

# FOOD

IN THE CITY

Inducing Interest in Urban Farming through Architecture



Tanya Dam



# CHALMERS

## FOOD IN THE CITY

Inducing interest in Urban farming through architecture

Master’s Thesis  
Design for Sustainable Development, MPDSD  
Department of Architecture,  
Chalmers University of Technology,  
SE-412 96 Göteborg.

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tanyadam.29@gmail.com


Examiner:  
Emílio da Cruz Brandão

Supervisor:  
Joaquim Tarraso

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# I want to thank

...everyone that helped me or inspired me 

Special thanks to...

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... my partner-in-crime urf life-partner, **Abhinav** for giving me immense strength to perform better and cheering me up all the way.

# Abstract

As Göteborg is about to celebrate its 400th Jubilee in the year 2021, it is planned to create a new image of the city with many new developments. It is going to be a dense city with new layers of infrastructural network. In order to strengthen its resilience, the dense urban built fabric would require to be balanced with biodiversity and food production in urban context. Moreover, sources indicate that Sweden imports enormous amount of food and could be vulnerable in case of Global crises of Peak Oil or Climate Change. Pioneers like Stadsjord, Kajodling, 4H, Galaxen, Lärjeåns Trädgårdar, etc. are working with different methods but one thing they have in common is that they all strive to create biodiversity within the city limits and showcase the role of nature in the urban lifestyles. However, what keeps them from growing and functioning actively is the lack of investment on these functions due to lack of knowledge or public interest. With the aim to stimulate masses this master thesis is a research on, how can architecture act as a medium to spread knowledge and awareness about local food (Plants and animals) production? It requires a strategical solution where people win incentives like stress-free lifestyle and enclosed open spaces while the city gains from the production. The process of this research includes understanding of human and animals' behaviour in natural biotopes in order to steer people's interest towards being involved in the activities. The design strives at creating an example of a built space that educates and multiplies into a biodiverse network of food chains that shares locally produced nutrients in unutilised urban green spaces in view of taking a step towards achieving resilience in Göteborg in terms of food!



# Manifesto

It is high time, the political and economic fabric need to shift their motives to create string resilient self-sustaining city. This shift is possible if many citizens (actors) come together and show interest in connecting the missing links between the flowing complex network of nutrients, air, water and energy. To achieve this goal it could be started at one point where people are strategically made to find interest in food production in urban context, while they enjoy the architectural and the physical experience of the space. This means that the system of food production is a network of such proposals. My intension is to strengthen the proposal of Göteborg stad for its future development with additional characteristics of resilience that could be one of the targets for the Göteborg’s quadricentennial jubilee.

Name: Tanya Dam  
Degree: Bachelor of Architecture, BArch  
(5years degree course)  
Year of passing: 2007  
University: Mumbai University

# Me and my Subject

I have been practicing architecture in India since 2007 till 2014 in Mumbai and Bangalore. However, the projects that I had dealt were from various cities. I have been quite sensitive towards designing functional buildings since the beginning of my architectural studies. Hence, my topic of Bachelor Thesis was A Vocational Institution for the Blind, where I explored various patterns of light, wind and sound. In Indian context, one of the prime focuses within building sustainable and energy efficient buildings is to find energy efficient methods of cooling the buildings with locally available natural materials. Plenty of researches and studies have been made and many methods are implemented in various projects. My exposure towards sustainable building in Swedish context was initially introduced during a language internship for three months in Glantz Arkitekt in Gothenburg. After that, while studying Masters in Architecture in Chalmers, I have been introduced to several methods of Sustainable practices within lifestyles and architecture. Before studying this course I believed that architecture influences lifestyle. Now I believe that it is a fact that architecture influences architecture but lifestyle is a bigger factor that defines the perception of the architecture within which the lifestyle is lead. Being an architect I would like to find the tool within my expertise that can guide people towards understanding and embracing the interdependence between nature and the humans in order to complete the loops of living. My intension towards choosing the subject for my Master Thesis is to spread the knowledge that I have been gaining during my experience and education and also create an opportunity to the works of million other people who are trying to create sustainable development to spread their knowledge. Thus, create a change from a small part of the city which would eventually create ripple effect affecting a much larger scale.



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# Introduction



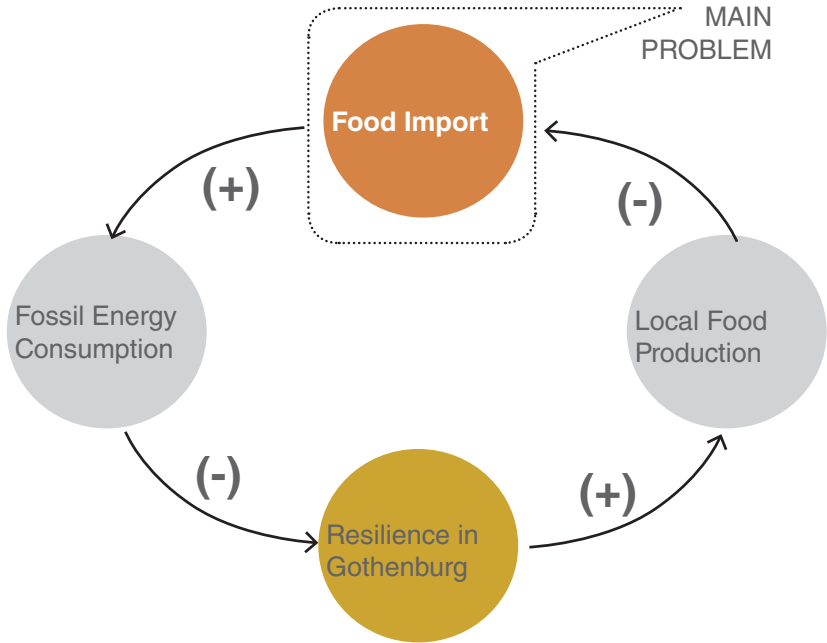
# Introduction

The history of agriculture and urbanism is intricately intertwined, one cannot exist without the other, a notion that became increasingly obsolete however over the last couple of centuries when food production and city expansion decoupled and each seemed to develop rather independently of the other (*Steel, 2008*).

To achieve resilience in cities, it is necessary to eradicate factors that could make them vulnerable to potential crisis situations. Moreover, being resilient could let cities focus on issues to strengthen themselves furthermore by leading in utility of sustainable methods. Developed nations are economically strong; yet they could add resilience by gaining knowledge from the developing nations.

During this Master Thesis I have researched about food production techniques, initiatives, success and failure stories and various methods in Urban Context in developed as well as developing countries. Thereafter, I have tried to implement a solution to a case where food import is prevalent majorly and has ample of space and potential to work towards reducing it.

“There is a need to explore how urban high density and urban food production can be integrated and urban agricultural lifestyles can be accomodated”  
- Andres Duany, 2011



# WHY?

The reinforcing loop shown to the left helps in finding the main problem that is causing hindrance towards gaining resilience in Gothenburg in terms of food. The question ‘Why’ is asked to it and its each subsequest answer till the **root cause** is found.

## Why is food imported in Gothenburg?

... because food produced locally in Gothenburg does not suffice the food requirement of the entire city.

## Why?

... because there have been very few intitatives of local food production.

## Why?

... because there is too little capital for investment due to lack of Government’s interest.

## Why?

... because not many people are interested in a lifestyle that could include being a part of food cultivation.

## Why?

... because people lack knowledge about urban farming and its benefits.



# HOW?

Reading about Global initiatives and actions towards Urban Food production



Researching on current policies of food production and circulation in the city



Gaining knowledge by talking to the existing Urban farmers of the city



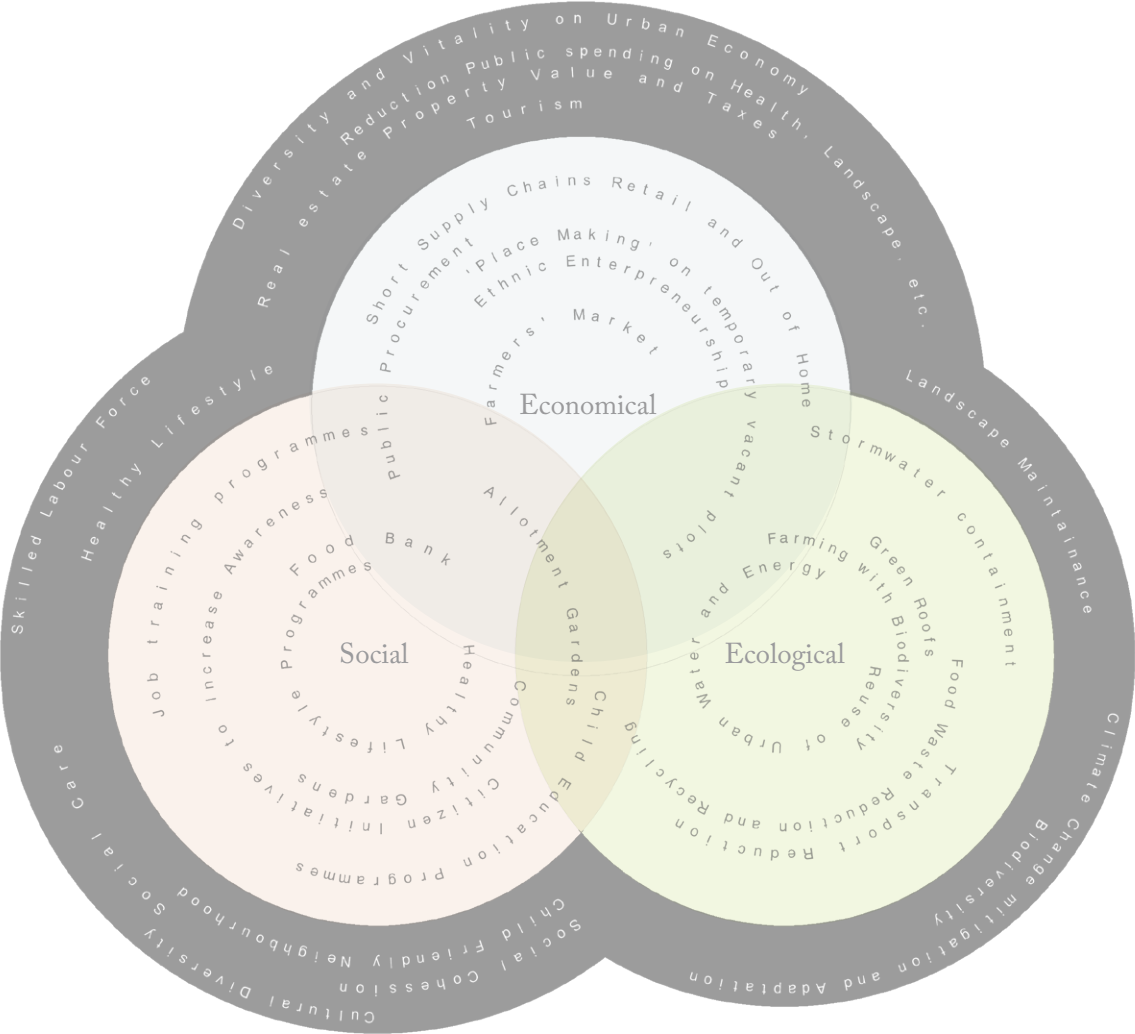
Brainstorming based on current policies and the knowledge gained



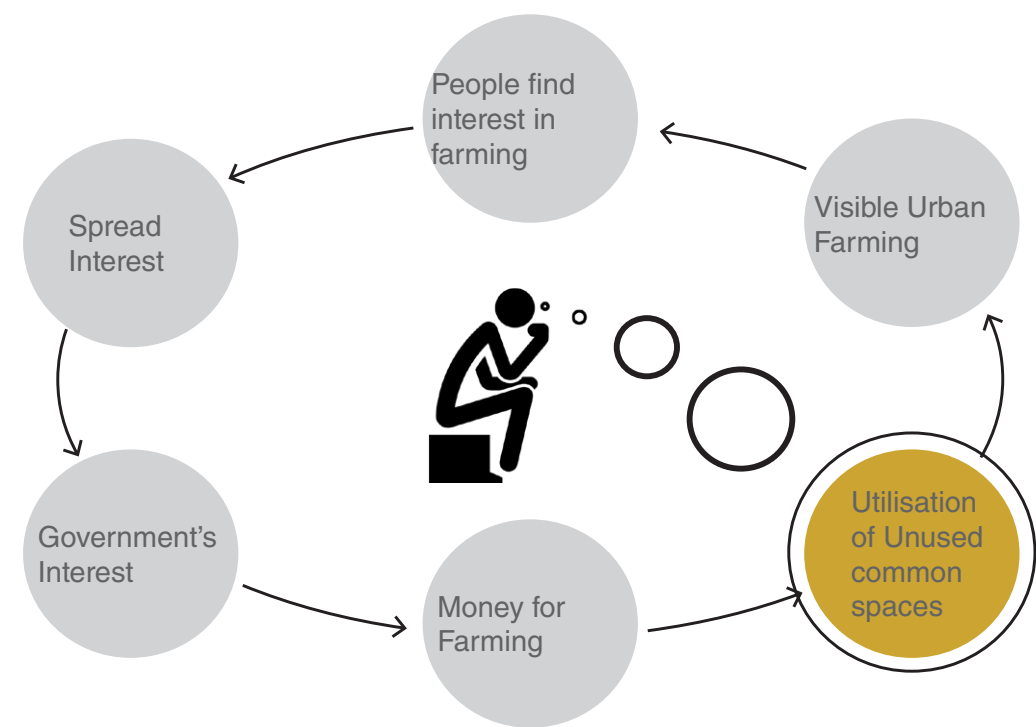
Finding the research question and proceeding with the design based on the points mentioned above



Cities all around the world are exploring the possibilities to reconnect food production (agriculture) and urban life, either by helping to re-establish the link between the city dwellers and peri-urban farms or by allowing or creating spaces for food production within the city limits (*Sonnino, 2009*). To implement a functional system including urban food production within a city, it is important to study the social and economical context and its ecological implications that get affected by them. One possible way to map out the policy dimensions of urban agriculture is the RUAF model (fig. to the left) developed by the members of Thinktank on urban agriculture in and around Rotterdam. This diagram illustrates how various policy measures are interrelated, and can potentially re-enforce each other.



*Manifestations and policy aspects of Urban Agruculture in the Developed World,*  
 RUAF Model based on brain storm in 2011 with members of the Thinktank  
 on agriculture in Rotterdam  
 NOTE: With exception to this illustration which is a reference, all the other  
 diagrams are produced by Tanya Dam



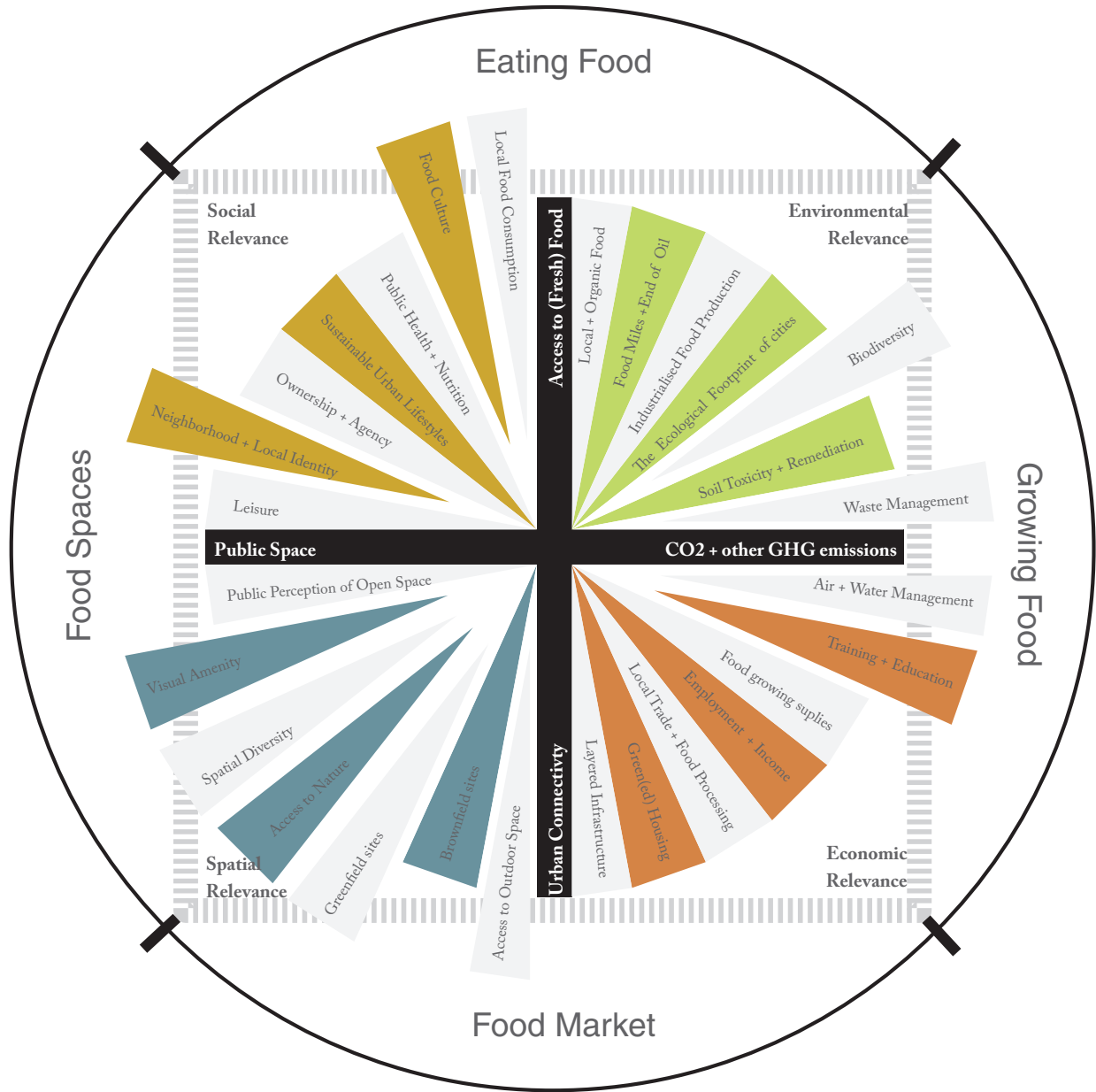
Vision of a cyclic pattern of Development being enforced at multiple stages.

## Finding the role of an architect!

Cities have ample of unused Greenfield and Brownfield sites that hold potential of growing food. Many such areas could be made usable yet visibly appealing in order to instigate interest amongst people towards growing local food. Highlighted in the diagram is the point at which an architect can play an important role and contribute in bringing about a change in the food system.

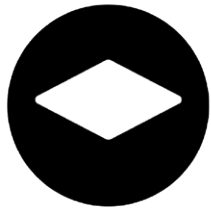
Spatial relevance where aesthetic quality of a space that exhibits beauty of nature plays an important role in calming people and getting them close to nature.

The main strategy to steer people's interest towards farming is to allow them to make it a part of their day-to-day lifestyles. It could be a place where they love to hangout after working hours or during weekends or hold meetings in a place that gradually inspires people to participate in farming. It could be a place that attracts people by its greenness, freshness, vibrance and comfort also during the coldest part of the year.



# WHAT?

The diagram shows what measures could be enforced in a city to ensure food production in urban spaces. They are clustered based on their causes and effects under social, economical, environmental and spatial relevances and the spines represent their effects. The spatial relevances make the most vital inputs in the architectural and planning framework. The text boxes projected from the main circle highlight the focus areas of this Master Thesis.



### A site

A landscape of asphalt, concrete, wood, brick, soil and some unutilised vacant spaces, shady corners, old buildings, damp moist corners, dry exposed surfaces and some fancy green trimmed parks



### Labour

The city aims at being dense with productive populaton that enjoys incentives of living in a resilient city less vulnerable to Global crises. It is therefore implied that it houses a blend of people from different backgrounds and cultures which require to be employed. Urban farming related activities would open a market full of job opportunities as it would be quite labour intensive.



### Nutrients and water

Excess rainwater that is unable to infiltrate could be stored and used for agriculture, sources of waste heat prolong the period of cultivation, organic waste could be turned into nutrients for food growth, thus balancing the local microclimates.



### Market

The denseness of the city determines the number of customers that require food. In order to achieve the vision of the city to be resilient as well as dense, it necessary to shift the political and economical fabric from being import based to being local production based. Hence, the demand for market for an urban farmer to sell his locally produced food naturally increases.

## Analysing what do farmers need?



### Knowledge

Experienced farmers from the nearby rural areas feel happy to share their knowledge as their children have moved to cities to work. Their farm lands stay uncultivated and their knowledge goes in vein. Many techonological solutions have made it possible to implement farming solutions in urban contexts.

The urban farmers have the knowledge to perform and show how farming could be included in day-to-day life in an urban context. It would require strategic approach to show and teach local food production using public green design methods. The farmer is the biggest actor in this project as he can make the food production possible.



### Energy

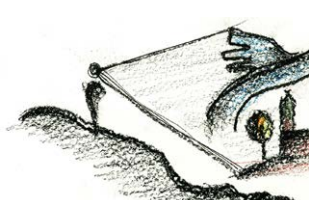
Technology has helped utilise the renewable forms of energy like solar energy, wind energy, etc. and it requires strategic planning and implementation of such technolgies depending on the topographic and natural conditions of various sites. Many functions like biodegradation of organic materials produce nutrients as well as heat energy which could be used for farming and creating microclimates suitable for cultivation or breeding.





# Goal 1

More and more people come here to see, get inspired and learn



Let the beautiful view and the natural biotope attract people



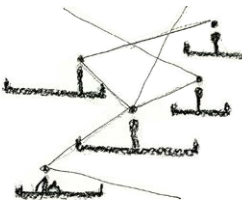
Let the people spend some time there, in order to grasp the notion of this space



Enclosed yet see-through spaces for the people to be protected from the harshness of the weather



Let the spaces be inspired by and blended with nature and its elements



Multi levels of interaction would strenthen sense of security and create dynamic meeting places

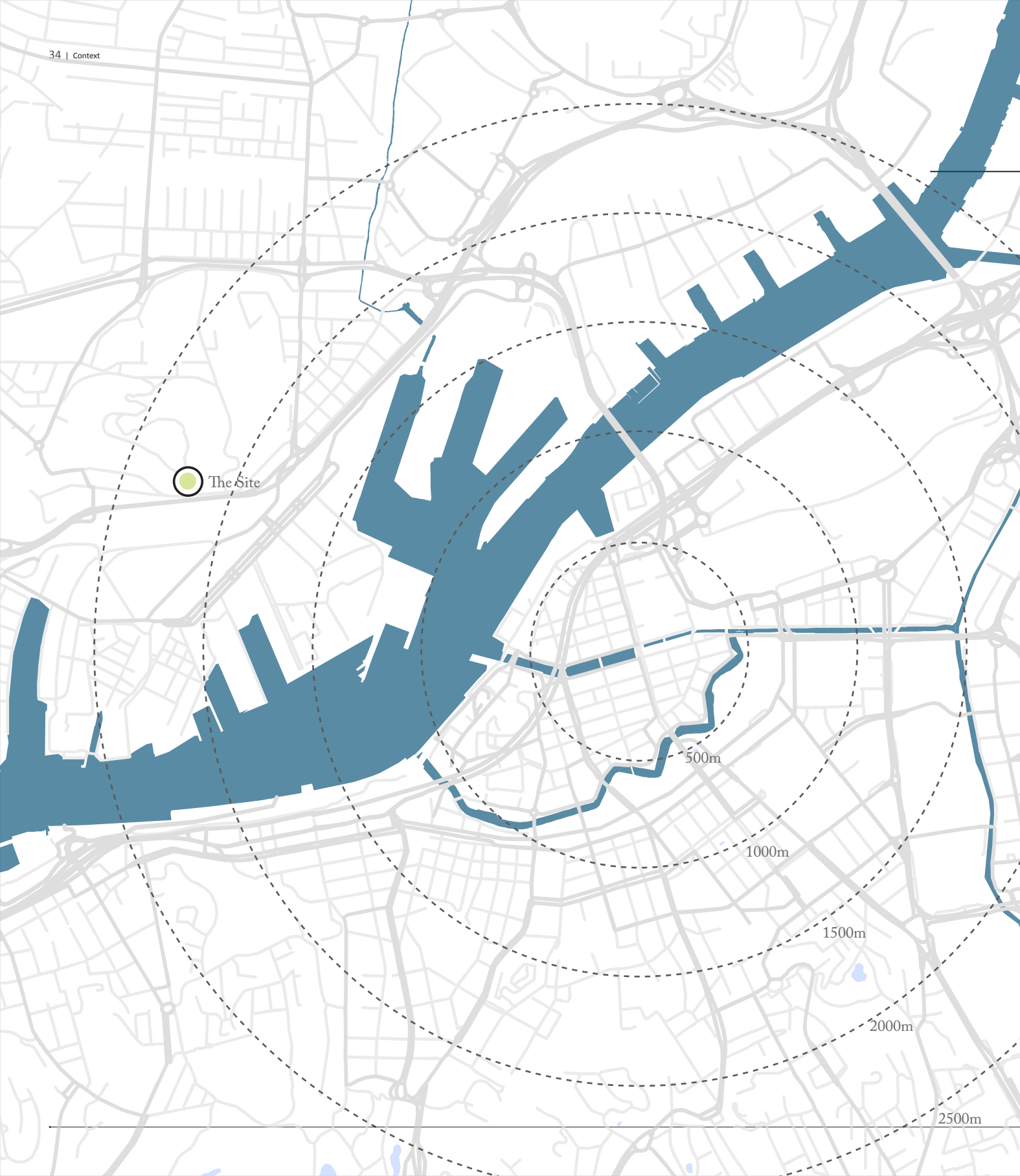


Locally produced food could be sold at the venue in order to attract people as well as eliminate the transporting cost



The structure could include some parts that are flexible and can be added, modified or removed. It is thus very necessary to include a workshop for the urban farmers to be able to simulate, build and experiment.





## Location

Food production in an urban context being one of the aims of this project indicates that the site has to be in a city. It is necessary that multiple number of food production units are needed to feed the entire city all round the year. As per the needs of the urban farmer a whole system of waste and energy regeneration should be implemented.

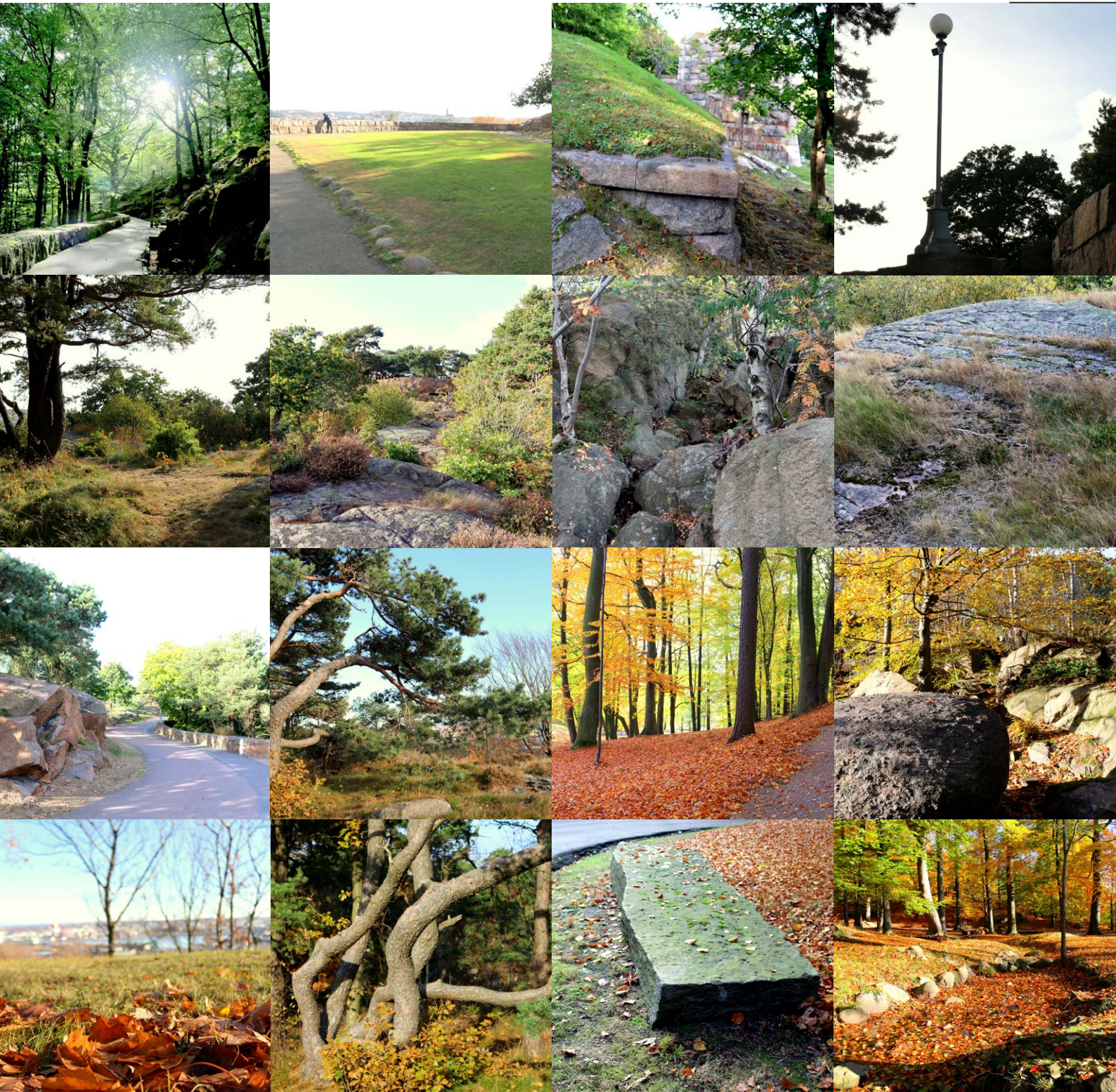
There could be many sites in every city in Sweden as it should be implemented everywhere. However, for this Master Thesis the chosen site is located in Göteborg, Sverige on a hill called as Ramberget. It is an existing park called as Keiller's Park. There are certain characteristics of this park which are discussed in the following part of this report which makes it unique to suit the function. The map towards the left illustrates its distance from the city centre.





# Site Photographs

This hill is a mixture of neat Beech forests, dense and inaccessible old Pine and Oak forests and barren and exposed rocky cliffs that view over the city-centre of Gothenburg. At the foot and at different levels there are few catchment ponds that hold the water draining from the top. There is also a reservoir built in stone that could hold plenty of rain water flowing from the top. There are quite a few access roads with steps and without steps which allows people to climb this hill by foot or by car. There is a proposal for a cable car line that is planned to connect the City Centre and Hisingen through Keillers Park.



Satellite image of Ramberget

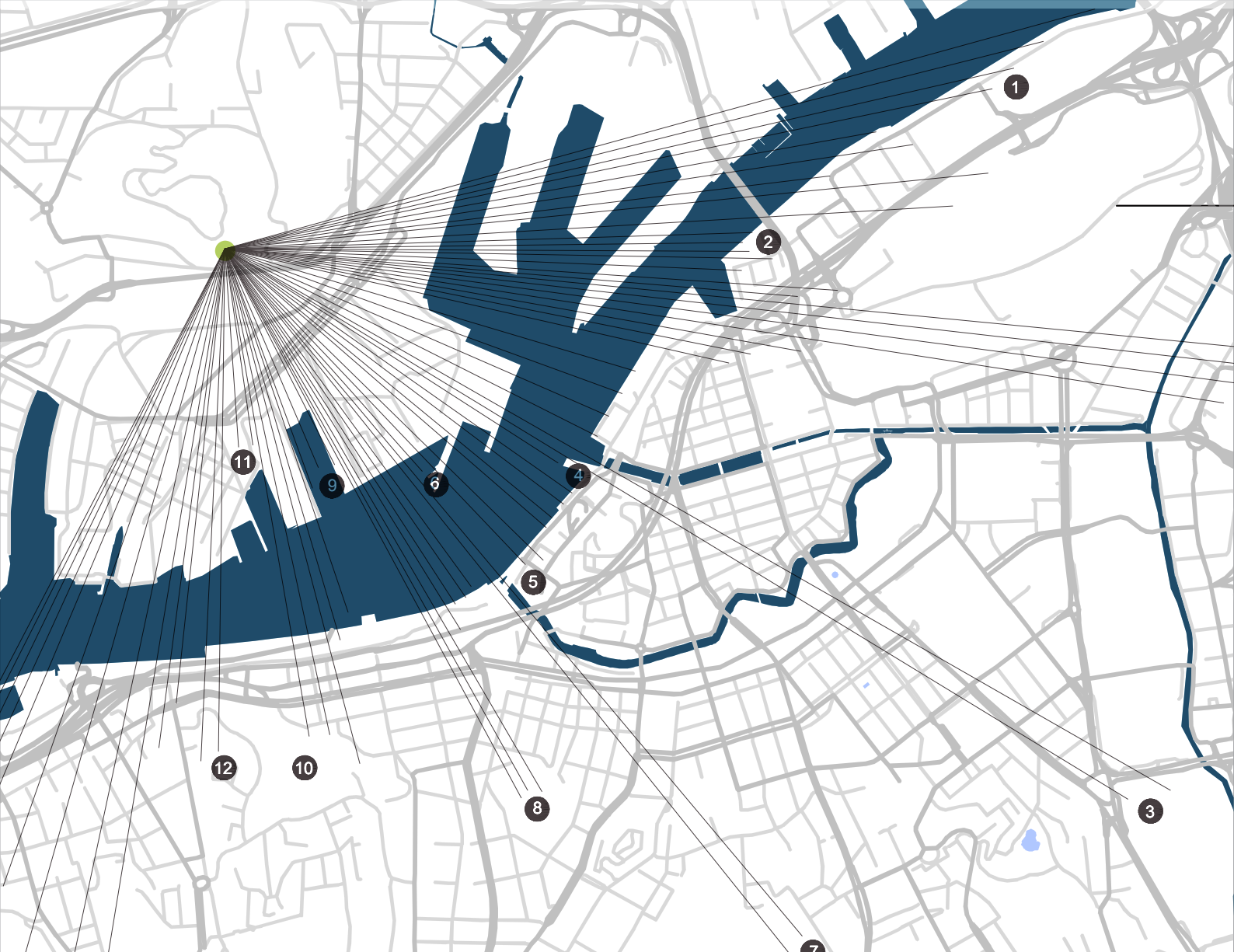


# View from the site

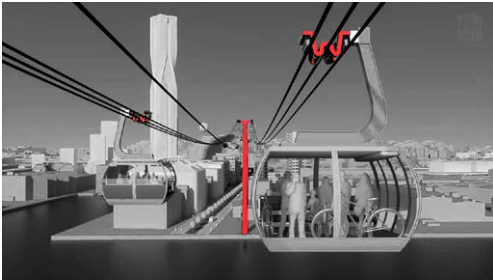
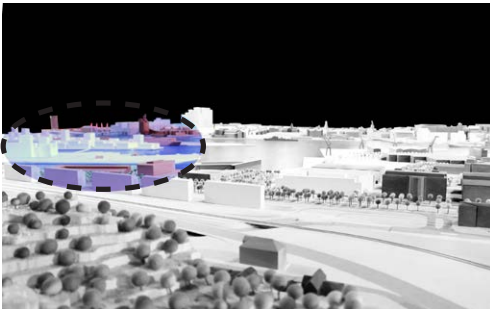
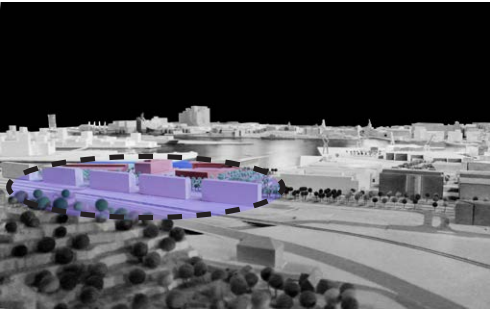
Since the site is located on high altitude and Göteborg Centrum is mostly flat, most of the city centre is visible from here. Glimpses of the Göta Älv can be seen at intervals and the rest is hiding behind the constructed parts of Lindholmen. Some areas with high buildings located on higher altitude towards far south are also visible.

Some prominent structures and areas that can be viewed from the site are listed below:

1. Göteborg Gasklockan
2. Läppstiftet
3. Liseberg
4. Stenpiren Resecentrum
5. Rustic tower of Rosenlundsverket
6. Iconic Cranes of Göteborg
7. Landalabergen
8. Skansen Kronan
9. Konsultsbron
10. Stigberget
11. Kuggen
12. Masthuggkyrkan



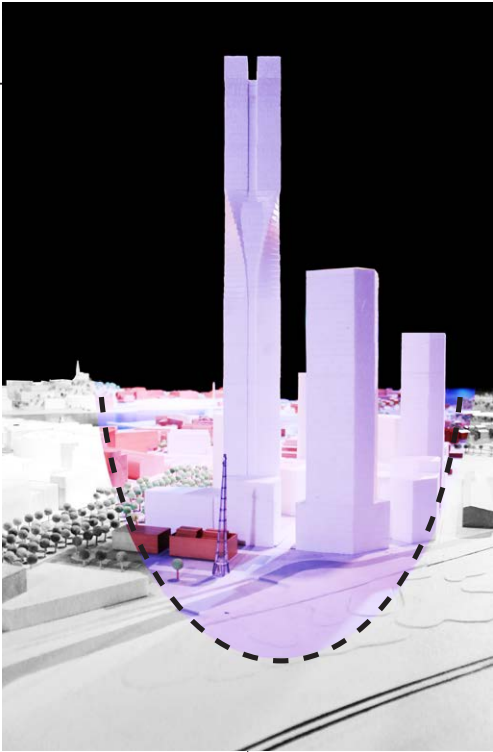




# City's Future Plans

Many developments are planned to happen around the site. As it can be seen in the sketch below and model pictures, Göteborg plans to densify the unused areas of Lindholmen and connect it with the city centre by a cable car network. The rope way is planned to connect the two areas of hisingen (Lindholmen and Wieselgrensplatsen) and also have a stop on the Keillers Park.

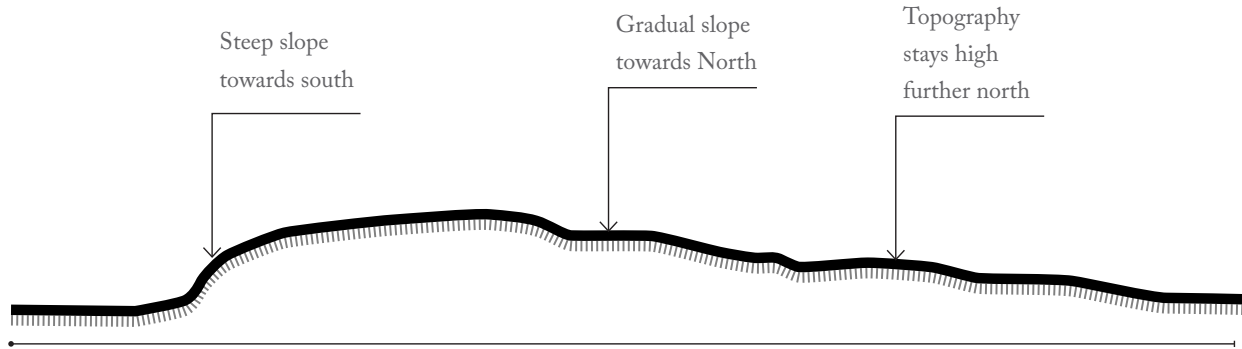
Thus, it can be predicted that more number of people would access the Keillers park in the near future to gain some relief in nature away from the hustle and bustle of the dense city.



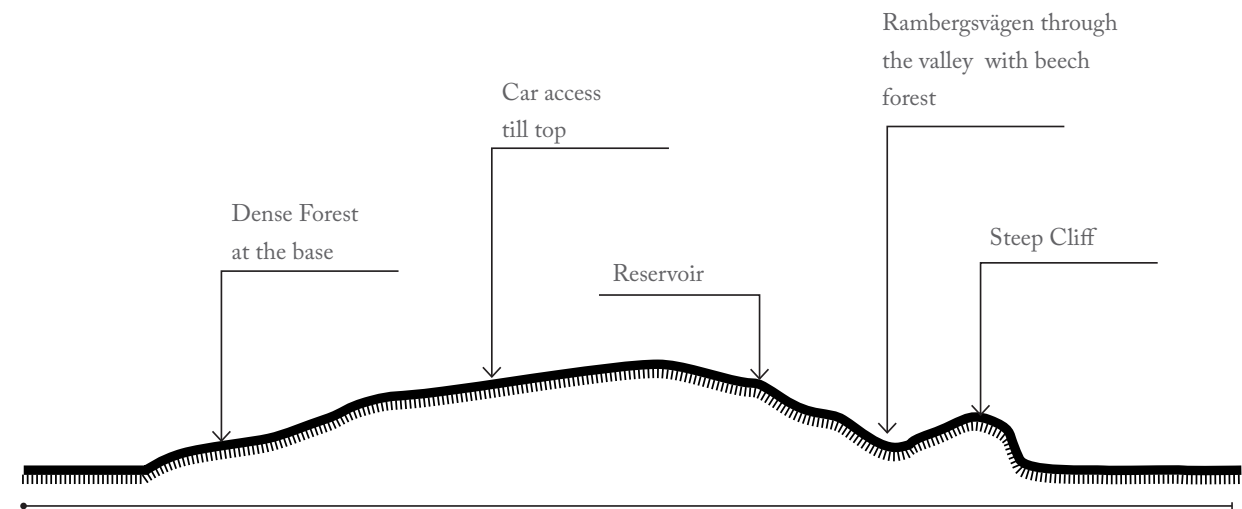
# Analysis

## Topographical analysis of the site

The Keiller's park is generous in allowing sunshine on it due to its orientation towards south with scanty vegetation towards the southern facade of the hill. The northern side slopes gradually with dense forests of mainly Oak, Pine, Larch, Birch and Beech.



a



b



- South Zone- Steep Barren with a lot of Sun
- North zone - Dense forrest with gradual slope
- Flat Zone- Dense flat base
- Flat yet high Zone- Park with Beech trees



Analysis of site-surroundings

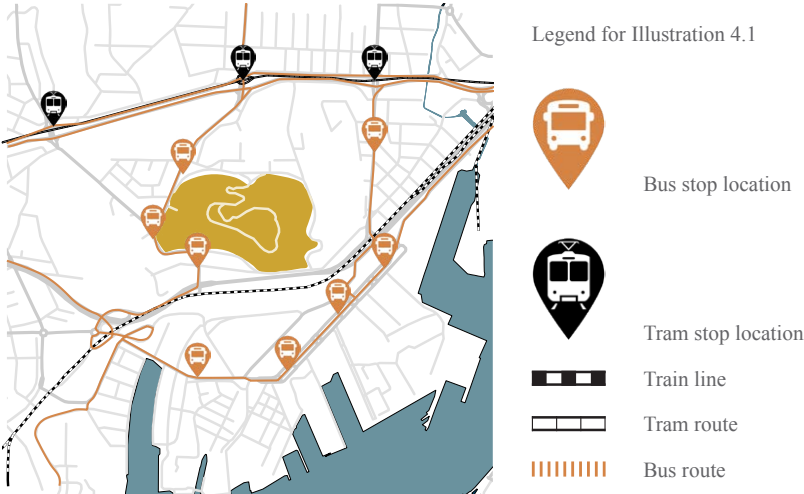


Fig. 4.1 Accessibility by Public transport system  
Illutration by: Tanya Dam



Fig. 4.2 Functional distribution based of GIS data  
Illutration by: Tanya Dam

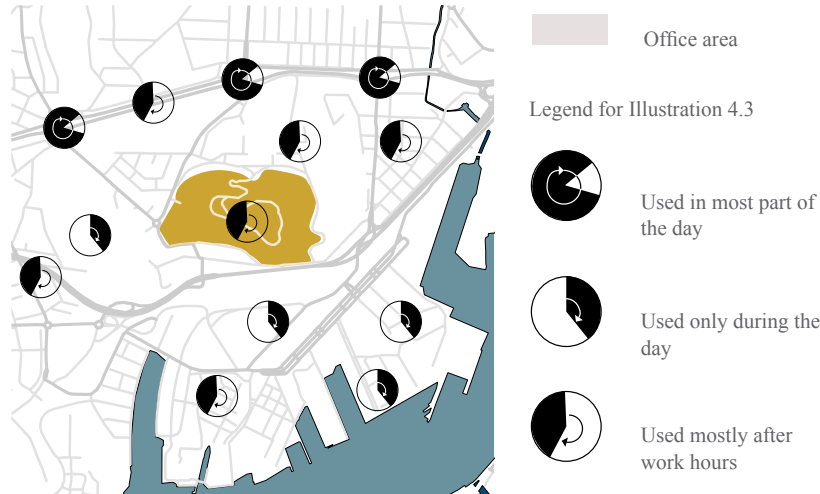


Fig. 4.3 Peopled hours  
Illutration by: Tanya Dam



Fig. 4.4 Mental barriers around the site  
Illutration by: Tanya Dam





	Finns anslutning?	Anslutning med bil?	Tillgänglig anslutning utan bil
västerifrån	ja	nej	nej
norrifrån	ja	ja	för brant på korta partier
österifrån	ja	nej	nej
söderifrån	nej	nej	nej

Möjlighet att ta sig upp på berget från de olika väderstrecken

Existing Car roads, Pedestrian Roads and Steps  
Source: Report ‘Ökad tillgänglighet till Ramberget’, June 2016, by Trafikkontoret, Göteborgs Stad, pg 15



Proposal Option 1  
Source: Report ‘Ökad tillgänglighet till Ramberget’, June 2016, by Trafikkontoret, Göteborgs Stad, pg 19

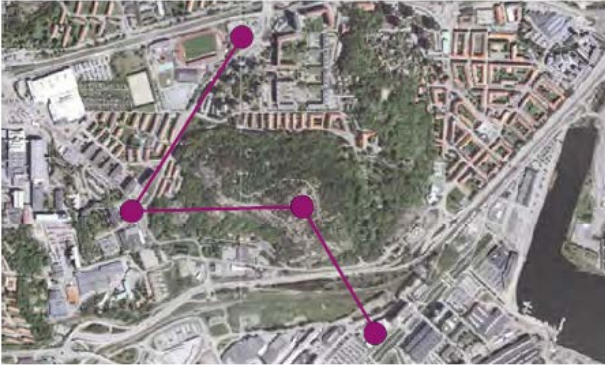


Proposal Option 2  
Source: Report ‘Ökad tillgänglighet till Ramberget’, June 2016, by Trafikkontoret, Göteborgs Stad, pg 21

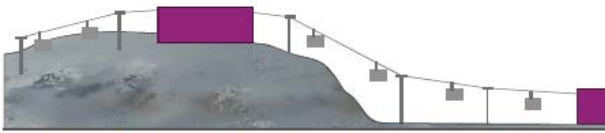


Proposal Option 3  
Source: Report ‘Ökad tillgänglighet till Ramberget’, June 2016, by Trafikkontoret, Göteborgs Stad, pg 23

Proposed cable-car line



Alternativ 1: stamlinbanan med station på Ramberget



Skalenlig sektion över stamlinbanan som går upp på Ramberget. Byggnaden dominerar berget.

Proposal Option 1  
Source: Report ‘Ökad tillgänglighet till Ramberget’, June 2016, by Trafikkontoret, Göteborgs Stad

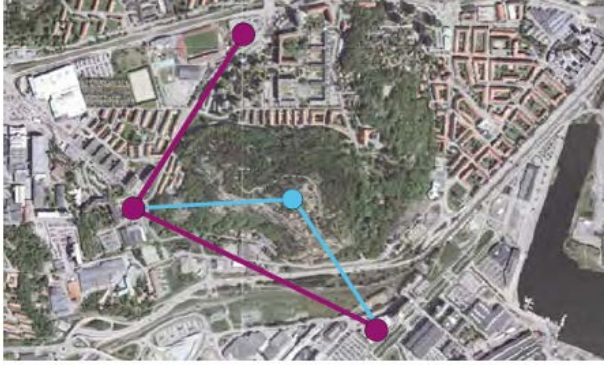


Stickspår från Lindholmen



Skalenlig sektion över stickspår från Lindholmen.

Proposal Option 3

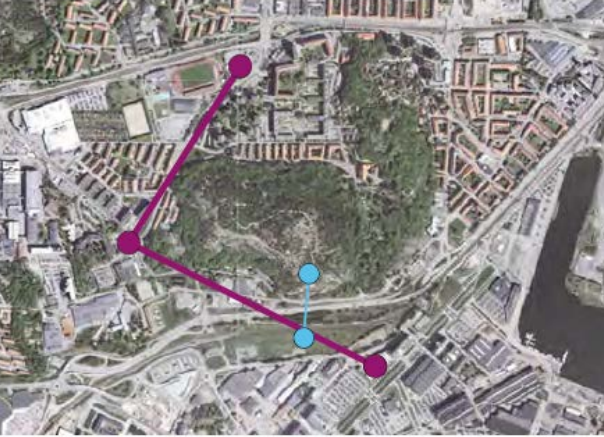


Alternativ 2: stickspår från Lindholmen och Lundby med station på Ramberget



Skalenlig sektion över stickspår från Lindholmen och Lundby med station på Ramberget

Proposal Option 2



Fristående stickspår från grönområde söder om Ramberget.



Skalenlig sektion över stickspår från grönområde söder om Ramberget.

Proposal Option 4

SWOT analysis of the site

S

- High altitude
- Surrounded by Office areas on front side and residential areas on the rear side (Hill shadow region)
- Overlooking major part of the city centre, Lindholmen and Göta Älv
- Many Iconic structures of Göteborg are visible from here
- Breathtaking views
- Fresh air due to its green context
- Noise free due to its height and dense forest at the foot of the hill
- South facing Cliff- receives most of the sun

W

- Railway line and Highway acts as a human barrier
- Lindholmen is almost deserted after office hours
- One has to climb or walk up the hill to reach this point. Makes it hard to access.
- Most people who come to visit this place drive to the top in their private cars
- The soil on top of this hill is eroded due to its steep slope

O

- Many people visit this place
- Natural resources / material like wood(Oak) is amply available locally
- Proposed Linbana (Cable car) to Connect Wieselgrensplatsen to Lindholmen and Majorna via Keiller's Park
- Young working Population in this area
- Bus and tram stops nearby
- Wind blows heavily at the site

T

- High development around
- Risk of development on the unbuilt areas of the hill
- The hill separates the areas of Wieselgrensplatsen and Lindholmen



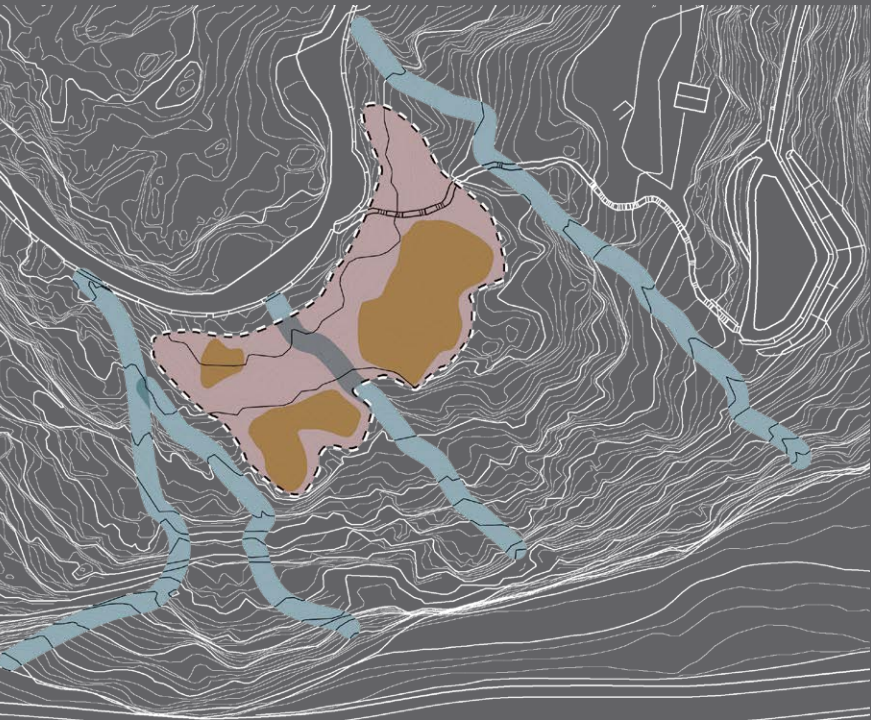
Boundary analysis of the context



Boundary defined by the proposed  
Cable Car Line



Boundary defined by the view from  
the site



Boundary defined by the plainness and  
natural obstructions at site



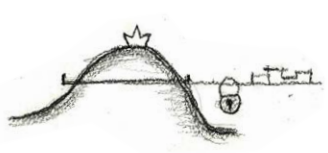
Existing deep valleys at site

Relatively plain surface

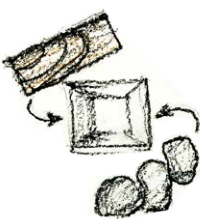
Boundary on the Site

# Goal 2

To preserve the strong historical identity as a park and the existing biotope and enhance it by adding what has worn out through ages



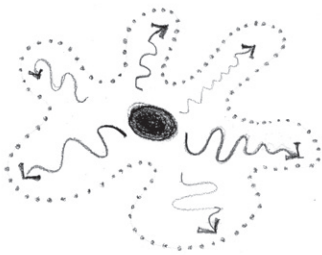
Let the peak of Ramberget stay protected-  
The Cable Car stop could be placed strategically



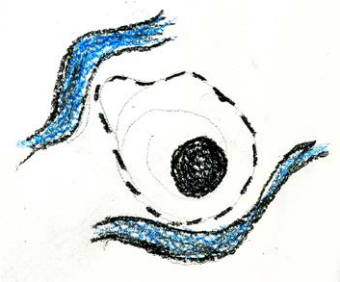
The site is rich with locally available materials like Wood which are getting old and rocks



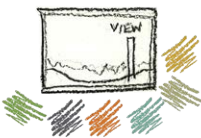
The eroded southern face of the site which is exposed to the sun during most of the sunny hours of the year, could be enhanced in order to house biodiversity



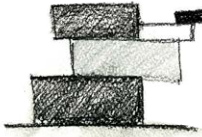
Animals and food need freedom yet require to be in control for the benefit of the city and the farmers



The natural streams, valleys and steep slopes help define the boundary

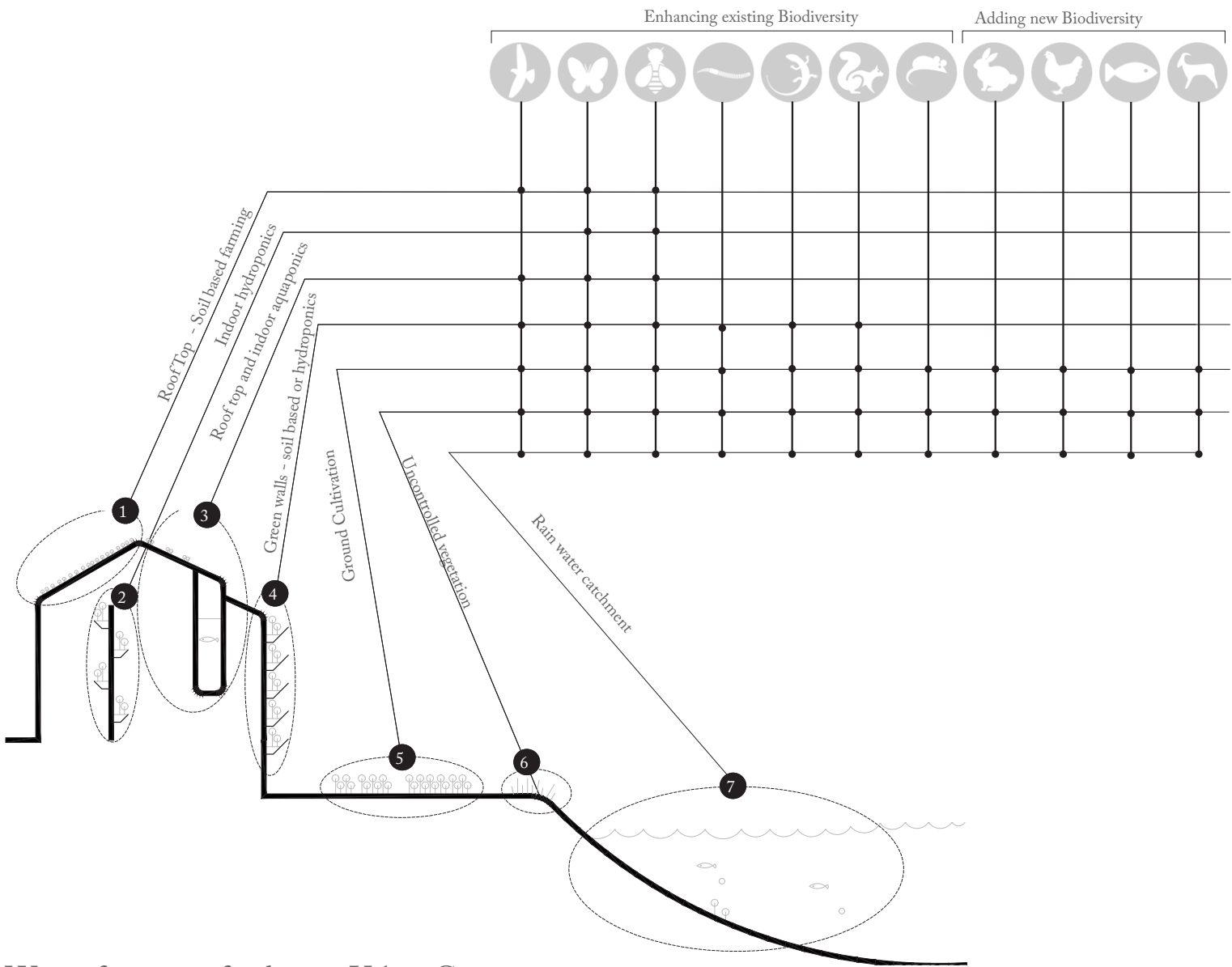


The beautiful view from the site or the ring road should not be obstructed no matter what



The design of the structure could be a combination of permanence and flexibility depending on its function and materiality



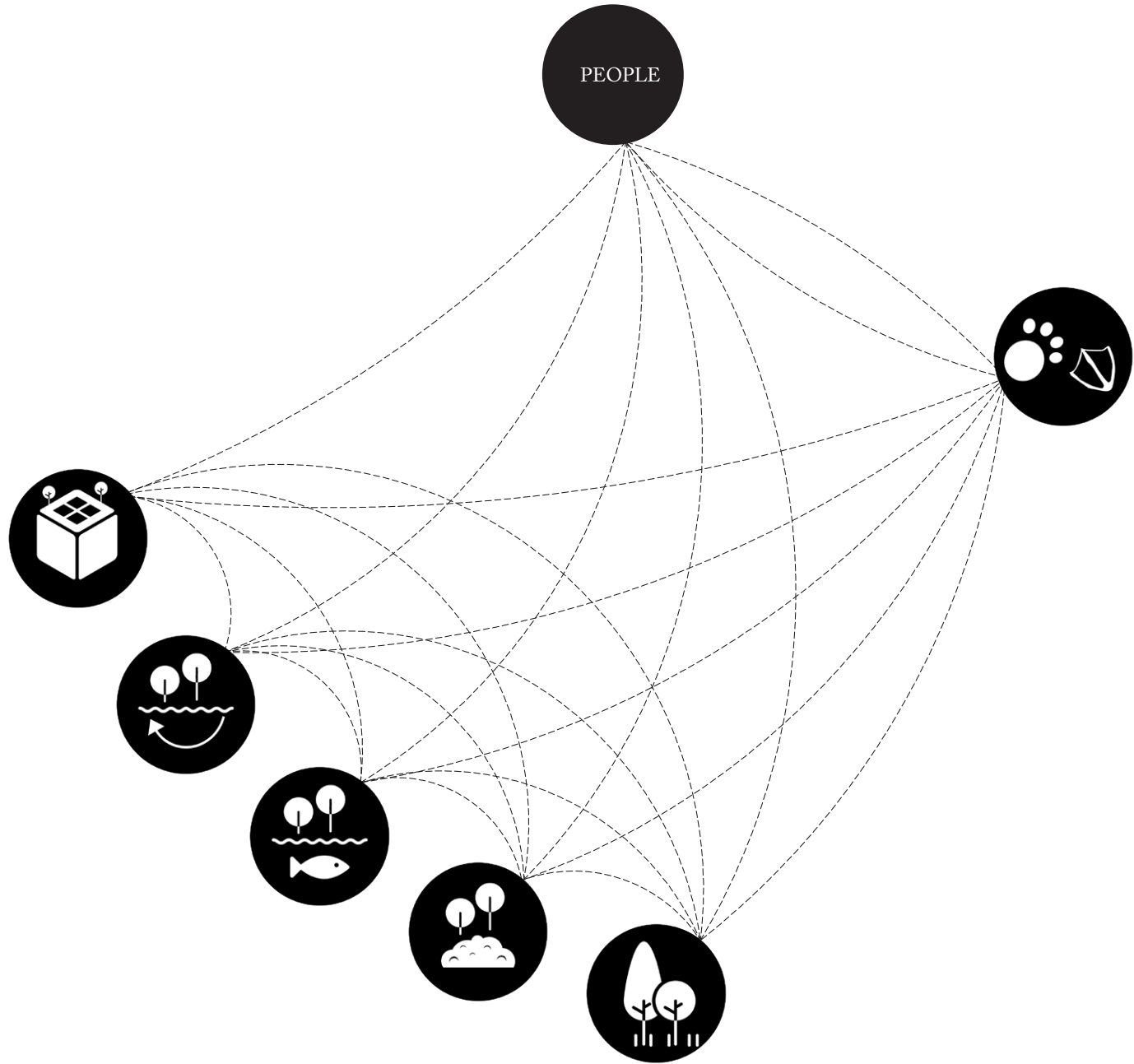


Ways of growing food in an Urban Context

# Building scale Design

## Ways of food production in Urban Context

The horizontal and vertical surfaces in a building, whether in its interior or on its exterior, has plenty of surfaces that could be utilised for food production. If the verticality of cities are flattened, the surface area could add up to multiple times the ground coverage of the buildings. Technology allows utilisation of these surfaces for growing food and vegetation. Open spaces and rooftops within the city could also be used for food production. The diagram to the left shows how various parts of a building could house food production. Some technologies include cyclic pattern of food circulation. where nutrient flows from one to another stage. As vegetaion could support growth of animals within the city and also other forms of animals that rely on greens, it is evident that the city tends towards being biophilic. A biophillic city is at its heart a biodiverse city, a city full of nature a place where in the normal course of work and play and life residents feel, see and experience rich nature – plants, trees, animals(*Beatley, 2011*).



The Nutrient network in the city

# Urban scale Design

## The Nutrient Network in the City

The nutrient flows by utilising locally grown products and biological waste as food to complete the food chain. Many researches are being carried out with this aim of reutilising the bio-waste created by one organism as food for the other.

Urban Waste Management systems in the the developed countries have eventually been developed with a view to sanitation standards and with a little concern for recycling (*Van der Schans, 2010*). It is a always a question of acceptance by humanbeings and this mind-shift could be possible by creating visibly apealing methods of food production.



Soil based farming on roof top



Indoor hydroponics



Aquaponics



Soil based Cultivation



Uncontrolled vegetation / forest gardening



Growing healthy animals



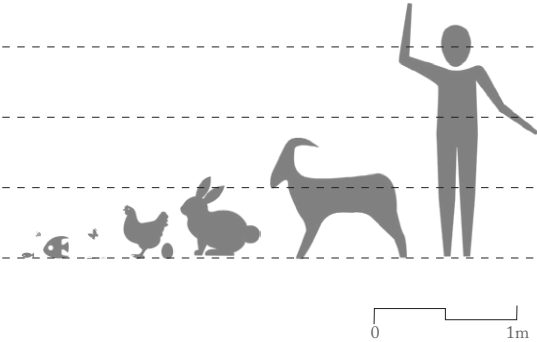


Food (domestic animal) model in a resilient city

Vision of the Urban Food (animals’) model

The vision is to produce **food within the city**. Urban agriculture benefits from the urban environment by using vacant plots of land and /or other underused urban spaces such as rooftops, or abandoned buildings (*Van der Schans, 2010*). The city has potential of growing many animals in its unused green areas. Depending on the sizes of the open spaces available, the animals could be placed in different parts of the city. This diagram to the left indicates a simplified version of how animals could be spread right from the centre of the city to its periphery. In the Urban Farm proposed in the Keilers Park primarily deals with are **goats, rabbits, chickens** and **fishes**. Many more species of birds, insects and animals should be added in this list which would get their homes back with densification of flora and fauna.

Proportion of human and the chosen animals for the farm



# Vision

...urban food production and sharing in Göteborg

...few existing urban farming initiatives be encouraged to grow, share and educate

...many unused greenfield and brownfield spaces by foodified



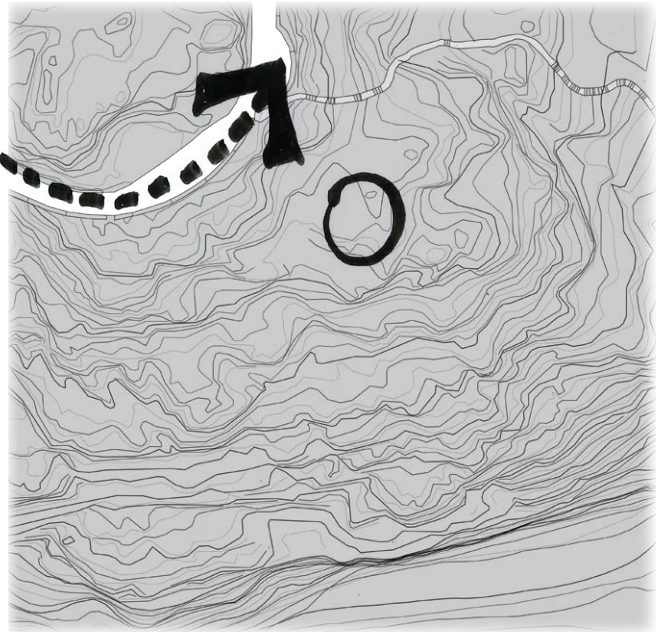
Simulation of the urban food production and sharing model in case of Göteborg with existing urban farmers and many green areas with potential for farming



# Design elements

## Arrival

The site is planned to be well connected by pedestrian walkways right till the top. The Cable car stop could be an open-air stop in order to minimize intervention by construction. The stop could well be proposed at a lower point than the peak of the hill in order to retain its cultural identity.



By Road

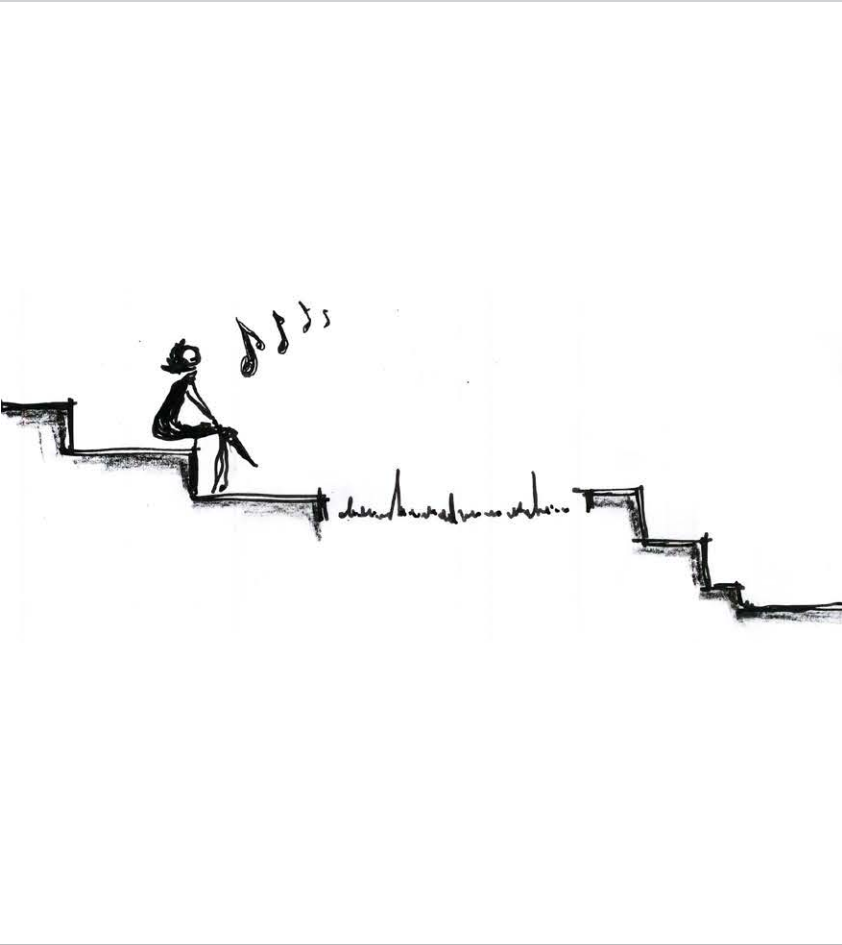


By Cable Cars

# Design elements

## Steps of notion

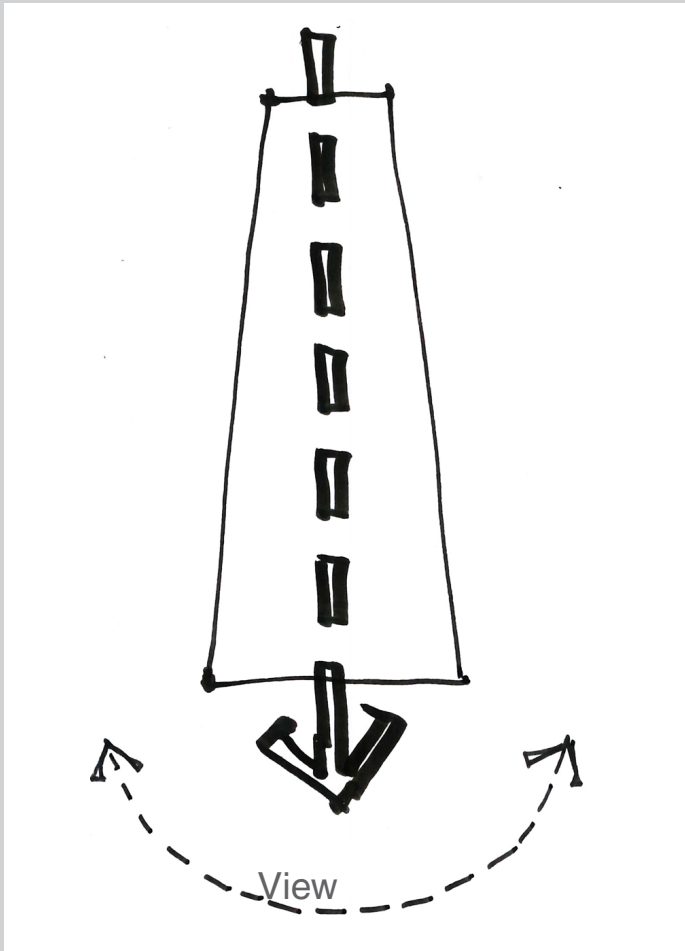
The steps of Notion is a transition point proposed at a strategic location that is visible immediately after one lands on the deck by a cable car. The sound of the animals and the view of the city's skyline would inspire one to spend some time at this location and even explore further.



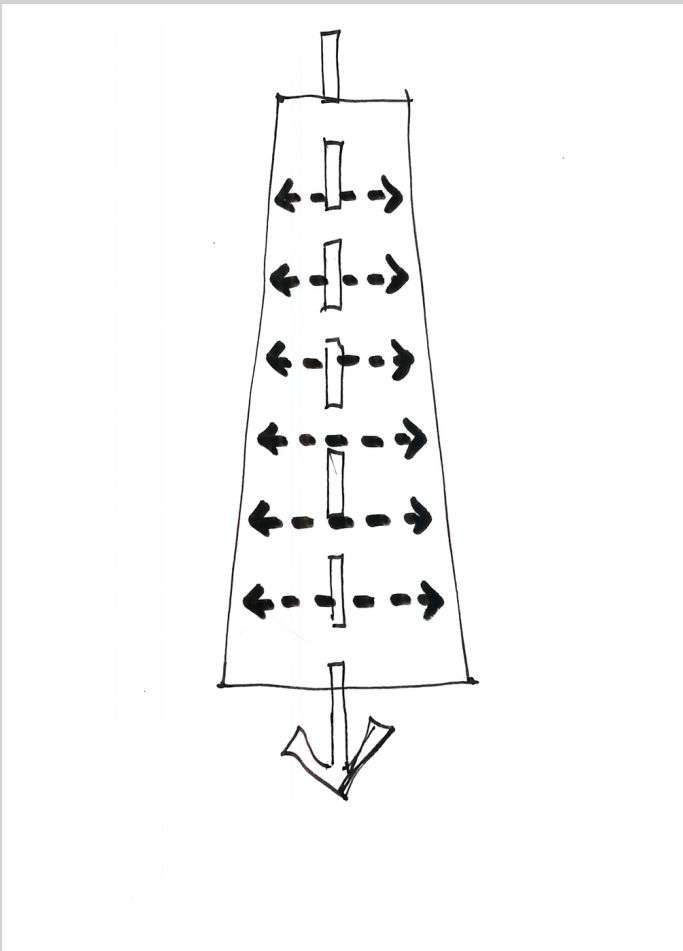
# Design elements

Axiality to be an important guideline for this building which sets the movement pattern for the visitors while being attracted towards the view of the skyline through the Wintergarden.  
The journey through the axis to be divided into various inspiration points.

3.1 Visibility along the main axis towards the view



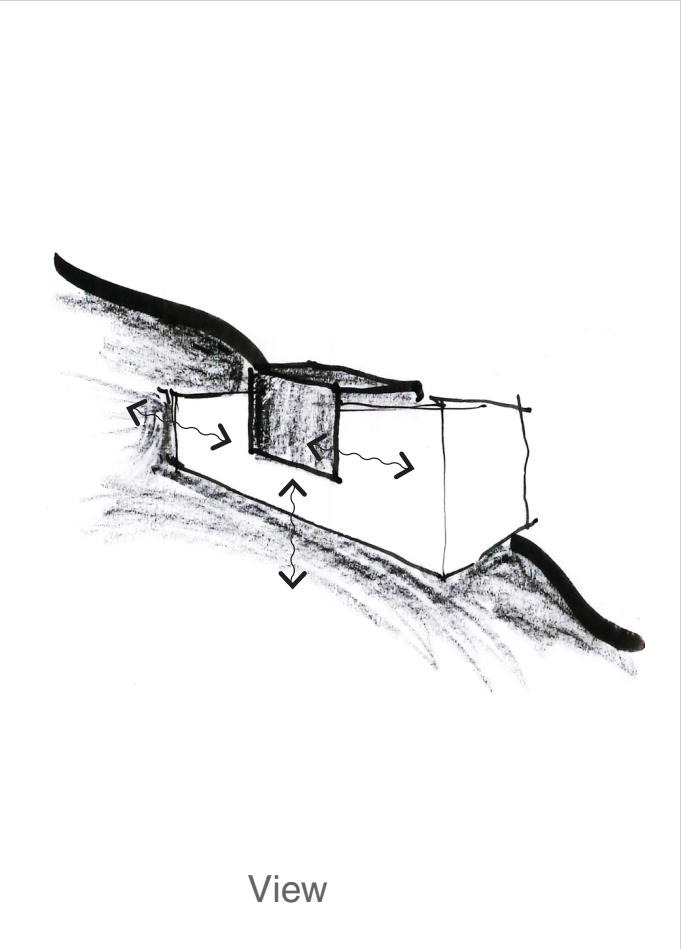
3.2 The building should have display areas along the axis



# Design elements

Axiality to be an important guideline for this building which sets the movement pattern for the visitors while being attracted towards the view of the skyline through the Wintergarden.  
The journey through the axis to be divided into various inspiration points.

3.3 The building should have a core and a shell



View

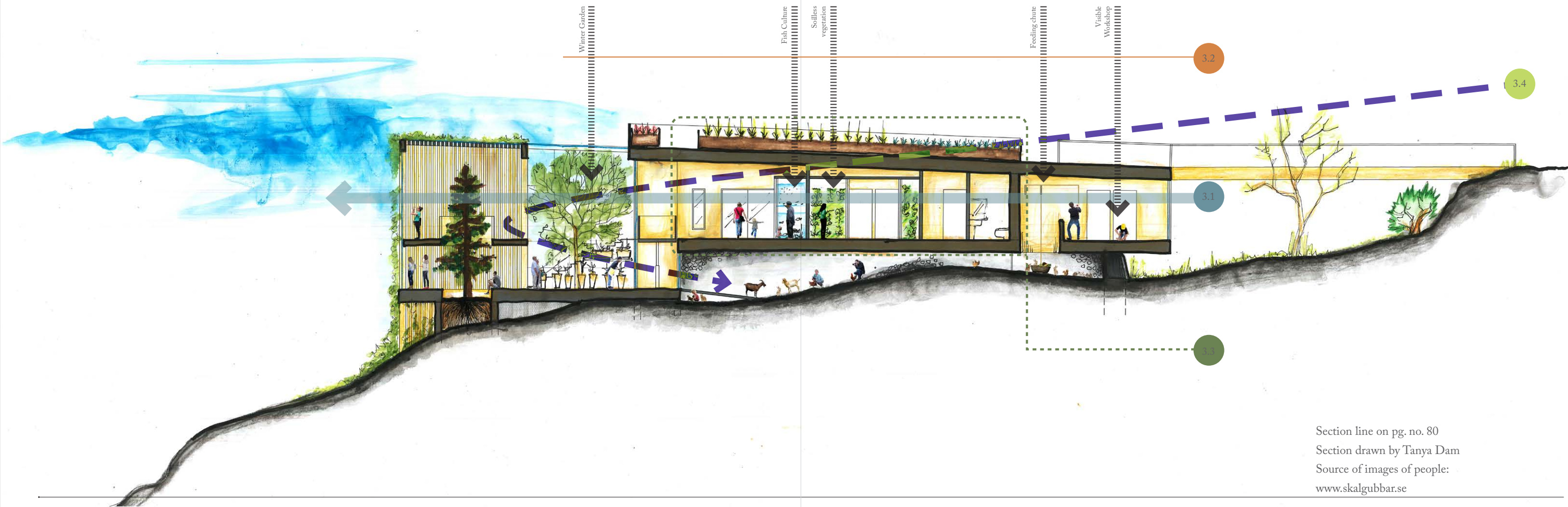
3.4 Movement could start from top and merge in the earth





Design Elements on the Building Section (a)

This is a longitudinal section (a-marked on site plan,pg. 80) that represents how the design of this building is structured along a main axis with different inspirational points along it. The design is extremely simple in order to resolve complexity and steer focus of the people towards the intention of gaining knowledge.



Section line on pg. no. 80  
Section drawn by Tanya Dam  
Source of images of people:  
[www.skalgubbar.se](http://www.skalgubbar.se)









# Sketch of the Vision





# Location Plan

... utilising Ramberget as an Urban Farm

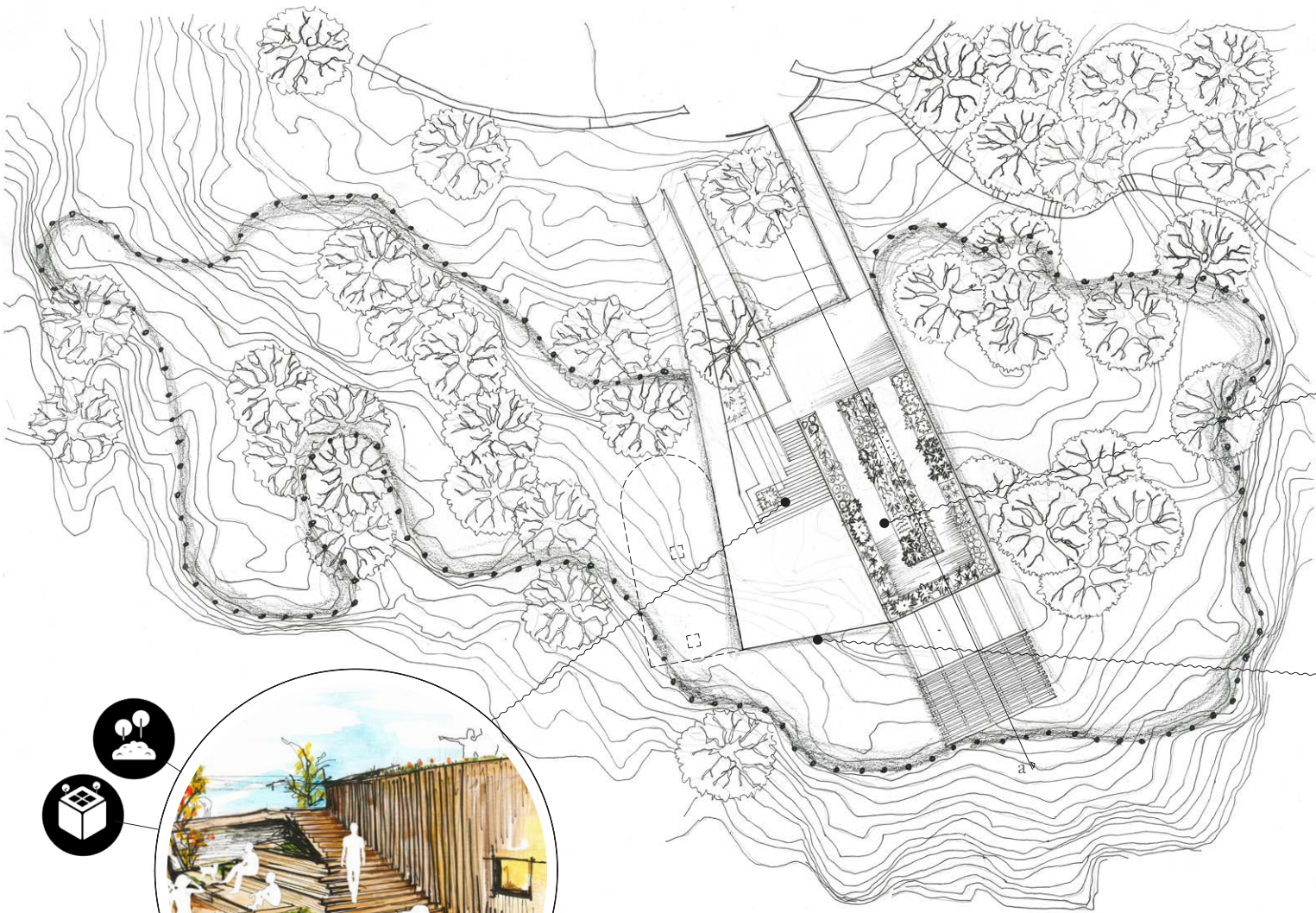
-  Accessibility by road
-  Accessibility by cable car
-  Green areas on Ramberget
-  Animals' Spill-over space
-  Animals' Grazing Boundaries
-  Open air Cultivation





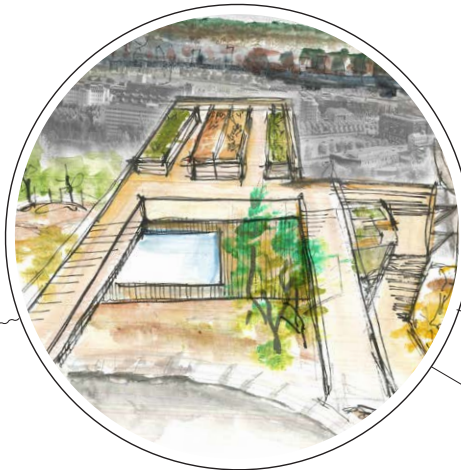
# Site Plan

... showing application of methods

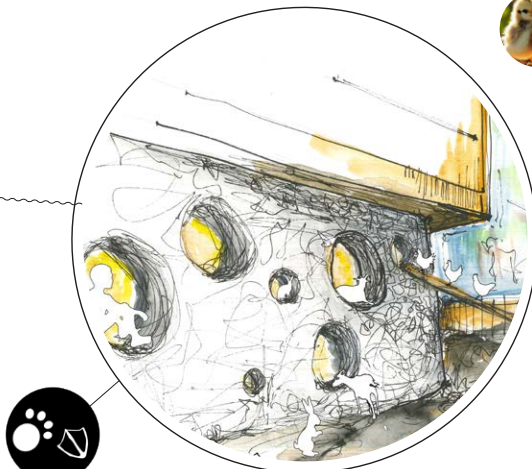


At the steps of notion

Unit = meter  
0 5 10 20



From the road on top



At the animals' fun zone

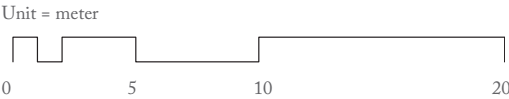


# Floor Plans

Upper level plan

Lower level plan

Roof plan





# 3D Visual (Front View)

**Front view at night**  
3D model and rendering by Tanya Dam  
Source for images of people:  
[www.skalgubbar.se](http://www.skalgubbar.se)





# Internal Views

... showing application of methods

...aquaponic zone and the main axis

METHOD :



...animals live in the basement when cold

METHOD :



...looking through the Winter-garden

METHOD :



3D model and rendering by Tanya Dam  
Source for images of people:  
[www.skalgubbar.se](http://www.skalgubbar.se)

Reflection

# Reflection

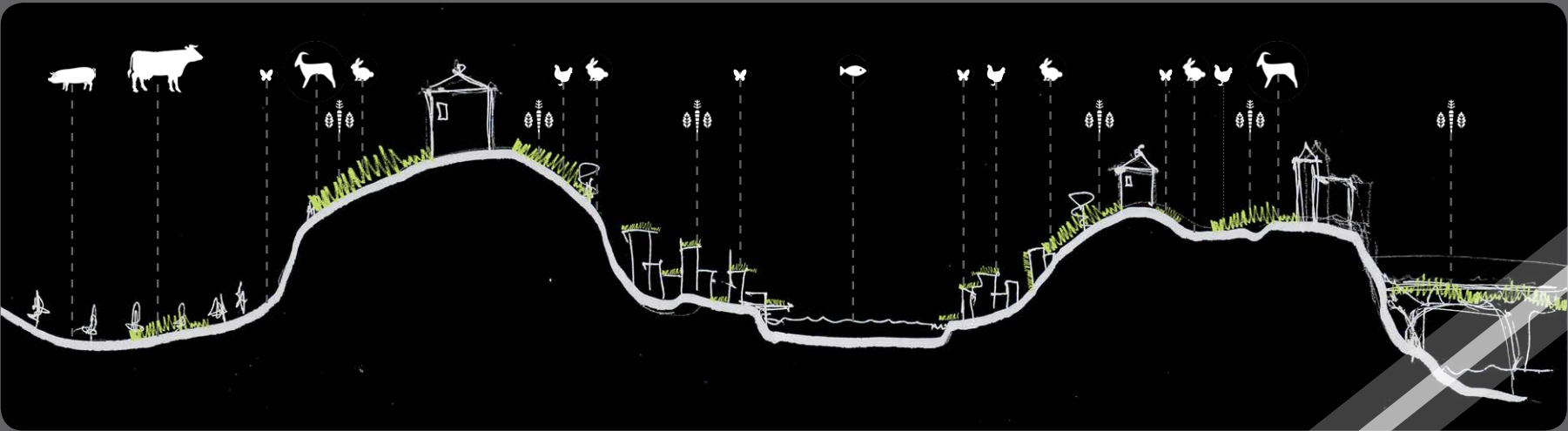
## ... towards Resilience in Gothenburg in terms of food

If this project is implemented, in Gothenburg it is evident that it will create an awareness amongst the people about the need to produce local food as well as the benefits of it.

The vision of this project of utilising many unused land portions of the city would gradually start fulfilling the need for feeding the city.

However, there can be many effects caused during this process. One of them could be that, people start refraining from consumption of meat as they start falling in love with them. It is questionable how the population of animals could be handled in such cases with limitation of space within the city. It could be debated that it is a matter of choice of people. Many people will still opt to eat meat.

Another point is about the poverty of the poor countries that make money by exporting food. What happens to those if every country starts being resilient? Probably they would have to strive towards their resilience following different strategies.



My Master Thesis

Resilience in terms of food in Gothenburg!

Food import declines

Healthy Food gets produced locally and individually

Many 'Urban Farms' get created and start sharing nutrients

More and more number of people, farmers and Municipality start getting interested in working towards 'The Vision'



# Interviews & Case-studies

# Interviews

**NIKLAS WENNBERG**  
Urban Farmer and Hydroponic Specialist  
Stadsjord  
Göteborg, Sverige

“It needs a network of food producers that make food for the entire city. One man cannot feed the whole city.”

“My pigs help make these areas ready for further use. The goats follow a particular route. You can make that out even if you come here (in the forest, mini farm unplugged) without them.”

“Farming cannot be centralised. It can definitely not be centralised at a periurban farming situation.”

“Every initiative towards urban farming should be encouraged to make the city resilient.”

“Let’s target the Jubilee and make a mark by producing food.”



# Interviews

**WILLAM BAILEY**

Urban Farmer  
Kajodling  
Göteborg, Sverige

“We started with some boxes and soil.”

“We are trying to extend the seasons of cultivation.”

“I think one of the reasons why the countryside isn’t making food is that the farmers are getting old and their children want move to the city.”

“There can be food everywhere – on the roofs, balconies, terraces... One can farm on a raft on the river.”

“The parks of the future could be more edible.”



# Interviews

**HANS LINDQVIST**

Park Intendent  
Natur och Park förvaltning  
Göteborg Stad, Sverige

”There is an assumption about these old parks - Once a park is made it is made”

“Keiller’s Park was a gift from James Keiller to the city with conditions in 1906. Its name could not be changed. There should be an independent board to manage the park. No land could be sold to private owners or developers.”

“A water reservoir was built which stored water for the dwellers of Lundby”

“Small salamander live here. There is a pigeon house too”

“Trees in the forest are Oaks, Birch, Pine, Beech, etc. There are quite many old ones in the north of the hill.”

“It is denser at the foot of the hill with trees which is quite rich with soil whereas it is quite bare at the steeper slopes where the soil is eroded.”

“It is convenient to grow Beech trees at these slopes as they do not need lot of nutrients to grow and they don’t like still water.”

“Even though it has quite a long south facing edge, the low soil volume makes it hard to have dense vegetation.”





A fully flourished vegetable garden lot, 2016  
Photocredit: Tanya Dam



The renovated green house-cum-café from inside, 2016  
Photocredit: Tanya Dam

# Lärjeåns Trädgårdar

Göteborg, Sverige

The aim of this kitchen garden is to rehabilitate people from work. Apart from cultivating food on hired allotment gardens, people can visit the cafeteria inside the renovated green house to enjoy some ecologic sandwiches and coffee. It is possible to rent a conference room for educating or holding meetings in a natural environment or even have celebrate some festival here. It is located very close to Angered and is openly accessible for public. Their cause is noble, but it is very hard to grow and expand and spread knowledge due to lack of funds for its management.



The Main sign-board of Lärjeåns Trädgårdar, 2016  
Photocredit: Tanya Dam



A small meeting place at the Lärjeåns Trädgårdar, 2016  
Photocredit: Tanya Dam





Dialogue between Niklas Wennberg - a Pioneer of Urban Food Production(To the right) and an Urban Farmer working on her lot, 2016  
Photocredit: Tanya Dam



A place to pause and rest while farming - a strategic division between ownership of the lots, 2016  
Photocredit: Tanya Dam



Mini Kiln to produce earthenwares and roof tiles locally - an experiment, 2016  
Photocredit: Tanya Dam



Preparation for expansion of the garden, 2016  
Photocredit: Tanya Dam





Taking care of the animals and feeding them, 2016  
Photocredit: Tanya Dam



When the animals are set free, 2016  
Photocredit: Tanya Dam

# 4H Gård, Tolsered

Göteborg, Sverige

The 4H is a Global network which aims at inspiring youth through active learning about their environment by being in a natural environment. It was initiated in the USA in 1902 when it was found necessary to teach the children of the rural areas about farming and understanding home culture. Their way of teaching is through practical knowledge on large pastures of land. Thus it requires to set up in a periurban to rural location.







A stout horse at the 4H Gårdar, 2016  
Photocredit: Tanya Dam



Food for the bunny, 2016  
Photocredit: Tanya Dam



Niklas Wennberg saying ‘Hi!’ to the Pigs, 2016  
Photocredit: Tanya Dam



Happy-dad watching his daughter play with the animals  
on a sunny Sunday morning, 2016  
Photocredit: Tanya Dam





Fresh green vegetables  
Photocredit: Tanya Dam



Compost as fertilizers  
Photocredit: Tanya Dam



*Dhaniya* (Spice) seeds  
Photocredit: Tanya Dam

# Kajodling i Frihamnen

Göteborg, Sverige

Kajodling is an Urban farm run by Jonas Lindh and William Bailey, where fresh vegetables are being grown on huge unused land in Frihamnen, Göteborg. They supply their food to restaurants in order to ensure regular sale of the massive amount of vegetables. They also hold fairs where they allow people to pick their own vegetables and buy them in order to promote local food culture. Many people have shown interest in farming and being a part of their farm since they have begun farming. They have great plans for future and would like to expand in other parts of the city and also be able to farm all round the year too.



The beautiful office in a container  
Photocredit: Tanya Dam



Spices and fresh greens  
Photocredit: Tanya Dam



Tomatoes  
Photocredit: Tanya Dam

# Brook Park Chickens

New York, USA

This is a Volunteer-run chicken coop in South Bronx. There are many other such organisations that include urban farming and animal based food production at a local level and exchange nutrients within this locality. Some of them are Just Food City and Backyard Chicken which are pioneers and hold educational motives to teach children and adults about food production at individual levels. These organisations show people benefits of local food production in terms of economy, resilience and nutritive value of freshly grown food over imported commercialised food. General public is given free access to these parks to play with these animals and also learn about taking care of them.



Photocredit: Lily Kesselman  
www.brookparkchickens.com



The first Egg, 2011  
Photocredit: Lily Kesselman  
www.brookparkchickens.com





Celebrating Success of ‘Chicken Coopapalooza!’, 2016  
Photocredit: LiLy Kesselman  
www.brookparkchickens.com



Incubating one-day old chicks, 2015  
Photocredit: LiLy Kesselman  
www.brookparkchickens.com



Articles from various newspapers



Articles from various newspapers





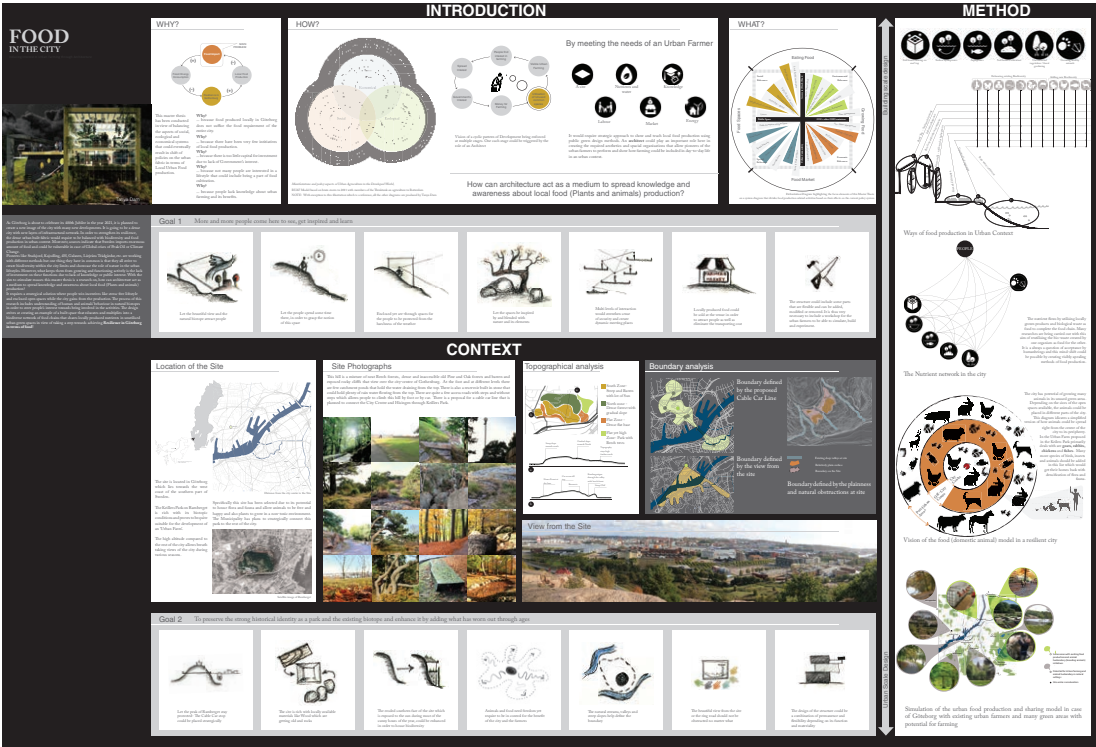
Food for the chicken  
Photocredit: Lily Kesselman  
[www.brookparkchickens.com](http://www.brookparkchickens.com)



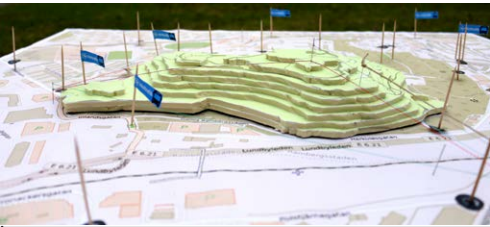
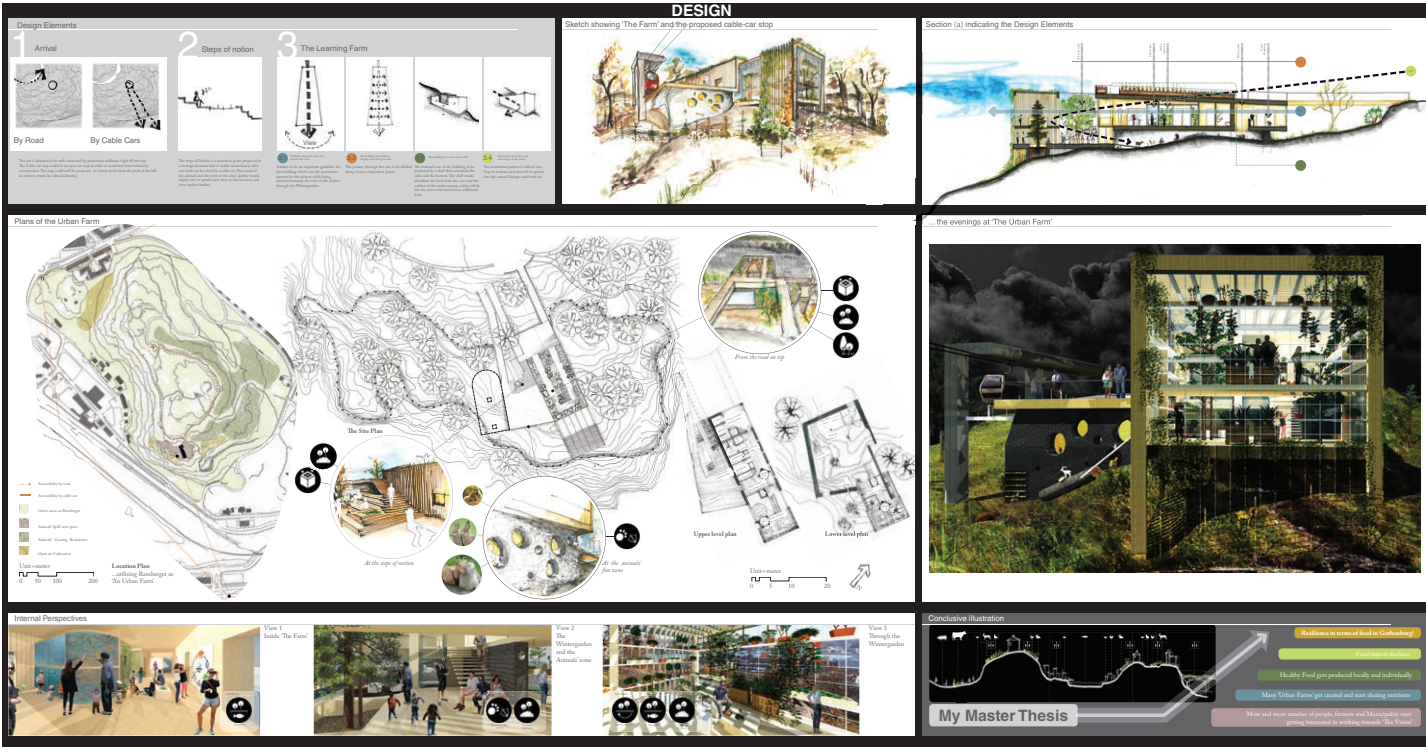
The Chicken were fed with bokchoy and cabbage  
Photocredit: Lily Kesselman  
[www.brookparkchickens.com](http://www.brookparkchickens.com)



This poster and the models were displayed during the public presentation in January 2017.  
Created by: Tanya Dam



# The Poster & Models



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