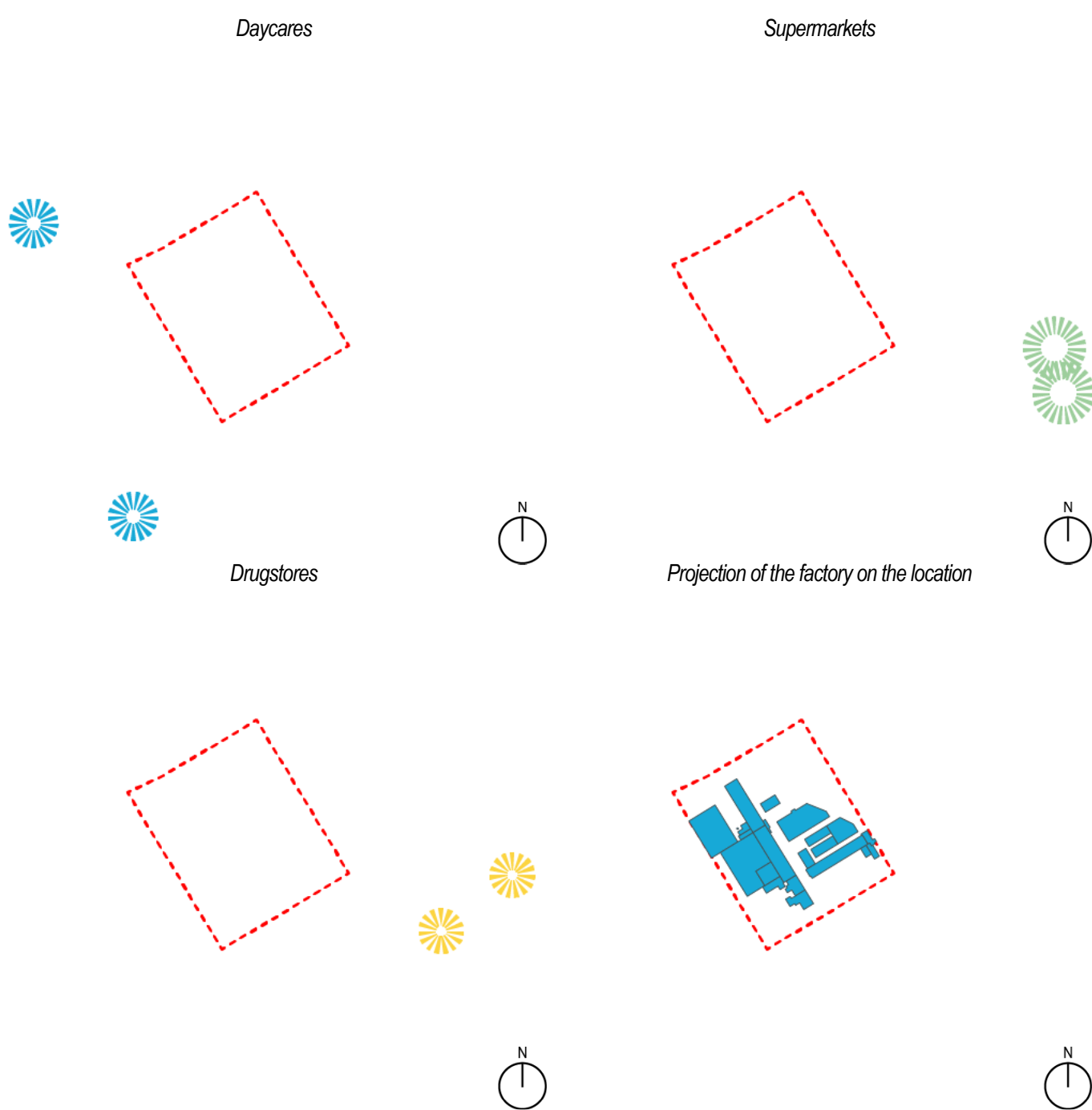
Important traffic routes surround the project site. The main road leading to the centre is on the southwest side of the area and crosses the water to the left and towards the centre. It is possible to reach Tilburg Central Station via this road. The other roads provide access to ring road east or ring road south. These are the main ring roads of Tilburg. The harbour's water is the reason why many people like to walk in the Piushaven. Calm water and beautiful walking paths, close to the busy centre of Tilburg. The ultimate place to relax and enjoy the pleasure of boating.



There are currently existing buildings on the project site. This building will be partly demolished to make way for the construction of a residential area. The existing buildings have been an eyesore within the port area for quite some time. There is also a part of the existing buildings that I will preserve. This has a typical architecture that is common in Tilburg. The mooring of various houseboats also characterizes the Piushaven. The houseboats on this side of the Piushaven deserve a better connection with the rest of the buildings and the surrounding infrastructure. Addressing the area also affects the surrounding area and its relationship to the waterway.



There are many amenities in the area. There is a primary school located in the Fatima district. There is another one on the other side of the water. Childcare facilities are also frequently available in the area. There are various childminders and childcare locations where children are welcome during the day.



To get an idea of the size of the area and whether I could make the factory complex of Pieter van Dooren fit on the plot, I projected the last location of the factory on the plot. There is sufficient space to position the factory on the site.



Bus stop



Walking routes



Waterway of the harbour

ROUTING



Houseboats in the harbour



Preserved buildings



Bakery

HOUSING



Parking lot north-side
Aabe Factory



“Den Ophef”

ICONIC BRIDGE

SCHOOL+DAYCARE

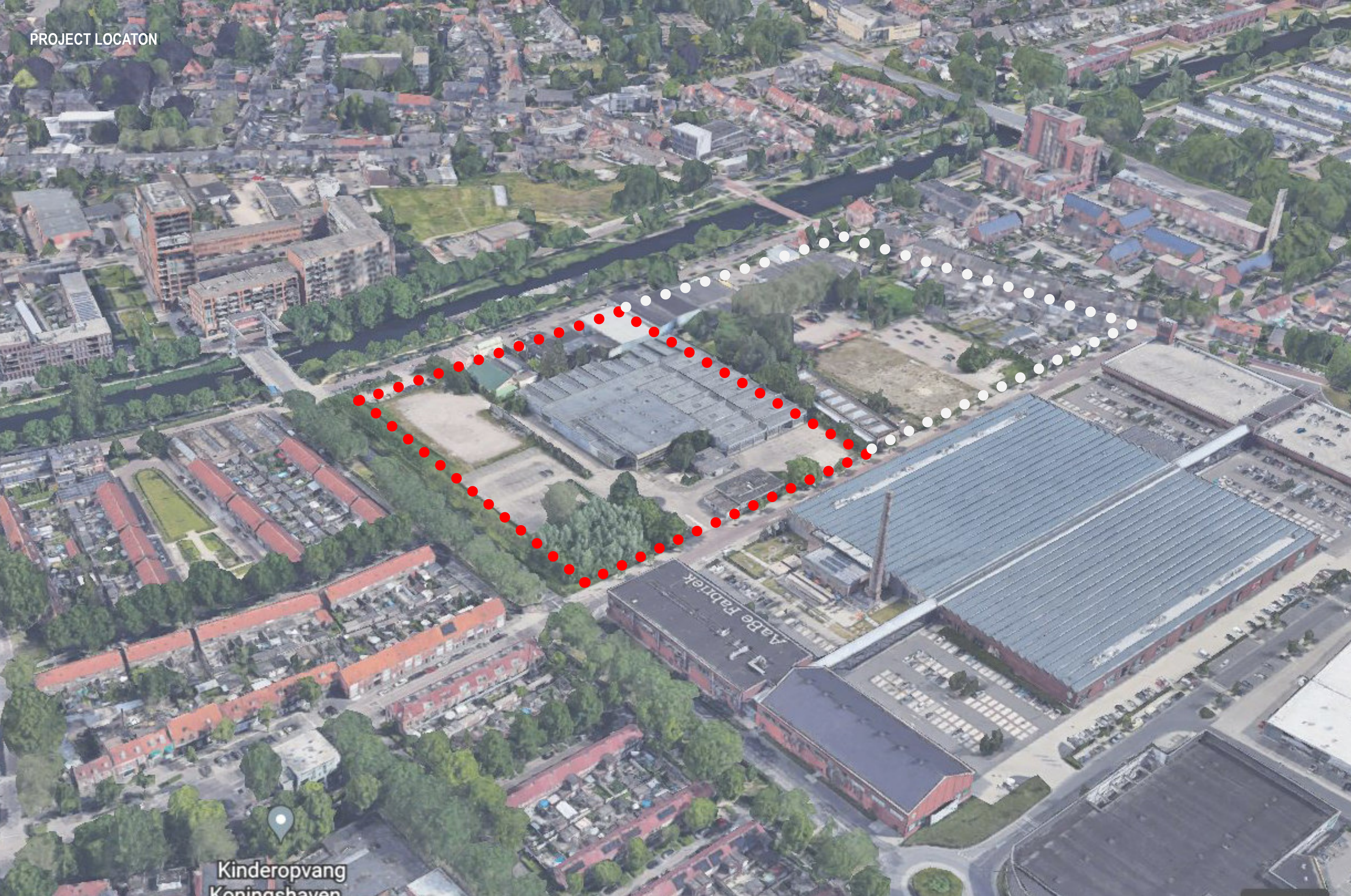


Daycare Panta Rhei



Primary school “Koningshaven”

Industrial look and feel in the surrounding of the project location. It is shown a lot of development has been done in the area already.



CONCLUSION

Site analysis

The location offers opportunities in the field of development, housing and it deserves more. The current situation does not deserve the beauty prize in terms of architecture and/or attractiveness. There is a lot of potential in this location due to its location and surrounding facilities. Tilburg's vision is to densify the (inner) urban areas. This is because the nature reserves around Tilburg must be preserved, so it has been decided to no longer expand the boundaries of the city, but to deal creatively with the space within the boundaries of the city.

The Piushaven is one of the industrial residential areas that have put Tilburg on the map in recent years. During the location analysis I noticed that the surrounding buildings are ready for the coming years, with the exception of the project area. This location has everything to be transformed into a successful residential area. Its industrial character and history make it a perfect location for the rebuilding of Pieter van Dooren's factory. The location requires an intervention in which housing is central.

TYPE-A	
shared spaces	m²
livingroom + kitchen area	
storage/techn.laundry room	12

private spaces	m²
bathroom	5
bedroom	25
total:	30

TYPE-B	
shared spaces	m²
livingroom + kitchen area + office	
storage/techn.laundry room	12
multi functional space	15

private spaces	
bathroom	4
bedroom	14
livingroom + kitchen area	18
storage space	4
total:	40

TYPE-C		
shared spaces		m²
storage/tech/laundry		6
multi functional space		20
total		26

private spaces	
entrance	3
techn.	1
toilet	1
livingroom + kitchen area	30
bedroom	16
bathroom	4
storage	5
total:	60

COMMUNAL AREAS		
parking garage for (shared) cars		400
parking garage bicycles		600
communal livingroom		1000
flexarea for communal ideas		1000
flex work spaces		300
outdoor areas (relax, sports and recreation)		-

TYPE-D	
entrance	6
techn.	1
toilet	1
livingroom + kitchen area	45
bedroom	10
bedroom	15
bathroom	8
storage	5
laundry room	4
total:	95

PROJECT PHILOSOPHY

In my vision, communal spaces are crucial in the future. These areas initiate social interaction. There is an incre-
asing amount of single-person households. Because of
this, smaller living areas are realisable combined with
communal spaces. Private outdoor spaces are also
banned from the project. I want to inspire people to go
outside and meet new people in and around their neigh-
bourhood.

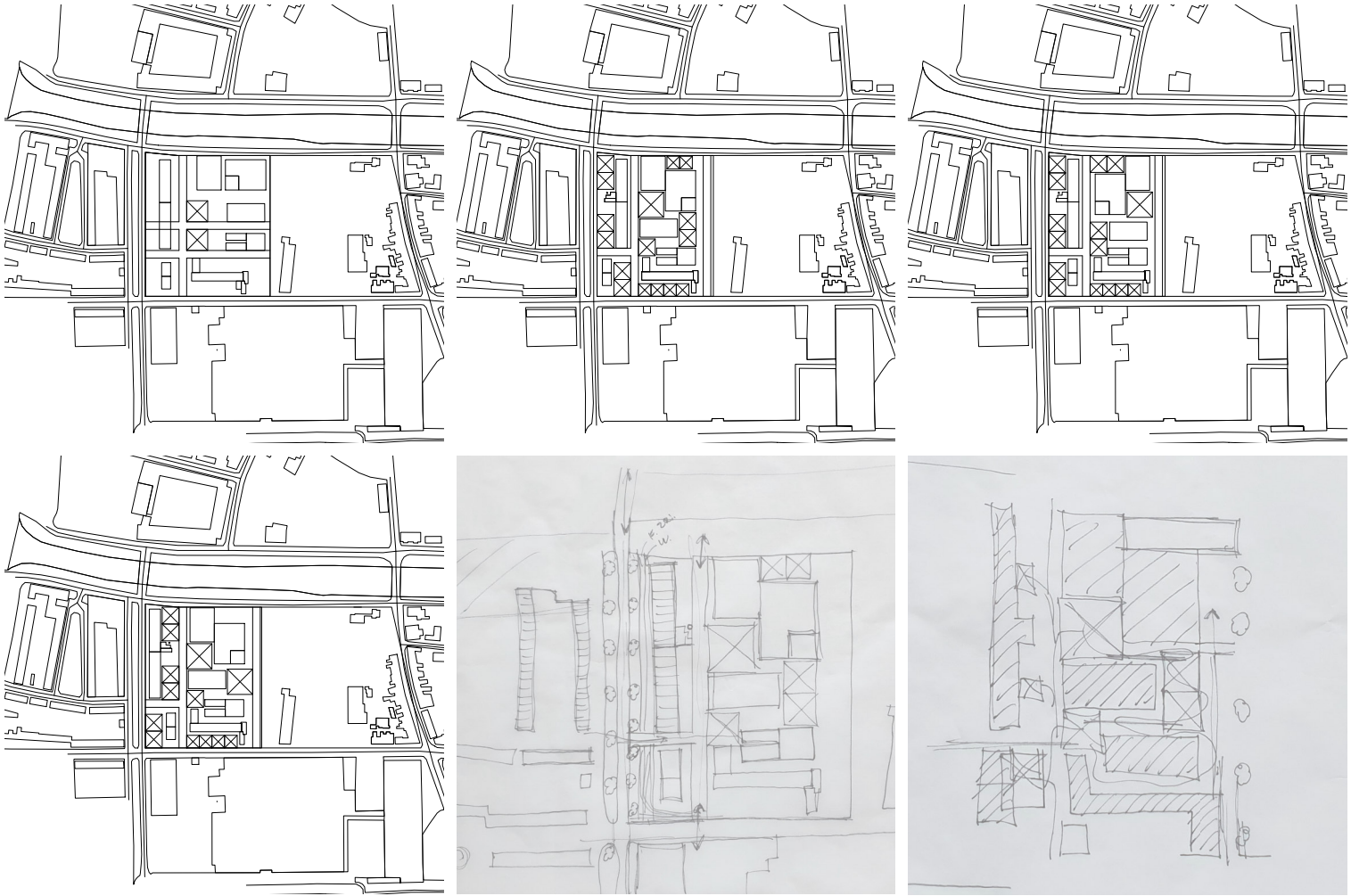
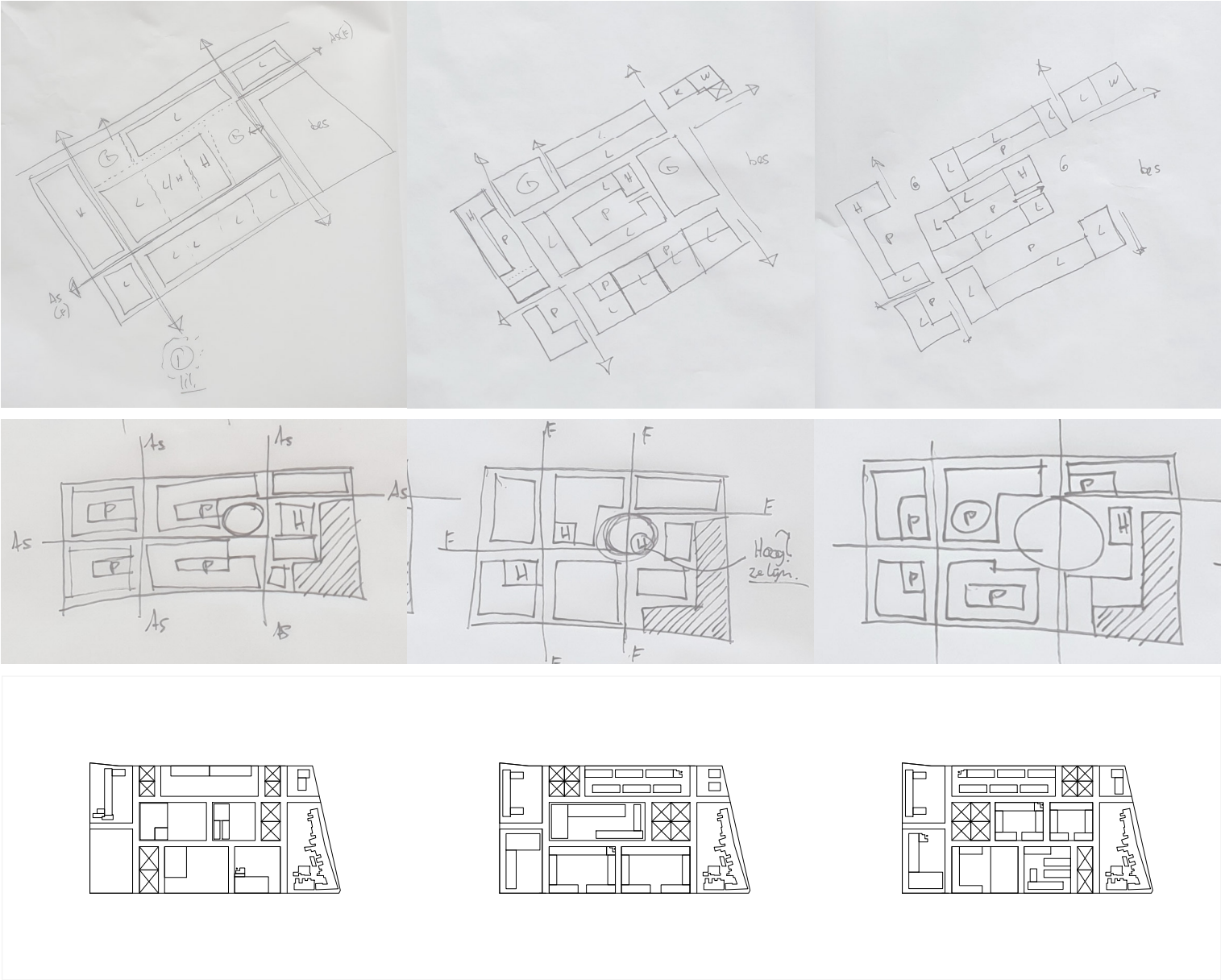
The four typologies illustrate different ways of living in the factory complex. The smallest space is 30m², strongly connected to communal spaces. The second type is 40m² and is also
connected to communal spaces. The third and the fourth types are more independent than the first two. These types are needed to attract a different target group. This mix of target
groups is required to make the complete area profitable.

TARGET GROUP:

starters
1 persoonshuishoudens
2 persoonshuishoudens
55+

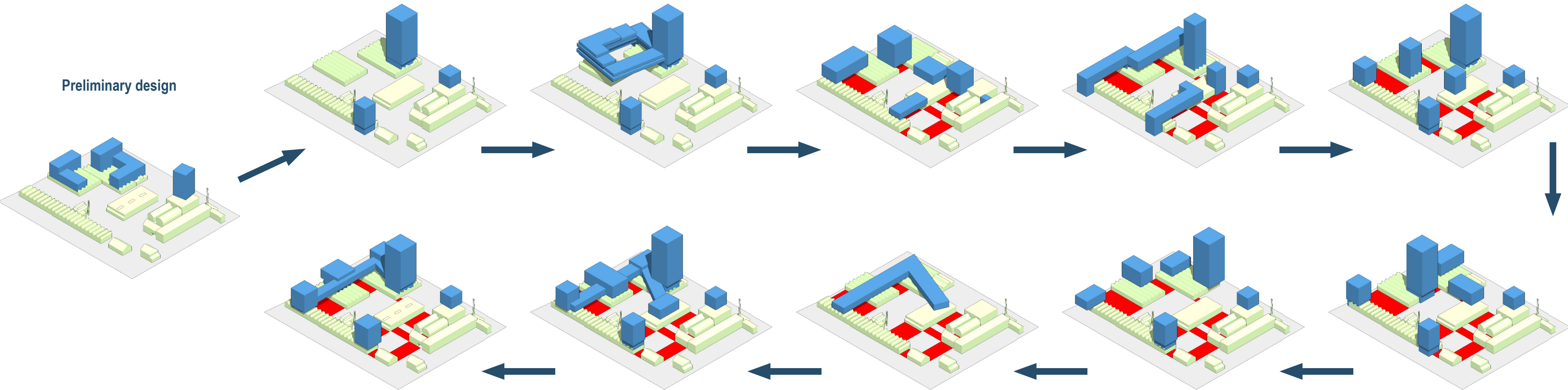
The mix of target groups with different types of living in the
strength of the community.

page conclusion: The mix of target groups with different types of living is the strength of the community.



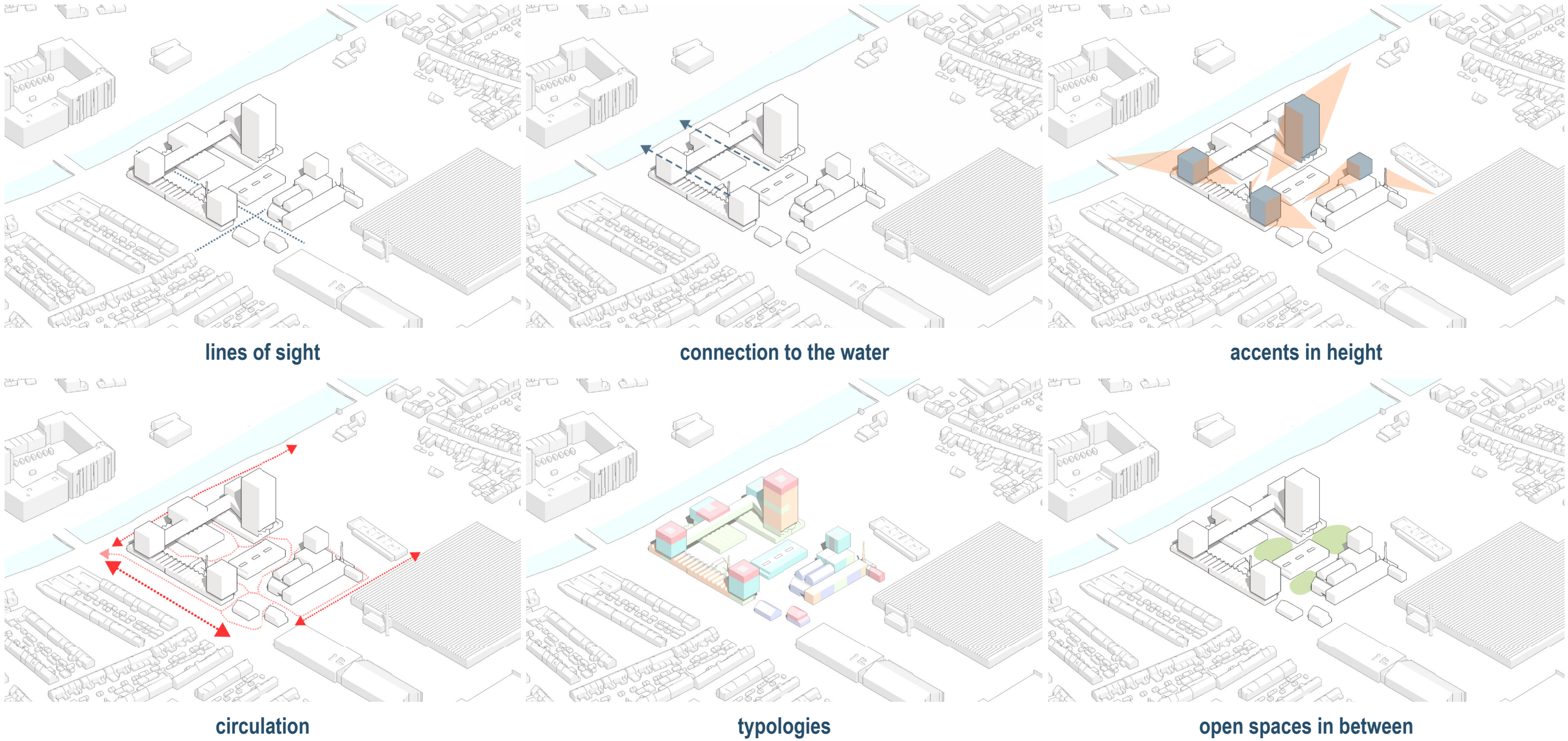
The plot is too big for the rebuilding of the factory. The next step is to reduce the project area to 2.4 hectares to increase the density and stay closer to a reincarnation of the factory.

Using a smaller surface makes it possible to achieve a higher density. An important conclusion is that the original factory complex is more suitable for a more compact surface due to the original relationship between the buildings. The urban planning analysis provided insights that I have translated into this master plan study. Step by step, closer to a first draft of the master plan. These studies gave me insights into the interrelationships of building envelopes and the spacing necessary to create "air".

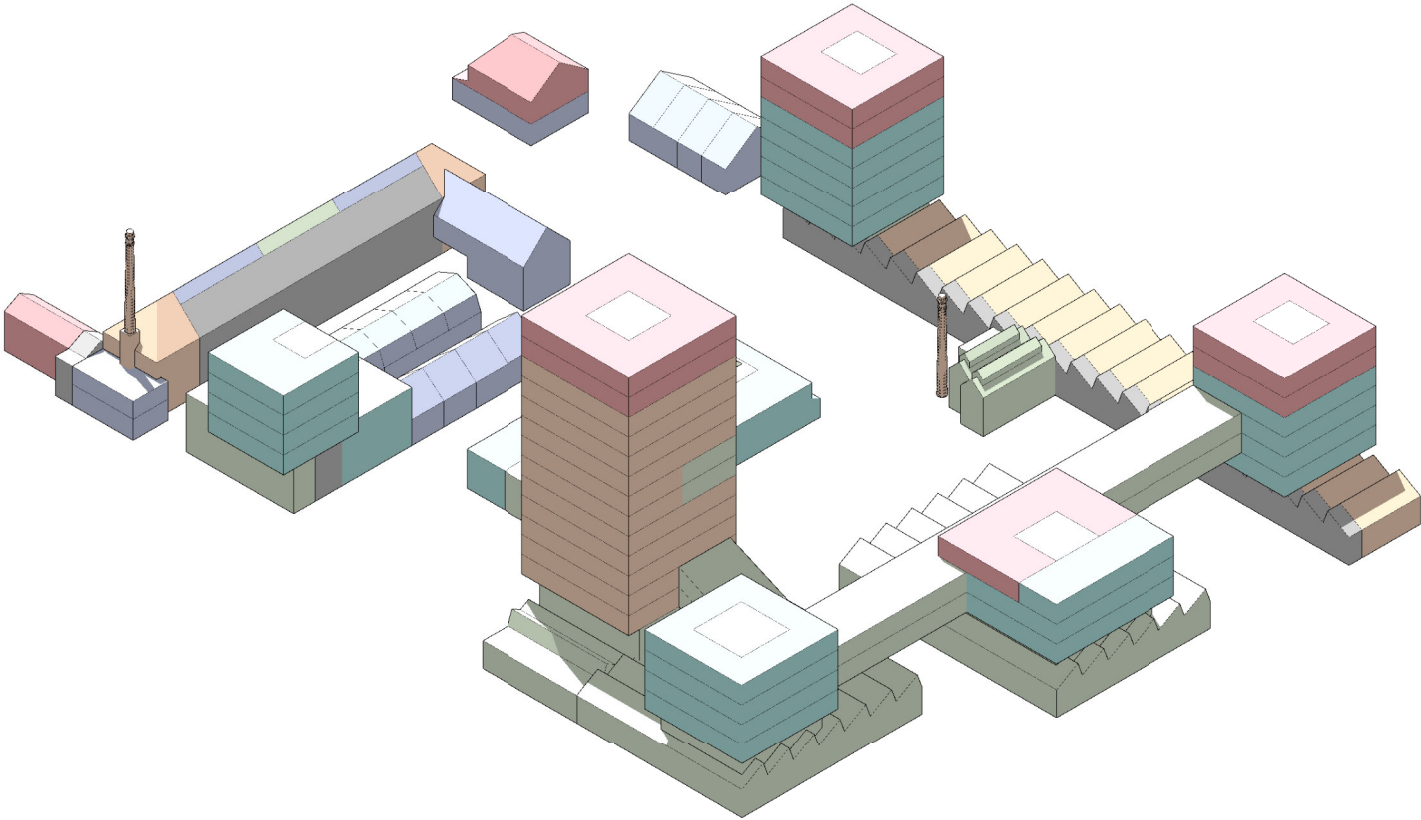
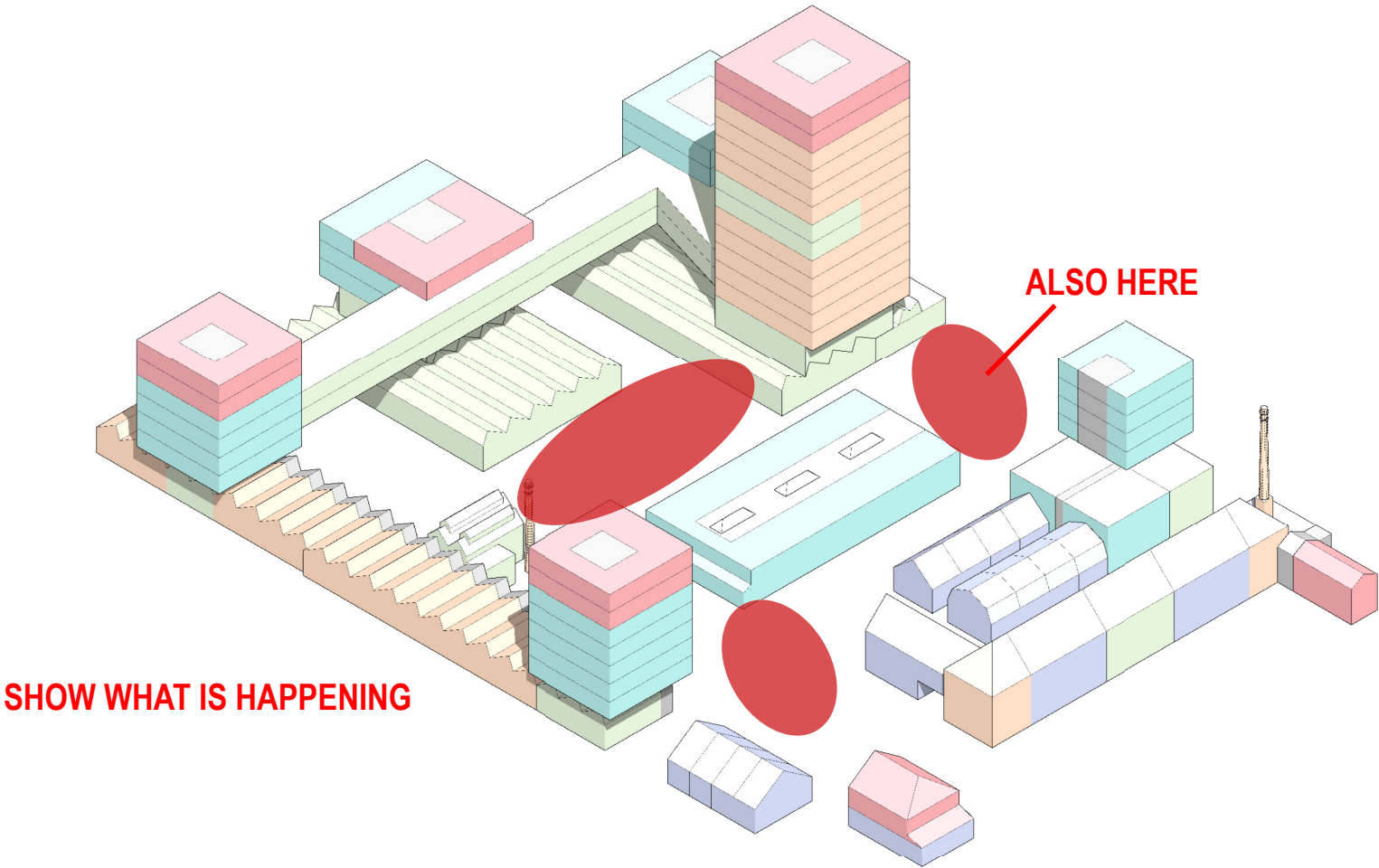


The starting point for this urban volumetric study was the result of the preliminary design phase. I did several studies to develop a final version of the factory volumes and the newly added volumes. The red squares illustrated the logical places where the buildings could interact with each other.

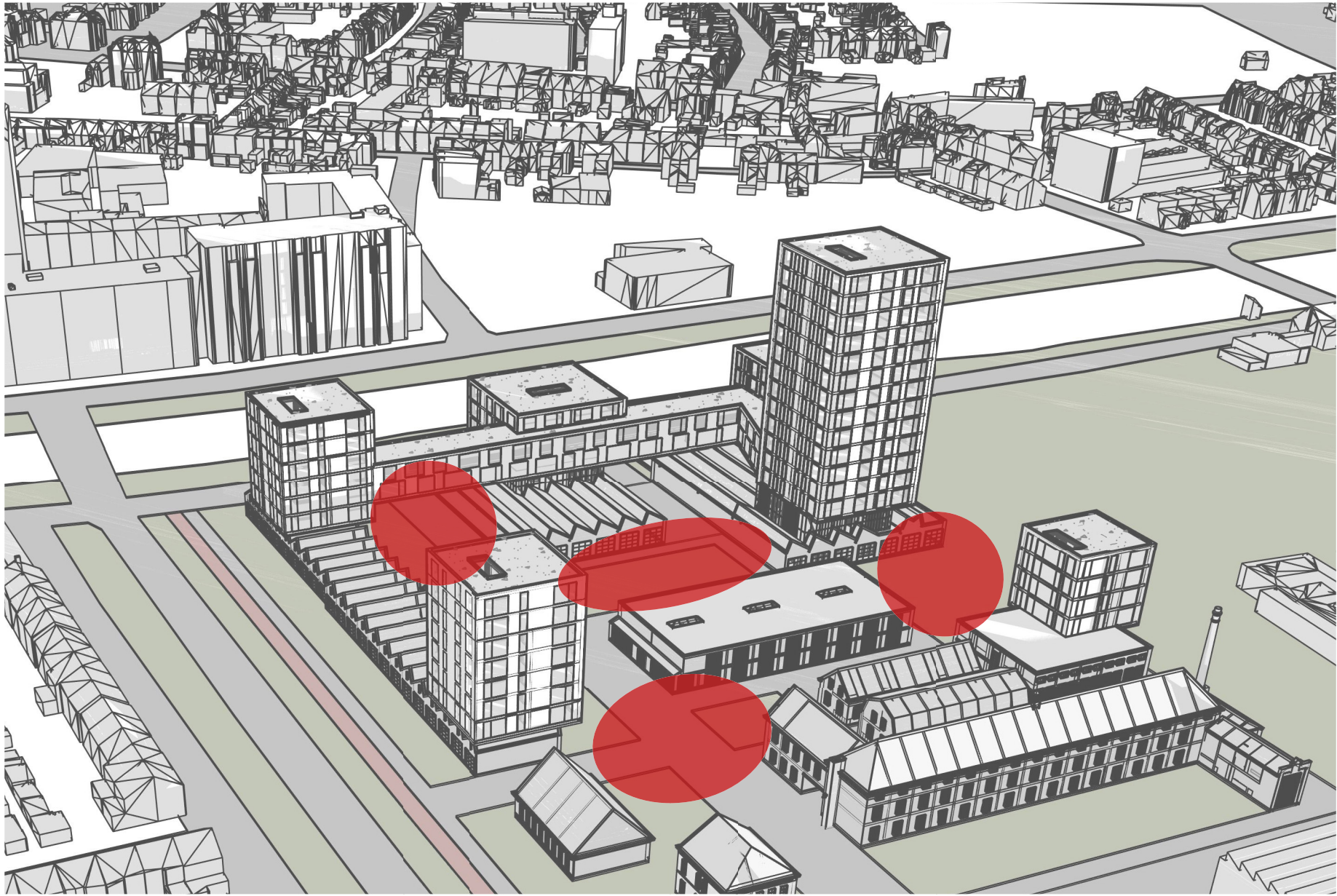
This experiment resulted in a final version of the volumetric design.



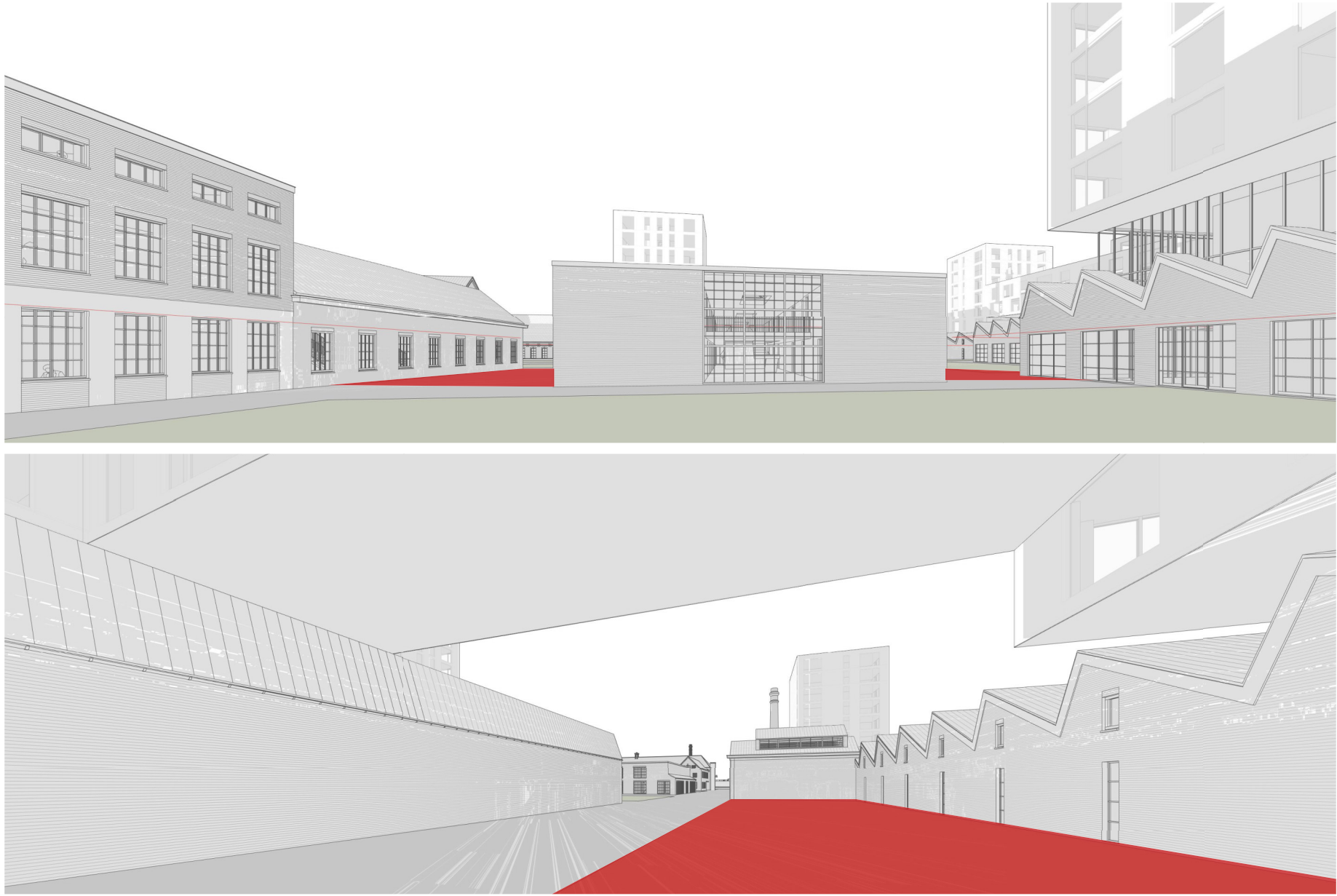
I have translated the conclusions of the location analysis into an urban masterplan. These six subjects were the most important starting point for the masterplan.



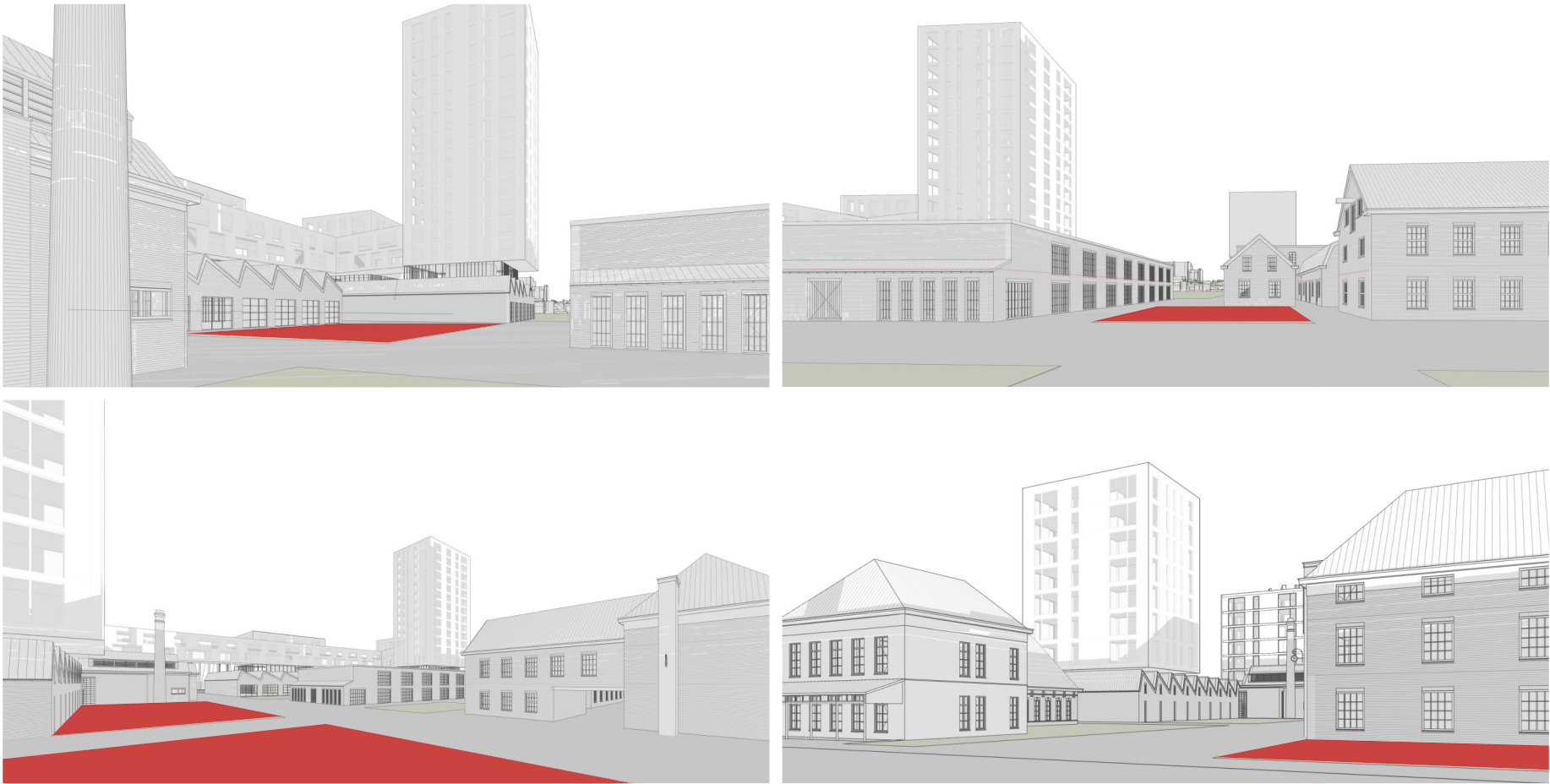
Types of living need to become more apparent. These visualisations could help me add it to the main storyline.



The translation of the spaces between the volumes of the factory, like the original, could have been better designed. There is more potential than visible at the moment. I need to focus on these outdoor spaces and design or create a vision for these areas.



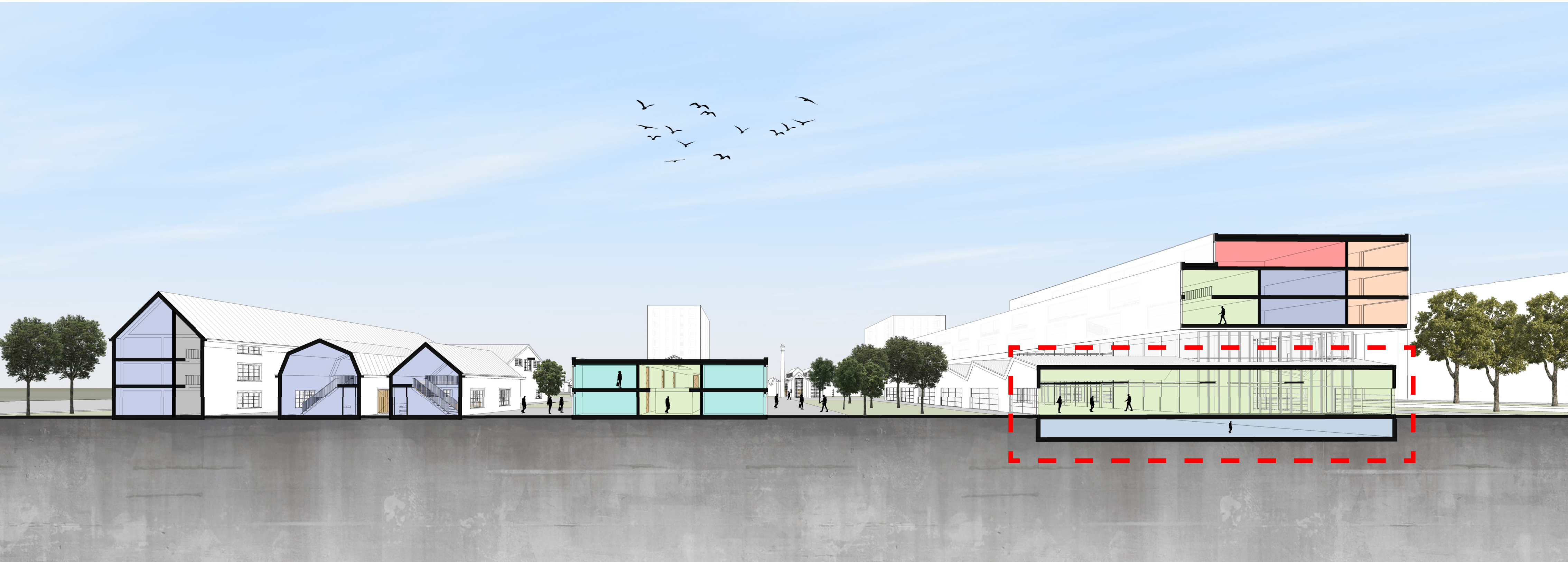
This kind of perspective could help me in the final presentation. The spatial qualities and failures are also visible from eye level. Therefore I need to work further on these areas.



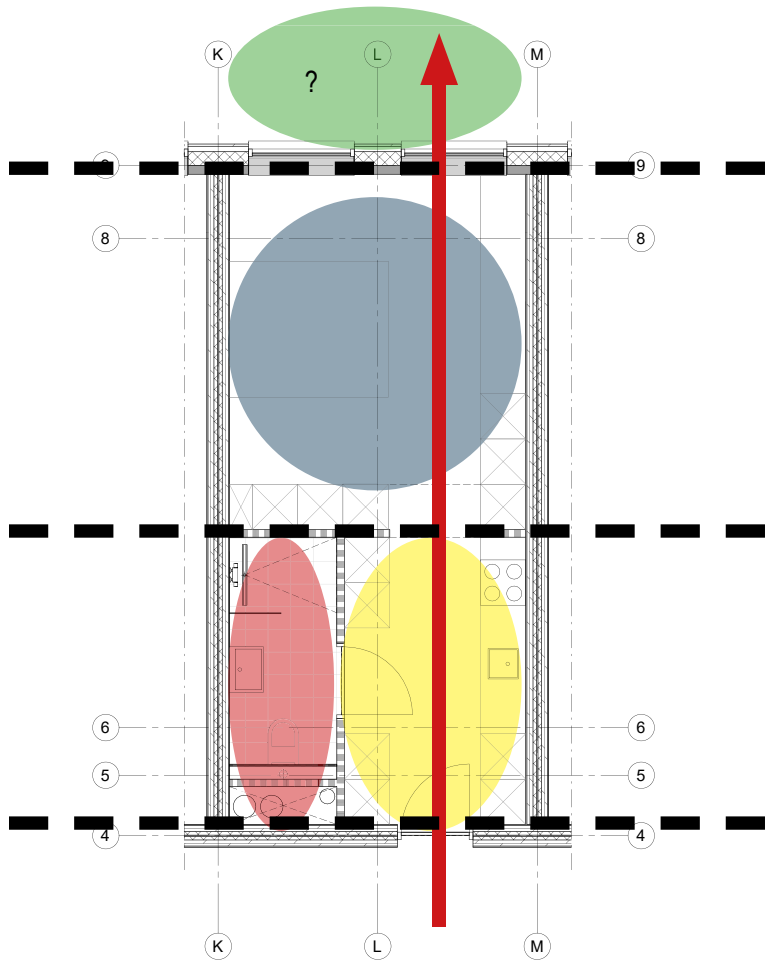
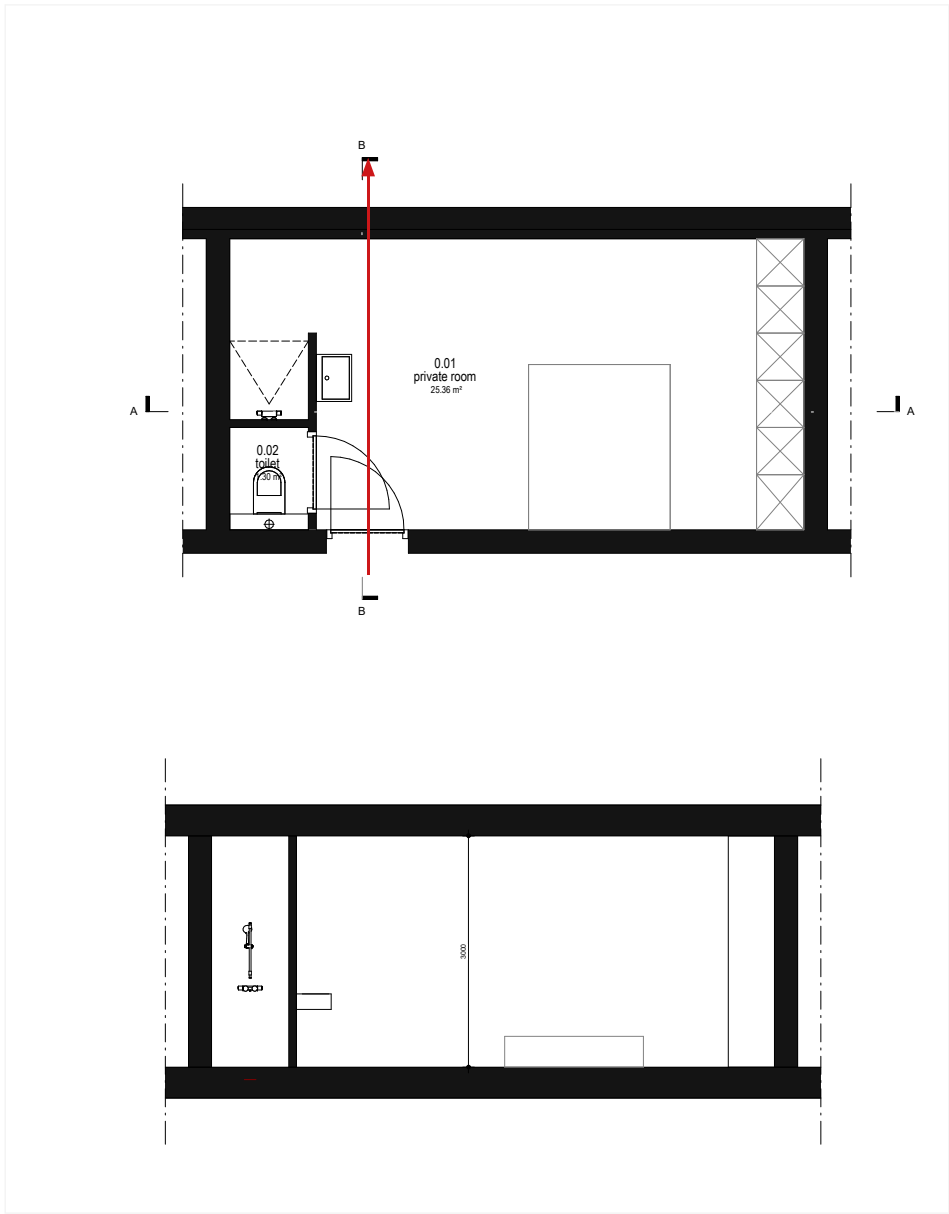
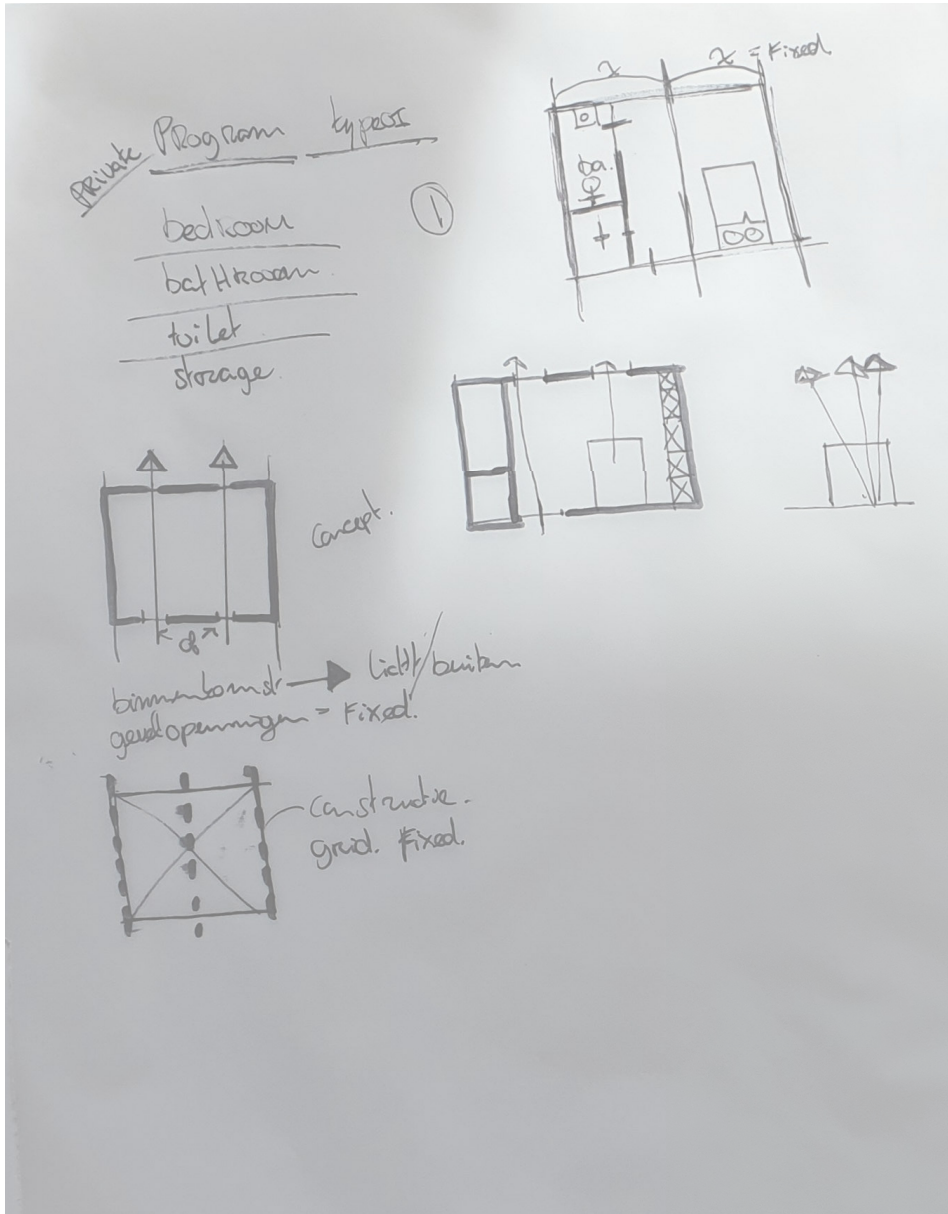
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One extra panel could help me provide the audience with more information about the basement, accessibility and public spaces. I obtain to create different themes for the outdoor areas.

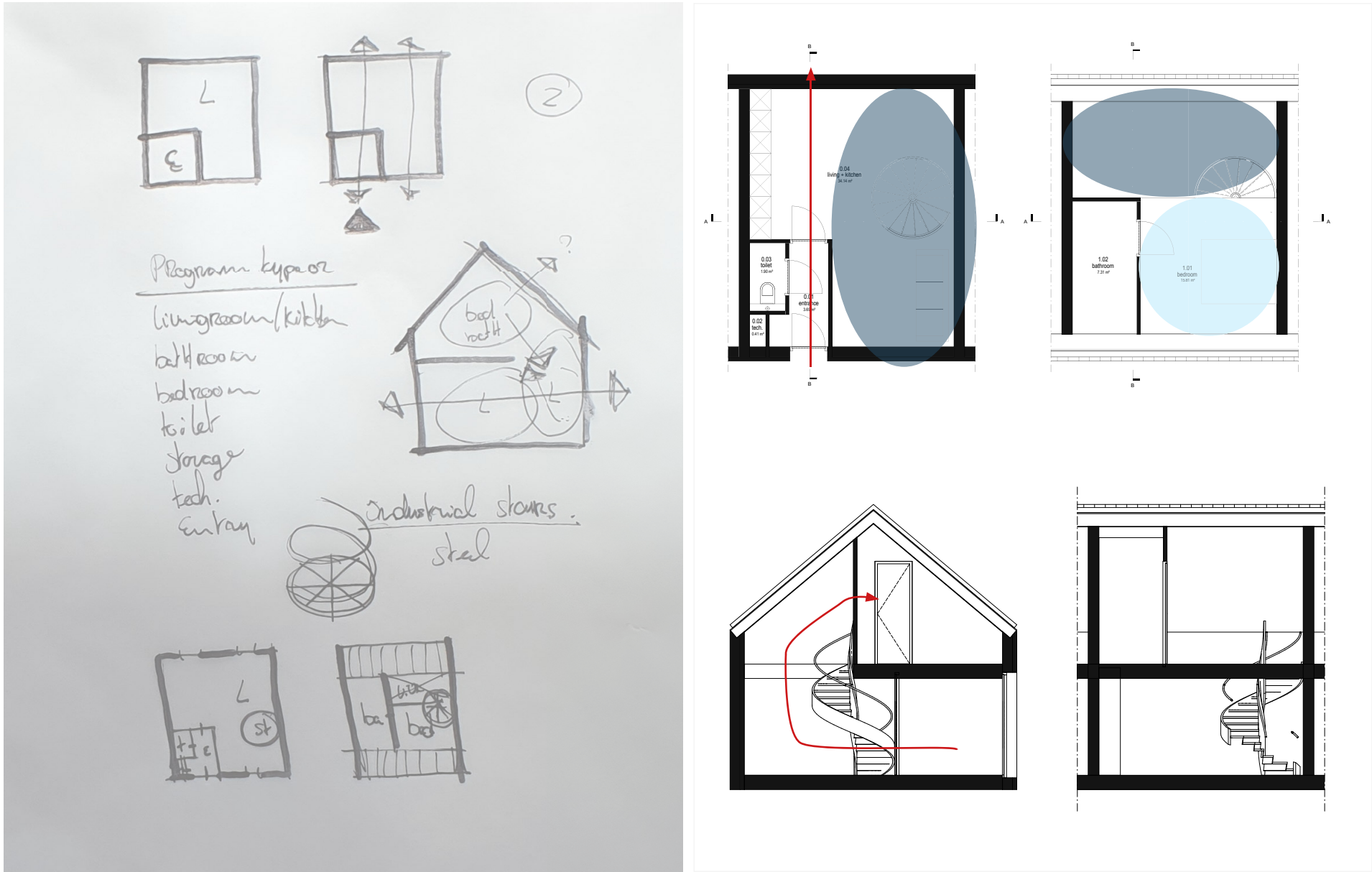


More information and implementation are needed to understand how to live and use the communal areas and the parking garage. Adding multiple camera views could also help in telling more about these spaces.

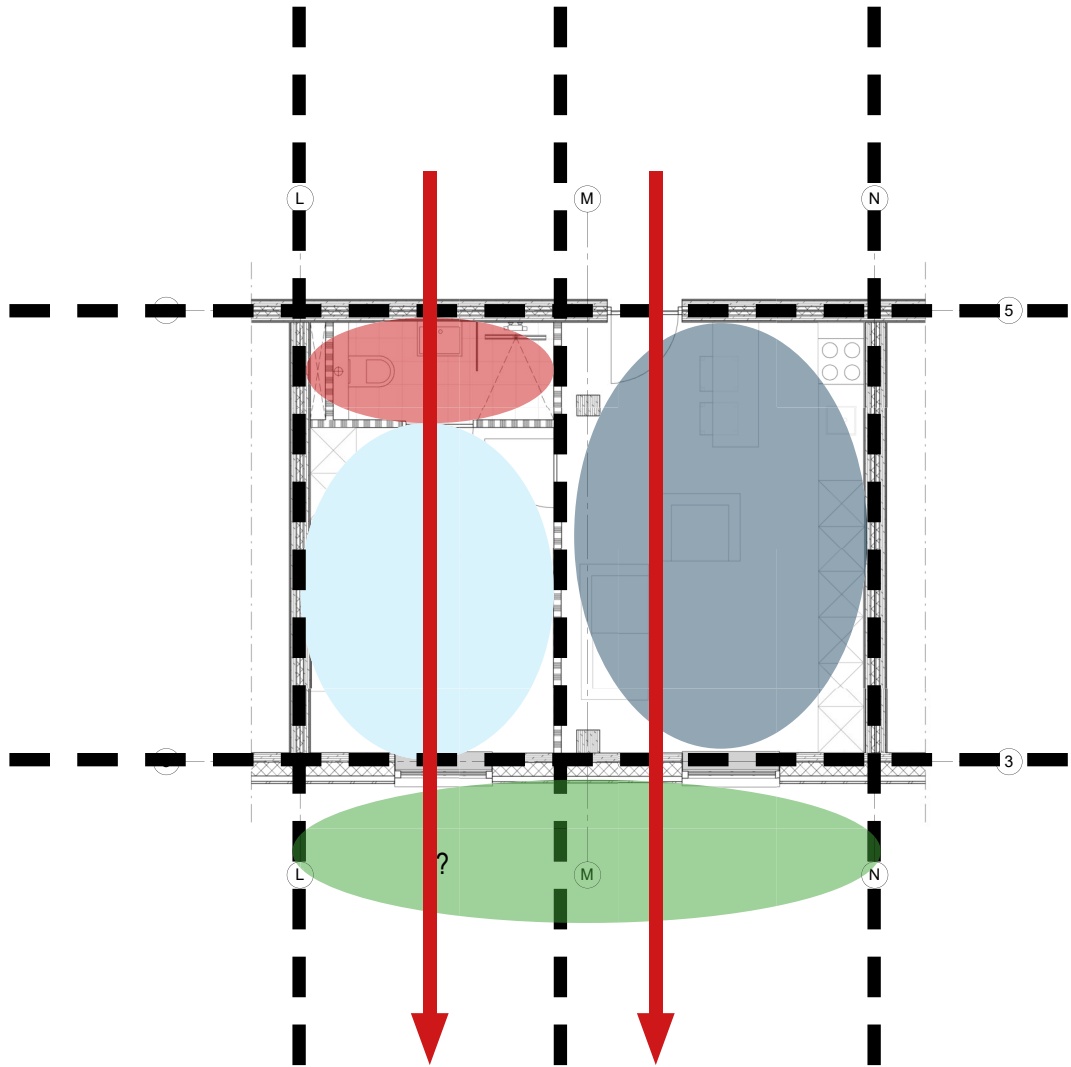


I aimed to translate the qualities of the first idea into the first design of this type. Unfortunately, the result of the preliminary design was not yet the final version. I want to improve the plan further and elaborate the design and spatial experience.

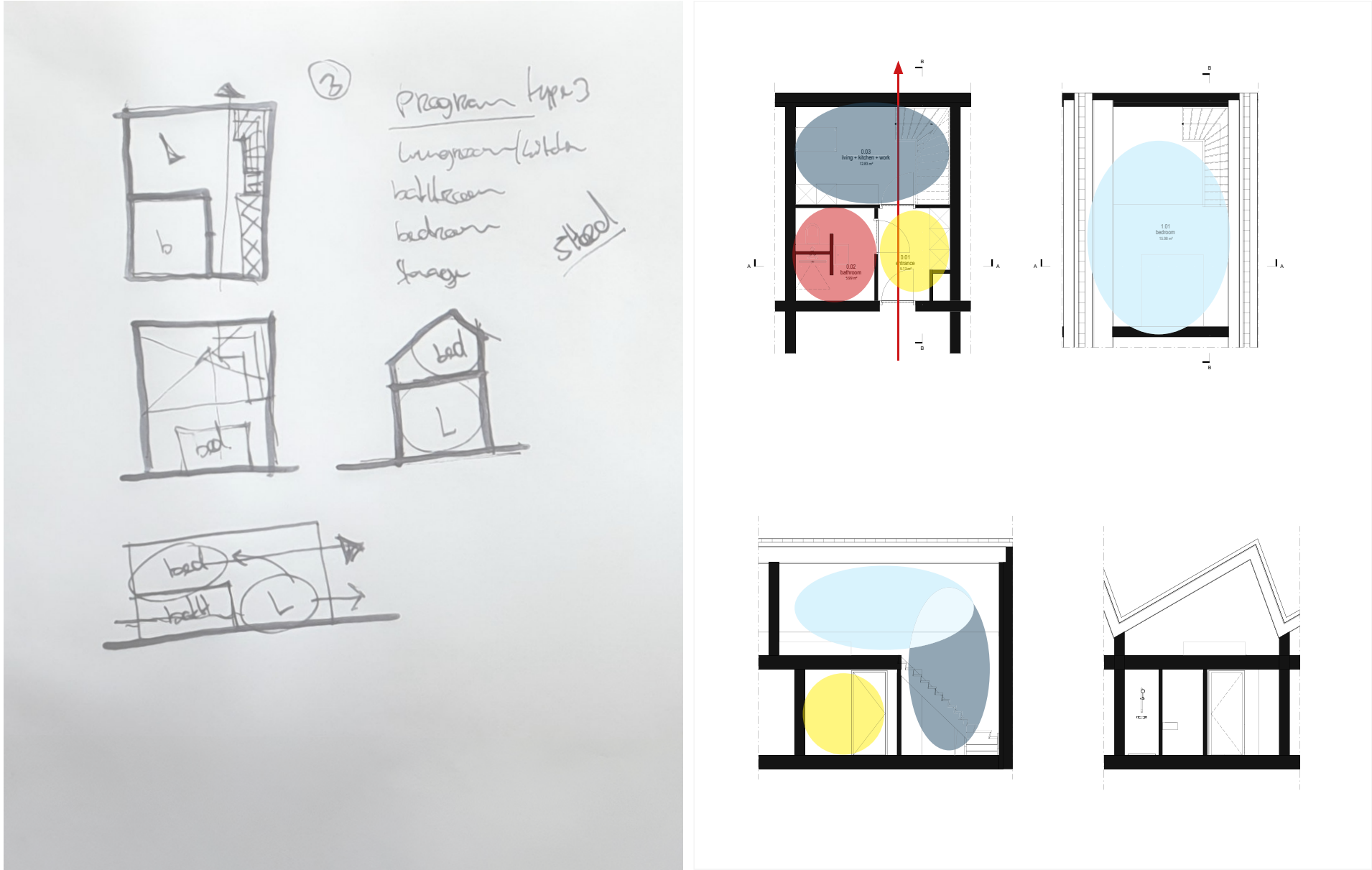
The final version of the floorplan of this type of living has a strong hierarchy. I also used the concept of the first idea by using a line of sight directly toward the light. By doing this, Future inhabitants will experience the space larger.



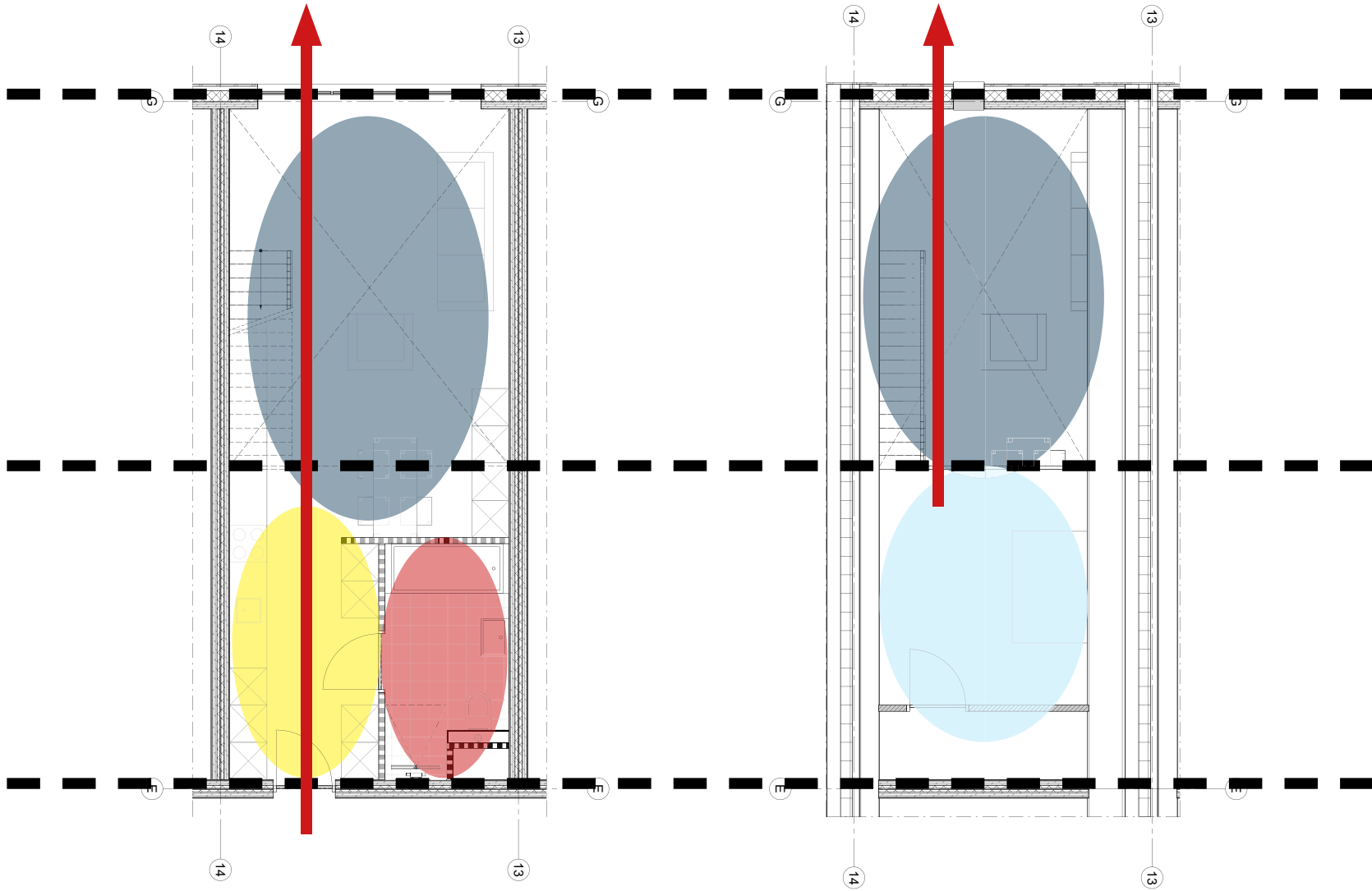
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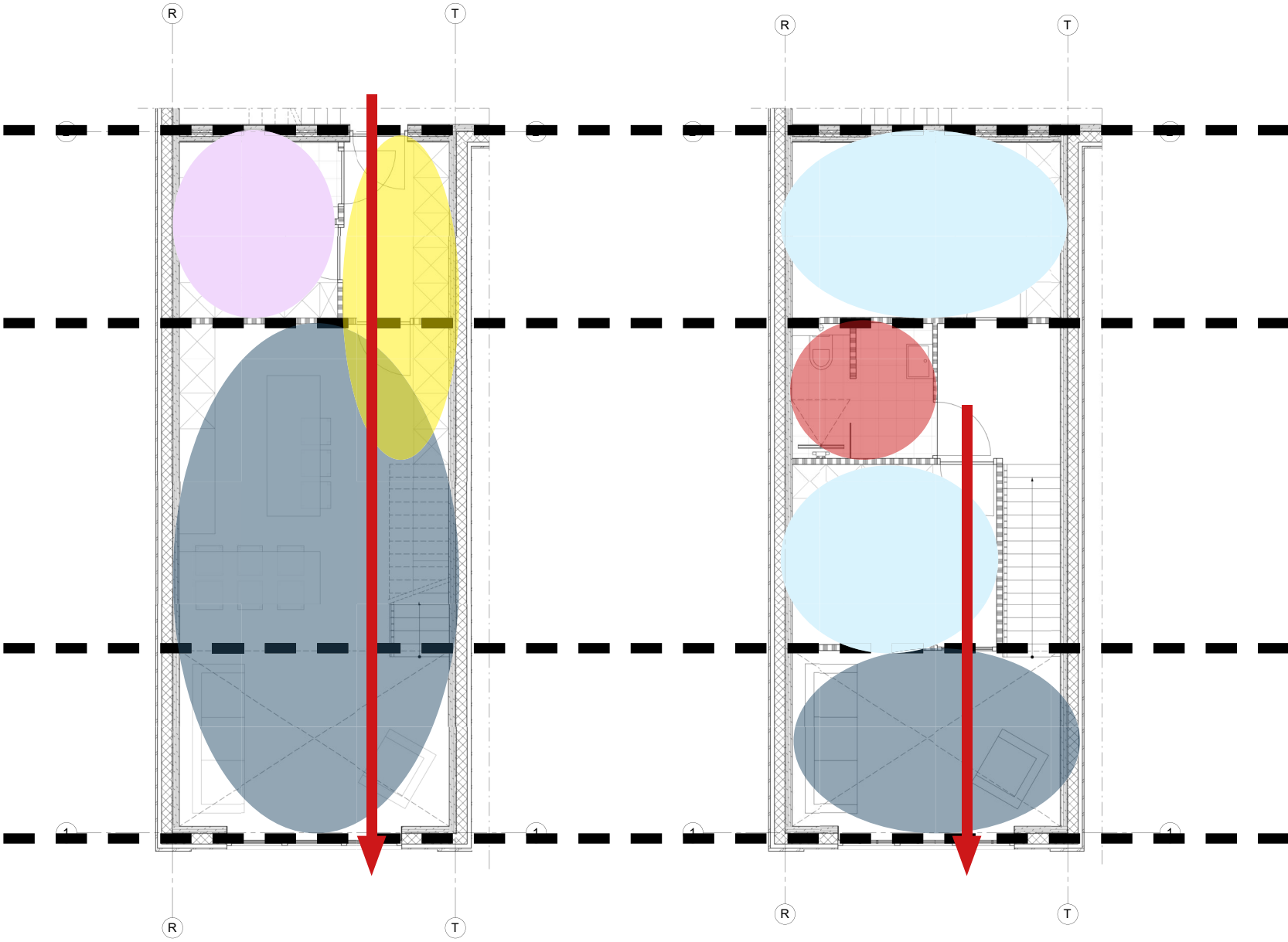
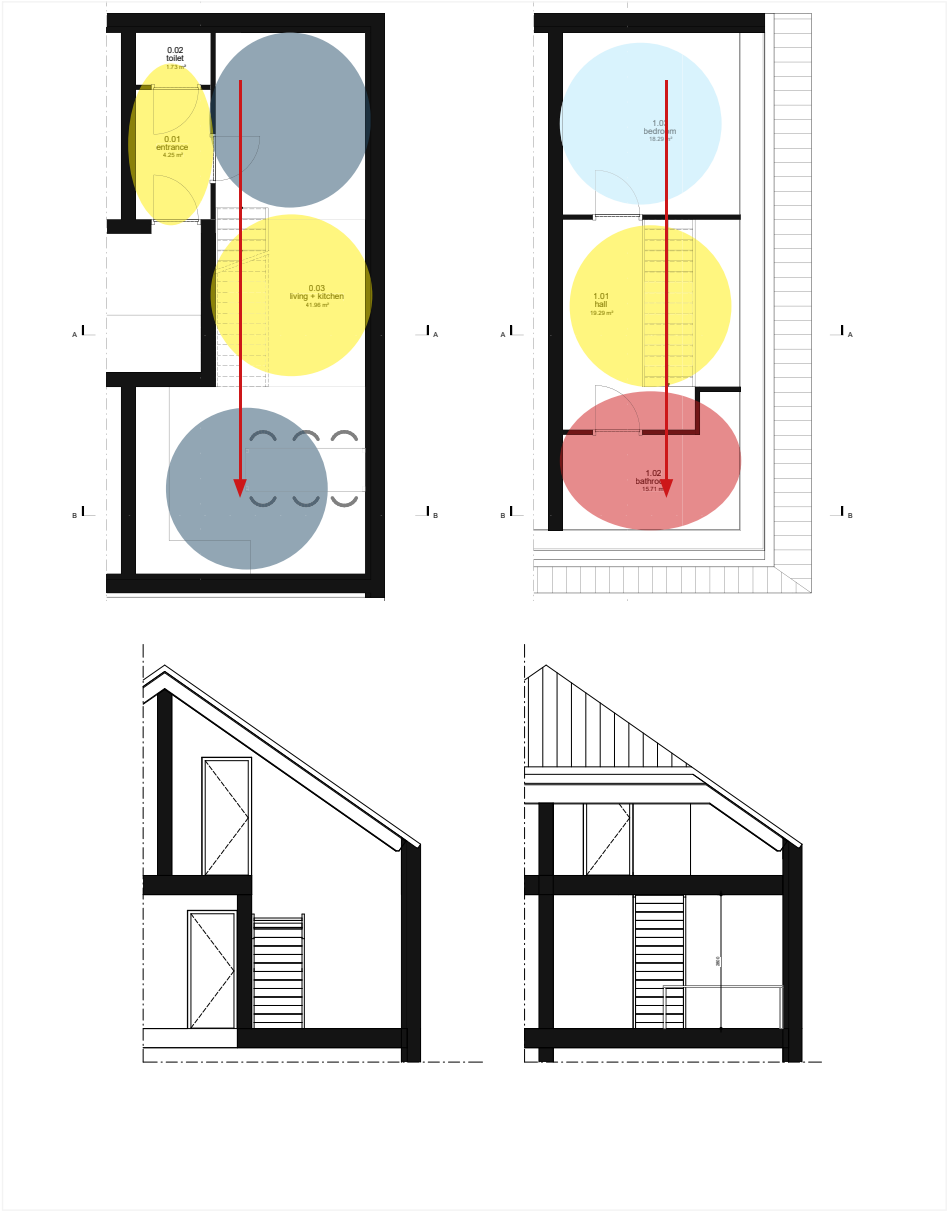
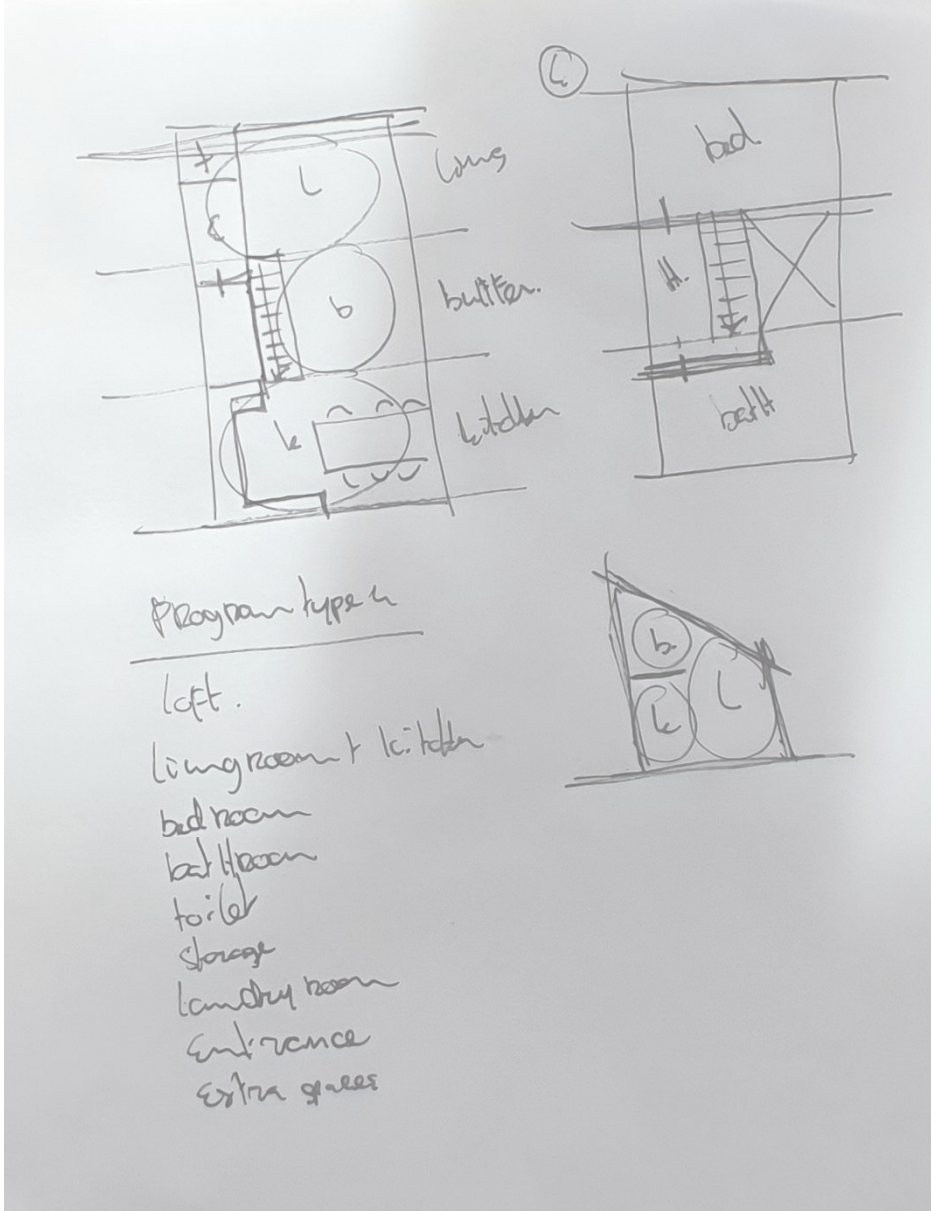
The final version of the floorplan of this type of living has a strong hierarchy. Also, the original construction has been recreated in this building part. I need to elaborate on connecting to outdoor space more towards the typology or not.



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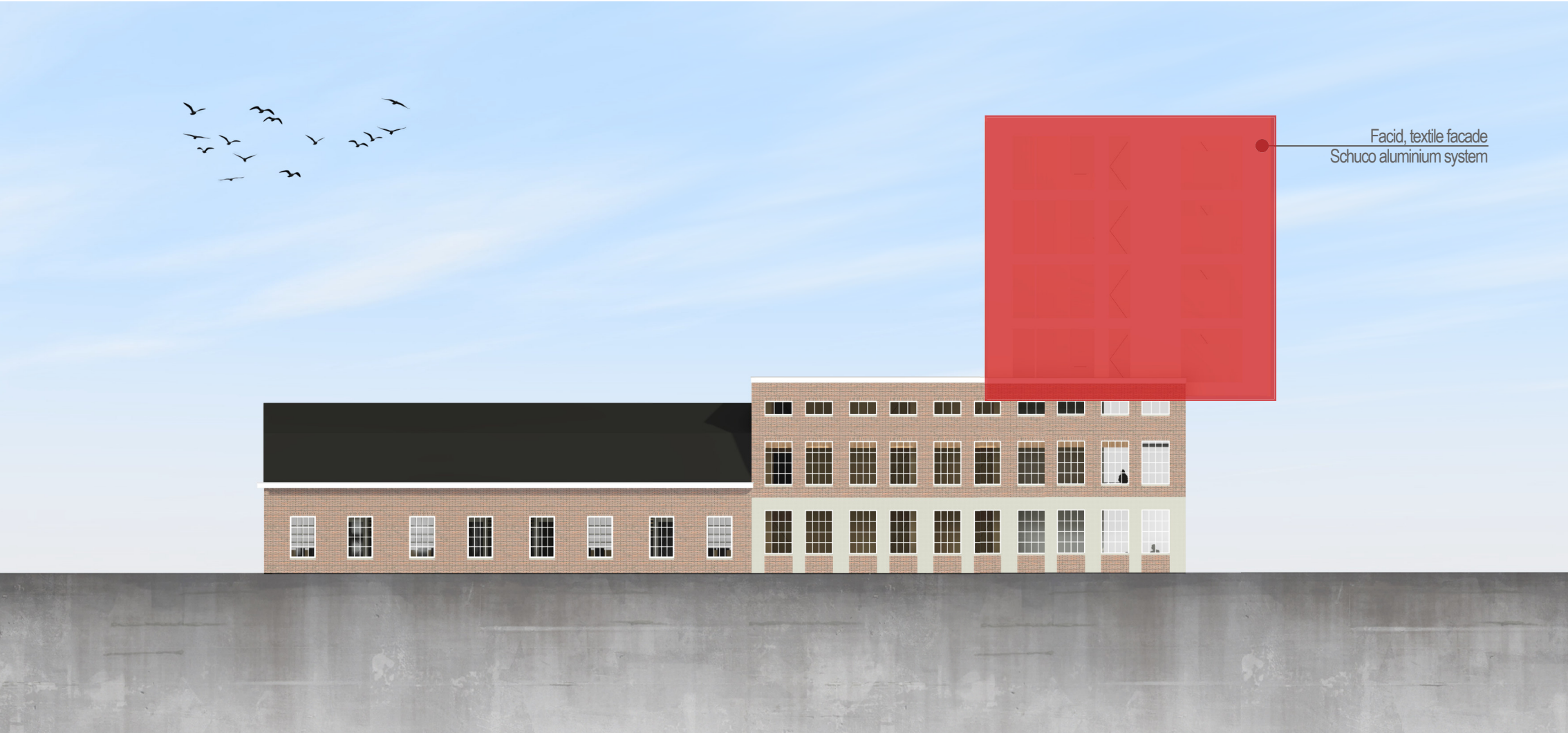


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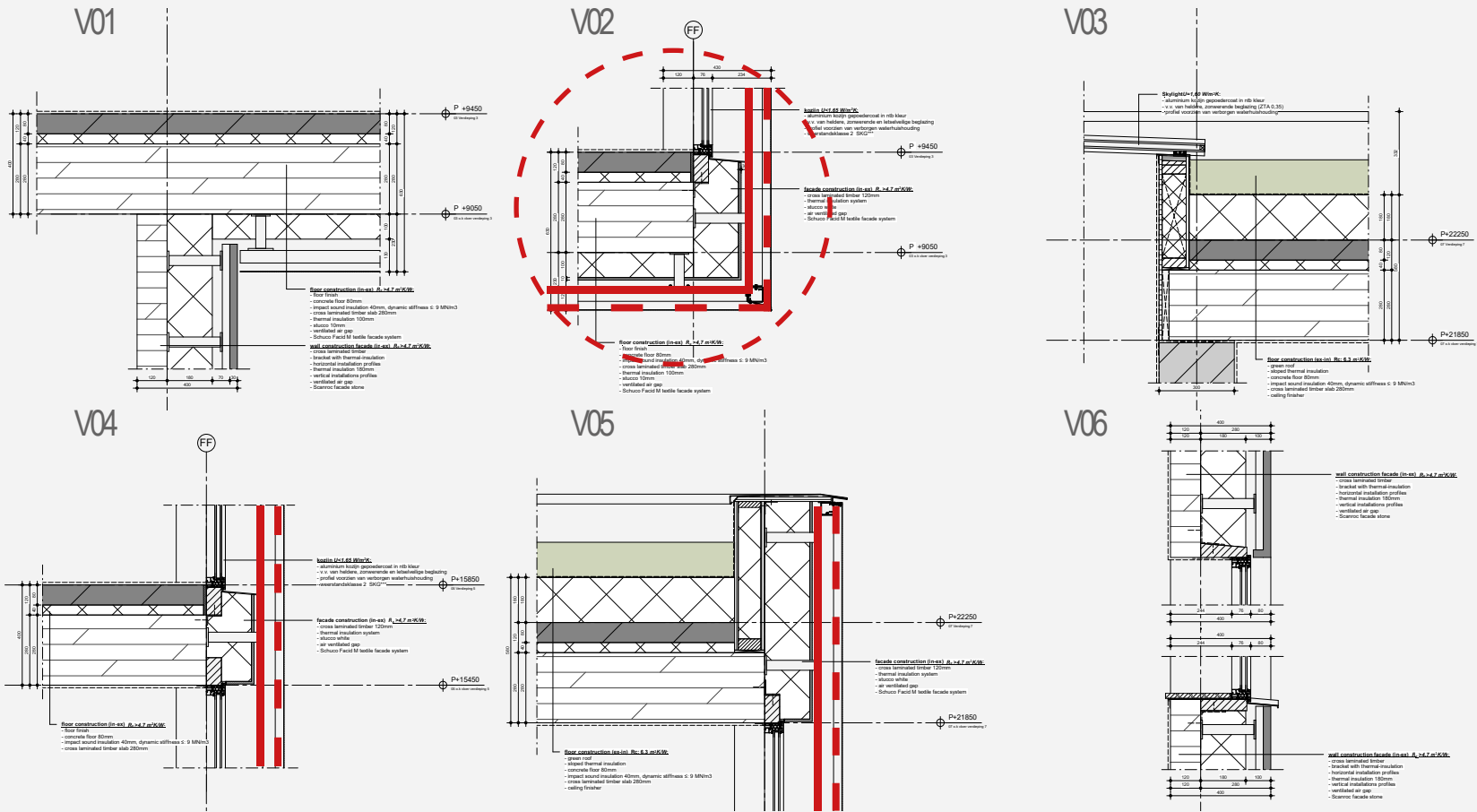


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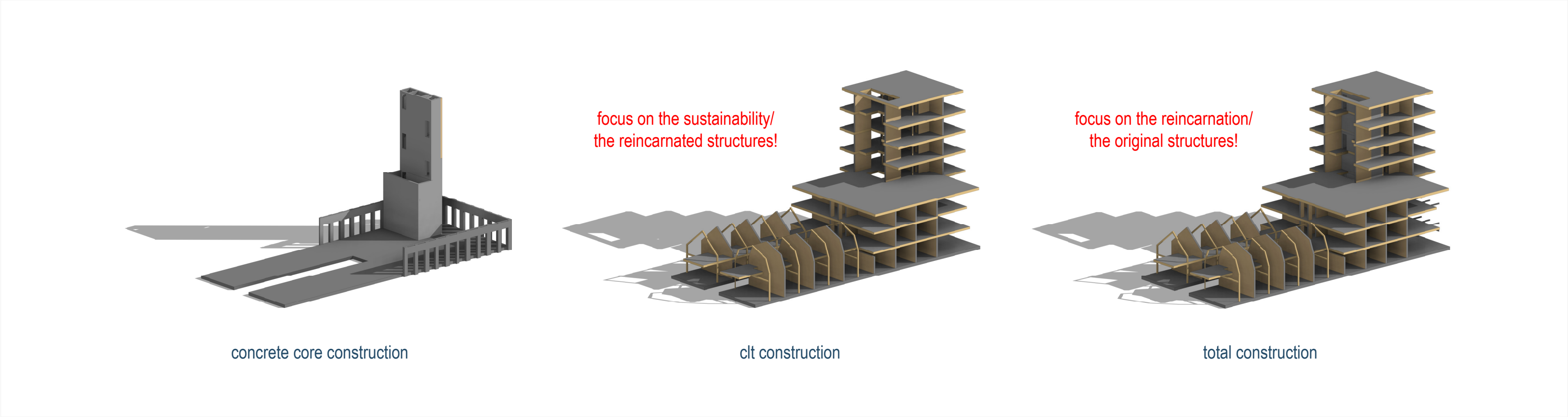
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My goal was to find a way to replace the original material with a sustainable alternative. The only hesitation part was about the second skin facade made of textile. By creating two facades, the project becomes more expensive. My next step is to find a way to create these abstract volumes and use just one facade finisher.



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The explanation of the choice of materials should be more connected to the original materialisation, sustainability and reincarnation. I want to improve this in my story for the graduation presentation.

REFLECTION

When I look back on the results I have achieved in the definitive design phase, I am satisfied. During the year I have managed step by step to formulate a new method how to deal with demolished heritage. From the start I knew the project was very extensive and I had to make choices in where to focus. I focussed on the typologies of living and worked mostly on the housing. Now I have to focus on the shared and autonomic services, as example the bicycle parking area, outdoor spaces and the special programming.

Once I've worked that out, the plan is more complete and it becomes more clear about life in the factory and accessories.

I am aware that there are over a thousand other possibilities to reincarnate a factory like this. I don't see the way I've chosen as the best way, it's the way I've chosen to do this.

I set the bar very high for myself for this graduation project. I have learned that being flexible and making your own choices during the process is vital. But I am most proud of the project and the results I achieved during the year.

CONCLUSION

This graduation project gave me countless new insights, and has broadened my thinking process as an future architect. It also increased my fascination for history and heritage even more. That is somethings I will never forget in the future. Demolition of heritage with potential monumental values is something that has often been in the news in recent years. The choice is often made to demolish or repurpose the heritage.

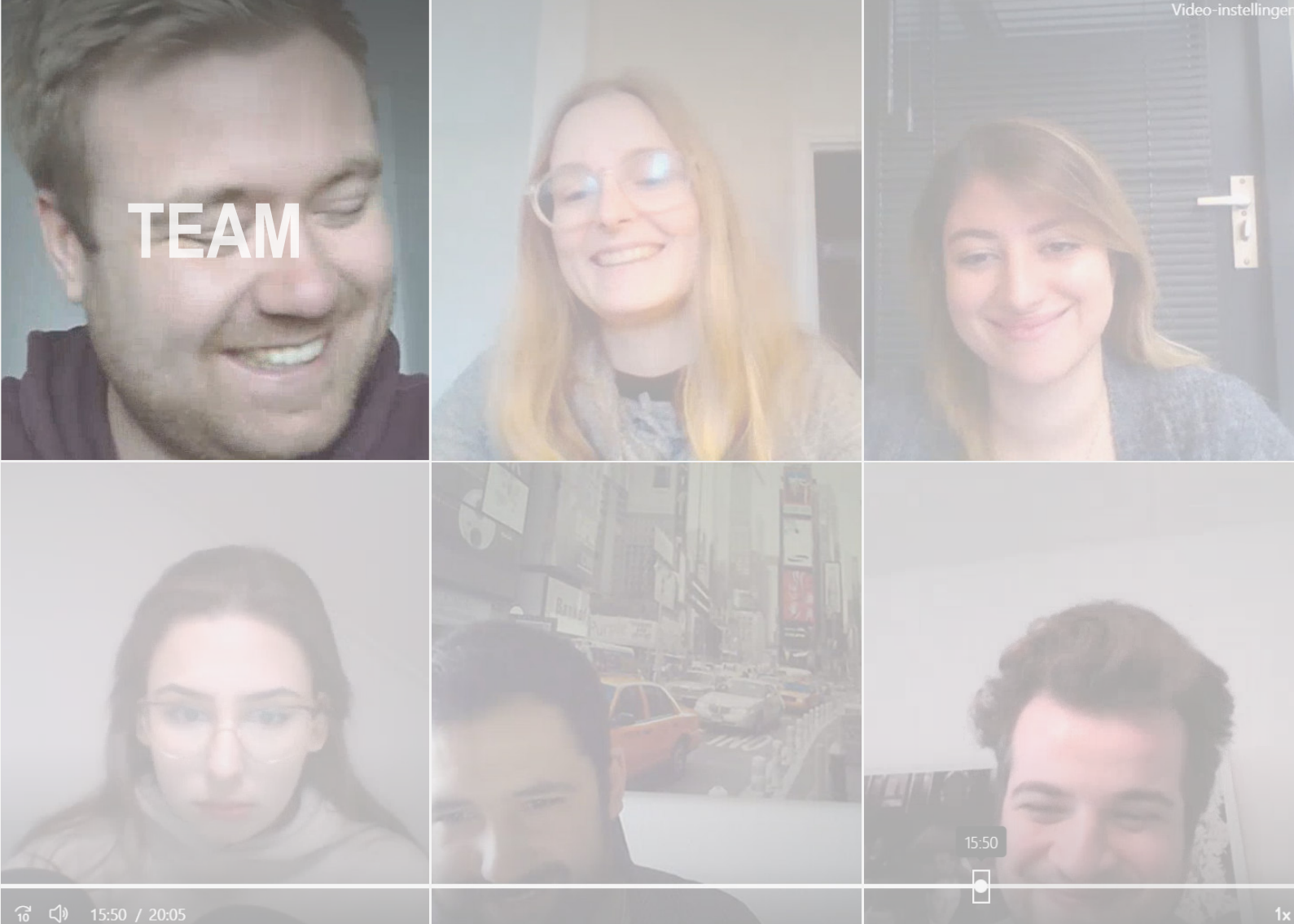
During the project formulation and research phase, the essence of taking a new step in this way of dealing with heritage was new and challenging. It is a timeless challenge dealing with heritage and estimating this architecture with the correct value. To get a clear picture of what I was getting into, it was necessary to dive deep into history and mainly theoretical studies. It was possible to translate this into a first spatial design only during the conceptual design phase. The conceptual design resulted in multiple approaches to the reincarnation of the textile factory. By testing these directions separately against my self-defined criteria, logical next steps arose. Throughout the entire process, it was necessary to continue to research. This was necessary to get a grip on the original architecture of the factory. The step from the concept design to a preliminary design was huge.

Now was the time to translate everything the research had produced into a reincarnation of Pieter van Dooren's factory. Making this step was challenging. I missed my starting points that I could use as a stepping stone for further elaboration. Once I had worked out a clear path for myself on the way to the final design, more and more puzzle pieces started to fall into place. Too many times during graduation, I was too attracted to the reactions I got at work. So I struggled to filter this and take my position on it. I now know very well what I want and what my principles are. So it is now essential to formulate this clearly towards graduation. Before I finish my graduation, it is crucial to pick up some topics given as a tip during the last feedback round.

WINTERSCHOOL
An interactive 3-day workshop

As a graduate student, this was the opportunity to use my fellow students' knowledge, thoughts, and time. Due to the COVID-19 pandemic, it was not possible to physically hold winter school at school. Alternatively, the winter school was via MS Teams (online). As a graduate student, the preparation for this event was crucial and indispensable to making it a success. I wanted to introduce my teammates and create awareness for heritage. My teammates went into their neighbourhood and searched for heritage, which is heritage to them. Later on, both individually and as a group, we took the project further by making sketches, researching and doing a minor design assignment.

My personal goal for these three days was to introduce the subject of heritage. Everyone has heard of it and has an image of heritage. I wanted to create awareness about the importance of this architecture. I have also taken the various living concepts to a new level in collaboration with my fellow group members. An overview of the living concepts has been created utilizing analyzing new living concepts, references and self-study.



Every team member has a different view of what heritage means to them. It was inspiring to talk about these different perspectives, and I liked introducing the project this way. I have learned everyone has an opinion about heritage and how to take it or leave it. It was fruitful to start this way.

MEETINGS & TALKS

Feedback

During the graduation period, various meetings took place, and most tutor meetings were via MS Teams. These meetings concerned Jan Willem, Pieter and Ben, and experts whom I approached to ensure the progress of my project.

During the year also, multiple presentation moments were scheduled. These presentations were crucial learning moments and gave me new insights. These new insights helped me step by step to improve the project.



Me

Jan Willem

Pieter

Ben

FEEDBACK PROJECT SPECS

- o Big improvements, in language as well. Keep checking language though, there are opportunities for improvements still.
- o Programmatic MEI architects is a great choice for rebuilding historic industrial heritage, bridging past and future.
- o The historic development of Tilburg can be more precise, including its spatial/urban development.
- o ‘...I came across the old factory of Pieter van Dooren...’ is not a sufficient driver to select a subject. The criteria to bridge past and future of Tilburg are a multitude probably and not just housing as mentioned.
- o Analysis of the thesis repeats the same statement three times; this requires a more critical approach.
- o The architectural themes, are these architectural? Urban themes are not mentioned or explained. The assignment is about a monument that will get lots of attention. In terms of site, should it not be heritage that can be rebuilt on the same spot? Can you just move the site of a former textile factory? That might be the trigger to find a demolished factory.
- o This is a go.

FEEDBACK RESEARCH

- o In the field of heritage and architecture the reconstruction of lost objects is called the phantom approach.
- o The reconstruction of a former textile factory site could be such a thing. It is important to put forward the real intrinsic motives for a redevelopment of this type, and further research into the program and design components may therefore be necessary to validate the project. Or is the box-in-box strategy, which is mentioned in the research, a new key to reverse exactly such a phantom project idea?
- o The current project title is descriptive, not catchy nor intriguing.
- o The presentation as well is very descriptive, and it fails in terms of explaining issues and focusing onto conclusions. It has the typology of a family album, just recording how time passes. There is no interpretation. There are no conclusions. It would be good to have striking conclusions per page and the conclusions together could be the start of the project.
- o Right now there is a possible subject but no position, no assign-

ment. The current material breathes reserve and restraint.

- o Become operational

FEEDBACK CONCEPTUAL DESIGN

- o “Why?” will long be the recurring question in a project like this, both aimed at and derived from the past.
- o The Volume presents a lot of material and studies, but an answer to the core values is not yet explicitly formulated.
- o Tilburg = factory, yet since the loft movement any city replicates factories. Will this factory make a difference? The village-farm-house by Maas in Schijndel solved a longstanding discussion about restructuring the market area, is something similar going on in Tilburg? And why is the specific choice of this factory not substantiated in an architectural review Aof the -qualities of – the ensemble and parts?
- o Does the factory as a whole package count, or will other traits and elements – to be discovered yet – become material?
- o The three concepts read as possible, concealed answers to these questions, but can they be spelled out aloud? Focus is required on design principles and specific themes.
- o design principles = urban themes & arch themes: The failed presentation led to a series of insights that are described clearly. It is puzzling why these insights did not emerge in previous years. The presentation, as well as the panels, had no proper introduction. The factory itself was not explained and remains unknown. The storyline of the presentation was very dry while the history of industrial heritage is exciting. Themes are not harvested yet and deeper digging is required.
- o design direction = foundational themes & criteria & conclusions: The absence of testing and findings leads to a situation that any concept would be fine. It is urgent to draw conclusions and to do so it is urgent to first test ideas. The assignment deserves more.
- o typology = program & urb and arch implications: Typology does not play a role yet. Programmatic aspects for example are absent. Architecture of the past and architecture of the present/future have no definition. Urban implications are not clear.
- o integrality = design principles & dummy of Volume: A draft of the essay, which is missing, would help a lot in discovering design directions. Writing is a design tool. The logbook needs sketches.

Programmatic aspects cannot be just a text, it requires functions and quantifications. A conclusion on every page can help.

- o proof = ways of experimenting & testing: The presentation did not show tests or conclusions.
- o concept = experiment & design intelligence & logic of criteria: Criteria are not presented and do not steer the process towards clarity.
- o project embryo = logic of concept qualities & outcome: Logic cannot be checked because of an absence of findings, criteria, and conclusions. The material is too abstract.

FEEDBACK PRE-DESIGN

- o The Volume is well structured with good content, could have titles at paragraphs in texts and its conclusions deserve more presence.
- o The design presentation was not the strongest, to put it mildly, and many aspects of the assignment are still hidden.
- o The process seems to stutter; a lack of information makes it impossible to understand the what, why, how and where of everything.
- o The design is too abstract, not yet structured and logical, not connected to the sources as can be found in the research.
- o Apart from historical aspects, architectural qualities need evaluation too.
- o Create an overview, it is necessary for the outcomes and also to validate the research. There is much more potential to dig up and this requires deeper and more elaborate reflection and testing.
- o As a result the current residential program typologies look like hit-and-run. It starts with the architecture of the old factory buildings, the materials, details, qualities, routing, etc. These are assessed in the Volume but left for death.

FEEDBACK DEF-DESIGN

- o Well done. It is the moment to take up the position with confidence as an architect. Currently presenting is felt a must-do instead of a great opportunity and this needs to be overcome as well. Behave like a professional, because the project deserves and requires this.
- o Lots of progress has been made, good steps forward. However, the philosophy and program of the project is still not formulated and defined properly. More information has to come on paper.

- o The drawings by themselves are partly good, but the layout and information on the panels are still really not sufficient. Take more time to schedule and organize the design process and the presentation. Use the essay to develop the content that needs to be communicated, make a list for that.
- o The reincarnation can improve on some important aspects. There is an absence of the interpretation, or translation, of the old factory; what aspects and qualities are reborn and which ones are left out, and which volumetric changes have been made?
- o The added layer of abstract buildings are not displayed well yet. What could help is one panel with an axo that shows it all, including the locations of the housing typologies and the qualities and use of in-between public spaces.
- o The white tensile skin hides the architecture behind; why is this architecture not abstract and white in the first place? It would not need the skin and save lots of budget to spend elsewhere in the project.
- o How about the capacity of the project, like homes per hectare? What are the supposed target groups and how would the design fit them? Could it be affordable for students and starters, and how? Shared and autonomous facilities, like bike storages, outdoor spaces, special programs, need more attention.
- o Sustainability was not mentioned once and this is impossible in our current era.
- o With more cameras the worst and best qualities of the design can be found and improved. How and where could dwellers be involved in personalisation of space use?
- o The volume requires much more attention, because it is behind. The order of things can be improved a lot to get a logical storyline.

FEEDBACK 25-09-2021

- o Focus on programmatic aspects, deserves more attention
- o Stakeholders, why these?
- o Braaksma & Roos: <http://www.braaksma-roos.nl/projecten/>
- o Explain themes
- o Elaborate reference projects, why are these important?
- o Buitengebied, niet meer de binnenstad
- o Industrieel erfgoed, in plaats van monumentaal
- o Zelf terugbouwen met eigen inbreng, dus het hoeft niet meer te

bestaan!

- o Wonen + extra functies om het aantrekkelijk te maken om te wonen
- o Zodanig aanpassen + connectie met historie behouden
- o Aanpassing voor nu en toekomst
- o Plek hetzelfde of verplaatsen en ergens anders herbouwen
- o Brug tussen het verleden en het heden
- o https://www.nlwiki.org/wiki/Stichting_Federatie_Industrieel_Erfgoed_Nederland
- o https://nl.wikipedia.org/wiki/Categorie:Industrieel_erfgoed_in_Nederland

FEEDBACK 01-10-2021

- o Aldo Rossi, vernieuwde architectuurstijl door zelf aanpassingen te doen aan bestaande stijl. Voor modernisme.
- o Zijn er meer mensen die dit eerder gedaan hebben?
- o Wat geeft mij die motivatie?
- o Wat inspireert mij?
- o Achtergrondverhaal?
- o GO
- o Moet het wonen zijn en waarom?
- o Gevoel van de fabrieken
- o Misschien nog wat bondiger op papier zetten t.b.v. de tutor.

FEEDBACK 08-10-2021

- o Wat is de criteria voor herbouw? Zelf bepalen en kiezen.
- o Wat zijn de themas?
- o Zet alles om in beeldend materiaal.
- o Rem Koolhaas - Delirious NY is een top boek
- o 3D model opzetten van de fabriek om gevoel te krijgen van de ruimtes enz.
- o Voorbeeld van Etten-Leur aanhalen om invloed te hebben (mogelijk) op uitkomst sloop oude fabriek.

FEEDBACK 05-11-2021

- o Concepten:
- 1. Herbouwen zoals ie was als geheel.
- 2. Verspreid over de stad herbouwen
- 3. Opgeschaald, groter terugbouwen

- 4. Herhaaldelijk terugbouwen in de stad, op meerdere plekken
- 5. Vervormen/hervormd terugbouwen
- 6. Anatomiseren
- 7. Combinatie van verspreiden en anatomiseren en herschalen
- o Erfgoed anno 2021, was bestaat er nog en wat is er weg?
- o Kaarten maken met al het erfgoed, Religieus, Industrieel, Hieruit komen mogelijke landmarks voort, plekken
- o Kaart textiel toen en nu
- o Kaart religieus toen en nu
- o Londen Tate Gallery

FEEDBACK 12-11-2021

- o De Banaan in Brussel
- o Woontypologieën, micro maso
- o Minder mensen per m²? Die vraagstukken koppelen aan typologieën
- o Op zoek naar de ideale typologieën, voor de nieuwe generaties
- o Rest ruimte, welke functie?
- o Wonen=leven
- o Olafsson in Londen, SUN
- o Woongroepen of groepswonen
- o Individualisering, ontwikkeling daarvan
- o Japan is het voorbeeld van NL in extreme
- o 1000 woningen, intensiteit

FEEDBACK 19-11-2021

- o Focus on volume
- o Create maquettes from specific parts of the factory, not the surroundings
- o Livingtypes in concepts?
- o Concepts in schemes
- o Find criteria to assess the concepts, make a choice on base of this assessment
- o 3D model digital, put the concepts in and show it on the poster.

MEETING 23-11-2021

- o Concept 2, repetition of 1 single element of the factory
- o Factories from the 19th century, more research
- o Social housing typologies
- o Program (preliminary)
- o Analysis of the factory, architectural, technical
- o Concept of living
- o Share outdoor spaces
- o Less m² per person, multi-gen??

MEETING 10-12-2021

- o React and look forward
- o Criteria will help making progress
- o Not enough produced
- o Create 3D graphics and zoom in (just do)
- o Volume=design tool
- o Order of things in the volume
- o Factory process can be inspiring for the design
- o Why PvD?
- o Research factory deeper!
- o Housing/living
- o Educational
- o Building as timeline
- o Rearranging the ensemble

FEEDBACK 24-12-2021

- o Get grip on original footprints of the factory
- o Variation in spaces
- o Living in a factory, the immense size?

- o Mapping, qualities
- o Create sections
- o Graphics combined with conclusions
- o RDCE
- o Floorplans original
- o Sections
- o Mapping

MEETING 04-01-2022

- o Concept scores, add level 1 till 5
- o Sharpen the criteria
- o Add accessibility, public services
- o The new housing concept, how, what, where, numbers, research?
- o Analysis of the new location
- o Architectural analysis of the factory
- o Conclusions
- o Program!

MEETING 11-01-2022

- o Good step towards the design
- o Find reference projects, shared living, m², look towards elderly housing
- o Use research from BAM, Dura Vermeer, etc.
- o Target group
- o Split out the public services in site analysis, schools, daycares, bakeries, etc.
- o Use photographs of the surroundings
- o Show the size of the factory on the project location?
- o Mobility

FEEDBACK 21-01-2022

- o Funfhoven, Entrepo-building, large atrium
- o Shared spaces, main focus, secondary is the housing
- o IJdock, lines of sight + volumeshaping
- o Feeling of freedom
- o The shared spaces are the most spectacular spaces to be
- o Shared spaces can have a historical theme, connected to the original function

MEETING 25-01-2022

- o Stand van zaken
- o Design study volumes
- o Building envelopes, urban planning, split elements?
- o Urban configuration = important, use sketching
- o Interaction location and the factory
- o Use of original buildings? Which do I use, which not
- o Qualities of spaces, new integration
- o Get grip on the location

MEETING 28-01-2022

- o Bring back the thrift shop, new location
- o Specific highrise, waterside, central?
- o It is not a copy-paste story, new interpretation, new layout
- o Use sources to explain
- o Piet Blom, Kasbah
- o Le Corbusier, urban planning
- o Variation in grid measurements
- o Design-research, 1 urban 2 architectural
- o Shared outdoor spaces, surroundings of the factory?

MEETING 01-02-2022

- o Mix of target groups to make it profitable
- o Elderly, students, starters, etc.
- o Masterplan, story with photographs
- o Social services in the neighbourhood
- o Accents in height

MEETING 15-02-2022

- o Grab the attention of the audience
- o Bridge, art, past future
- o Personal fascination=passion
- o Tell the structure of the presentation
- o Tell the assumptions of the design/project
- o Urban scale model=must
- o Sustainability is important
- o Concept of the reconstruction, Middelburg, reinterpretation of Jaren 30 woningen, stijkenmerken
- o Reinterpretation of the factory

- o Rebuilding the factory=future vision, connect this to research
- o Create own vision on this

FEEDBACK 18-02-2022

- o Assumptions as a diagram, use in design presentation
- o Experiment by design, fail and error
- o Personal vision
- o Nolli-3D map of the project?
- o Technical design=Def design presentation

FEEDBACK 11-03-2022

- o Walk around through Tilburg and visit more factories
- o Characterize the surroundings of the factory
- o What is happening with the history of Tilburg now?
- o What is my contribution as an Architect?
- o Qualities of textile factories, try to point them out

FEEDBACK 18-03-2022

- o Start the presentation with the project, instead long introduction
- o The new volumes are the connection between the past and the future, history and the future.

MEETING 22-03-2022

- o The why question is very important to tell.
- o Connect the story to the research and the sources
- o Start with strong graphics
- o Comments on the design, too much new, overwhelming the factory
- o Connection not in pathways, over the factoryvolumes, to much attention for the new
- o More potential in the design
- o Reconstruction is the main focus, not new volumes
- o Focus on the shared spaces
- o Use of material, be aware

FEEDBACK 25-03-2022

- o Personal design principles, what are they?
- o Influence of the program on the design? or on the factory?
- o Use of material? Sustainability

- o Huge public areas, Milaan shopping mall WOW!
- o The new is supported by the old, the future is supported by the past. The future cannot without the past.
- o Lloyd-building?
- o Paperclip Karel Weber

MEETING 31-03-2022

- o Start the presentation with the masterplan
- o Connection with the research
- o Use themes to create the storyline
- o Plans, sections, elevation, details.

MEETING 06-04-2022

- o Personal story, Why history, why Tilburg?
- o Make it a personal story
- o Living in a city? Why?
- o Think about a different title?

FEEDBACK 08-04-2022

- o Rebuild monuments, how do we deal with it?
- o How do we deal with moments at the moment in the Netherlands?
- o I create a new way, I use a new approach
- o How did the heritage get lost?
- o Do talk about max capacity, instead of mass housing.
- o Diversity in outdoor spaces, park, sports, relax, etc.

MEETING 03-05-2022

- o Vision on reconstruction, add in essay
- o Position myself in essay types of living, heritage etc.
- o Sustainability

BRABANT CULTUREEL

14 januari 2021 Architectuur Nieuws reacties: 5

Breed verzet tegen sloop van de voormalige Tomado-fabriek in Etten-Leur

Het voornemen van de gemeente Etten-Leur om de voormalige Tomado-fabriek van de bekende Rotterdamse wederopbouwarchitect H.A. Maaskant (1907-1977) in die plaats te slopen, stuit op verzet. Lokale en regionale organisaties pleiten ervoor om het fabriekspand te behoeden voor sloop vanwege de grote architectuurhistorische betekenis. En zij worden daarbij inmiddels ondersteund door de landelijke Erfgoedvereniging Heemschut en door het Cuypersgenootschap, een landelijke instelling die zich inzet voor behoud van bijzonder bouwkundig erfgoed uit de negentiende en twintigste eeuw.

Maaskant

De Tomado-fabriek werd in 1955 gebouwd naar ontwerp van architect Maaskant. Boven de entree kwam een sculptuur van kunstenaar Ossip Zadkine, bekend van het beeld *De verwoeste stad* in Rotterdam. De tuinen rondom de fabriek werden ontworpen door tuinarchitect Mien Ruys. Het vernieuwende ontwerp vormde een stijlbreuk met in die tijd bestaande



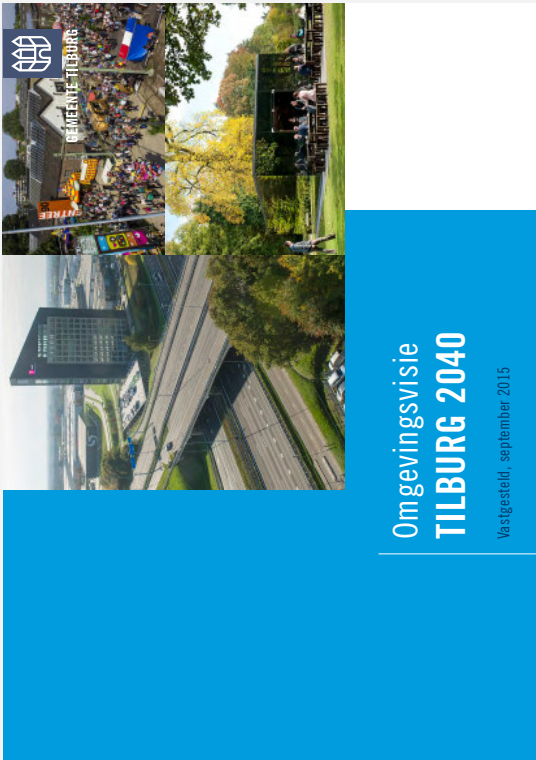
▲ Anton Joosen heeft negen jaar bij Tomado gewerkt. Die periode heeft diepe indruk gemaakt op de Hoevenaar. foto Robert van den Berge/het fotoburo De fabriekshal van Tomado EttenLeur in 1955. De fabriek ging dat jaar open en moest in 1982 de deuren sluiten. ‘Oprichter Jan van der Togt had een te grote broek aan.’ foto Regionaal Archief WestBrabant

De oude Tomadofabriek was bijna een monument, maar wordt nu waarschijnlijk gesloopt

ETTEN-LEUR - Bijna was de oude Tomadofabriek aan de Oude Kerkstraat 2 een gemeentelijk monument. De toenmalige eigenaar Fri-Jado maakte daar bezwaar tegen, dus ging dat niet door. Nu dreigt het pand tegen de grond te gaan en willen verschillende partijen het pand alsnog tot monument laten uitroepen.

Anne Jansen 22-12-20, 06:00 Bron: BN DeStem





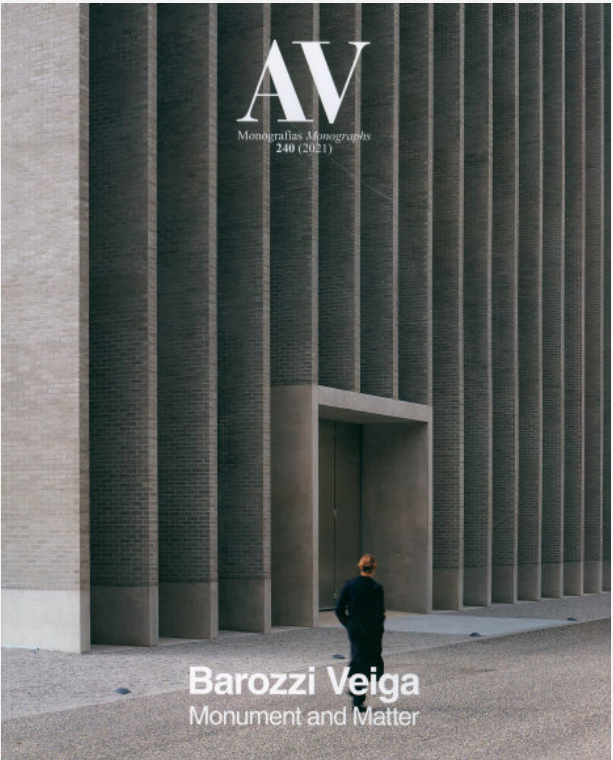
Omgevingsvisie Tilburg 2040



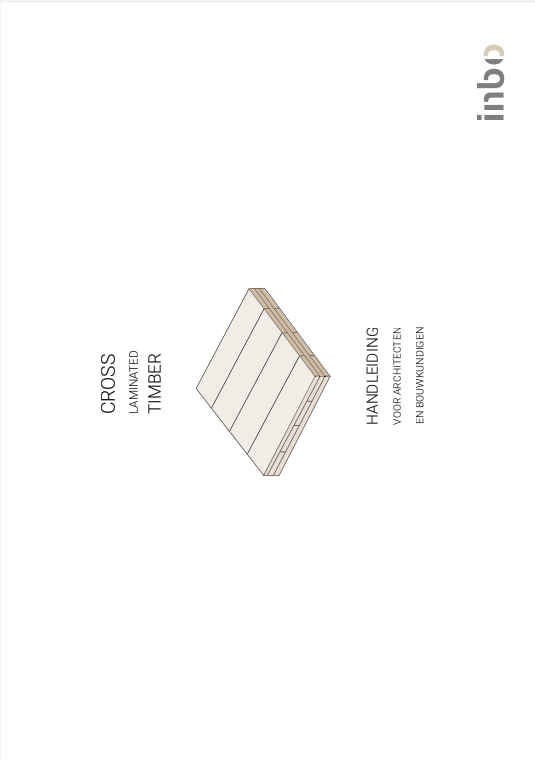
Wonen in de 21e eeuw



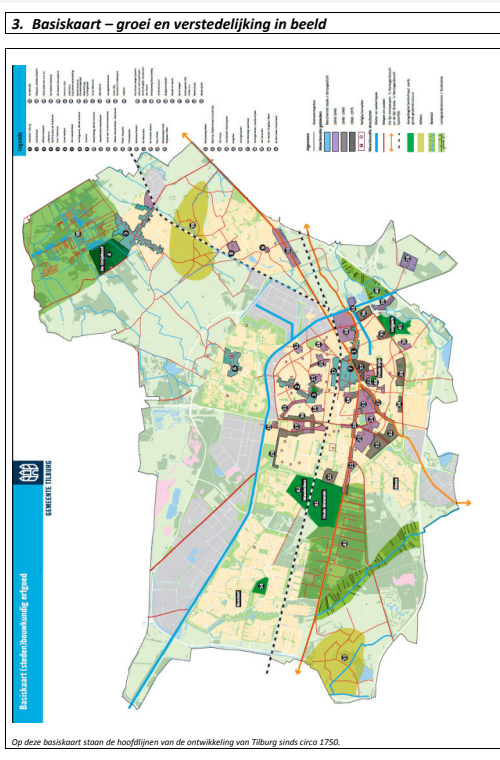
Stedelijk wonen in de 21ste eeuw



Monument & Matter



CLT handleiding voor architecten en bouwkundigen



Monuments of Tilburg

ZOHO, ROTTERDAM

Orange architects

Zoho Rotterdam is a reference project for my graduation project. It's interesting how they've dealt with the heritage, futuristic addition and sort of buffer zone in between on this project. The facilities and social outdoor areas are also interesting.



VDMA, EINDHOVEN

VenhoevenCS

The VDMA site is an inspiration in the field of heritage transformation and circulation. The design of social outdoor spaces is also interesting. The style that is used in the elaboration and schematization of the concept is something that also appeals to me. The combination between monumental and new, the circuitry in this and the use of materials is something that caught my eye during the research.

HIMMEL, RIGA

Square One architects

This reference fits in perfectly with my factory typology and a modern addition. In this project I found the schematics of the concept and the design interesting and clearly designed. Something I can learn from for my graduation project.



6. The existing Kimmel brewery is the beginning of the composition. We propose a gesture of continuation of the line that is already established by the old listed building. In that way, we pay respect to the original Kimmel's architecture.

7. The produced volume is an perimeter block opening towards the Kimmel site. The overall composition is one continuous volume with uniform material expression (brick), which could partly be reclaimed from the demolition of buildings 6, 7, 8, 19 and 20.

8. By creating an opening towards Stabu street, we produce a continuous promenade through the block, starting at Kimmel main gate at Bruniniešu str. In this way, we produce two potential construction phases.

9. We create a network of public spaces open 24/7 with shops, restaurants and cafes, with no dead-ends or poorly utilized areas. Through this public network one is able to find the main entrance atrium to the new development.

10. The remaining square meters are placed on the top of the brick base, with a different, light colored expression. In this way, we achieve an addition of a large commercial building without affecting the UNESCO monument.

11. We create two "gap" floors in order to visually separate the volumes from one another and give transparency for two main functions: the retail function at ground level and the co-working hub at the interim level.

The first "gap" space at ground floor activates the streetscape with shops, restaurants and other lively activities.

The second elevated gap space becomes a big continuous creative hub, a co-working space where smaller companies & startups connect and build alliances between them.

12. We create a subtle subdivision on the facades of the building which matches the facade lengths of the surrounding streets by letting the facade of the building "bend" under the influence of the urban context.

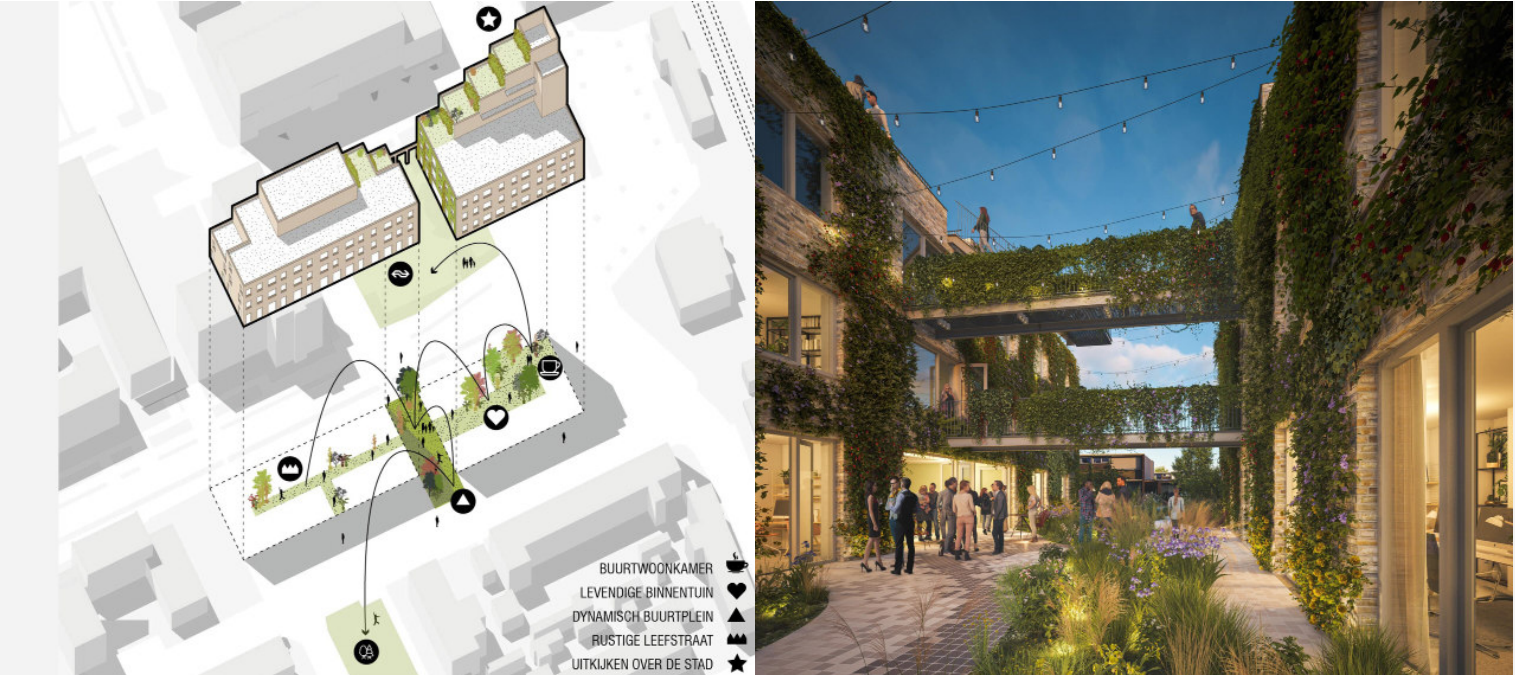
The slightly curved facade is a reminiscence of the vaulted roofs of the Kimmel brewery cellars.

By bringing this element forward and making it the central visual theme of the building, we once again pay tribute to the monumental ensemble.

13. The two volumes are physically connected with "bridges" which increase the efficiency factor or the overall structure: the amount of fire escapes and elevators are drastically reduced.

Moreover, a covered atrium creates a well protected and representative entrance to the offices, from which one can access the entire building.

At this point we propose the passage way through the block to be uncovered, but covering it can also be a viable architectural scenario.



BUURTWOONKAMER
LEVENDIGE BINNENTUIN
DYNAMISCH BUURTPLEIN
RUSTIGE LEEFSTRAAT
UITKLIJK OVER DE STAD

BASISPLATTEGROND

VARIANT 1

VARIANT 2

VARIANT 3

VARIANT 4

VARIANT 5

ROCK, ETTEN-LEUR

Levs architecten

Rock in Etten-Leur makes use of shared living/living. Social interaction is encouraged through shared spaces, living room, kitchen. The vision of the social outdoor space is also very interesting. Furthermore, this project contains many interesting forms of living that have a connection with my personal vision of living.

VAN BESOUW, GOIRLE

Bedaux De Brouwer architecten

A comparable project is the project in Goirle. It is an old factory, completely repurposed for living. A lot of volume has been added in this case. I don't find this project interesting in terms of material use, typologies, but more in terms of living/living. Their diversity in the different volumes. With an emphasis on factory volumes.



“DE TOUWFABRIEK”, OUDEWATER

Braaksma & Roos Architecten

This project was inspiring in terms of atmosphere and experience of an old factory complex. Because the complex has been preserved in its original context, the original outdoor spaces have also remained intact. What seemed particularly interesting to me about this project is the way of making interventions on this monument. The original building was not immediately suitable for living. Adjustments have been made to make this possible. In my opinion, that was very well done, with respect for the existing experience.

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