

*Abstract*

## Kjelvene Student Housing

Our home is something that surrounds daily. Its qualities affect us broadly, but their realization is conditioned by economic and spatial restrictions.

In my pre-diploma I started to look into housing quality and urban density, and how these two ambitions can be combined. I decided to work with a residential typology that is suitable for higher densities; student housing.

The same density may have very different outcomes; a high tower with a small footprint and thus low coverage, and low row-houses with high coverage can have the same amount of gross floor area.

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

Located southwest in Norway, the city of Stavanger is one of Norway's biggest cities. Stavanger municipality has recently published a strategy for architecture and urban design with the desire for an increased focus on quality and attractiveness in the city's design. Four target themes have been set in the strategy; new city development should be comprehensive, people-friendly, identity-creating and responsible. Densification is an issue in most cities and is often suggested as a proposal for sustainable development. Stavanger has the largest continuous area of wooden houses ("trehusbebyggelse" in Norwegian) in Europe, both in the city centre and in the surrounding districts, while newer housing construction is often solved with taller building blocks.

In recent years, Stavanger has had a greater focus on housing in the city, among others with Helen & Hard's pilot project Vindmøllebakken and the upcoming project Teknikken Sør.

The site I have chosen for my diploma is located at Kjelvene on the east side of Stavanger, where the outskirts of the older Trehusbebyggelsen and newer development areas meet. The area has an open block structure with mostly detached houses with a density of approximately around 85-90% building density. Historically, the site has been a part of the canning industry in Stavanger, but in more recent years, it has had a varying program - from gym, music school, food store, storage and housing. Existing buildings on the site are two wooden houses from the late 1890s, a tower building and factory buildings from the mid-1800s and three smaller extensions from the 1960s and later. Today, a detailed zoning plan for a new hotel on the site is waiting for approval by the municipality. In the planning proposal, all existing buildings except the tower building are demolished and replaced with a new hotel with between 4 and 6 floors and approximately 230 rooms.

With the neighbourhood and neighbouring houses in mind, I believe the proposal is too big for the site with a building density of 286%. Not far from the site, the shared living project Vindmøllebakken, with low-rise high-density has a density of 198% which seems more fitting in size and density for the area.

The site is located by a busy road that provides easy access to the city centre either by public transport, bike or walking. The area's demographic mix is predominated by young people; considering their income, these are probably many students or newly graduated. As a target group, students seem to fit for a housing project on the site. Being a student is a temporary life phase; you usually only live in a student house for a few years. Students are also a group that often is open to new ways of living.

There are approximately 13.000 students in Stavanger and only about 1300 rooms in student homes, which means that around 90% of the students' residences are provided through the private market. Most of the existing student homes offer studio apartments, a small unit with a private kitchen and bathroom.

For my project, I decided to work with the western part of the site, preserving the factory buildings as it is, keeping the two wooden houses while demolishing the three lower buildings from the 60ies. The buildings are in a bad shape and have little or no quality for the surroundings as for itself.

In order to blend into the existing surroundings and taking the neighbours access to daylight into consideration, the new building is spilt into four wings that step down towards the detached houses in the north and in front of the neighbours' gardens in the west.

Kjelvene Student Housing consists of 48 units divided into four collectives, one per floor. As a resident, you have your own private room and share a kitchen and living space with between 8 and 14 other units. The ground floor contains a gym, a reading room with a closed group room, a laundry and a café as well as the entrance for the apartments. With the café open, most of the ground floor can work as a social meeting place, either if you wish to enjoy your coffee while studying or while doing laundry. The public ground floor activates the one-way street towards the activity park and bus stop. Each collective's shared space is located close to the stairs and elevator or in one of the well-lit ends of the building volume.

The four directions of the building's wings allow for rooms with different views and little insight into the building. When entering your unit, a view through the window is the first quality you meet. Exiting the units, the corridor's window offers the same quality. The exposed timber walls and roof give a warm and breathing atmosphere both in the private unit and in the shared and public spaces. A storage system in the axis of the bathroom frees up more floor space, and a movable cupboard allows students to furnish the unit according to individual needs and preferences.

Kjelvene Studentboliger aims to respond to Stavanger municipality's new strategy for new development with a focus on responsible and people-friendly planning. With a focusing on qualities, not only for the residents for the new building, but also



for the existing neighbourhood supports that ambition. The use of timber relates to Stavangers identity, but also gives the building an honest material use and a living atmosphere.

**Program:**

44 units à 19 m<sup>2</sup>

4 units à 25 m<sup>2</sup>

4 shared living and kitchen spaces (4,3-7 m<sup>2</sup> per unit)

Laundry

Gym

Café

Reading room with closed group room

Bike parking

**Numbers:**

Units: 48

Floors: 2-5

Site: 1464 m<sup>2</sup>

Footprint: 665 m<sup>2</sup>

Floor area (BRA): 2806 m<sup>2</sup>

Building density (%BRA): 172% (without basement) and 191% (with basement)











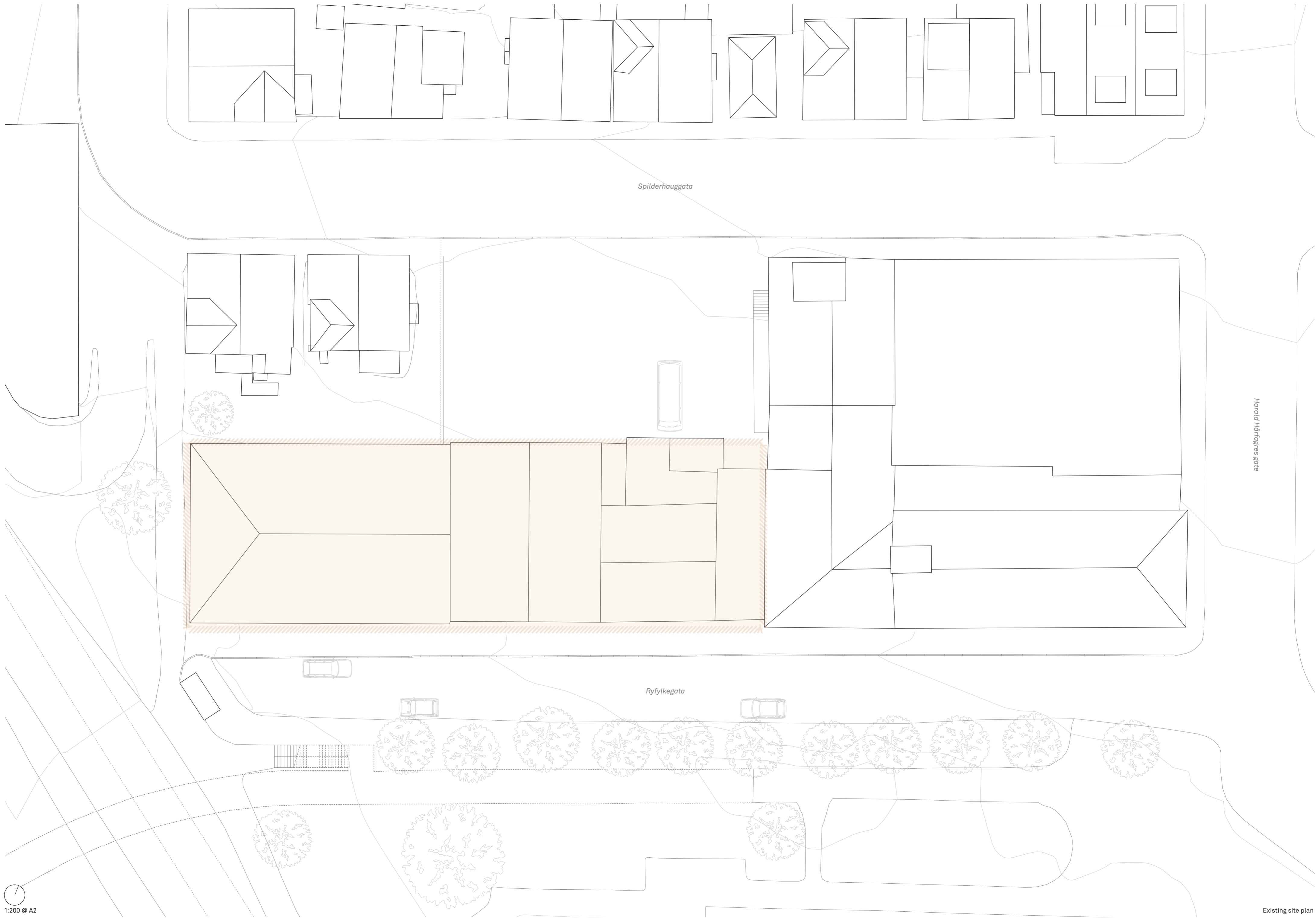


Site model from the north



Site model from the south

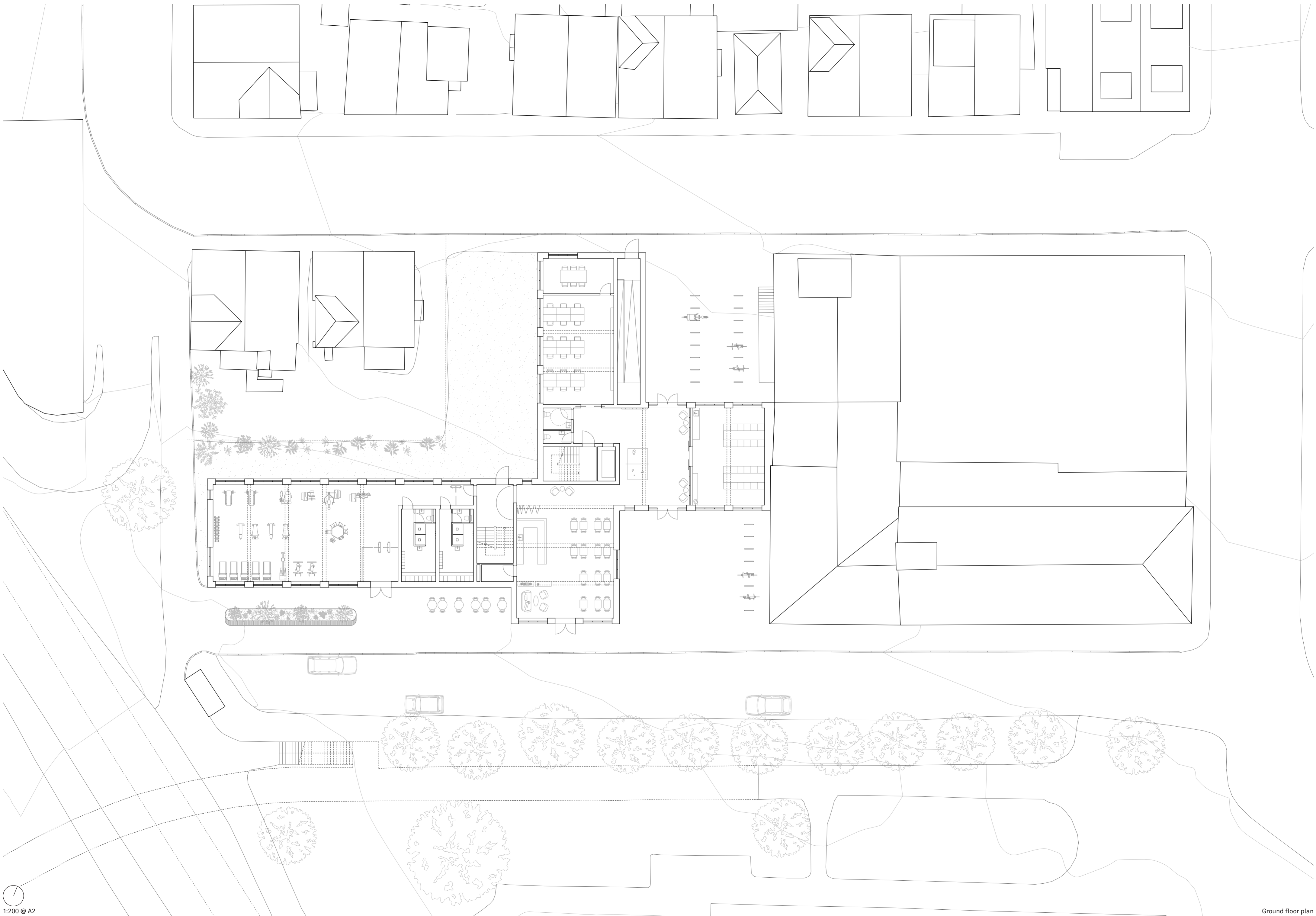


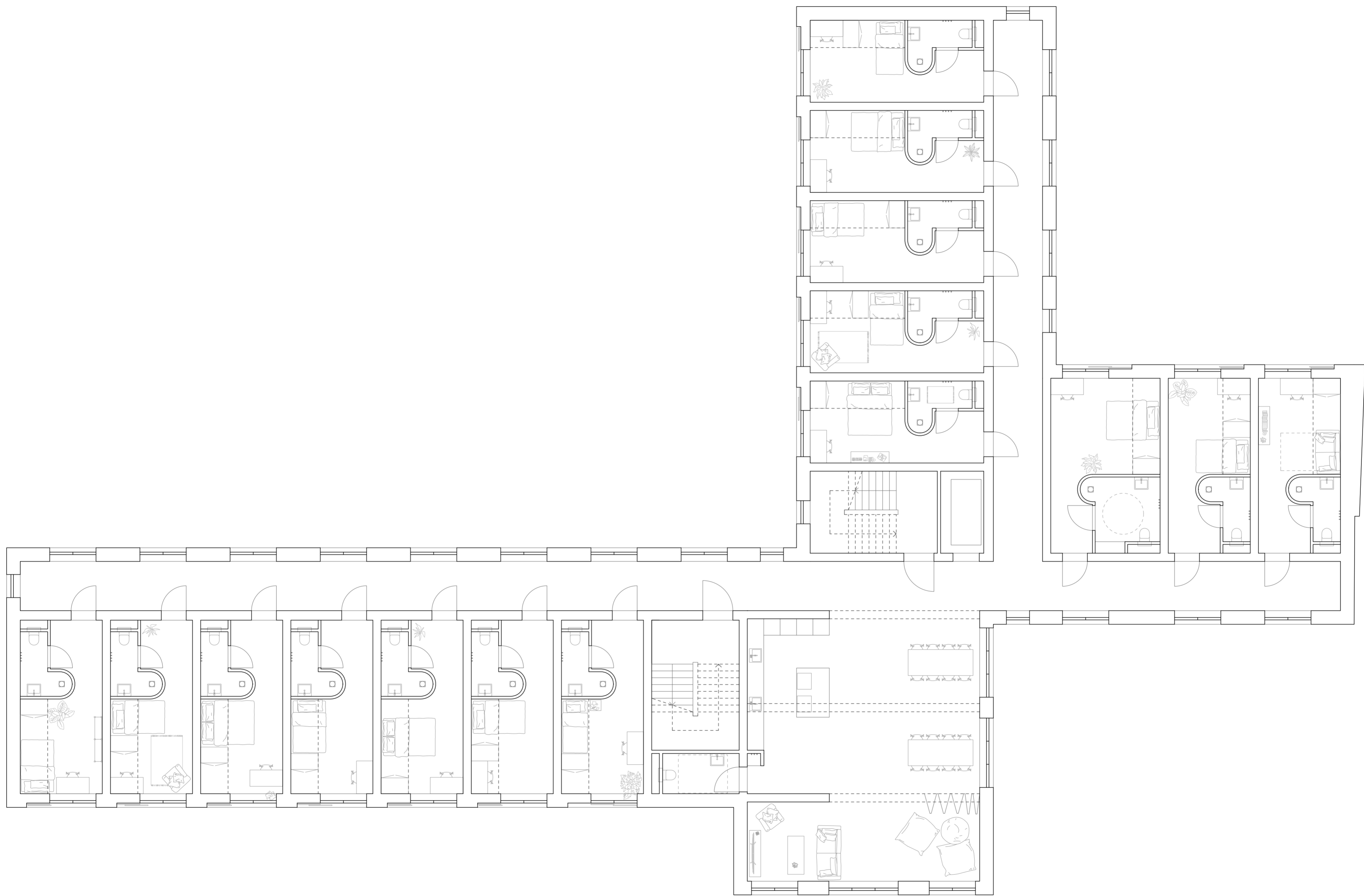


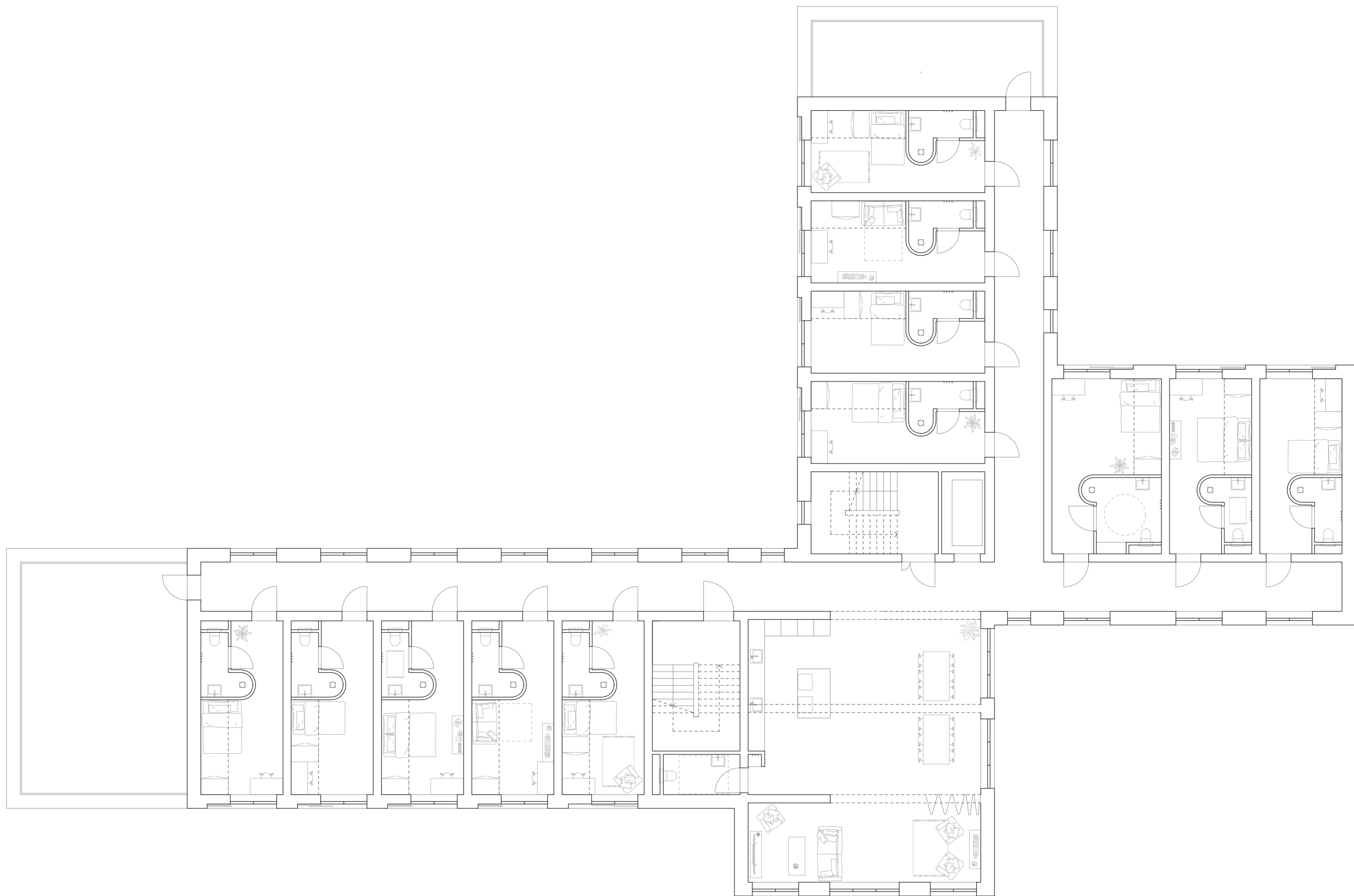
Spiderhauggata

Harald Hårfages gate

Ryfylkegata



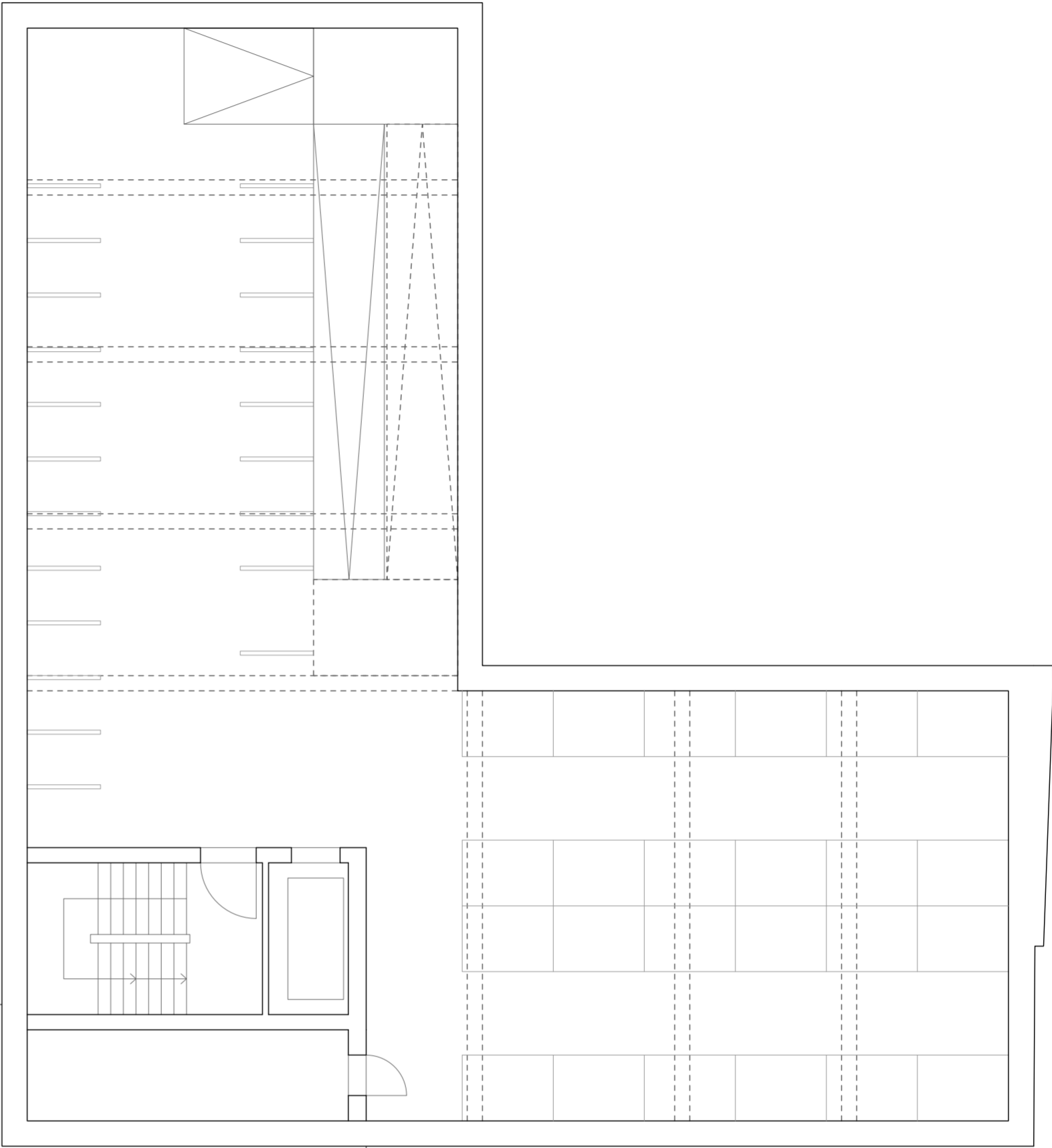


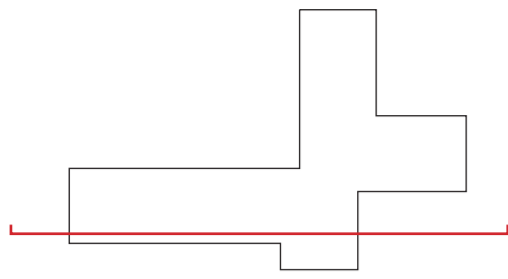


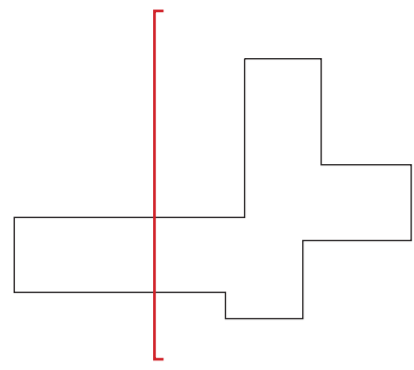


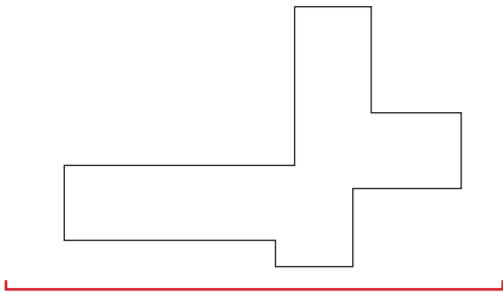








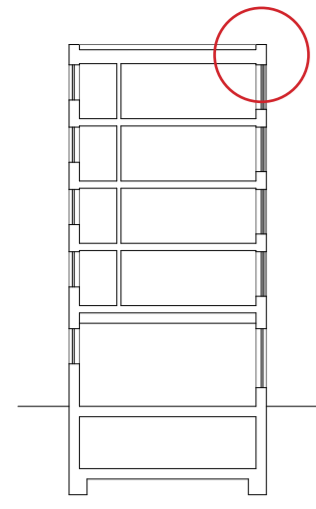












Green roof, sedum  
Separation layer  
Sealant layer  
350 mm thermal insulation  
Vapour barrier  
198 mm cross laminated timber

