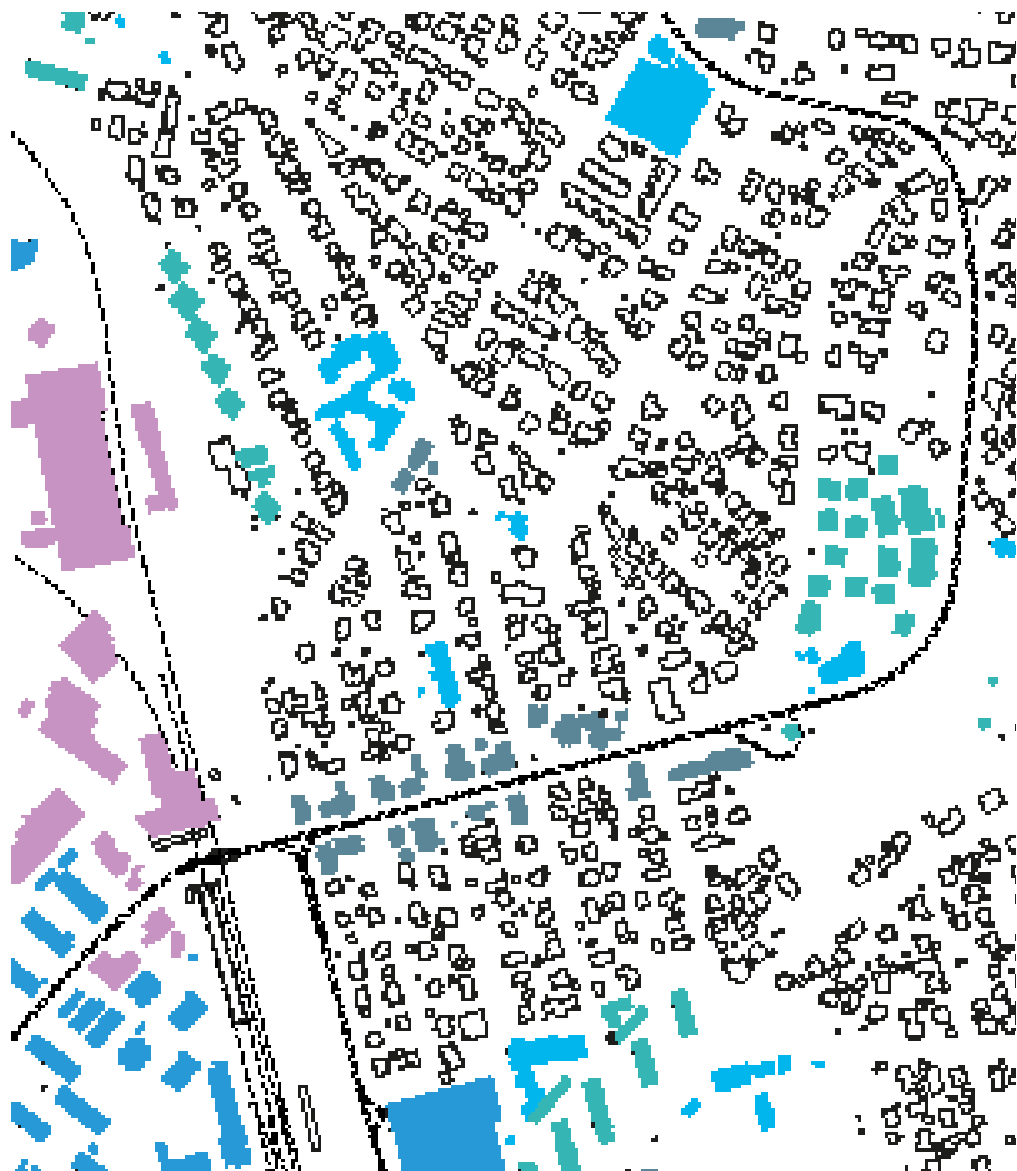


EXTRA RESEARCH AND MATERIAL

HÅVARD BLEKASTAD



Regulations: Scale 1:5000

□ Roads and infrastructure

■ Shops in smaller buildings

■ Large, freestanding shops/offices

■ Dense, multidwelling housing

■ Parks and recreation



Noise: Scale 1:5000

- ☒ Red zone for noise
- ☐ Yellow zone for noise
- ☐ Not in a noise zone



Transportation and traffic

— Traffic > 50 000 cars/day


— Traffic < 10 000 cars/day

— Traffic < 5000 cars/day

— Traffic < 1 000 cars/day

 Transportation Hub

 Tram station

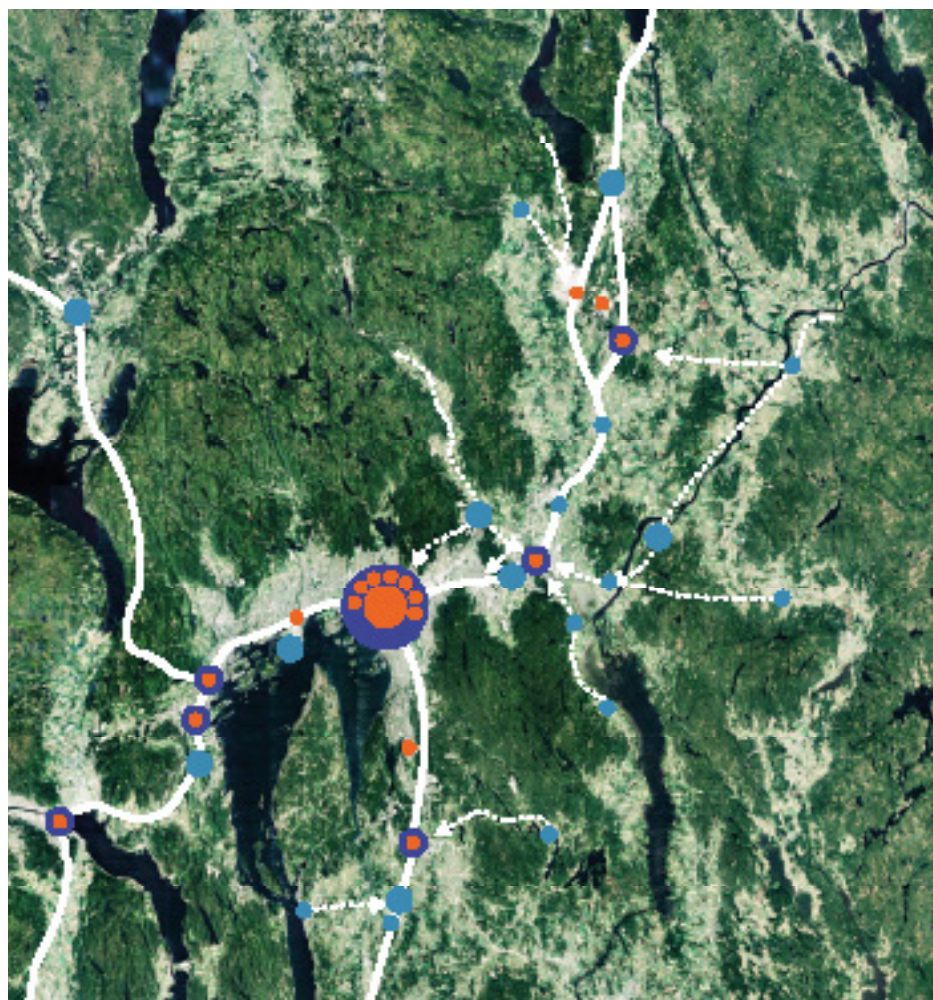
 Bus station

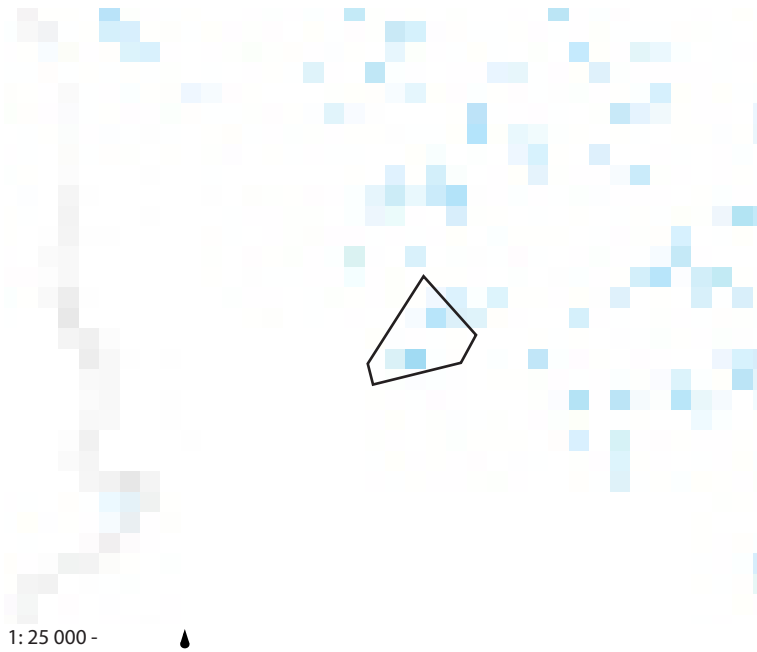
Noise: Scale 1:5000

- ☒ Red zone for Pollution
- ☐ Yellow zone for Pollution
- ☐ Green zone for Pollution

On the opposite side is the “Knutepunktsplanen” overlayed on an areal photography to show its interaction with the Oslo and its surroundings. The aim of the plan is to concentrate densification around transporation nodes/hubs.It shows the densification nodes on a regional scale.

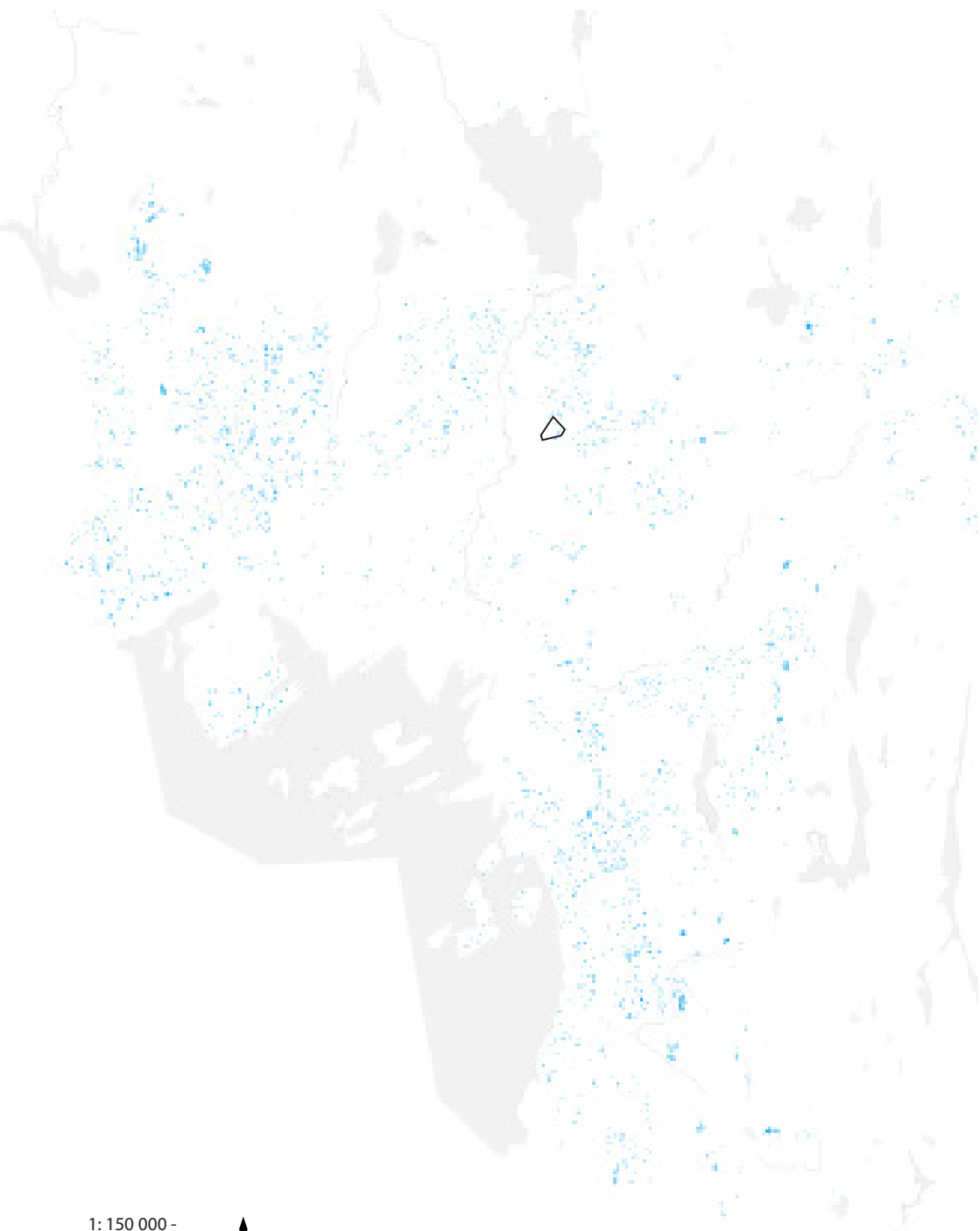
- Regional urban areas
- Local urban areas
- Hubs
- Main lines
- - Secondary lines

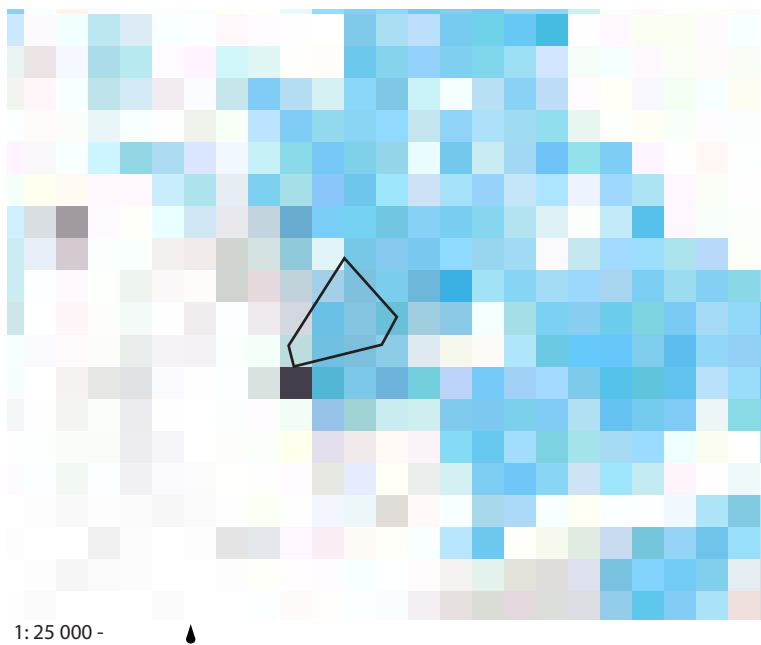








As you can see, the existence of small scale housing (defined by the grey forms), and the plan called "Småhusplanen" have a good correlation. This plan will be considered in a dialectical exercise later on.

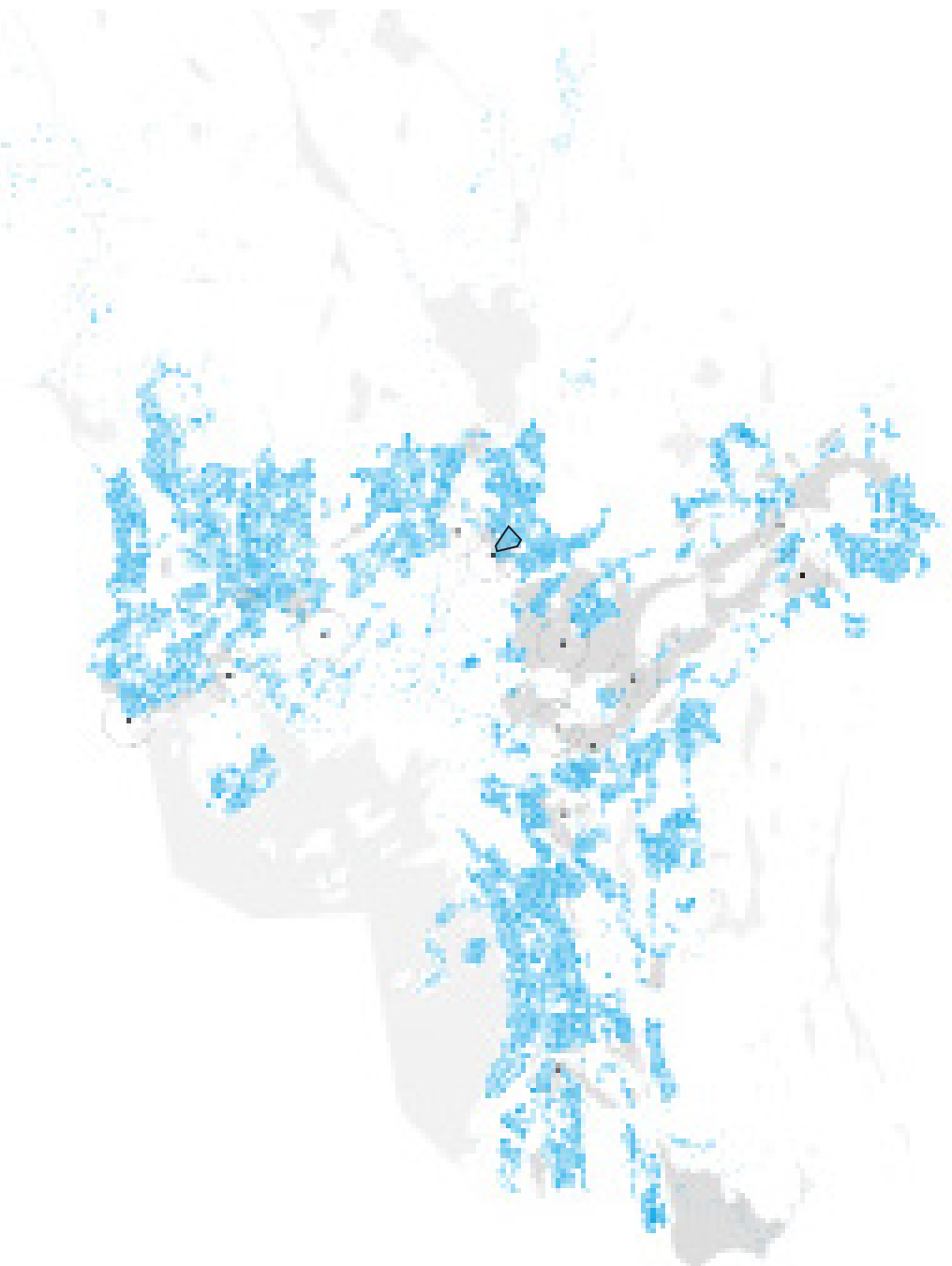
- Småhusplanen
- Small scale housing
- Water

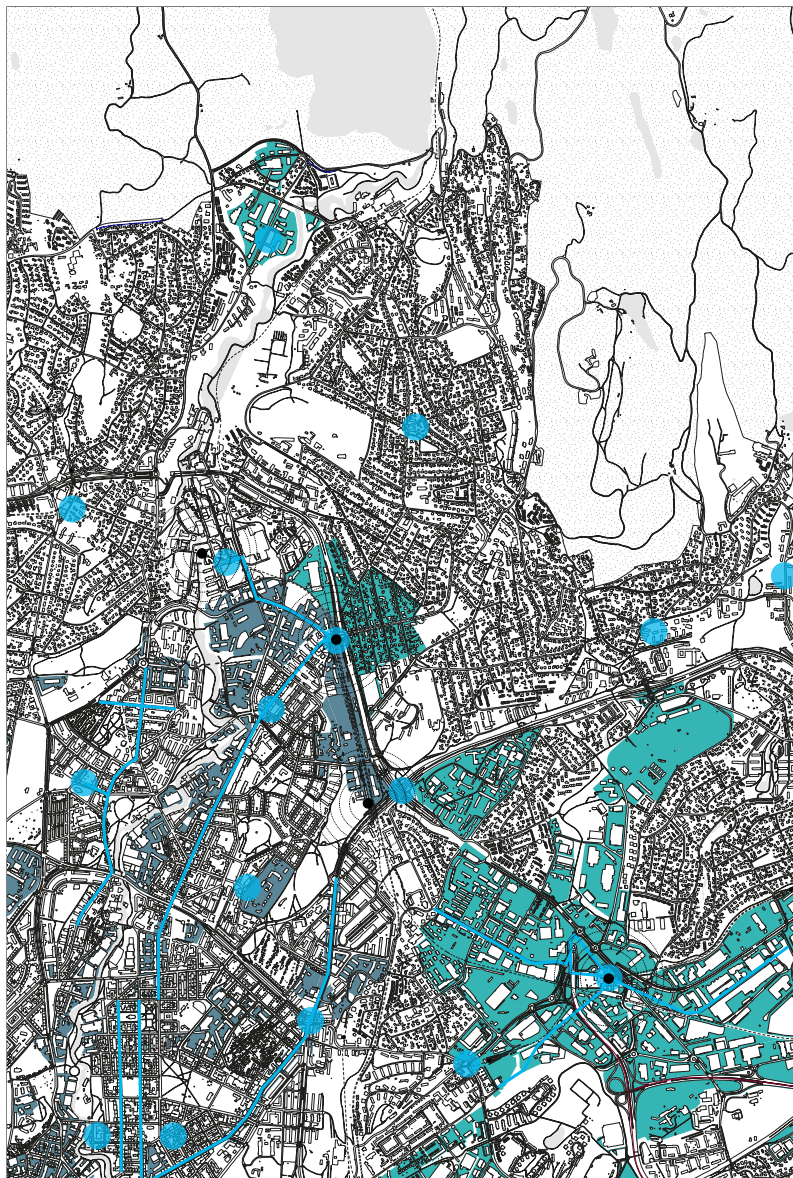




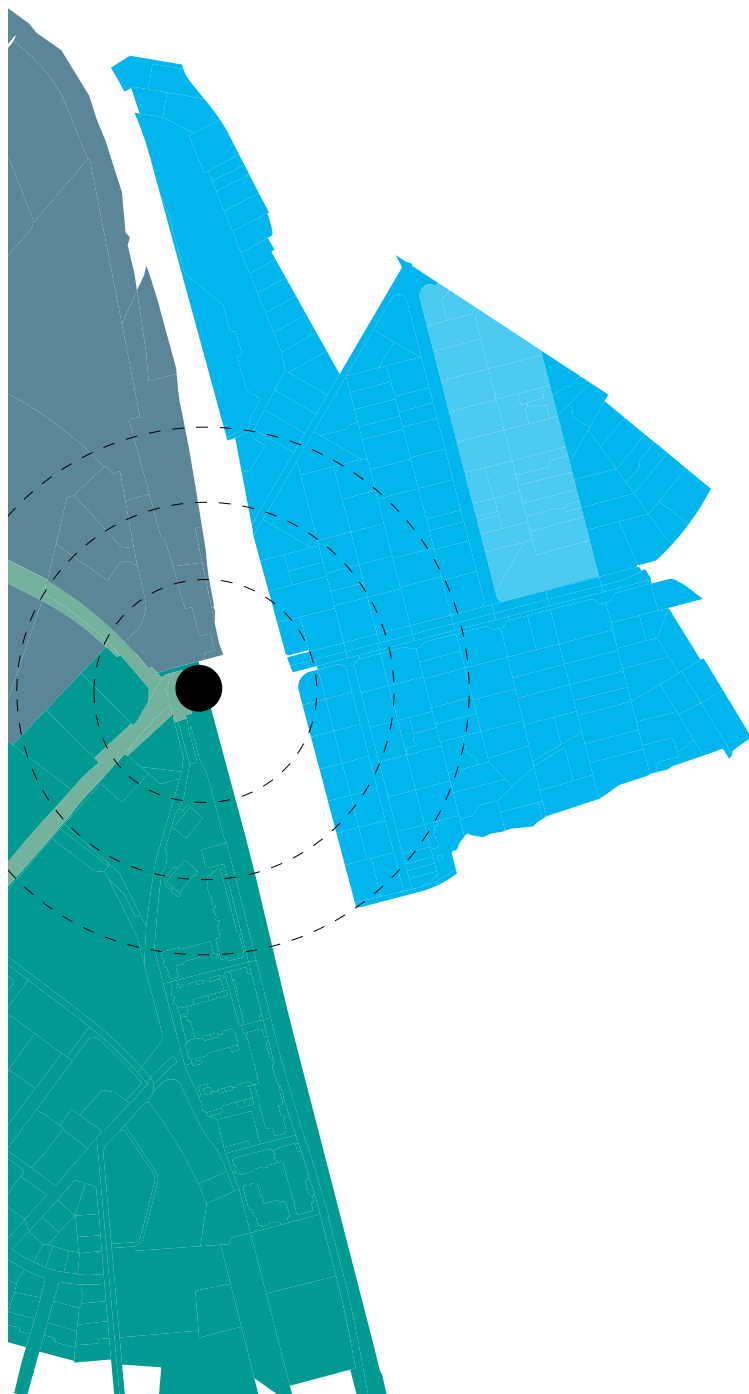
Here I have overlayed the areas that are scheduled for redevelopment, the designated knutepunkt and the small scale housing units.

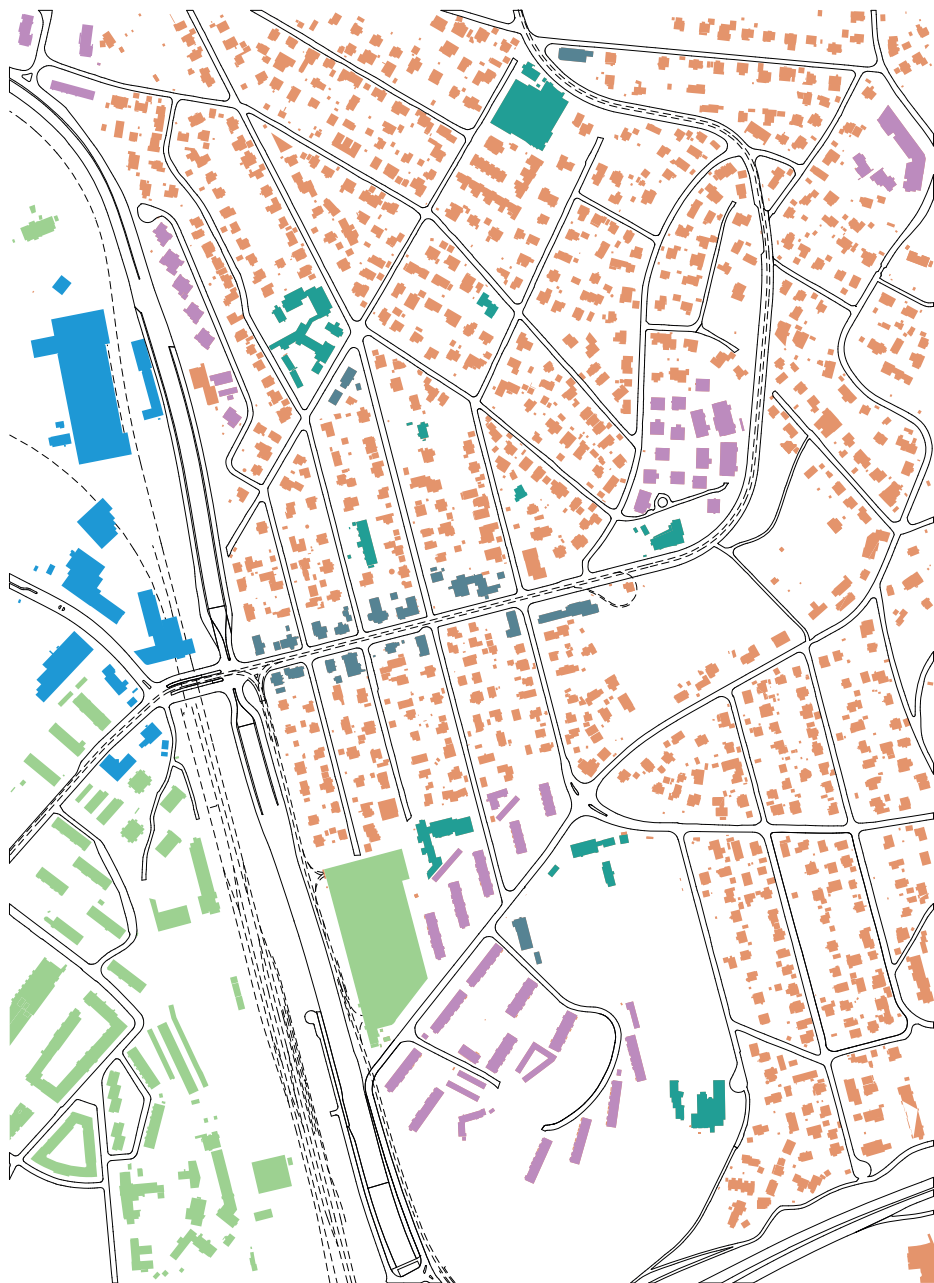
-  Small scale housing
-  Redevelopment areas
-  Knutepunkt
-  500 m radius from Knutepunkt















- Eremitis
- Spawning
- Swelling
- Cloning
- Replacement

Public Spaces

There are four main categories of public space in the area. Two of these are situated along the main axis, up towards the hill while the other two are dispersed throughout the area.

1) The streets between the suburban houses.



2) The premisses of public institutions and private businesses.

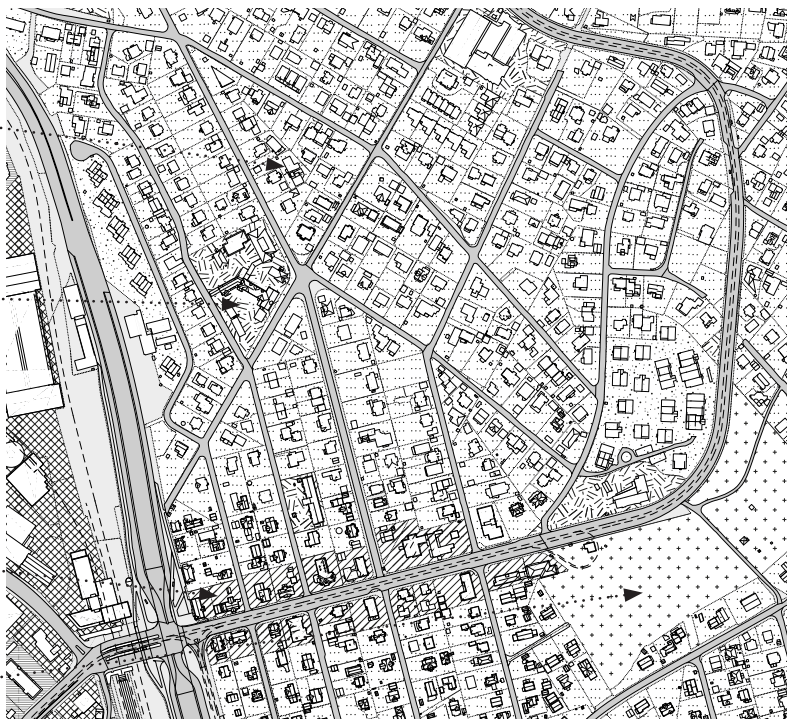


3) The lower portion of Kjelsåsveien, where there are shops with parking spaces in front on both sides.



4) A space consisting of two parks with the Kjelsåsveien running through





1:10 000

THE MAIN ROAD



In this area, the road provides a public space. Both sides of the street are lined with public businesses. Together these create a large accessible space.

NEIGHBOURHOOD SHOPS OR INSTUTIONS



The institutions situated throughout the area have parking, and are mostly inwards facing. This is done to cater to being accssible mostly by car. This contrasts to the fact that most students arrive by foot to the schools.

STREETSIDE PARK



Along the main road there is a set of parks: One on each side. Combined with the wide street they form a open expanse in a closed enviornment. The whole ensemble is characterized by expanses of grass, unkempt edges and a low intensity of use.

SUBURBAN STREETS

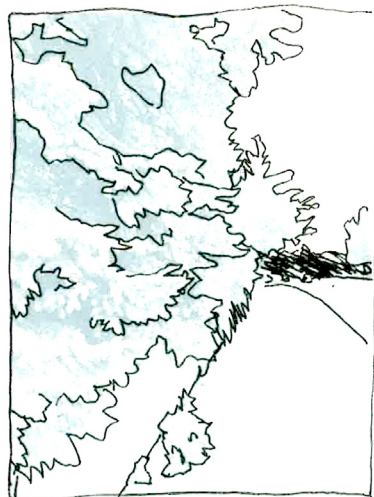


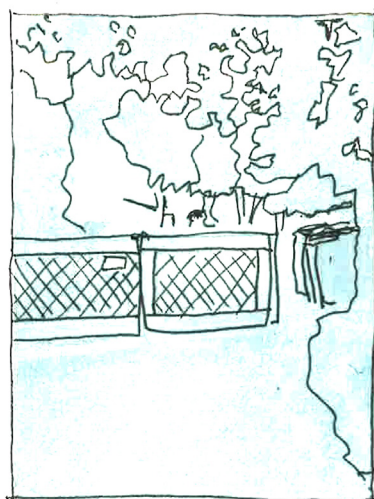
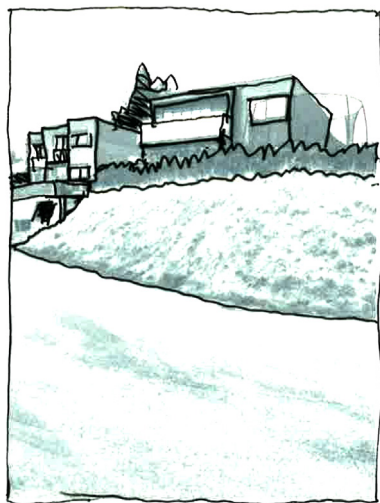
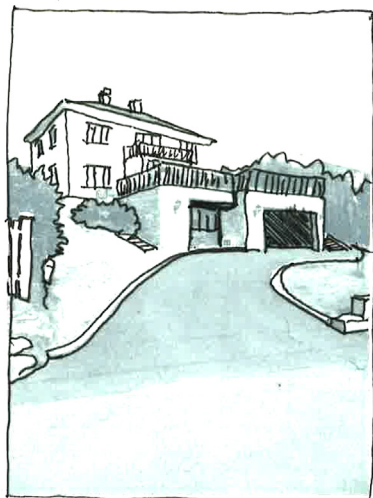
The houses all face onto a road of some sort. In most places these roads are small and in a state of disrepair. As one walks along the street, you either face the backside of houses, a cordon of trash bins, tall hedges and large drive-ways or you walk along low fences, hedges and gravel pathways framed with a trees and bushes farther back.

SUBURBAN STREETS

The street is mostly something to distance oneself from. Some places this happens through distancing oneself from the street, in others there is the implementation of hedges and in some the landscaping and positioning of the driveway takes care of the distance. In area with older houses, there are more trees, often with a picket fence in front. Newer houses more often are equipped with a hedge of consisting of Thuja. Houses that has been remodeled often have a marked driveway, paved with asphalt or paver-stones providing the distance.

All of this puts emphasis on the illusion of being isolated. The street is seen as an infrastrucutre, a place for rubbish bins, cars and strangers. The gardens and the porches shielded by hedges, fences and distance is where life happens. Houses inhabited by several families take this to the extreme, having carefully laid out ways of entry and egress to provide a very flimsy sense of being independent





SMÅBYPLANEN

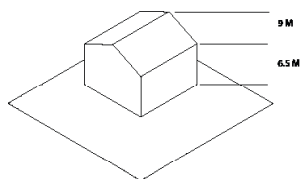
My goal for Grefsen is to transform the suburban to the miniurban. The endgoal is the urbanish feeling of a small town rather than an ensemble of suburban objects placed in a field providing privacy. Every object should relate directly to each of the other objects, not try to avoid relating to the rest. These are goals to be achieved through the manipulation of regulations:

Privacy

Every dwelling shall have one more private side.

Occupany

It is a goal that the occupancy, read as the number of humans having their homes in houses on the block doubles.



Street access

It is a goal that each and every house has easy access to the ground plane directly from the dwelling.

No street parking

Make all the streets wide enough for two cars passing by removing the parking along the curbs.

Outdoors space

The access to the street should be mediated by an outdoor space.

Throughfares

There is to be an access through the middle of each block, forming a cross of pedestrian access.

No street walls

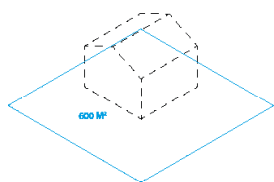
There shall be no walls along the streets and hedges shall have a maximum height of 1.5 m.

Open ground

Driveways and parking should have permeable ground cover.

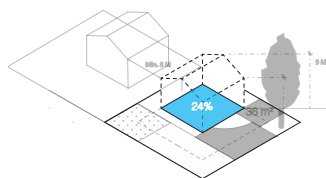
SMÅHUSPLANEN

The main regulation for single-family housing in Oslo is the “Småhusplanen”, a regulation that deals with the houses through the tools of set-backs, maximum heights, maximum occupancy of the site and by detailing the amount of landscaping you are allowed. The regulation provides further rules for planning for several units on the same plot. All of these illustration is based upon Oslo kommune (2006).



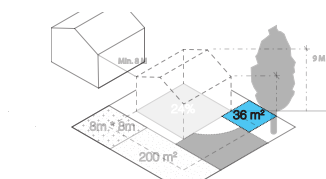
Plot size

The minimum plot size for a new plot is 600 square meters.



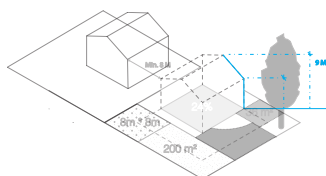
Occupancy

A maximum of 24% of the site can be occupied by building, roofs and parking.



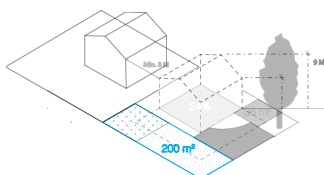
Parking

A house needs two parking spots, each being 18 square meters. In addition it is necessary to be able to turn a car on you property.



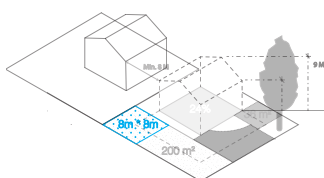
Eaves height

The max height for a house from the average level of the ground is 6.5 to the eaves, and 9 m to the top of the roof.



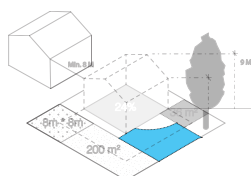
Outdoors area

There needs to be a least 200 square meters of "occupancy area" outside. Of this, a square of 8 m by 8 m is to continuous.



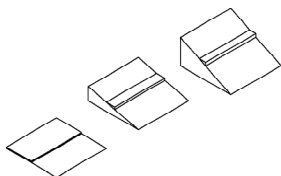
Play area

There needs to be a continuous square of 8m x 8m of green space with a slope of no more than 1/3.



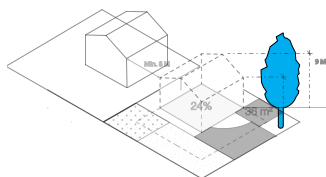
Turning area

You need to be able to turn a car on your own property.



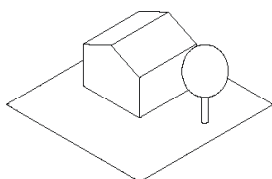
Retaining walls

The amount you can alter the terrain is regulated by steepness of the plot. If it is if it is $< 1/3 = 1,5$ m, if it is between $1/3$ to $1/6$ it is 1 m. If it is less you are allowed to alter the terrain by 0,5 m



Treekeeping

Trees with trunks above 90 cm in diameter 1 m above the ground can't be felled without extraordinary reasons.



Light

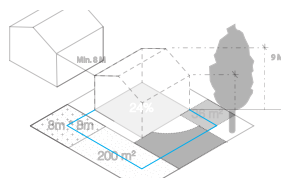
All rooms for permanent habitation (in a private home this would be the bedrooms and the living room) need adequate light.

OTHER REGULATIONS

In addition to the regulation of the specific areas under småhusplanen, there is certain regulations that apply to the whole of Norway except for those areas that are exempted/regulated in other ways. These are divided between the TEK 17, authored by Direktorat for byggsikkerhet (2017), the regulation of technological standard in buildings, and the Veglova (1963), the law the regulates matters regarding roads.

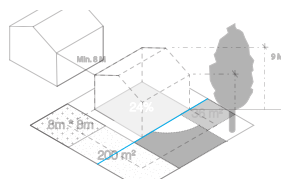
Setback

TEK17 regulates a setback of 4m from the plot line on all sides for any structure intended for permanent inhabitation.



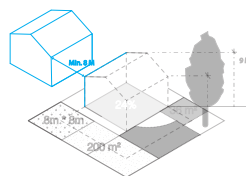
Distance from roads

The law regulating roads, dictates that you have to apply for dispensation to build closer than 15 m from the middle of a municipal road.



Firedistance

TEK17 Dictates that there should be 8 m in between buildings for inhabitation if they don't have firewalls facing each other.



SMÅHUSMAX CARPET





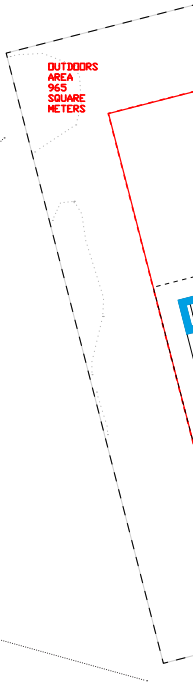
SMÅHUSPLANEN

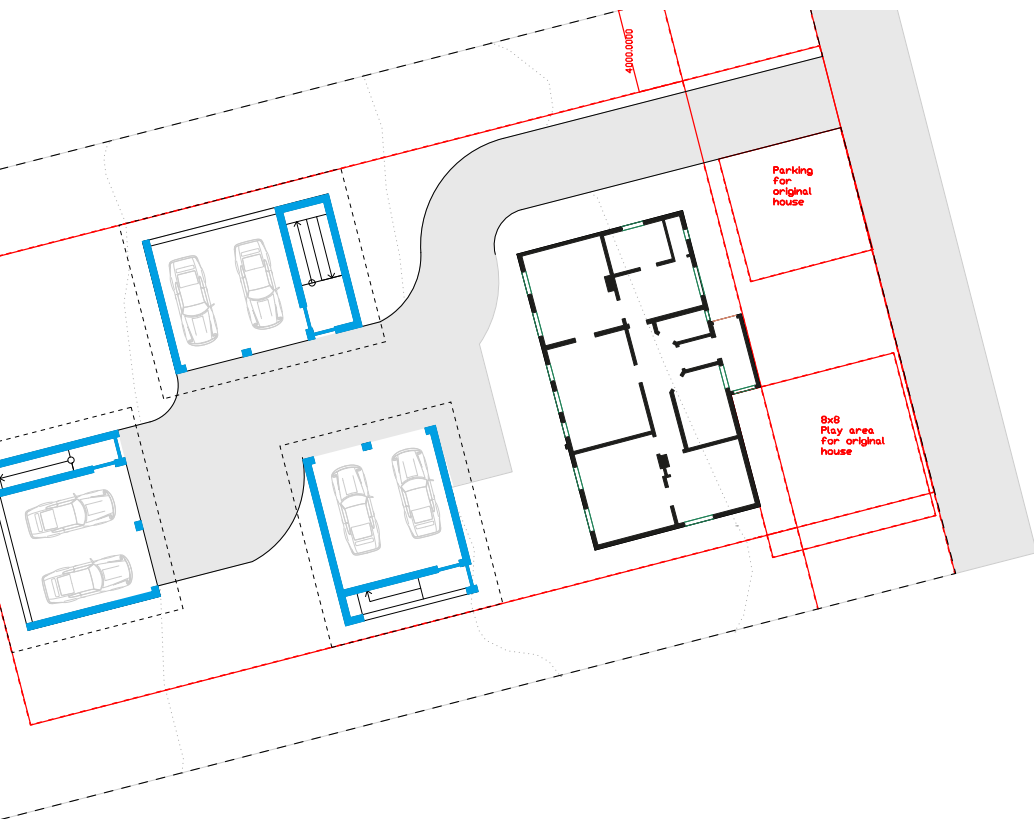
Outdoors area	Retaining walls
Play area	Treekeeping
Turning area	Light
Parking	Setback
Plot size	Treekeeping
Occupancy	Firedistance
Eaves height	Distance from roads

SMÅBYPLANEN

Privacy
Occupancy
Street access
Outdoors space
Roads as public
No street walls
Vegetation

CARPET OF UNITS





SMÅHUSPLANEN

Outdoors area	Retaining walls		SMÅBYPLANEN
Play area	Treekeeping		Privacy
Turning area	Light		Occupancy
Parking	Setback	X	Street access
Plot size	Treekeeping		Outdoors space
Occupany	Firedistance		Roads as public
Eaves height	Distance from roads		No street walls
			Vegetation

ROWS OF UNITS

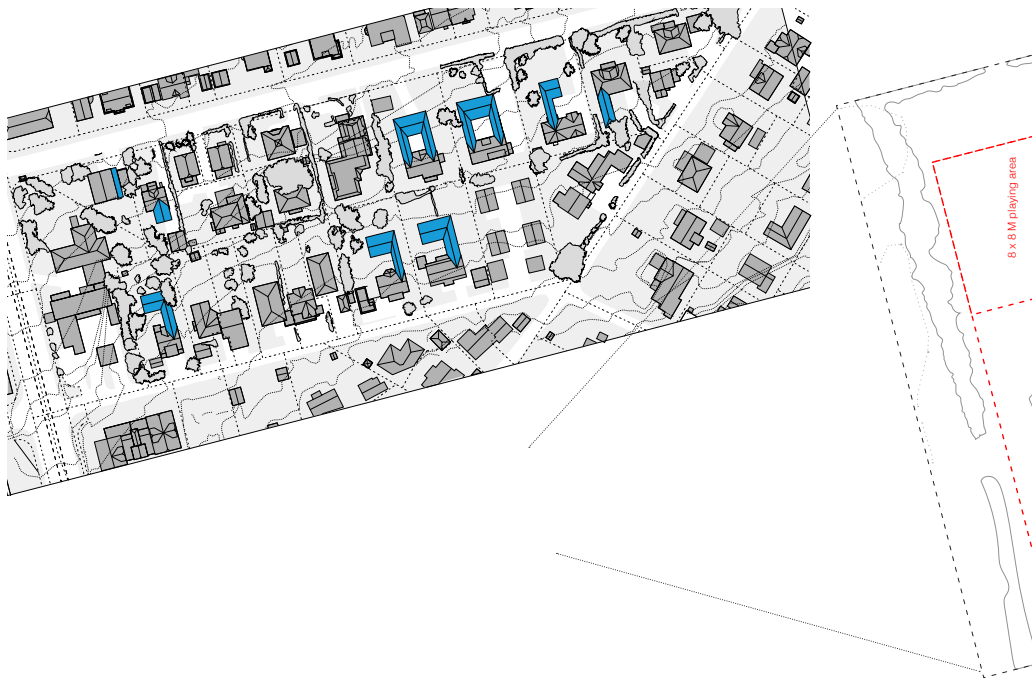


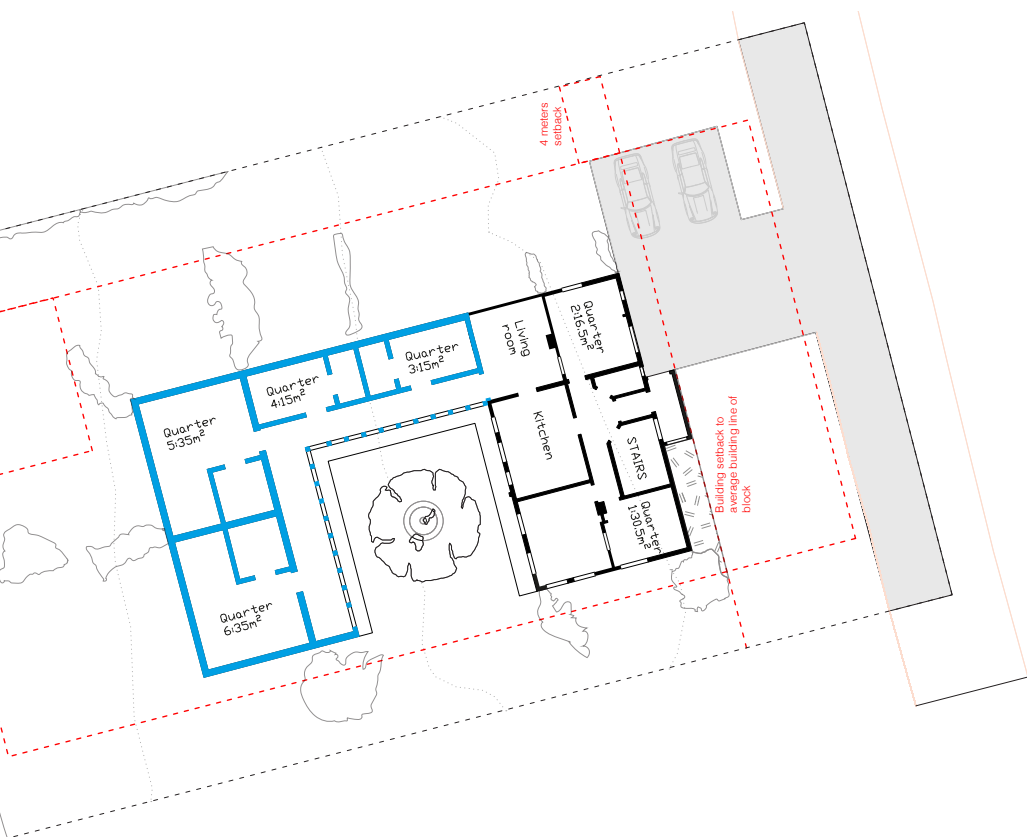


SMÅHUSPLANEN

Outdoors area	Retaining walls		SMÅBYPLANEN
Play area	Treekeeping		Privacy
Turning area	Light		Occupancy
Parking	Setback	X	Street access
Plot size	Treekeeping		Outdoors space
Occupany	Firedistance		Roads as public
Eaves height	Distance from roads		No street walls
			Vegetation

SWELLING UNITS





SMÅHUSPLANEN

Outdoors area

Play area

Turning area

Parking

Plot size

Occupancy

Eaves height

Retaining walls

Treekeeping

Light

Setback

Treekeeping

Firedistance

Distance from roads

SMÅBYPLANEN

Privacy

Occupancy

Street access

Outdoors space

Roads as public

No street walls

Vegetation

Lettvintveien



Lettvintveien 41



Lettvintveien 43



Lettvintveien 47



Lettvintveien 45



Lettvintveien 49B



Lettvintveien 49

Grefsen Allé



Grefsen Allé 2



Grefsen Allé 2B

Lindealléen



Lindealléen 10



Lindealléen 12



Lindealléen 16



Lindealléen 16B



Lindealléen 16C

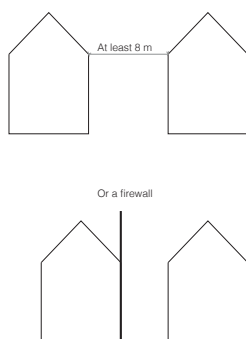


Lindealléen 16D

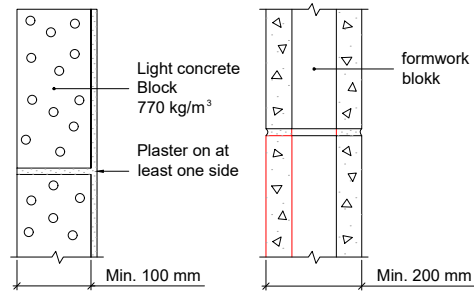
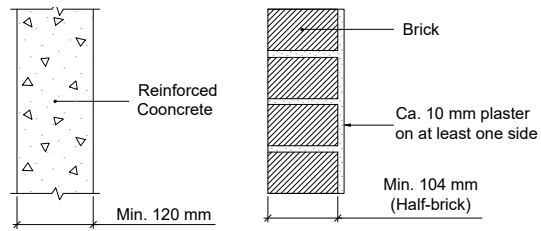
APPROACH

FIRE

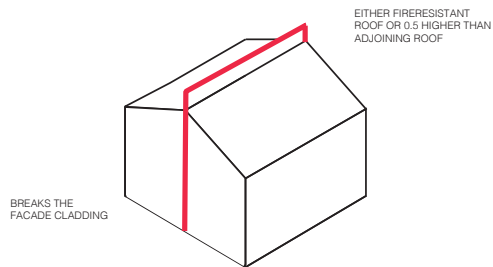
The national rules for buildings (TEK17) stipulates that any building with a fire energy of above 400 MJ/m^2 there needs to be a divide into fire sections by means of a fire-proof walls for every 800 m^2 . A distance of 8 m is considered as reaching this requirement. If not, there is to be a firewall on the side of the building.



The requirement for such a wall is that the wall is made up of unburnable material, classified to withstand a complete fire on the other side for 120 minutes. Examples of such constructions are concrete (120mm), light concrete (100 mm) or brick (104 mm). Furthermore this dividing wall needs to break through the facade. In the roof it needs to extend 0.5 above the building or the next roof needs to be fire resistant. Also, any eaves needs to be covered by the roof.



Examples of firewalls



The rules governing the placement of the wall

