



*Seaside Residence For Katajanokka*

*Ekaterina Ishimova*



**SEASIDE RESIDENCE FOR KATAJANOKKA**  
**Master's Degree in Architecture**

**Author:**

Ekaterina Ishimova

**Supervisor:**

Professor Markku Hedman

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**TAMPEREEN TEKNILLINEN YLIOPISTO**  
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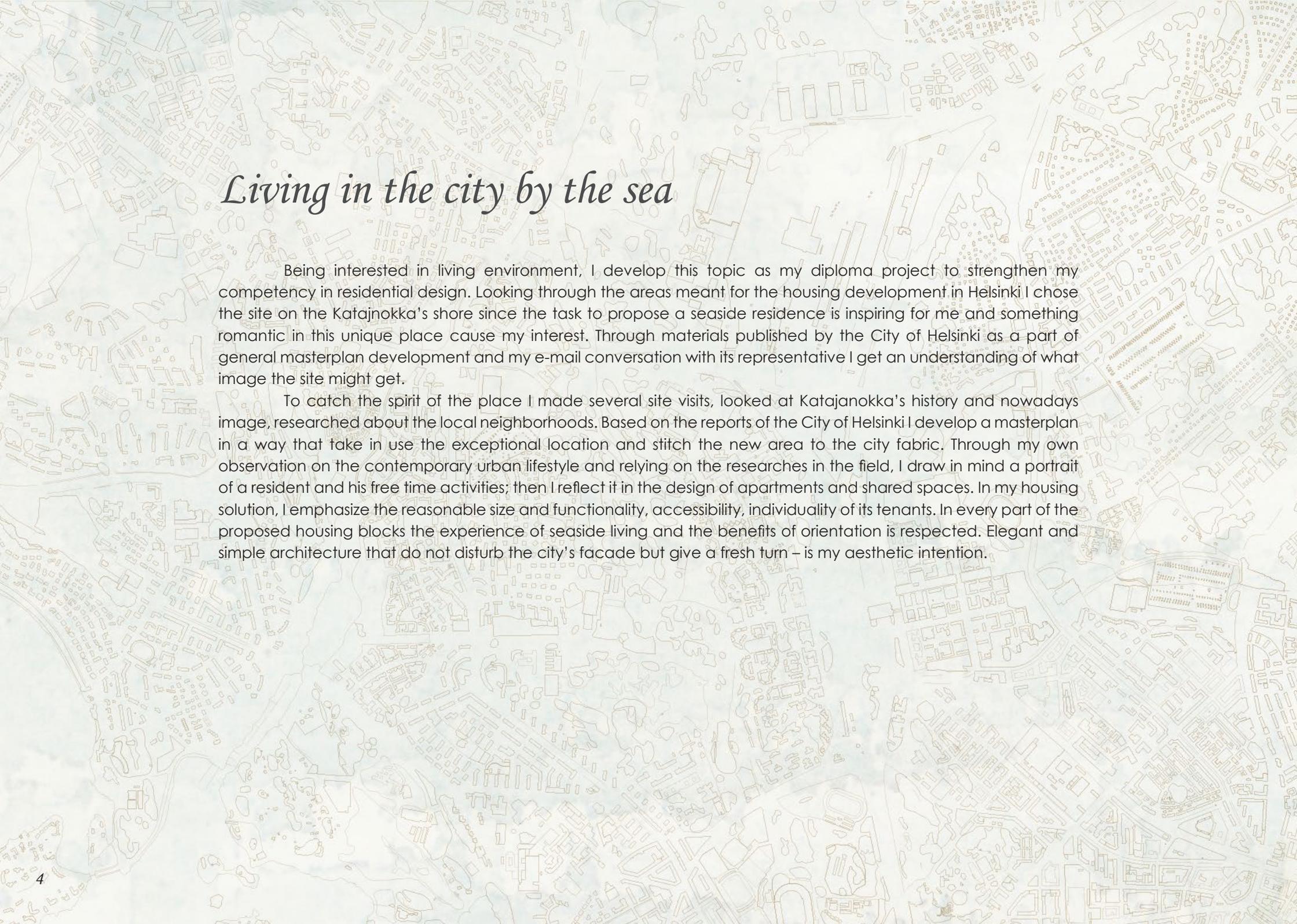
## **ABSTRACT**

This work represents my intention to think through the residential design agenda and focus on contemporary seaside residence. The project proposes a place- and time-specific design of a new housing area with a response to the nowadays urban lifestyle.

Living in the city by the sea is a statement guiding the project. The aim of the design is to illustrate the possibility to expand the city. The design approach of the project is to ensure a variety and relevance of the apartment solutions, establish a neighborhood and support the urban lifestyle. Specific yet neutral shared and public spaces as a continuation of the living space, emphasizing and taking in use the picturesque location of the site.

Since the development of the Katajanokka shore line is going towards lively public cityscape and the location of the site is right next to the city center, I propose a living environment supplied with attractive shared spaces. The area is targeted for residents who wish to live in the heart of the capital and apply for convenient services as well as spaces for free time and creativity. Nevertheless, the location of the site is somehow on the periphery, that makes me consider the family oriented tenants as well and adapt the design for a hasteless living. The focus is on the middle-sized studios with an excellent orientation and thoughtful layout. The other apartment solutions vary from spacious family apartments to extra-efficient serviced micro accommodations which can be considered as a second home or as a short-term primary residence.

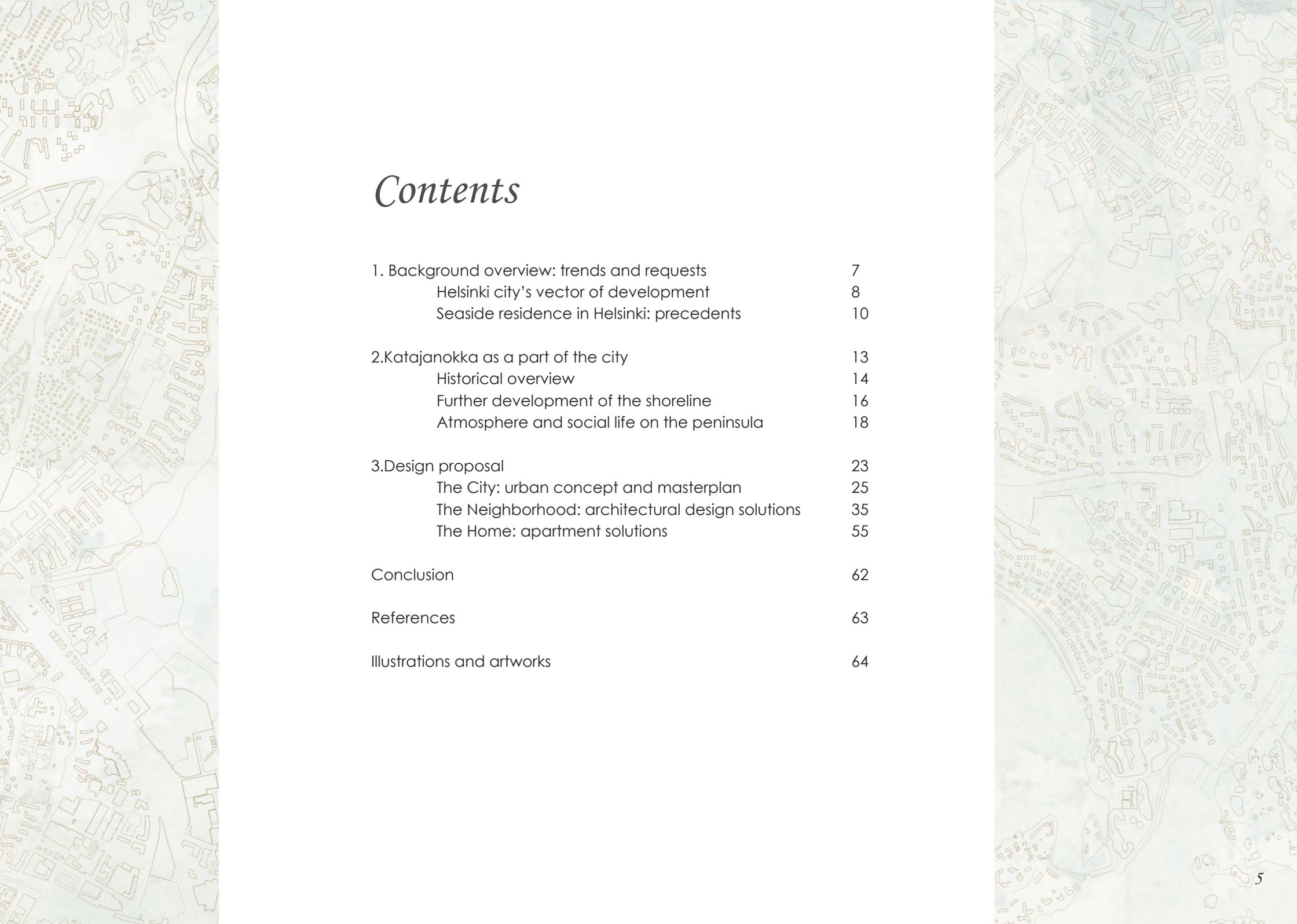
The thesis includes overview of trends in city's development, site analysis and design proposal illustrating a solution for site arrangement, housing blocks and variety of apartments. The project shows my vision of how Katajanokka may grow and what kind of architectural language can express its pleasant location by the sea.



## *Living in the city by the sea*

Being interested in living environment, I develop this topic as my diploma project to strengthen my competency in residential design. Looking through the areas meant for the housing development in Helsinki I chose the site on the Katajnokka's shore since the task to propose a seaside residence is inspiring for me and something romantic in this unique place cause my interest. Through materials published by the City of Helsinki as a part of general masterplan development and my e-mail conversation with its representative I get an understanding of what image the site might get.

To catch the spirit of the place I made several site visits, looked at Katajanokka's history and nowadays image, researched about the local neighborhoods. Based on the reports of the City of Helsinki I develop a masterplan in a way that take in use the exceptional location and stitch the new area to the city fabric. Through my own observation on the contemporary urban lifestyle and relying on the researches in the field, I draw in mind a portrait of a resident and his free time activities; then I reflect it in the design of apartments and shared spaces. In my housing solution, I emphasize the reasonable size and functionality, accessibility, individuality of its tenants. In every part of the proposed housing blocks the experience of seaside living and the benefits of orientation is respected. Elegant and simple architecture that do not disturb the city's facade but give a fresh turn – is my aesthetic intention.

The background of the page is a detailed architectural site plan of Helsinki, Finland. It shows a dense urban layout with numerous rectangular building footprints, streets, and green spaces. The map is rendered in a light, muted color palette, primarily in shades of light blue and grey, giving it a technical and historical appearance. The layout is organized into a grid-like pattern, typical of urban planning documents.

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*Background overview:  
trends and requests*

## *Helsinki city's vector of development*

Helsinki City plan draft (*Helsinki City Planning Department, 2015:1*) defines the strategy for the city's development. One of the key issues is the densification and new housing development in central Helsinki. The capital is preparing for a significant population growth, therefore new residential areas mixed with business and commercial premises are requested. Should be mentioned, that the migration will largely contribute into the urban growth. Dense and compact urban structure will offer a balance between housing and everyday activities such as work, hobbies and services, as well as shorten commuting.

Business premises are on demand in the city center and innovative types of working environment need to be developed. Commercial facilities are to be integrated into the courtyards, basement floor and street-side spaces. (*Helsingin kaupunkisuunnitteluvirasto, 2014:18, 10-11, translated from Finnish*) Interesting and innovative living-working environment attracts creative and skilled workforce which is necessary for Helsinki to succeed in the international competition between cities. Urbanized city implies such benefits as knowledge-intensive business services, information services and culture, entertainment and event services.

Development of traffic network, particularly pedestrian and bicycle traffic, will be favored. 'Boulevardisation' – idea to create a 'network city' of public rail transport and the gradually transform motorway-like entry routes into the outer

suburbs into 'city boulevards', thereby reducing traffic on the main streets. Generally, Helsinki aims primarily to encourage sustainable modes of transport, such as walking, cycling, and using the metro, trams and commuter trains, and of course, buses and ferries. (*Helsinki City Planning Department, 2015:1*)

Special attention is paid to the seaside neighborhoods. The city's extensive seaside trail ties all the waterfront recreational areas together, this is another key point. Leisure-related businesses and facilities along the city's waterfronts are making maritime experience exceptional. Different kinds of novel maritime housing solutions – e.g. floating houses, houseboats and a permanent year-round island dwelling are encouraged. (*Helsinki City Planning Department 2015:1, 12*)

Among the international trends are the tourism and exchange with other countries. The traffic between Helsinki and Tallinn as well as St. Petersburg is expected to grow. Tourists from Russia and Asian countries will increase in coming decades. Tourists are a specific group of consumers. Additionally, Helsinki wishes to strengthen its position among Baltic and Nordic countries. The approach to create carbon-neutral city is a response to climate changes on the international scene. Helsinki tends to develop science, art and creativity as an innovative and enterprising international center. Work-related immigration is promoted. (*Helsinki City Planning Department. 2015:7, 160-161, translated from Finnish*)



*Site photo, Katajanokka, Helsinki. 13 April 2016*

## *Seaside residence in Helsinki: precedents*

### **Merenkulkijanranta**

*Lauttasaari, Helsinki*

*Architect: Arkkitehdit NRT Oy*

This outstanding example of seaside residence was completed in autumn 2008. A lot of features of the site are similar to my project's site. One of the main goals was to allow the sea views to existing neighborhoods as well as new apartments and ensure the favorable sun orientation. The design is handled in a shape of elongated building masses perpendicular to the shoreline. At the shore the buildings are low and extend on columns over the surface of the sea. For the share use spaces, there are public pier and pedestrian zone, green yard zone, a free-form street yard and furthest away garages and adjoining street region. Among the materials chosen for the facades are white plaster and copper. To make a warm feeling of living space, architect clad rear walls, ceilings of the balconies and overhead projections in wood. Light and airy apartments are made to enjoy the pleasant view from large balconies and roof terraces. (*ArchDaily.com*)



*Merenkulkijanranta. Photo: Antti Luutonen. Source: archdaily.com*



*Merenkulkijanranta, site plan. Source: archdaily.com*

## Arabianranta

*Arabia District, Helsinki*

Arabianranta is a home for 10,000 people, a workplace for 5,000 and a campus for 6,000 students and know-how professionals. The area is a great example of waterfront residence. Diverse housing solution including loft buildings, city villas, Plus Koti (Plus Home) concept and homes for groups with special needs such as Loppukiri (community housing for active elderly people), Käpytikka (residence for mentally disabled juvenile) and MS-Talo (MS House) (for people with MS) make the area be called a “laboratory” for housing. Arabianranta district includes all the necessary services for residents and perfectly integrates businesses and creative industry. The waterfront is a successful example of public space with possibilities for recreation, sport, art. City design elements are integrated in a form of attractive artworks, that could be found along the promenade in the courtyards, for example joyful Tapio Virkkala park. (*Arabianranta.fi*)



*Arabianranta areal image. Source: [uttahelsinki.fi](http://uttahelsinki.fi)*



*Arabianranta panorama. Source: [arabianranta.fi](http://arabianranta.fi)*



*Katajanokka as a part  
of the city*

## *Location and role of area in the city structure*

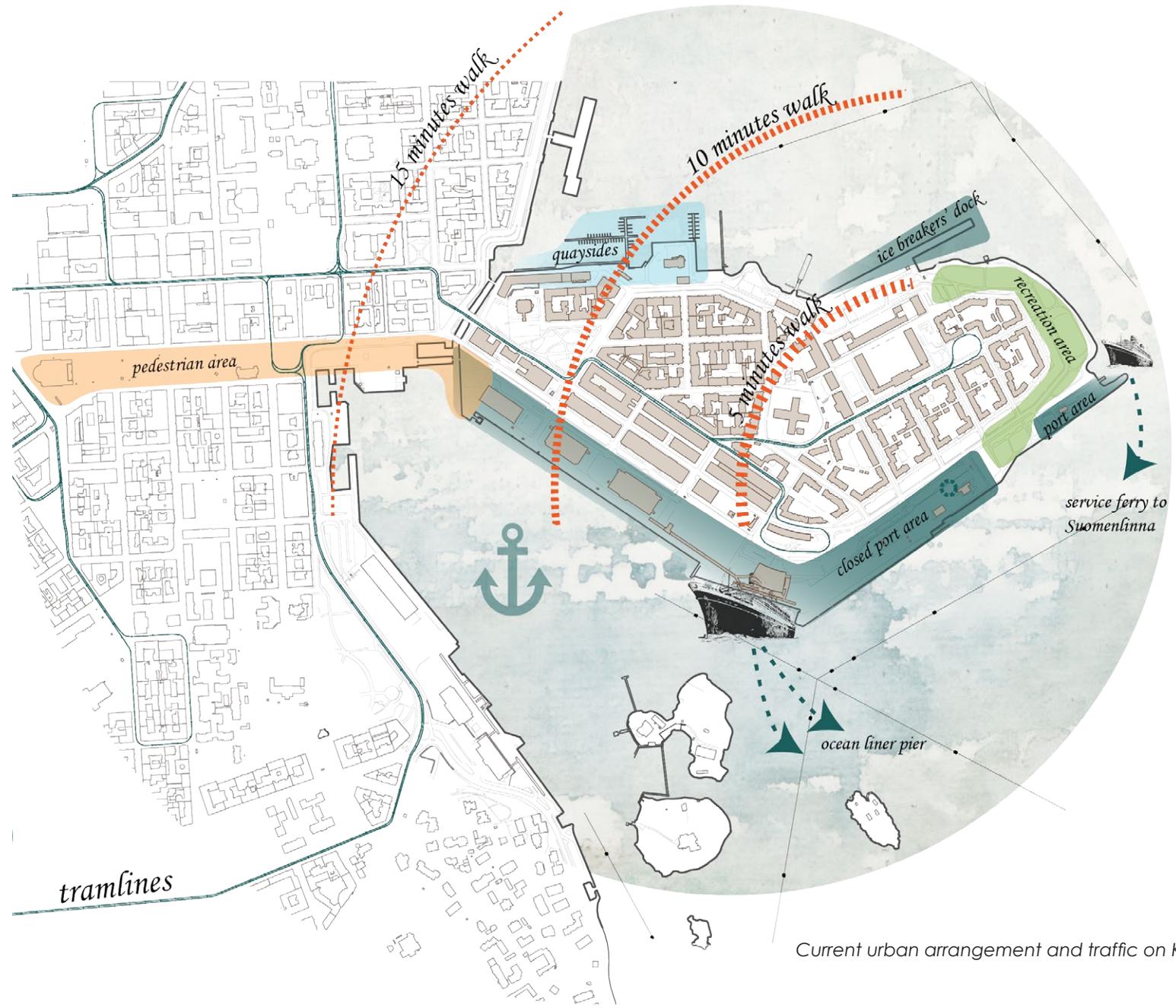
Significant part of Katajanokka from the west belongs to South Harbour, which urban profile opened to the sea can be considered as the visiting card of Helsinki. The historical center of Helsinki, Market Square, significant cultural historic public buildings along the shoreline, make a sense that time froze here. However, the area is evolving and getting ready to adopt brave ideas in order to establish vibrant urban cityscape while preserving the harbor functionality. It is likely to be done according to the results of the 'Helsinki South Harbour. Open international ideas competition' (2011). (*Helsinki City Planning Department, 2011a*)

To the south from the harbor is Suomenlinna – one of the most precious places in Helsinki. Icebreakers' harbor and berths on the north makes an identity of the area recognizable. The lush landscape of Korkeasaari, that hosts Helsinki Zoo, can be observed nicely from Katajanokka's shore. From the east peninsula is facing the shoreline Kruunuvuorenranta, where the large new area is going to be built by 2030.

At the moment, the public transport connection to Katajanokka is handled by the tram and bus lines. The heavy transport flow upon the arrival of the ocean liners makes the exit from area towards the city center rather problematic, since the peninsula has only one traffic segment that links it to the city. Parking lots already take a lot of space, and for

that reason a new facility of 500 vehicles is being planned for Katajanokka. This way underground or multi-level parking lots are reasonable solution.

Among the options for possible traffic development is the water connection from Katajanokka's most eastern tip to Kruunuvuorenranta. Desired scheme in this case to efficiently transfer passengers, cyclists as well as passenger buses between city center and quite distant Kruunuvuorenranta. The turnover is estimated to be 8800 passengers per day with the duration of about 37 minutes per trip. (*Destia Oy, 2011, 68-69*) The option is beneficial, particularly because it may have a positive impact on healthy pedestrian and cycling flows through Katajanokka, so it has a reflection in my masterplan.



Current urban arrangement and traffic on Katajanokka

## *Historical overview*

Throughout its history Katajanokka played a role of well-functioning port and a long-established and historically valuable urban structure. From modest wooden housing area into a busy harbour and seaside residential district, the area carries its exceptional marine atmosphere.

Until the 1800s Katajanokka remained as an outskirts of the city. The eastern part was for a long time a military area containing a naval base and shipyard. The residents were mainly fishermen and seamen, whose houses were simple wood structures. (*Mäkinen, n.d.*)

During the second half of the 1800s several significant buildings appeared during this period – the Merikasarmi barracks designed by C. L. Engel completed in 1820s, prison built in 30s and the Mint Building designed by E. B. Lohrmann, and completed in 1864. Red-brick warehouses were also built along the waterfront during this period. Completed in 1868 Uspenski Cathedral (A. M. Gornostajev) situated on the high cliff top, became a visible landmark of the area. The Cathedral that represents Russian-Byzantine church architecture is one of the largest Orthodox cathedrals operating in Western Europe.

In the 1890s, along with industrialization and expansion of Helsinki, the shore areas of Katajanokka were taken to more efficient use by the harbour. The railway was built to Katajanokka port area and served until it was decommissioned in 1980 and removed altogether in 1985. This cargo traffic port was the most modern in Finland at the time. There was an air harbour at the eastern end of the pier area from the 1920s to 1936. The most extensive

land filling was made during the 1890s. (*Putkonen, 2010*)

In the early 20th century, a dense Art Nouveau style residential area was established in the western part of Katajanokka. Apartment building quarters form an exceptionally coherent entity. Seven-storey warehouse designed by Lars Sonck and the Customs and Warehouse Building designed by Gustaf Nyström also date back to the beginning of the 20th century. In 1962 the headquarters building of the former Enso-Gutzeit (the current Stora Enso Oy), designed by Alvar Aalto was completed at the entrance of Katajanokka. (*Helsinki City Planning Department, 2012b*)

Another significant housing development was commissioned in 70-80s. Based on the winning entry (1971-72 V. Helander, P. Pakkala, M. Sundman) the eastern part of Katajanokka now represents an interesting example of co-operative housing with compact green areas.

After mid-20s old building began to be transfer into public use. The Merikasarmi barracks were transformed and complemented for office use by the Ministry for Foreign Affairs in the 1980s, Hotel Grand Marina is now in the former port warehouse. The former Customs and Warehouse Building has business premises and a festival hall. The building however is still partly empty and its development is under consideration. In addition, the Officers' Casino (1911 Jac. Ahrenberg, J. Nyberg) is situated on the northern shore and currently serves as a restaurant. Another interesting transformation happened to a prison, which construction dates back to early 18th. In 2002 it was converted into a unique hotel.



2015



1900



1820



(above) Historical photos of Katajanokka. Valokuvataiteen museo I. K. Inha 1908. Source: [helsinki.fi](http://helsinki.fi)

(left) Shoreline during different years of development. Source: [helsinki.fi](http://helsinki.fi)

## *Further development of shoreline*

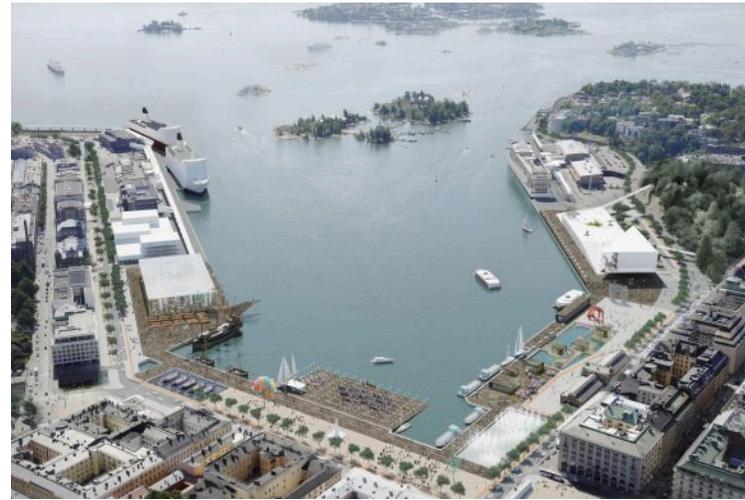
Development of Katajanokka's waterfront is under discussion. It is possible to obtain new residential space for a little over 2,000 inhabitants at the seaside by rearranging the existing thoroughfares and parking lots in the harbor. (Helsinki City Planning Department 2015:1, 6) The current capacity of the harbor in Katajanokka will be maintained. Also the terminal and existing piers will be remained. However, parking areas require alternative solutions (such as an underground parking). It is mentioned, that the new housing construction must take into account the noise background created by harbor's operation. (*Helsingin kaupunkisuunnitteluviraston, 2014:15, 48, translated from Finnish*)

According to my e-mail conversation with representatives from the City of Helsinki, the whole South-East waterfront of the peninsula is meant for new apartments blocks as well as public outdoor spaces, promenade and green area.

The objectives and results of the 'Helsinki South Harbour. Open international ideas competition' (2011) helps to illustrate the next step in shoreline evolution. Although the competition site was the south-western shore of Katajanokka, vision of development strongly binds the whole waterfront area of the island. The strategy is to integrate the South Harbour area more tightly into the city structure, create vibrant urban

culture. New uses are sought for the existing buildings and new diverse public spaces, leisure-time services and recreational activities are encouraged, as well as an attractive and easily accessible promenade area and a well-established cycling route. It is preferable to avoid high buildings on the shoreline with the respect to existing city's silhouette and not to block significant views. (*Helsinki City Planning Department, 2011; Helsinki City Planning Department, 2012b*)

The Port of Helsinki is the largest passenger port in the Baltic Sea. Helsinki ferry traffic from Tallinn, St. Petersburg and Stockholm will continue to be directed to the center. (Helsinki City Planning Department. 2015:7, 85-86, translated from Finnish) The cruise traffic in the South Harbour will increase. The harbour's passenger and cargo traffic encumbers the street network and causes traffic jams at the arrival and departure times of the ocean liners. As mentioned previously, parking facility of 500 vehicles is being planned for Katajanokka. (*Helsinki City Planning Department, 2011a, 20-24*)



*Helsinki South Harbour Competition  
Winners. Source: archdaily.com*

*Current image of Katajanokka.  
13 April 2016*

## *Atmosphere and social life on the peninsula*

### **Neighborhood**

'Katajanokkaseura', founded in 1945, is one of the oldest neighborhood associations in Helsinki, whose activity is aimed to support comprehensive development of area and comfort of its residents. (Katajanokkaseura) Association arranges meeting and discussions, events, publishes own journal. Among the services in the area there are daycare centers, elementary school, sport club and a winter swimming place. Parks are maintained in a good condition; urban farming is rather popular activity among the members of Katajanokkaseura.

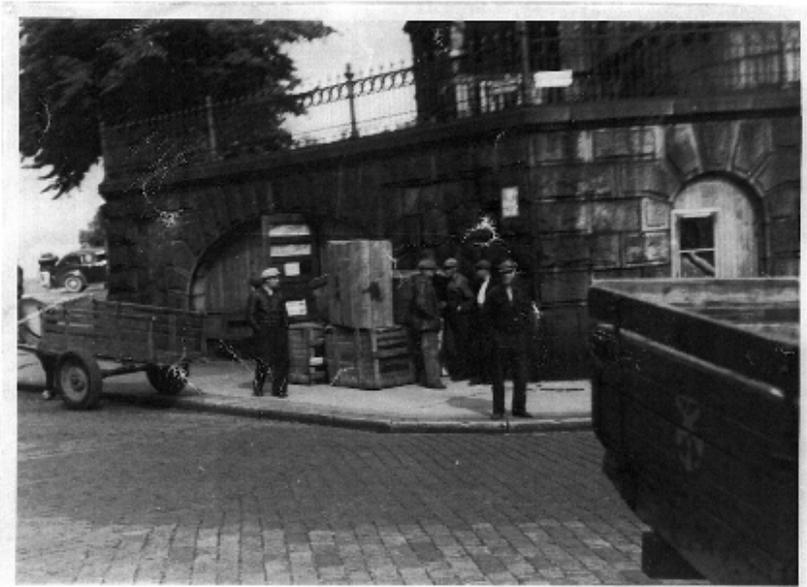
The neighborhood is taking an active part in city's life. The wish of City of Helsinki to build a new housing area on the waterfront causes discussion on Katajanokka's. Those residents whose windows are facing the southern shore are concerned to lose the price value for their apartments. However, a newly build housing and services can contribute to the development of the site in a positive way. Moreover, there are hundreds of possibilities to create the design for new neighborhood. (Helsingin Sanomat, 2015) That is also a challenge for the design of this master thesis to take into account wishes of current tenants. Such an engaged society inspires me to pay special attention to the public places included in the project.

### **Ambience**

Observing the contribution of architecture into the atmosphere of site gives me a better understanding of how to expand the area.

On the western side, the stylistic fusion of Art Nouveau and National Romanticism is expressed in dwellings with granite basement and plaster walls. This visual hardness of granite was meant to symbolize the strength the Finnish people needed to maintain. (*Finland-Japan Seminar 1997*, 45) The common features of the buildings included accentuated corner sections, eaves lines broken by triangular, rather simple facades but a plastic sense of form, diverse silhouette and an overall fortress-like appearance. The residents belonged to the middle class or bourgeoisie, and often employed servants. (Mäkinen n.d., 3) The brick structured, former warehouse along the harbour side are converted for public use and include hotels restaurants and performance facilities.

On the eastern side, the cityscape is characterized by middle-height red-brick residential buildings, small and quite green areas and peaceful promenade. Enclosed yards surrounded by arcades on the ground level provide the protection against maritime climate and the inner street connects. The tram line does not reach the eastern shore and the care traffic volume is rather light. These dwellings were originally designed according to the HITAS system regulations, which helps control the prices and allow varied population structure. (*Finland-Japan Seminar 1997*, 77) Generally, area leaves some sense of suburban hasteless lifestyle.



*Historical pictures of Katajanokka from middle of XX century. (Katajanokkaseura)*



# *Design proposal*



# The City

This urban design solution is aimed to respectfully treat the current urban structure, resonate the ambiance of the seafront and harbor, create pleasant environment around new residence.

As the future of South Harbor seems to be more mixed-used, public-oriented and vibrant, I consider a role of the boulevard along the shore to be more vital and functional, so it continues all the way through harbor to the new residential area and recreation space and make a loop back. The public services are located on the ground floor of the housing block making the environment more pedestrian friendly. Existing football field and park on the eastern shore I complement with a wellness center for sport and healthcare.

Important is to consider the exciting housing area and handle the design in a way that keep the sea views for current residents, therefore keep the value of those apartments, and that explains the distantly detached blocks. The grid drawn for the red brick housing finds its continuation in my proposal as well, and the height of the new blocks are moderate in order not to completely change the city

facade but instead nicely frame it.

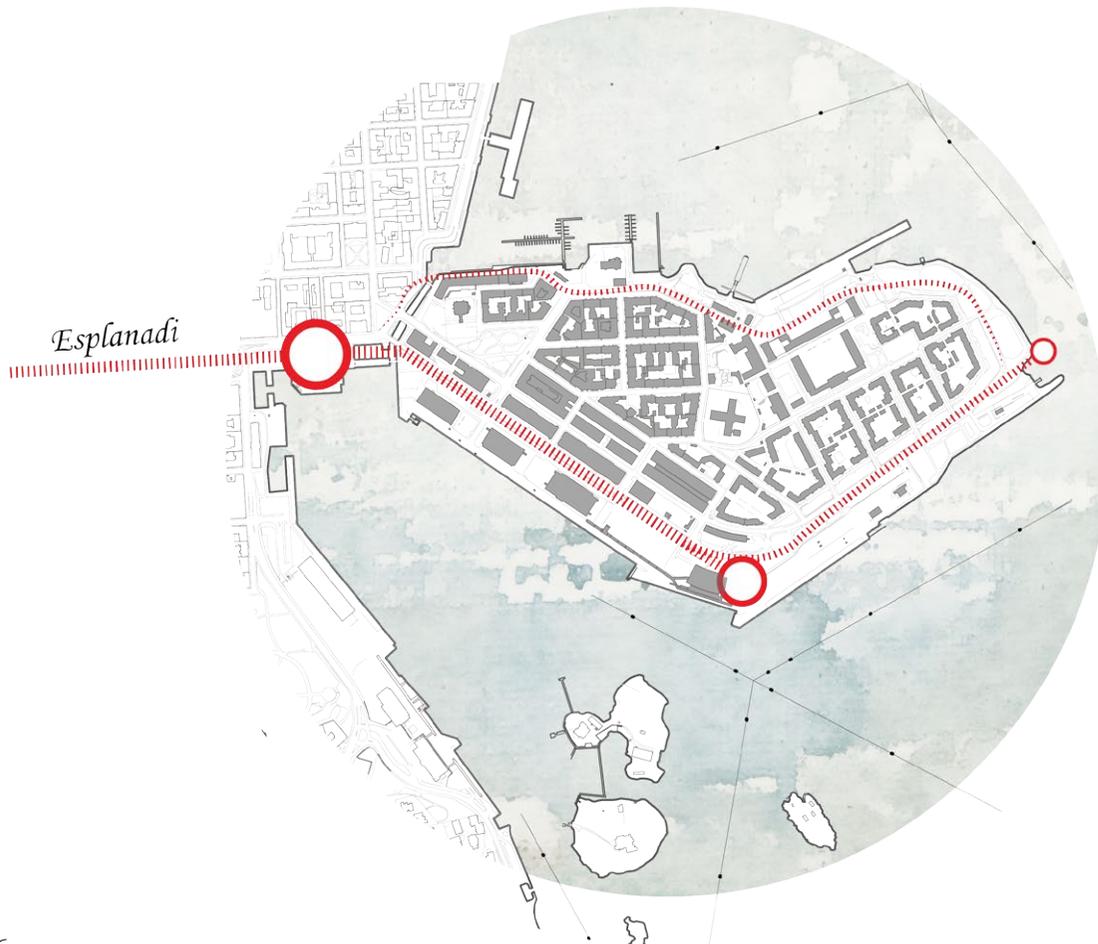
The drawback of windy weather and harbor noise leads me to a solution of creating enclosed blocks, but with an opening towards the south to let the sun into the courtyard. The interior street waves through the blocks, stitching the site together. To take into use the exceptional location of the site, I arrange the area to give the pleasant experience of the sea. Promenades and public buildings between the blocks belong to the city, while the blocks' courtyards continue into a semi-private terraces. The green roof tops provide the opportunity to enjoy the marine panorama.

As the diploma project is focused on housing solutions, public facilities are shown schematic.

# Area Arrangement Strategy

## Boulevard takes a loop

Boulevard starting from Esplanadi, running along the shore of South Harbour tight Katajanokka to the city center. It continues in a new area, strengthened by nodes on the tips of shoreline.



## Harbour tomorrow

Concentrating harbor logistics on the western shore of peninsula is a way to allow an area big enough to place new residential area. A solution to arrange logistic in levels so that parking is set underground, terminal and office is elevated building allows traffic flow in harbor orderly.

## Living by the sea

Area marked for a housing development stretches along the eastern shore of Katajanokka and a slight land infill and change of the shoreline is possible.



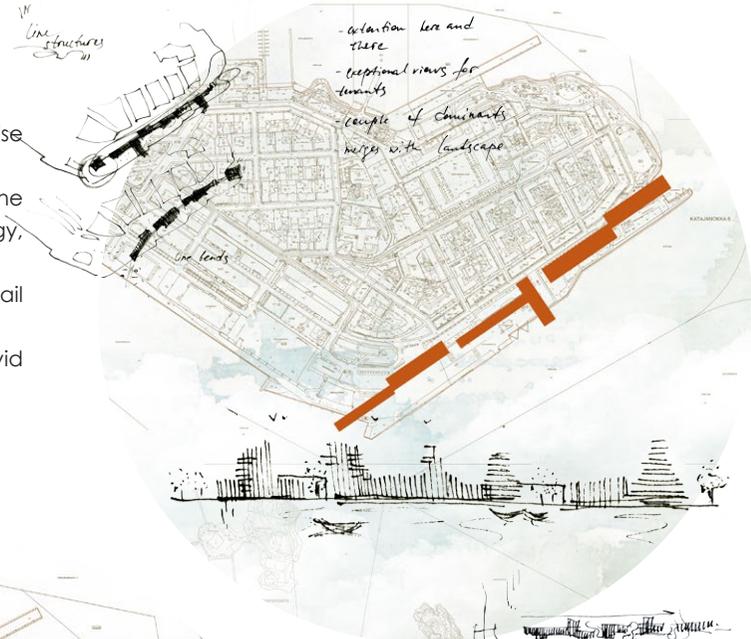
## Chilling by the sea

Pleasant but rather dull at the moment spot on the tip of the peninsula can be activated by improving the recreation area and replacing current service ferry dock with new public functions or giving it a new definition as a public transport node.

# Concept investigation

## SOLID

- follows the site's limitations and emphasise the longitudinal character
- playing with the height and opens of the structure, provides interesting morphology, brings a lot of sunlight
- leaves the view of neighborhood residential area rationally open
- keeps waterfront as a strong and vivid urban element



## SLICED

- illustrates the idea of stitching together two ambiances of Katajanokka
- successfully extend the emerging boulevard and bring it all the way to the eastern tip
- two areas ensure diversity of apartment solutions



## BLOCK

- respond to the existing enclosed character of the site but with another composition of the blocks
- dense structure provides vast public spaces
- big gestures are the logical continuation of the South Harbour waterfront development ideas
- metaphor of ocean liner perfectly reflects the ambience of the site



SEASIDE RESIDENCE

Recreation site

Harbour rearrangement

South Harbour port area

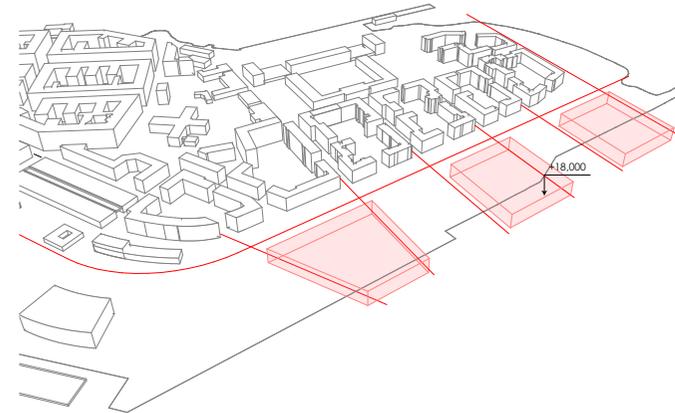
KATAJANOKKA 8

Granulation plan 1:4000

# Urban Design Principles

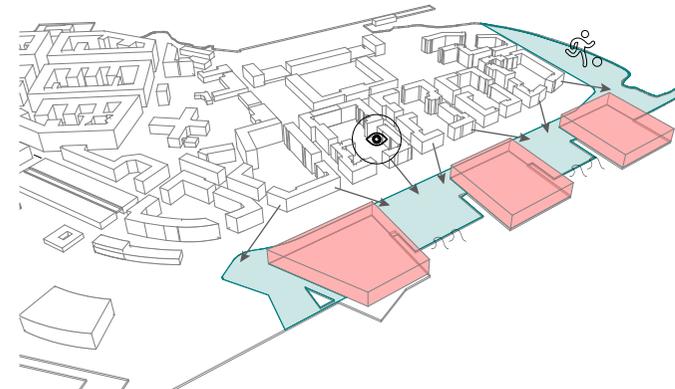
## Respectful

Continue the grid, respect the high levels of existing buildings. The typology of blocks is beneficial since the site is exposed to the wind and harbor noise.



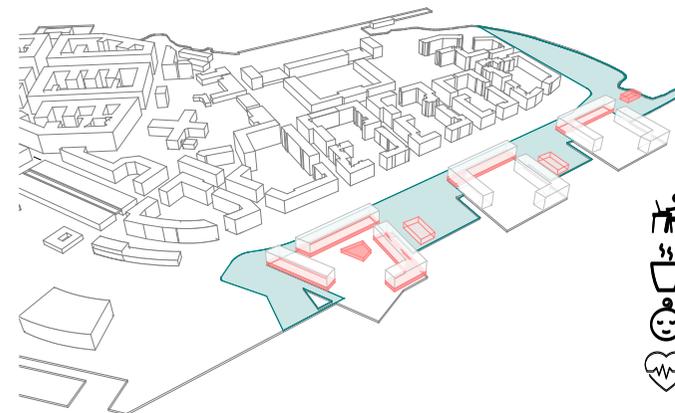
## Tolerant

Keep area open for residents' views. Place enough public spaces with direct connection to the sea – green areas, promenades along the shore, alley; improve the recreation side.



## Functional

Include public services and community rooms as well as infill buildings and placed along the street level. Such functions are possibly: co-working spaces and workshops, mediateque, daycare and education facilities, wellness center.





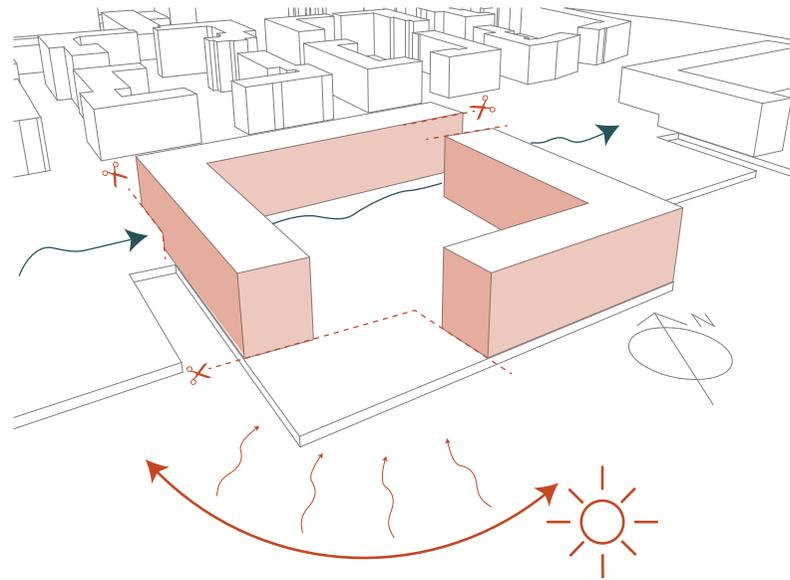
- Public building infill options:
- 1. Auditorium/pavilion
  - 2. Education center
  - 3. Daycare center
  - 4. Healthcare/wellness center

*Masterplan 1:2500*

## *Block shape logic*

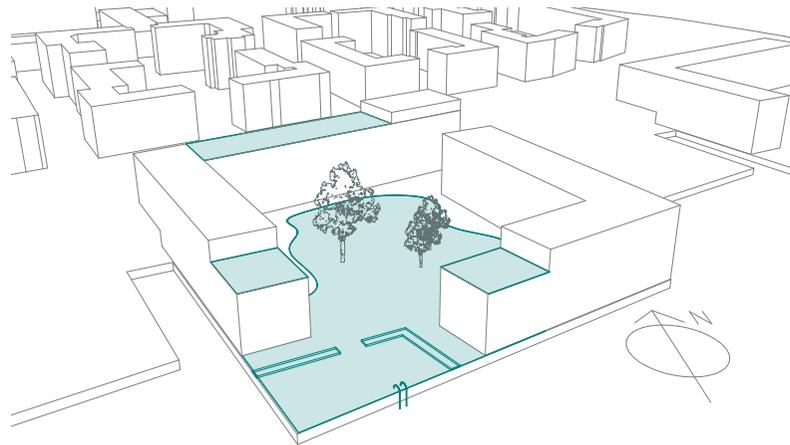
### Reasonable geometry

The block is shaped so to allow the comfortable micro-climate inside of the courtyard and pleasant orientation according to the sun. The boulevard flows through the blocks.



### Quality of shared spaces

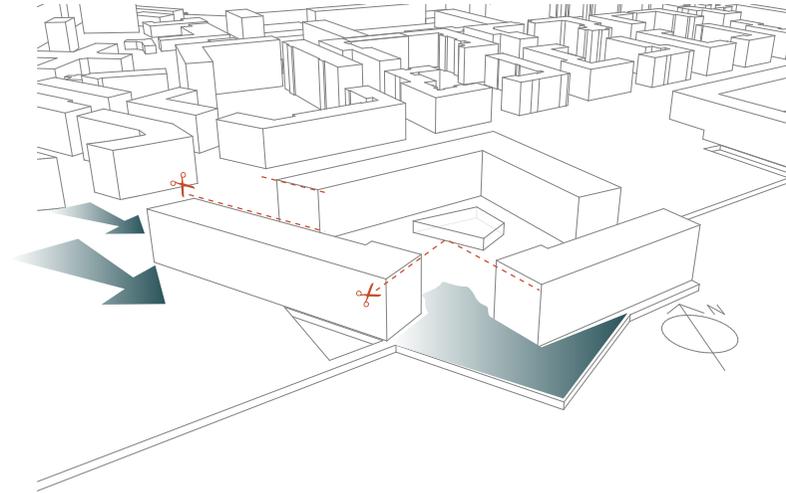
Common rooms and seaside terrace take a beneficial position so the residents can enjoy the view and experience the sea. Green rooftops as well provide possibilities for recreation.



## *Front block features*

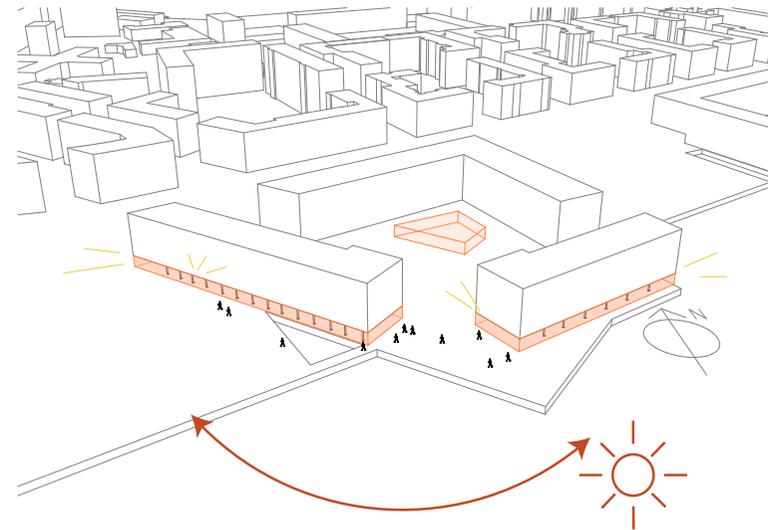
### City oriented

The geometry of the block is open towards the city and directs towards the seaside terrace. The block has a bit more public character.



### Open use spaces

The ground floor is flexible and transparent. The open use spaces include working places as well as cafe, mediateque and library. Together make a convenient place for distant working and meetings with an excellent orientation and marine view.





# *The Neighborhood*

To make a residential environment attractive, I find it important to overview the lifestyle of contemporary citizen and define the target group. Proximity of Katajanokka to the city center and approaching change in the South Harbor towards more public-oriented cityscape attracts people with dynamic lifestyle and certain requirements to living environment. Within this part I overview the features of today's lifestyle and find and design language to express them.

One out of three blocks, the front block is a link between the new residential area and the rest of the city. Therefore, I give it a more public character by placing the commercial free-time and leisure spaces on the ground floor. Helsinki is growing and the sector of knowledge and creative workers expands. That is why those spaces need to be flexible. There is a co-working environment, place for meeting or just spending time by your own with a cup of coffee and view towards the South Harbor. Still it is a place for education, so the mediateque is a suitable concept – contemporary citizens value time and knowledge. Along

the street, I design commercial and office or studio places so that they are easily accessible and make the street a bit livelier.

To make the area more efficient I schematically draw public building along the shoreline. Those can be occupied by, for example, a daycare center, education center, healthcare and wellness facility. The current service ferry harbor on a very eastern tip of peninsula can be extended and rearranged into a new sort of traffic unit, since one of the perspective for city development includes the ferry connection from Katajanokka to Kruunuvuorenranta (mentioned on p.14).

## *Contemporary urban lifestyle*

To adapt the design to contemporary lifestyle I outline common values and needs of knowledge and creative workers and complement the project of residential design with certain shared and public spaces.

***The value of time and working-living balance*** – working at home or remotely became common. However, flexible co-working spaces equipped for creative activity, teamwork make the great contribution into the work flow. Often knowledge workers tend blur boundaries between work and leisure and use their free-time for education and productivity. In one of the blocks I include such open-use spaces on the ground floor with south and west orientation, with cafe, terrace, mediateque and workshops.

***The social engagement*** – often knowledge workers have a sense of responsibility and they are rather ambitious, it means that their participation in community life is quite likely. Moreover, since those people tend to engage in work-related activities during free time they possibly engage in home-oriented hobbies and organize social gathering at home. Therefore, rentable facilities as a continuation of liv-

ing environment might improve such activities. To influence the architectural design with the idea of healthy community I propose common rooms with sauna (rentable) and access to the outdoor terrace, with the most pleasant orientation and connection to the courtyard. As well roof terraces for community use take the benefit of seaside location.

***Requirement of the comfort*** – convenience of services and reduced commuting are the things that all citizens apply for. In the project, I infill the ground floor with commercial and public use facilities to ensure easy access and proper street environment. As separate buildings, I propose such functions as daycare, education, wellness centers.



## *Work and Creativity*

Design elements - open-use spaces: places for co-working, creativity, sharing and free time



## *Social life*

Design elements - community spaces: gathering rooms and shared saunas, terraces and rooftops

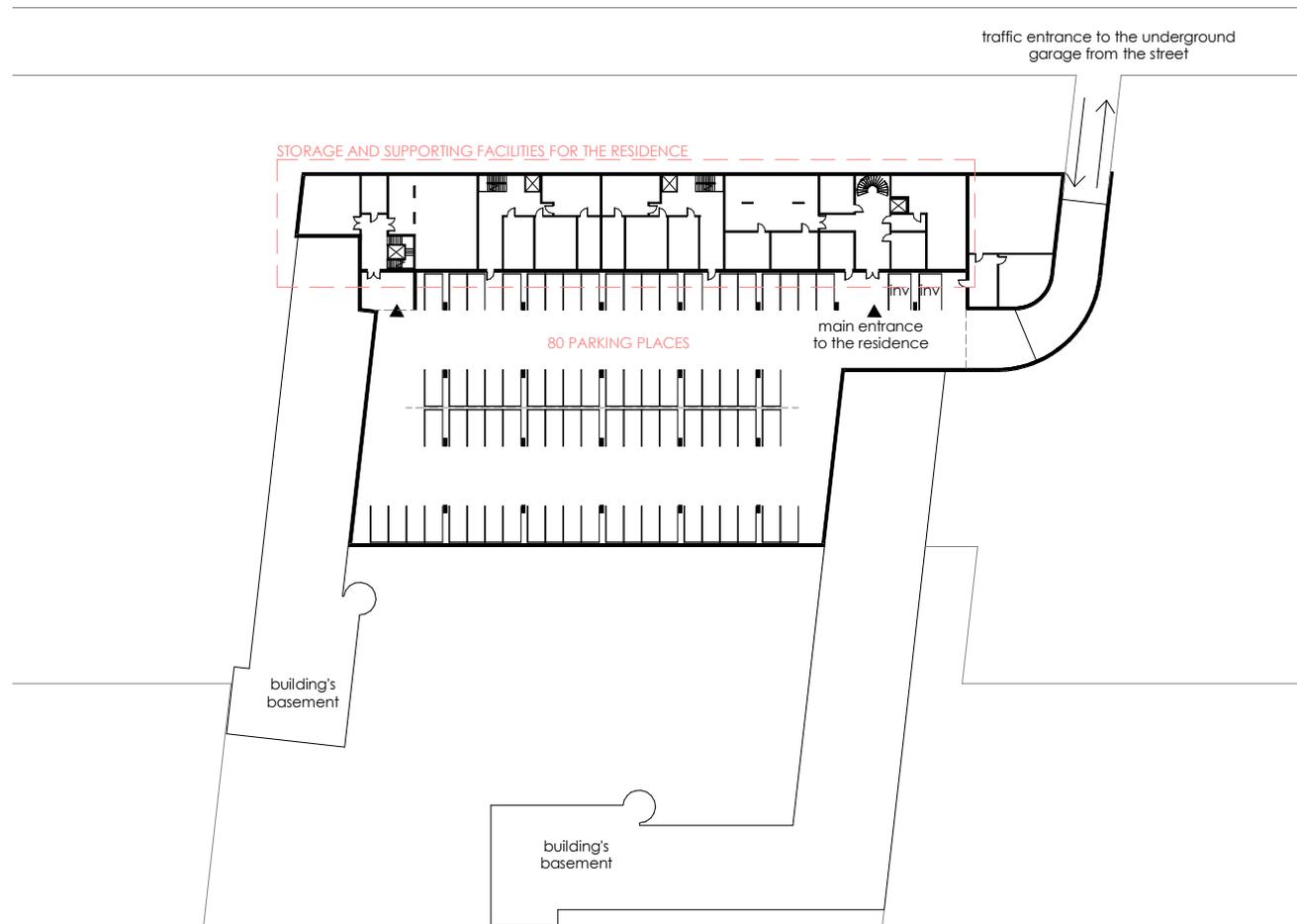


## *Comfort*

Design elements - public spaces: services, health- and daycare centers, wellness, education

*Design elements as a response to contemporary lifestyle.  
Artworks used: flickr.com*

# Project space calculations



## Parking places

Parking places are calculated as 1 per 150 sq. m. of living area plus additional capacity for public spaces use. So it makes around **70-80 parking places** per block.

Area taken by parking in under the courtyard because of the buildings structural arrangement.

Apartment units along the street include the underground spaces for storages and supporting facility. The entrance to this units can be done straight from parking lot.

*Parking scheme, basic block 1:1000*

## *Apartments*

### TYPES AND NUMBER OF APARTMENTS

1 room apt (studio)	22 – 37 m <sup>2</sup>	160
2 room apt	48 – 56 m <sup>2</sup>	164
3 room apt	69 – 93 m <sup>2</sup>	66
4 room apt	101 – 105 m <sup>2</sup>	62
5 room (2fl apt in gallery units)	151 m <sup>2</sup>	12

TOTAL NUMBER OF RESIDENTS:  
1094

## *Space area*

### GROSS AREA:

Front block	18347 m <sup>2</sup>
Basic block (2 blocks)	17877 m <sup>2</sup>

TOTAL GROSS AREA  
54101 m<sup>2</sup>

### LIVING AREA:

Front block	8080 m <sup>2</sup>
Basic block (2blocks)	8872 m <sup>2</sup>

TOTAL LIVING AREA  
25824 m<sup>2</sup>

### PUBLIC SPACE AREA:

open-use spaces, commercial,  
office premises

Front block	3943 m <sup>2</sup>
Basic block (2blocks)	564 m <sup>2</sup>

TOTAL PUBLIC SPACE AREA  
5071 m<sup>2</sup>

## *Volume*

Front block	57200 m <sup>2</sup>
Basic block (2 blocks)	53000 m <sup>2</sup>



port area

CW

OW

CA

MT

infill possibility  
e.g. auditorium

entrance to the  
underground garage

infill possibility  
e.g. education center/  
day care center

0m 5m 10m 20m 30m

Ground floor 1:700

# Front block

## COURTYARD ELEMENTS

1. Seaside terrace
2. Playgrounds and equipment for kids
3. Recreation spaces with seats and greenery

## FACILITY LEGEND

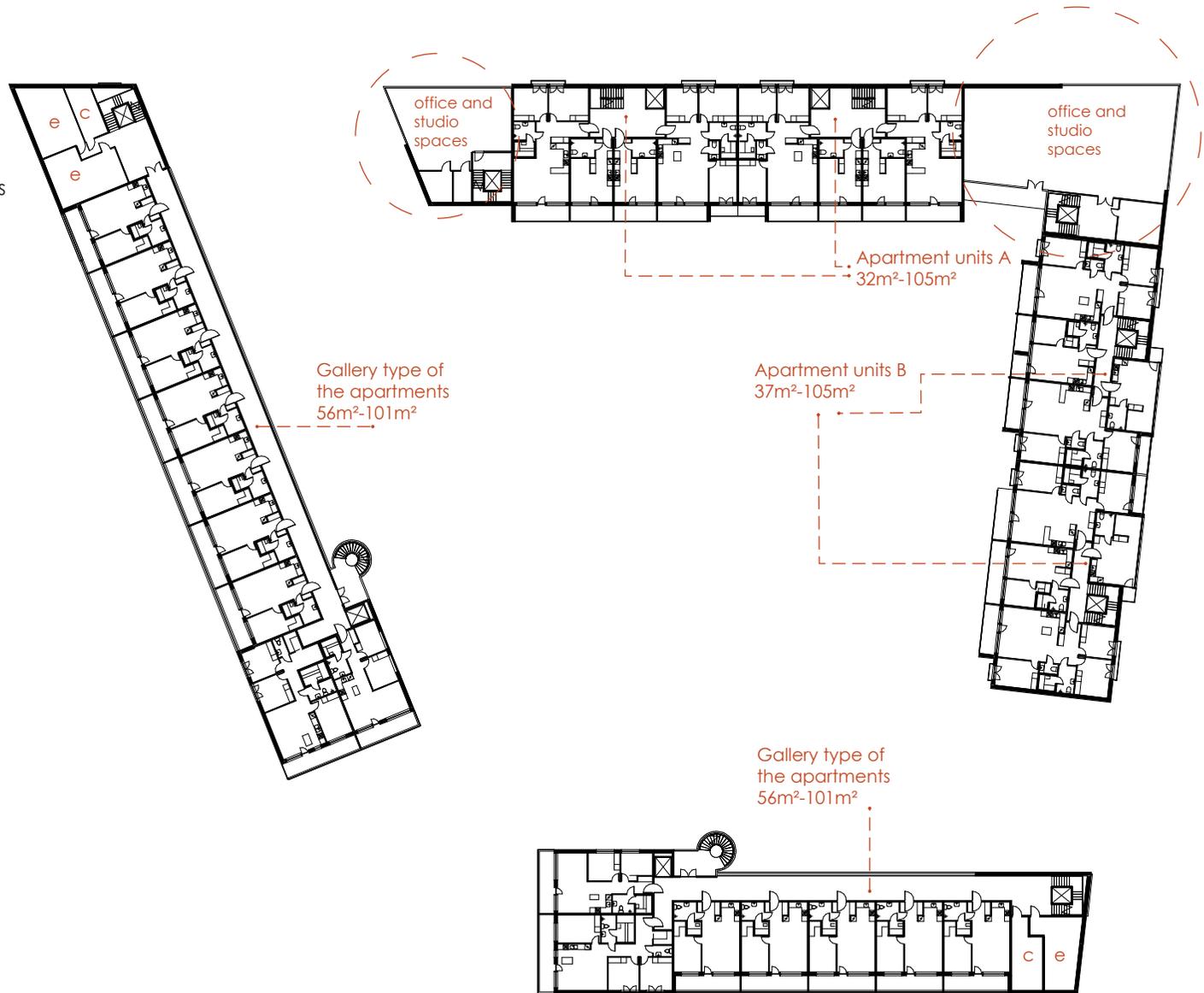
- a. Commercial/office space
- b. Lobby (office unit)
- c. Cleaning room/laundry
- d. Shared sauna
- e. Storage
- f. Bin chamber
- g. Outdoor maintenance storage

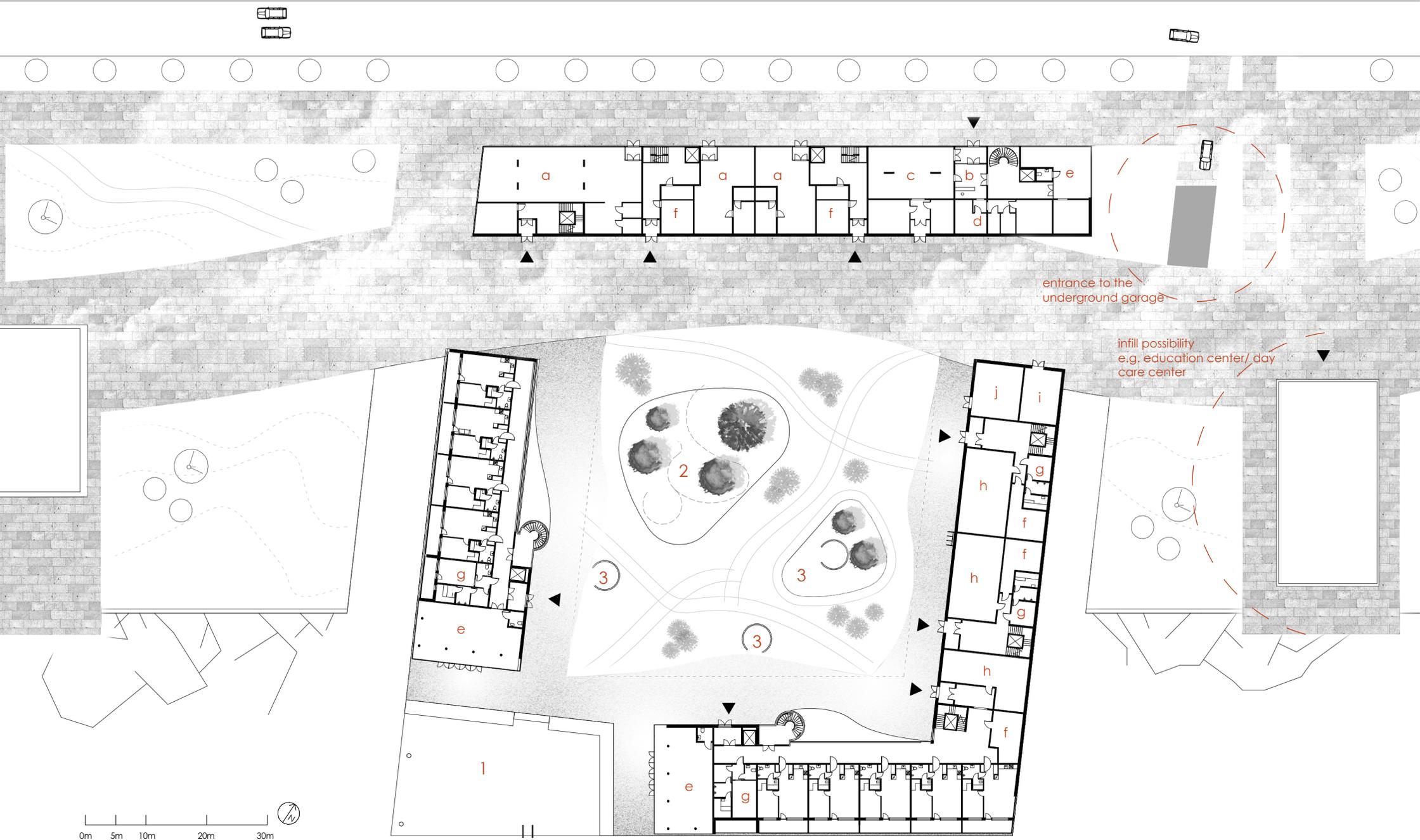
## OPEN-USE SPACES

- CW - co-working, meeting spaces
- OW - open-working spaces
- CA - cafe
- MT - mediateque



1st floor 1:700





Ground floor 1:700

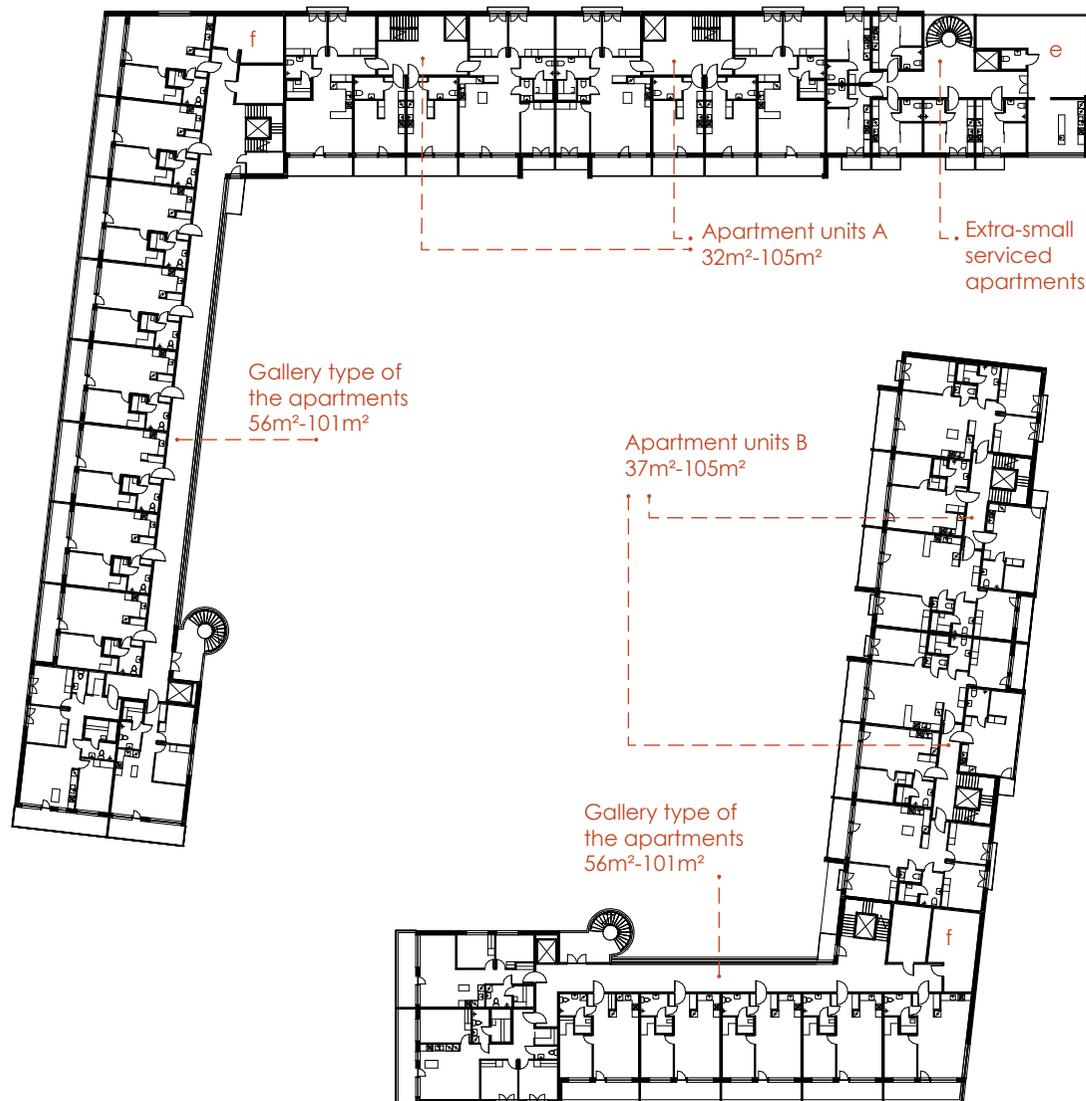
# Basic block

## COURTYARD ELEMENTS

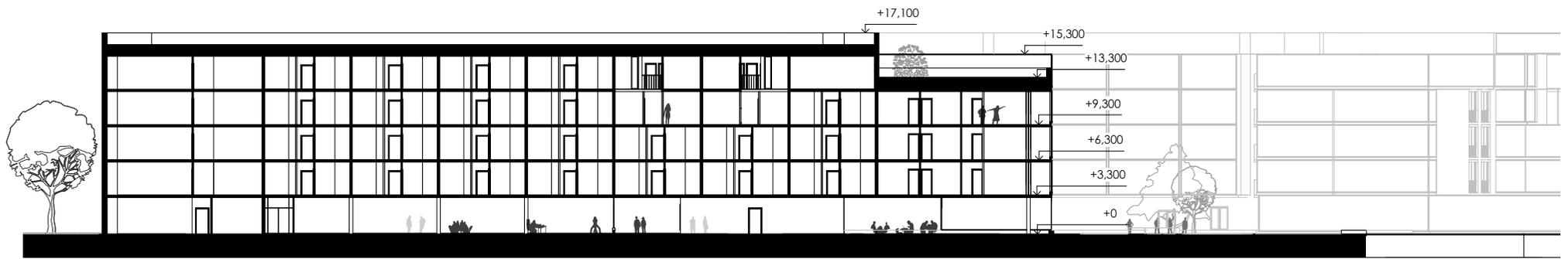
1. Seaside terrace
2. Playgrounds and equipment for kids
3. Recreation spaces with seats and greenery

## FACILITY LEGEND

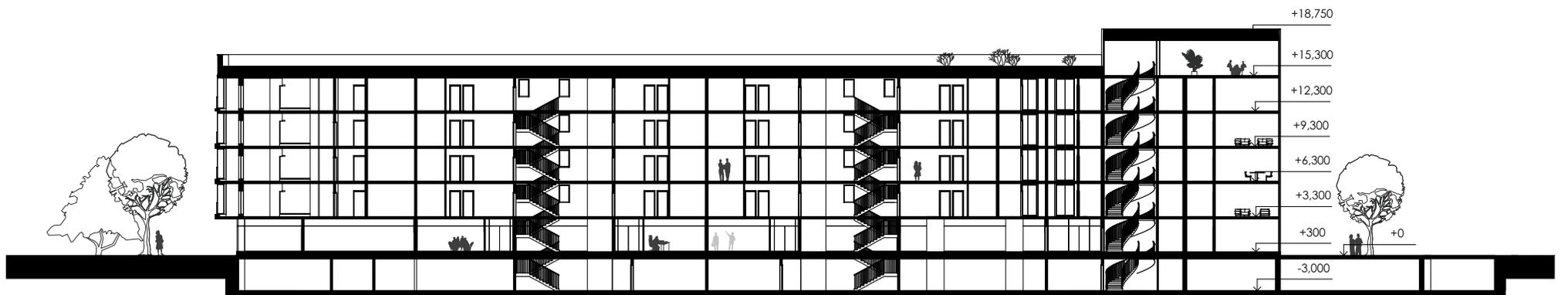
- a. Commercial/office space
- b. Lobby (serviced apartments)
- c. Cafe (serviced apartments)
- d. Service facilities (serviced apartments)
- e. Common rooms
- f. Cleaning room/laundry
- g. Shared sauna
- h. Storage
- i. Bin chamber
- j. Outdoor maintenance storage



1st floor 1:700



Section, front block. 1:500



Section, basic block. 1:500

## *Facade solutions*

My aim with the facades solution and material choice is to reflect the atmosphere created by existing urban layer and surrounding landscape. Solid materials, such as stone and brick are common on the site. In this project, I look for warm shades of granite facade to bring the static and reliable sense, a bit of a fortress-like appearance. Complemented by the expansive glass surfaces drawn in a marine coloring and with different levels of transparency, facades altogether keep the warm-cold balance. Opaque glass for French balconies I propose in a red color, by that refer to brick buildings right next to the area. Walls behind the translucent facades, in corridors, shared rooms leave the space for imagination – could be clad in any material, unless it is fire-resistant. For instance, tiles, graphic or exotic patterns gives an eclectic look, which is quiet organic in Katajanokka artistic ambiance and also relevant to harbor as it reminds of traveling and faraway countries.

### **Materials proposed for exterior:**

1. Facade finished in granite
2. Translucent glass
3. Balcony glass
4. Artistic solution for interior walls
5. Metal railing
6. Colorful frosted glass for balcony railing



Fragment of the courtyard facade, fragment of gallery interior. 1:200



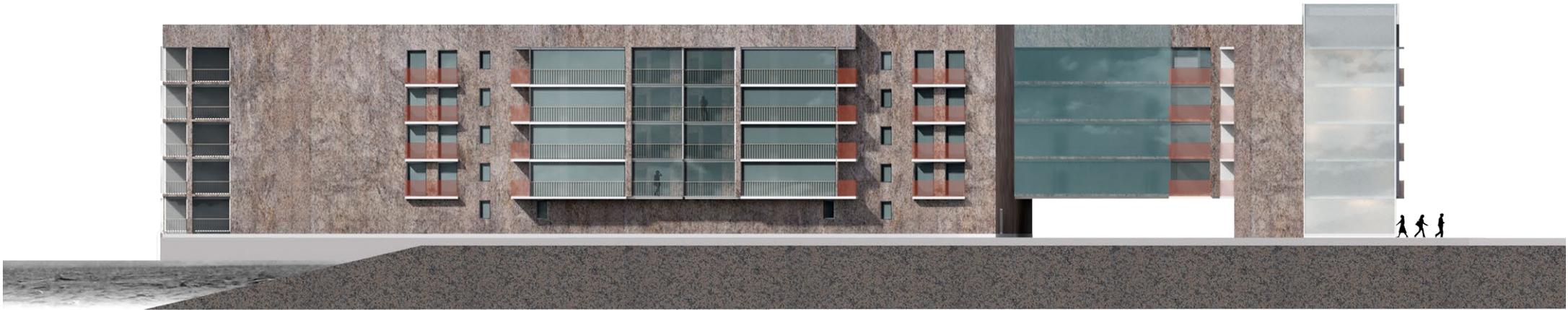
*Basic block, south facade. 1:400*



*Basic block, west facade. 1:400*



*Basic block, north facade. 1:400*



*Basic block, east facade. 1:400*



*Basic block, courtyard facade. 1:400*



*Basic block, courtyard facade. 1:400*



# The Home

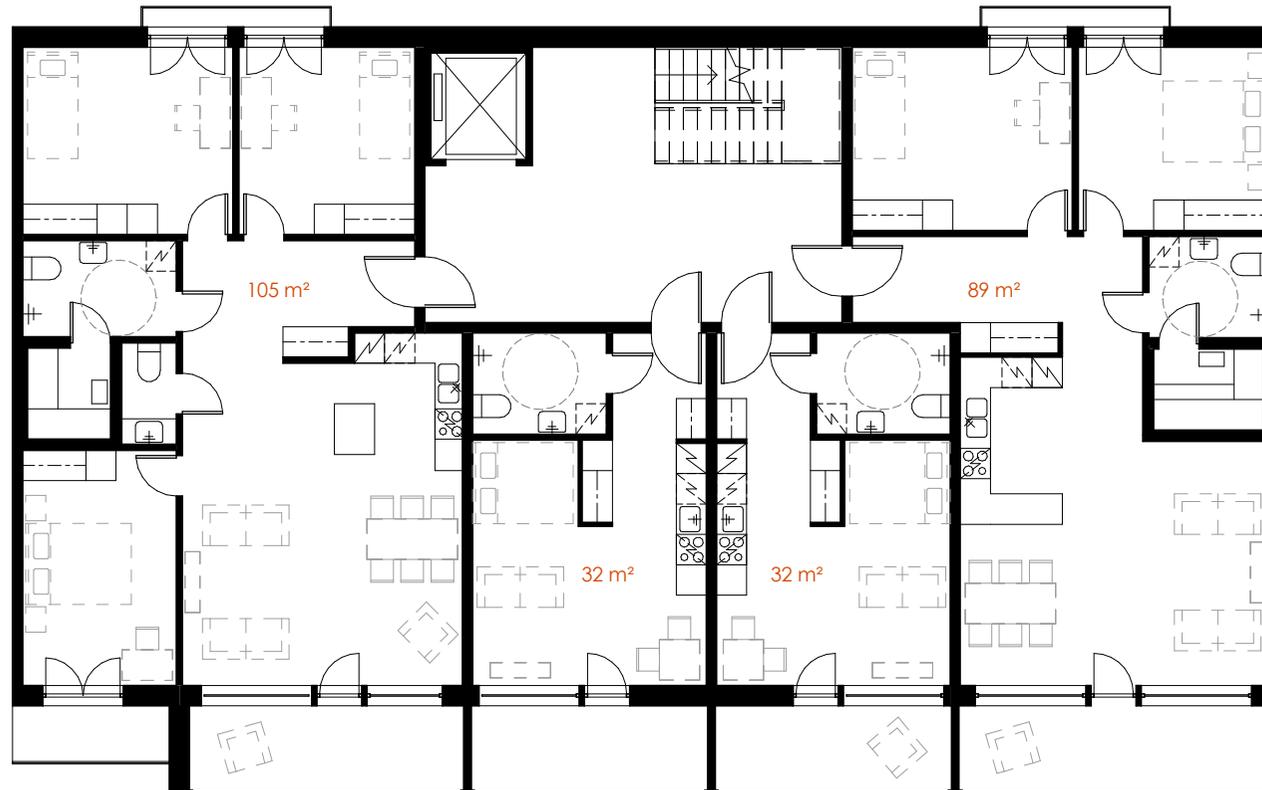
I expect that, while living in the city by the sea, one applies for reasonable sized yet comfortable apartment with pleasant orientation and views. Therefore, that is what I define as a focus of my apartment solution. One of the most important thing in the design is to make sure that apartments are accessible or can be rearranged as such. Also, I pay attention to the arrangement of the shared-use spaces, supporting facilities since they as well contribute to the comfort of living.

Following the trend of residential development in Helsinki, I make an accent on medium-sized one-bedroom apartments. Taking the advantage of pleasant south and west orientation, uniform apartments are placed in gallery scheme. Each of those homes have a spacious terrace towards the sea. In each of the gallery units I include a shared living room with sauna and access straight to the seaside terrace. Such spaces can be used for community events, celebrations, as well as rentable spaces for tenants' own use. Storages and some supporting facilities are on each floor of the galleries.

Single room apartments are also designed in units along with bigger up to three-bedroom apartments. Those apartment units take street and eastern sides of residential blocks with most of living room towards the sea. For these apartments, my intention is to ensure efficiency while keeping them comfortable and functional. Supporting facilities are on the ground or underground floors. Blocks along the street have direct access to the underground parking.

Somehow experimental are the extra-small apartments in a form of serviced co-housing. I would like to include them in the project so to emphasize the dynamic life flow in the center of capital city. Such apartments are design for singles, who are likely to use it as a second home or for rent. For the service facilities, I draw spaces on street level, for the tenants' use there are common living room on each floor and a roof terrace.

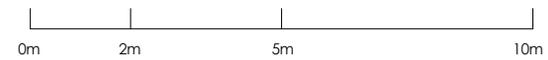
# Apartment unit A



105 m<sup>2</sup>  
89 m<sup>2</sup>  
32 m<sup>2</sup>

4 room apartment  
3 room apartment  
1 room apartment (studio)

1:150

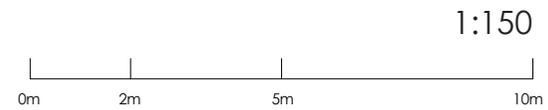


# Apartment unit B

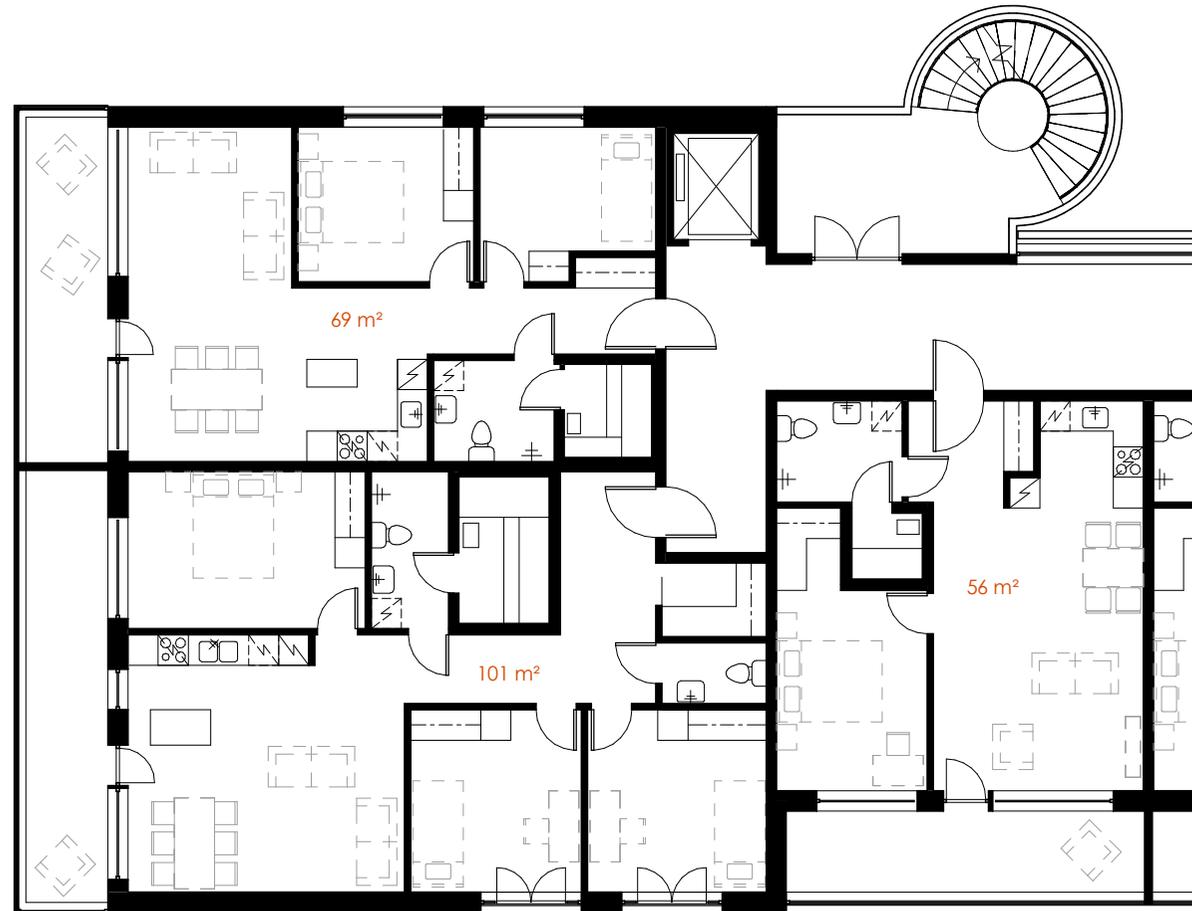


105 m<sup>2</sup>  
93 m<sup>2</sup>  
48 m<sup>2</sup>  
37 m<sup>2</sup>

4 room apartment  
3 room apartment  
2 room apartment  
1 room apartment (studio)



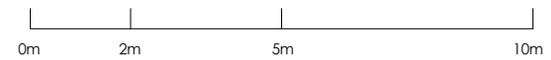
# *Apartments in the gallery units*



1:150

101 m<sup>2</sup>  
69 m<sup>2</sup>  
56 m<sup>2</sup>

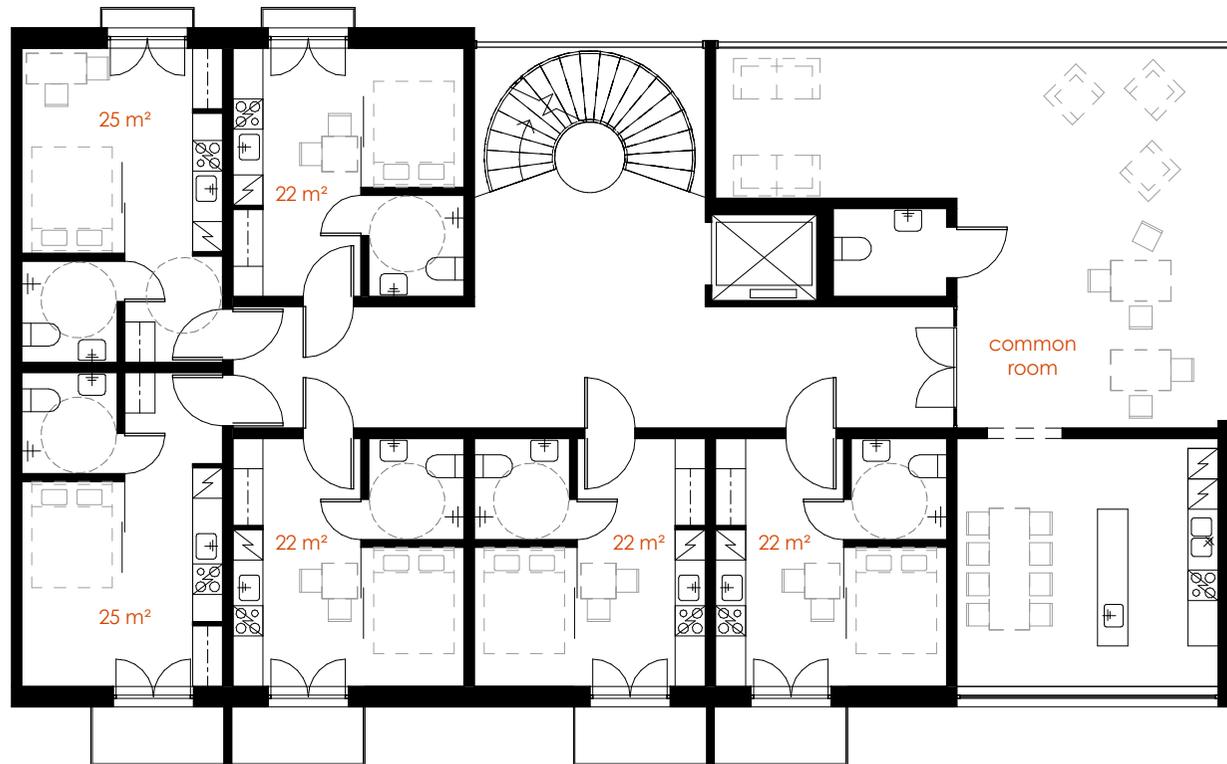
4 room apartment  
3 room apartment  
2 room apartment





Section, fragment of interior. 1:150

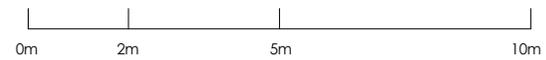
# *Extra-small serviced apartments*

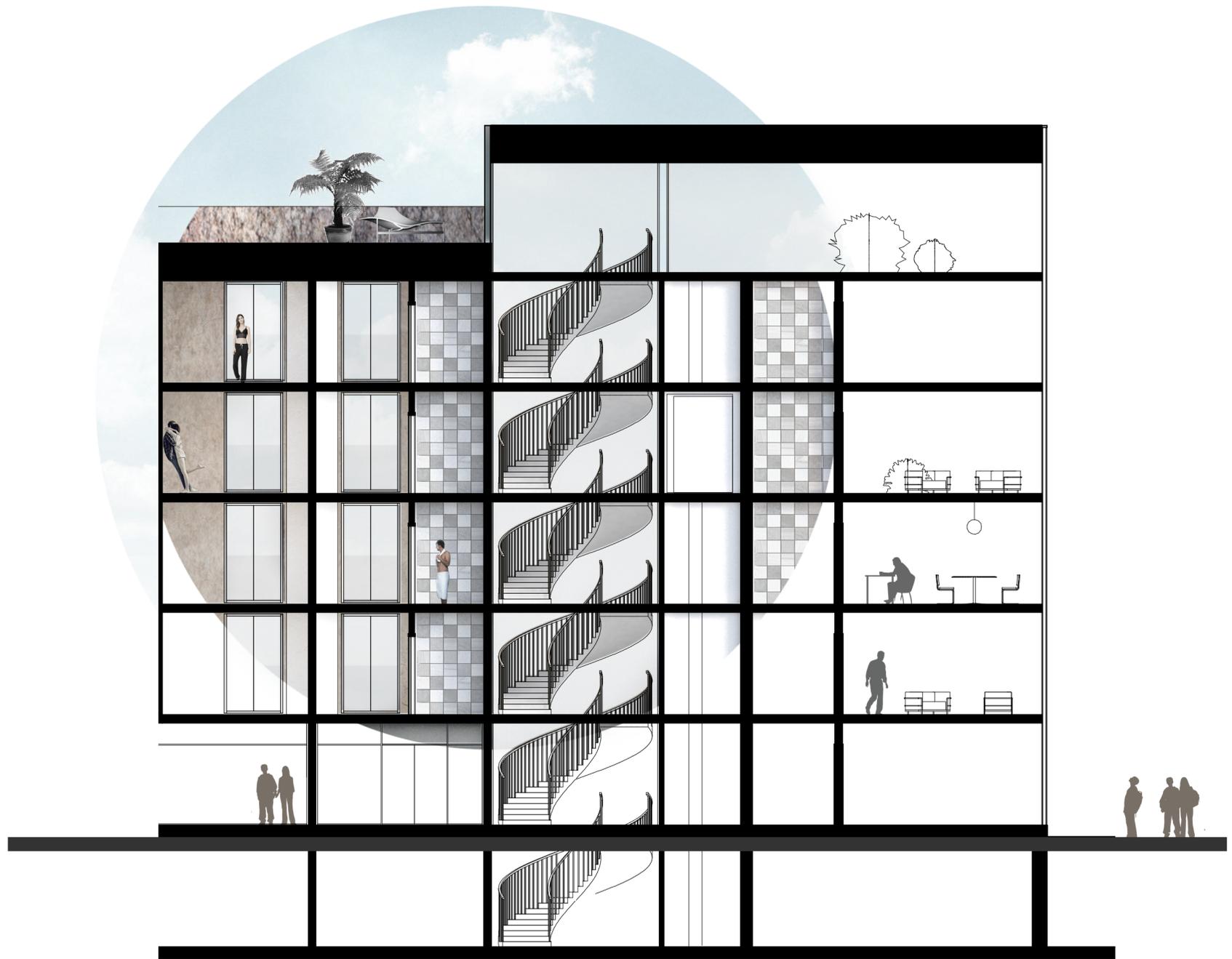


22- 25 m<sup>2</sup>

1 room apartment (studio)

1:150





Section, fragment of interior. 1:150

# Conclusions

Since living environment is one of the most important spheres of architecture and it should be responsive to the time and citizen's request, I take the task to propose a residential area as my diploma thesis. This work is a study project for me to explore the trends in housing design in general, especially in the city of Helsinki. The project helps me to improve my artistic and professional skills in residential design and urban planning. Throughout the project, I keep the idea of contemporary seaside living and imagine the resident's portrait to adapt my design to the needs of nowadays city life.

On the sketching stage I look for a reasonable solutions that are place- and time-specific and chose the concept that fits to the site the best. I analyze how the area develops and what solutions may fulfill the need of the city in terms of residential design.

In order to propose architectural solution for new residence area I look at Katajanokka's history, current state and predictable development. That helps me to create the architecture suitable to the stylistic of the area and takes into consideration the existing urban structure and residential buildings. The proposal is a block structure that helps to reduce the weather conditions on the site and takes benefit of living by the sea into account.

While developing the apartment solutions, I consider the orientation of the housing blocks according to the sun and as well according to the landscape. The main goals are to emphasize the feeling of seaside living, allow accessibility and diversity of living environment. Responding to a dynamic flow of urban life I include different types of public facilities. Through shared space I find a way to establish the neighborhood and communication between residents. Several types of housing solutions, from small studios to spacious family apartments make the residence attractive for different citizens.

I expect that the present work illustrates the example of a residential design attentive to the cityscape, comprehensive and fresh. The work is a vision of how the city of Helsinki and particularly Katajanokka may grow and transform. As well, the project shows the option of contemporary apartment with pleasant location and attractive urban environment.

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