



MEAT MEETS URBAN LIFE

A conceptual building investigating how to shape the
modern conscious meat consumers

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A conceptual building investigating how to shape
the modern conscious meat consumers

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Master Thesis
Chalmers Architecture
MPARC - Architecture and urban design
2015/2016

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CHALMERS

ABSTRACT

As a result of the rapid development of technology the distance between the consumer and primary products has gradually increased. This is very apparent concerning meat. The vacuum packages of cut up pieces of meat at the supermarket are expected to exist in unlimited amounts and preferably to a cheap price. The relation between meat and animal has become neglected.

The aim of this project is to develop a conceptual building showing how meat can be brought into society again. The discussion concerning meat, whether to eat it or not, is infinite, but, even though more people choose not to eat meat the overall consumption is still increasing. Meat meets urban life investigates how increased knowledge about- and decreased distance to- meat and meat production could effect the consumption.

The design process resulted in a building for meat production. The building offers visitors and passers-by insight of the meat production and understanding of all the steps from tendering carcasses to perfectly cooked steak. The goal is to make learning a natural part of the individual meat consumption. By adapting new techniques to traditional Swedish culinary art and fit it into the modern society it is possible to decrease both the physical and psychological distance to meat. Meat meets urban life is a conceptual building, which tells one story of Swedish meat production.

About me

Besides the obvious reasons, food has always had a special place in my heart. Like most people I have beautiful memories of food related to people I love. I would like to take the opportunity to thank them. Because of all of them and because of all of the amazing food they have provided my love for food has got nutrition. So, thank you!

Working with food and meat in various ways is also part of my family history. My great grandfather owned a traditional butcher's shop. He bought the meat and carcasses from the local slaughter and farmers and transformed it into delicious meat products like pates, sausages and smoked pork sausages and sold them in the shop. Have you ever eaten Hugos Isterband? They have been classified as the best smoked pork sausages in Sweden. My great grandfather is the one who came up with the recipe and gave it to his friend Hugo. True story, even though they probably would not admit it if you asked the Hugo family today.

My grandfather has been working as a district veterinarian. For a short period of time he and the whole family were based in Arvidsjaur. My father was just a little boy at this time, but he always tells me the strongest memory he has is when he and his siblings and mother came along with the father, the veterinarian, to the reindeer slaughters in Arvidsjaur. The slaughter vehicle came to reindeers in the forest and along came the veterinarian to examine the animals. My father tells me how they sat in the snow, drinking hot cocoa, surrounded by piles of skin from the reindeers and how they steamed in the freezing air. He has told me this memory several times and I conceive it as a beautiful one.

My father really loves his job. His job is also why I decided I wanted my master thesis to concern people's relation to food. He is a surgeon and one surgery he executes a lot is gastric bypass. It is when a part of the stomach is disconnected in order to make really fat people eat less. I do not want to destroy my father's career, but think it is really important to start to convince people to learn about food and make them respect it instead of inventing ways to go around the huge problem of people not being able to control their diet, even though it does not always end up in obesity.

Personally, I have had a short, but amazing, career as a sushi chef. But, as the impulsive, restless soul I am, I without further ado started my architectural education instead of investigating my options in a career with Japanese divinity. Beside the studies during my bachelor years in Umeå I, together with two fellow students, started a cooking team. Whenever there was a big feast at the school we planned and cooked the food. It was fantastic. Even if the stress sometimes made me a horrible person, it is those situations I remember and cherish, sometimes even more than my "real" education. So food, I love you and respect you and I hope you, as a reader, will find this master thesis interesting.



Thank you!

Emilio Brandao, supervisor and amazing person. Thank you for your endless encouragement, inspiring ideas and discussions.

Lena Hopsch, examiner. Thank you for your engagement in the project and for your support and ideas leading the project forward.

Peter Ehlin, CO-owner at Robertssons charkuteri. Thank you for helping me understand the complexity of a butcher's shop.

Olle Forsgren, town architect, Umeå. Thank you for helping me in my confusion of where to locate my project and for being supportive and positive.

and Thank you *Josephina Wilson* for your hospitality, friendship and discussions, *Gustav Hamlund* for always being there for me and *my family* for your generous and endless support.

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I

INTRODUCTION

Meat meets urban life is a project investigating how to turn people into conscious meat consumers. This is important because along with the development of the society our relation to the origin of products gets lost along the way. More people than ever live in cities in Sweden today (Statistiska centralbyrån 2015) and the meat consumption in Sweden has never been higher (Jordbruksverket 2012). The purpose with this project is to decrease this physical and psychological distance between consumer and meat and meat production. This will be investigated by designing a building bringing meat into the urban life. The vision is to enhance the connection between animal and meat, to highlight Swedish meat production from small farms around the country and to make knowledge and learning a natural part of the meat consumption.

Meat production is a long process. A lot of techniques and knowledge are involved throughout the production processes. Knowledge is key and therefore this project focuses on bringing knowledge into meat consumption. This will be executed through a building for meat and meat production, where the costumers pass by all steps of the process and observe them before being able to buy the product. This is to enlighten people about the products, where they come from and what it is. Thereafter the costumers have something to base their decisions on and the choice whether to eat meat or not becomes an active decision every time.

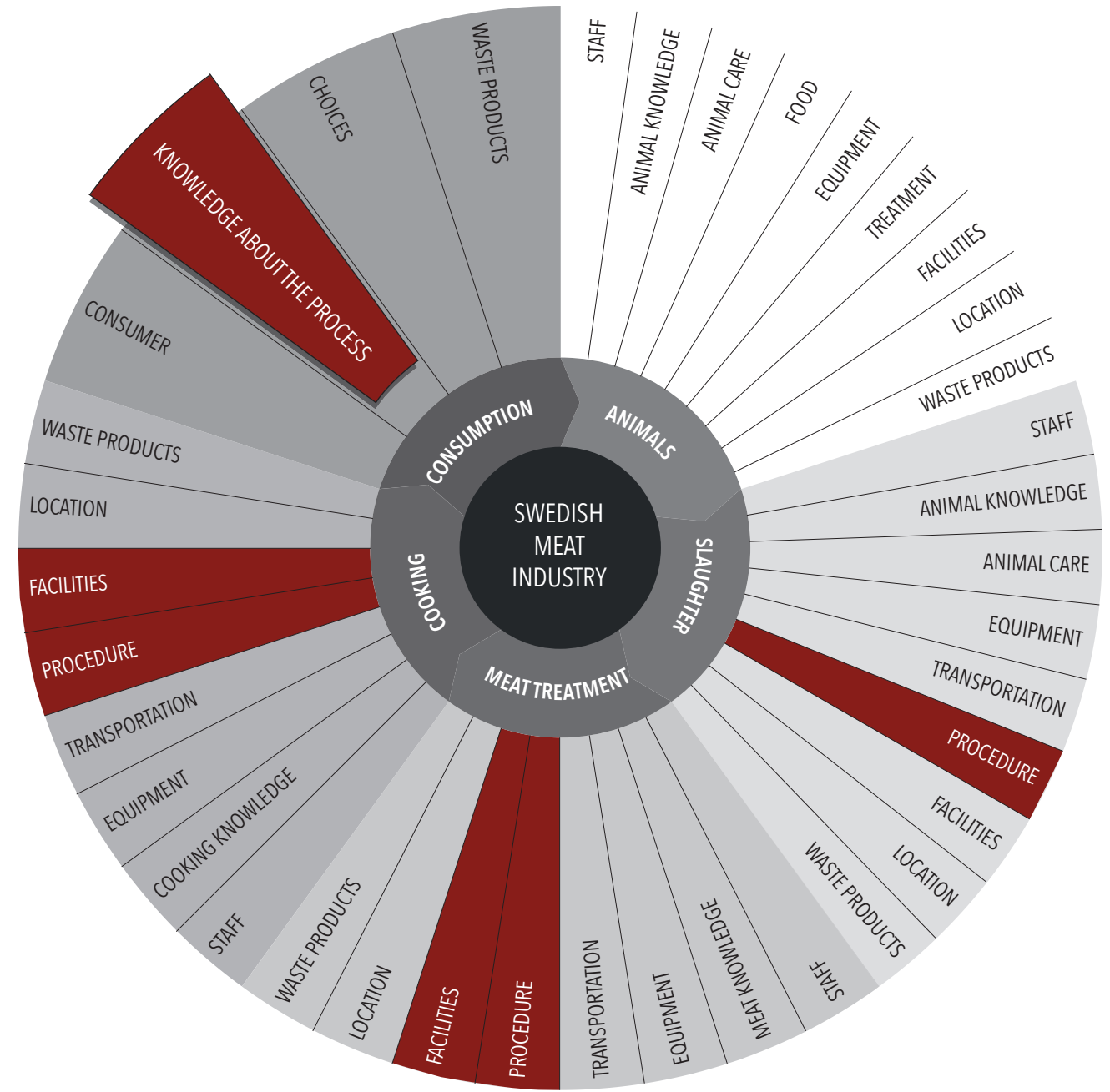
Questions

- Is it possible to change people's behaviour and relation to meat using architecture?
- How can a building tell the story about Swedish meat production?
- How can this project achieve a decreased physical and psychological distance between human and primary products?

Method

To find an architectural proposal for this project, the method of Research by Design is applied. The design tools architecture possesses are powerful and valuable when finding one possible solution to this. By exploring through design feeling, views, visions and experiences can be enhanced and pinpointed towards the goal. Through model making, sketching and collages the process will lead to the final result. Information about the fields included in the project, gathered through literature, interviews, study visits and reference projects, will constitute the background that will motivate and emphasize decisions taken throughout the project.

Diagram showing the process of meat production. The red fields are the ones incorporated in this project. The main focus is to investigate how to incorporate knowledge into meat consumption.





II BACKGROUND

Swedish trade history

The markets and the rural shops

Until the middle of the 19th century trade was only allowed in cities in Sweden. Exceptions were made for some places located far from the cities, where annual markets were permitted. At these markets people were able to buy goods they could not produce by themselves. The market often took place in connection to a religious feast (Blom, Johnson u.å). In cities, however, farmers travelled daily in to the market squares to sell their goods. The trade was mostly handled by the farmers themselves and sold directly from their travelling carriages, but also by market women in permanent market stalls. During the 19th century the primary trade of agricultural products was at the markets (Blom 2008).

In 1846 a change of the law made it legal to open small stores in rural areas, located at least thirty kilometres outside the city boundary. This was a great milestone in Swedish economy and history. In Swedish these shops were called "handelsbodär". Here the costumers could buy everything from locally produced butter to snuff, fabric, flour and coffee. If something was not in the original stock, the storekeeper could easily order it. The need of stores outside the cities was substantial and they grew rapidly in numbers (Handelns historia u.å). Along with the openings and spreading of stores outside the cities, the division between production of goods and consumption came to grow. To be able to shop at a store money was needed. The old ways of payment with subsistence economy started to be replaced by money economy. This can be seen as the start of Sweden's development towards a

great economy. When local rural stores first established, they were a part of the modern society and a possibility for a city to grow and be introduced to the modern world. Still rural shops are important in sparsely populated areas. However, the store no longer is a thing of the future and modern, but a service expected by the society and a necessity for small rural communities to keep on living (Handelns historia u.å).

Regulations of fish, meat and milk

In the late 19th century a lot of products at the city markets where relocated into covered markets and shops. Tradesmen wanted permanent places for their businesses and the administrative authority wanted to improved hygiene. Outdoor trade of meat, fish and milk became prohibited in many cities in Sweden during the first decades of the 20th century. The goal was to get all provisions into hygienic halls designed for the products and the management of them. Vegetables and fruits on the other hand were not considered as sensitive because of their natural connection to earth and did not get the same restraint (Handelns historia u.å).

Different sorts of shops opened as a result of the new regulations. Milk, which previously had been brought into the city and sold by the farmers or market women, now had to be sold in special shops to keep up the hygiene of the products. *The fear of meat and vegetables infecting the milk resulted in a lot of regulations controlling what products should be allowed to be sold in the milk shops and whether shops for meat or vegetables could be located next door.* Considering that the majority of the Swedish population did not have any possibilities to keep their milk cold at this time, the milk shops had to be opened every day of the week, which was unusual at this time. The reason for keeping milk separated from other goods in stores disappeared in middle of the 20th century. Now the hygiene among provisions were further developed, the possibilities of keeping the products cold existed and pre-packed products had its breakthrough. Tetra Pak for milk products came to the market in 1954 and the law was abrogated in 1953 (Handelns historia u.å).



Development into self-service stores

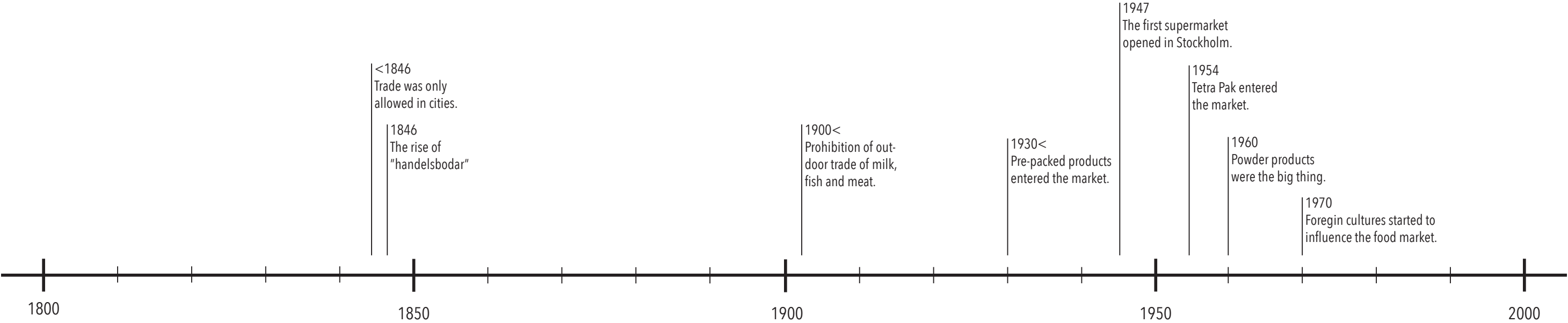
Up until the middle of the 1930s most of the goods and products in the stores still were sold unpacked or piece-by-piece and packed by the storekeeper. At this time pre-packed products came to be further developed and took more space on the shelves. The wrappings protected the goods during delivery and became an effective way of branding the products. This was the first breakthrough of pre-packed products and the assortment of tins, ready-made food and semi-finished products grew. Products such as anchovy, herring and caviar were very popular with this new technique but also vegetables, exotic fruits and the classical pea soup that had been delivered to the Swedish army for decades. Even canned ready-made baby food existed, but did not get its breakthrough until the 1960s (Handelns historia u.å). After World War II the economies grew rapidly and hence the consumption in the society increased. The economical growth also created a bigger demand on staff in the factories. More women started to work outside the homes. This resulted in a big flow of people in the stores at the end of the day, which was a complication due to the law regulating the opening hours. The rationalization had to be improved. The distribution forms and self-service had already been slightly investigated and in

some places tried out in small scale. *In Sweden the first complete supermarket opened in 1947 in Stockholm* and they soon became popular and widespread (Johnson, u.å). However, the transformation of the old shopping habits came with a psychological resistance that needed to be confronted. To no longer be attended in the store was not appreciated by the costumers who were used to get everything sorted out for them by the storekeeper. The word self-service had a bad touch to it. A name competition was launched and the winner that was going to convince and attract the costumers to the modern shops was “Supermarket”, a name focusing on the positive quality of shortening the time in the shop. The supermarkets came with changes in the society; the role of the staff in stores changed, the costumers could shop in their own pace and by own needs and did not have to be embarrassed if choosing a cheep alternative of a product for instance. *The new supermarkets demanded a development of the packages, all products needed the possibility of being pre-packed and this was the key to the success of supermarkets* (Handelns historia u.å). The post-war years were the time for the great pre-packing boom. Fridges, freezers, plastic wrapping and supermarkets were the key elements. Tomatoes from the Canary Islands, loaves, cheese and cutlets it all got covered in

plastic wrappings. Changes of seasons became intangible with the new freezing possibilities (Handelns historia u.å).

Since many women made a change in life and started to work outside the home, the time to prepare dinner decreased. This was beneficial for ready-made products and during the 1960s products in powder form dominated the market. People dreamt about only having to eat a pill to fulfil the purpose of a meal. Milk packaged in Tetra Pak had been available on the market since 1954 yet the invention of milk powder was celebrated due to its quality of not being heavy to carry home. Deep frozen cod without bones and fish sticks entered the market and filled the freezing boxes at the supermarket. Falun sausage, lightly smoked pork loin and spaghetti to the mincemeat sauce were big hits on the dining table. Desserts were now mainly served during weekends and could be a chocolate pudding or lemon mousse quickly made by mixing powder with water (Ica-historien u.å).

During the 1970s Swedish plain food still dominated the homes but this was a time when we started to eat outside our homes more frequently (Handelns historia u.å). During this time the Swedish food culture got influenced by a lot of other cultures. Pizza and hamburgers got popular both to cook at home and to eat at a restaurant. McDonalds opened the first restaurant in Sweden in 1973 in Stockholm. Rice competed with potato on the plate but despite all the new influences and exotic products, such as bell pepper, we kept on being conservative. (Ica-historien u.å)



The microwave
One day in 1945 the American engineer Percy Spencer discovered the chocolate he had in his pocket started to melt when he passed by a radar system radiating microwaves with a frequency of 2,5 gigahertz. By curiosity he investigated how other products reacted to the microwaves and found water, fat and carbohydrates reacted on microwaves with the frequency of close to 2,5 gigahertz. The first microwave developed was called “Raydarange” and had a weight of 340 kg and was 1,7 m high and was mainly used by big restaurants (Världens historia 2010). In 1967 a more compact microwave suitable to be used in the home entered the market and now it became interesting for common man. But with a cost of 495 dollars, it was an expensive investment. Rumours about the microwave causing sterility made people questing the new technique of heating and cooking food but due to lack of proof of this the selling rates and usage of the microwave increased during the 1970s. Years of development has made the microwave increasingly more effective, compact and cheap and today it is a natural feature in almost all households (Thelander 2003).

What and how do we eat in Sweden today?

The development of food up until today has resulted in a backlash towards the industry. The possibilities to create everything in an industrial way and on an industrial scale have created an increasing distance to the food. This has encouraged and evoked the big food trend of today: “real food”.

Change of food trends is a slow process since it is a part of human behaviour and is strongly related to big structural changes in the society. Now we have come to a point when people have started to question the industrially produced substances in the products we consume (Äkta vara 2010). Almost 50% of the Swedish population choose not to buy the product after reading the list of ingredients. The ingredients avoided are primarily unnecessary additions, but also trans fats, hardened fats and sugar (Äkta vara 2015). Our suspicion towards these ingredients has resulted in a search for the “real products” and the products with the authentic feeling are the locally produced ones, the ones we can find near and preferably ecological, too. It is the opposite of the industrial produced food, in which we do not have a clue where the ingredients come from etc. Along with this trend more people have started to grow their own vegetables, fruits and herbs, especially in the garden but also on the windowsill or in balcony flower boxes if not having access to a garden (Äkta vara 2010).

A deviating product from this “real food” trend is the consumption of meat. The consumption of meat keeps on rising. In 2010 we ate 85 kg per person and year; it can be compared with 60 kg per person and year in 1990. The most crucial factor for this is the increased import of meat. *The year of 2013 was the first when Sweden imported more beef than was produced in the country.* It is the imported meat that keeps down the prices on the market, due to the less strict

rules concerning animal management. In 1995 the meat production in Sweden basically equalled the amount consumed. It was the same year as Sweden entered the EU. Since then the animal production in Sweden has steadily decreased with some dramatic drops in 2000, 2005 and 2012. During these last 15 years the price of meat has risen slower than the consumer price index. The Swedish board of agriculture (Jordbruksverket) has not proposed any strategy to turn this negative trend around yet they pinpoint the importance of a competitive production. To preserve the animal production in Sweden guarantees a good animal protection and a fair animal health with a low usage of antibiotics. Swedish domestic cattle also help to keep the landscape open which is beneficial for the biological diversity (Brink 2013).

A natural result of the increased import of meat is the shutdown of activity for many farmers in Sweden. In 2012 the Swedish beef- and pig slaughter decreased with 9 percent. The increased import of dairy products is hitting the dairy farmers even harder. During the last ten years the amount of dairy producers decreased from ten thousand to barely five thousand in 2013. If this negative trend continues there might not exist any Swedish dairy farmers in 2050 (Lagerwall 2013). This effects the meat production due to the fact that 65% of all beef comes from the dairy production. If the amount of dairy cows keeps on decreasing so does the base for the beef (ATL 2015).

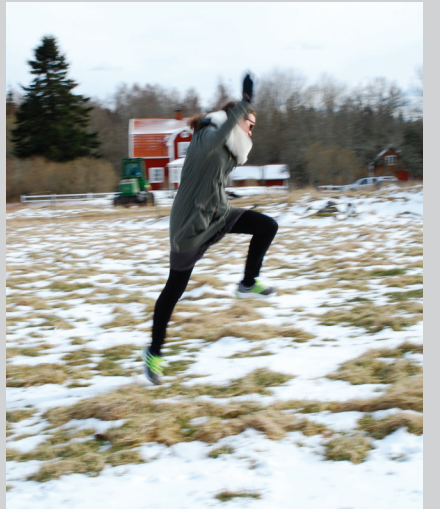
By preserving the Swedish meat production and let the animals graze on Swedish pasturelands, to remain the open landscape, it is possible for important plants, insects and animals to flourish and keep up important steps in the ecosystem (Naturskyddsföreningen u.å). In the agricultural landscape and grazing lands more than half of all vascular plants and mammal species in Sweden exist and about 50 bird

species. A lot of insects like bumblebees, bees and butterflies only exists in the agricultural landscapes. A shortage of these species would result in less harvest for the agricultural sector due to lack of pollination (Svenskt kött u.å).

“One health” is a term symbolising the relation between the health of humans and animals. If one gets infected the other risks of being infected as well. The increased usage of antibiotics around the world, both for people but also within the cattle management, is a big problem. It has led to an enhanced antibiotic resistance and this can strike back and have devastating consequences. Swedish milk and meat do not contain any levels of antibiotics, this is because of a long tradition of actively keeping up a stable animal management and work to prevent diseases. Sweden was the first country to prohibit the usage of antibiotics in feeding stuff in order to increase the animals’ growth. This was in 1986. In 2006 the EU instated the same law, but is still missing outside the EU. Yet antibiotics are still used within the cattle managements in the EU in other ways. *Healthy animals do not need antibiotics* (Äkta vara 2010).

Sweden has the most comprehensive law for prevention of cruelty to animals. It has its origin in the possibilities for animals to behave naturally and to treat the animals respectfully (Svenskt kött u.å). The law of prevention of cruelty to animals composed by the EU is in most cases still far behind the standards of the Swedish law. A lot of countries outside the EU, exporting meat to Sweden, do not have any law of prevention of cruelty to animals at all (Äkta vara 2010).

Even tough eating is the most basic human need it is the trends that influence the food industry. Concerning food, the middle class is the trendsetter for the big masses and it is that group the food industry observes when inventing and launching new products. The most important is to show what food we want to eat by thoughtfully choosing our products. The industry can be changed to provide the natural products we deserve (Äkta vara 2010).



The conscious consumer definition

The conscious consumer's basic ideas are based on the facts that the production behind some products and services are unsustainable in several matters and their effects can be devastating. Examples of these effects are pollution, child labour, distressing animal testing, unethical treatment of animals and humans, cultural and economical drainage of local communities, insufficient safety concerning products and product testing, lack or absence of safety principals, short-term planning, loss of working opportunities as a result of restructurings or shutdowns and general problems at the work (Sveriges konsumenter I samverkan 2015).



Food trends 2015 and 2016

An investigation made by The Food Marketing Expert team describes the rising and upcoming food trends in 2015 and 2016. The general description is “rise of the pragmatic consumer” and it incorporates eight different categories, listed below. Some of the trends are a bit contradictive, which is natural, since it is extremely rare for everybody to want the same thing (Nordfalks 2015).

Summary about the upcoming trends concerning meat

The meat consumption has been increasing for decades and upcoming trends show no deviation from this. Working with integrating the meat production into the society is a way to join together the consumers with meat as a primary product. With a closer relation and increased knowledge about the production, the increasing meat consumption could appear differently from today. There is a lot to gain. Luckily more people start to question the origin and the production of the products they eat and want to know under what conditions they have been produced. The enquiry of an informed society, regarding food production, is fighting to be heard and responded to. Related to the knowledge about the origin of what we eat, is a rising trend of producing products by our selves. The value of knowing exactly what we put on our plates is reinforced.

*The food trends during 2015 and 2016 (Nordfalks 2015)
The categories are not listed in chronological order*

Freedom

The free choice of the consumer is emphasised. This incorporates the possibility for us to have access to food and sweets everywhere we go all the time. Freedom of the meal is also a part of this category, when we eat and how. The sharp division between the meals gets blurred and new hybrids emerge, the concept of brunch was the start for this. The development anticipated revealed a modest involvement for the consumers in the food and the cooking.

Empowered health

This category incorporates the never-ending search for the hottest new diet. It focuses on health and celebrates so called super berries and fruits with vitamins and antioxidants beneficial for the body and health. It focuses on providing the body with natural and positive products and to avoid or decrease the consumptions of allergens and too much of the regarded unhealthy products.

Experience in everyday

“Haute casual” describe how we want to refine our ordinary everyday meals and raise them to new culinary levels. The experience of the meal and the new trend also come with the table accessories, the cutlery, cloth, plates etc. and their effect on the meal. The exploration of new products fits into this trend to.

Scandi-simplicity on plate

This trend emphasizes the simplicity and natural products, raw food and a natural flavour palette. Natural cooking with home-grown primary products is emphasised, a vegetable revolution is rising. Overall the amount of meat consumed and used in cooking will be drastically decreased, it is called demi-veg. The keyword is “natural”.

Kidult

“Kidult” is the merge of adults eating food usually consumed by kids, a rising trend during 2016. Classics are also rediscovered or are reintroduced in new shapes.

Food for social good

Knowledge about the food we eat. Where does it come from? How big is the environmental footprint caused by the product? How has it been produced? Under what conditions does the producer operate? How long have the products been transported? These are questions the modern conscious consumer are interested in before making the choice of product. It also incorporates the respect for the products.

New food hero

This can shortly be described as knowledge about the source of the food. We want to know where it comes from and we want that to be reflected in the product. Ideal would be if we knew who had farmed the animal, performed the slaughter, cut it up and cooked it for us. To eat along with the seasons is also an important aspect in this trend. We have higher demands on the information. Two keywords are “food feminism” and “local pride”.

Relax, casual is king

How we see food gets a twist. What previously has been regarded as ordinary and trivial will be highly valued. This incorporates the revival and upgraded quality of street food as well. Examples of this are sausages and hamburgers, products that during the past year already have got higher status and transformed into something luxury and exclusive. The revival of old or existing food products quite naturally boost and encourage the usage of meat to a larger extent.

Mobile slaughter

Mobile slaughter units have been in use within the reindeer management since the 1960ies. Due to long distances, special conditions and the difficulties in transporting reindeers the regulations for slaughter are different from domestic cattle. The inadequate control of hygiene has been one of the critical factors why this type of slaughter not has been adapted to other species (Benfalk, Edstrom, Geng, Gunnarsson, Lindgren, Nordberg 2002). In Europe there are mobile slaughter units for sheep, pigs and, as mentioned, reindeers. In Northern America and Australia the technique is a bit more common and in use for big domestic cattle as well (Grimstedt 2014).

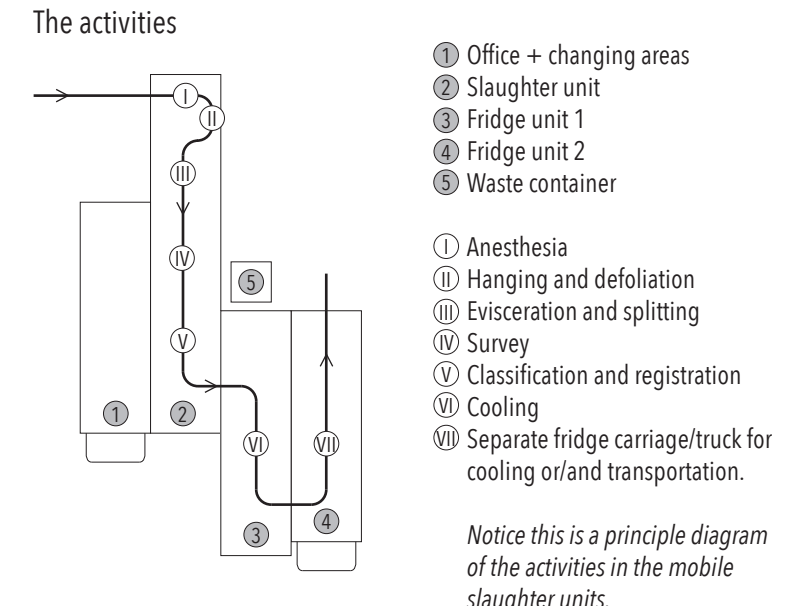
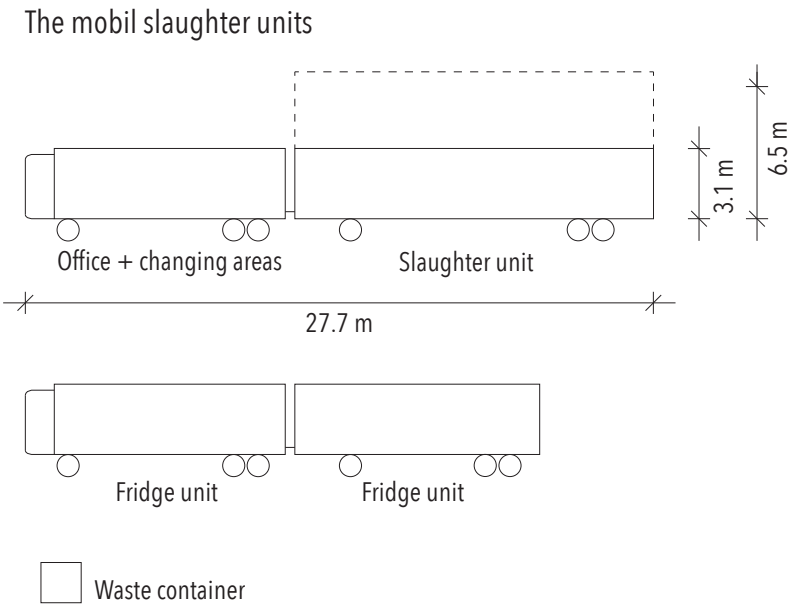
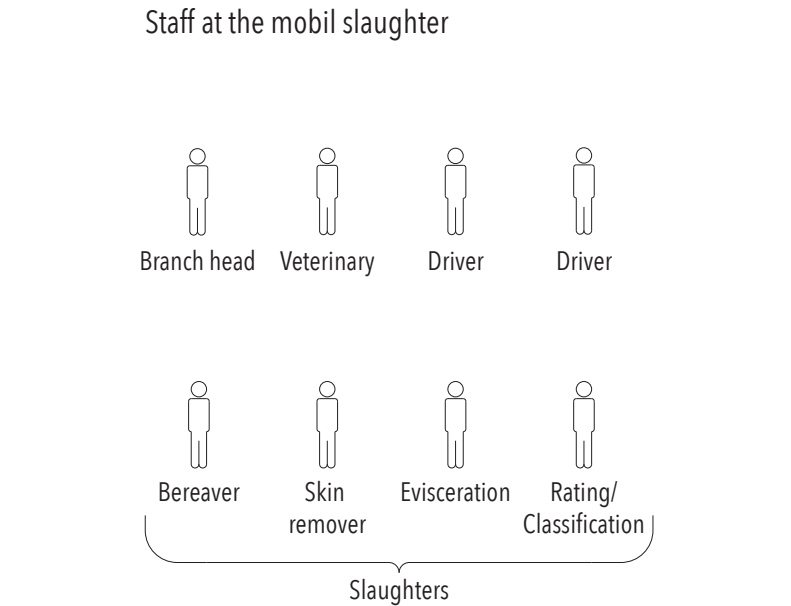
An initiative by Britt-Marie Stegs, founder and Chief Executive of Halsingestintan, resulted in 2014 in the first mobile slaughter unit for big domestic cattle in the EU. The two vehicles consist of one truck tractor containing an office and changing areas and it is pulling the slaughter unit. The second truck tractor is pulling a carriage with a cold storage area for the meat. When the vehicle reaches the farmer

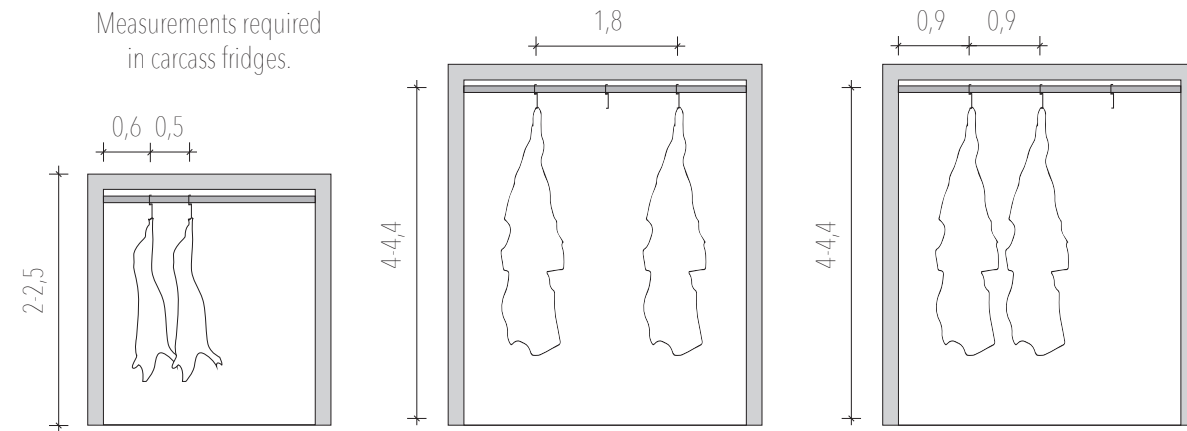
the units are put up beside each other and joined together to create a flow within the different steps. This can take place in the fields or in the barn area. Preparing the arrangement takes about one hour (Halsingestintan 2014). The animal walks into unit where it is about to get stunned. It is possible to open up the wall in front of the animal making it view the light and nature in front instead of a solid wall. This is less stressful for the animal because it does not feel like it is trapped. There is neither any difference in level for the animal to take into consideration, the floor can be levelled with the ground. After it has been stunned and the staff have ensured it is unconscious, the carcass is hung up. According to the law the animal must immediately be drained on its blood to secure the death. This is important in a hygienic aspect considering the fact the bacteria grow faster if the body is full of blood. Now the animal is ready to be skinned and then the entrails are eviscerated. A veterinarian examines the meat and entrails, controlling the meat is healthy. The carcass is subsequently transported to Hälsingestintan's facilities in Eskilstuna where it is hung for seven days to get tender and then it is cut up to be sold. The only difference

between slaughter in a mobile facility and an ordinary one is primarily the condition for the animals and the fact they do not have to be transported. To eliminate the long bumpy transportations is better for the animal in terms of stress. They stay in their familiar environment with smells they are used to and they do not meet other animals. The quality of the meat improves when the animal is not exposed to the stressed situation of the transportation. When the animal gets stressed it releases stress substances into the meat, which is passed on into our own bodies when we eat it (Det första mobila slakteriet 2014). 2012 was the first year when the amount of imported meat to Sweden was greater than the meat produced in Sweden. This is meat from animals treated in a way that never would have been allowed in Sweden. Sweden is one of the countries in the EU with the toughest regulations concerning the environmental aspect and animal protection. Something that brings up the prices of running the business but chiefly benefit the quality of the meat, the life of the animals and protects the environment (Har svenskt kött någon framtid? 2014).



Britt-Marie Stegs, founder of Hälsingestintan and initiator to the first mobile slaughter for big domestic cattle in Sweden. The mobile slaughter unit (Britt-Marie och djuren u.å).





Butcher's shop

When the slaughter process is finished the carcasses hang in a cooling-room waiting to be cut up. When designing such a space there are several things to take into consideration. The bodies, which have not been examined by a veterinarian, cannot hang in the same space as examined bodies. The temperature needs to be $+3^{\circ}\text{C}$ if organs for food production are kept in the room, otherwise $+7^{\circ}\text{C}$ is the warmest temperature allowed. The carcasses can take days to come down to the required room temperature, therefore it is crucial the cooling capacity of the space is consistent and does not alter when new warm carcasses are brought into the same space. When the bodies hang to cool the most important is for the surface to be dry and cold as fast as possible and for the meat to be cooled down continuously. There are no regulations about the pace of the cooling process but concerning the quality of the meat the best is to do it slowly. It is profoundly important to avoid humidity and a rise of temperature when bringing in new bodies. Hence the volume needs to be dimensioned for the expected production. Recommended dimensions for the area around the carcasses can be seen in the illustrations. The figures are counted in metres (Benfalk, Edström, Geng, Gunnarsson, Lindgren, Nordberg 2002).

In Sweden an agreement within the meat industry has decided cattle have to hang at least seven days to become tender before being cut up, but it is preferable to let it hang for two weeks.

When the body hangs a process starts inside of the meat where proteins in cells and connective tissues are digested by enzymes existing in the meat, making it tender and easy to chew. The process starts naturally but can get a kick-start helped by electric stimulation. This digesting process of the meat continues until it is cooked, but the process is as most effective in the beginning (Svenskt kött 2015). There are two ways to perform the process; the first is the one mentioned, by hanging the whole carcass. It is the traditional method, today it is considered exclusive. When the bodies hang bacteria attack the surface, consequently the top surface needs to be removed. The other way is to cut up the meat, vacuum-pack it and let the meat get tender while in the package. This is a very hygienic alternative resulting in less waste products, smaller storage spaces and easier transportation. Equally long tender process results in equally tender meat no matter which one of the two techniques has been used, though, experts and chefs prefer and advocate the traditional hanging process (Svenskt kött 2015).

III THE SITE

Future development plan of Umeå
Notes from a meeting with the town architect of Umeå, Olle Forsgren, discussing the future development and visions of Umeå.

A current project is rerouting the transit route E12, going through Umeå city centre, to the outskirts of the city. This will drastically decrease the heavy traffic in the city centre. This is one step towards the goal of a car free city centre with a well developed system for public transportation. The city centre in Umeå is called the Centre Quadrangle. It is framed by the railway in the north, Västra Esplanaden in west, the river in south and Östra kyrkogatan to the east. When the majority of the vehicles on E12 are relocated the plan is to bottleneck the street. On the southern side of the river, at Teg, the plan is to build dwellings along the street where there today is a small industrial district. On the northern side of the river, on both sides of the railway, the plan is to remove the big crossroad and minimize it to one road only with a couple of roundabouts. Today this road reaches over the railway, blocking the view between the regimental area and the city centre, increasing the distance with both a visual and physical boundary. In the future the road will go under the railway, decreasing both the visual and physical distance. Instead of the major crossroad the area will be developed with dwellings and commerce connecting and expanding the city centre. The regiment area and the residential area Haga will also be included in this expansion. The plan is to make the city denser and in a sustainable manner increase the city population to 200 000 no later than 2050.¹

¹Olle Forsgren, town architect Umeå, interview September 16, 2015

Umeå - a conscious city

Umeå is located in the county of Västerbotten. It is a city of 120 000 inhabitants with an average age of 38. A low number partly due to the university where 31 500 students are studying. Since the founding of the university in 1965 the students have coloured the city and today 54 percent of the population are people that have moved to the city (Umeå kommun 2015).

The university came to be called "The red university" during the early years. The school was new hence no old traditions existed. The older universities in Sweden were conservative with a lot of traditions. At the university in Umeå however the tailcoats and white gloves were exchanged into Samian peaked shoes and afghan jackets. That time's radical movements affected the students and the students confronted all injustices, big or small (Bergström, T 2008).

Another radical movement in the city was the big vegan movement in the nineties. It emerged in Umeå along with the success of the hardcore band Refused. Refused lived the Straight edge lifestyle, a political one advocating abstention from alcohol, tobacco, drugs, and optionally, animal products. Umeå came to be called "The Mecca of Veganism". Even though these two political left wing movements are not as strong today the politic still is. There might be some snow left, but when all the red first-of-May posters are literally colouring the city, then it is official, it is spring in Umeå (P3 dokumentärer).

SWOT Analysis

Three potential sites

I The Regiment crossroad

A new area equals endless possibilities. Close to the city centre. Future aim to make it a part of the city centre. With the new development a lot of people will live in the area - **the site has potential to be used by a lot of people.**

The fact that the area where I am planning not exists right now - nothing to relate to. On the opposite side of the railway from the city centre; psychological border.

The possibility to inspire the future building structure and planning of the area. To make this project a part of a new city area. The plan is to incorporate both commerce and dwellings in this area.

The location is not in the existing city centre - makes the structure a bit more exclusive than it is aiming for. Lack of passers-by.

II Teg

New area equals endless possibilities. Located in an already dense populated area.

The fact that the area where I am planning not exists right now - nothing to relate to. **The site is located on the other side of the river from the city centre.** It is not a destination if you do not have special errands to that part of the city or live there.

The possibility to inspire the future building structure and planning of the area. To make this project a part of a new city area.

The location is not in the existing city centre - makes the structure a bit more exclusive than it is aiming for. **The future plan of the area does not incorporate making it a part of/connect it strongly to the city centre.**

III Parking area

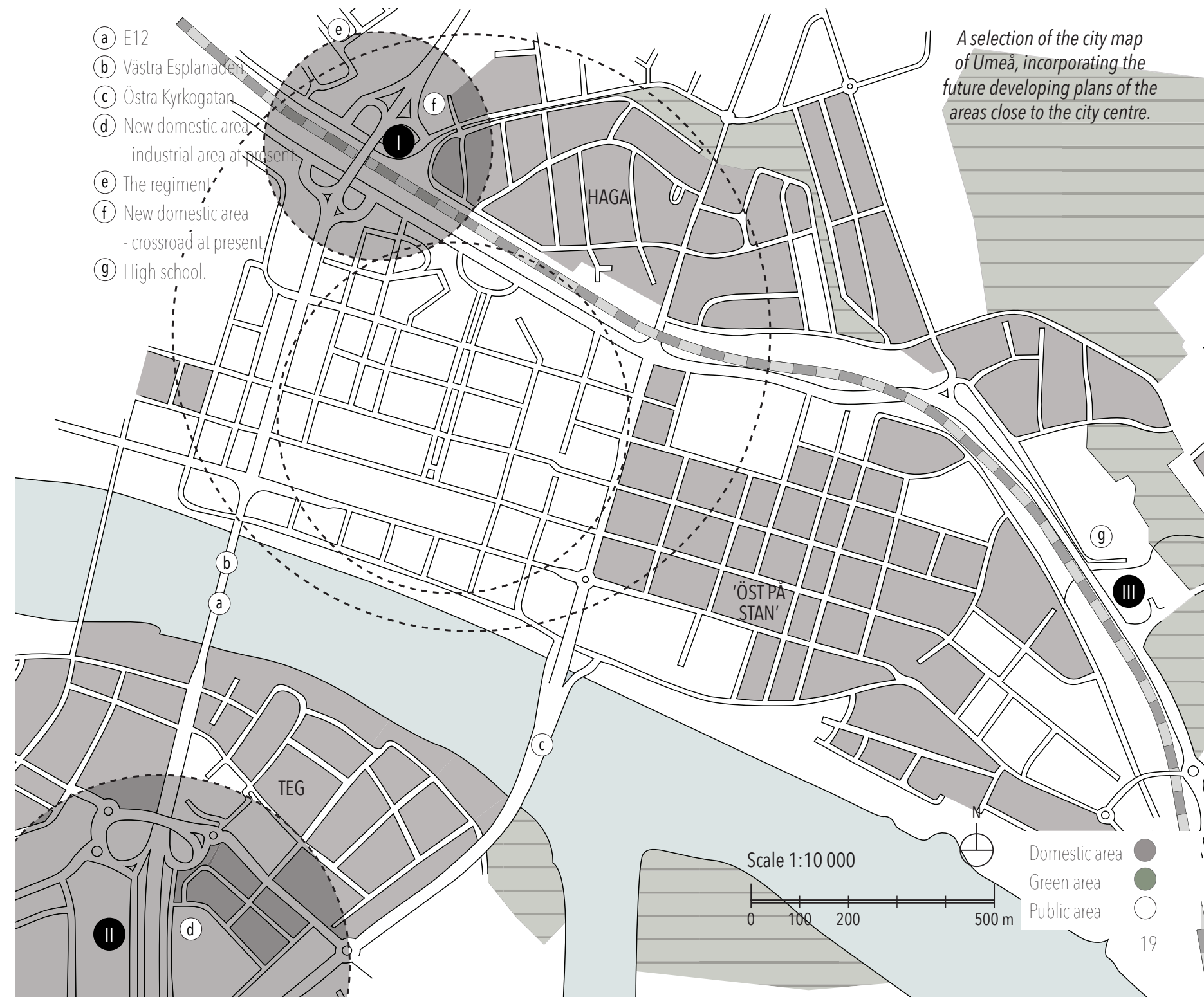
Close to the hospital area and the university. In between two domestic areas; 'Öst på stan' and Berghem. Next to a school - a part of the education.

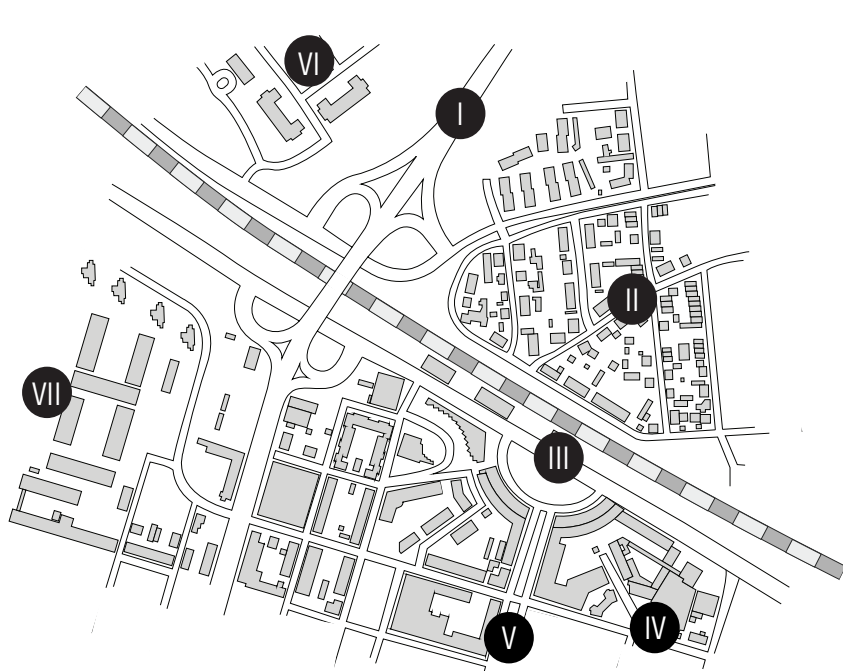
A place of transit, from the eastern domestic areas to the city centre. It is not a destination if you do not have special errands to that part of the city or live there. There is no other commerce there. **Too far from the city centre.**

A chance to question the enormous parking lot for the staff working at the school, considering the municipality's goal of a car free city centre.

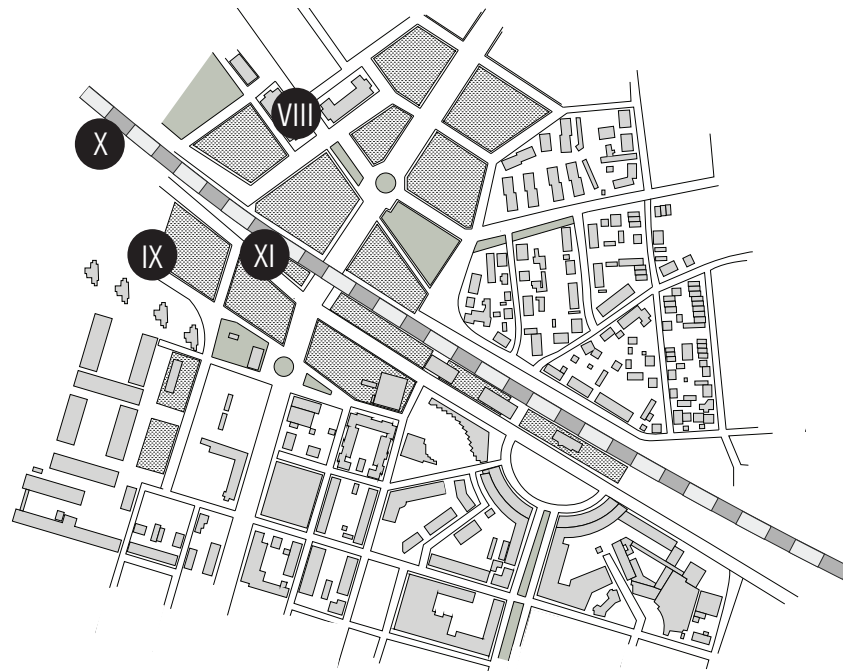
There is no existing future developing plans for the site. **The location is not in the city centre - makes the structure more exclusive than it is aiming for.** Lack of passers-by.

Chosen site : The Regiment crossroad. The location is chosen due to its qualities of being located very central and for the future plans of being incorporated within the city centre. This site is the one of thee options where the project can reach out to a maximum amount of people. It is easy to get to and it is close to a lot of public spaces. It will be intertwined in between two residential areas investigating a concept of how to bring meat to people and to urban life.





The area today

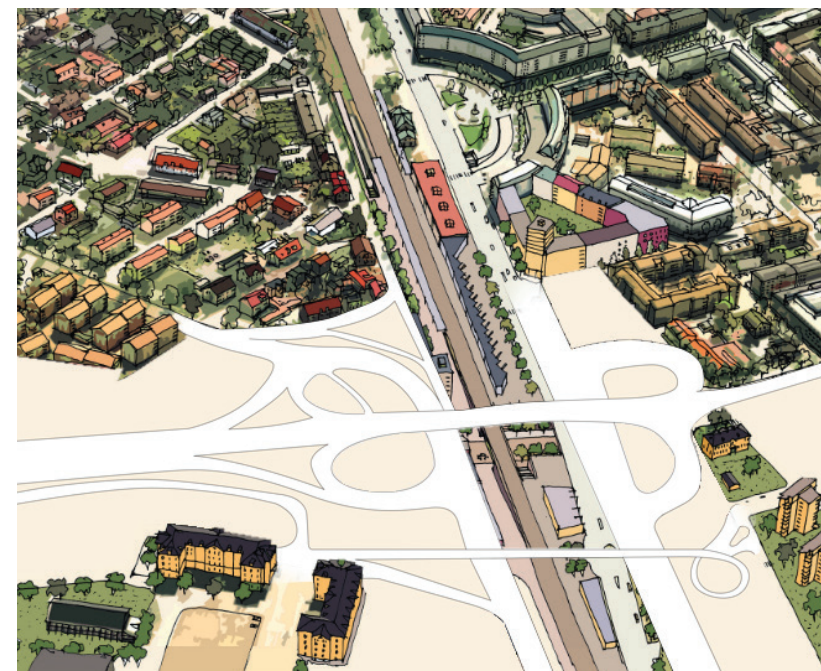
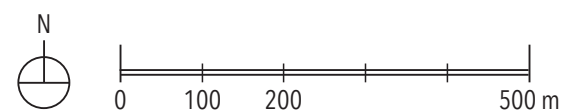


Future plans

The regiment crossroad

- I. E12, Heavy trafficked road.
- II. Haga, domestic area.
- III. The recently built railroad square connects the city centre with Haga thorough the Sara Lidman tunnel.
- IV. NorrlandsOperan. Culture centre.
- V. The Town house Esplanade. The spine of the city centre. Connecting the railway station with the town house and further down to the river. A historical and architectural important element for the city centre.
- VI. The old regiment area. A cultural environment of national interest.
- VII. Väst på stan: domestic area, location of the police station, primary care centre, the city hall, Nolia (exhibition hall), schools etc.

- VIII. Ongoing restructuring are relocating the heavy traffic from the central areas to a new circular road.
- IX. The new road will cross the railway through a tunnel to improve the sight-line and connection between the city centre and the regiment area.
- X. Rationalization and a decreased traffic situation enable new domestic block buildings combined with public activities; expanding and densifying the city.
- XI. My chosen site.



The area today



Future plans
Marked area show the chosen site.

To decrease the distance to primary products, they have to be incorporated in our everyday life, interwoven with our regular movements and encouraged to become parts of our habits. To decrease the distance must be a part of the future city planning in order to achieve this and to make it stable. This new domestic area is a part of the new Umeå, incorporated with the future ideas of a more sustainable city. Decreased traffic, the new and the existing domestic buildings and the expansion of the activities in the city centre will result in a steady flow of people and easy access: two important factors for the butcher's shop and restaurant to be exposed, known of and visited.

The right sketch above, gathered from the county of Umeås webpage, show the vision for the new area. Three guidelines, framing the project,

are gathered from this: Emphasise the connection between the regimental area and the passage under the train station with a walk way and bicycle lane. Incorporate a green park area at the site. Keep various scales of the buildings at the site.

The site has been planned as two different areas, separated by a diagonal bicycle lane creating a strong bond between the regimental area and the passage under the train station leading to the city centre. This connection is part of the representation of the relation between the new area and the city centre. There will be a steady flow of people moving along the path and therefore a valuable element to keep and to incorporate in the project.

IV THE PROCESS

Concepts/ Architectural guidelines

1. Transparency

Transparency is a key architectural element in the project. The transparency will open up the building to a broad audience and reveal the inside and tell the story about meat production. Transparency is not only the practicality of being able to see through something, but also to be honest about the process and not suppress anything.

2. Story telling

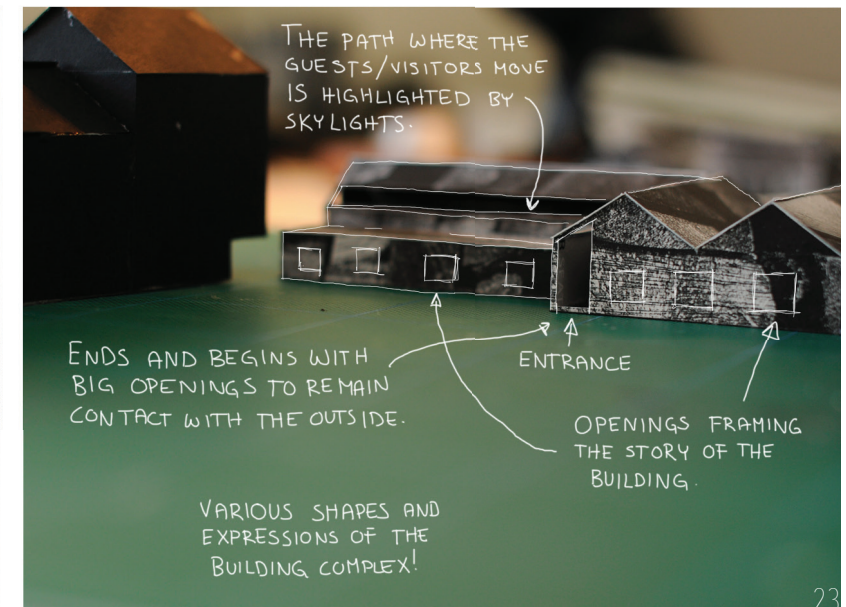
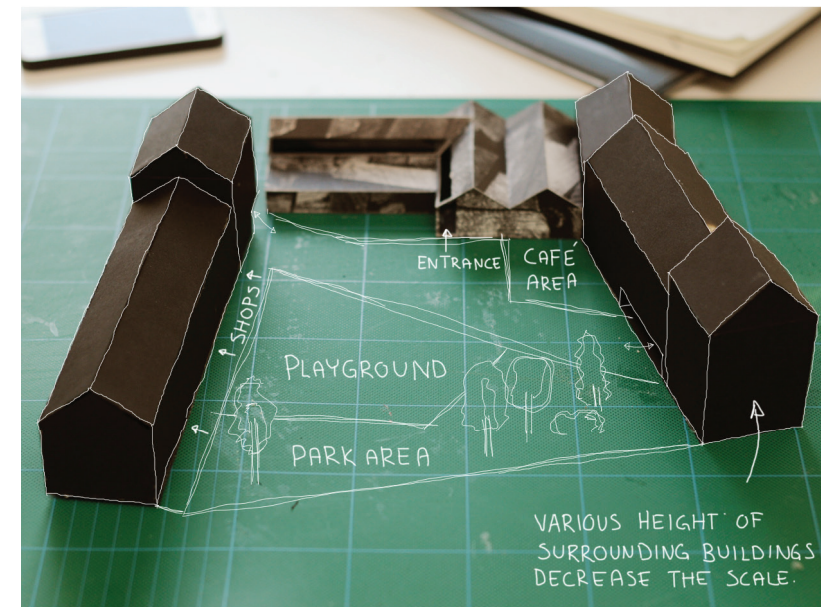
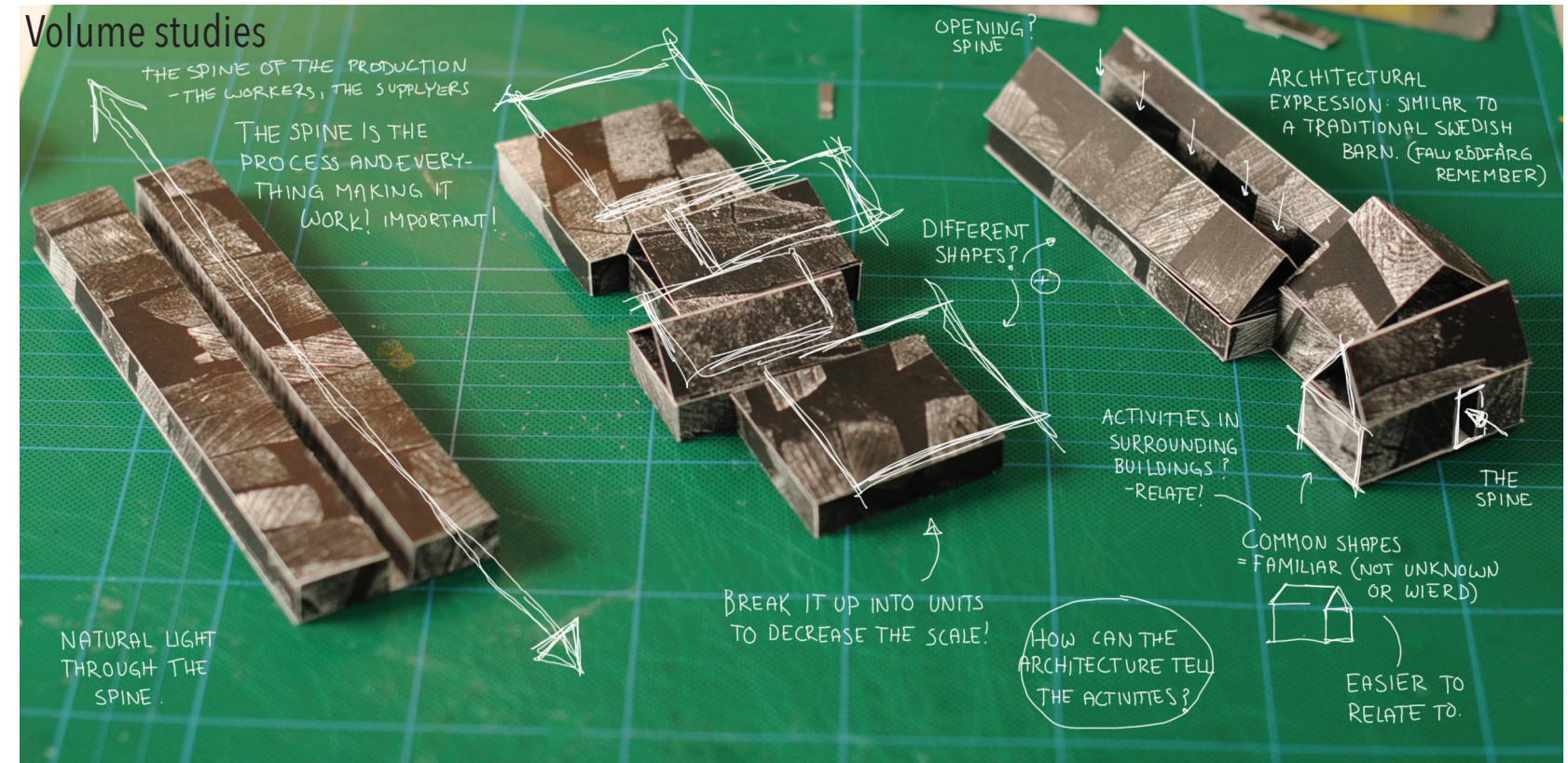
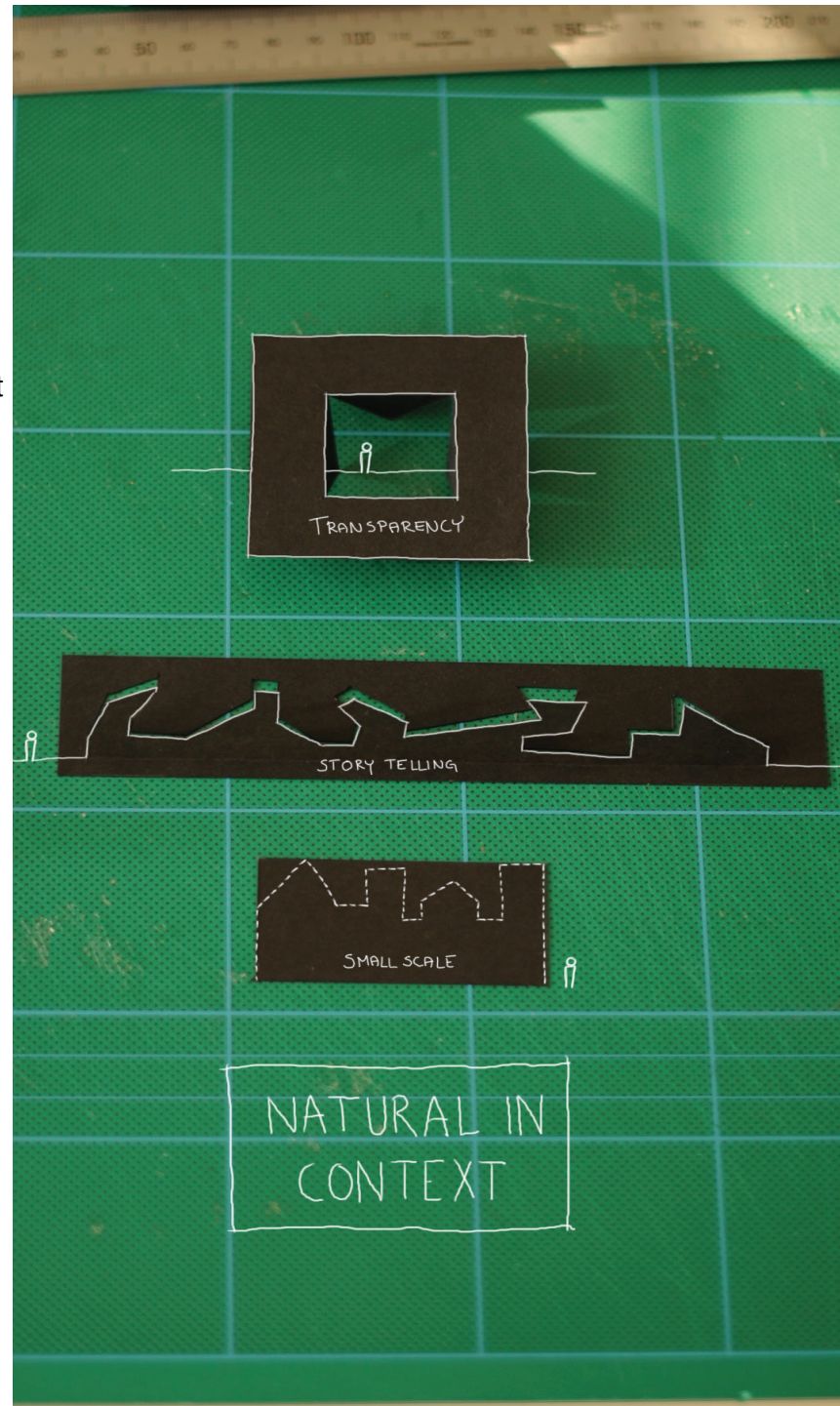
Story telling is the core and main idea of the whole building concept. The building is by architecture to tell the story about Swedish meat production. Meat production is an infected topic due to the many bad examples existing and those stories are told through mass media. The story about the good production and especially the Swedish production is rarely told, which makes it harder to understand the importance of the choice not to buy the imported meat.

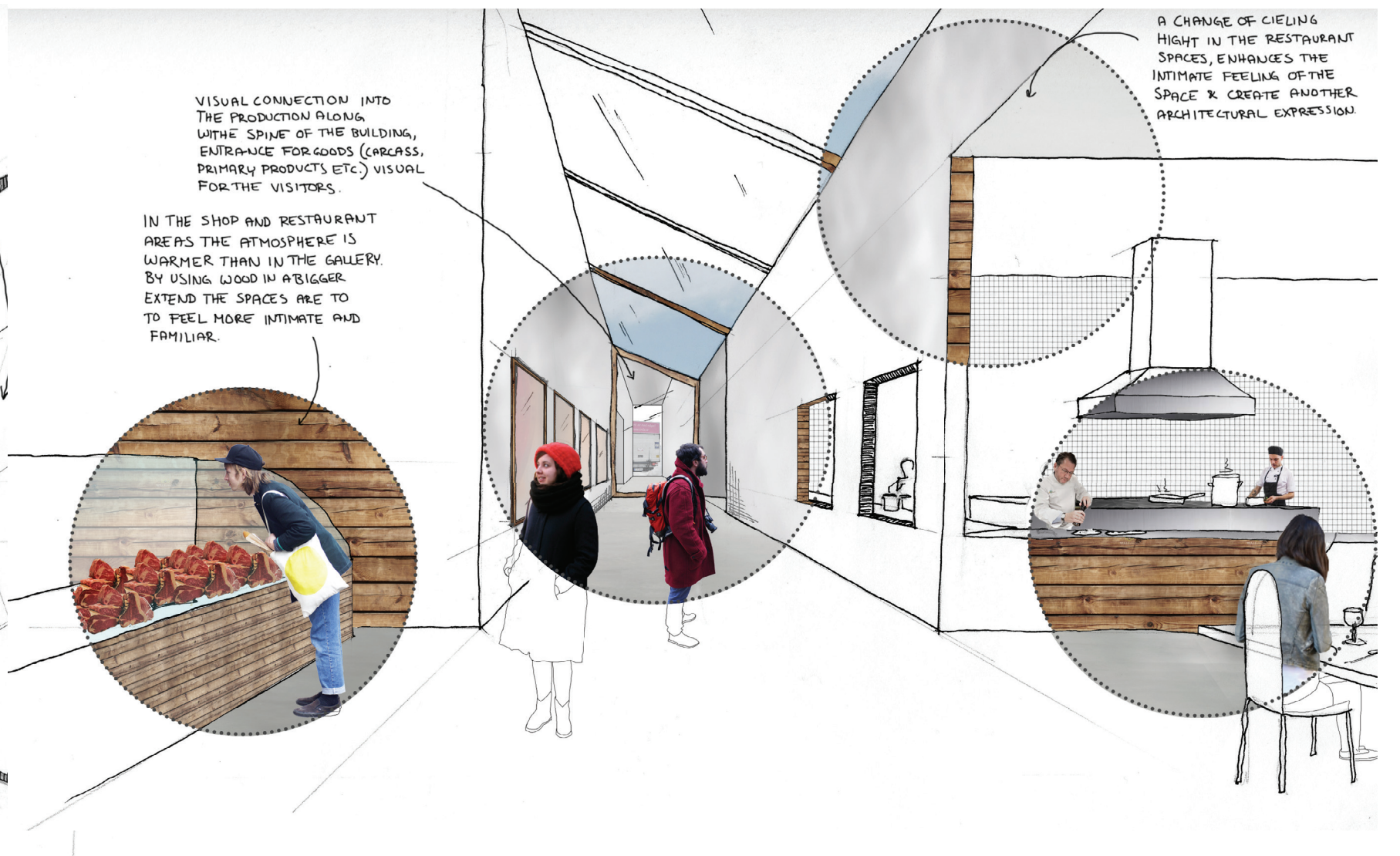
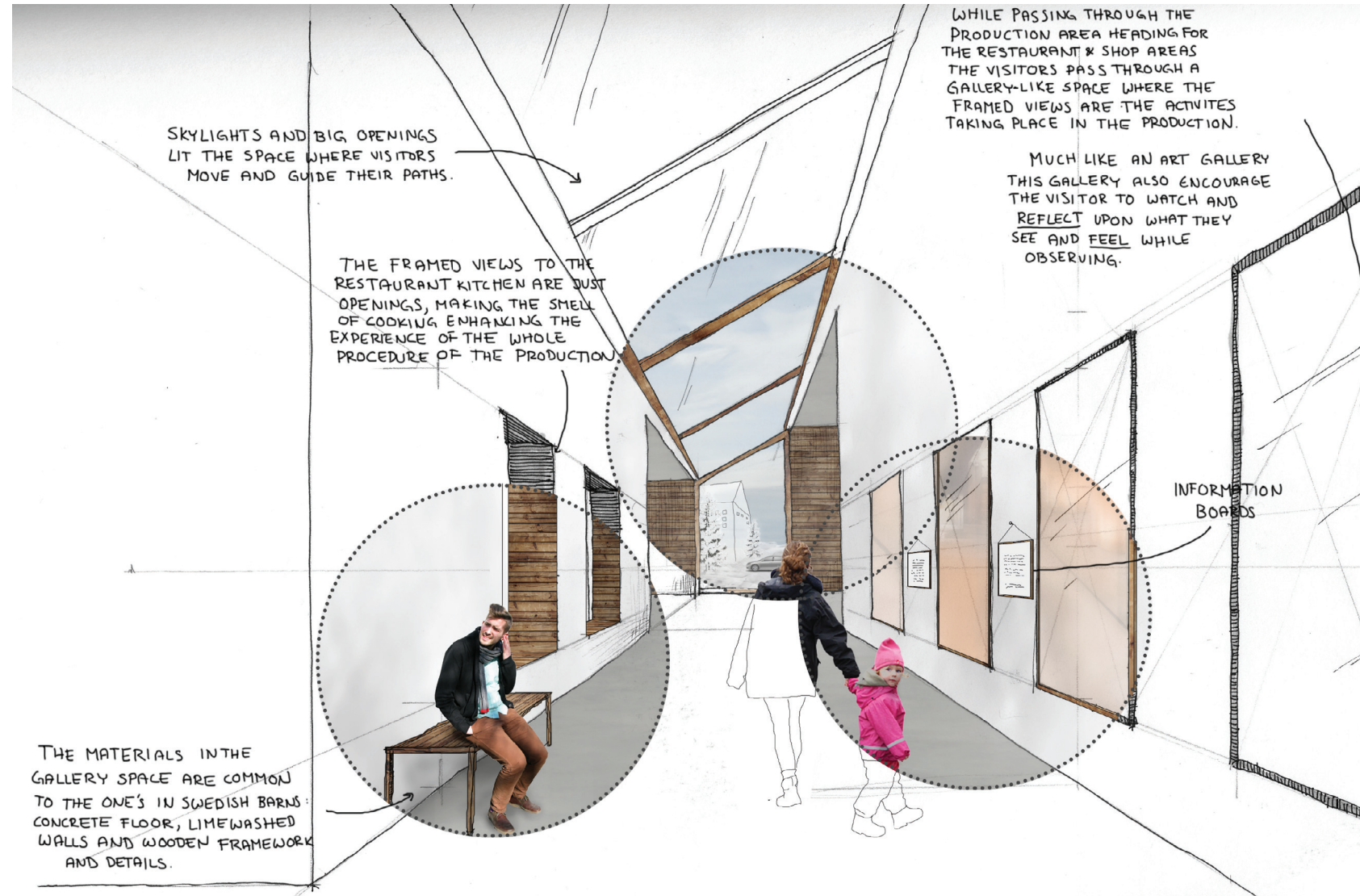
3. Small scale

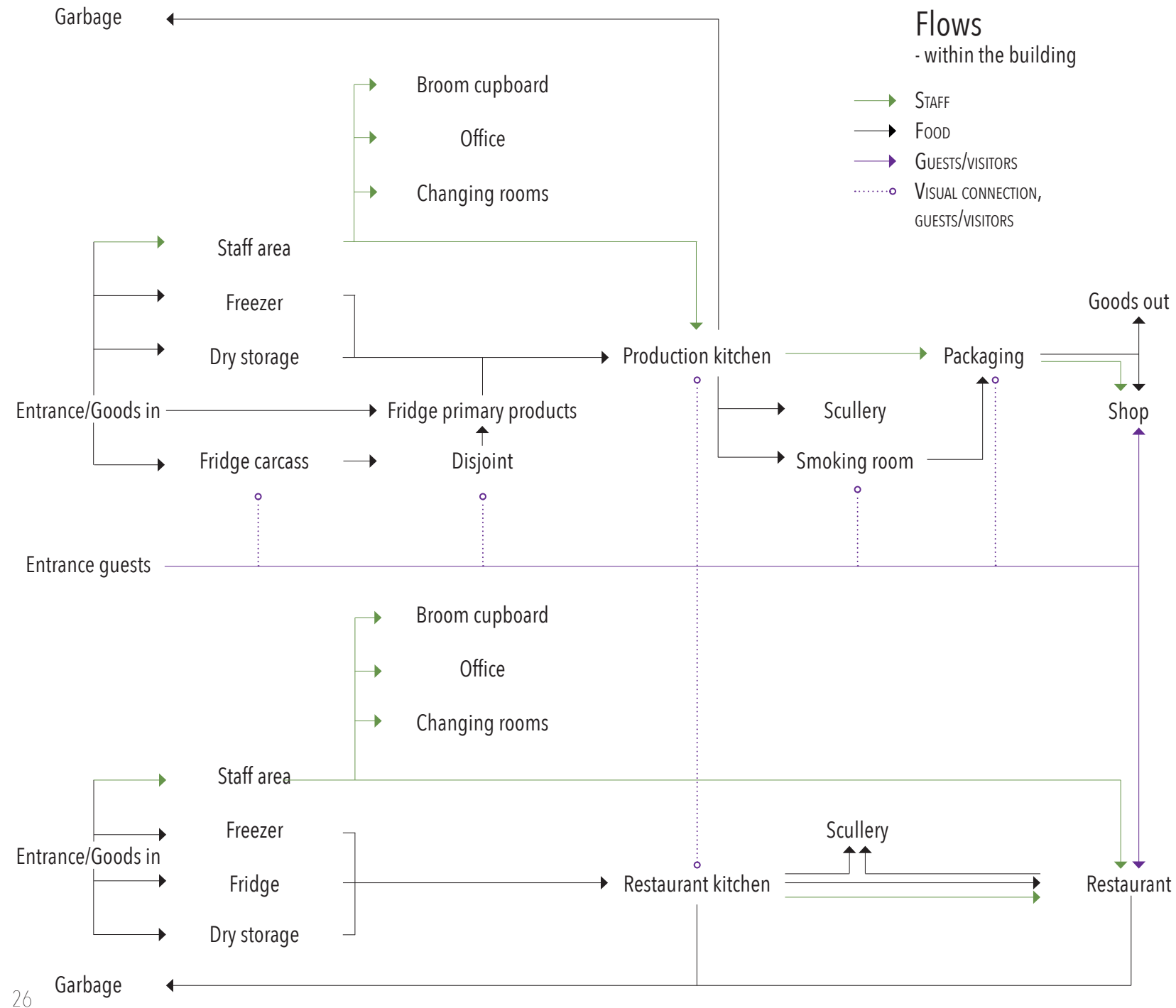
It is important to keep down the scale of the project in terms of perception. In order to make it easier to relate to the building and the story it is telling the building scale must be easy to relate to. Big scale buildings can feel intimidating, out of reach and industrial; all qualities opposite to what the building is to radiate.

4. Natural in context

For the building to be natural in the context in which it exists, it is important to consider how the building relates to the surrounding and the context in which it exists. The building needs to correspond and be humble to the existing architecture in order to be a contributing and a natural part of the city.







Flows - reflections

The flow of the meat production areas was leading in the project. These flows have constraints needed to be followed, not only for efficiency but primarily for the hygiene aspects. It is crucial raw meat never mixes with cooked meat. The flow of the guests stretches parallel with the flow of the meat production. This is an important part of the organization of the building and the core of the story telling. Important for the flow of the restaurant is for it to be efficient, due to the high tempo during service. Something the meat production areas and the restaurant have in common is the linear production; there is a beginning and an end and this regulates the planning of the two flows. Since the meat production and the restaurant are separated into two different flows in the project, yet equally important, the flow of the visitors and guests is inbetween those two. With an organization like this all meat related activities in the building could be exposed when walking through the building.

Reference projects

CONCEPT.

Jernbruket is a new restaurant located in Floda, a small community located 25 kilometres north-west from Gothenburg, Sweden. The restaurant has a unique concept emerging from the, not very unique, idea of having the primary products in focus. But, unlike other restaurants Jernbruket takes this one step further. They cooperate with a local farmer who delivers one animal at the time; cattle, pig or lamb. All parts of the animal are taken care of and cooked, limiting the numbers of all dishes. When all pieces to a certain dish are finished, the dish simply is taken away from the menu. The restaurants vision stresses the unsustainable behaviour in only taking the "finest" parts of the animal. By buying a whole animal the prize per kilo can be minimized hence the prize of the finest parts can decrease as well (Jernbruket 2015).



INTERIOR DESIGN.

Victor Churchill Butcher shop is located in the suburban area Woollahra 5 kilometres outside of Sydney, Australia. James Churchill founded the shop in the 1870s. In 2009 a full-scale renovation of the shop was concluded. The awarded firm 'Dreamtime Australia Design' got the challenge to create "a truly unique butcher shop that successfully blended a traditional European butchery in look and feel with modern, cutting-edge design elements and features that had the potential to re-define the category, not only in Australia but world-wide" (Dreamtime Australia 2009). The glassed walls reveals the processes going on in the shop. The visitors can see products being made, meat cut up, meat ageing etc, all this in a beautiful atmosphere with the products in focus. Nothing is hidden. The meat is displayed as art (Victor Churchill 2015).

STUDY VISIT

Robertsons charkuteri

September 4, 2015

Robertsons charkuteri is a butchery shop specialized on charcuteries. The business is located in the industrial area Aspholmen a couple of kilometres south west of the city centre in Örebro. The business was established in 1929 and was then located in the covered market in the city, a building today hosting the museum of Örebro County. After several locations and spaces the business settled down in a costume designed building at Aspholmen in 2010. With good parking possibilities and great requests on charcuteries and meat produced by Swedish local meat with high quality the selling is on top. ²

The Ehlin family is the owner of Roberstons charkuteri today. Peter Ehlin¹ explain the activities behind the shop and the products. The meat is bought from Gällerstas slakteri, a slaughterhouse nearby, they buy the animals from local farms. The quality of the meat is primary when creating a good product. The most important during the production is for the flow not to go backwards, which is something that can affect the hygiene of the products. At Roberstons they buy both cut up carcasses but also whole animals. When whole carcasses arrive the truck transporting them attach their hanging tracks to the ones in Robertsons building and the carcasses slide into a fridge, where they hang until they are to be cut up. The cut up station is located next to the shop and a glass opening makes it possible for costumers to observe the activity. The meat is subsequently heading for the shop to be sold or into the production area. All kinds of sausages are produced in the production but also smoked meat, pate, minced meat etc. ²

²Peter Ehlin CO-owner Robertsons charkuteri, interview september 4, 2015

EXTERIOR EXPRESSION

Sands hus is a domestic building located on Vrångö, Gothenburg. The facade of the main house and the two additional buildings consitutes of vertical wooden panels coloured with Falu rödfärg. Due to the short eaves the buildings get a neat and modern expression. This is enhanced through the choises of the red window details and untraditional placements of drainpipes.



V THE PROJECT



The Site

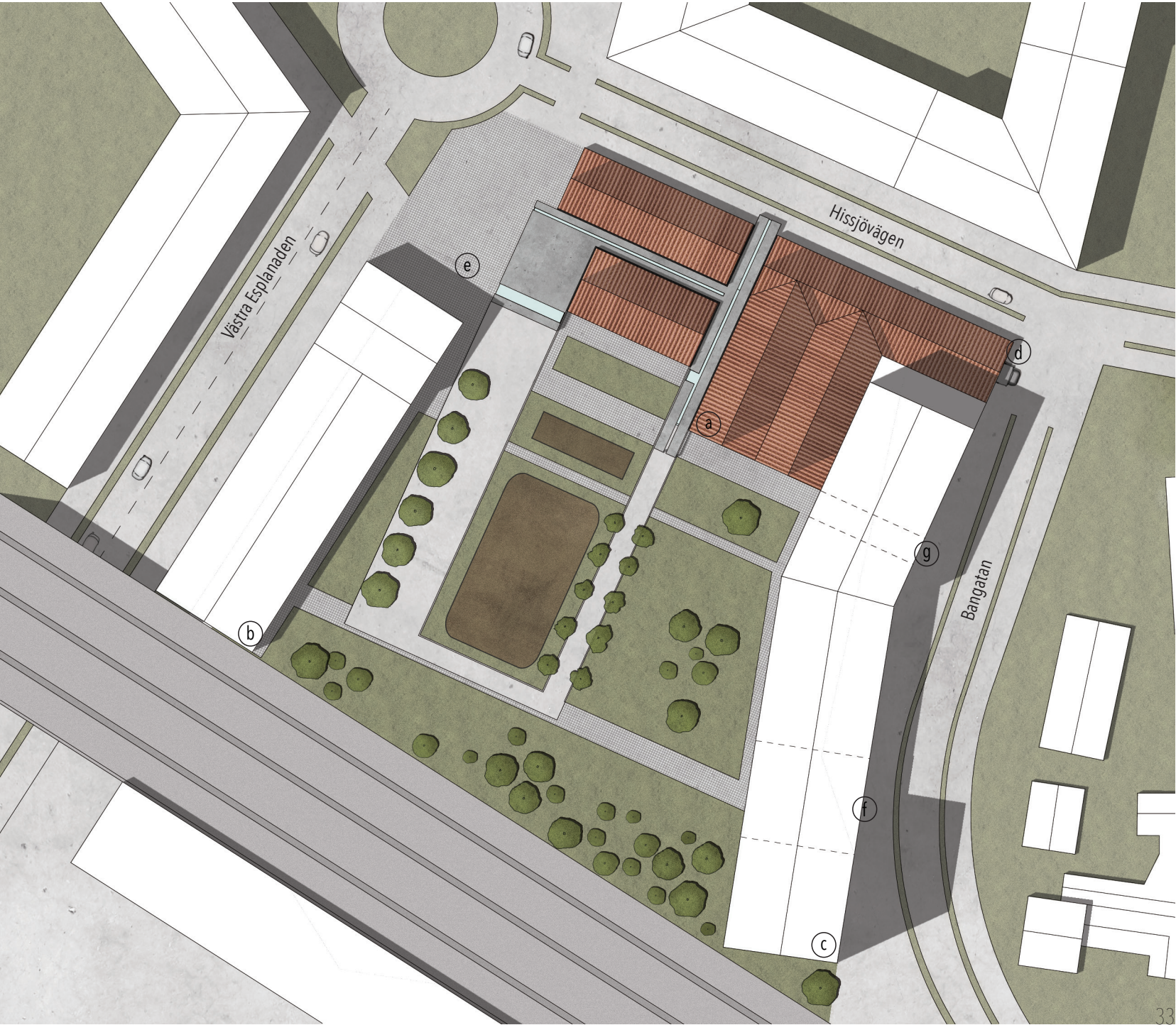
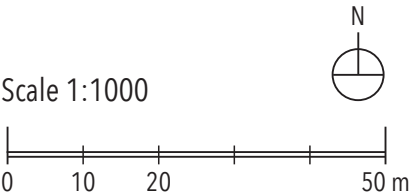
Instead of two separated areas, one with the park and one for buildings, which the original plan for the site was, they are combined into one. The site is now restricted by the railroad in the south and Hissjövägen, leading in to the domestic area Haga, in the north. By placing the building of the meat production on the northern side of the space, two apartment complexes on each side of the space, in a tilted north-south direction, a framed and protected area is created by the buildings and the railroad. This space constitutes the public park. The small grove in the south constitute a sound barrier from the railway and enhances the intimate feeling at the site.

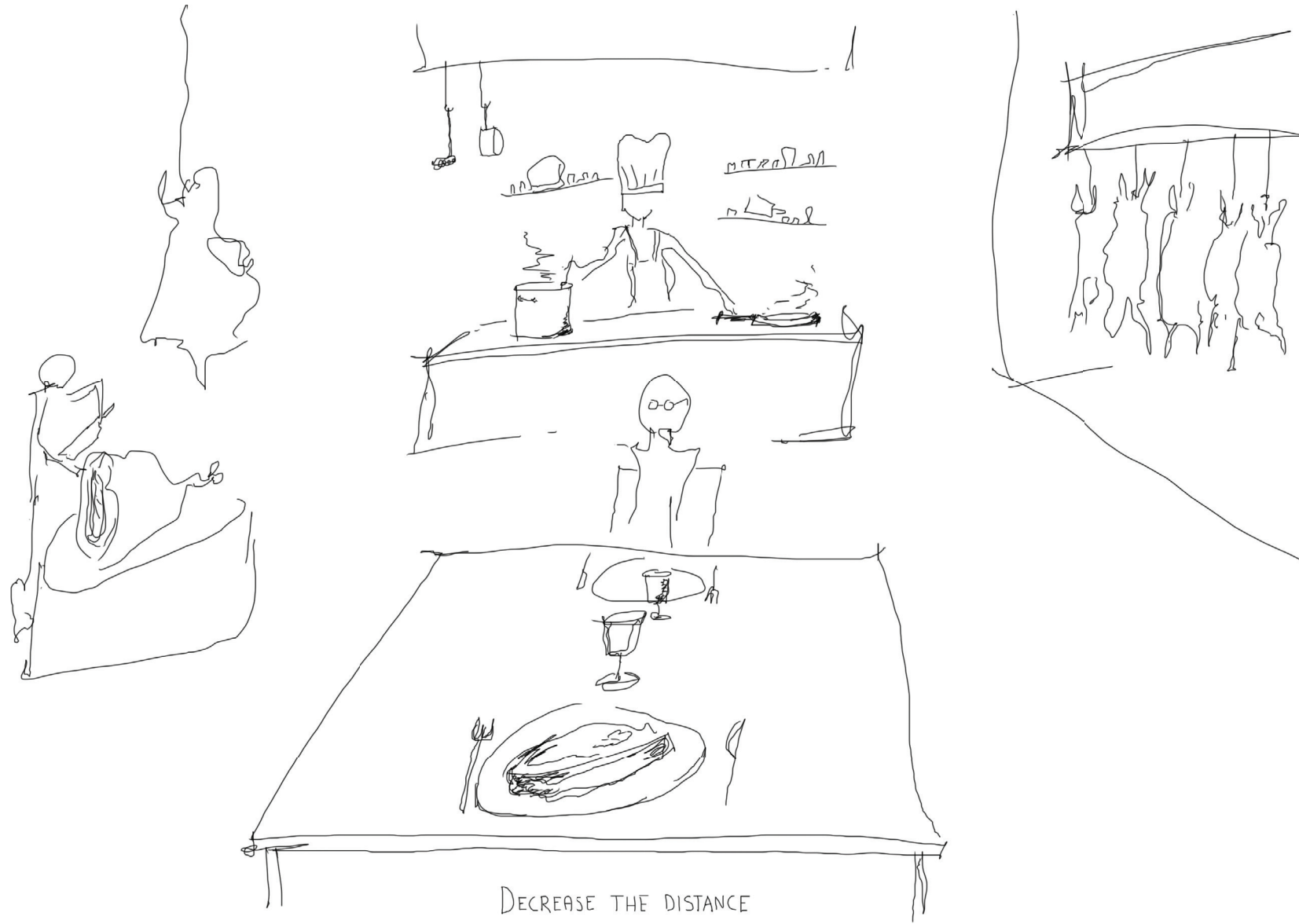
The northern location of the meat production building is beneficial in terms of exposition, since movements of different sorts will take place on all four sides of the building. The walking path and bicycle lane will now pass right through the park area, beneficial for the activities at the site. It will be a natural meeting point and place of transit, which both are good qualities when aiming for a living park with a broad diversity of visitors.

Bangatan is a road parallel to Hissjövägen. The domestic area Haga basically starts to the right hand side of Bangatan and then stretches northwards and to the east. It is a sparesly used road and therefore it is good to locate the entrance for delivering trucks from this road.

There are three entrances into the park, one from a small square area next on the roundabout. At this square a change of material will lead the visitor in to the park. The other two are located from Bangatan, the first is towards the tunnel under the train station, hence connected to the city. The second is located closer to Hissjövägen and opens up towards Haga.

- a. Meat production building
- b. Domestic building
- c. Domestic building
- d. Entrance for delivering trucks
- e. Entrance to the park I.
- f. Entrance to the park II.
- g. Entrance to the park III.

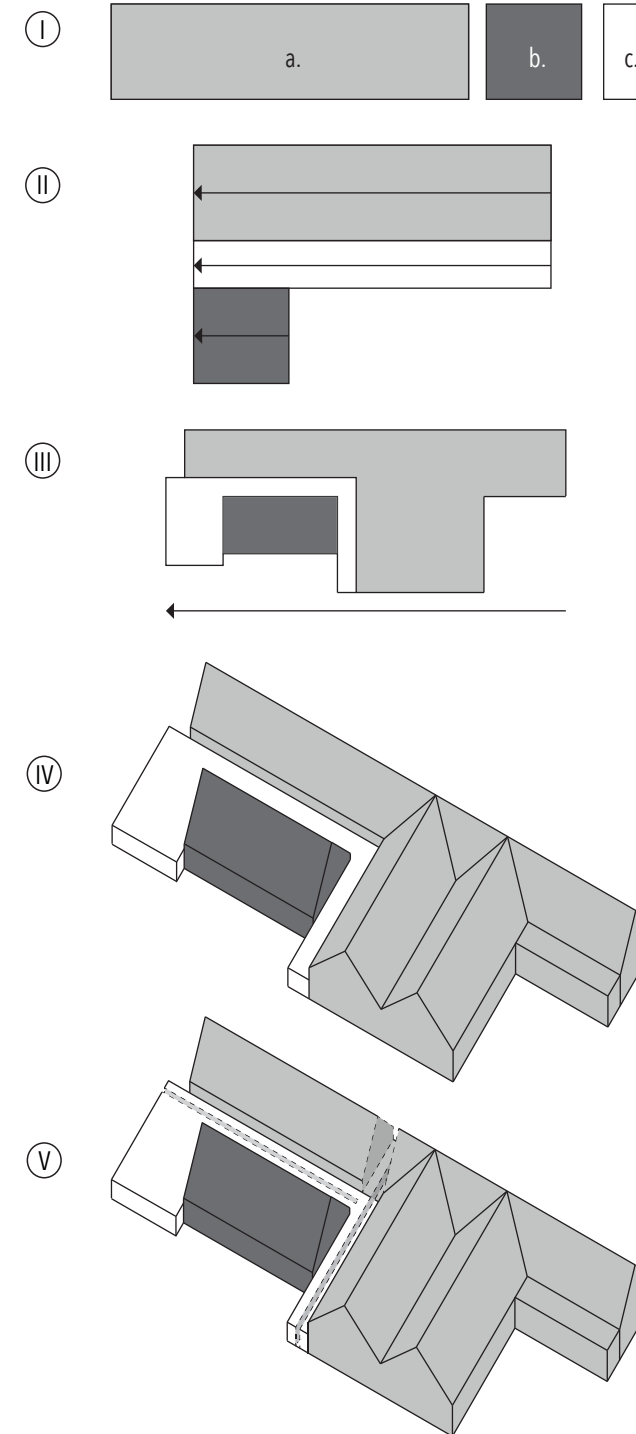




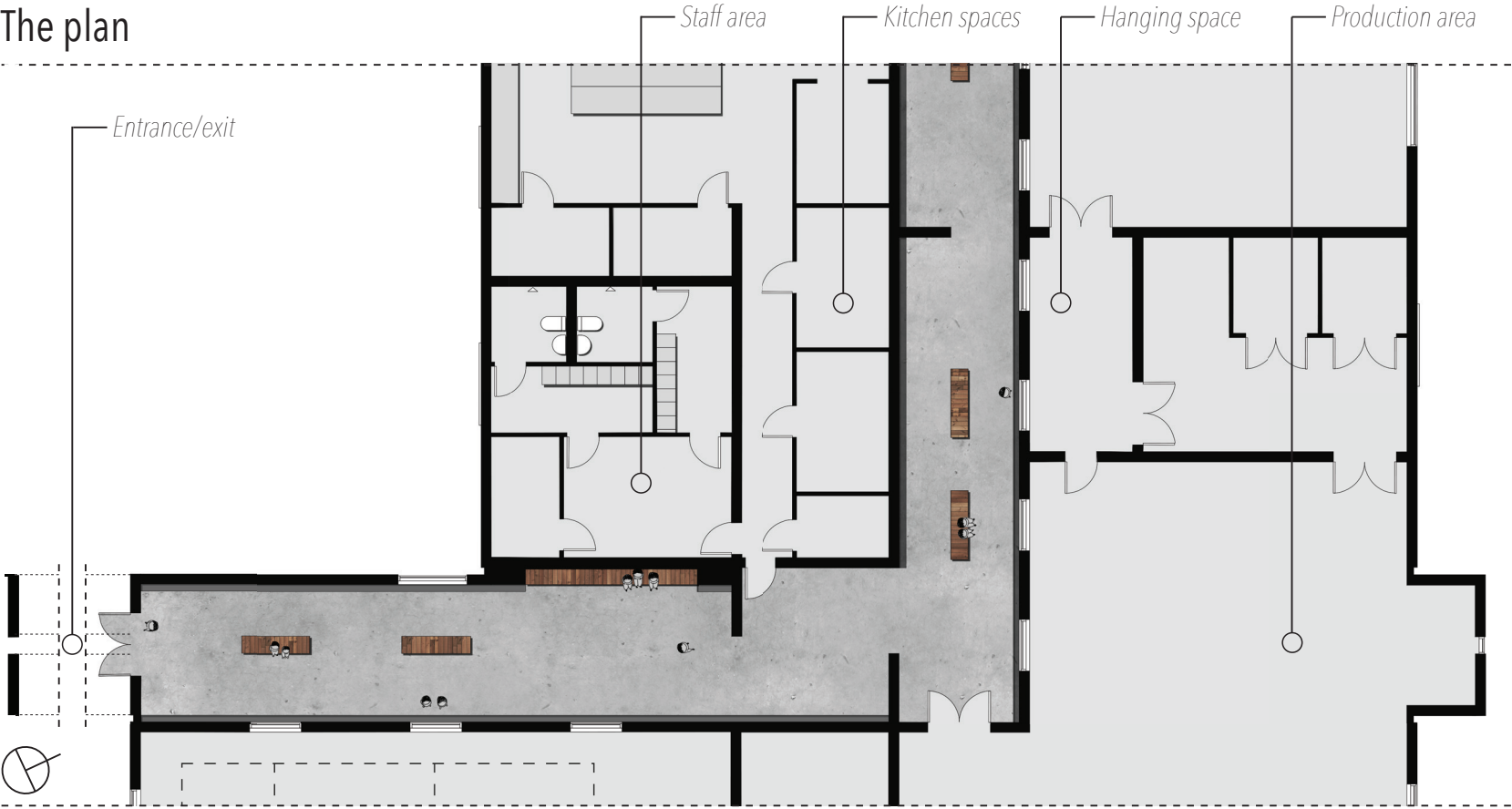
To decrease the physical and psychological distance between people and the sources of meat has been the main idea from the beginning and throughout the whole process. It is what the process has been aiming to achieve. The idea of being a part of and understand every step of the meat production process before getting the final result is key. Knowledge is important in order to respect

something. The concept of the building is for all steps of the meat production process to be in close relation and in chronological order to constitute a pedagogic story. The story of the building is enhanced by choices of materials, architectural elements and design decisions.

Volume development

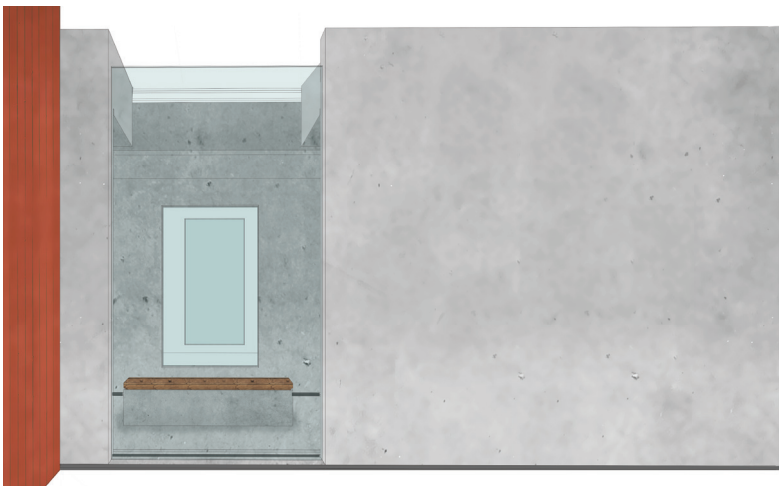
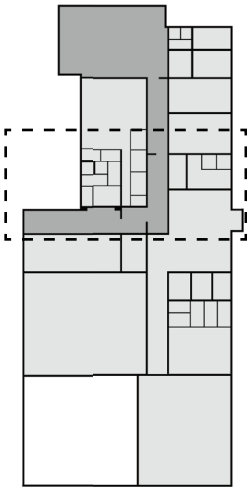


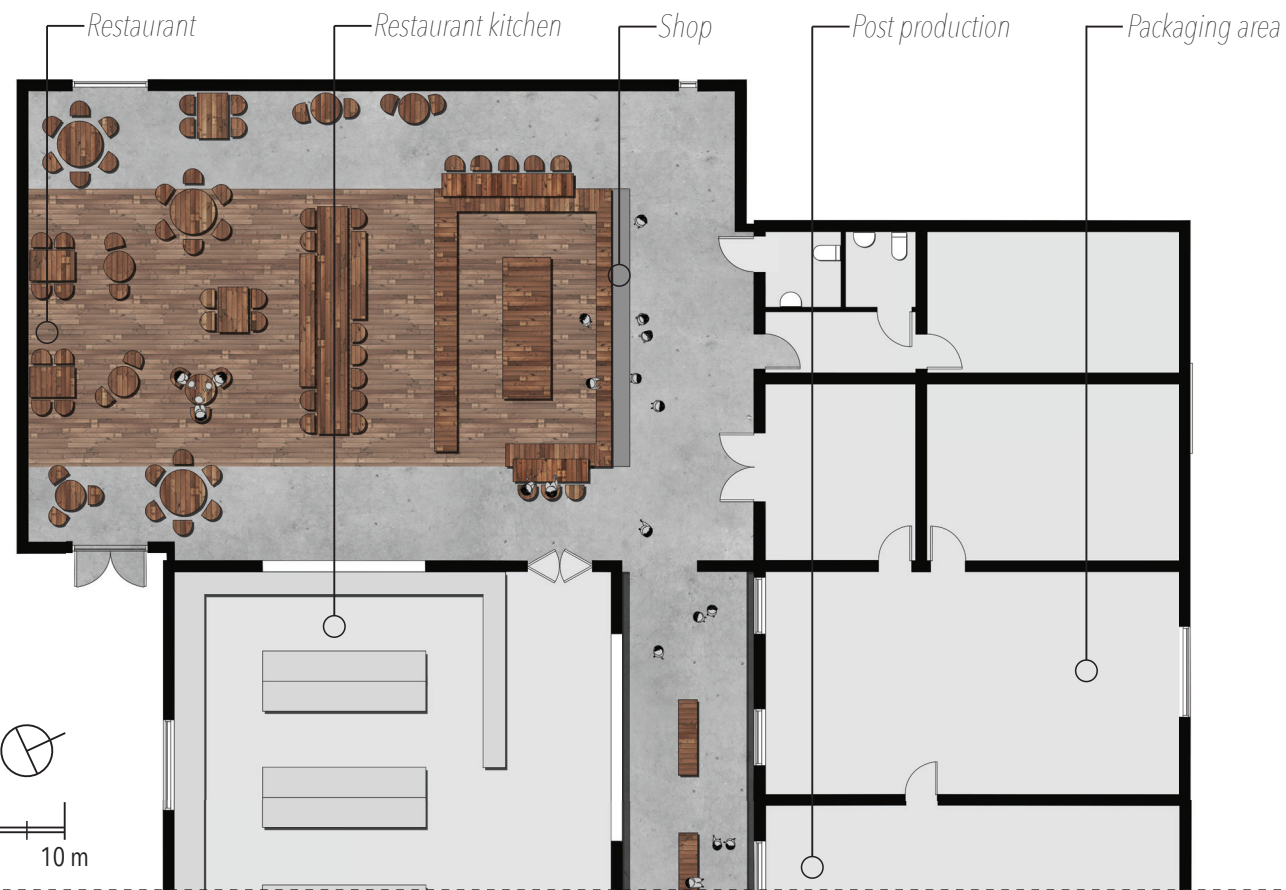
The plan



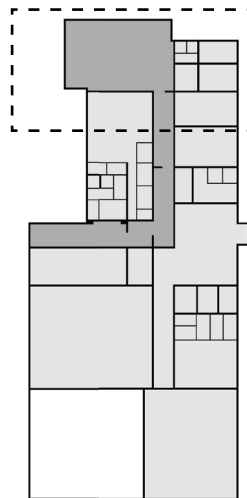
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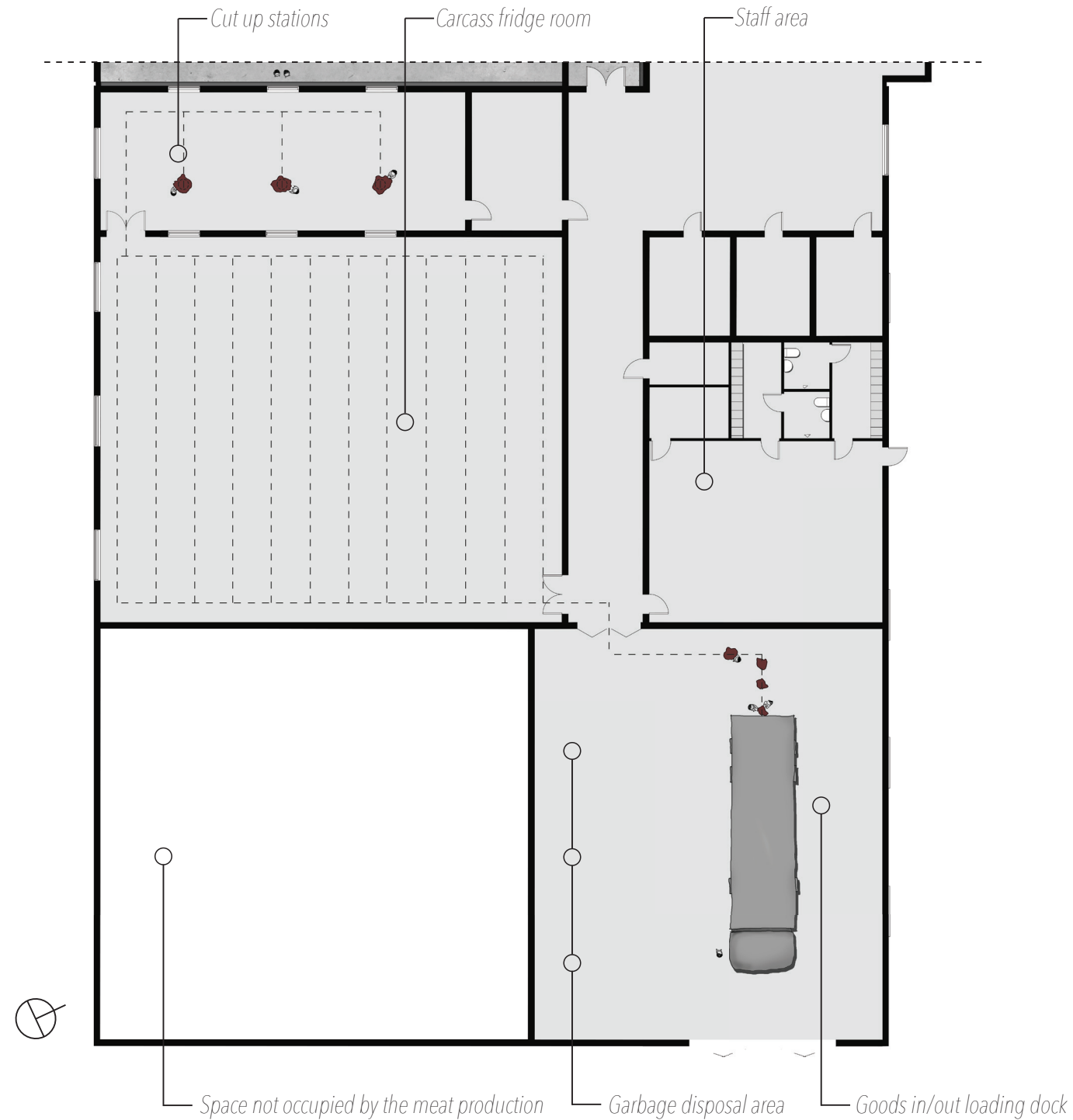
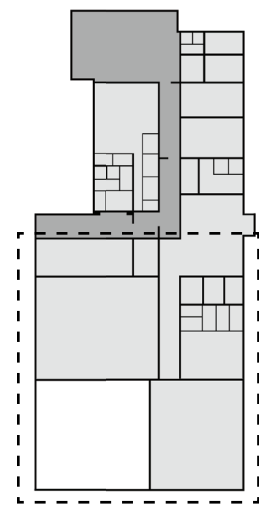
When the visitors and guests enter the building they approach a gallery like space. On their right hand side the process of the meat being cut up can be viewed but also the space behind which is the carcass fridge. Keep on walking the production area appears and the whole process from pieces of meat to ready made products can be followed visually. The spaces where the visitors move host several opportunities to sit down and contemplate. On the prominent dividing walls information about the processes and Swedish meat production is being displayed.





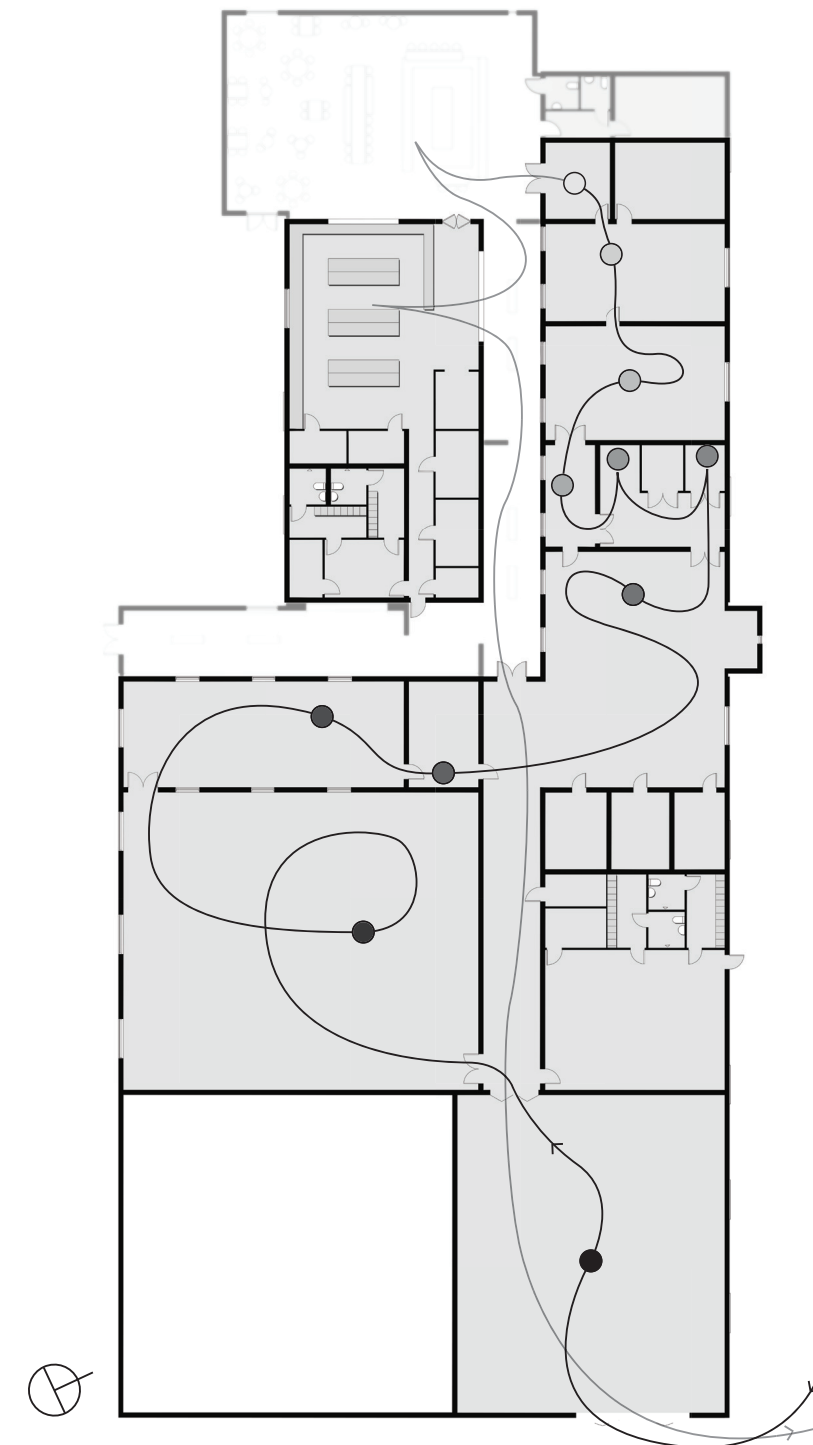
As the shop and restaurant come closer the smell of meat being cooked becomes more distinct. The open kitchen gives the space an additional experience of meat. The space of the restaurant hall is relatively closed. This is to enhance the concept of focusing the experience on the building and the production and to govern the conversations to activities inside the building. The activities in the kitchen are visible from the restaurant area as well.





The journey of the meat

- The truck containing the fridge, hosting the carcasses from the slaughter, enters the building on the northeast corner of the building.
- The carcasses are brought into the fridge room where they hang at least seven days to get tender. The fridge room has a capacity of hosting 192 carcasses at the same time.
- After the seven days of tendering the carcasses are cut up. Three cut up stations are located in the space next to the entrance. Through this space it is also possible to view into the carcass fridge from the entrance hall.
- When the meat is prepared it stays in the primary products fridge waiting to be used or sold.
- In the production area some of the meat is changing shapes into minced meat, sausages, pates etc.
- When producing smoked sausages for instance, the sausages are brought into the smoking lockers to get the right taste and smokiness.
- Afterwards the sausages are showered to cool down.
- Then hang to dry off.
- When the sausages are dry they are gathered in the post-production room, waiting for more products to be ready to rationalize packaging procedure.
- The activities in the packaging room make the products ready to hit the market, both cooked products and raw meat are being packed here.
- Now the products are ready to hit the market and gathered to be delivered. The meat production of this project has the capacity to sell products in the shop, provide the restaurant with meat and distribute to other stores.





Areas of the different activities

The numbers and spaces in the production areas are inspired by Robertsons charkuterier.

Staff areas, butchery, 141 m²

- 1 Break area, 93 m²
- 2 Changing rooms, 2 x 16 m²
- 3 Office 9 m²
- 4 Broom cupboard, 7 m²

Primary products area, 846 m²

- 5 Goods in/out, garbage disposal area, 310 m²
- 6 Fridge carcasses, 397 m²
- 7 Cut up stations, 112 m²
- 8 Fridge, primary products, 27 m²

Production, 243 m²

- 9 Dry storage, 18 m²
- 10 Freezer, 17 m²
- 11 Scullery, 14 m²
- 12 Production area, 154 m²
- 13 Smoking lockers, 2 x 7 m²
- 14 Shower, 7 m²
- 15 Hanging space, 19 m²

Post production, 281 m²

- 16 Post-production pre-packaging, 77 m²

17 Packaging area, 65 m²

- 18 Goods out, 19 m²
- 19 Storage area, 31 m²
- 20 Shop, 61 m²
- 21 Shop storage, 24 m²
- 22 Staff toilet, 4 m²

Restaurant, 355 m²

- 23 Restaurant, 173 m²
- 24 Guest toilet, 5 m²
- 25 Kitchen, 132 m²
- 26 Fridge, 7 m²

27 Freezer, 7 m²

- 28 Scullery, 9 m²
- 29 Dry storage, 11 m²
- 30 Service storage, 11 m²

Staff areas, restaurant, 57 m²

- 31 Broom cupboard, 5 m²
- 32 Break area, 17 m²
- 33 Office, 7 m²
- 34 Changing rooms, 2 x 14 m²

Reference projects

- materials



Materials meat production areas

Reference project:
Smedjan Järna, slaughter and treatment of venison meat.
Material qualities: durable, easy to clean, hygienic.

Floor:

Colour: Dark grey
Material: Concrete mixed with waterglass.

Walls:

Colour: White
Material: Tiles

Equipment:

Colour: Silver
Material: Steel



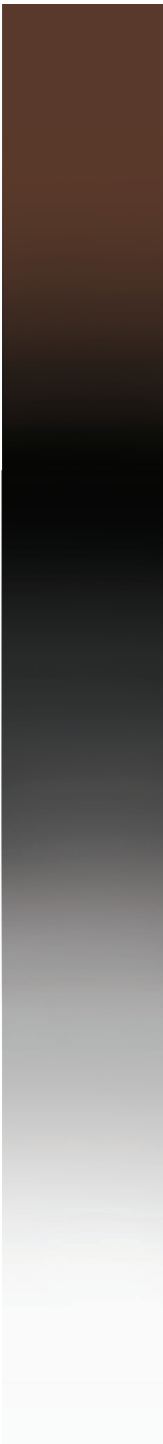
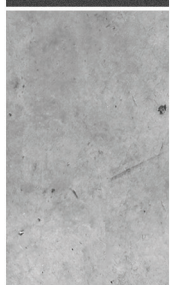
Interior wood

In 2010 the architectural firm Consultec Arkitekter in collaboration with Luleå University of Technology designed and built a conceptual building showing what heat-treated wood could look like and how it can be used. Heat-treating of wood changes the qualities in the wood, which enables fine detail work. The wood also gets a darker tone, increased permanence and have an environmental friendly production. The types of wood used in the conceptual building are pine, fir, oak, birch and beech. Depending on what wood has been used and what temperatures it has been treated with different colours and textures have occurred. (Nilsson och Sahlin Arkitekter, Luleå Tekniska Universitet 2007)

Interior usage of wood:

- Floor in the restaurant.
- Furniture in the restaurant.
- Sitting devices in the visitors' passage.
- Shop and restaurant counter.

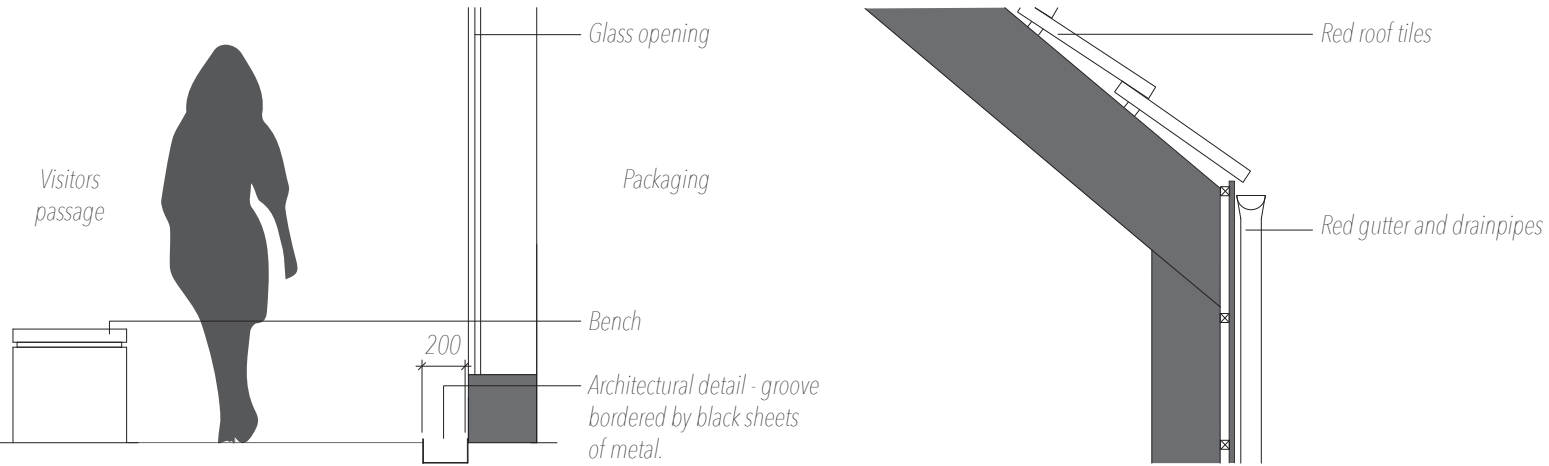
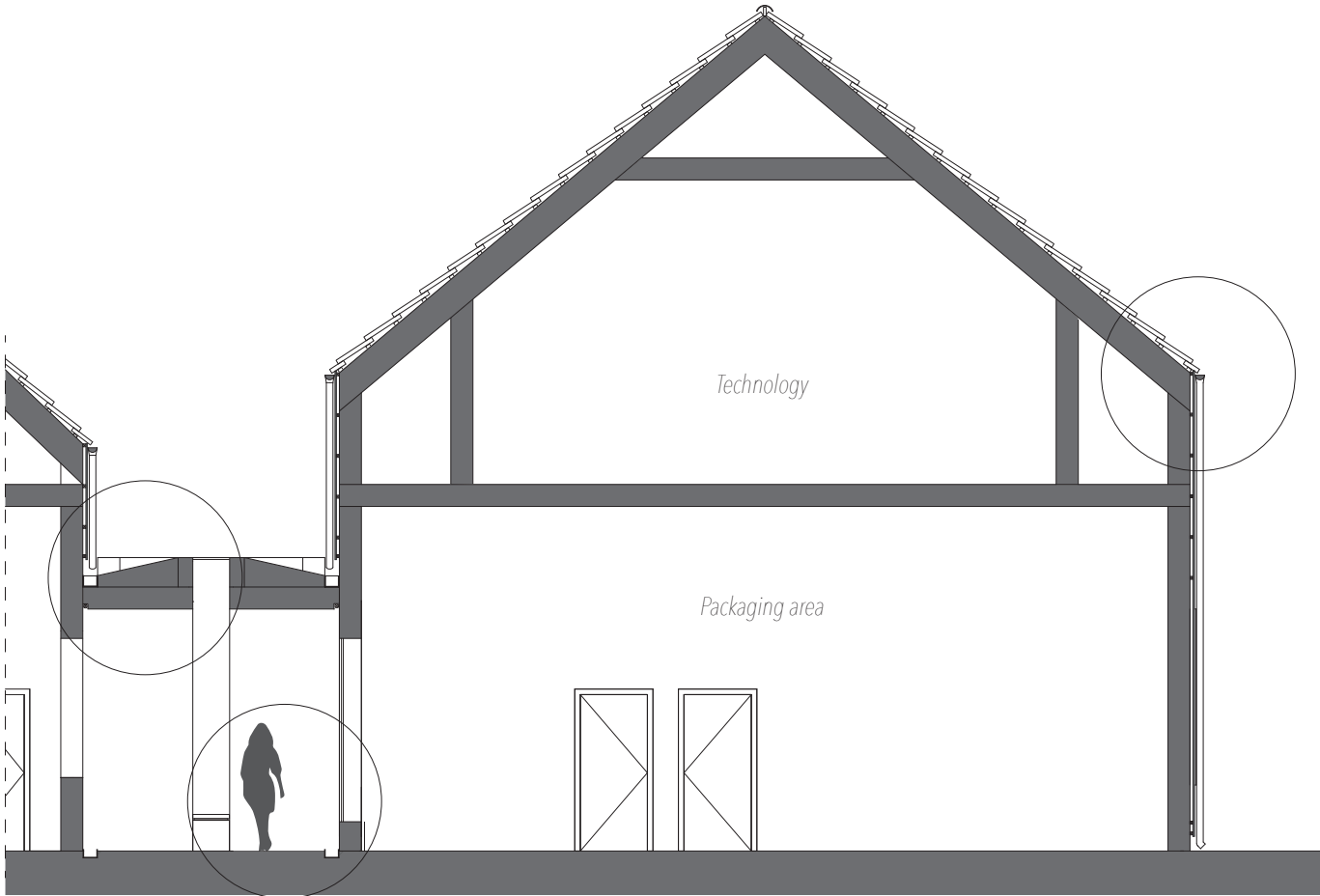
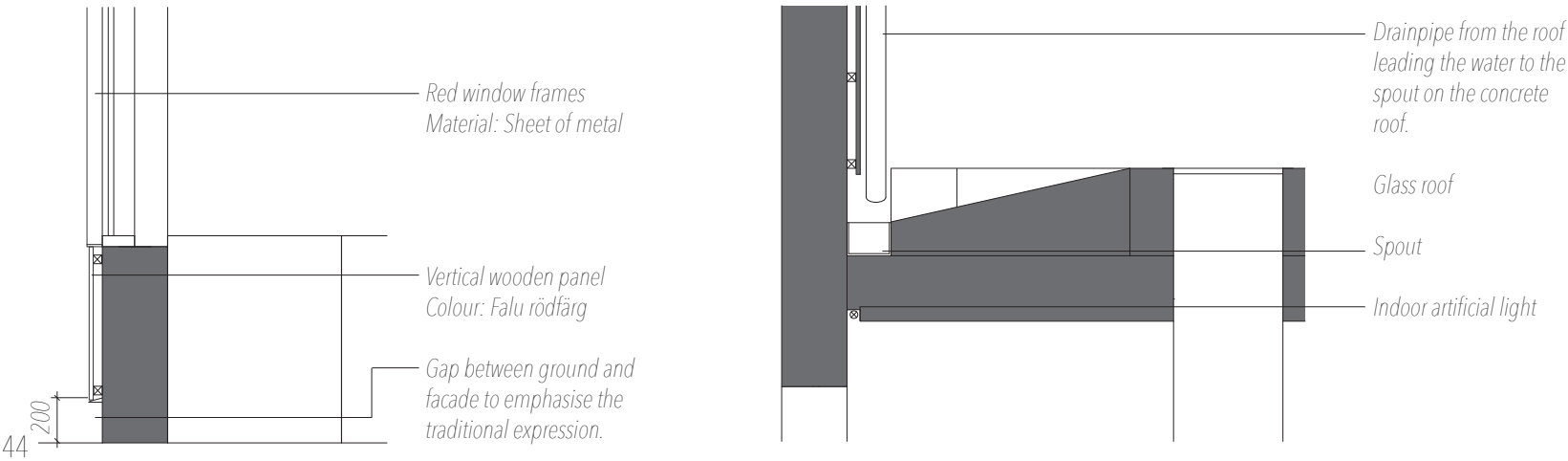
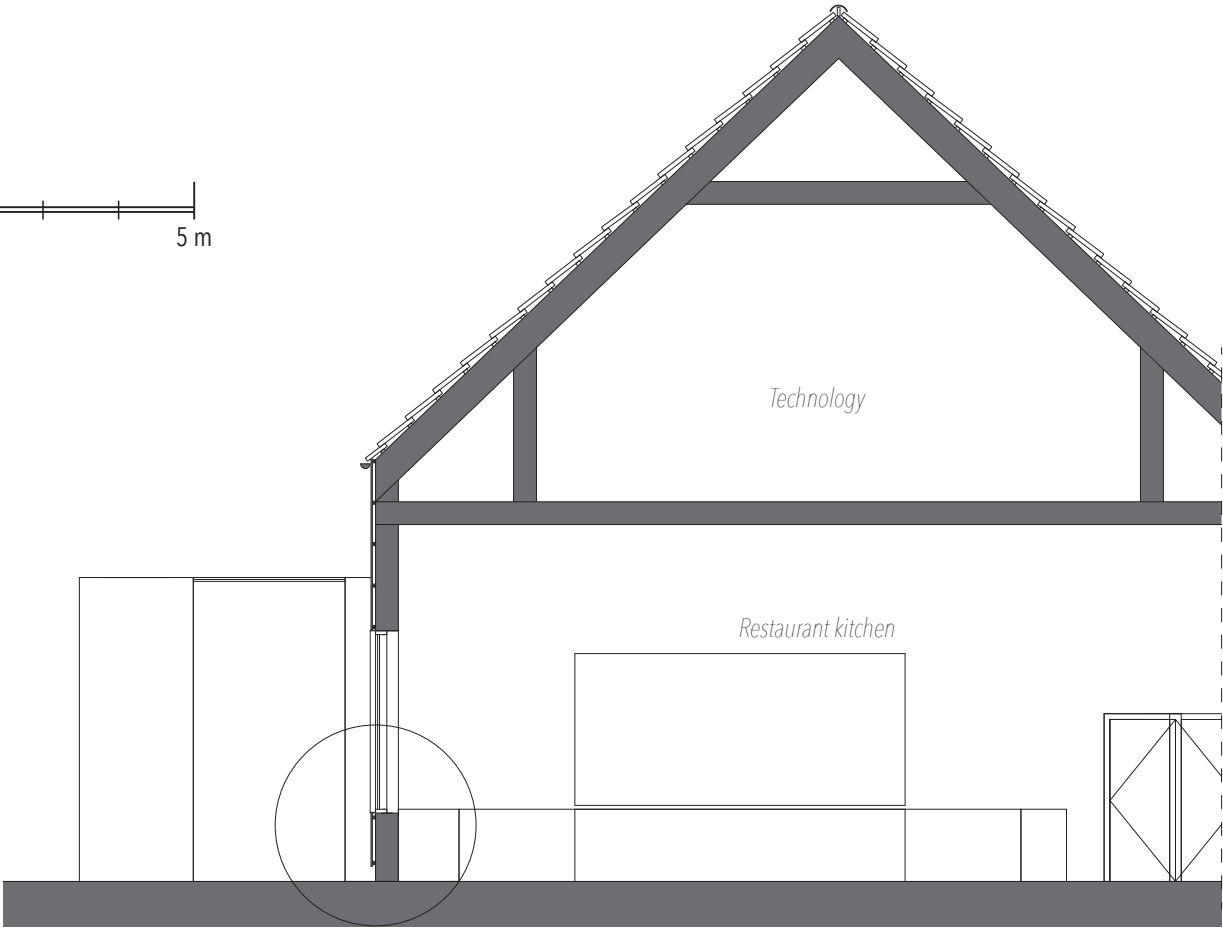
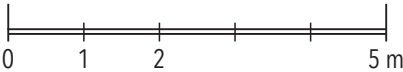
Interior colour scheme ►

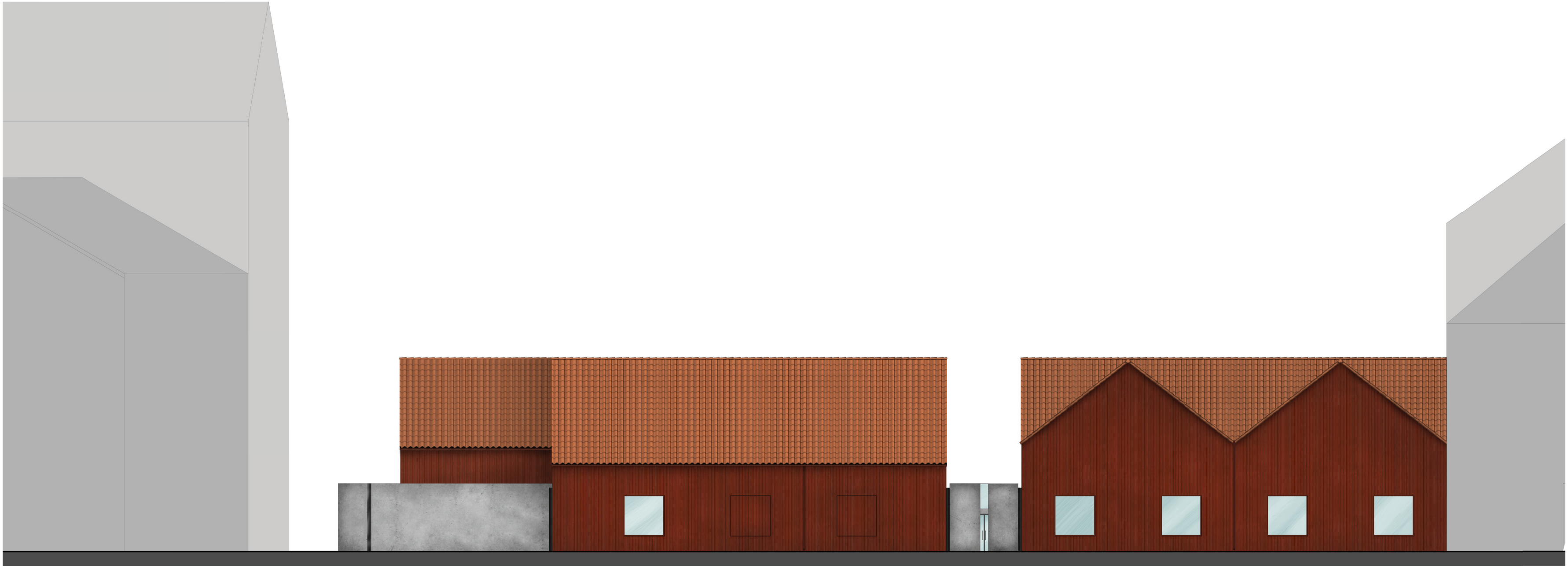


Section

Section A-A

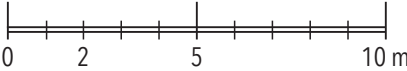
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South facade

Scale 1:200





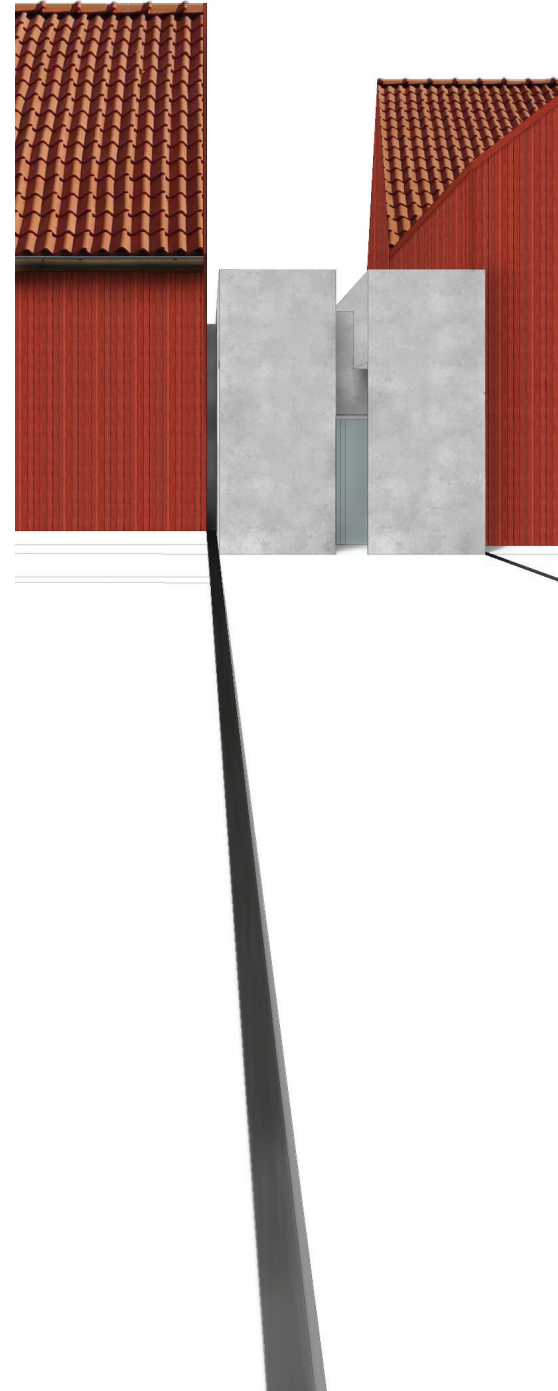
◀ Exterior colour scheme

The concepts of the exterior materials

The building complex consists of three different parts. One is where the meat production takes place, one where the visitors move and one is an adapter joining the other two parts together. The buildings in which the meat production and preparation take place have an expression of a traditional Swedish house or barn. Vertical wood painted with Falu Rödfärg, a traditional Swedish paint for facades, is a core element for this. Additional wood is the most traditional building material in Sweden due to the country's big resources of wood. To emphasise the red colour, all details - from windowsills to drainpipes etc. will be red as well. This will also give these buildings a traditional yet modern expression; it reflects the new approach to meat. The roof will be covered with traditional red roofing tiles to correspond to the red colour and due to its common appearance on Swedish houses.

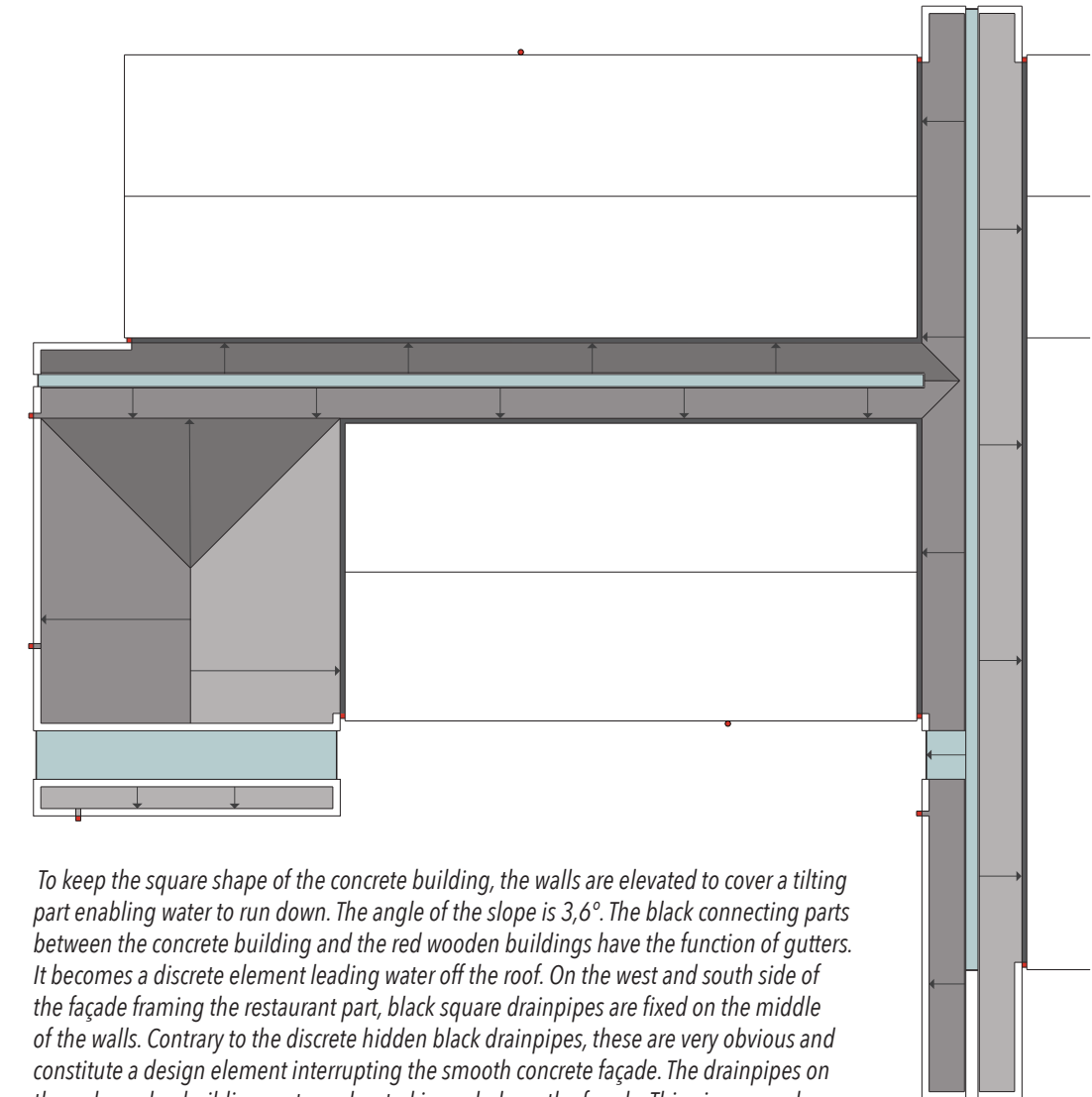
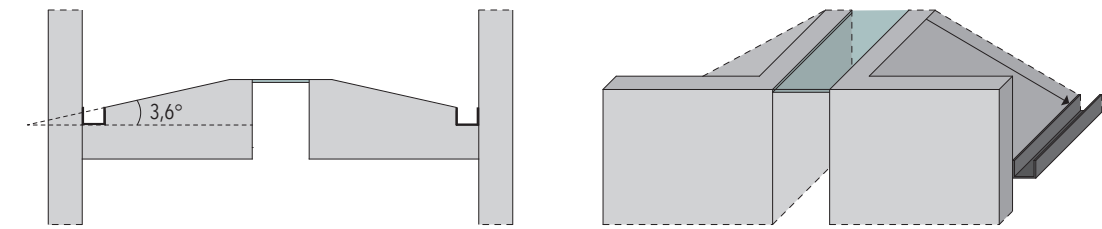
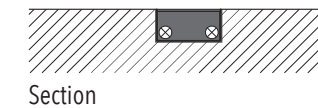
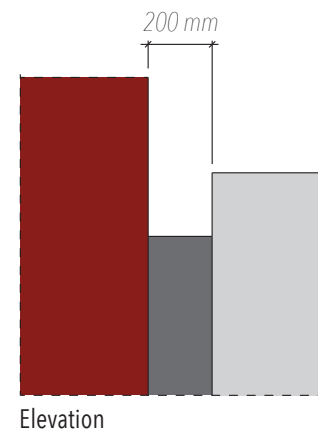
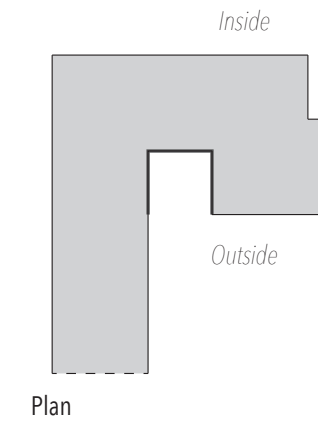
A heavy concrete building splits the red buildings. This is the part where the visitors move. The concrete reflects the human and is a symbol of how we have turned away from the natural, hence created a cold and hard surface. For the two parts, the natural and traditional wood complex and the modern and heavy concrete parts, to be able to meet, conceptually, an adapter part is added to enable this junction.

The surface of the adapter is black sheet. It is an element that stretches out to the park and joins it together with the building complex by prolonging its geometry. In the park it becomes an architectural element that is partly lit up to mark out the path to the building.



Diagrams illustrating how the adapter parts relates to the surrounding buildings and the ground in the park.

⊗ Lights



To keep the square shape of the concrete building, the walls are elevated to cover a tilting part enabling water to run down. The angle of the slope is 3,6°. The black connecting parts between the concrete building and the red wooden buildings have the function of gutters. It becomes a discrete element leading water off the roof. On the west and south side of the façade framing the restaurant part, black square drainpipes are fixed on the middle of the walls. Contrary to the discrete hidden black drainpipes, these are very obvious and constitute a design element interrupting the smooth concrete façade. The drainpipes on the red wooden building parts are located irregularly on the facade. This gives a modern expression and a variation to the otherwise rather classic façade.

The Park

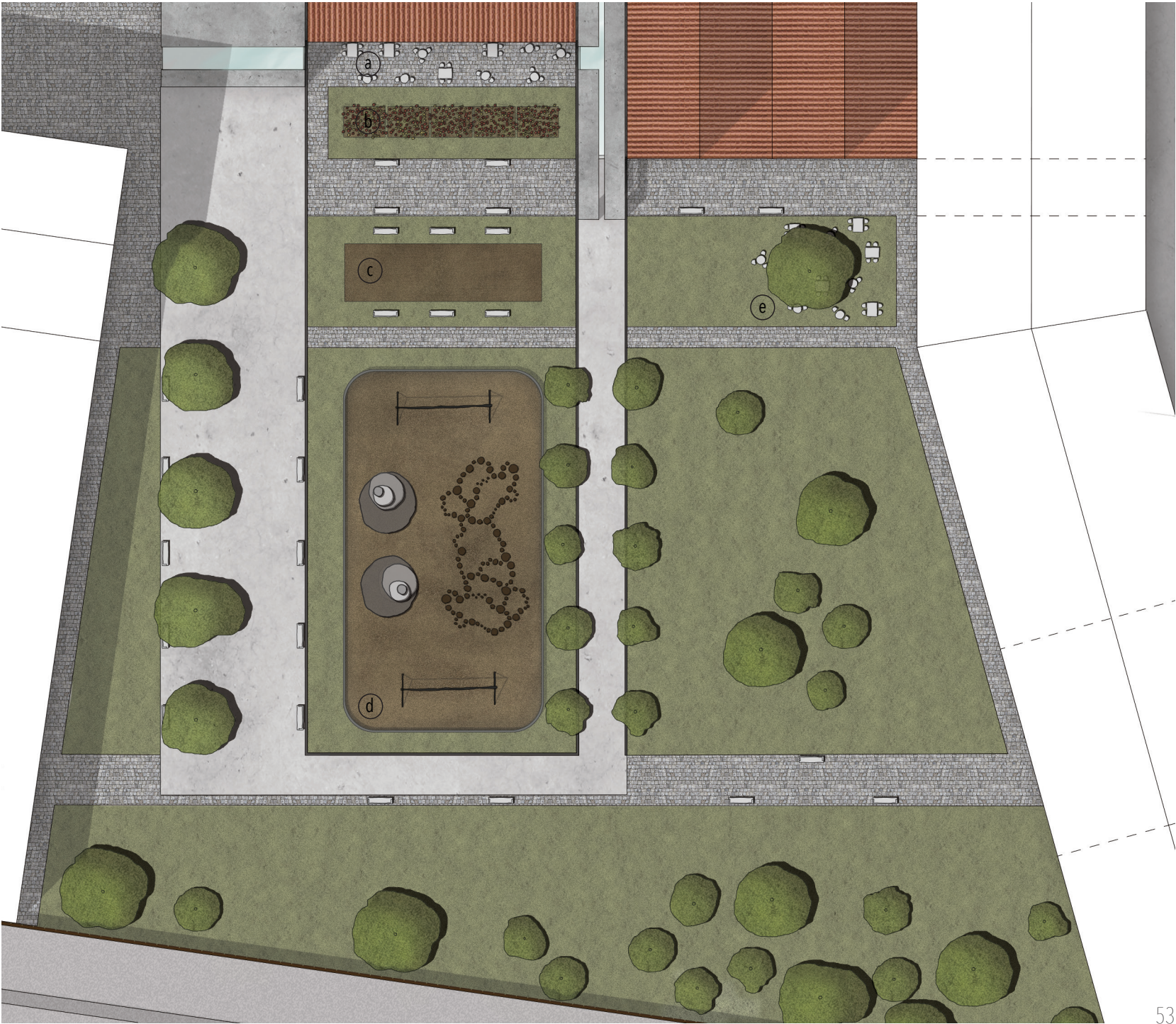
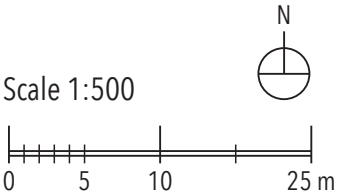
The pathways in the park are divided into two groups. The first and primary is reflecting the movement of the visitors inside the building of the meat production. The path is a continuation of the building out onto the park. Asphalt is used to relate to the concrete part of the building complex, where the movement of the visitors takes place. The u-shaped path surround an area in front of the building, hosting the restaurant kitchen, in which planned activities will be located. The main gathering point will be the big playground, which is turned into an ice skating rink during winter. A playground located in a dense populated area will be well visited and bring people and life to the site. An ice skating rink, located very close to the city centre, suitable for all kinds of people, is something retaining the natural activity at the site during the winter season as well. A boules court is also planned. It is a calm activity and very popular among the older generation, which is an important aspect to take into consideration.

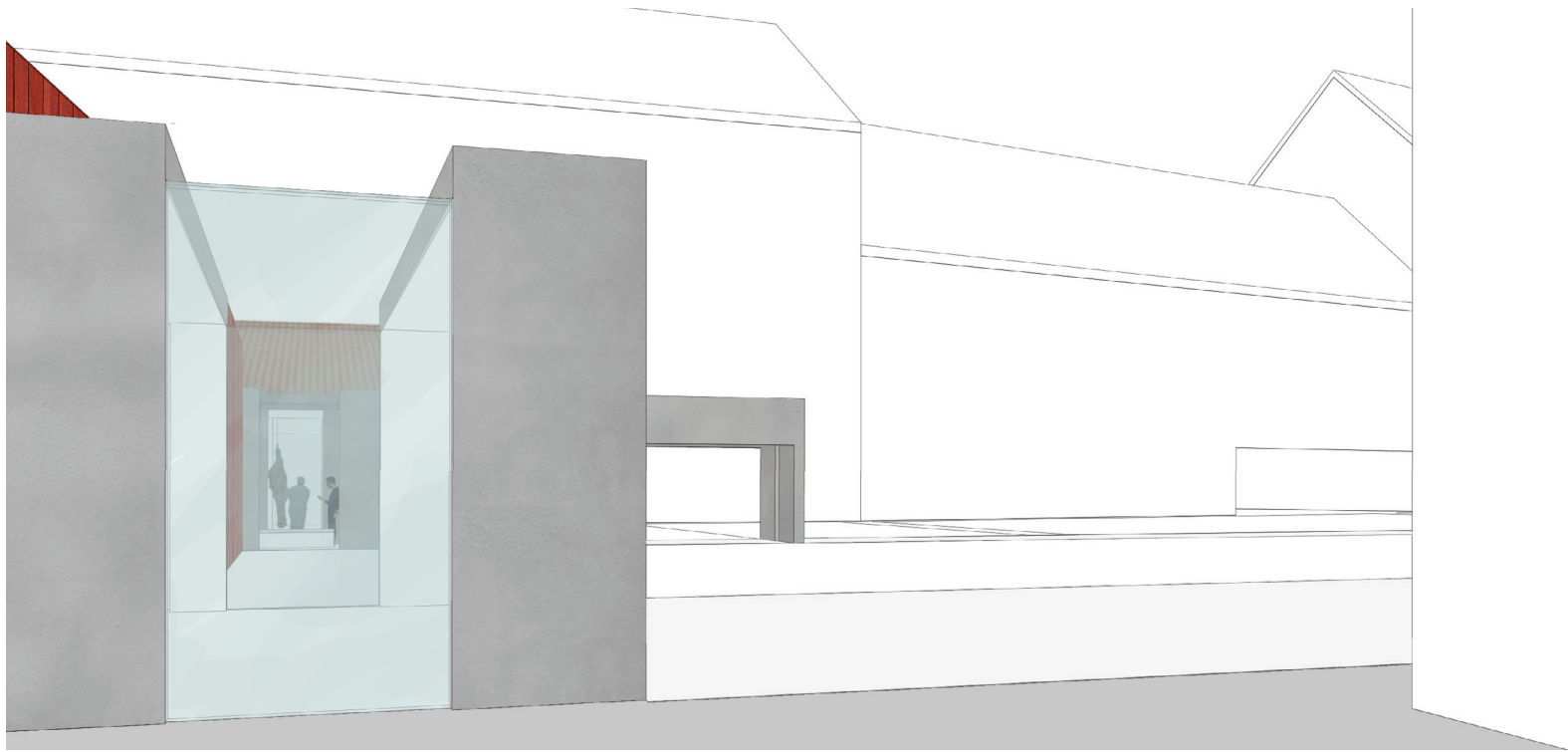
The park area outside the U-shaped asphalt path is planned for a more organic growth with grass, trees and bushes enhancing the natural feeling. The chosen material for the path here is cobblestone, it is to interact with less strict expression this part of the park is aiming for. Aligned with the cobblestone paths are the building parts where the meat production takes place. The cobblestone will decrease the speed of the movement and encourage people to look up and reflect upon the activities in the building. The cobblestone, together with the red wood on the buildings of the meat production, gives a natural and traditional expression.

In front of the restaurant kitchen an open-air service of the restaurant is located. This is only used during lunch hours, when a lunch buffet is served. To have the open air service available during the dinner à la carte service would work against the concept of the building to give the guest the story about meat production while visiting the restaurant, since a shortcut into the restaurant would be available. To eat inside the restaurant is moreover an important part of the experience of the building and the story of meat production.

In the other two building complexes at the site, hosting dwellings, commerce takes place at the ground level. A café, located just outside the part of the meat production building where the carcass fridge is located, extends out into the park during the summer season and has an open air service on the grass outside the cafe.

- a. Open air service of the restaurant
- b. Flowerbed
- c. Boules court
- d. Playground/Ice skating rink
- e. Open air service café

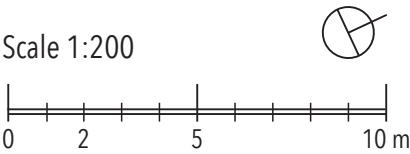


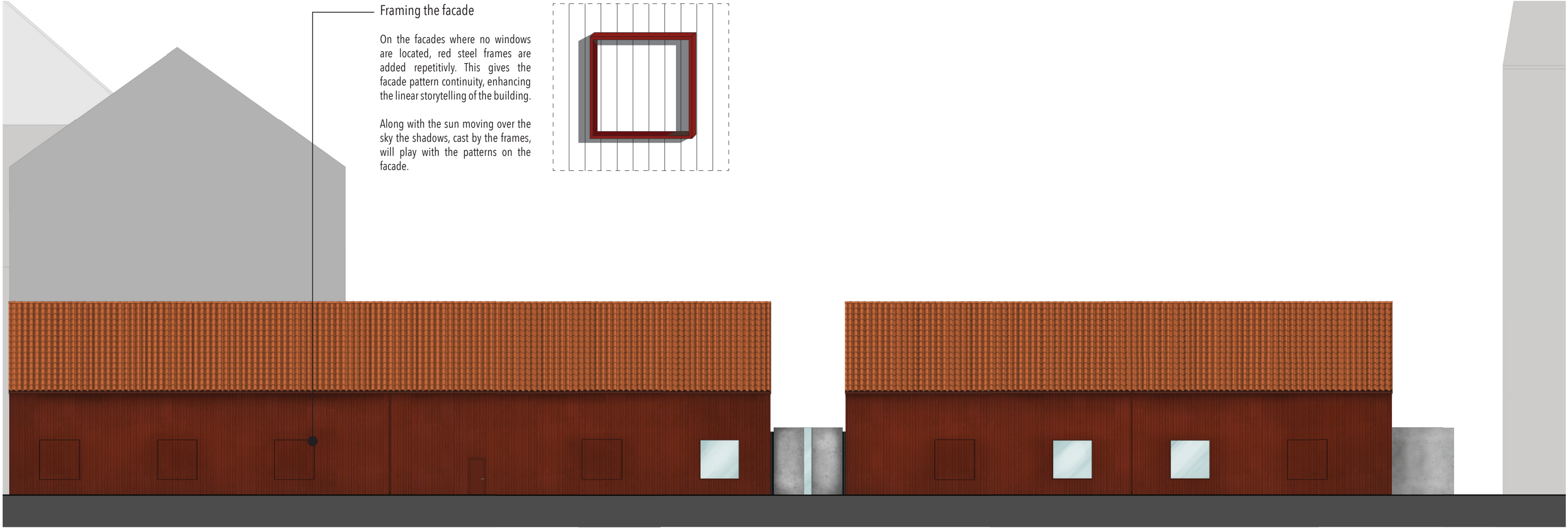


West entrance to the park



West facade

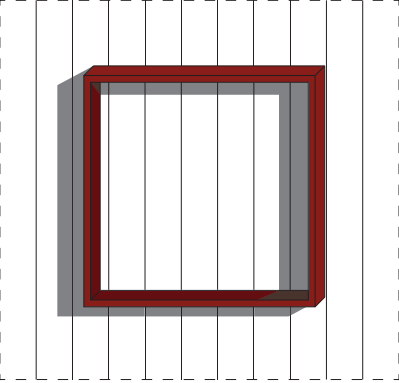




Framing the facade

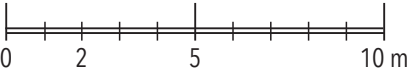
On the facades where no windows are located, red steel frames are added repetitively. This gives the facade pattern continuity, enhancing the linear storytelling of the building.

Along with the sun moving over the sky the shadows, cast by the frames, will play with the patterns on the facade.



North facade

Scale 1:200



V

CONCLUSION

Reflections

Is it possible to change people's behaviour and relation to meat using architecture?

Architecture possesses the tools of deciding what people shall experience and how to perceive spaces. Information can be spread through well-considered design. The project Meat Meets Urban Life emphasises the importance of including primary products into our everyday life. The information mediated through the building of the project is the objective image of Swedish meat production on small-scale farms around the country.

Food is something that always had a great impact when shaping our cities. No less than 120 years ago the markets still were crucial in the city planning in Sweden. Meat Meets Urban Life shows how we could incorporate food and primary products into future city planning, to make it a part of everyday activities and a common sight.

Change develops over time, therefore society needs to adapt to a

long-term plan to achieve a change of attitude to food and primary products. To include this new approach into future developments of the society is key to accomplish this. To create a facility for meat and to make it represent the Swedish meat industry will give the industry a better chance to reach out to more people and to spread knowledge. Knowledge is important when to question one's habits. This building encourages to discover something new and to understand it, it becomes a symbol for the future perspective of food.

How can the project tell the story about Swedish meat production?

All stories have different ways of being told. Different architectural tools are needed depending on the story. This building is describing facts for everybody to make up their own mind about. The building is not supposed to provoke the "right" answer, hence the design of the pathway is rather reductive and have similarities to a museum – a place where visitors are to get an opinion on the art without being pushed by

the design of the space.

Walking through the building the visitors will visually experience all different steps in the meat production, from carcass to perfectly cooked dish. Today this is a rare experience, yet a good way to learn. It gives a closer relation to the food you will eat or buy at the end of the pathway and therefore have an impact on the visitors mind concerning Swedish meat production.

How can a building achieve a decreased physical and psychological distance between human and primary products?

The short answer to the question is to make the building available for as many people as possible. To locate it at a site where a lot of people move is an easy way to decrease the physical distance. The project is located at a site planned to be built upon. It is located very close to the present city centre and future development plans incorporate the area into the city centre. The project therefore states an example of how inclusion of primary

products can be approached when building new areas to decrease physical distance.

Now is the time to figure out how to join the countryside and the city. The cities have always depended on the countryside in terms of providing food, but today this is taken for granted, which has resulted in a psychological disconnection and ignorance. The fact that meat comes from animals and that these animals come from somewhere and that someone somewhere has reared them can be highlighted if the knowledge about Swedish meat production is brought into the light. To realize the fact that the perfectly cut up pieces of meat we buy in the store descends from an animal and a carcass of an animal is a strong strategy to decrease the psychological distance between human and primary products.

Reflections

The food industry has been running amok for more than half a century. Once a product, with a quality appreciated by the consumer, has entered the market it has stayed there, no matter what downsides there is to the product. We live with a market economy and that is why we as consumers have the power to decide whether if Swedish meat industry has a future or not. This is the reason why it is important for society to contribute to decision-making and market, advocate and support the Swedish meat industry. The tools of architecture are powerful enough to affect people and spread information. Placing an exposing meat production building in the city centre not only simplifies for people to support the Swedish meat industry, but it also constitutes a powerful statement, something profoundly important to enhance the spread of information about the industry. The spreading of information can be done in several ways, but to get the word out and make people talk about it to each other and discuss it, is not only the oldest way of information dissemination but also one of the most important. When talking and reflecting about a subject you learn, which enables and facilitates decision-making. To decrease the physical distance between people and primary products is comparatively easy in relation to the task of decreasing the psychological distance. The concept and technique of mobile slaughter units makes it possible to bring identifiable meat into the city without harming the animals or their quality of life. The psychological distance can be affected when primary products become a part of the society and we start to talk about it and value it and its origin. To value a product for its positive qualities is more important than the dislike for bad products. The spreading of information about the meat industry today is generally only the bad examples. The animal treatment on small farms all around Sweden and the impact this meat industry has on our biota is rarely stressed. Yet, to turn the focus to the positive and what comes out of decisions based on that approach is a winning concept.

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