

Kjelvene Student Housing

Diploma 2022

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Background

Background

Something that surrounds everyone daily is our home. But how do we build housing today?

In my pre-diploma I started looking into housing quality and density in a city, and if the two can be combined. Cities are now After re-searching both different forms of density and housing quality, I saw that it could be interesting to work with a typology with a high density; student housing. The same density may have very different outcomes, a high tower with low coverage and a low row-houses with high coverage can have the same amount of units.

Quality is somewhat more difficult to determine as the desired quality may vary according to where we are situated, the size of the home, everyday needs, life situation and family situation. As a student, you are often new to the city with few or no acquaintances which can lead to collective or shared living can be a quality in everyday life.

Rundeskogen
High-rise, high density



Photo: Unknown
<https://helenhard.no/work/rundeskogen/>

Storhaug
Low-rise, medium density



Photo: Unknown
<https://www.stavanger.kommune.no/bolig-og-bygg/byantikvaren/sporsmal-og-svar-om-eldre-hus-i-stavanger/>

A high-rise, high-dense example is Rundeskogen, from 2013, with tree towers surrounded by greenery. The density for this typology is approximately 8 dwellings per acre.

Trehusbebyggelsen is a low-rise, medium-dense typology with smaller detached housing. This typology is well distributed throughout the city with approximately 2,5 dwellings per acre.

Vindmøllebakken
Low-rise, high density



Photo: Unknown
https://helenhard.no/wp-content/uploads/2020/06/MAX_0264-2600x1733.jpg

The co-living project Vindmøllebakken from 2019 is an example of a low-rise, high-density typology, with approximately 10 dwellings per acre.

Siriskjær
Medium rise, medium to high density



Photo: Marie von Krogh
<https://www.aftenbladet.no/meninger/debatt/i/PPqPp/cecilie-bjelland-om-byutviklingen-noen-har-tatt-for-lett-paa-jobben-sin>

In one of the development areas, east of the city centre, Siriskjær's "The Waterfront" from 2014/15 represents a medium-rise, medium to high dense typology, with approximately 6,5 dwellings per acre.

List of qualities

- light conditions :

light from two or more directions

- flexibility in the plan :

rooms with similar size

- use of materials :

honest, exposed or/and variation in materials

- sightlines :

views, transparency, inside and outside

- outside :

private, shared or access to nearby parks and/or squares

- spaciousness in height :

above average requirement

- movement :

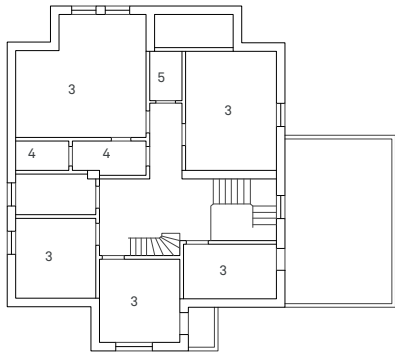
flow and separated privat and social zones

Study case #1

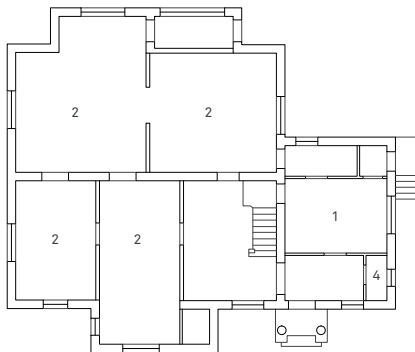
Eiganesveien 30
Architect Karl Kielland / Lars Storhaug

Villa from 1911

Large areas in Stavanger are detached houses built between 1850 and 1950. To find qualities in how to live today, I have looked at how one lived in the past. What qualities did they have then and how can they be implemented today?



2nd floor



Ground floor

1 - Kitchen 2 - Living room 3 - Bedroom 4 - Bathroom 5 - Storage

- light : from several directions
- flexibility : rooms of the same size
 - materials : little focus
 - sightlines : little focus
- outdoor : space directly connected to the house
 - spaciousness : unknown
- movement : separated private and social rooms/activities, flow in the ground floor

<https://stavangerbyarkiv.no/2018/01/29/lars-storhaug-eiganesveien-30/>

Study case #2

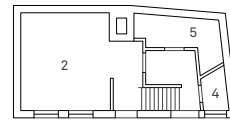
Sølvberggata 15
Measured in 1932

Workers housing

In the city centre, the housing is smaller and denser than the villa-areas. Workers' housing with fewer rooms and facilities, but some similarities to the villa.



2nd floor



Ground floor

1 - Kitchen 2 - Living room 3 - Bedroom 4 - Bathroom 5 - Storage

- light : only from one side
- flexibility : rooms of the same size
 - materials : little focus
 - sightlines : little focus
- outdoor : close to the city centre and some parks
 - spaciousness : unknown
- movement: separated private and social rooms/activities

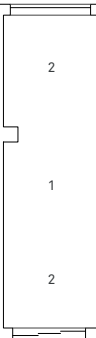
<https://www.stavanger.kommune.no/siteassets/bolig-og-bygg/byan-tikvaren/8000trehus.pdf>

Study case #3

Vannkanten
AAE
2011

Apartment block

Newer development east in the apartment block in Stavanger, but the inside and public spaces su volume that moves along the ba and several different apartment



2

1

2

1 - Kitchen 2 - Living room 3 - Bedroom

- light : from two directions
- flexibility : variation in room sizes
 - materials : little focus
 - sightlines : outside view
- outdoor : close to the city centre and some parks
 - spaciousness : high
- movement: separated private and social rooms/activities

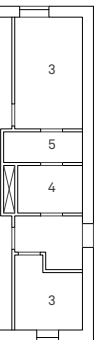
<https://aart.no/prosjekter/vannkanten>

Case #3

Siriskjæret
RT
4

ements

city. A start of the "typical"
but planned with views from
surrounding it. The building
y creates different shapes
ts in the complex.



room 4 - Bathroom 5 - Storage

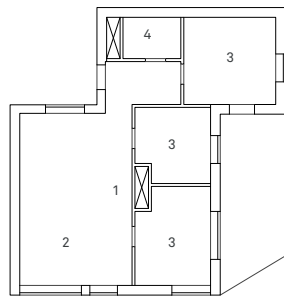
two directions
in apartment plans
little focus
de views in focus
close to parks
er in the living area
: open plan

Study case #4

Vindmøllebakken
Helen & Hard
2019

Gaining by sharing apartments

A co-living project initiated by the architect question how to build sustainable housing that also improves the quality of life. Smaller apartments surrounded by generous shared spaces, but without leaving the apartments missing something.



1 - Kitchen 2 - Living room 3 - Bedroom 4 - Bathroom 5 - Storage

- light : from several directions
- flexibility : rooms of the same size
- materials : exposed timber
- sightlines : little focus
- outdoor : private balcony, shared spaces outside the apartment, close to nearby park
- spaciousness : as the requirement
- movement : little focus

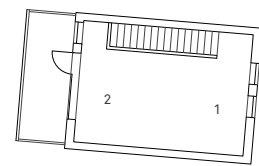
<https://helenhard.no/work/vindmøllebakken/>

Study case #4

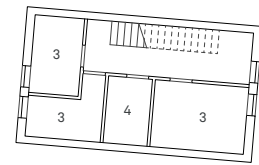
Kirkebakken
Mad Architects
2022

Townhouses

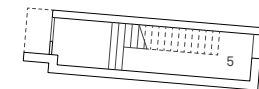
Another option for new housing in an established area could be Townhouses like this, which takes the surrounding area into consideration in form of size and design. It has some similarities to a detached house as well as an apartment.



3rd floor



2nd floor



Ground floor

1 - Kitchen 2 - Living room 3 - Bedroom 4 - Bathroom 5 - Storage

- light : from two directions
- flexibility : little focus
- materials : little focus
- sightlines : little focus
- outdoor : private balcony, close to city centre and parks
- spaciousness : higher in the living area
- movement : separated private and social zones, several floors

<https://mad.no/prosjekter/kongsteingata-22-kirkebakken-28>

Mapping












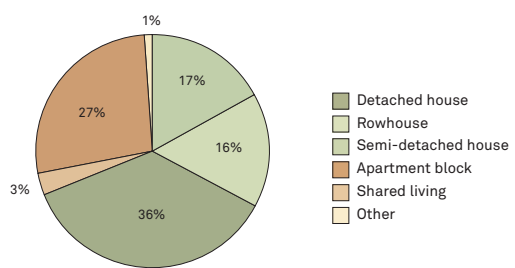
“Vågen” in the city centre



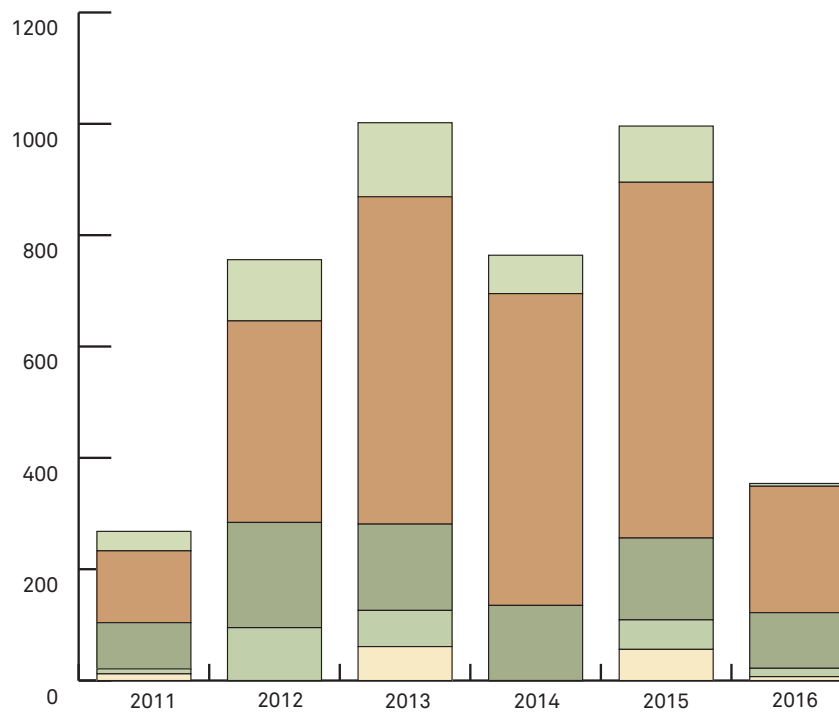
The old town



- | | |
|---|---|
|  Detached house |  Apartment building 5 or more floors |
|  Semi-detached house |  Apartment building between 3 and 4 floors |
|  Row house |  Apartment building up to 2 floors |
|  Student housing |  In development |

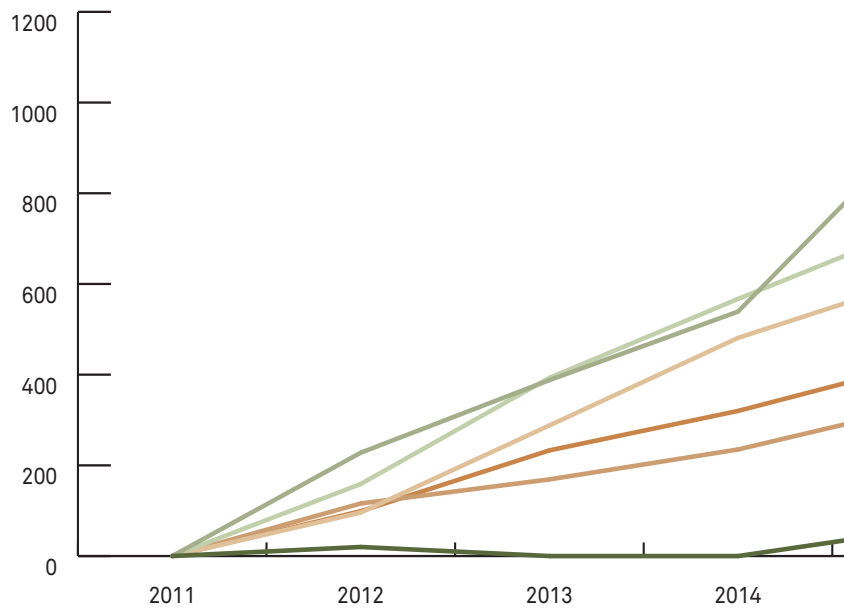


Housing growth

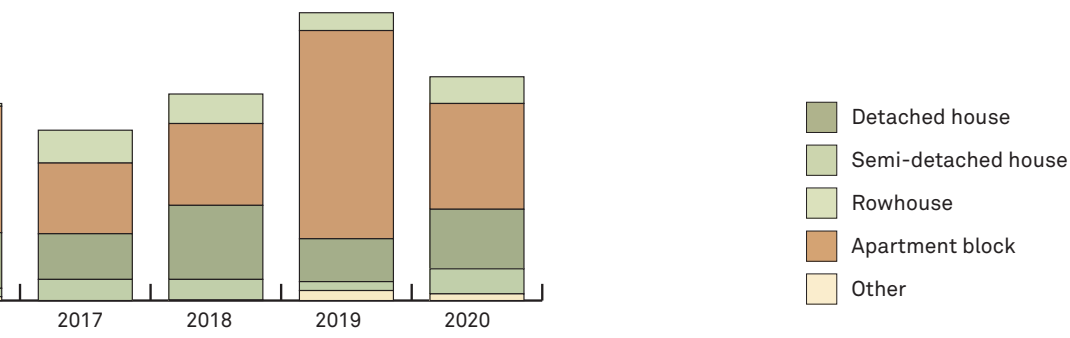


<https://public.tableau>

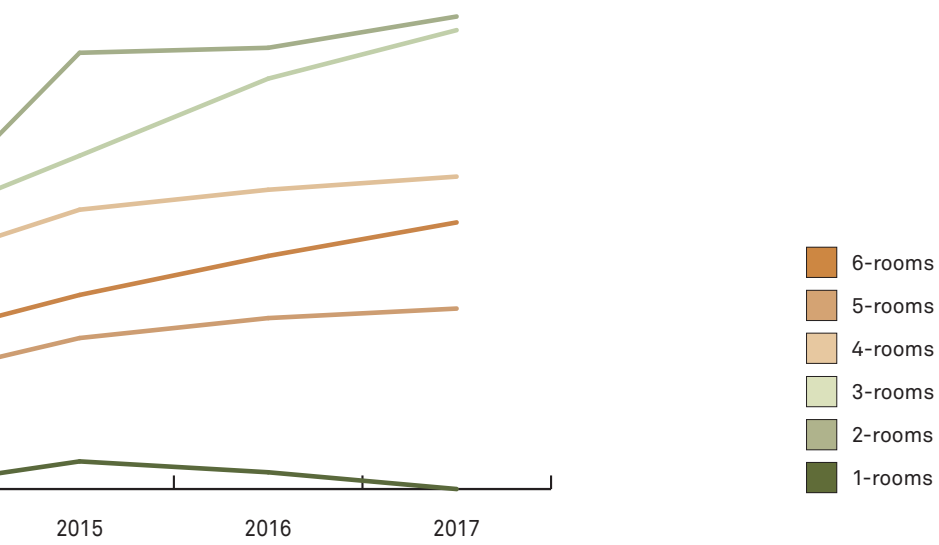
Change in the housing stock



<https://public.tableau>



<https://www.stavangerstatistikk.no/app/profile/stavanger.statistikken/viz/Boligbygging/Historiskboligbygging>



<https://www.stavangerstatistikk.no/app/profile/stavanger.statistikken/viz/Levekrsunderskelsen2018/Innhold>

Age

Children (0-12)



Teenagers (13-18)



Young adults (19-34)



Adults (35-64)



Elderly (Over 65)



0%

44%

Family configurations

Couples w/children



Couples



One person household w/children



One person household



Multi families



0%

67%

■ Stavanger East

■ Stavanger

Income

<200 000 NOK



200 000-400 000 NOK



400 000-600 000 NOK



600 000-800 000 NOK



800 000-1 000 000 NOK



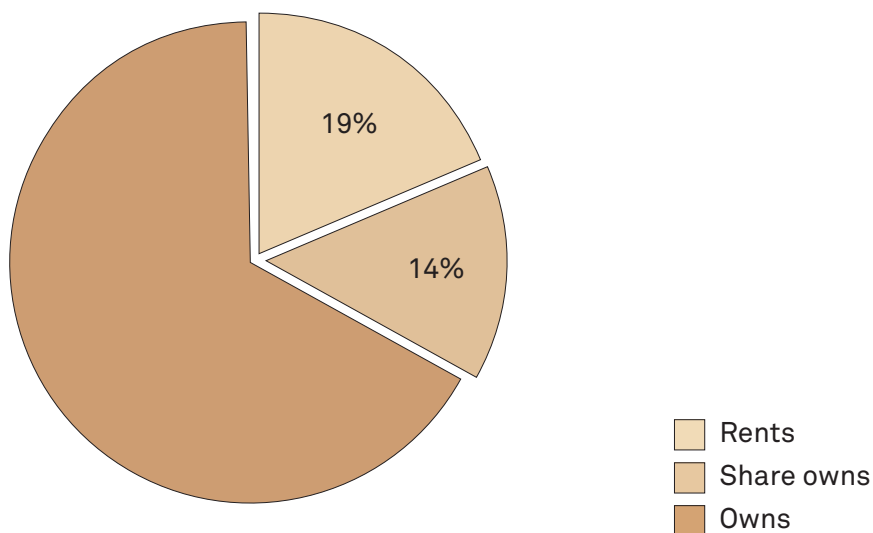
More than 1 000 000 NOK



0%

25%

Ownership





Historical photos



2010



1973



1937









Screenshots from : <https://kart.finn.no/>



Typology



1:2000 @ A3

- | | |
|---|---|
|  Detached house |  Apartment building 5 or more floors |
|  Semi-detached house |  Apartment building between 3 and 4 floors |
|  Row house |  Apartment building up to 2 floors |
|  Student housing |  In development |

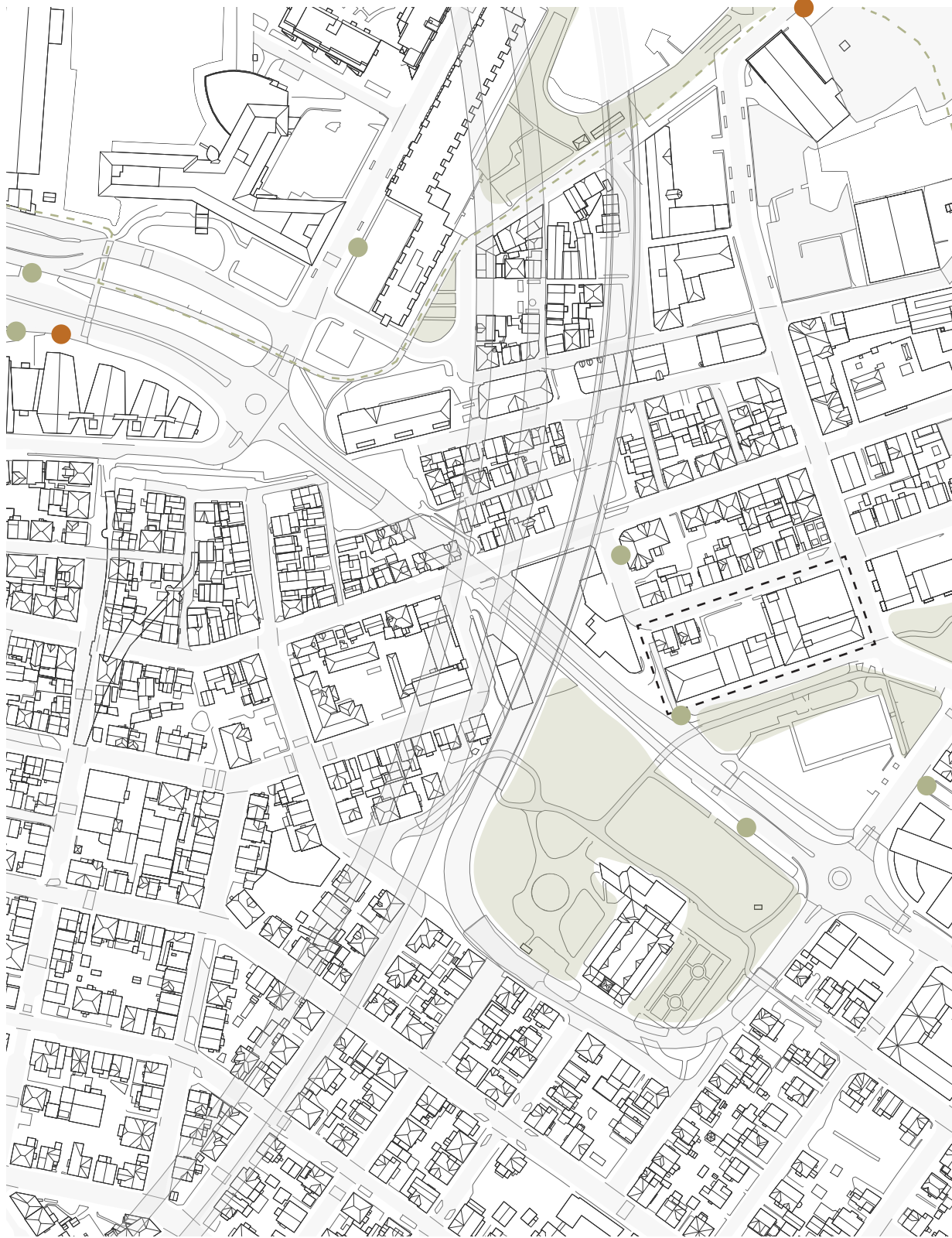


Social infrastructure



1:2000 @ A3

- | | |
|---|---|
|  Religious |  Commercial |
|  Culture |  Restaurant / café |
|  Hotel |  Activity |
| |  School / kindergarten |



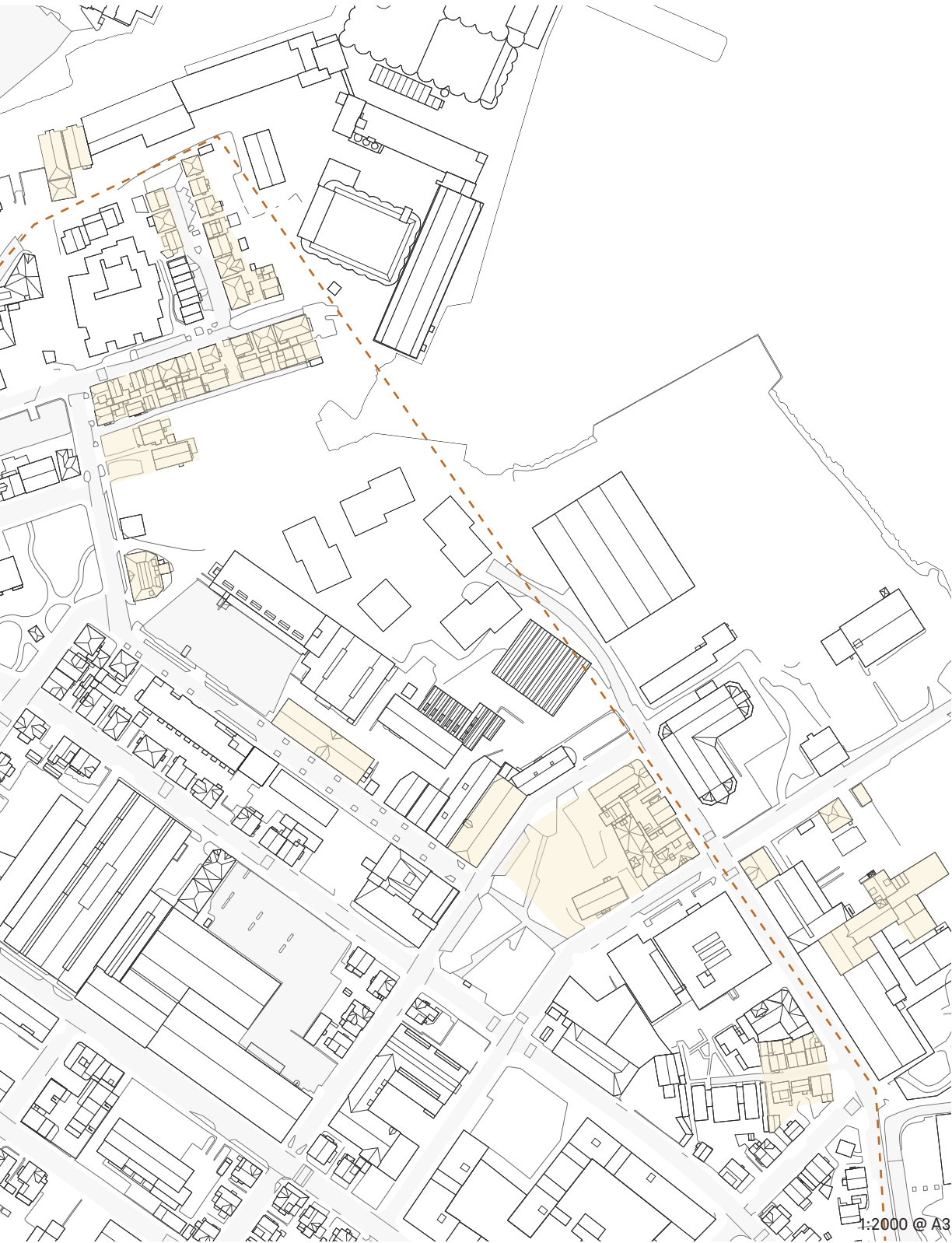
Mobility and greenery





- City bike
- Bus stop
- Future seafront promenade

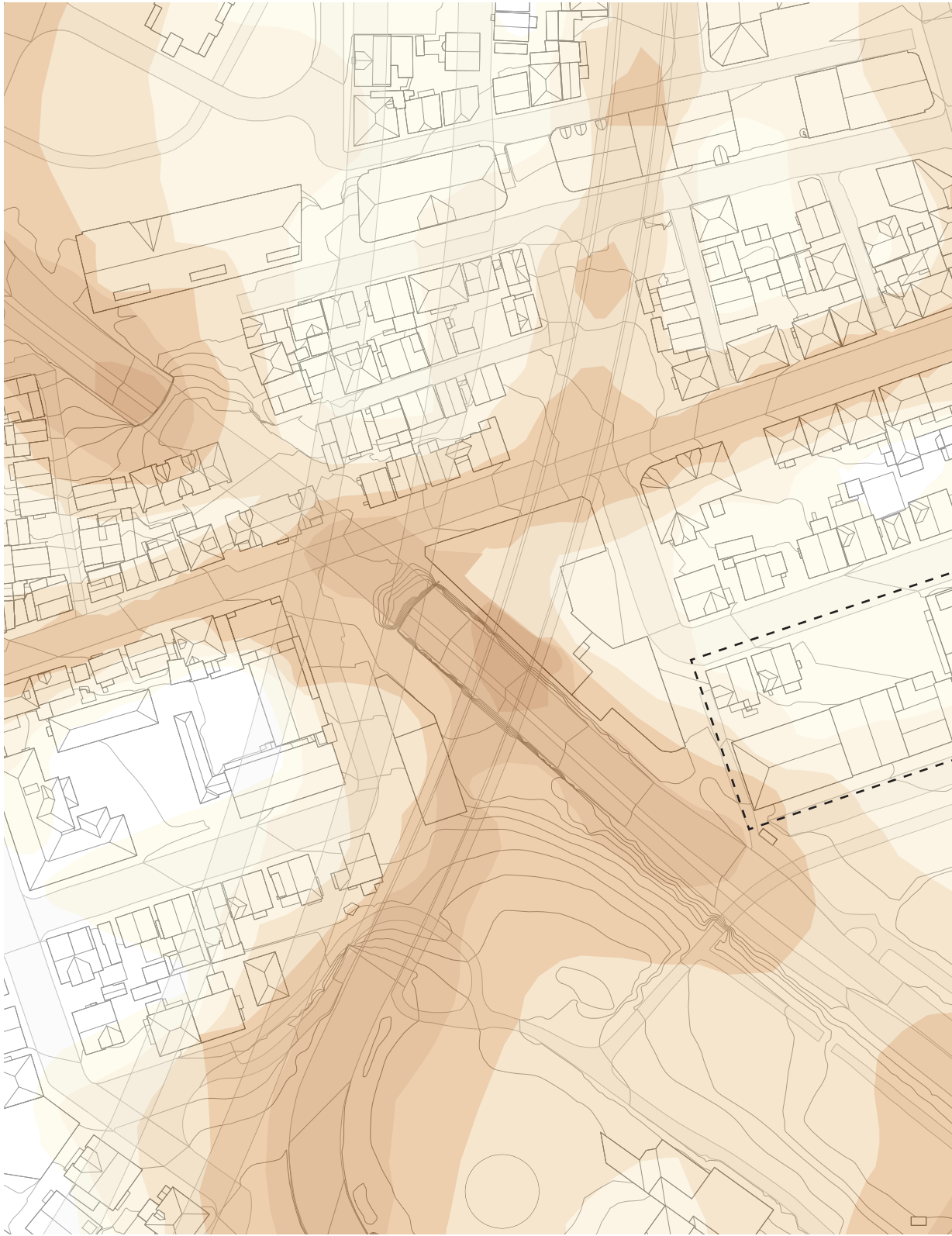


Trehusbyen

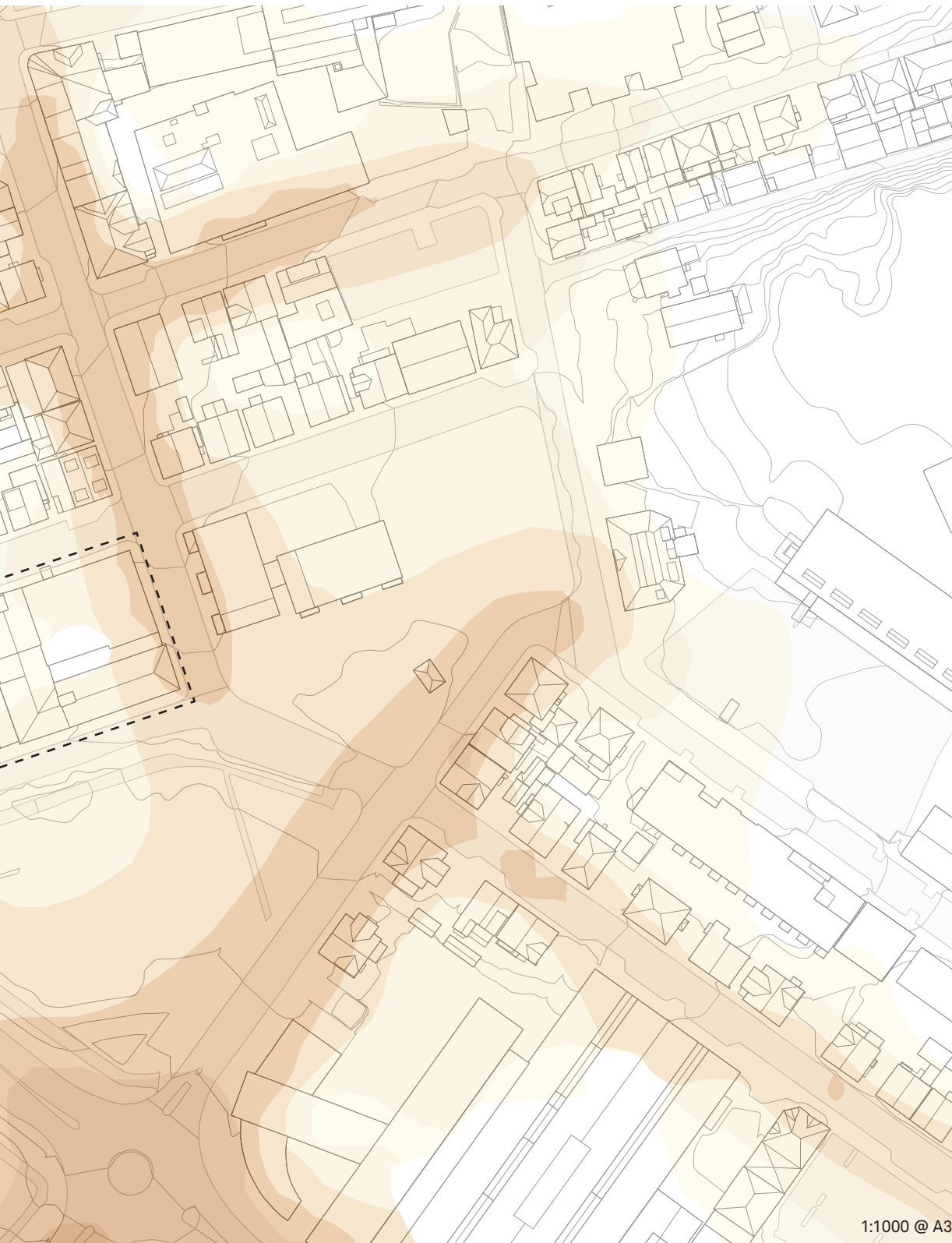


1:2000 @ A3


-  Special area of conservation
-  Trehusbyen border



Noise pollution



1:1000 @ A3

- | | |
|--|--|
|  50-55 dB |  65-70 dB |
|  55-60 dB |  70-75 dB |
|  60-65 dB |  > 75 dB |



Negative space



1:1000 @ A3



90% BRA



125-170% BRA

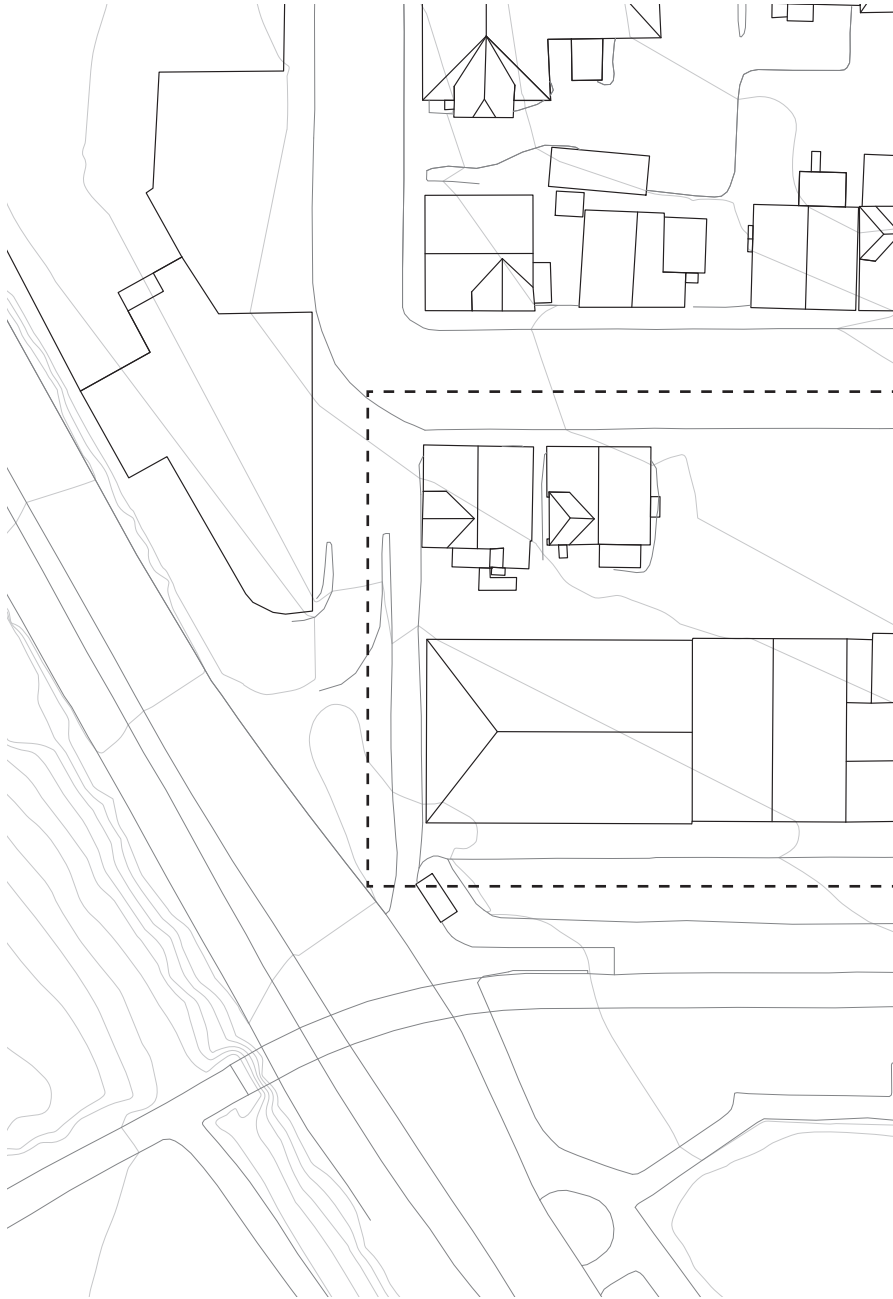
Existing density



285% BRA

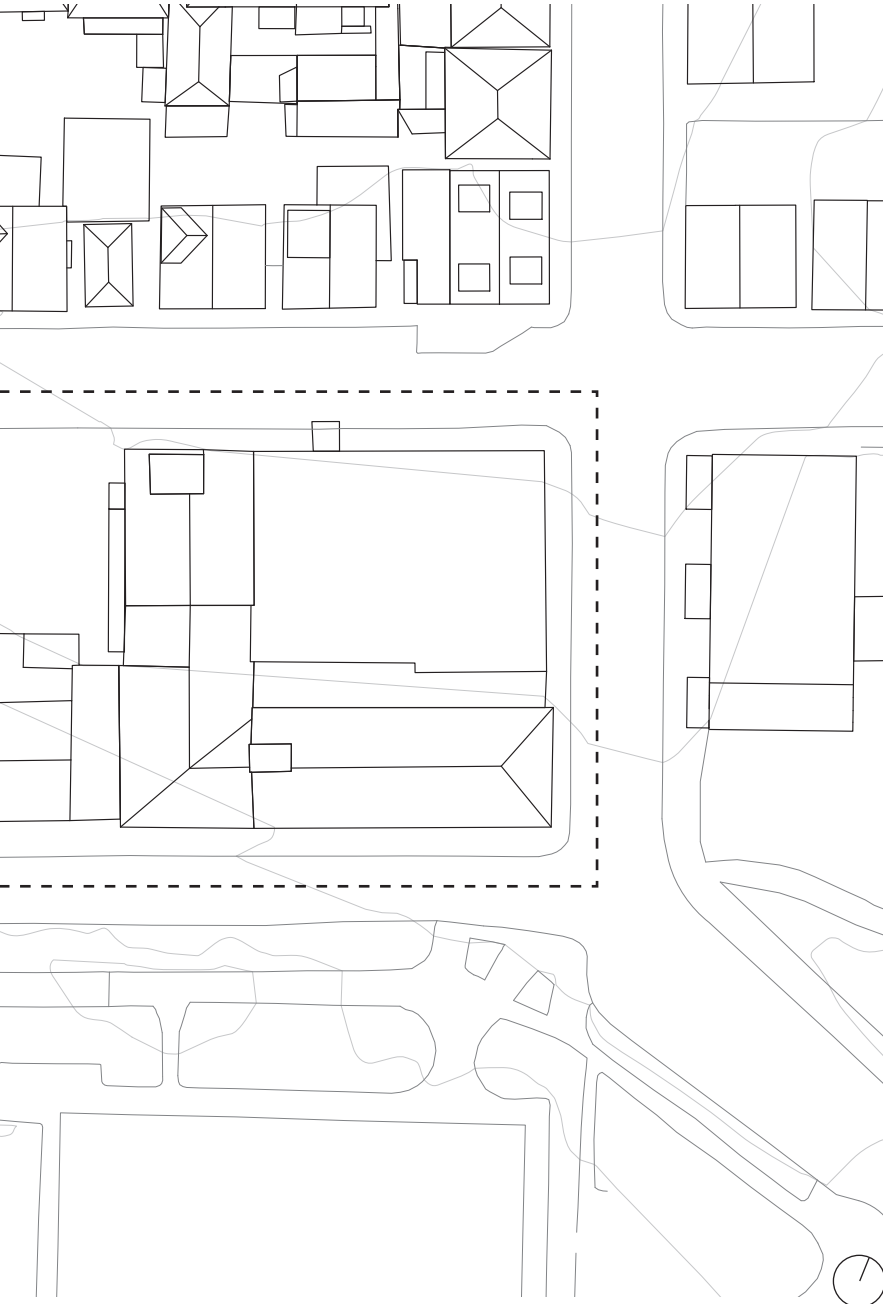


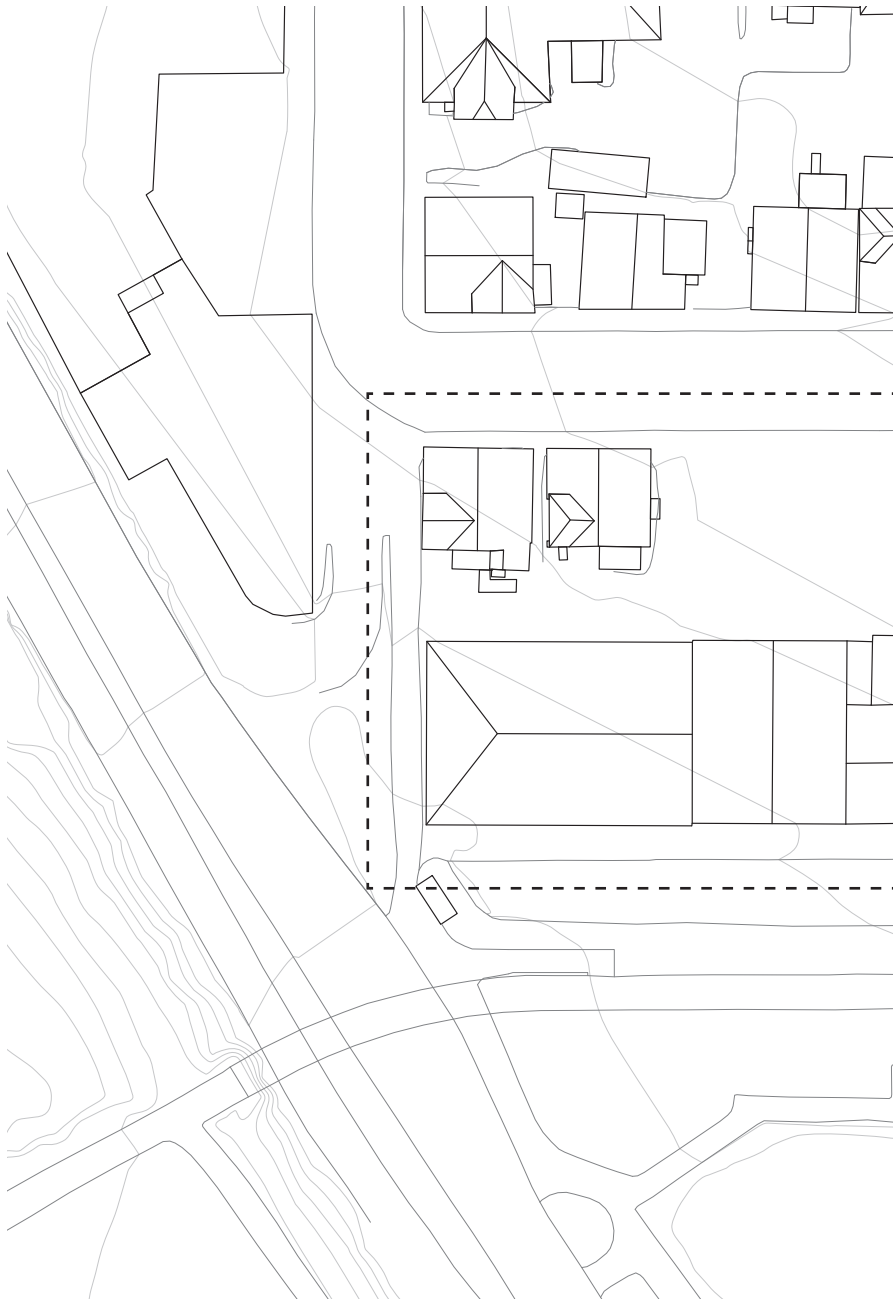
198% BRA



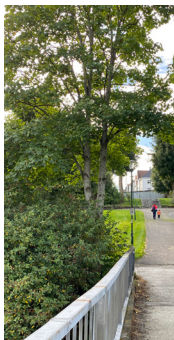
Existing site



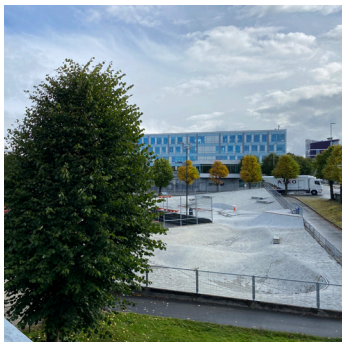
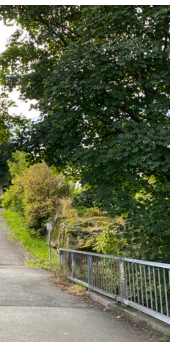
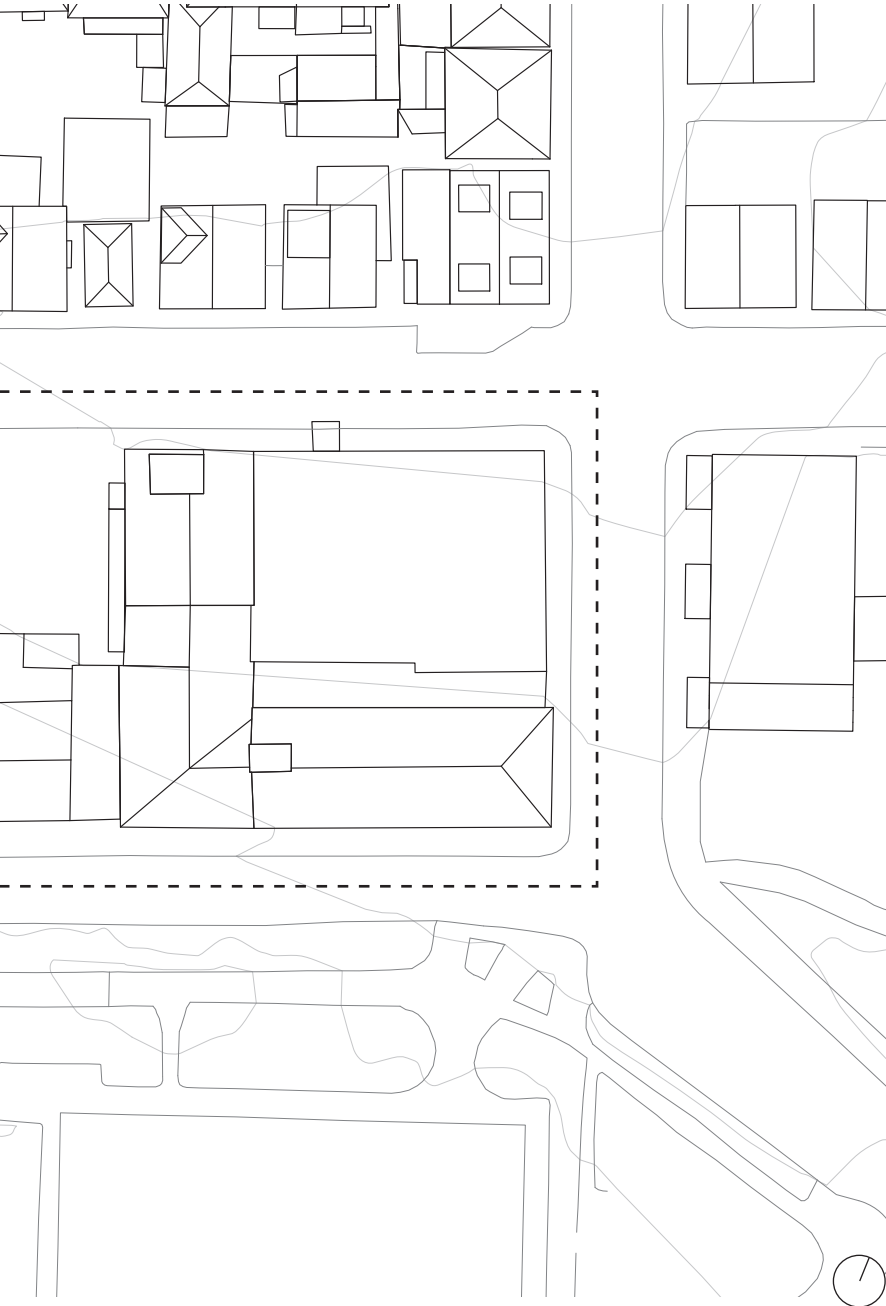
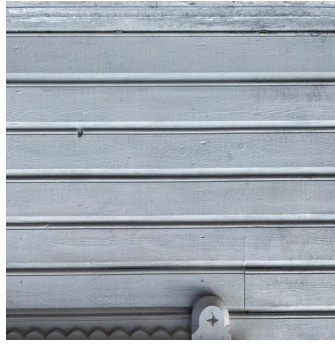


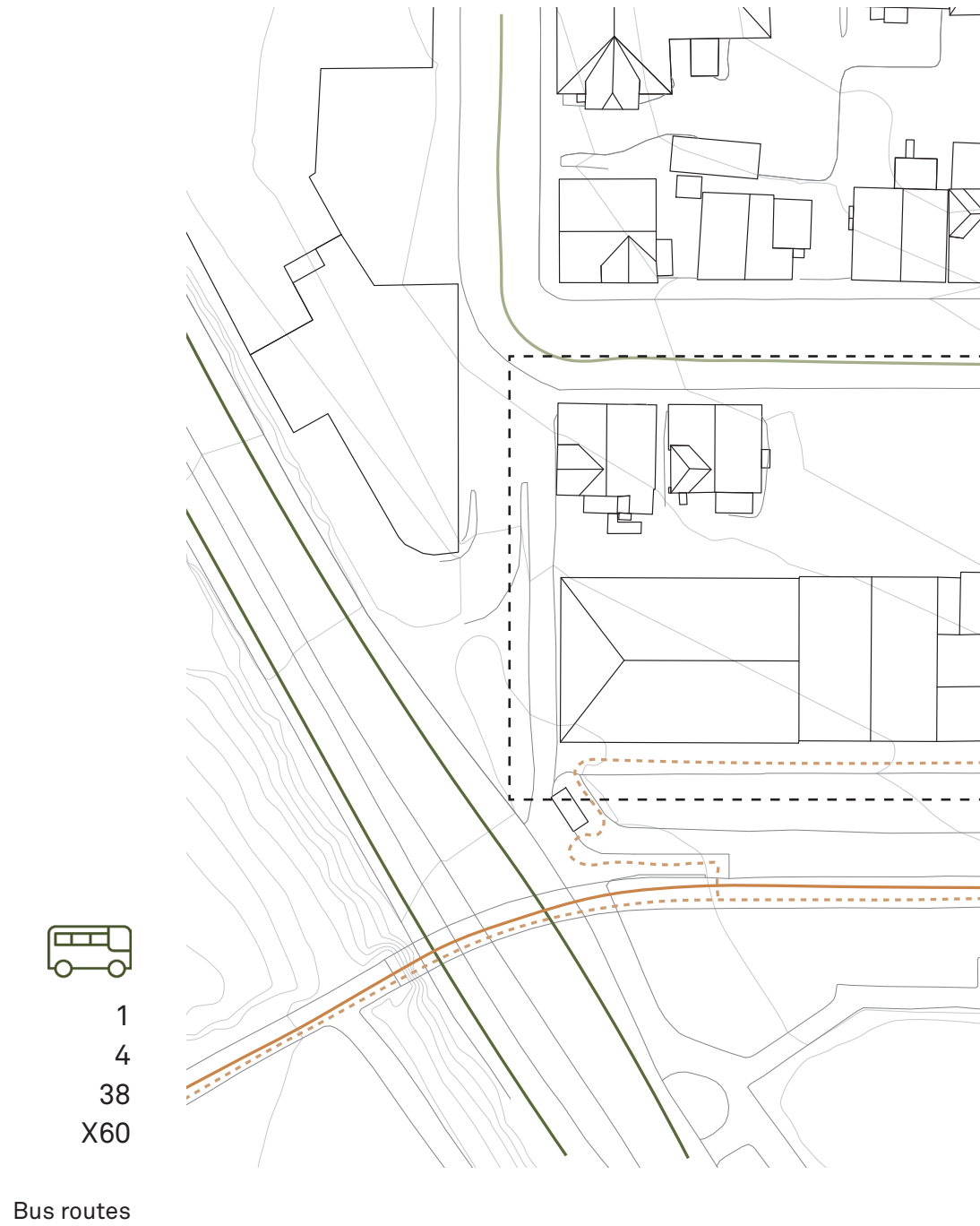


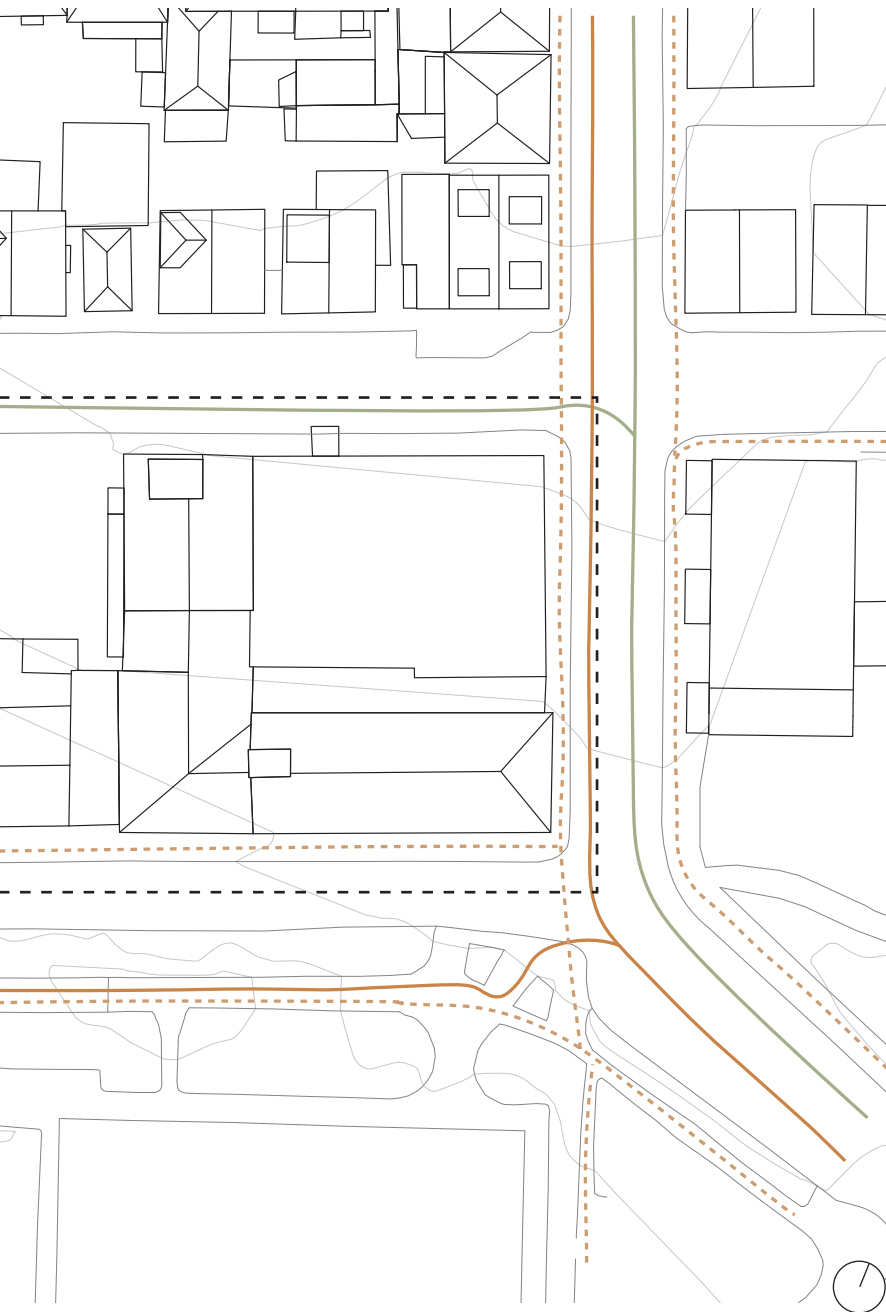
Nearby surroundings



Mapping







 63

 17

 49

Traffic by car, bike and people between
13.30 and 14.00

KULØRKVARTALET

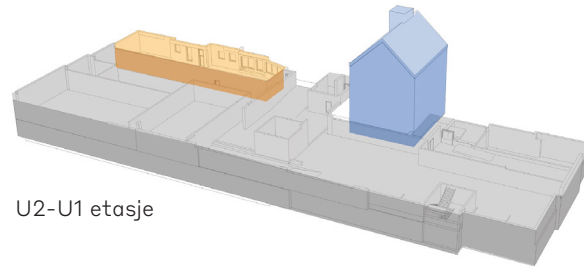
HARALD HÅRFAGRES GATE 15



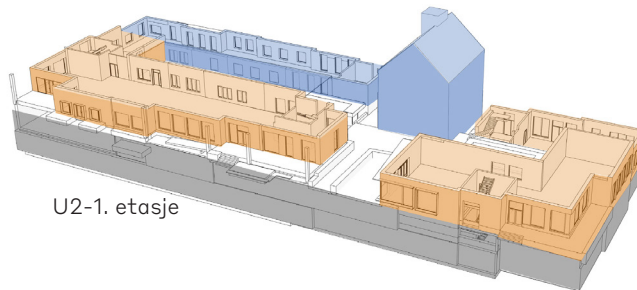
UTFORMING AV KVARTALET



All drawings and illustration from Holon Arkitekter / Stavanger municipality



U2-U1 etasje



U2-1. etasje



U2-6. etasje

New planning proposal for the site. Hotel, parking and commercial/office space

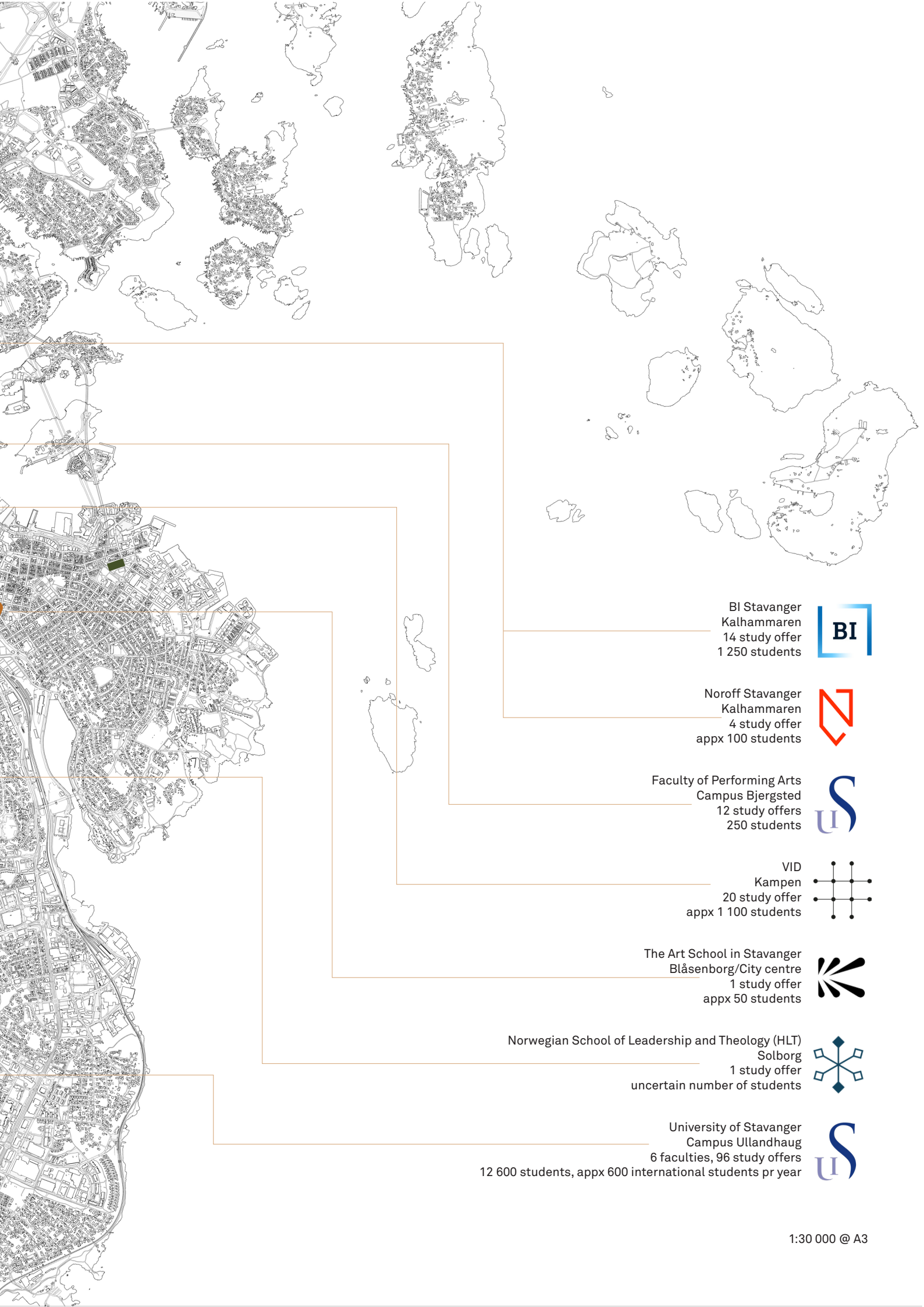
All drawings and illustration from Holon Arkitekter / Stavanger municipality

Target group



University and colleges

Appx. 15 000 students in Stavanger



BI Stavanger
Kalhammaren
14 study offer
1 250 students



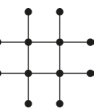
Noroff Stavanger
Kalhammaren
4 study offer
appx 100 students



Faculty of Performing Arts
Campus Bjergsted
12 study offers
250 students



VID
Kampen
20 study offer
appx 1 100 students



The Art School in Stavanger
Blåsenborg/City centre
1 study offer
appx 50 students



Norwegian School of Leadership and Theology (HLT)
Solborg
1 study offer
uncertain number of students



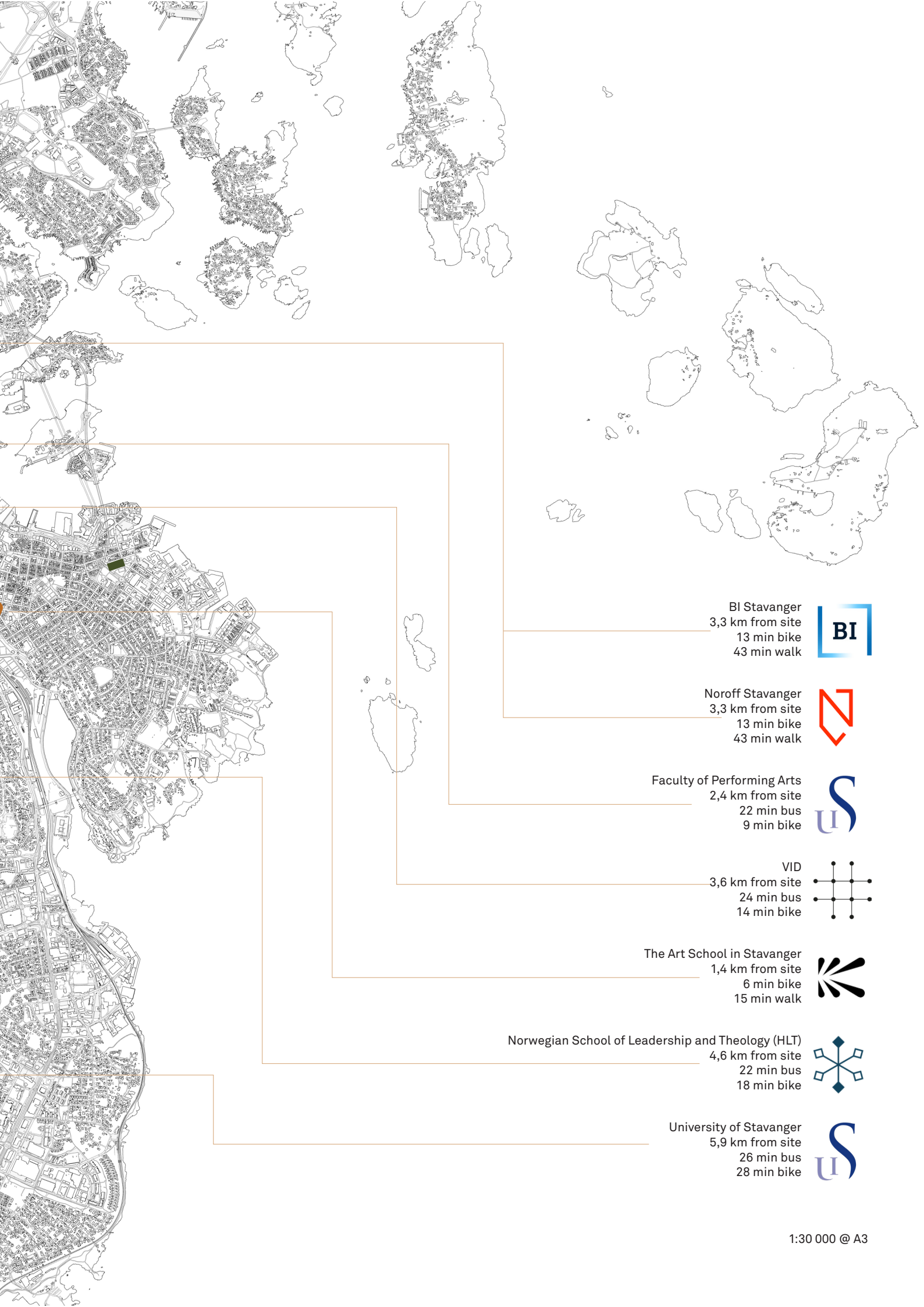
University of Stavanger
Campus Ullandhaug
6 faculties, 96 study offers
12 600 students, appx 600 international students pr year





University and colleges

Appx. 15 000 students in Stavanger



BI Stavanger
3,3 km from site
13 min bike
43 min walk



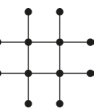
Noroff Stavanger
3,3 km from site
13 min bike
43 min walk



Faculty of Performing Arts
2,4 km from site
22 min bus
9 min bike



VID
3,6 km from site
24 min bus
14 min bike



The Art School in Stavanger
1,4 km from site
6 min bike
15 min walk



Norwegian School of Leadership and Theology (HLT)
4,6 km from site
22 min bus
18 min bike



University of Stavanger
5,9 km from site
26 min bus
28 min bike





SiS
The student Welfare organization in Stavanger

Appx. 1 300 student housing spread over 14
locations in Stavanger

Prices from NOK 3,300 to NOK 9,500 a month

Student housing



Existing student housing



<https://studentensbeste.unialltid.no/houses/house/1:55#1:3>

Misjonsmarka



<https://studentensbeste.unialltid.no/houses/house/1:38>

Bjergsted



<https://stu>

Units type

Bjergsted	2 bedroom apartment
Misjonsmarka	Studio apartment
Gulaksveien	Dorm room
Gosenmyrå	Studio apartment
Rennebergstien	1 bedroom apartment

Units size

Bjergsted
Misjonsmarka
Gulaksveien
Gosenmyrå
Rennebergstien



<https://studentensbeste.unialltid.no/houses/house/1:3>

Gulaksveien



<https://studentensbeste.unialltid.no/houses/house/1:75#1:3>

Gosenmyrå



<https://studentensbeste.unialltid.no/houses/house/1:29>

Rennebergstien

Shared space

47-62 m²

15 m²

10 m²

16-22 m²

28 m²

Bjergsted



Misjonsmarka



Gulaksveien



Gosenmyrå



Rennebergstien



References



<https://www.tarkitektur.dk/tietgen-da-0>

Tietgenkollegiet



<https://mdh.no/project/moholt-student-housing-towers/>

Moholt



<https://helen>

Units type

Tietgenkollegiet

Dorm room

Moholt

Dorm room

Sørhauggata

Studio apartment

Woodie Hamburg

Studio apartment

Kringsjå

Studio apartment

Units size

Tietgenkollegiet

Moholt

Sørhauggata

Woodie Hamburg

Kringsjå



<https://www.bygg.no/work/sorhauggata-student-housing/>

Sørhauggata



<https://www.sauerbruchhutton.de/en/project/udq>



Woodie Hamburg



<https://www.bygg.no/kringsja-studentboliger/1347915/>

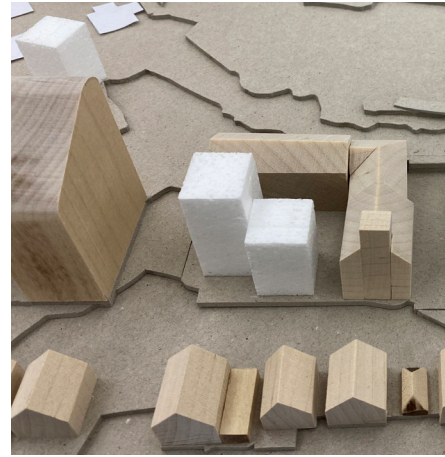
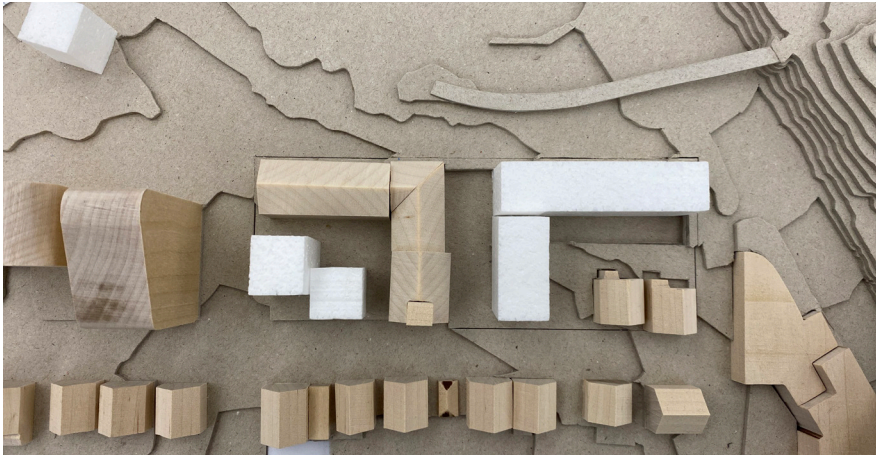
Kringsjå Bygg 68 & 72

Shared space

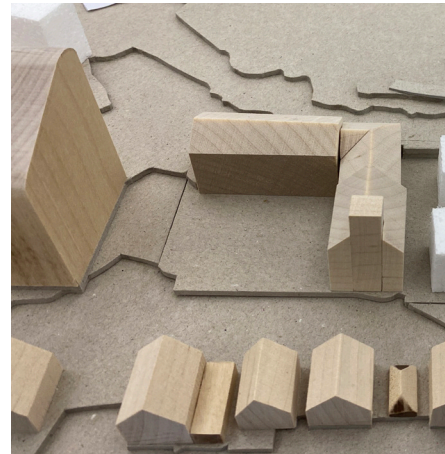
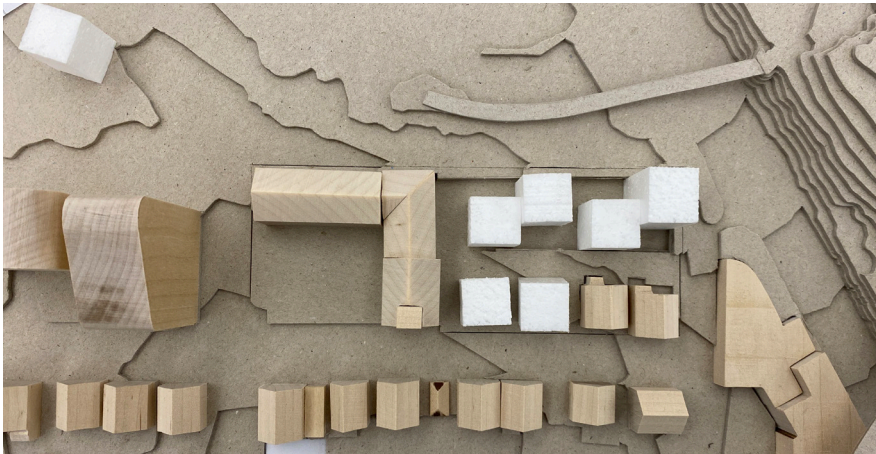
t	26 m ²	Tietgenkollegiet	    	8,5 m ² pr. unit
	16 m ²	Moholt	  	4,7 m ² pr. unit
rg	16 m ²	Sørhauggata		
	20 m ²	Woodie Hamburg		
	19 m ²	Kringsjå		

Massing

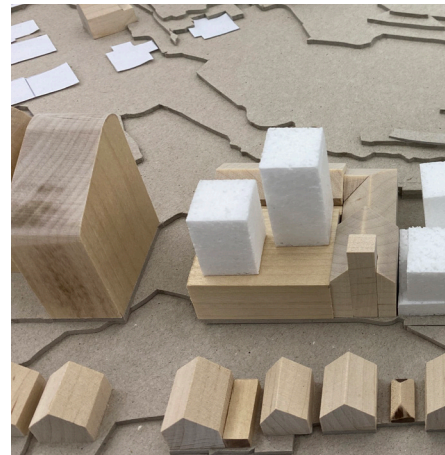
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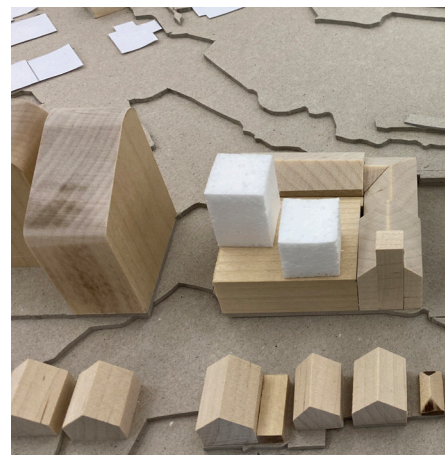
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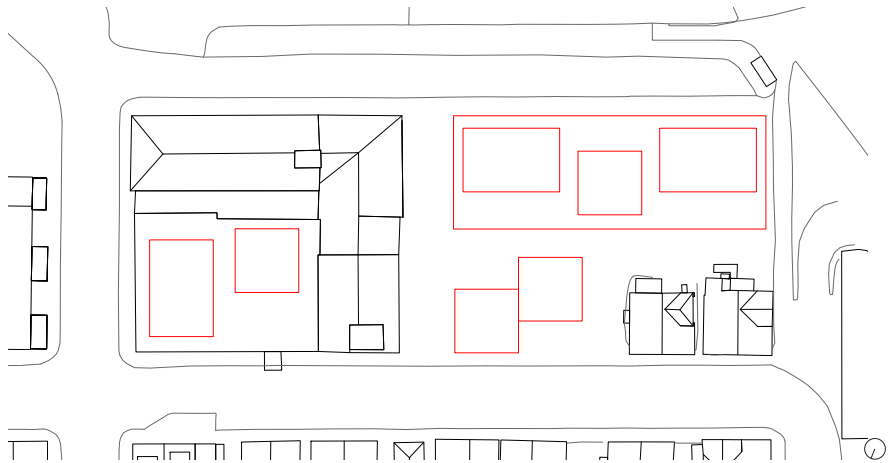
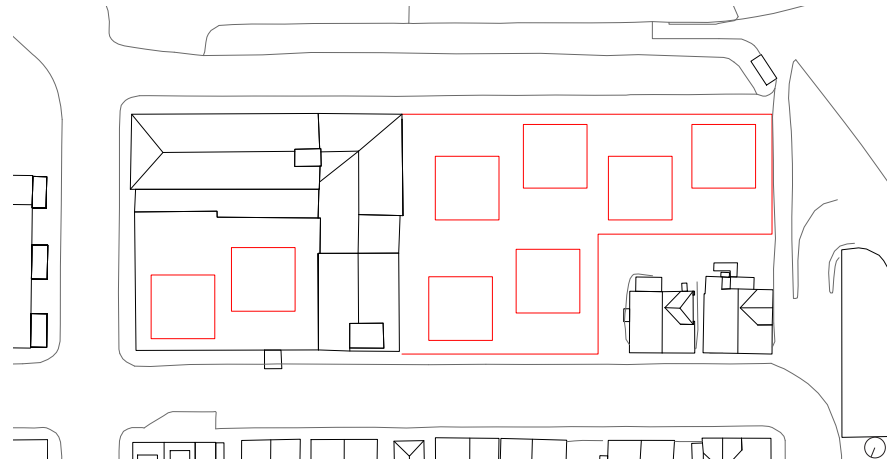
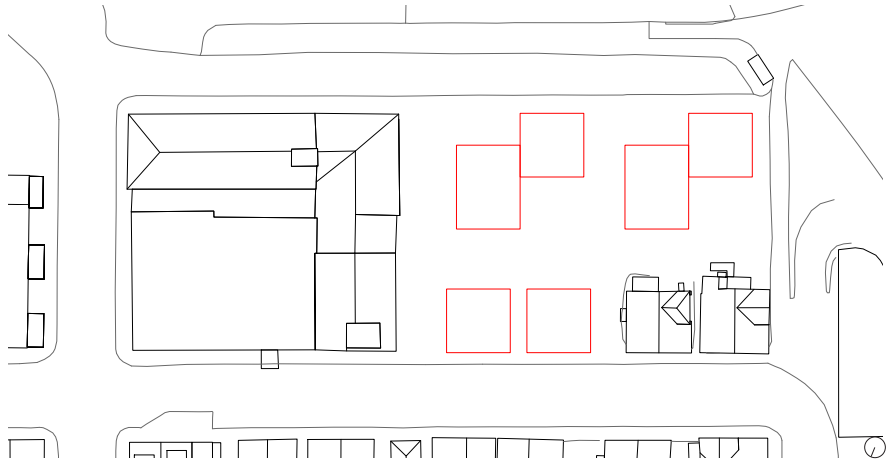
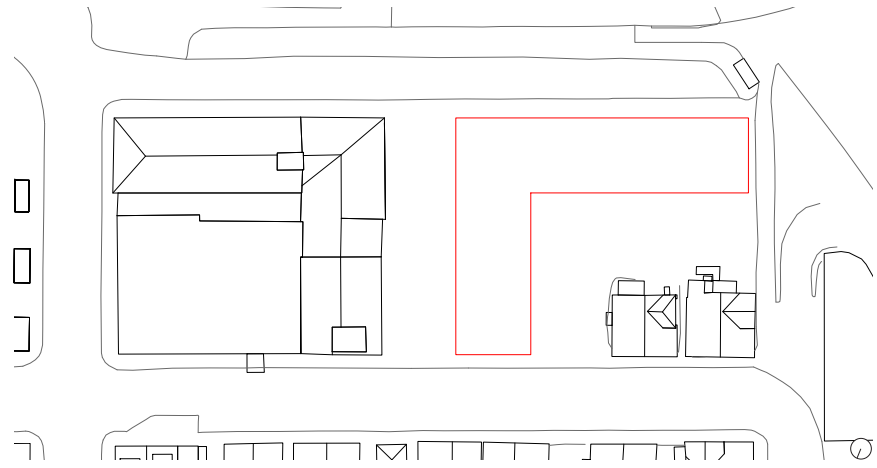


#3

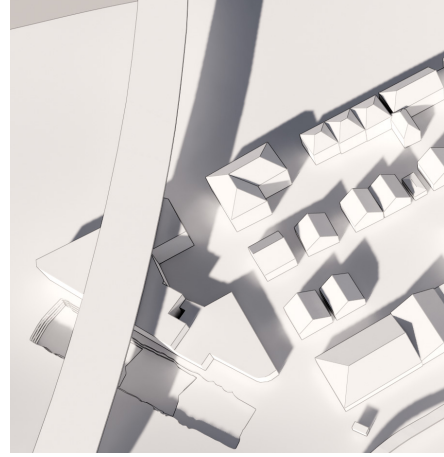
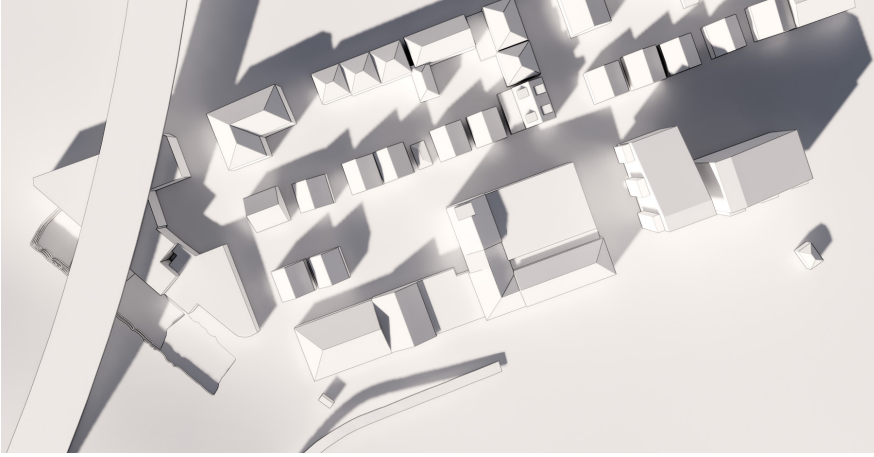


#4

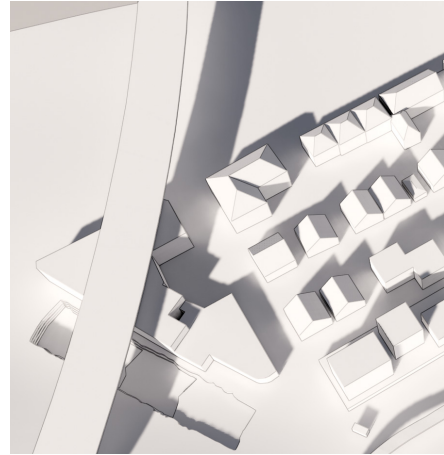
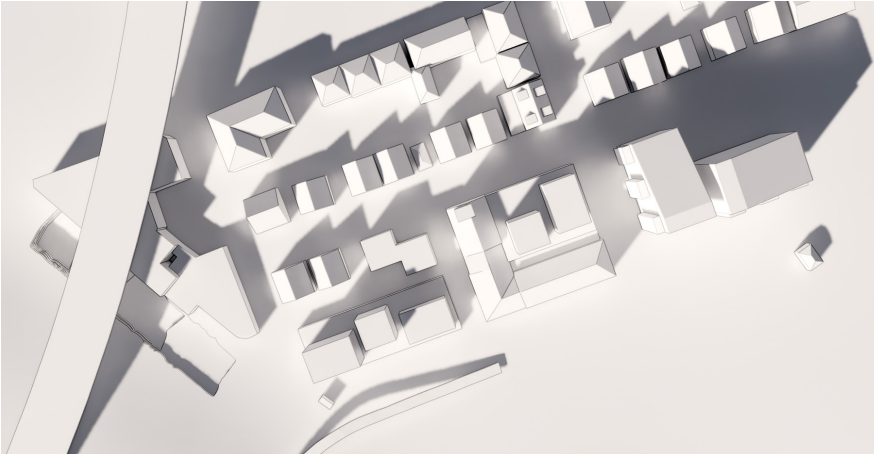




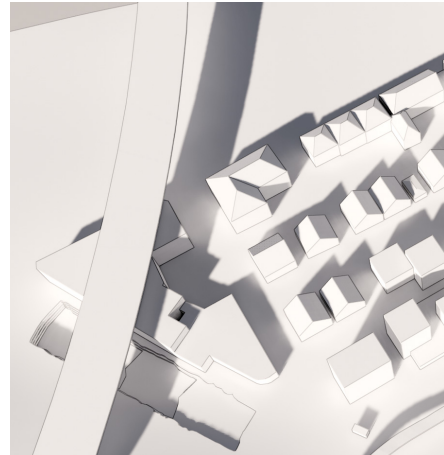
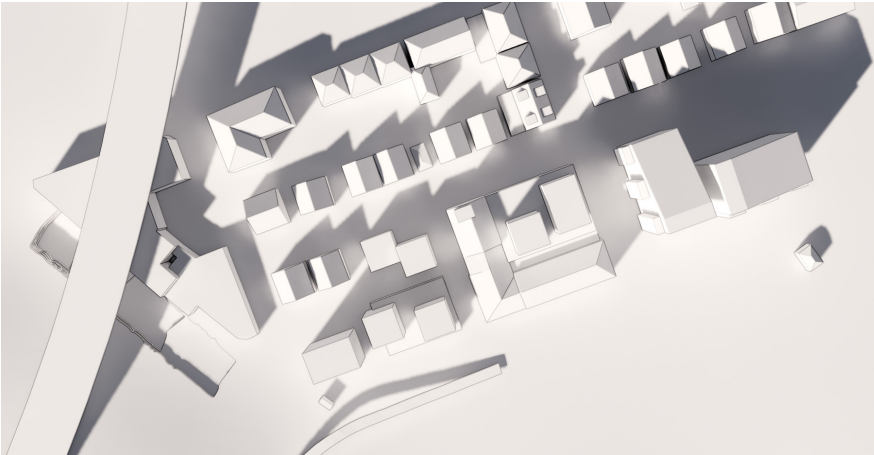
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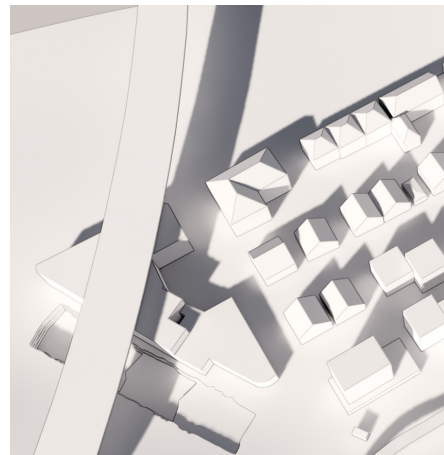
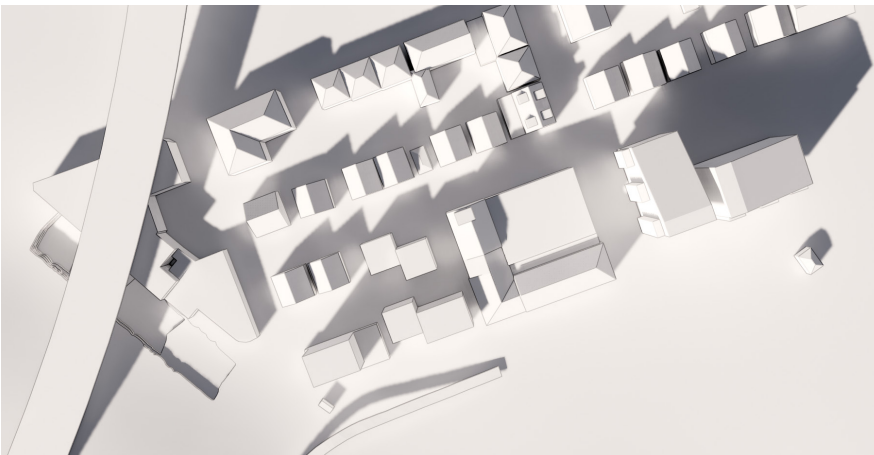
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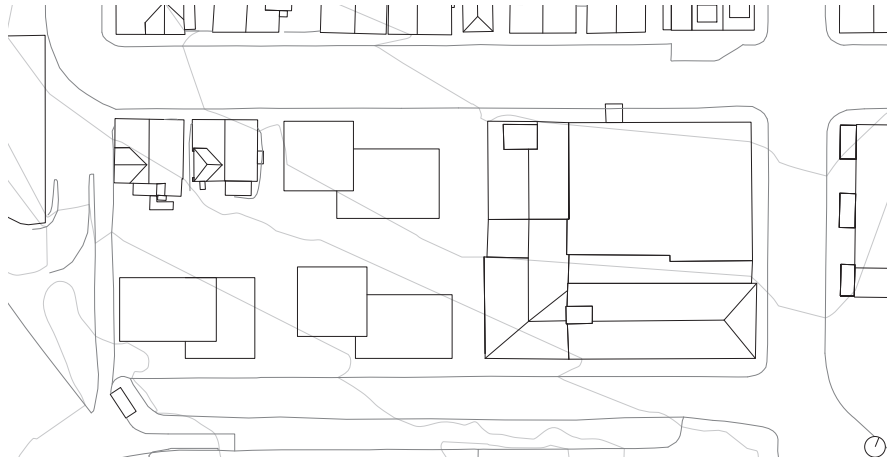
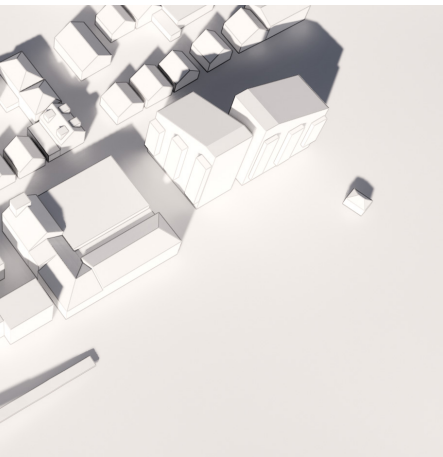
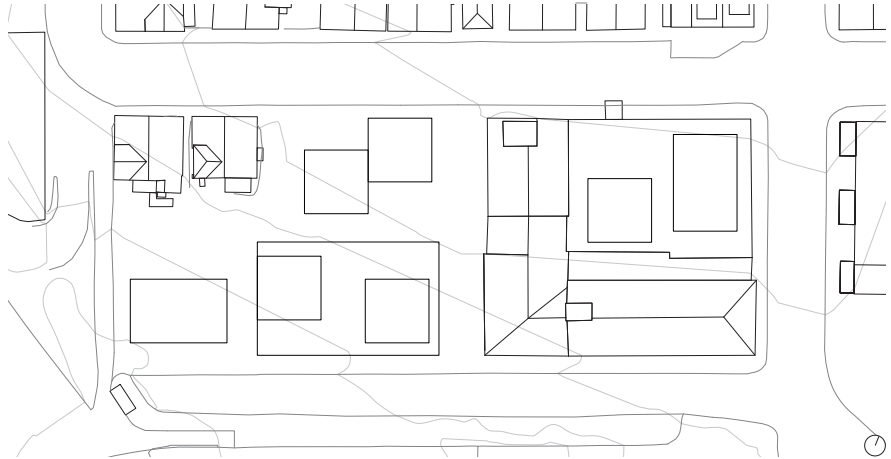
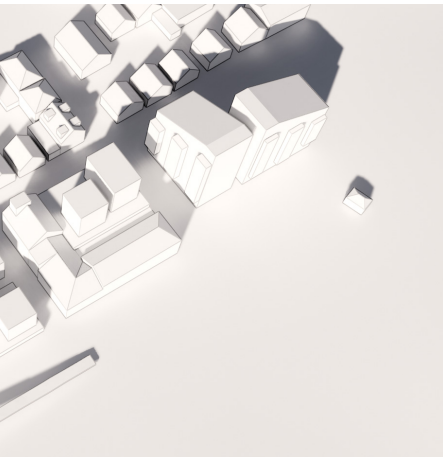
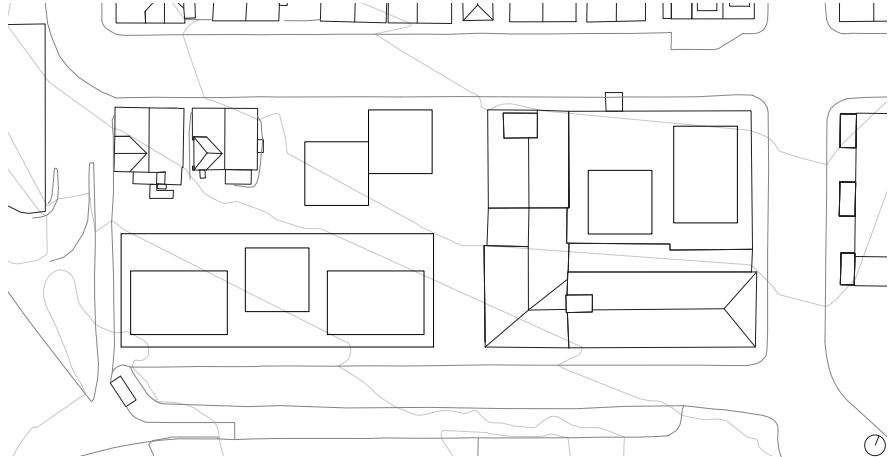
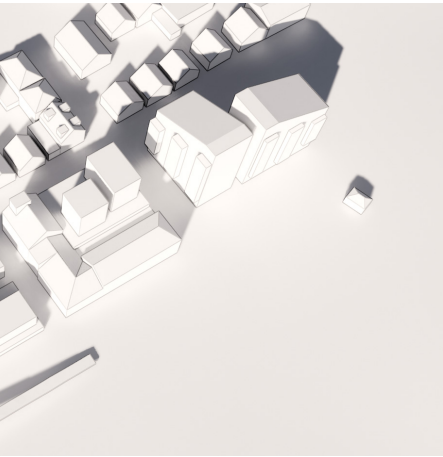
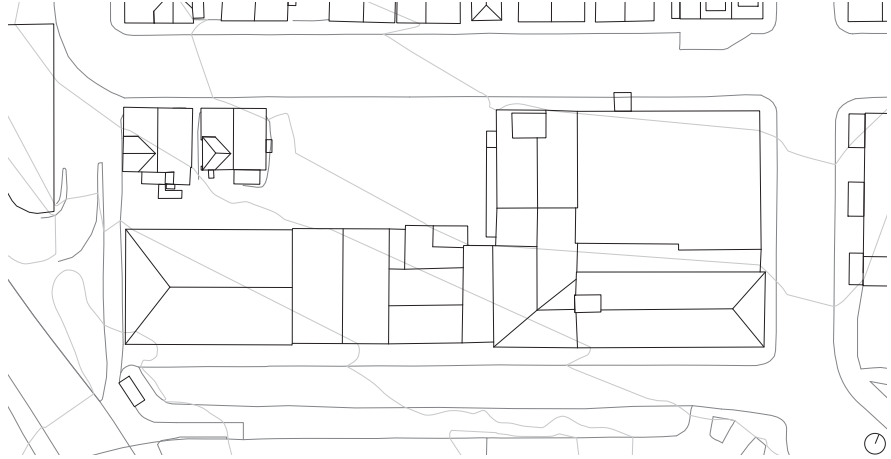
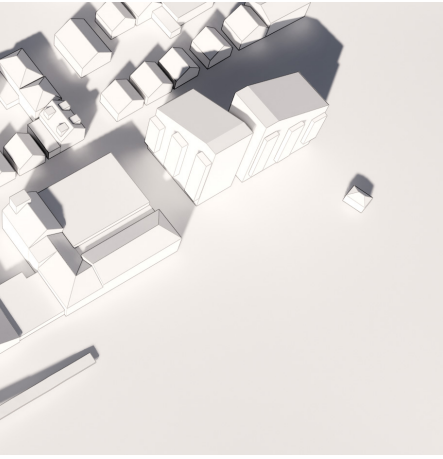


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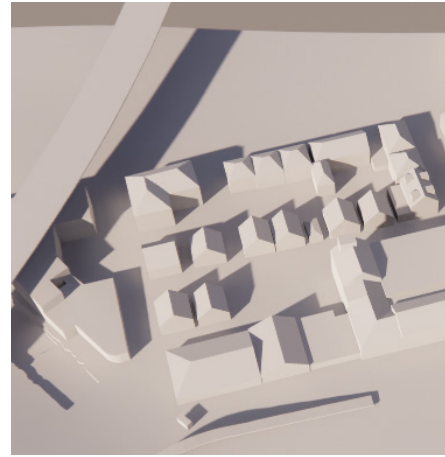
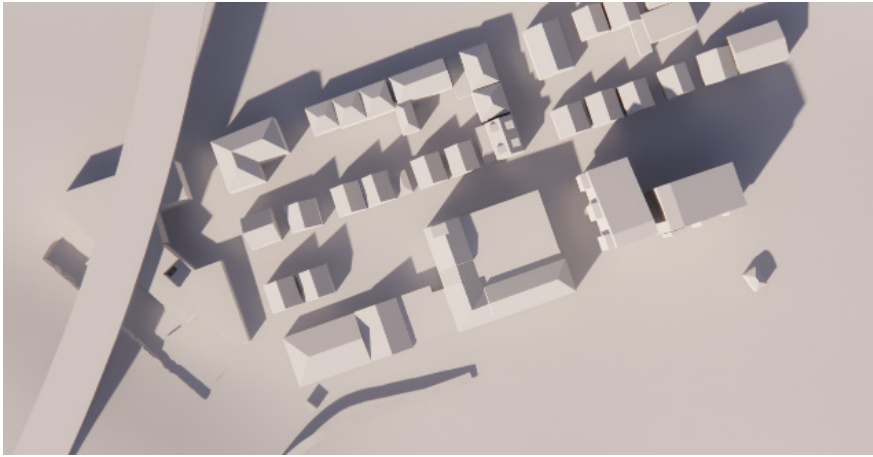


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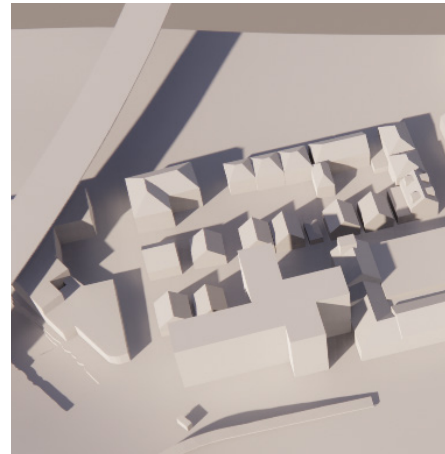
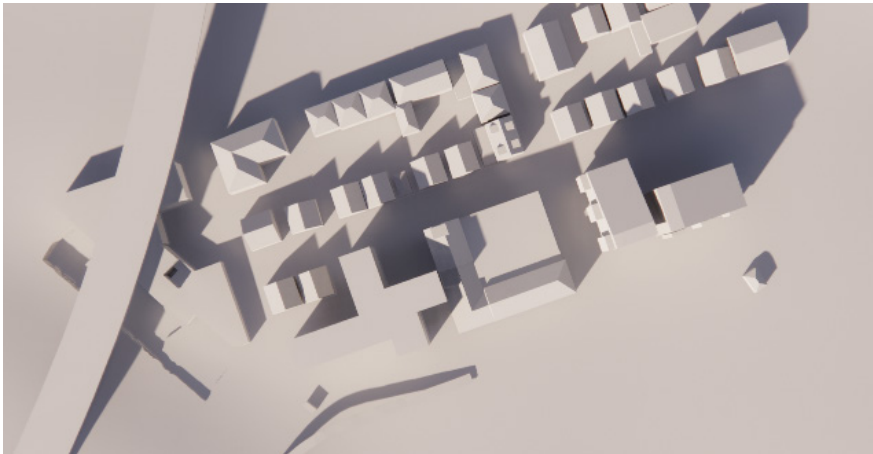




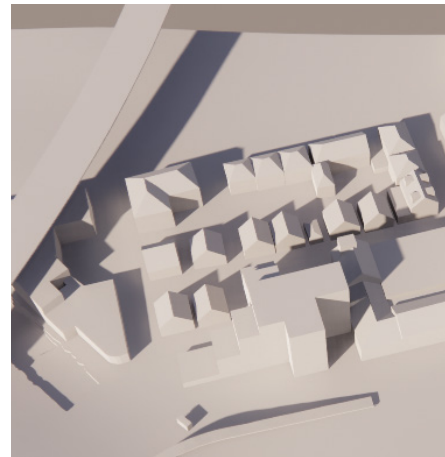
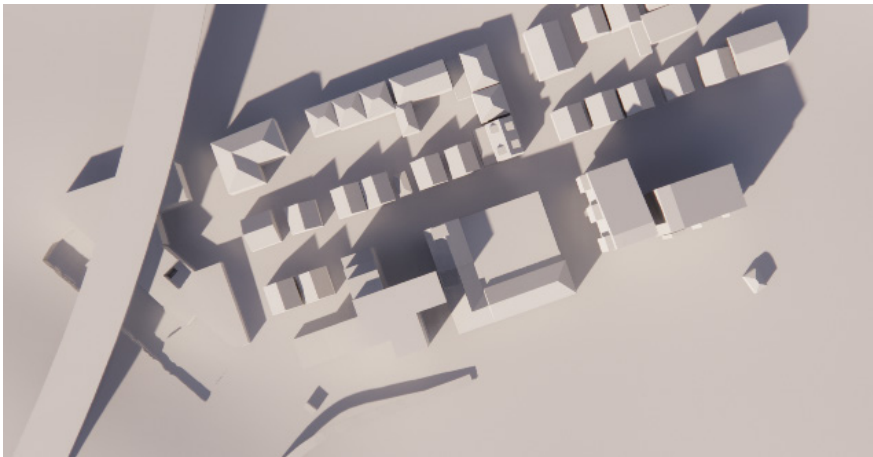
Existing



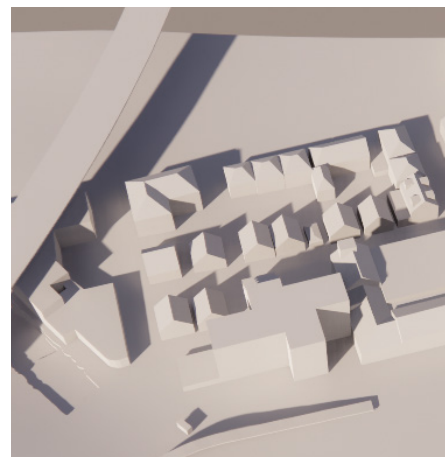
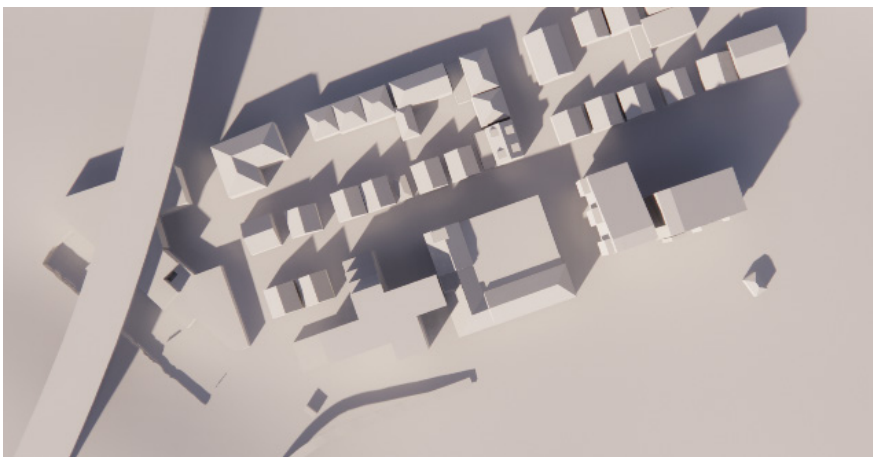
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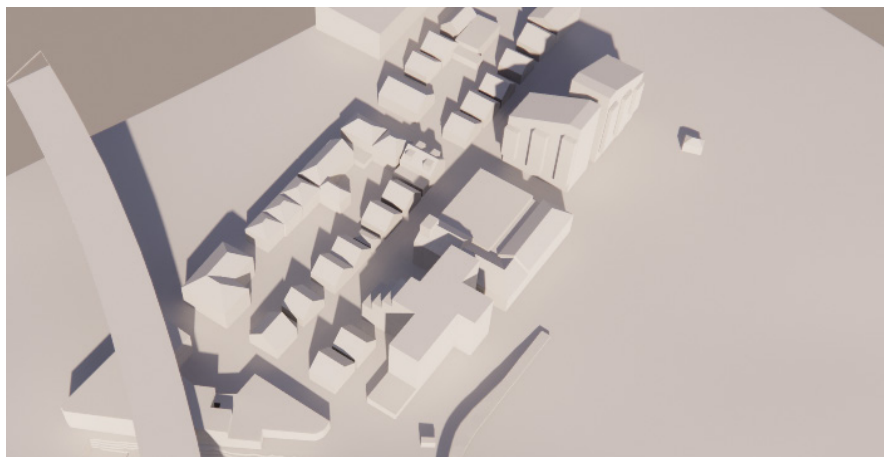
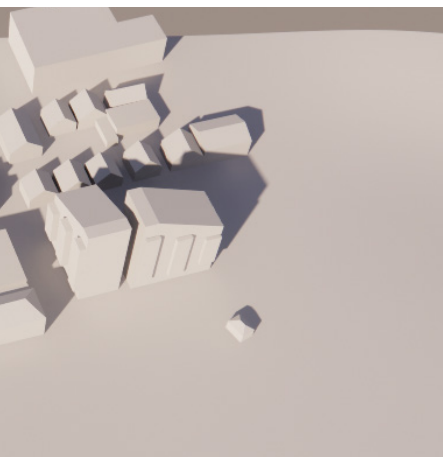
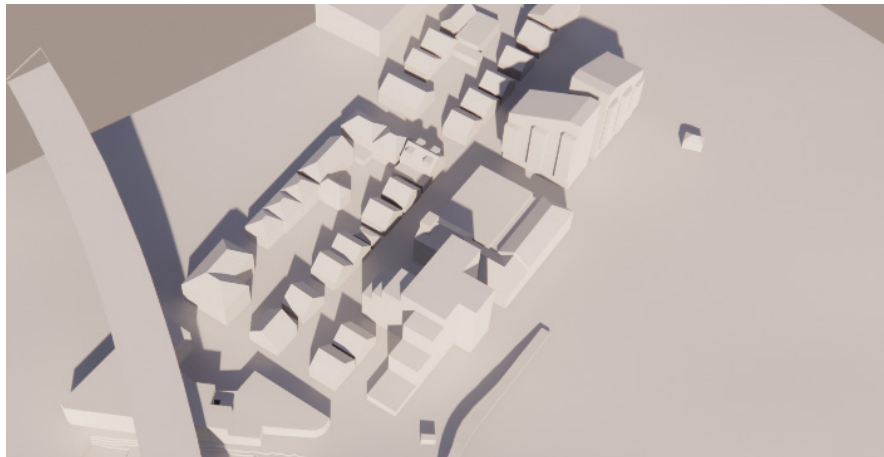
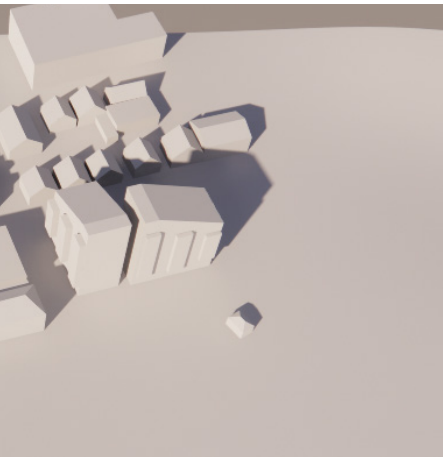
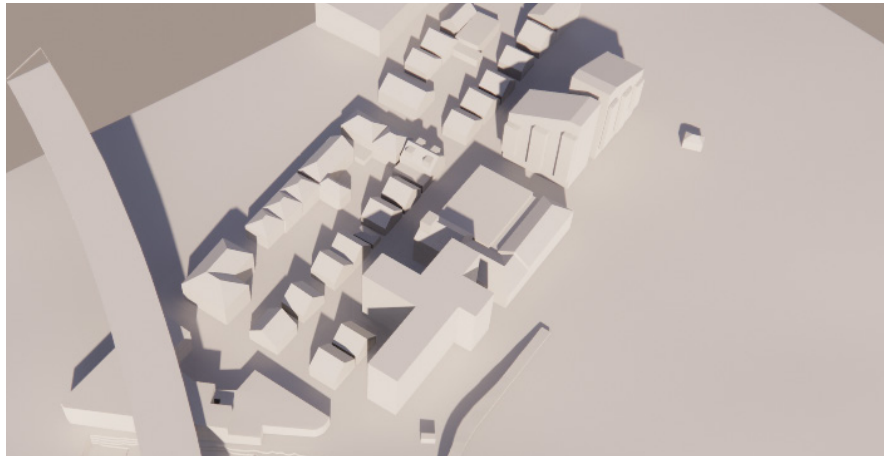
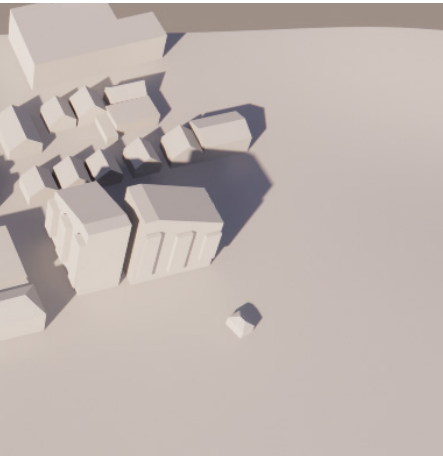
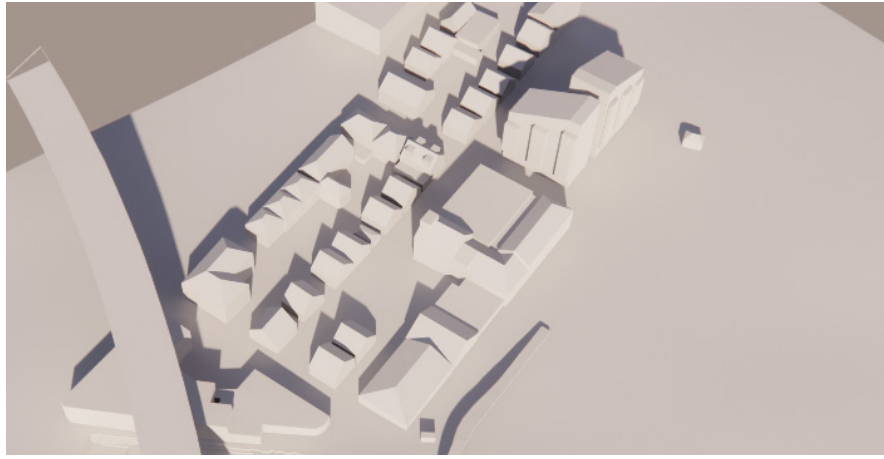
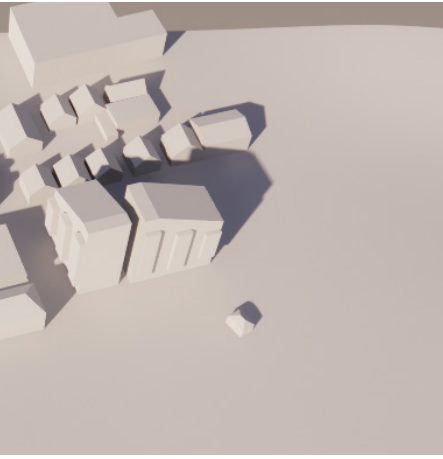


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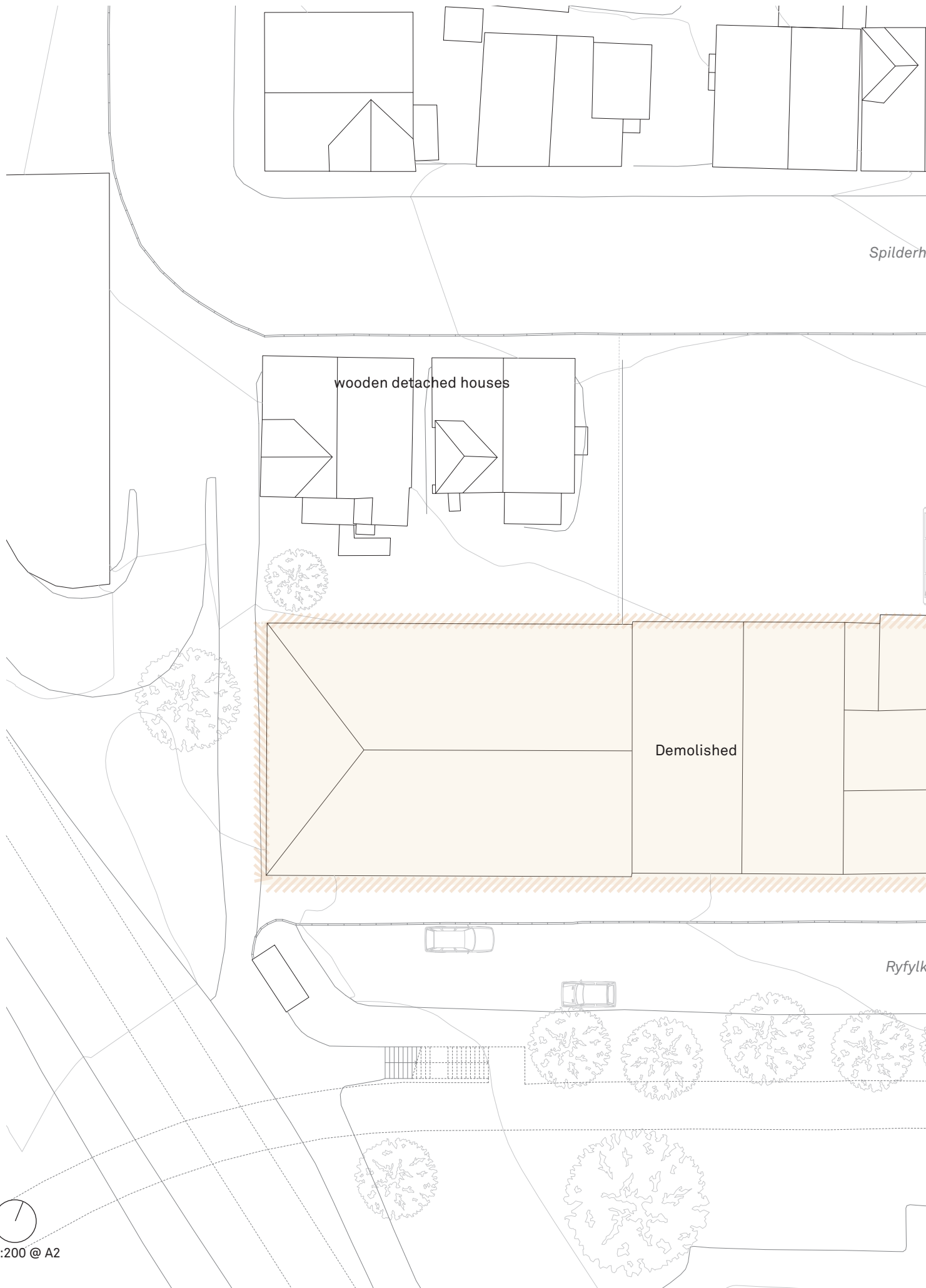


#3





Proposal



Spilderh

wooden detached houses

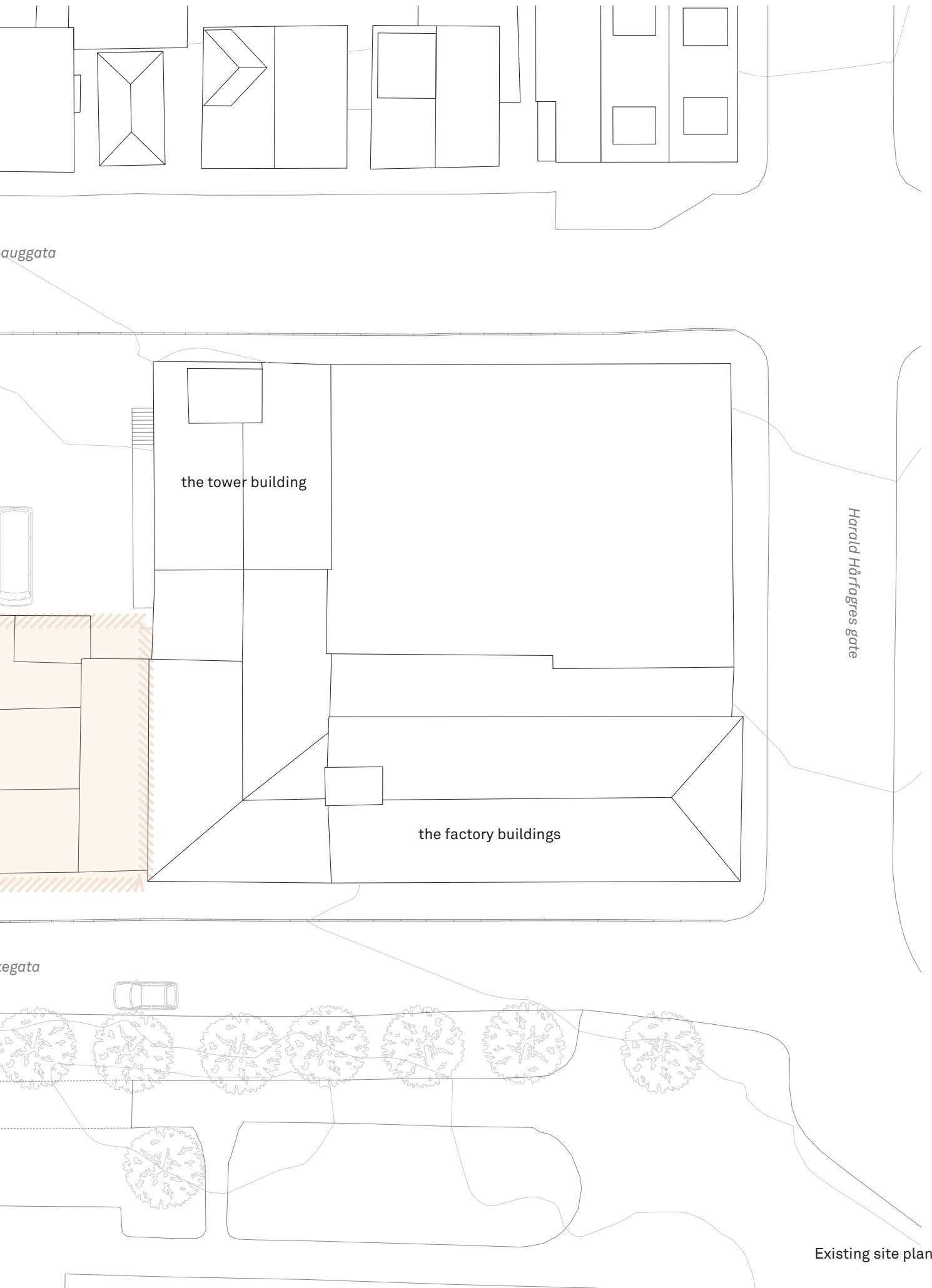
Demolished

Ryfylk

Proposal

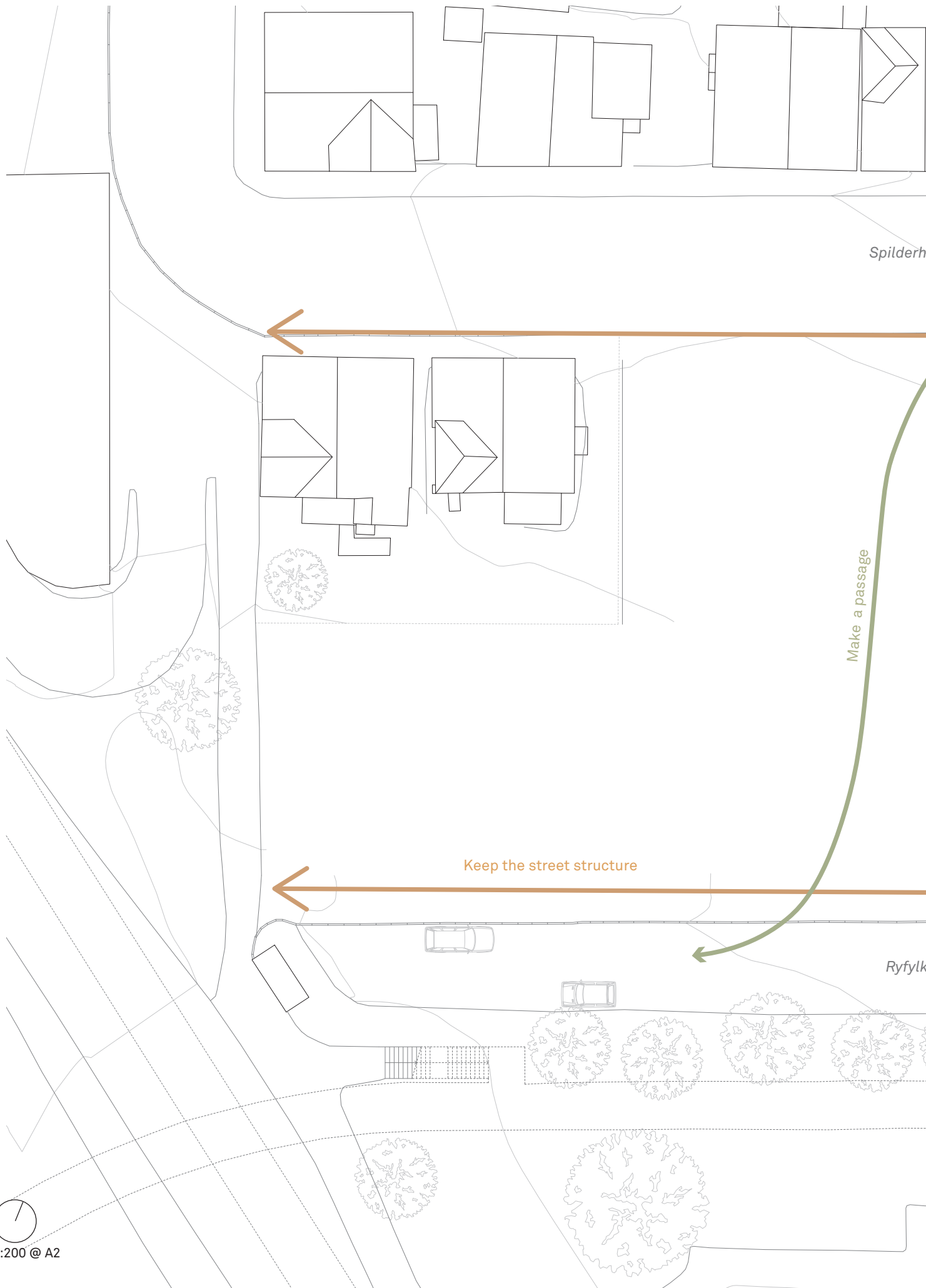


1:200 @ A2



Existing site plan

Proposal



Spilderh

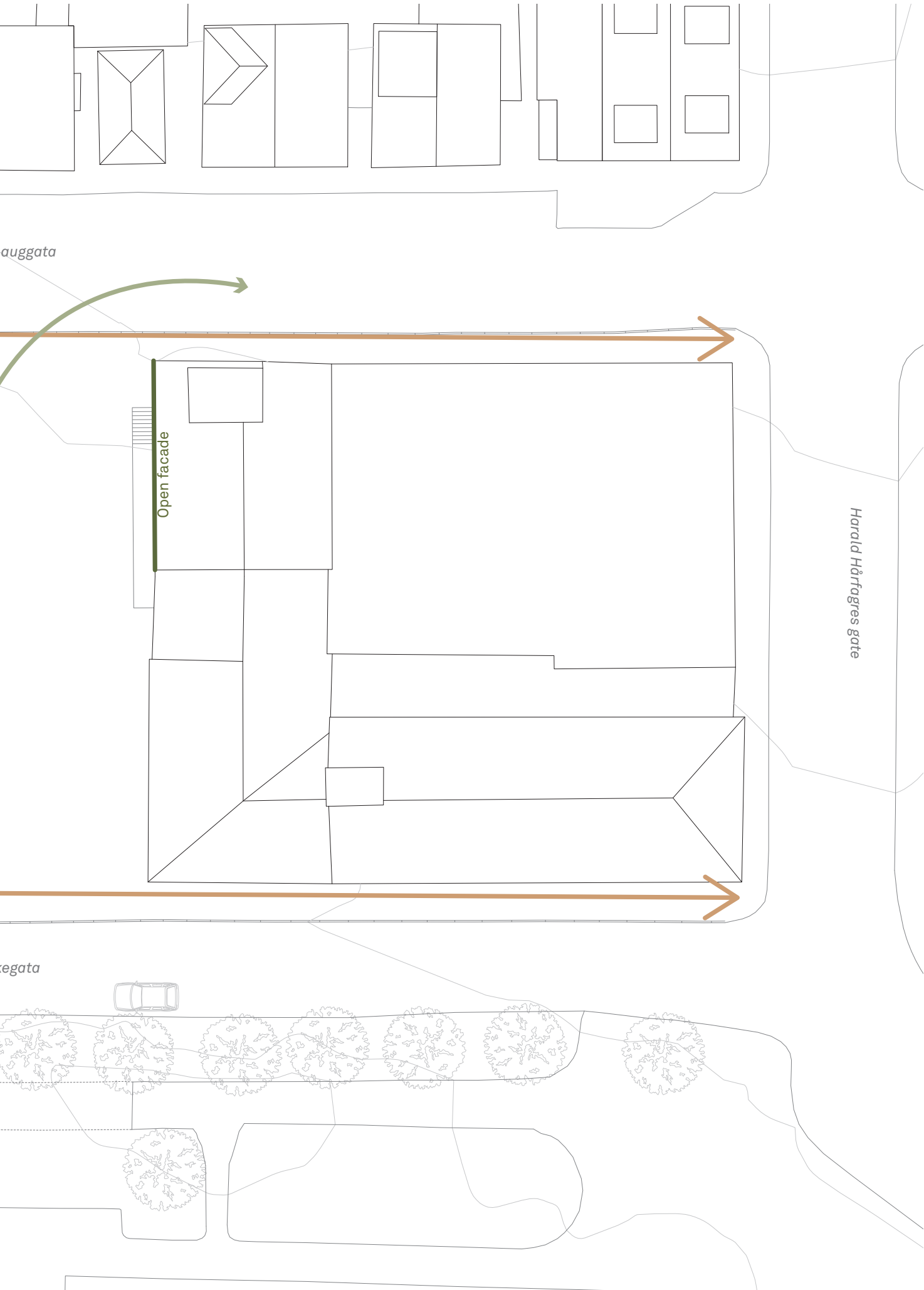
Make a passage

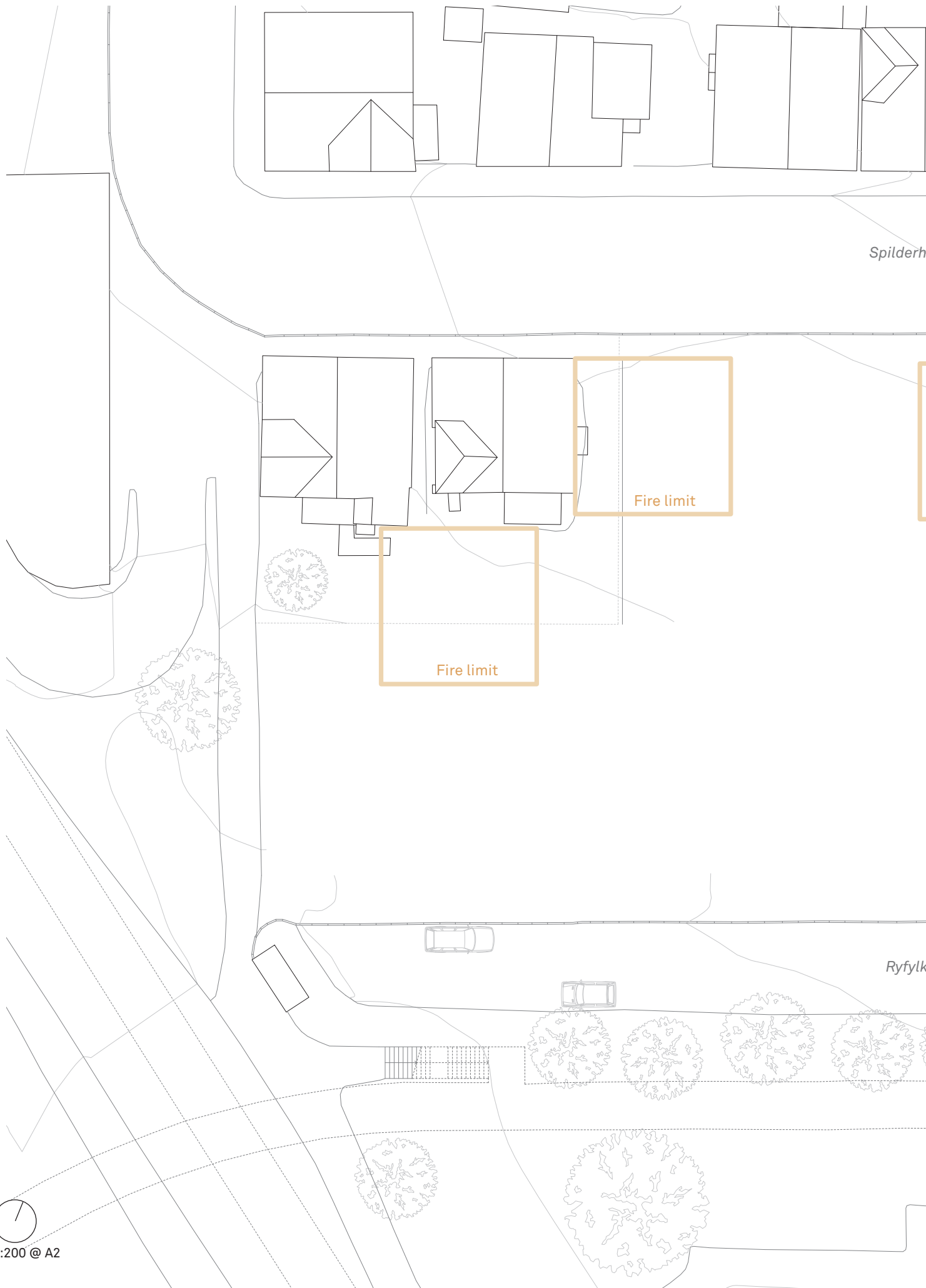
Keep the street structure

Ryfylk



1:200 @ A2





Spilderh

Fire limit

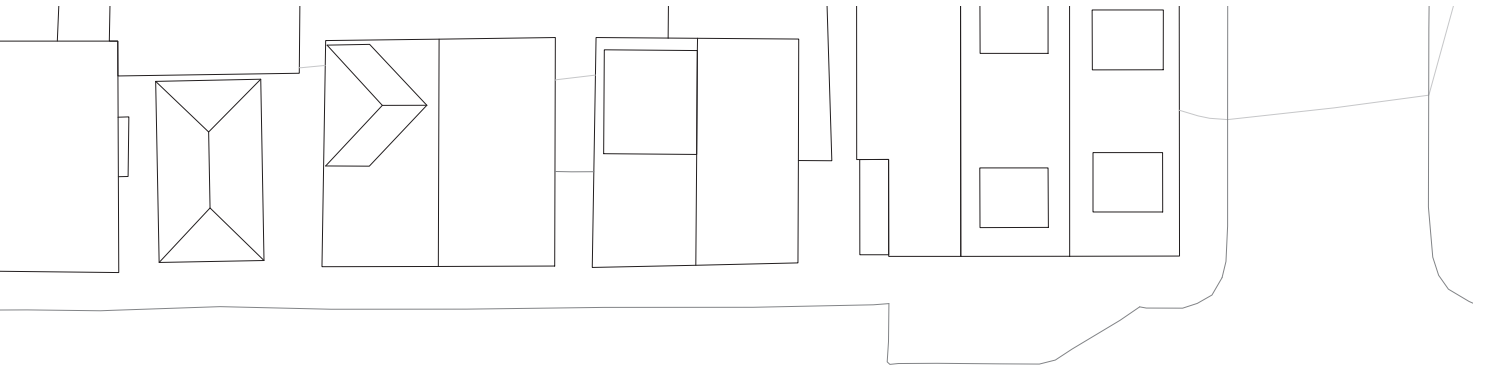
Fire limit

Ryfylk

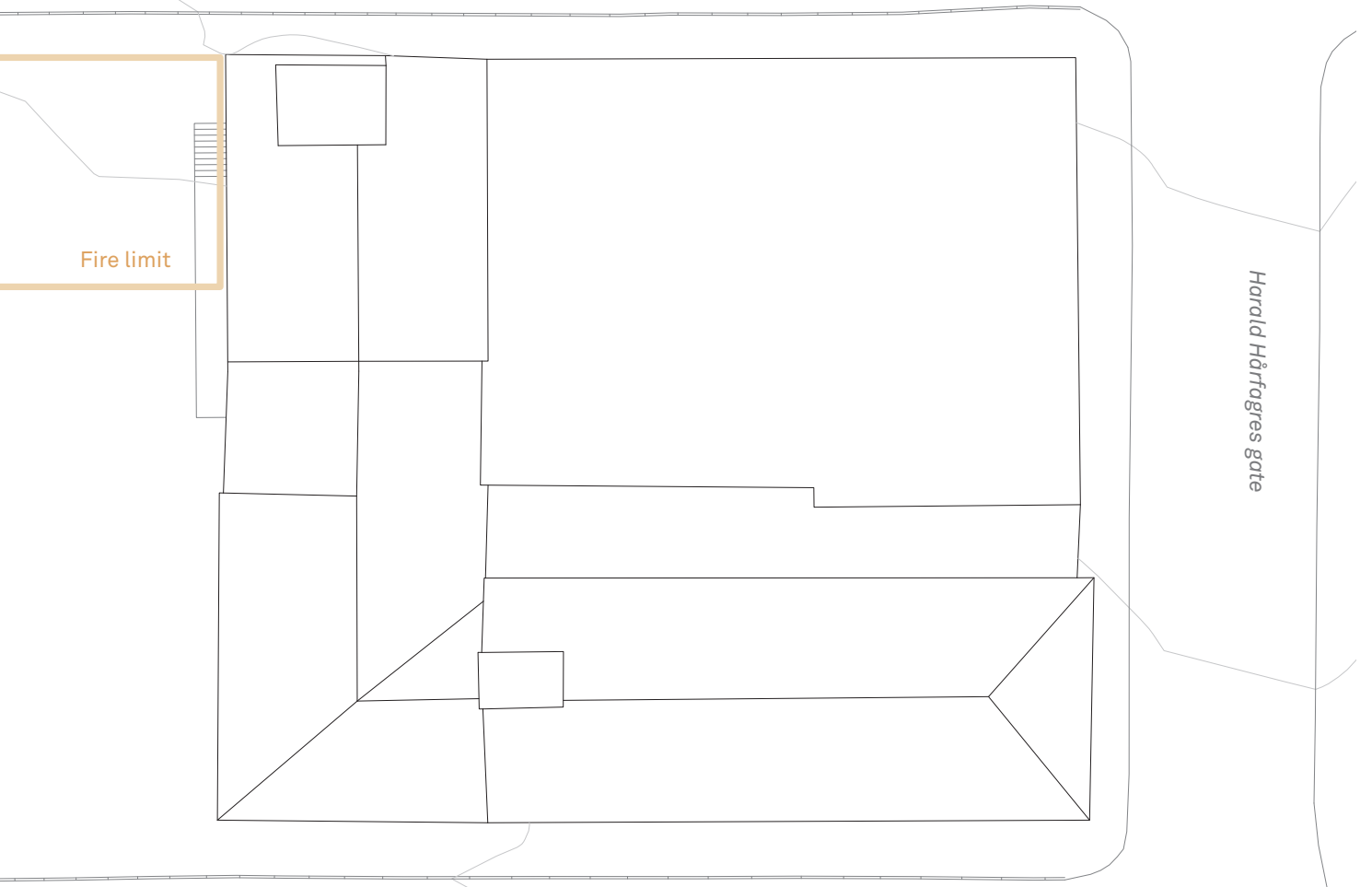


1:200 @ A2

Solveig Tjetland



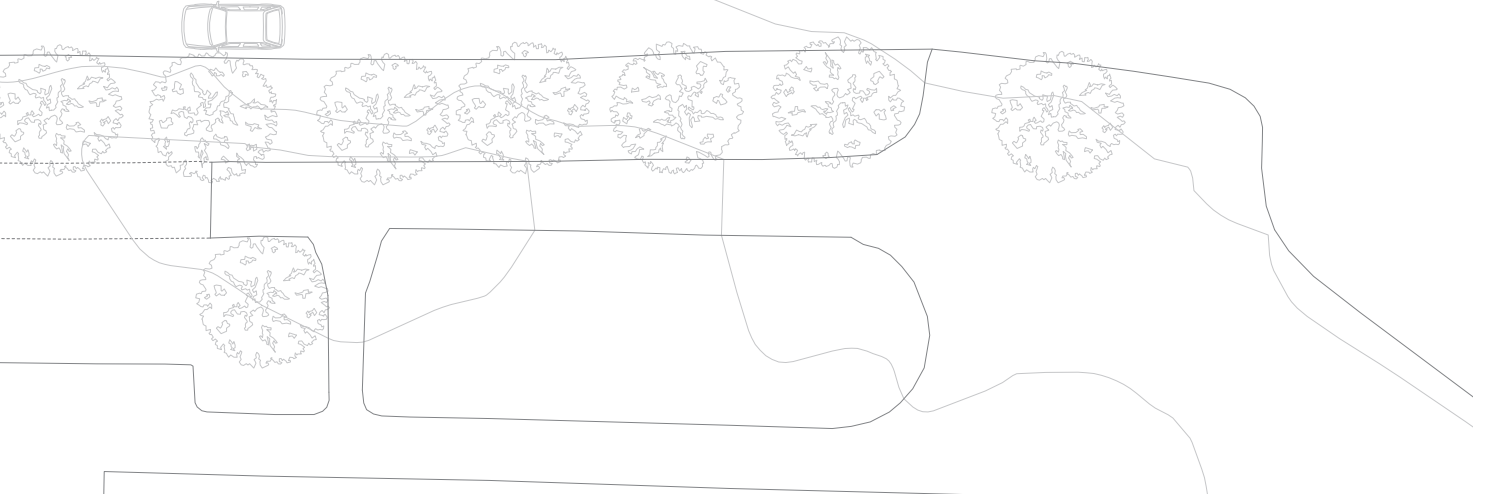
auggata



Fire limit

Harald Hårfagres gate

regata



Proposal

Deliveries

Conceptual diagrams

Site model 1:500

Situation Plan 1:500

Ground Floor Plan 1:200

Plans 1:100

Sections 1:100

Elevations 1:100

Model photos

Architectural Models 1:20 / 1:100

Text / Description / Numbers

Project book

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