

A MULTI-GENERATIONAL COMMUNITY

Master of Science Thesis in Architecture

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ABSTRACT

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Subject: A multi-generational community

Topic and examiner approved on: 29th of May 2017

Examiner: Professor Markku Hedman

Number of pages: 55

Completion: August 2017

Tampere University of Technology (School of Architecture)

Keywords: common life, mixed generations, cohousing, extension of the city.

This master thesis work consists of the study and the design of a potential multi-generational district in the city of Tampere, Finland. In fact, it focuses on the advantages and the importance of living in a mixed generation district.

Developed in three main parts, this work begins with an introduction to the recent problematic of an aging population and the importance for each generation to live as a community. The second part of the work goes through a study of precedents. Designed during different periods, these precedents are analysed to understand the main goals of a co-living community. The last part of the work includes the design's program and the design itself.

The master plan is organized with four types of buildings. They all include blocks of apartments offering a diverse choice of living spaces that answer to the needs of each potential inhabitant, from single people to families with children. The district also provides facilities to increase the interaction of its inhabitants. Some of them are even open to public and offer the district an opportunity to be an active part of the city.

The results of this work show that living as a community is advantageous to each inhabitant. By linking the needs, people learn to live together and benefit from a strength complicity.

PREFACE

This master thesis gave me the opportunity to develop new interests and new ideas about how we should design for the future. This subject is closely linked to accessibility which is for me an important criterion for designers. It has, obviously, changed my way of thinking housing and urban design.

I would first like to thank my examiner, Professor Markku Hedman for his precious help, availability and his encouragement.

I would then like to thank my parents and the University of Liège who both gave me the opportunity of expanding my approach of the architecture, allowing me to go and study in Finland.

Thanks a lot to the Tampere University of Technology that accepted me as a student giving me an enriching teaching and placing ultramodern equipment and infrastructure at my disposal.

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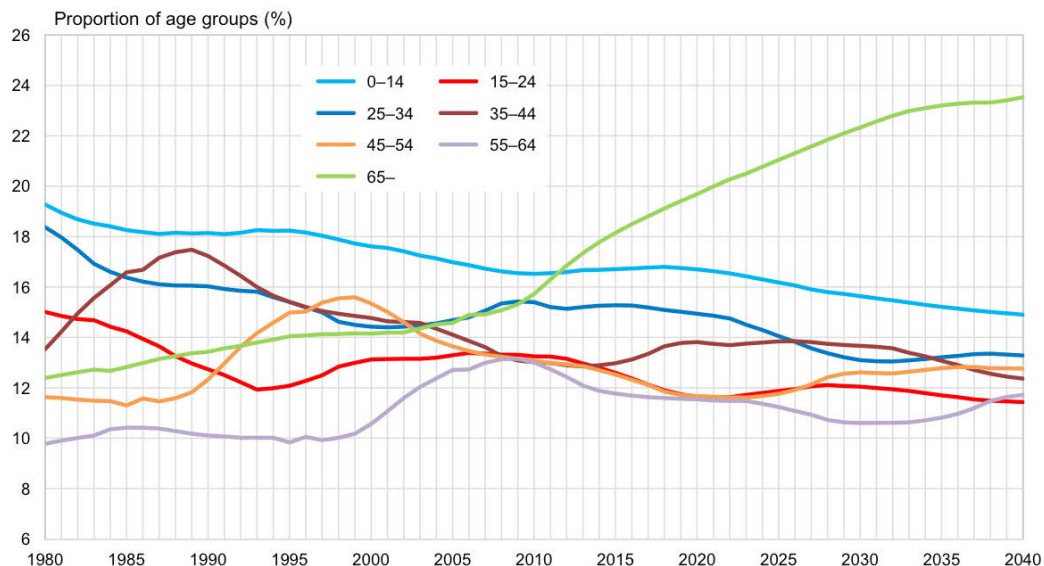
1 INTRODUCTION

1.1 RESPONDING TO AN AGING POPULATION

In Finland and in general, the population is aging quickly. One of the main reasons for this demographic transition is the baby boomer generation- people born between 1945 and 1965.

In fact, due to high birth rates, people who were born after the Second World War are representing an important part of today's community. Today, the total amount of Finnish citizens is around 5.5 million. Baby boomers represent 1.3 million which is around one quarter of the population. (Statistics Finland, Population, 2016)

Other factors such as an improvement in the quality of life and working conditions, the development of new technologies and an easier access to good quality healthcare has led to an increased life expectancy. Today, the "Finnish life expectancy is 78 years for men and 84 years for women". (Statistics Finland, Population development in independent Finland, 2007)



Population by age in the Tampere Central Region 1980–2014 and projection for the year 2040.

Source: Statistics Finland

An aging population has become a serious problem when it comes to the city we live in. In fact, the baby boomer generation is slowly retiring and their needs in terms of accessibility and availability of facilities are increasing.

The goal of designers is to generate sustainable and liveable cities for the future. To attain this, they need to adapt their designs to the needs of the elderly. Cities are increasingly in need of innovative design solutions to respond to their needs.

Presently, houses are made to last, but they are not made to be adapted to the new needs of the elderly. Houses can be retrofitted or renovated to accommodate their needs, though this process is often financially not feasible. For example, ascending a flight of stairs or even a single step can be problematic for the elderly and disabled people. (Urban Land Magazine, Preparing for an aging population, 2012)

Another key issue is that it is complicated for the elderly to live alone in a single family house. Completing any amount of house chores can be a serious task for these individuals, and one of the best solutions to this problem is co-housing.

1.2 COHOUSING AND MIXED GENERATION COMMUNITIES

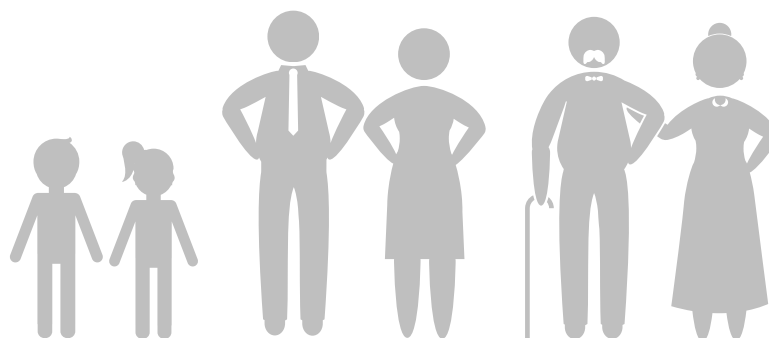
Cohousing is a term that is progressively starting to be more and more used, but actually has been developed more than thirty years ago. The first cohousing projects were established in Denmark during the seventies. (Milman, 1994) Nowadays, Denmark is an exemplary country in terms of cohabitation with nearly 8% of the population living in a cohousing accommodation. (Gottberg, 2016) This concept of cohousing consists of sharing accommodation between a couple of persons to benefit in a number of ways.

Indeed, cohousing is good for many reasons and leads to financial, environmental and social benefits. People living together have much greater advantages than a single inhabitant. In fact, they can not only split the price of an accommodation, but also minimise the cost of the daily expenses by sharing spaces, facilities and services.

Cohousing is also a plus in terms of environmental impact. People are sharing resources and reducing the size of their ecological footprints. For example, inhabitants may share the laundry and dishwasher machines in order to minimise the need for additional machines, thus saving resources. This also saves energy and decreases the carbon footprint of the individuals involved. Together, they can look after vegetable gardens that contain a great variety of fruits and vegetables, which could be difficult if you are alone. It requires a lot of maintenance and can be expensive for a single person.

Cohousing is a great way to develop your sociability. Indeed, by living with other people, inhabitants start to forge links with each other and build a real community. Knowing people you live with improves the feeling of safety and the sense of belonging to a group. It is then easier to find somebody within the community to take care of your child while you go to the gym or to water your plants when you are on vacation. Furthermore, having people from different ages in the community can add a sense of diversity and liveliness.

Each generation finds its own advantages of living among a diverse group. Young adults and students, for example, would likely prefer to be more independent. Unfortunately, they aren't always able to afford a house or an apartment by themselves. Living with other people from different ages is also an important point for the elderly to tackle the loneliness that can often come from living alone. Moreover, a community life will offer them a sense of belonging to a group and make them feel resourceful and valuable to the community as a whole. It is also very important for elderly people to talk and share their knowledge with the younger generations. Furthermore, with old age often comes health problems and it may be important for the elderly to be able to rely on quick help from the group in case of emergency. Families also have many reasons to be a part of a multi-generational community. One of the main challenges for families is finding a suitable environment to raise their children in. They may also be interested in leaving their children in the hands of someone they know and trust during the day.



Source: Noun Project

All these generations have many common needs that can and should be linked. Benefiting from safe walkable paths is an important selection criterion for families with young children and elderly people, because an environment without lifts and accessible slopes is problematic for families with strollers, wheel chair users, etc. Often, these communities benefit from public transport and try to maximise car sharing system to stay connected to the city centre.

Living as a community in general, also provides affordable housing and larger shared outdoor spaces. By sharing a bigger green space instead of having a private garden, people benefit from a bigger area to relax with the benefit of less daily maintenance.

2 CASE STUDIES

The following four projects are being included as precedents for research and as successful examples of responding to community needs through architecture and design. Three of these designs have been realised and one is a recent project that is scheduled to be completed this year. Each project is different and has its particularity, but they all respond to the same subject and aim at the same idea of living as a community.

2.1 QUARTIER VAUBAN (Germany 1996)

The project of the Quartier Vauban is a renovation of an old barracks from the Second World War into residential units. After being closed down in 1992 and used as low income housing for four years, the municipality decided to turn this area of 38 hectares into accommodation for 5.500 inhabitants. (Urbanlab, 2017)

The project has been developed by the municipality, but also by the inhabitants with groups of construction called “Baugruppen”. These groups gather together people who want to build their own home. Through a series of meetings, they had the opportunity to express their wishes for the future design of the district. This is beneficial for a number of reasons. First, it increases the interaction between the inhabitants. They learn to know each other and to communicate. These groups also help to reduce

the design cost. By using the different knowledge of everyone involved, the users can limit the cost and be more independent. Furthermore, they can share common needs and facilities, which means they can all have more than they would have individually.



Quartier Vauban. Photo: Daniel Schoenen. Source: urbanlab.eu

The Quartier Vauban is also behind the car-free neighbourhood principle. Indeed, the old roads of the barracks has been closed to cars and turned into pedestrian and bike routes. Thanks to close public transport facilities, the district works with parking lots for only 25% of the inhabitants. To aim for a “short distance district”, it also includes many offices and services. (Urbanlab, 2017)

However, this district is not perfect, as it lacks social diversity. In fact, this district is not affordable for low income residents or retired persons with extensive credit loans. Most of the users are German between 30 and 50 years old and are classified as middle class. Furthermore, only a handful of apartments with one or two rooms are available which excludes students and singles from the district. (Urbanlab, 2017)

2.2 LA CANOPEE - P. AROTCHAREN (France 2011)

La Canopée is a collective eco-housing community located in Bayonne, France, designed by Patrick Arotchaeren. This project has been designed in opposition to the “tabula rasa” and takes its inspiration from the topography of the site. Arotchaeren explains that as cities expand, we often tend to destroy the nature and replace it with buildings, roads and walkpaths. This is how Patrick Arotchaeren came up with the idea of living on piles to restrict the impact on the ground floor and more precisely on the nature. (Archdaily, 2013)

All structures are elevated and connected with footbridges. It creates a great atmosphere and a close connection to the nature, but even more- a hierarchy between the public and the private spaces. (Archdaily, 2013)



La Canopée. Photo: Vincent Monthiers. Source: archdaily.com

The project includes collective and individual living spaces, but still leads to a similar and common experience for each user. In order to make them disappear from the inside views, the parking areas are located on the ground floor, below the houses. (Archdaily, 2013)

This project offers a real opportunity to live in harmony with nature. A unique environment is created for inhabitants by allowing for absolute privacy inside their homes, while at the same time having numerous opportunities to be engaged in the community. Nevertheless, the fact of using piles might not be ideal in terms of accessibility and the presence of cars on the ground floor could lead to a loss of space for pedestrian-designated areas.

2.3 BRUTOPIA - STEKKE + FRAAS (Belgium 2015)

Located in Brussels, the housing project Brutopia takes its name from a mix between the name of the city and the term utopia. The housing project has been funded and developed by its residents, according to their needs and designed by a local studio named “Stekke + Fraas”. (Archdaily, 2015, Brutopia Wordpress, 2017)

With the aim of living near the city for an affordable price, the inhabitants created a non-profit institution to control the cost and manage the construction. (Archdaily, 2015, Brutopia Wordpress, 2017)



Brutopia. Photo: Tim Van de Velde. Source: archdaily.com

With a total of thirty people working together as a cooperative community and benefiting from the different skills of each participant, they were able to manage many tasks that are usually completed with the help of a developer. The key to success was strong communication within the group and a common desire of living as a community, in an ecologically responsible way. (Archdaily, 2015, Brutopia Wordpress, 2017)

The location of the site was decided on due to the nearby public transport facilities. Indeed, it was important for the inhabitants to have quick access to the city centre and to stay connected to it even if they were living outside the limits of the city. Furthermore, the main goals were to live, work and spend their leisure time in a way that would minimise unnecessary travel time. (Archdaily, 2015, Brutopia Wordpress, 2017)

The project consists of two blocks of twenty-nine apartments each, but also includes offices and a centre for local elderly people. Fifty people of different backgrounds, ages and social classes are living in Brutopia. There is a real diversity among the community. It includes people of different status (families, couples, students, single people, elderly people...) but also with different professions which adds to the richness of the group. (Archdaily, 2015, Brutopia Wordpress, 2017)

This project, based on a few key principles, proved to be successful, and it would be interesting to see similar concepts implemented in different projects in other locations and scales.

2.4 REGEN VILLAGES - EFFEKT (The Netherlands 2016)

In terms of an eco-community, Regen Villages is a new example from this last year. Thought of by a Californian company called Regen Villages and designed by a Danish architectural office named Effekt, this eco-village has been developed to live 100% autonomously. Inhabitants of this off-grid district will share a local eco-system where each resident has a role. (Archdaily, 2016)

The main goal of the actors of this project was to create a new way of developing the suburbs to tackle the current development issues that can be seen on a global scale. (Archdaily, 2016)

The village works autonomously and produces its own food and electricity. To assure that, it will take advantage of the latest technologies like solar panels, wind turbine, vertical farms, aquaponics, ect. (Archdaily, 2016)



Regen Villages. Courtesy of Effekt. Source: archdaily.com

An interesting aspect of the design is the organizational form of the district - a circle. The houses are on the outside and create the boundary of the district while the common services, the food production, the common spaces and facilities are in the centre. (Archdaily, 2016)

Though the project is a great example of community living, this does come with a few downfalls. The affordability of the housing due to the installation of the most modern technologies comes into question, as well as the size of the overall living quarters.

3 INTRODUCTION TO THE DESIGN PROGRAM

3.1 LIVE AS A COMMUNITY

As an answer to the previously mentioned issues, the decision was made to design a project in a way that expresses a practical approach to the subject.

The main goal of the design is to create a group of residential units that work together as a community and that is accessible to everyone. The project focuses on the phenomenon of an aging population, but as outlined previously, it is crucial to design for all potential users and not only for a part of the community.

Designing a community for a diverse population stimulates activity throughout the day. As a mixed-generation community, it is home to a number of inhabitants having varied schedules, allowing the community to thrive and feel constantly alive.

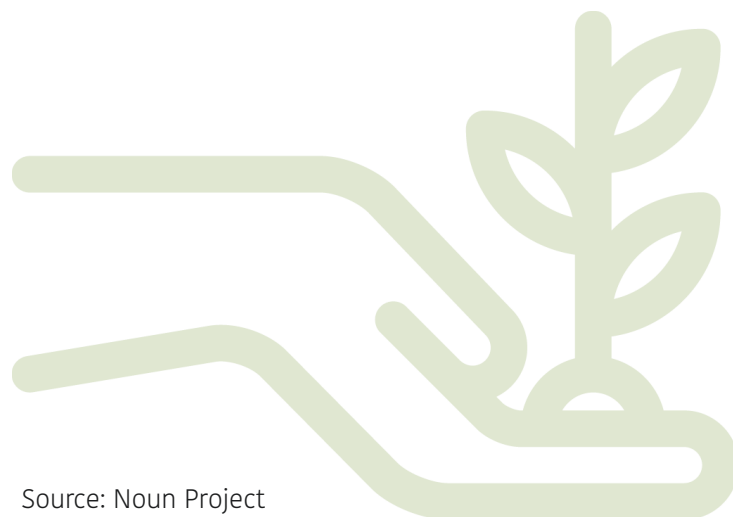
In terms of accessibility, the design aims towards a pedestrian district including enough facilities and services to limit unnecessary travel. Furthermore, offering common services and activities in the community increases interaction between users. Integrating individual living spaces with shared accommodation and common areas is paramount to develop a natural spirit of community and a sense of belonging to a group. Knowing your neighbourhood develops a feeling of a safe atmosphere and results in an improved well-being of the users. Moreover, living in a community leads to an opportunity of extending the definition of home from meaning personal quarters to including the surrounding nature.

Besides that, cars and public transportations are still significant actors in the design. In fact, it is necessary to take into consideration the importance of quick and easy transportation to the city centre and thus the project tries to encourage sharing those travel facilities. Additionally, integrating daily services into the community eliminates the need for people to go to the city centre on a daily basis.

3.2 LIVING GREEN

Designing this project as ecologically as possible is one of the goals. The aim with this eco-community is to be able to implement it in different cities and even different countries around the world to develop the future housing in a natural, ecological, and financially viable way.

Designing medium sized buildings with focus on human scale makes the relationship between the users and their environment more natural. The inhabitants are not simply using a space that has been created by someone else, but rather, they are able to have an impact on their own environment.



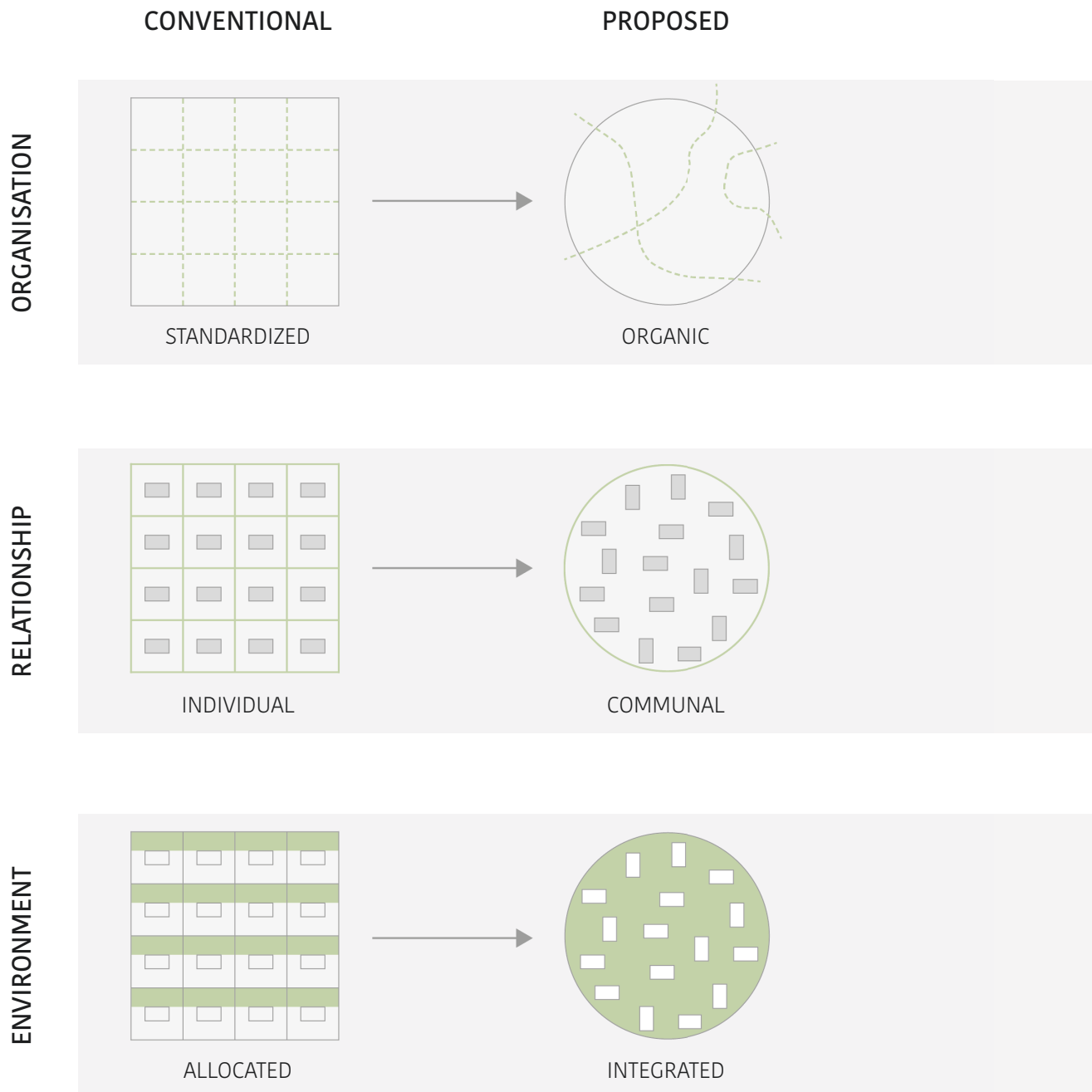
Source: Noun Project

As inhabitants are the principal users, their comfort comes as a priority. By giving them the opportunity to maintain and change their living space, it has a direct impact on their well-being. A greater sense of attachment is instilled if people see that they have an impact on the environment they are living in. For example, developing spaces to grow fruits and vegetables offers the opportunity to eat fresh and local food. You can be your own food producer. By sharing these spaces, it generates a smaller need for maintenance per person. In fact, the community takes care of the common spaces, not only a single person. It is an advantage that allows each participant to accomplish more compared to an individual way of living.

4 PROPOSED DESIGN

4.1 CONCEPTUAL DIAGRAMS

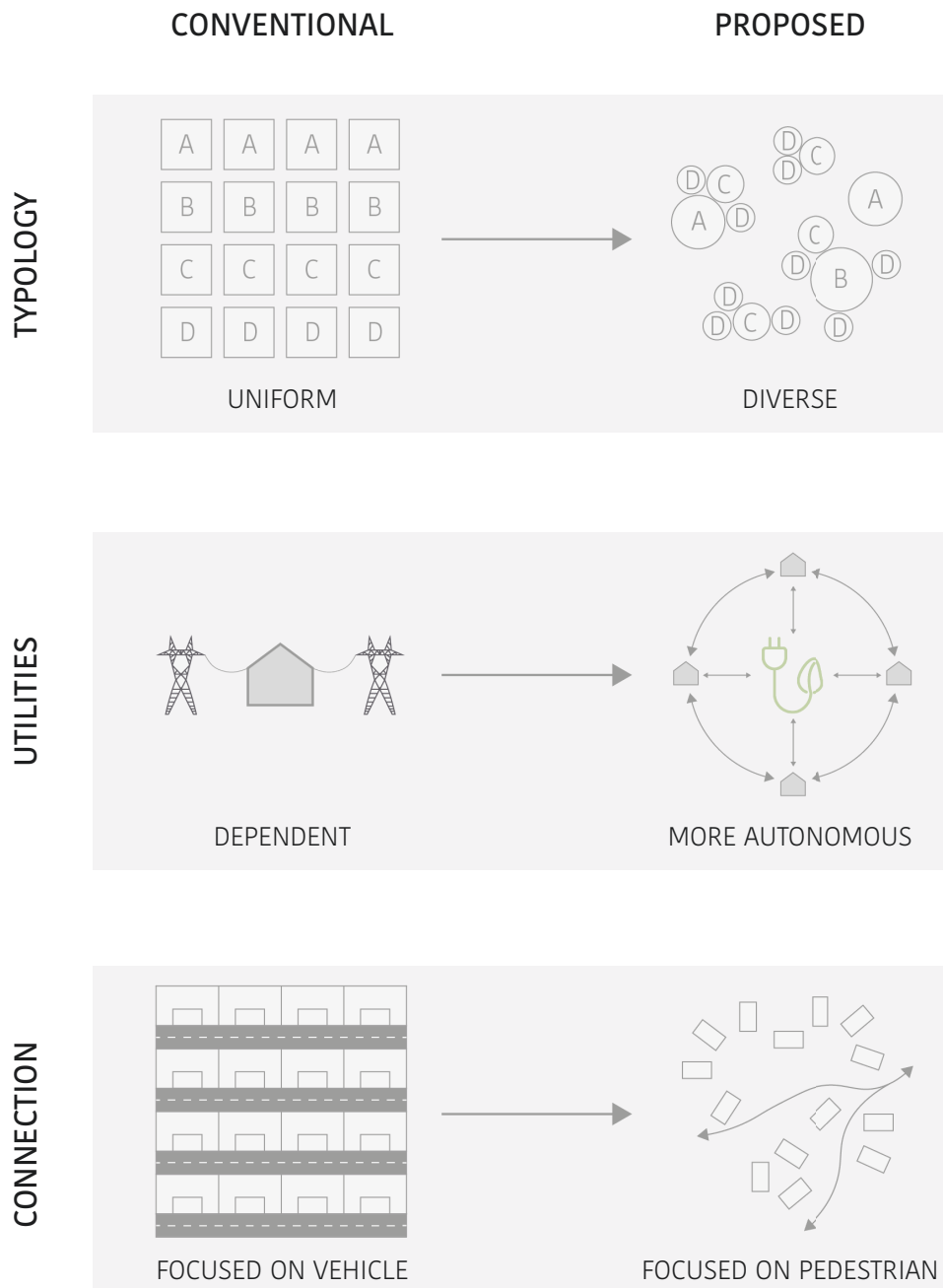
The following diagrams explain the different concepts of the design in comparison to the “conventional ways” of designing a district.



Bring the organisation of the district to a natural formation to eliminate the idea of a controlled grid.

Develop the design as a community. It is essential and will remove the isolated feeling for the elderly and increase the interaction in the neighbourhood.

Live with nature as we are supposed to. The environment is a common space and has been developed naturally.



Break the repetition of today's districts.

Benefit from independent resources.

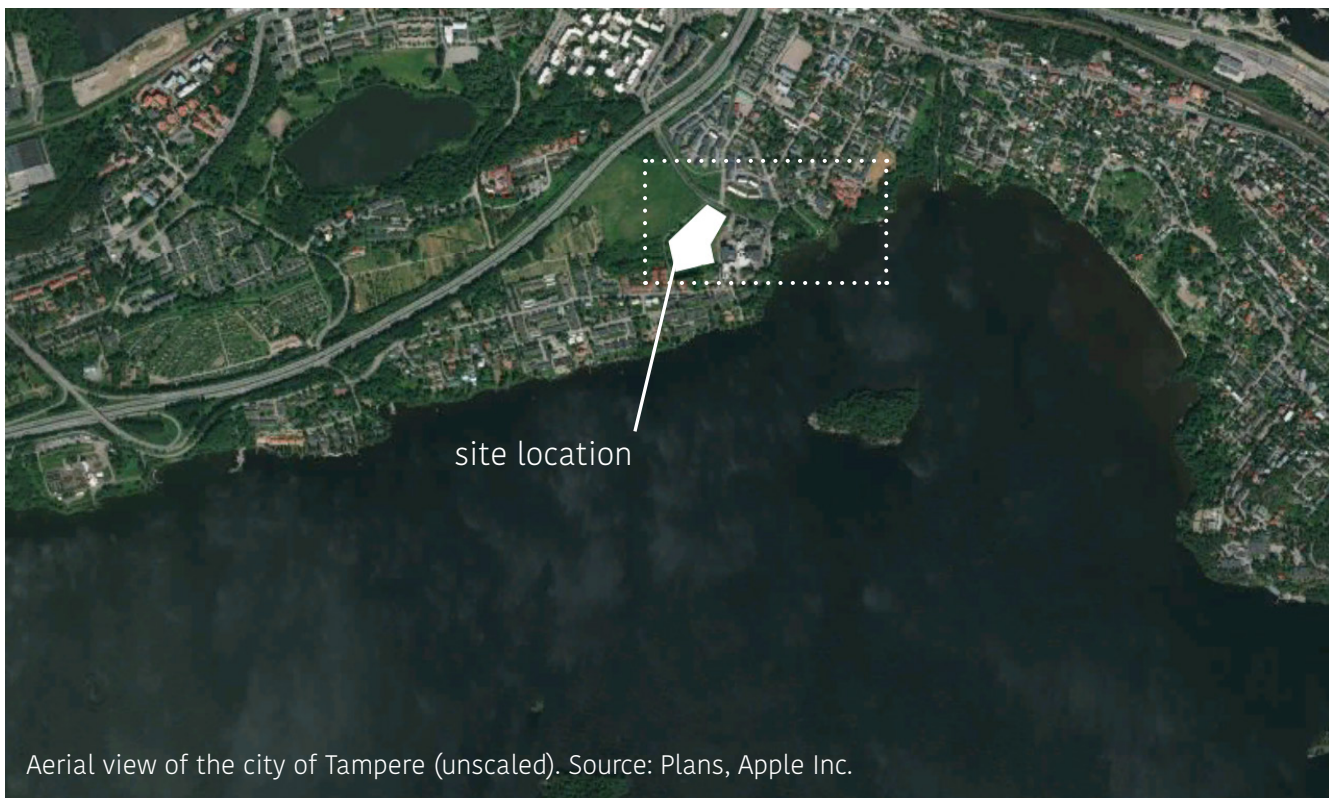
Limit the cars on the main roads. This will provide a safe atmosphere in the community and offer more space for other activities.

4.2 LIVING IN BETWEEN

The practical part of the work is to design a project that would be used in different cities and countries around the world.

To be used as an example, the design is located on an existing empty lot located in Hyhky, on the western side of Tampere. The area was selected as it is situated in the suburbs of Tampere, because of its many advantages and its opportunity to “live in between”. This expression refers to an area that isn’t located in the city or in the countryside, but that is literally between them. The users benefit from the advantages of the two different atmospheres in this area, which provides a perfect balance of urban and rural living.

The proximity of the highway and public transport make this area a valuable node in terms of mobility and accessibility. Indeed, the location is nearby to several bus stops. Bus number 26 currently stops in front of the district every thirty minutes and takes 18 minutes to the city centre. It is also quick and easy to reach the city using a car in less than 15 minutes or by bike in approximately 20 minutes. It is even possible to reach the city on foot with a one-hour stroll through the beautiful woods of Pispala along the lake.

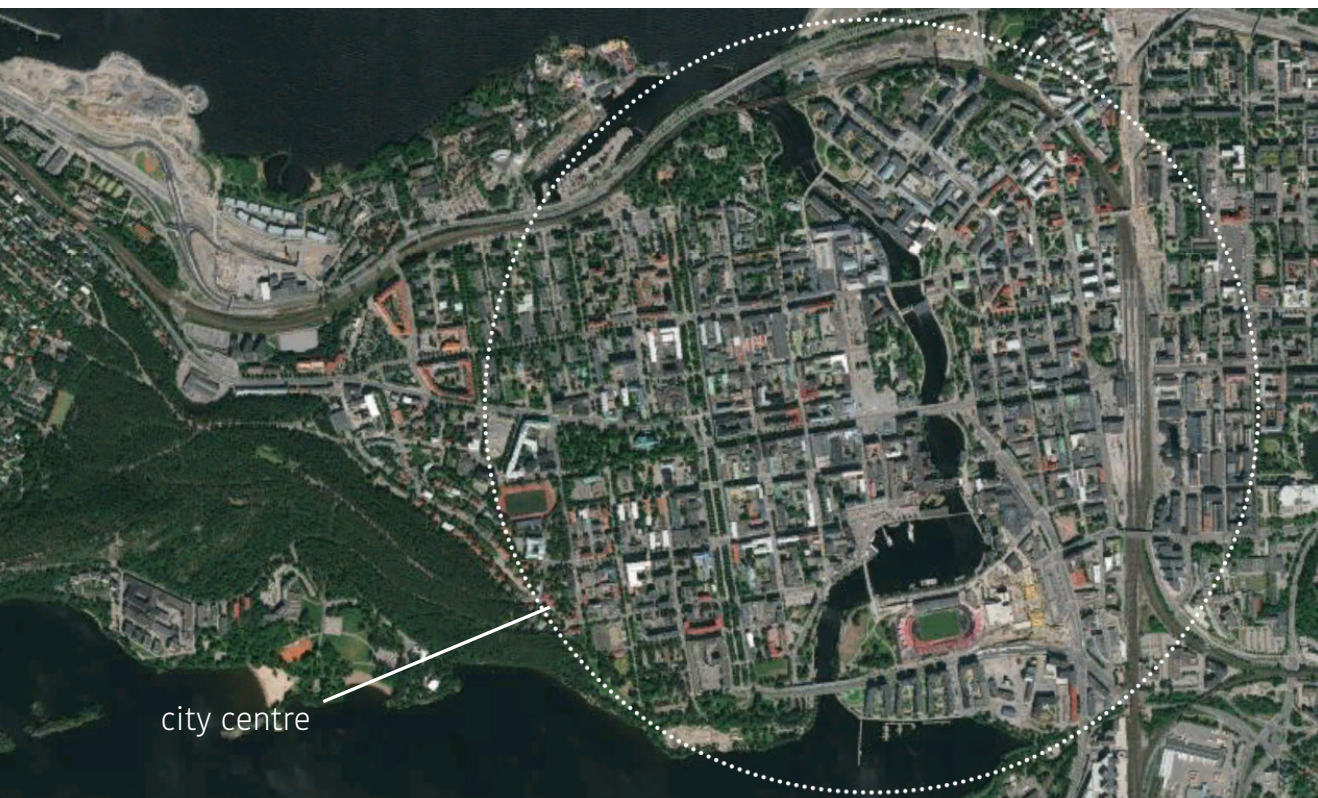


Aerial view of the city of Tampere (unscaled). Source: Plans, Apple Inc.

The Finnish countryside atmosphere is also present with the lake located 200 meters away from the district. The total area is around 18.000 square meters and includes housing to accommodate 391 inhabitants.



Location plan. Scale 1:5000.



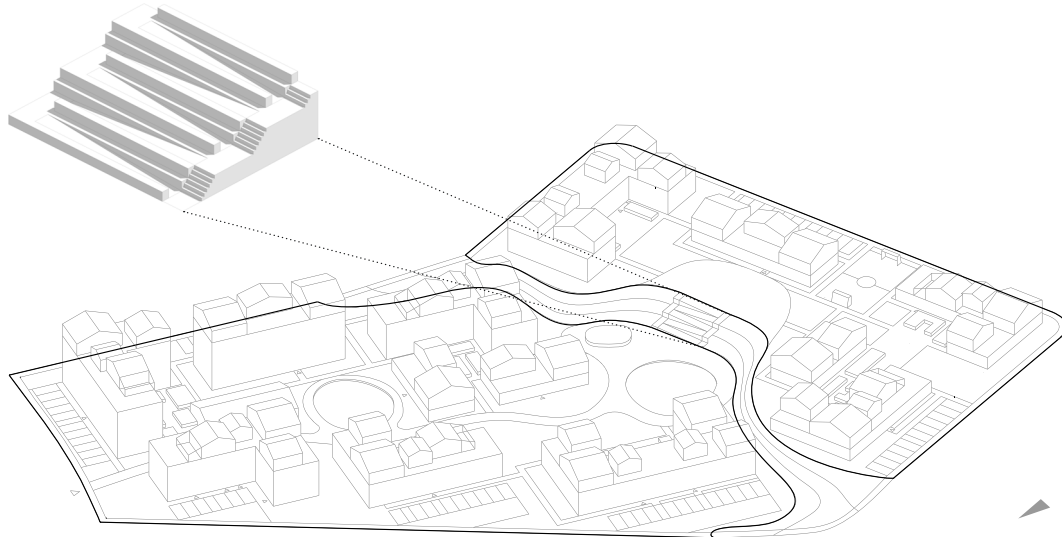
city centre

4.3 THE DESIGN

4.3.1 SITE TOPOGRAPHY

The original topography of the area has been slightly modified and organized on two flat levels to reach the goal of full accessibility. The lower level that connects the district to the main road is 80 meters above sea level and the upper one, that is connecting the district with the neighbourhood, is 83 meters above sea level.

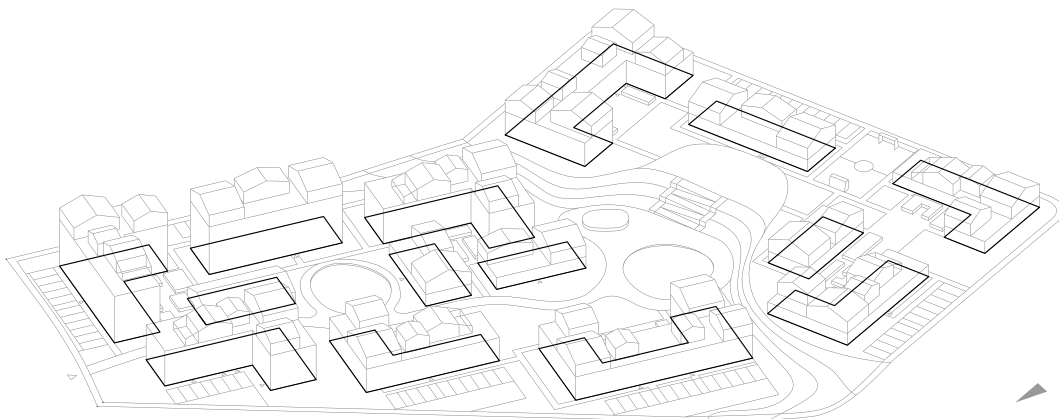
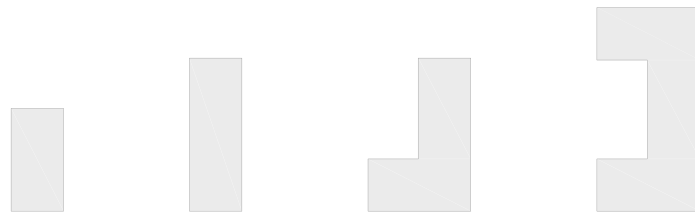
Stadium seating including a ramp has been designed to give the possibility of wheelchair, stroller and pedestrian access to the higher level naturally and in the easiest way. Each ramp goes through the seating rows which provides a safe environment and act as parapets while stairs run perpendicularly to the rows. The ramps are designed with an incline of 5%. Furthermore, the seating rows are designed to increase interaction. In fact, each level includes two rows with the same height and offers the possibility for the users to interact comfortably and face to face.



Site topography

4.3.2 THE BUILDINGS SHAPES

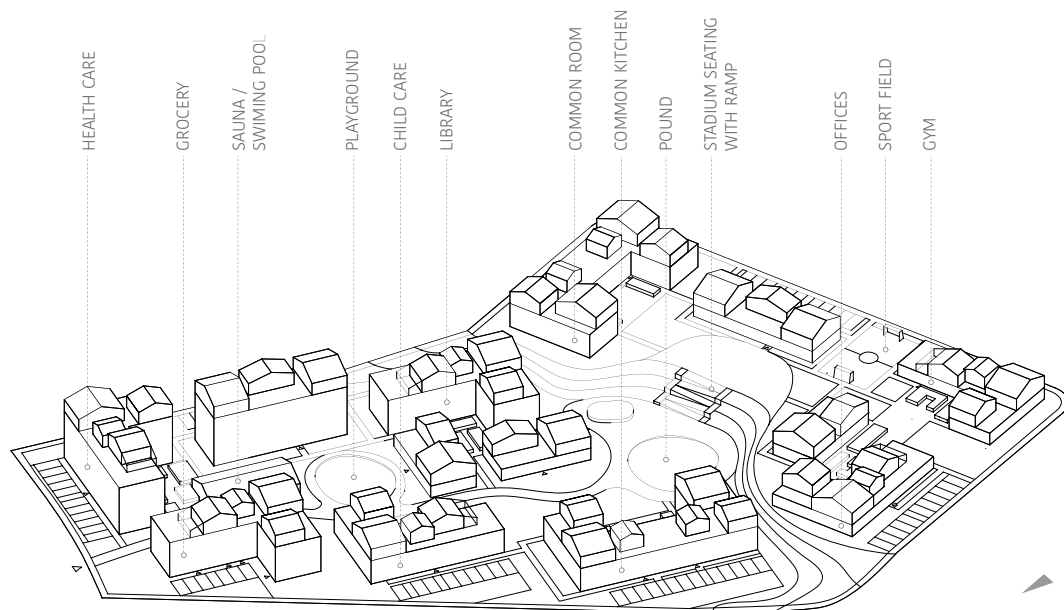
The design includes four different shapes of buildings (i, l, L and U). These diverse shapes have been used together to stimulate interaction between residents. It creates smaller public squares, like courtyards, and also spaces favourable to the development of children in a safe atmosphere. In terms of construction, all the buildings use the same structure with a five meter structural frame grid. Having the same structure for the thirteen buildings that compose this district, makes the construction quicker and more economical. In fact, it allows these buildings to be pre-fabricated.



Buildings shapes

4.3.3 TYPOLOGY OF THE BUILDINGS

All of the buildings offer living spaces for a diverse group of users. A typical floor, for example, includes accommodation for students, young couples, singles, elderly people and families with children. In each building, a large area of the ground floor is dedicated to public services and common spaces. In fact, it is important to offer inhabitants space for common activities to increase the interaction between them and to generate a natural spirit of community. Moreover, the district offers a multitude of outdoor common spaces with varied facilities. While designing outdoor spaces, it is important to think of all the future users- that way it can provide a sense of equality between the users of different generations. The design also includes playgrounds for children, sport facilities for the youth and a large public square that acts as a link and represents the central node of the district.

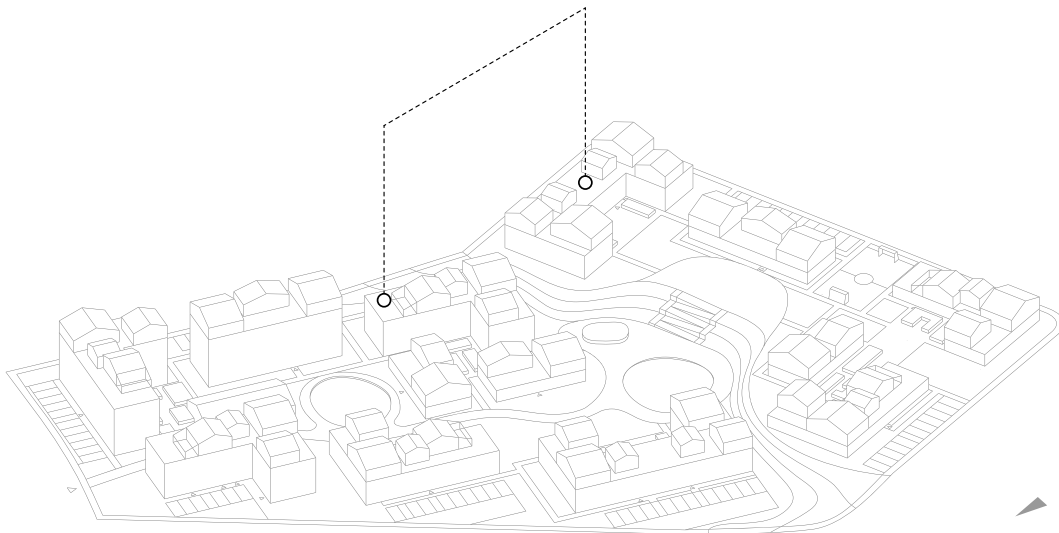


Buildings facilities

4.3.4 ROOF TOPS AND BUILDING HEIGHTS

It is important to stimulate each area of the district, that's why the roof tops have been designed with wooden elements that resemble traditional Finnish houses. Referencing the simple shapes of traditional houses also brings back the idea of residing in a village. These wooden houses answer to the needs of different categories of people. Some have been designed to welcome families while other have been designated for couples or single inhabitants.

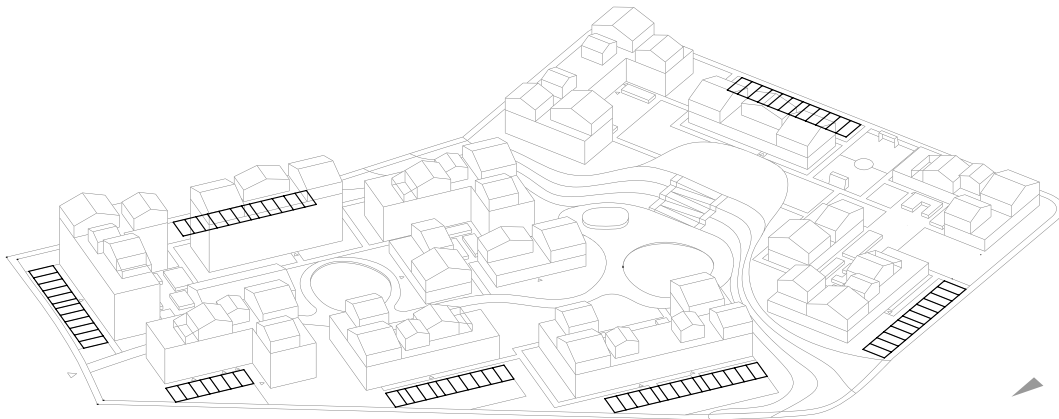
The building heights have been adapted to the neighbouring buildings and to the natural curve of the sun to maximise the exposure to natural sunlight. The building heights vary between two and five levels except the swimming pool & sauna building which is single-storey. On the diagram below, the terraces of the two buildings are on the same level, even if the buildings themselves are of different topographical height.



Buildings heights

4.3.5 A PEDESTRIAN DISTRICT

The entire district is pedestrian and bike-oriented. To achieve this goal, the area has been designed in layers from the centre to the outside. Imagine the district as a sphere composed of different layers. The outermost layer is the limit of the district and is represented by the road that provides an easy access for the cars around the entire district. The second layer acts as a buffer zone between the previous and the next layer. In the project this includes the parking lots. The third layer is the living space which in this case is represented by the houses. The last layer of this imaginary sphere, is the heart. It is probably the most important part of the sphere; it keeps it alive. In this metaphor, this fourth layer represents in reality the common space of the district.

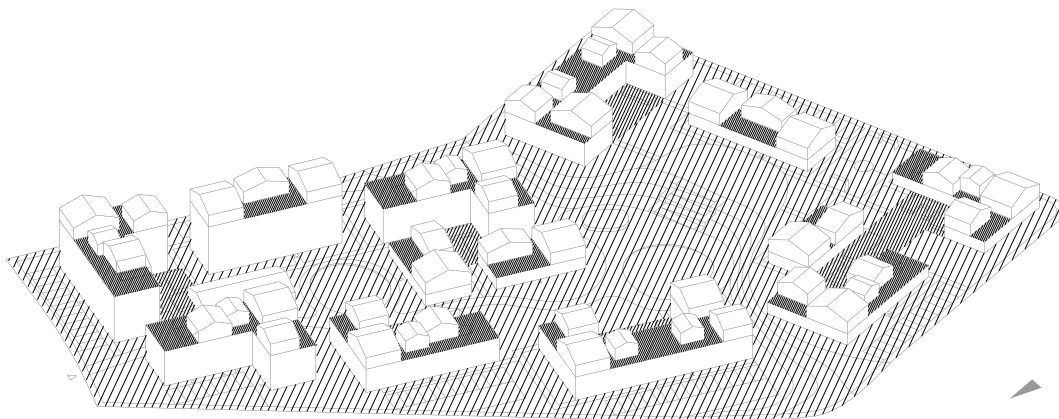


A car free district

4.3.5 A HIERARCHY OF SPACES

The district is comprised of different spaces and atmospheres which play important roles due to their different characters. A hierarchy of spaces between public and private is crucial in a community life.

In the following diagram, the intensity of the hatches represents the different functions of the common spaces relating to their privacy level. The wider ones represent the public open spaces. These large areas, like the main square, are for example, favourable for outdoor activities in big groups, a stroll with the family, etc. This kind of environment provides great interaction opportunities for the inhabitants and visitors. The second category of hatches is defined by the courtyards, between the buildings. In fact, according to their narrow areas, they become more private than the previous ones. The last hatches are actually located on the roof-top terraces. Indeed, these spaces are reserved for the inhabitants.



Hierarchy of spaces

4.3.6 SITE PLAN





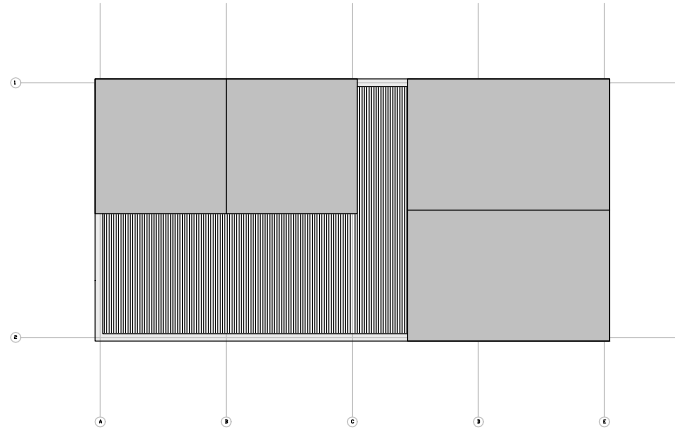
4.3.7 MASTER PLAN



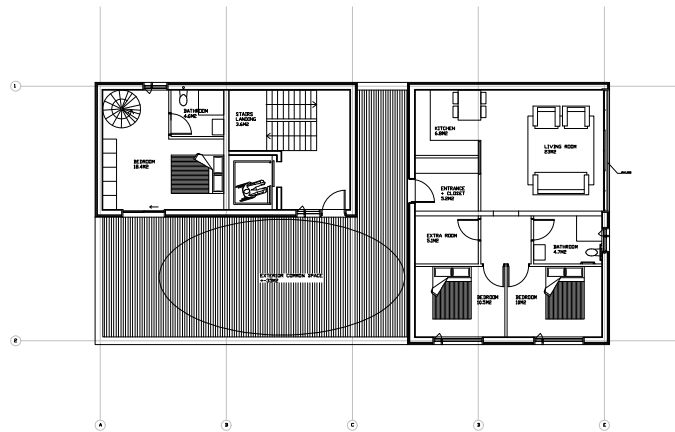
LEGEND

- 1 Main pedestrian entrance
- 2 Car access
- 3 L shaped building, 4 levels, function: housing
- 4 L shaped building, 4 levels, functions: housing + health care
- 5 Swimming pool + sauna, 1 level
- 6 L shaped building, 3 levels, functions: housing + child care
- 7 I shaped building, 5 levels, functions: housing + grocery store
- 8 Playground
- 9 U shaped building, 3 levels, functions: housing + common kitchen
- 10 Small I shaped building, 2 levels, function: housing
- 11 Small I shaped building, 2 levels, function: housing
- 12 L shaped building, 4 levels, functions: housing + library
- 13 Pond
- 14 Public square
- 15 Accessible ramp and seating stadium
- 16 Upper square
- 17 L shaped building, 2 levels, functions: housing + offices
- 18 Small I shaped building, 2 levels, function: housing
- 19 L shaped building, 2 levels, functions: housing + gym
- 20 Outdoor sport field
- 21 I shaped building, 2 levels, function housing
- 22 U shaped building, 3 levels, functions: housing + common room

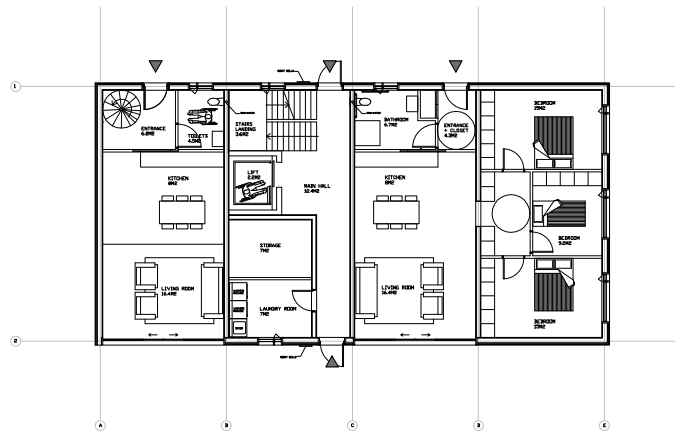
4.3.8 EXAMPLE OF A SMALL «l» SHAPED BUILDING



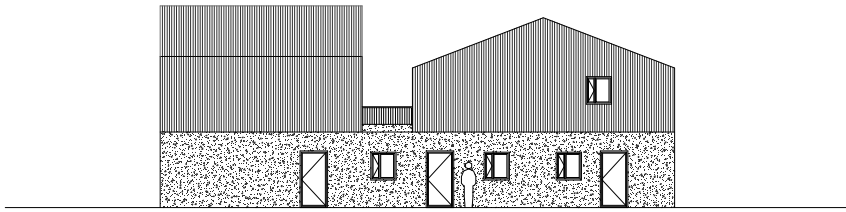
Roof top 1:300



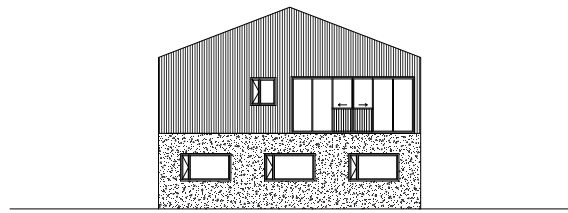
First floor 1:300



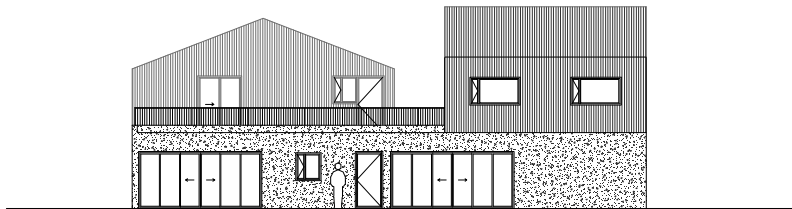
Ground floor 1:300



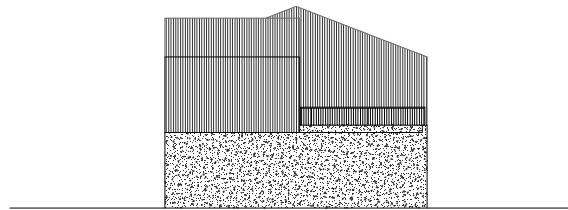
North elevation 1:300



East elevation 1:300

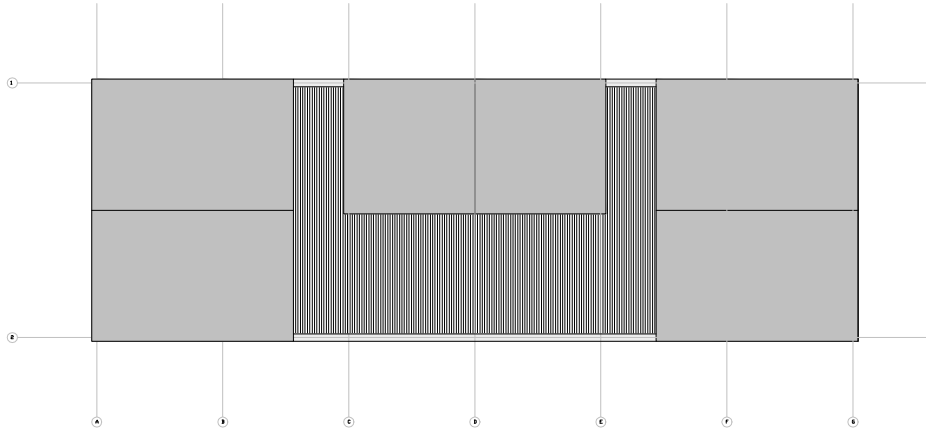


South elevation 1:300

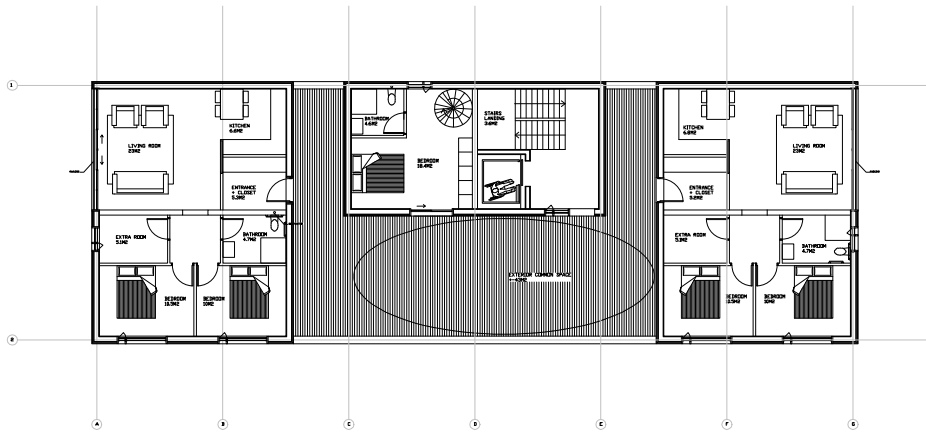


West elevation 1:300

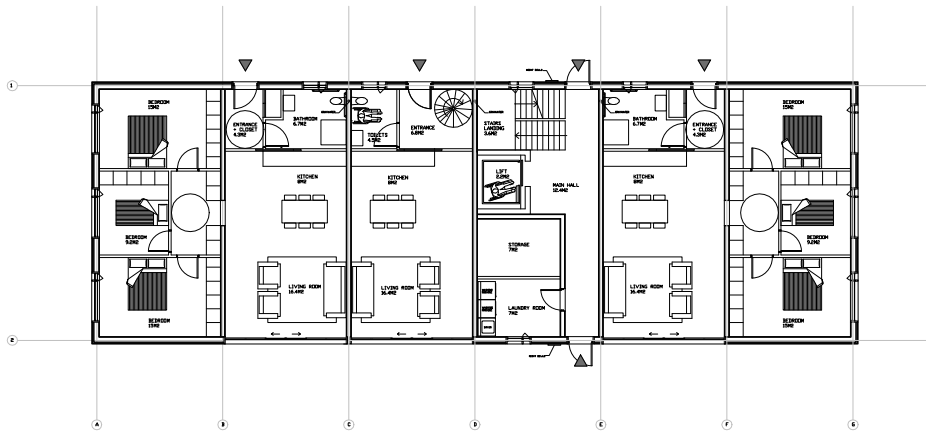
4.3.9 EXAMPLE OF AN «|» SHAPED BUILDING.



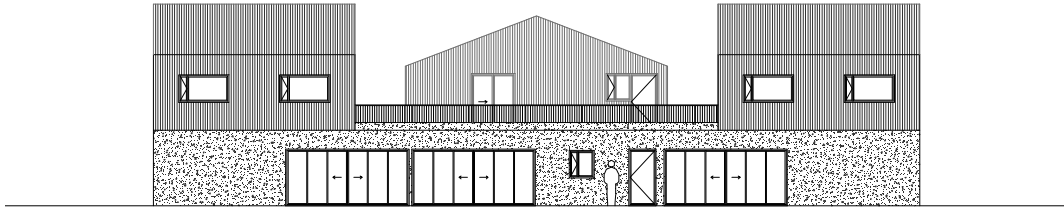
Roof top 1:300



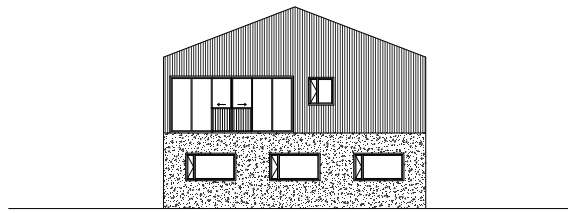
First floor 1:300



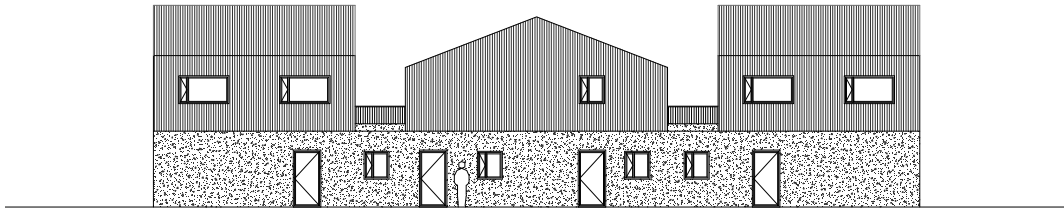
Ground floor 1:300



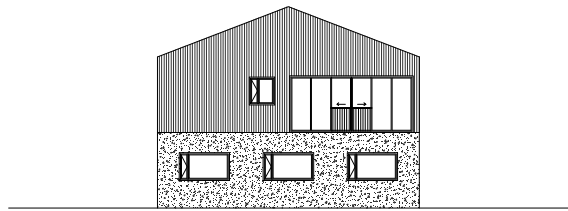
North elevation 1:300



East elevation 1:300



South elevation 1:300



West elevation 1:300

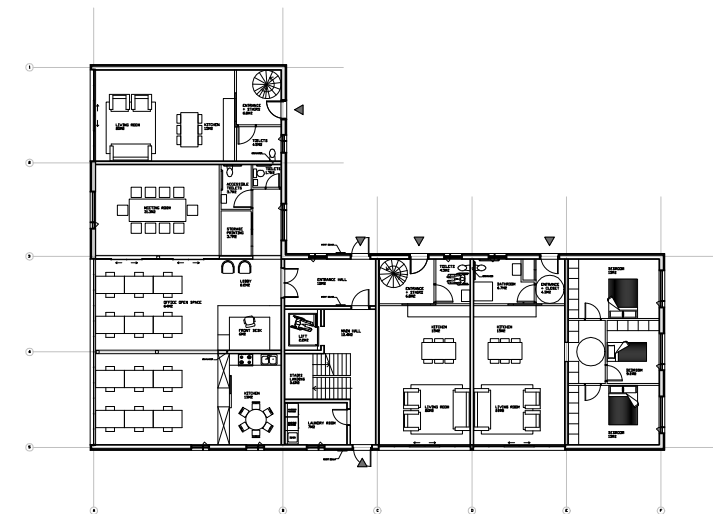
4.3.10 EXAMPLE OF AN «L» SHAPED BUILDING.



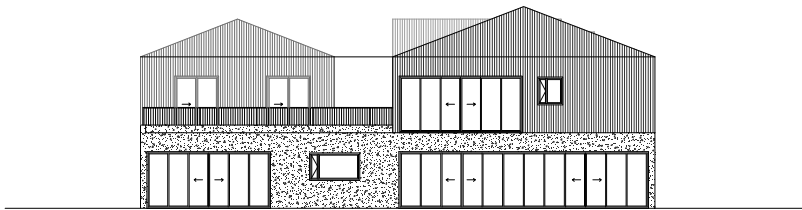
Roof top 1:400



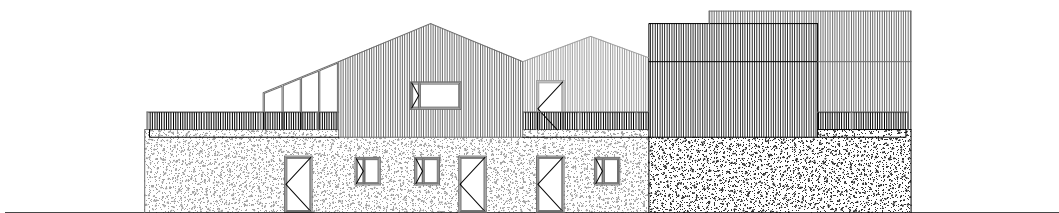
First floor 1:400



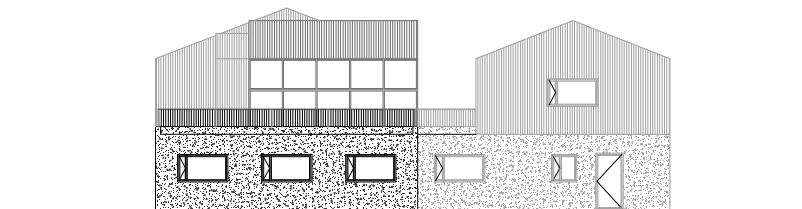
Ground floor 1:400



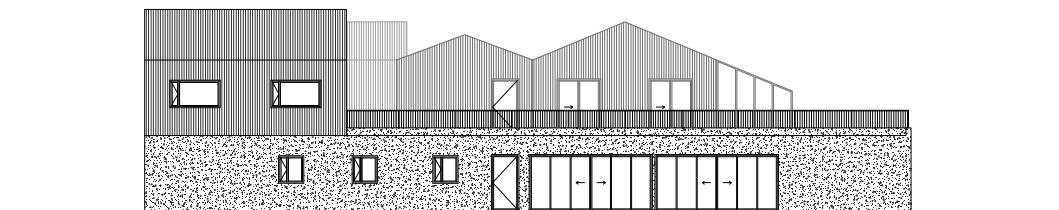
North elevation 1:300



East elevation 1:300

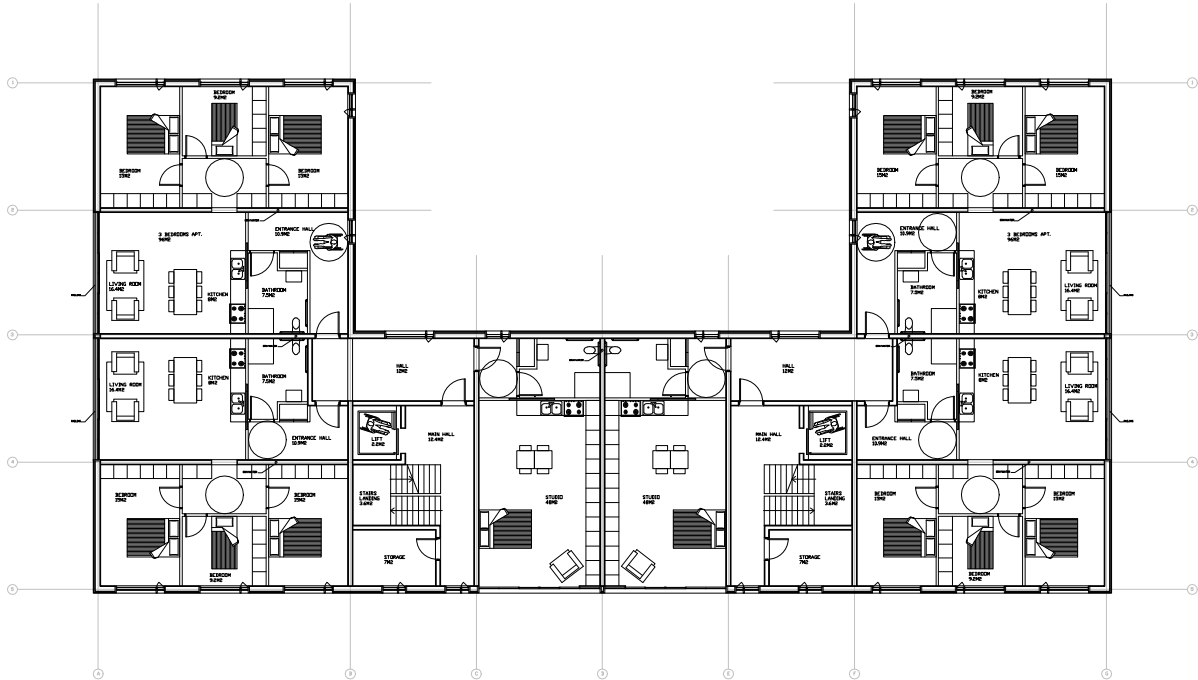


South elevation 1:300

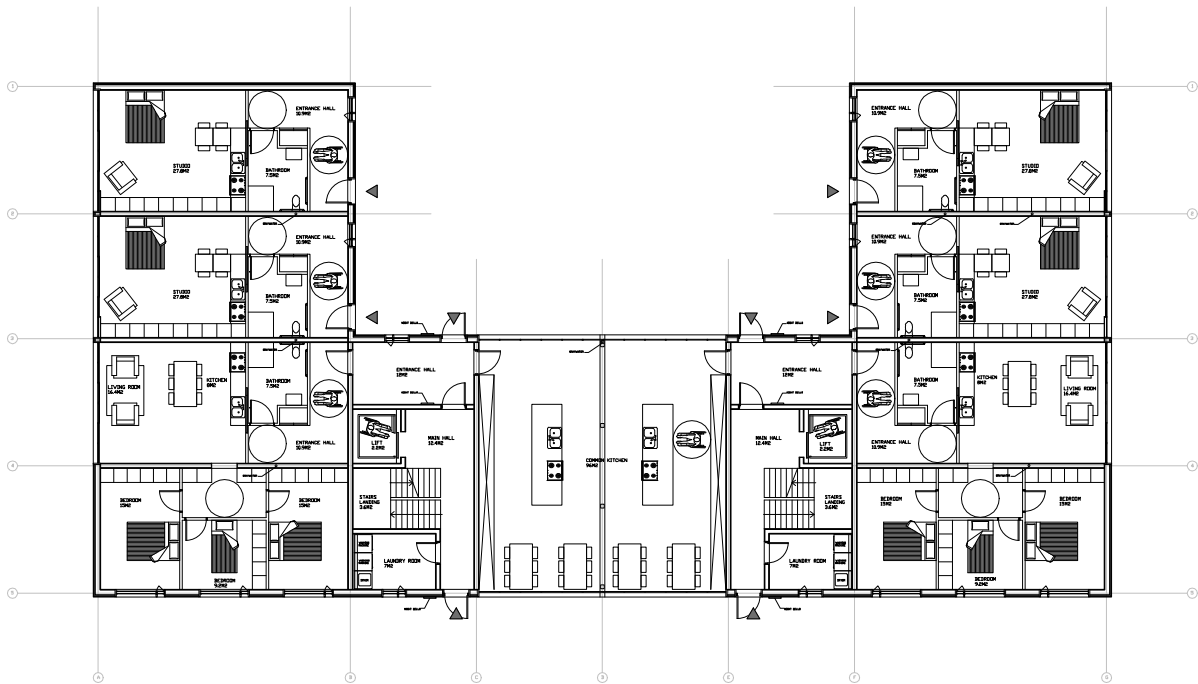


West elevation 1:300

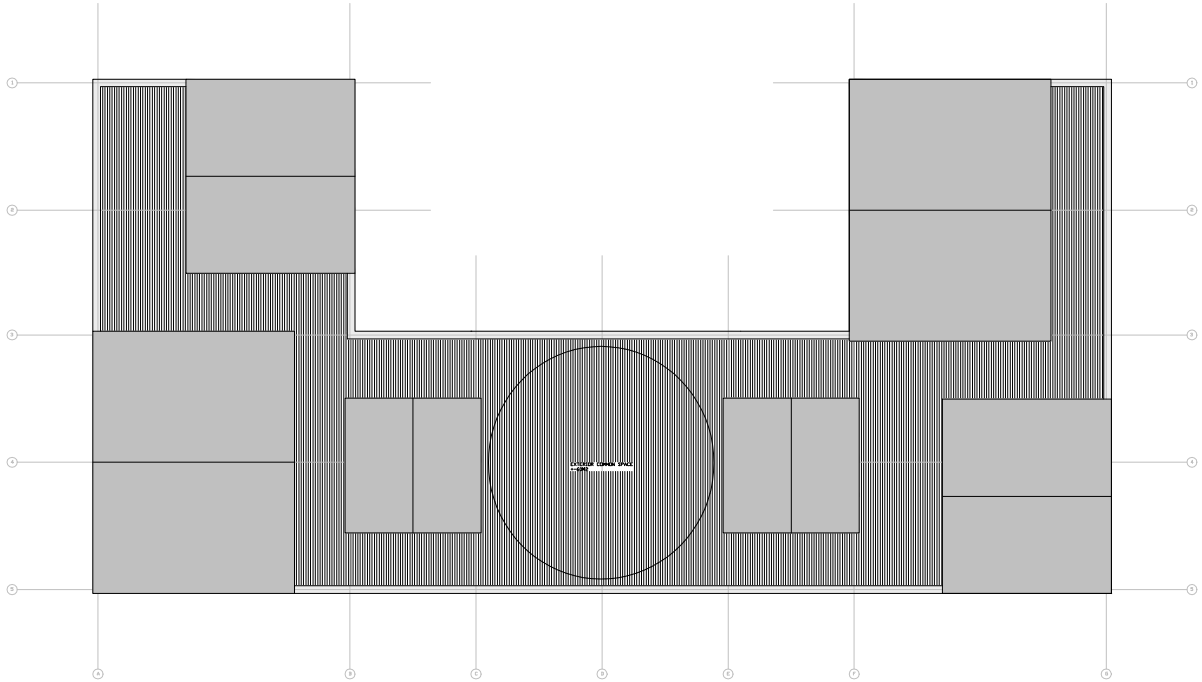
4.3.11 EXAMPLE OF A «U» SHAPED BUILDING.



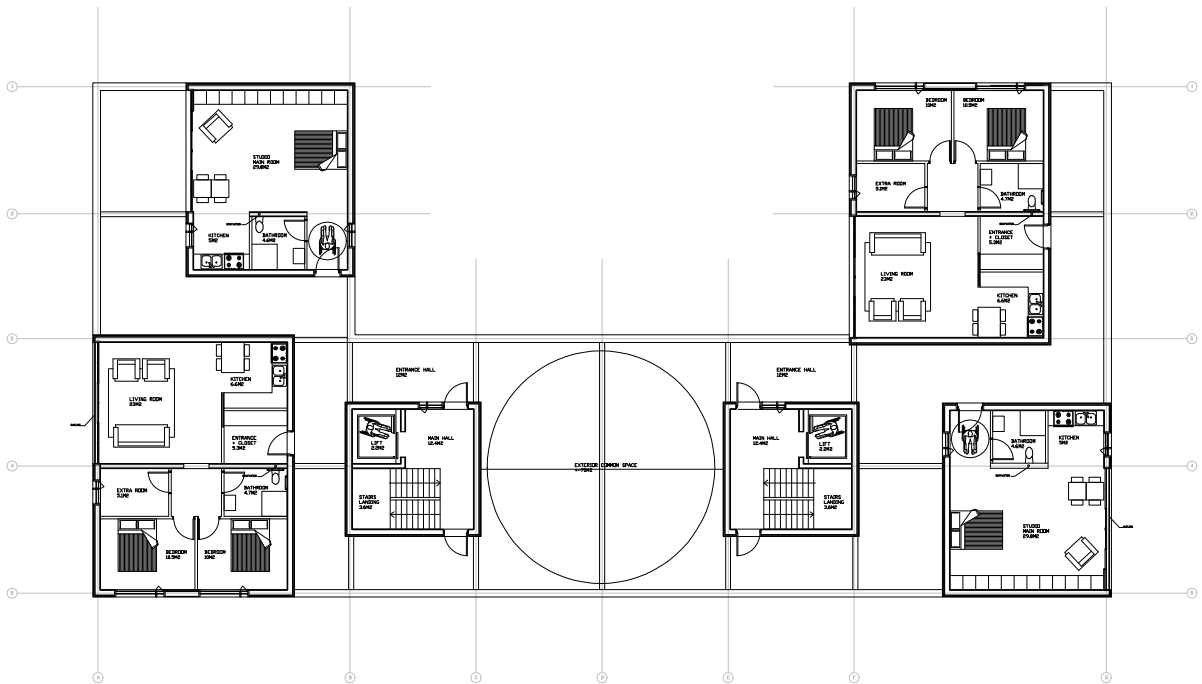
First floor 1:300



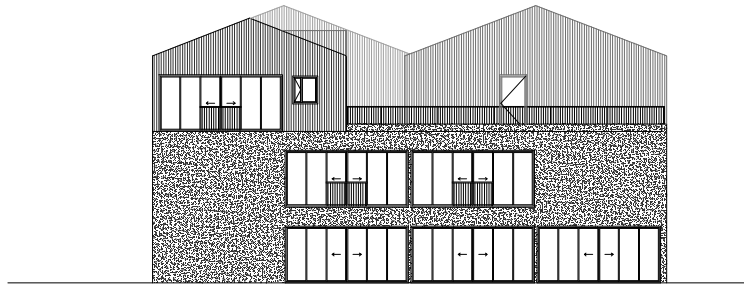
Ground floor 1:300



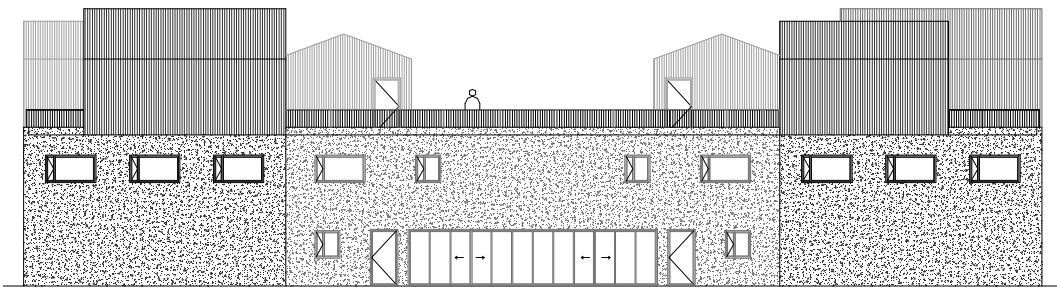
Roof top 1:300



Second floor 1:300



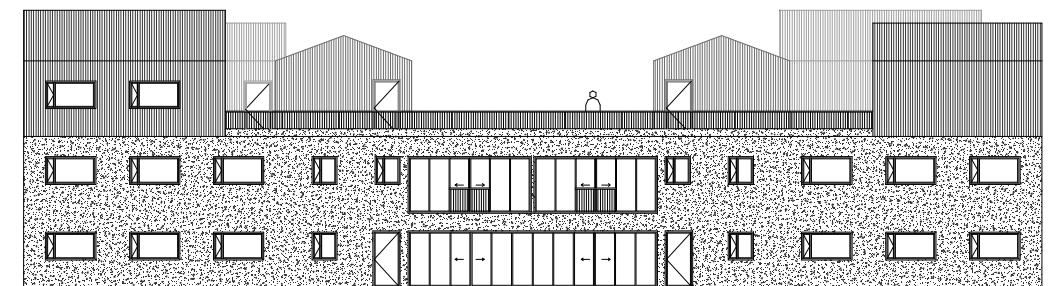
North elevation 1:300



East elevation 1:300



South elevation 1:300



West elevation 1:300

4.3.12 DESIGN DATA

Total amounts of buildings: 13

Small “I” building type: 3

└ 11 inhabitants per building (x3) = 33 inhabitants

I building type: 2

└ 32 inhabitants per building (x2) = 76 inhabitants

L building type: 6

└ 37 inhabitants per building (x6) = 192 inhabitants

U building type: 2

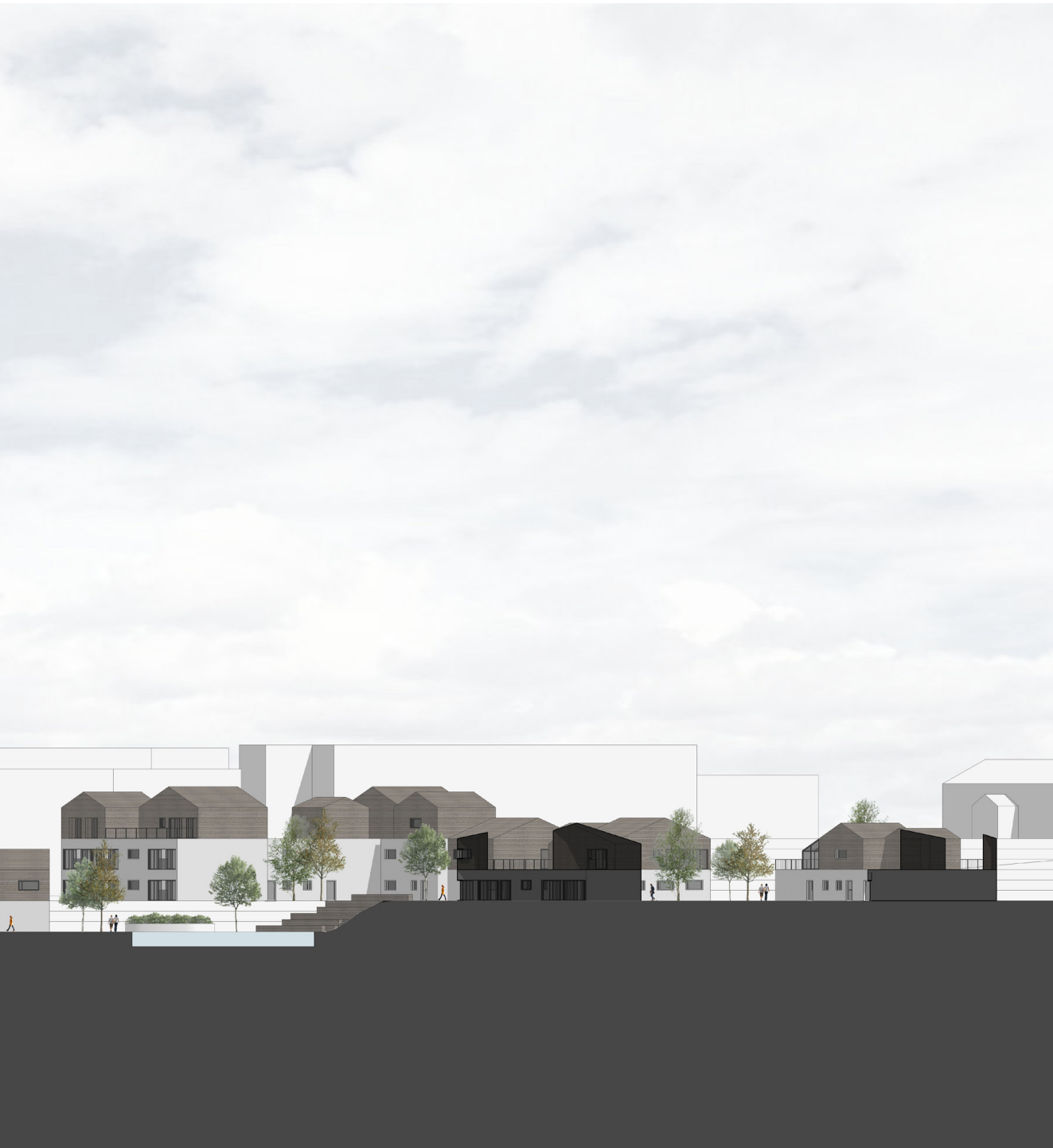
└ 45 inhabitants per building (x2) = 90 inhabitants

Total population: 391 inhabitants

Total area of the site: 18.000 square meters

5 ILLUSTRATIONS











View from a common balcony



6 CONCLUSION

To think of a district in terms of its inhabitants means to think about children, teenagers, working people, senior citizens, some of them in good health but others of reduced mobility. Moreover, with the phenomenon of an aging population caused by the baby boomer generation and change in life expectancy, it is necessary for designers to evolve and answer to the current and future needs of the elderly avoiding ghetto's and keeping a harmonious blending of generations. Indeed, adapting the design to their needs provides a natural well-being and environment favourable to aging well.

It is actually quite simple to notice how the needs of different generations are closely linked. We could say that the two most important points in designing for a multi-generational community are the accessibility and the hierarchy of spaces. As an example in terms of accessibility, elderly people using a wheelchair and families with young children in a stroller, both need accessible slopes instead of stairs. It is just as important for people to benefit from a good balance between private and public spaces. Inhabitants need places that increase their interaction, but they also need their private comfort zone.

Since the stone ages, living as a community has been natural and is beneficial to each individual person. Indeed, the sense of belonging to a group has positive impacts on people, but also helps each individual achieve more in society due to their inclusion in a group. Designing a multi-generational district leads to a serious reflexion on the development of a wide range of facilities and services within the neighbourhood, helping to reduce the daily expenses. The project has to include many common services to accommodate the needs of the inhabitants, but also to increase the interaction between them. Varied facilities and services need to be developed to fit, as closely as possible, the society we live in. It is therefore crucial to include public spaces in the design, to increase the development of the district but also to build a spirit of community within the city.

However, it is important not to focus only on the needs of one part of the society, but rather to make an effort to design for a mixed generation.

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