

# DELTA

## 9736



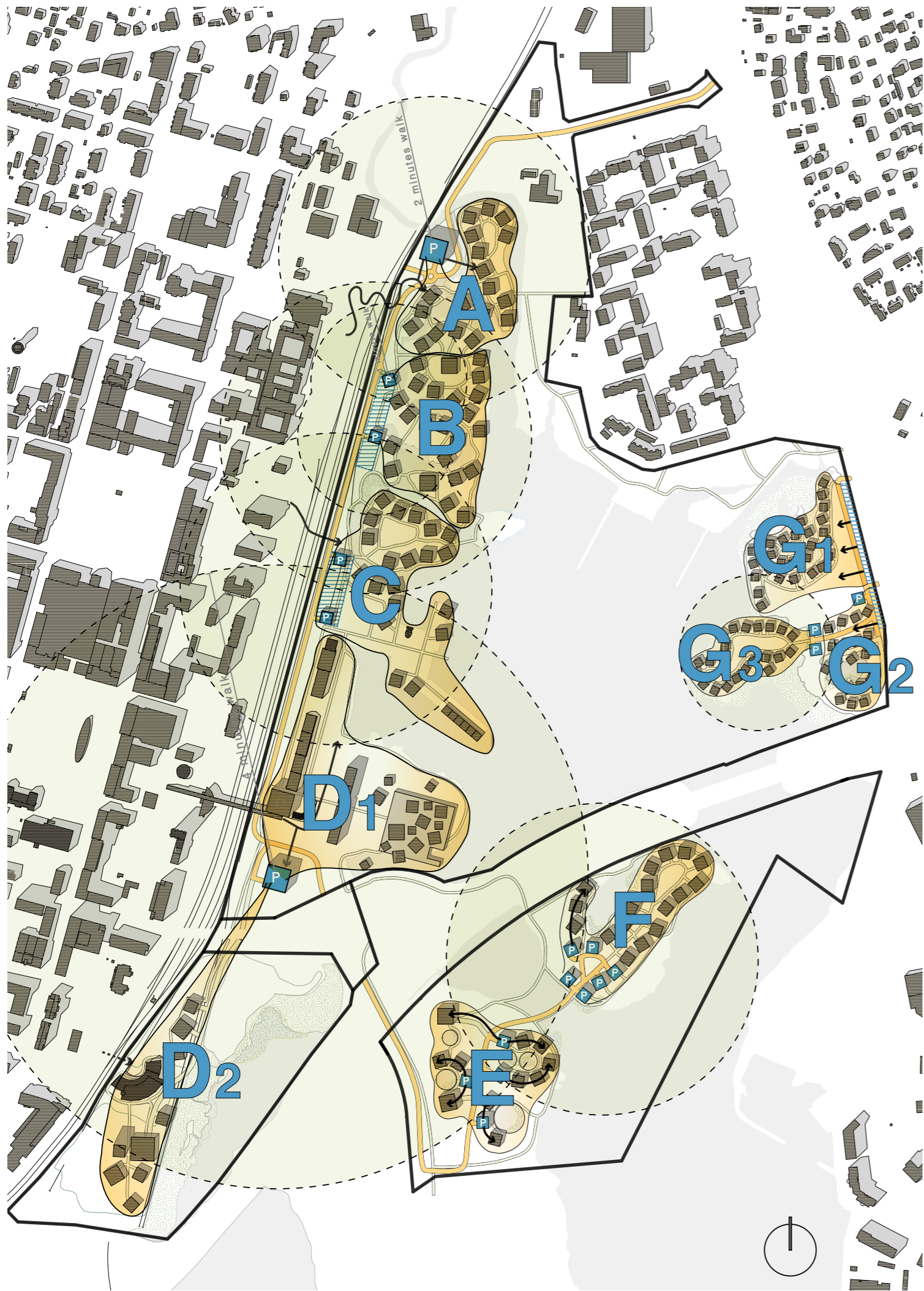
# FUNCTIONS

The new development has a consistent urban form which contains a mix of different functions with housing as the main ingredient. The kindergarden makes focal points internally in the housing developments, while other social functions and smaller spaces for local services are mixed with the housing program.

There is a market on the pier that faces the science center which becomes a village on its own.

The area on the east side of the lake is more focused on housing but there is also room for local shops and services. To be able to reach services locally is important to reduce car use and create strong neighborhoods.



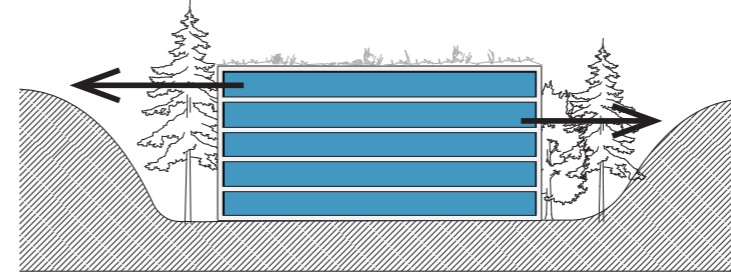


**PARKING REQUIREMENTS**

1 parking space/ 85 m<sup>2</sup> floor area

**Area A**

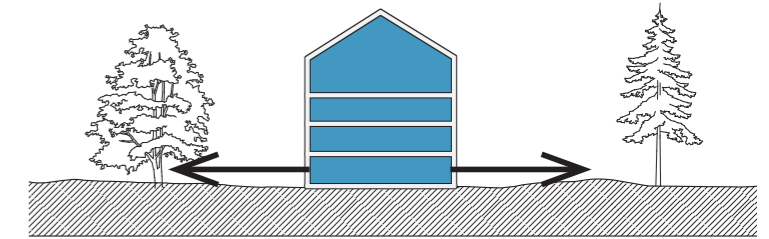
Floor area: < 24000 m<sup>2</sup>, req. parking; 240 places



1 multi level car park (32m x 32m), 5 floors 240 places

**Area E**

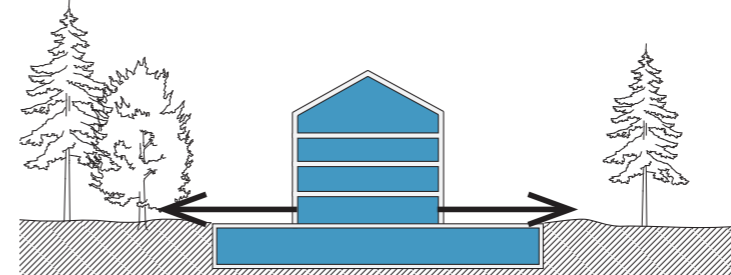
Floor area: <16300, req. parking; 192 places



4 multi level car park (16m x 16m), 4 floors 192 places

**Area B**

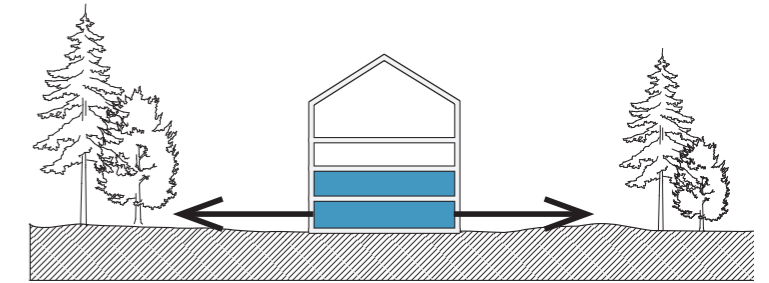
Floor area: < 23 000 m<sup>2</sup>, req. parking; 273 places



2 multi level car park (16m x 16m), 4 floors 96 places  
Basement parking 177 places  
Total 273 places

**Area F**

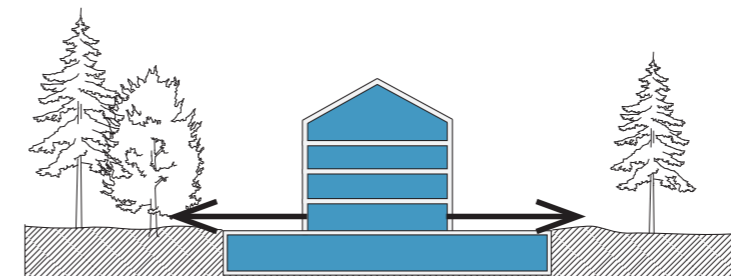
Floor area: <23500, req. parking; 276 places



6 buildings with 3-4 floors for parking 240 places

**Area C**

Floor area: < 21 100 m<sup>2</sup>, req. parking; 248 places



2 multi level car park (16m x 16m), 4 floors 96 places  
Basement parking 152 places  
Total 243 places

**Area G1, G2, G3**

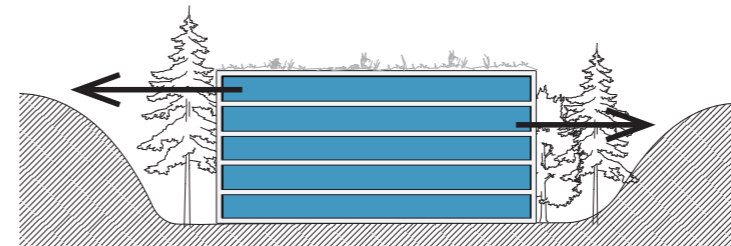
Floor area: <15700, req. parking; 208 places



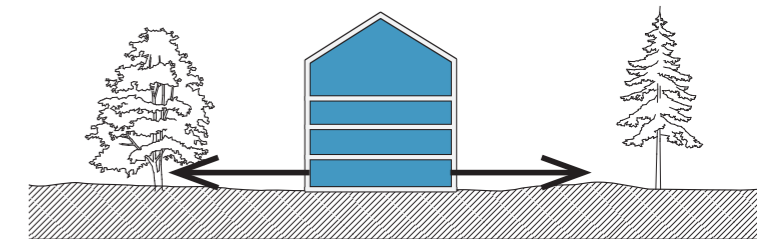
Parking on ground 80 places

**Area D1, D2**

Floor area: Science center/ offices, req. parking; 240 places

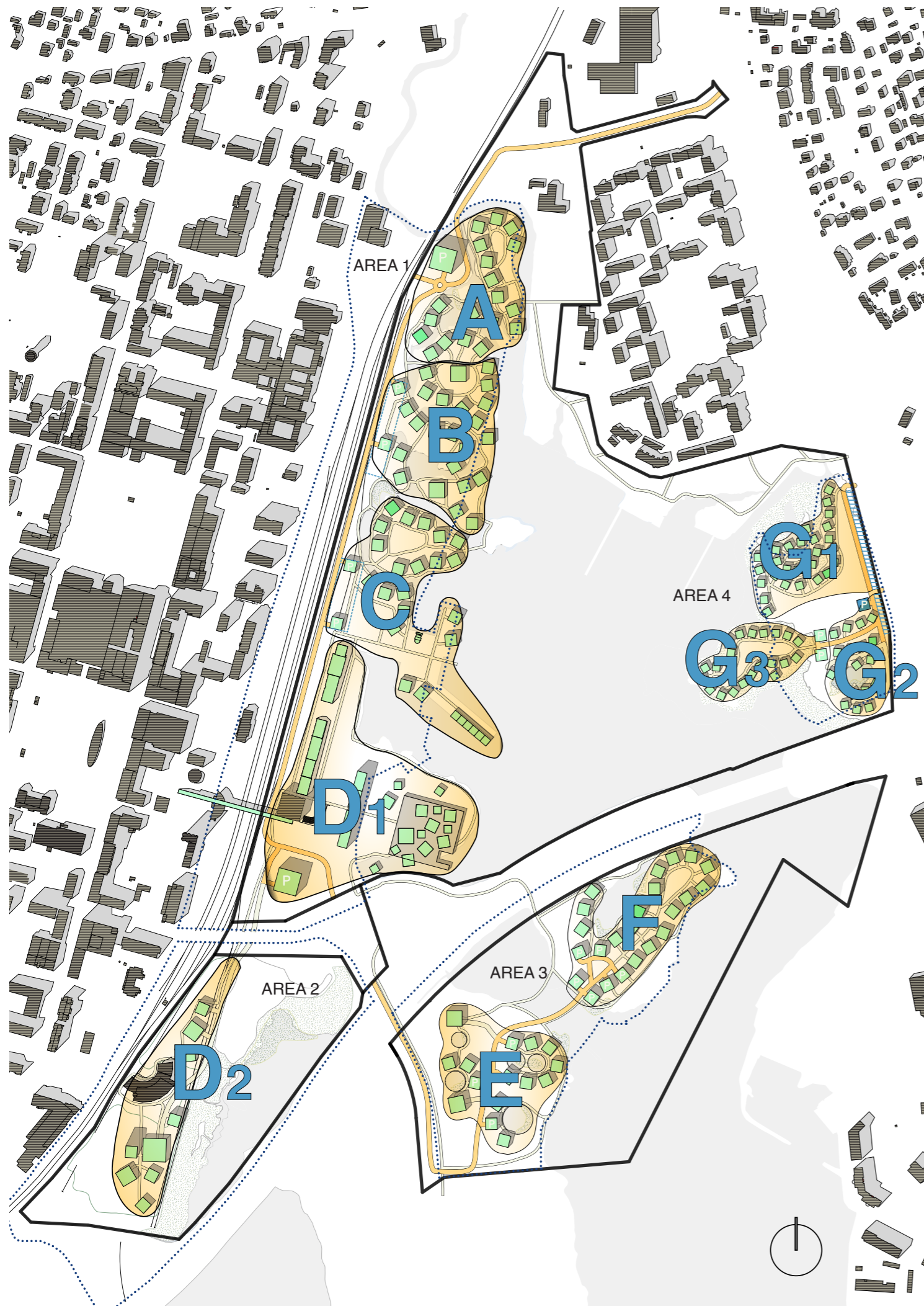


1 multi level car park (32m x 32m), 5 floors 240 places



Multi level car park 128 places

**Total amount ..... 2045 cars**



# BUILT AREA

The project aims for a development where massive growth is not the main objective. Instead the projects focus on a gentle integration of nature and dwelling. There is a possibility of adding more public functions, offices and shops while keeping the general typology of the development.

- AREA 1: Land: 196330 m2 / built 78149 m2**
- AREA 2: Land: 114274 m2/ built 7527 m2**
- AREA 3: Land: 95576 m2/ built 39787 m2**
- AREA 4: Land: 37861 m2/ built 15644 m2**

**Area A:**  
 Area size: 23441 m2  
 Built area: 15280 m2  
 Parking: 5120 m2  
 Total: 20400 m2  
**FAR(Floor area ratio): 0,87**

**Area B:**  
 Area size: 26890 m2  
 Built area: 20708 m2  
 Parking: 1896 m2  
 Total: 22604 m2  
**FAR: 0,84**

**Area C:**  
 Area size: 34 986 m2  
 Built area: 18960 m2  
 Parking: 1896 m2  
 Total: 21145 m2  
**FAR: 0,6**

**Area D1:**  
 Area size: 48293 m2  
 Built area: 8800 m2  
 Parking: 5120 m2  
 Total: 14000 m2  
**FAR: 0,2**

**Area D2:**  
 Area size: 21390 m2  
 Built area: 7527 m2  
 Parking: -  
 Total: 7527 m2  
**FAR: 0,35**

**Area E:**  
 Area size: 21551 m2  
 Built area: 12532 m2  
 Parking: 3792 m2  
 Total: 16324 m2  
**FAR: 0,75**

**Area F:**  
 Area size: 20656 m2  
 Built area: 18012 m2  
 Parking: 5451 m2  
 Total: 23463 m2  
**FAR: 1,13**

**Area G1:**  
 Area size: 15728 m2  
 Built area: 4800 m2  
 Parking: on ground/ along the road  
 Total: 4800 m2  
**FAR: 0,3**

**Area G2:**  
 Area size: 10107 m2  
 Built area: 3600 m2  
 Parking: 948 + on ground/ along the road  
 Total: 4548 m2  
**FAR: 0,44**

**Area G3:**  
 Area size: 10861 m2  
 Built area: 4400 m2  
 Parking: 1896 m2  
 Total: 6296 m2  
**FAR: 0,57**

**TOTAL BUILT AREAS (A-G) 141.107 m2**

**Housing: 78988 m2**  
 Shops/ Service: 3500 m2  
 Kindergardens/ Social functions: 3500 m2  
 Science center: 14000 m2  
 Office space: 15000 m2  
 Parking: 26119 m2

# GREEN AREAS/ PARKS/ MARSHES/ WETLANDS

The new development area is an integrated system of nature and buildings so the actual areas that have a natural is larger. In this calculation we have focused on the areas that will be easily accessible to the public.

Green areas and parks : 84412 m<sup>2</sup>

Marshes and wetlands: 54489 m<sup>2</sup>



# DELTA

## The challenge of ecological development

The challenge of this task is to look into the future of Mikkeli. How shall the city develop and grow. We see the program of the competition as a visualisation of a possibility of future growth. At the same time the program asks for an ecological concept of urban development. We believe that an ecological mindset means that other factors, such as integration with the natural conditions and social and economic stability must be considered as well as growth potential. The city of Mikkeli has been developed over time as a result of a series of many different urban plans, but also in a strong relationship to a natural condition. We believe that the new development of the city should bear witness to a new kind of planning and a return to nature values.

The railroad is a barrier between the city and the shore and it makes it difficult to create a clear contact between the old city and Satamalahti. So perhaps Satamalahti should be something of its own, an oasis of regenerated nature and small scale housing, a car free area dedicated to nature and people. It's about re-integrating the historical landscape and creating a new context with a careful introduction of new housing areas. We propose to ignore the barriers of the road and the train and create the new area as an autonomous place of different sustainable neighbourhoods with a different focus than in the rest of the city: to re-establish lost marshes, create a river delta and create new houses with a light footprint scattered around along the new shoreline.

## A village by the lake

The new shoreline is developed as a result of studies of the historical shoreline, but also the idea of a blurred barrier towards the water that we found in the Saimaa area. It will increase land value and will create a characteristic harbour. This way it will also be possible to keep existing nature and wildlife, and possible make space for new species. This creates a new image of Mikkeli: The small town by the lake. A place where nature, protected species and animals thrive in coexistence with the city.

## Neighbourhoods and ecological building methods.

We propose wooden houses with heights of 2-6 floors. The typologies are based on the traditional Finnish villa in the forest and typical lakeside sheds. The houses are clustered into smaller communities with common outdoor areas, local shops, kindergartens and services. A strong local community is the foundation for ecological city development – not large scale planning strategies.

All the new houses should follow some basic guidelines for sustainable developments:

*Build as small as possible, shared ecological solutions for infrastructure, bioclimatic design, light building footprint, permaculture and local renewable energy. The houses should be well insulated, compact and simple with natural ventilation, temperature zones, buffer zones and flexibility.*

*Build with local, lasting materials that are recyclable and have little or no surface treatment. Simple technological solutions, and the use of passive solar heating will be the main part of the energy solution. Mikkeli's timber and veneer industry could also play a key role in developing these houses.*

## Density.

We propose to extend the city towards the lake, not with an area of high-density housing and office developments. We propose to build an area of low density, with an FAR below 1.0) so that a closer integration towards the lake is possible. This will be a positive area for the city as a whole. If more density is needed in the future we believe this development should take place in the city centre.

## Nature.

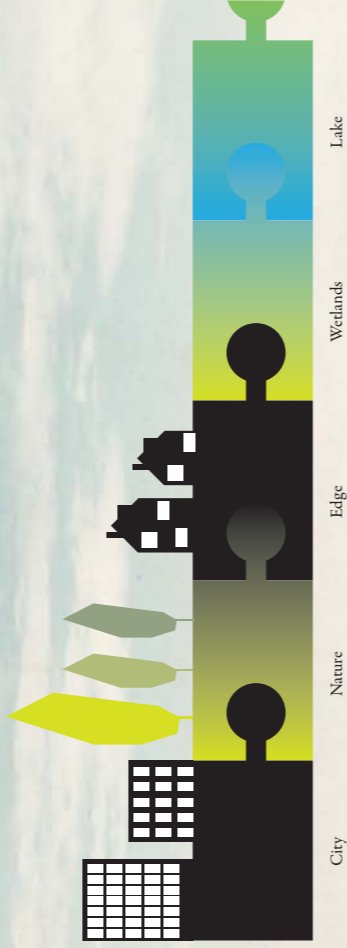
The Saimaa Lake is home to a vast array of different species. Many of these species are not so common in the Mikkeli area but we believe that our proposal will welcome these animals to come back into the city. Creating more wetlands and marshes are very positive for animal life.

## Attractive living areas without cars.

In our proposal we keep the car parking in buildings strategically placed near roads and new collector streets while creating mainly car free housing areas. The cars might be necessary at the moment but we want to plan for a future with much less intensive use of cars. We show on the parking diagram how we can achieve necessary parking while creating neighbourhoods that are dominated by nature not traffic. We propose also to create a new electrical boat route connecting the city and the new development area. We believe there is a lot of potential for both tourism and light recreational boat traffic. We also propose several more bridges for pedestrians and bikes.

## A city for the future.

We propose to plan in Mikkeli a city that is integrated with its natural condition - both the existing nature, and nature that changes into the future. We believe that this development has the possibility not to further dominate the city but develop a city that integrates with its surroundings.



City

Nature

Edge

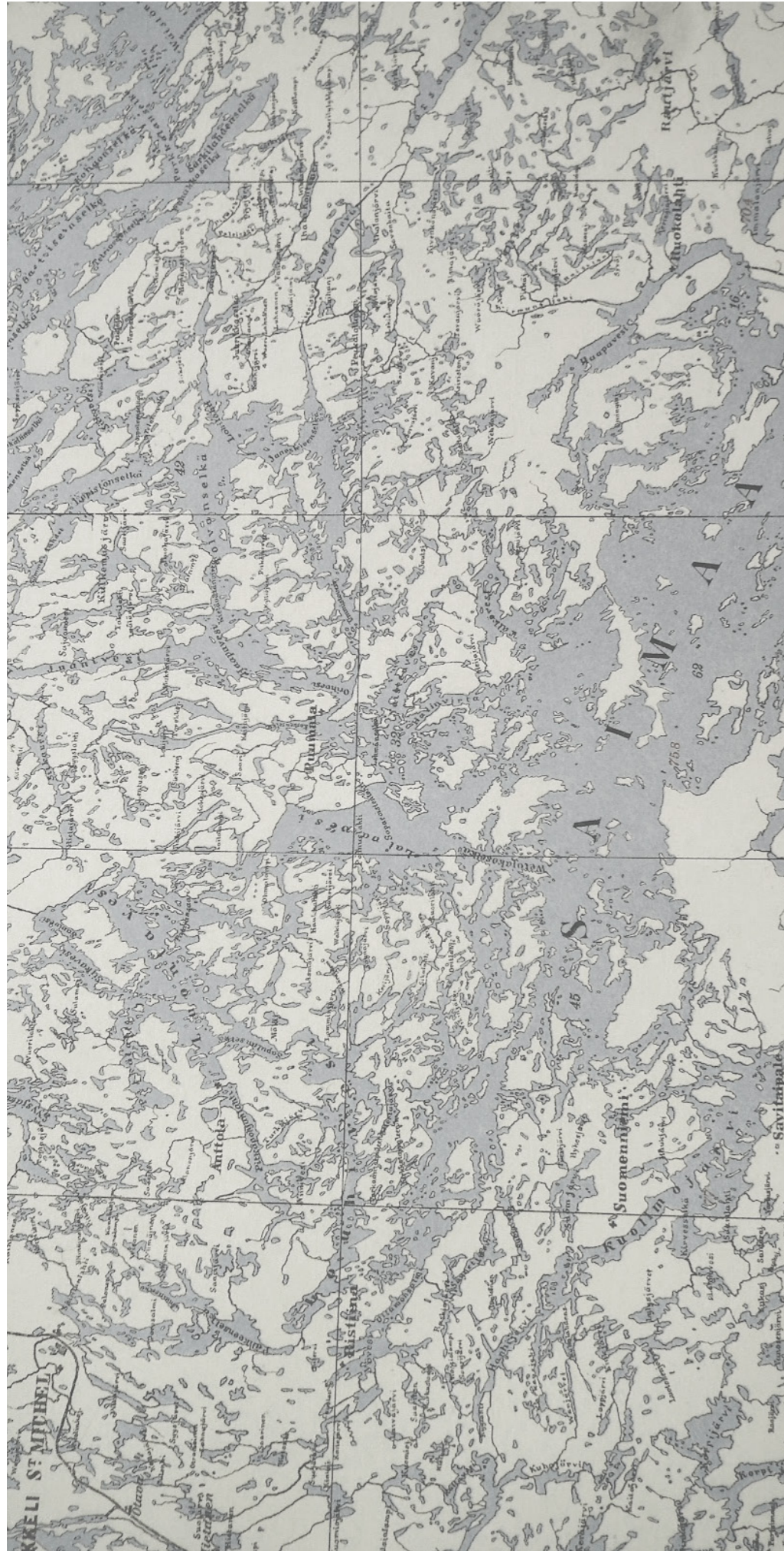
Wetlands

Lake

## ECOLOGICAL CONCEPT

The new development reestablishes the relationship between the original landscape. The edge between the city is no longer clear - but blurred and shifting.





## Local species in Mikkeli and Saimaa region

### Animals



Lynx



Brown Bear



Grey Wolf



European Otter



Seal

### Birds



Redwing



Purple Finch



Reed Bunting



Woodpecker



Ural Owl



Eurasian Wren



Boreal Owl



Greater Scaup



Nuthatch



Wood Sandpiper



Night Jay



Redstart



Hobby Bird



Black-throated Diver



Common Crane



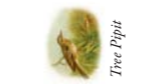
Common Tern



Whooper Swan



Eurasian Wigeon



Tree Pipit



Lesser Spotted Woodpecker



White-throated Dipper



Bird Merlin



White-tailed Eagle



Pied Flycatcher

### Flora



Yellow Bedstraw



Alder



Pine



Fern



Dandelion



Spruce



Linde



Hypochaeris Micadota



Flameless Wiveshipf



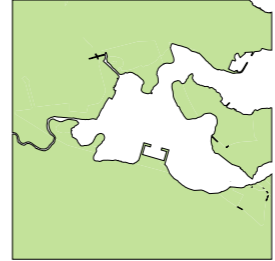
Fragrant Orchid



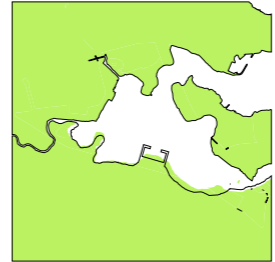
Anemone Caroliniana



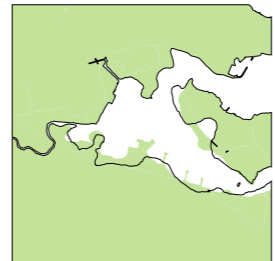
Spring Paque Flower



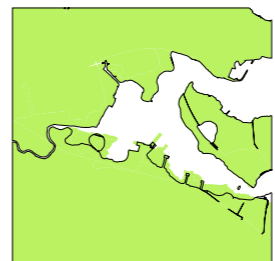
1841



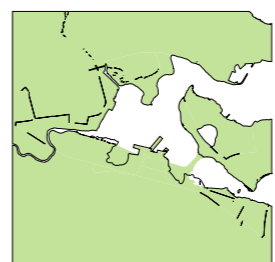
1860



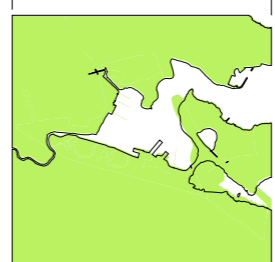
1904



1950



1960



2012



DELTA

## Changing shorelines 1804-2012

Mikkeli has a strong relationship to the Saimaa lake. Since the foundation of the city the edges has been developed and redeveloped continually. The new part of the city is a continuation of this border development while opening up for a continued change of the relationship between land and water.

## Historical development of the urban situation

1776 - Establishing the city



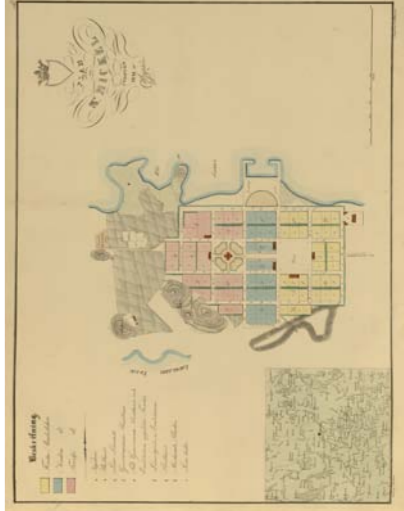
1776 - Mikkeli Region



1790 - Samuel R. Moller



1841 - Map



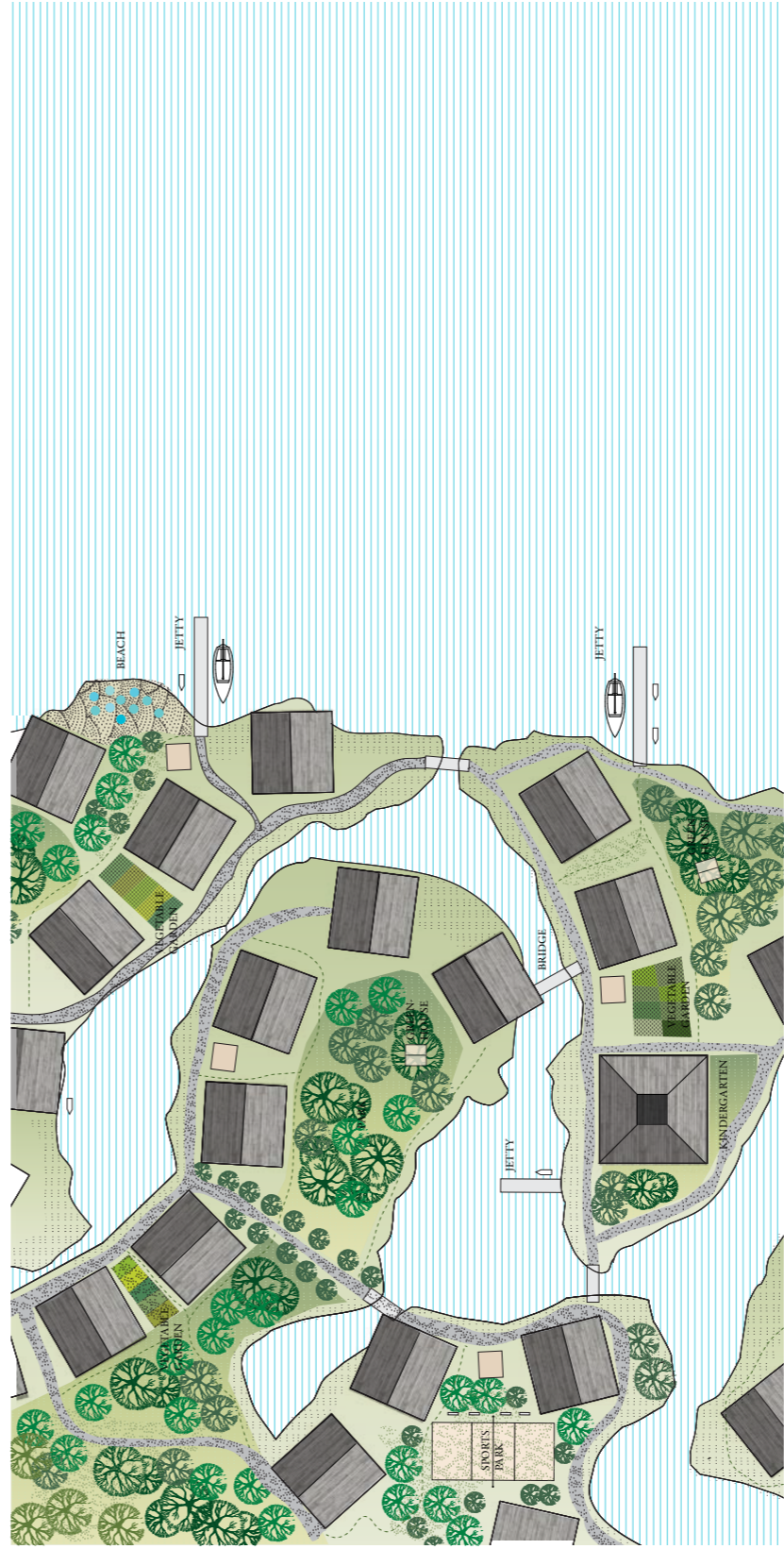
1902 - City map





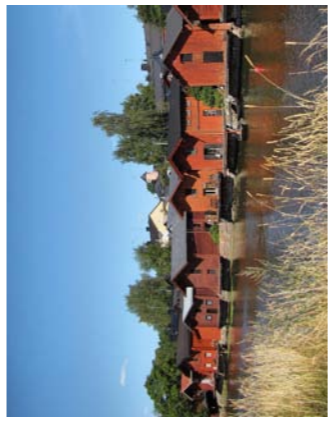


Public space between the new houses - nursery in the middle.



**Detail plan - community.**

The new development seeks to create integrated communities with shared local functions, social areas, and access to surrounding nature. The integration of nature and city becomes both a planning tool and an ecological principle.



Old Sheds in Porvoo



Pekka Halonen's House at Lake Tuusula



Section B-B 1:2000



Some of the new houses sit in the new marshland between the land and the lake.

### Functions

The new development consists mainly of housing, mixed with local service, office space and social functions.



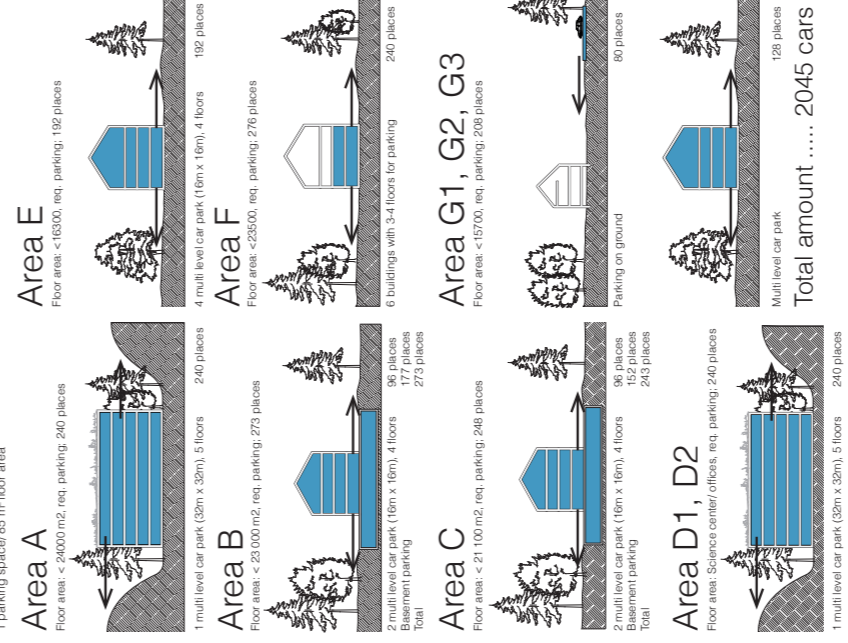
### Parking

Parking facilities are located close to main roads so as to limit driving in the housing areas.



#### PARKING REQUIREMENTS

1 parking space/ 65 m<sup>2</sup> floor area



### Section C-C 1:2000

# Development concept



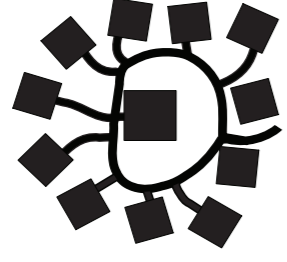
## DELTA

We propose a new meeting between land and sea that we call the delta. It is founded on the idea of a blurred lake that we found in lake Saimaa. It is not a hard border but a soft and wet border.



## A HOUSE IN NATURE

We propose simple houses that integrate with nature. The new development integrates with the edge between Lake Saimaa and the city - the Delta.



## BUILDING COMMUNITIES

Houses are combined into clusters that make small communities within the larger development. A strong local community is an important aspect of ecological development.



Granularity map 1:4000



Section A-A 1:2000