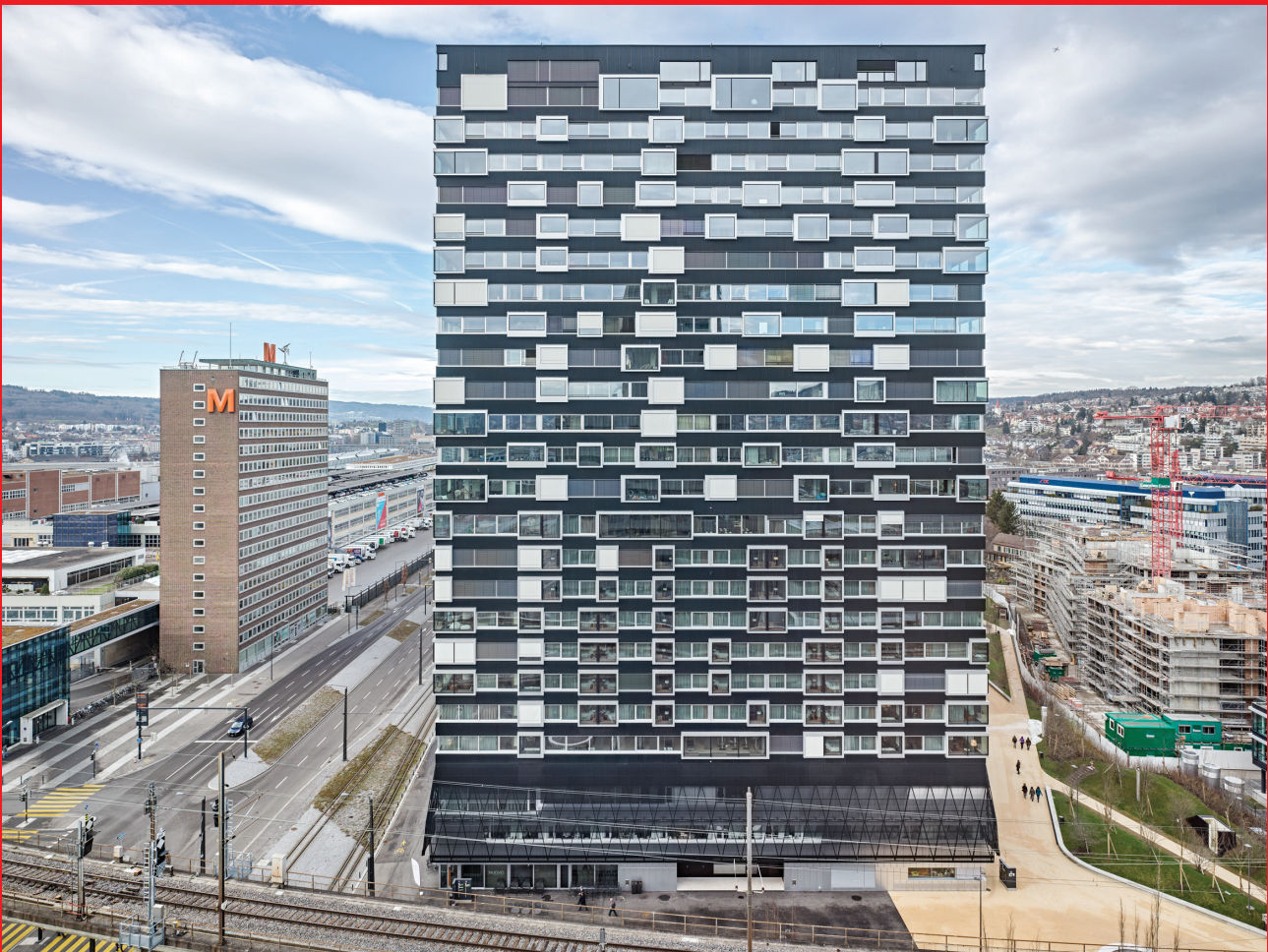


**Sam Fox School – College of Architecture
Graduate School of Architecture & Urban Design**

Washington University in St. Louis, Missouri (US)

Ruth and Norman Moore Visiting Professor



**Program – Autumn semester 2019
Studio Patrick Gmür**

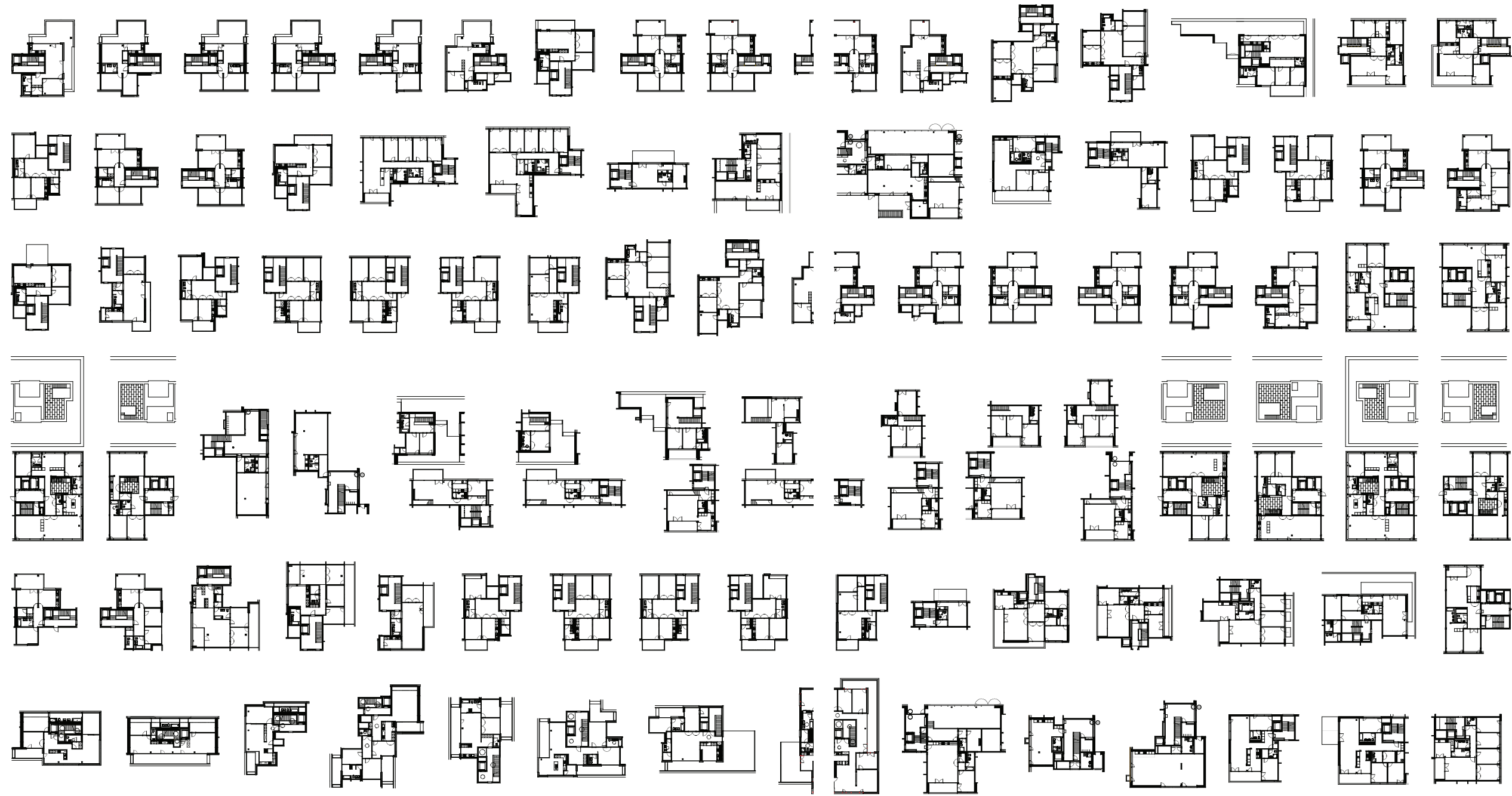
Gmür & Geschwentner Architekten + Stadtplaner AG, Zurich

Program – Autumn semester 2019 Studio Patrick Gmür

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Housing as the supreme discipline of architecture!

The design of apartments is and remains the most important task for architects. We live in the apartments we plan and build. We do not visit a bad museum, but people have to live in bad apartments. This implies a huge responsibility towards the future residents. At the same time, building apartments always reflects our own biography. Each of us lives, i.e. resides somewhere. Right from the first hour of our lives. The parental home, the first own room, the first apartment shape us. In addition, we are part of a centuries-old history of housing, which in turn is part of our housing culture.



Floor plans of apartments of the housing project James in Zurich



„The future of humanity lies in cities.“

Currently, two thirds of the world population live in cities. People are flooding into cities right across the world, cities are growing, creating big challenges – and offering a unique opportunity: they are becoming even more urban, vivid and attractive. None other than Kofi Annan, former UN Secretary-General, said in his opening speech at the World Conference on the future of the cities in the year 2000: "The future of humanity lies in cities." Cities have ever been incubators of culture, sites of intellectual exchange, and cradles of innovation. But that's not all: cities are actual "service machines". They offer people work and education, living and recreation space, good healthcare system, functioning public transport and a mixture of anonymity and social cohesion. And last but not least, let us not forget the wide range of societal milieus that cities engender. A city is a place for everyone.



Zurich's atmosphere – between water and urban fabric

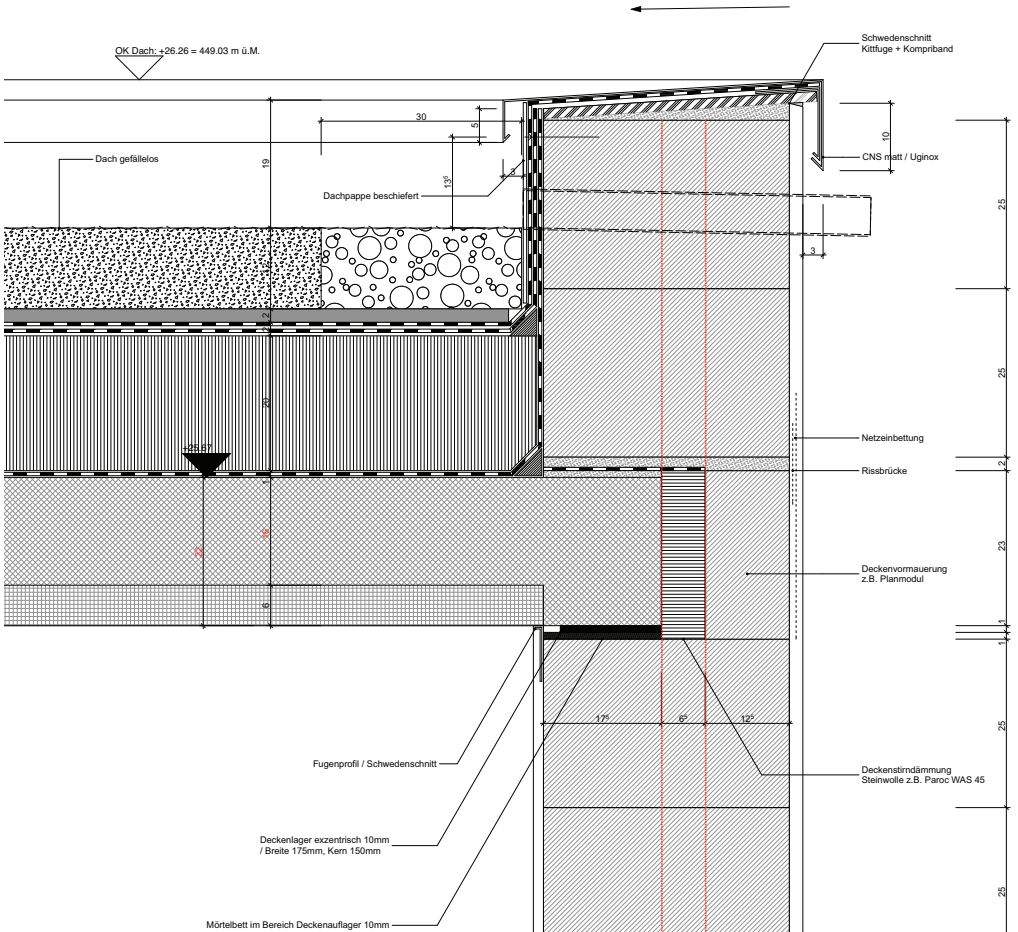
Figure-ground plan of Zurich



Aerial view of Zurich

Large and small scales!

Our semester will move in this rich field of tension - between city and apartment. An architect's design project always first concerns the city or the larger context of a neighbourhood. At the same time, the focus is always on a possible design idea and its implementation. In our profession, we always work with large and small scales, whereby the adjectives „large“ and „small“ do not refer to the number of scales, but to the size of the object on a map or on a plan. We are interested in urban planning, architecture, design, construction and 1:1 detail. The focus is on Zurich, my home town.



Construction detail roof and facade of Binz housing project in Zurich

The high quality of life in the city of Zurich as both an opportunity and a challenge!

The city of Zurich, the largest city in Switzerland, will be our training ground for this semester. Why Zurich?

For years, Zurich has been one of the cities with the highest quality of life and in many respects is a role model for a lot of European cities. There is a wide range of reasons for this.

Thanks to its privileged location in the heart of Europe and excellent connections to the international transport network, the city is closely linked to its neighbouring countries and cities. All major cities in the German-speaking area can be reached within a few hours of travelling time. But public transport is also exemplary in Switzerland, and Zurich is its most important transfer point.

The city is actively committed to mobility that is compatible with the needs of the city, i.e. reducing motorised individual transport and at the same time promoting public transport (train, tram, bus) as well as slow transport (bicycles and pedestrians). Switzerland is economically and politically very stable. Zurich profits from this stability. One in five francs earned in Switzerland comes from Zurich. Being one of the most important financial trading centres of the world, many financial institutes have also settled in Zurich. This concentration also generates a very high average income for the population. Zurich is one of the richest cities in the world, also thanks to its good tax revenues. But it is not only rich, the city is also very safe.



Zeppelin view



Sechseläuten-Platz in Zurich



Lake's atmosphere in Zurich



Street market in Helvetiaplatz



Sunny Bullingerplatz

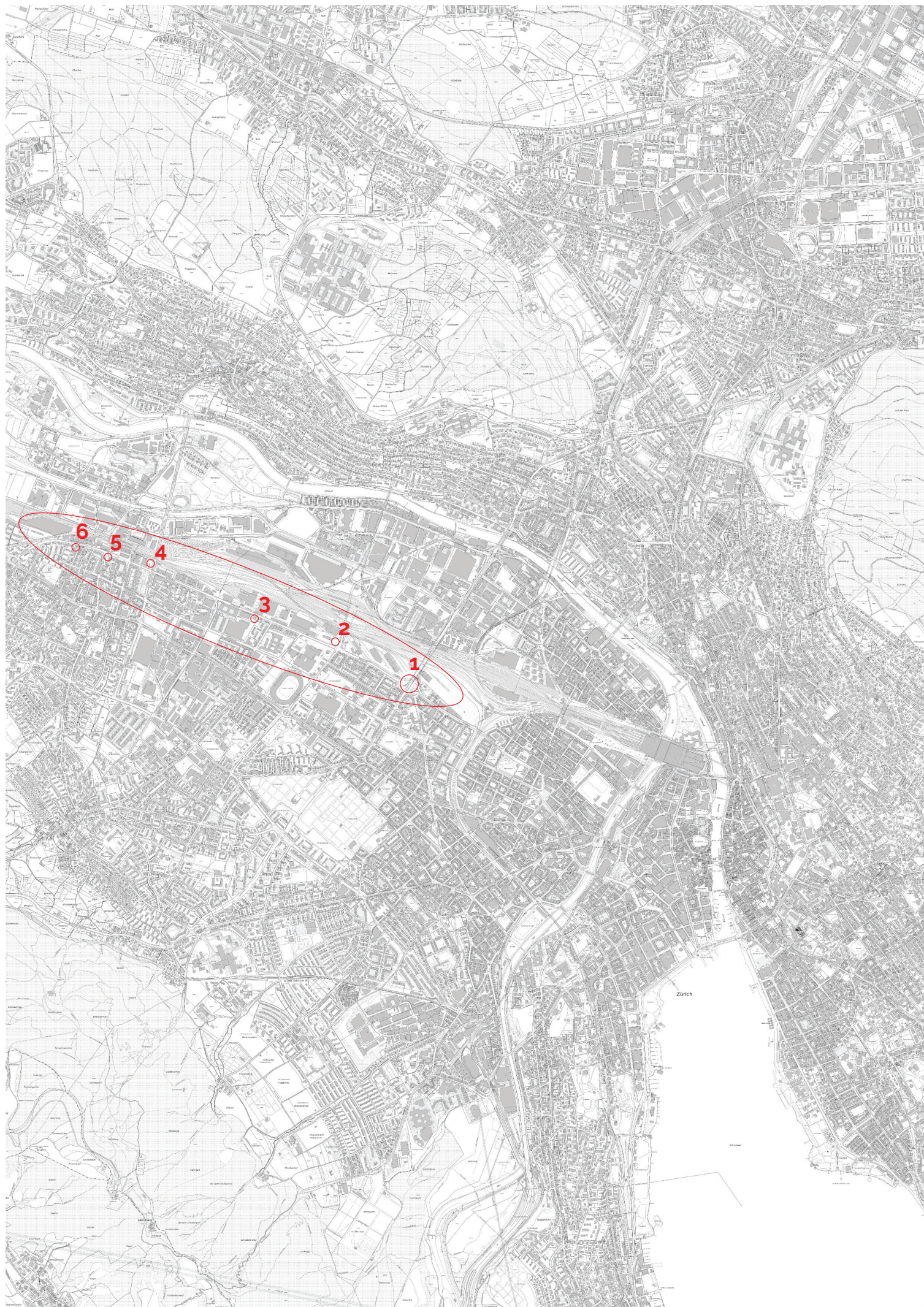


A view and a bench

In addition, Zurich has an extremely good health care system. Moreover, it offers an excellent public school system and various universities, including the world-famous Swiss Federal Institute of Technology (ETHZ).

Compared to the number of 420,000 inhabitants, the cultural leisure and sports facilities are also very large and extremely diverse. Various museums and sports facilities are open to all visitors. Furthermore, environmental protection has been promoted and maintained for years. The realisation of the 2,000 Watts society by 2050 is one of the major political goals. It has been confirmed in various referendums and is laid down in the municipal regulations. The cityscape paired with the (also political) demands for high qualities in urban development and architecture, but also the care of the existing and partly protected urban structures and neighbourhoods make an essential contribution to the high quality of life. These and other qualities attract people from all over the world. Over 180 nationalities live in Zurich. At over thirty percent of the total population, the proportion of foreigners is among the highest in Europe. Two thirds of the inhabitants have a parent with a migrant background. Zurich is a city for everyone! However, this great attraction and attractiveness also has its downside: there are no more vacant plots of land. Urban expansion is also impossible for political reasons. If the city grows, it has to do so with internal densification. One consequence of this is that land prices have risen at an above-average rate in recent years. The associated explosion in apartment rents is one of the biggest concerns of the Zurich population. In addition to implementing the 2,000 Watts society, building and maintaining affordable housing are among the greatest political and social challenges.





Overview plan of Zurich with indication of the six selected sites

Semester structure

Our semester is divided into three parts. There is a first three-week design exercise dedicated to housing and housing culture; an apartment for a collector is to be designed and presented in a model at a scale of 1:20. The second part deals with Zurich: in addition to an urban planning analysis, a collective model with the six high-rise locations is to be built. A joint study trip to Zurich concludes this phase. In the third part, a small residential high-rise building is to be designed on the selected site. In addition to the apartments, which make up the majority of the uses, the entrance area as well as common social facilities and meeting points are of interest.

The aim and intention of the course is for students to work independently and with great personal responsibility. The work is presented and discussed in three intermediate critiques.



Project review at Gmür & Geschwentner office in Zurich

1. Housing and housing culture – a preliminary exercise

(26th of August – 13th of September 2019)

We sleep in the bedroom, cook in the kitchen, eat in the dining area, live in the living room, and use the bathroom for personal hygiene. These functions of an apartment are universal, they determine our floor plans, whether in St. Louis, Zurich or Tokyo. And yet residential construction is still extremely interesting because it always sets new conditions for orientation, access, space requirements, additional uses, relation to the outside space or material specifications. That's why there are innumerable variations and combinations in an apartment floor plan design. At the same time, specific living cultures have developed over the centuries.

In order to approach the overriding topic of housing construction, we start our design semester with a three-week preliminary exercise. The task is: Design an apartment for a collector. The collection provides the opportunity to give the apartment a specific character and to charge the design accordingly. The following collections are available:

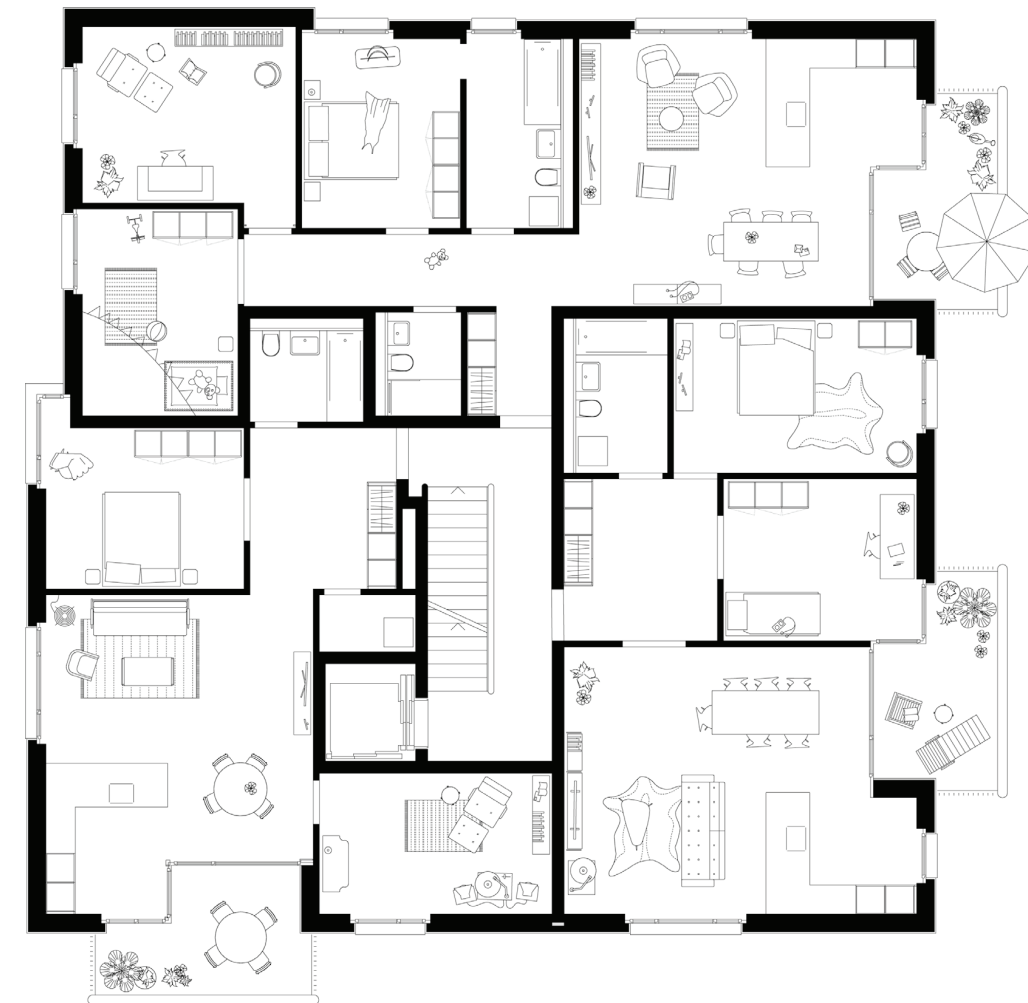
- Modern(ist) furniture
- Carpets
- Ceramics
- Books
- Mexican Folk Arts & Crafts
- American Art of the 20th Century

Find a reference of a built apartment that serves as a model for you and create an individual room program in a first step. Then represent the individual spatial principle on a scale of 1:20 in a working model.

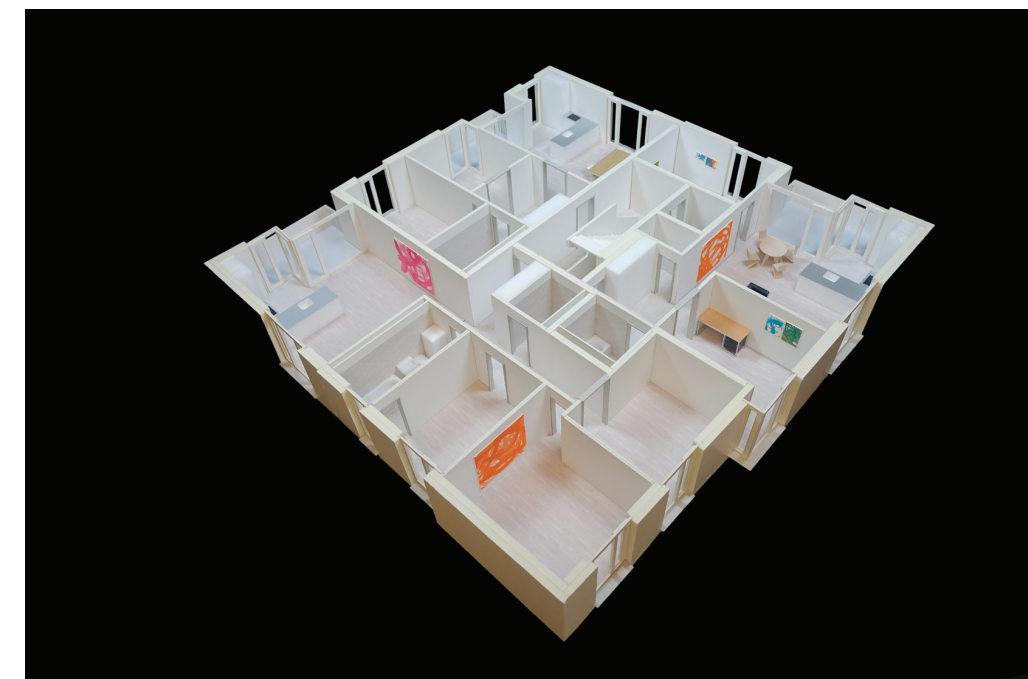
On 12 September 2019, the interim review will take place on the basis of the 1:20 model of the first preliminary exercise.



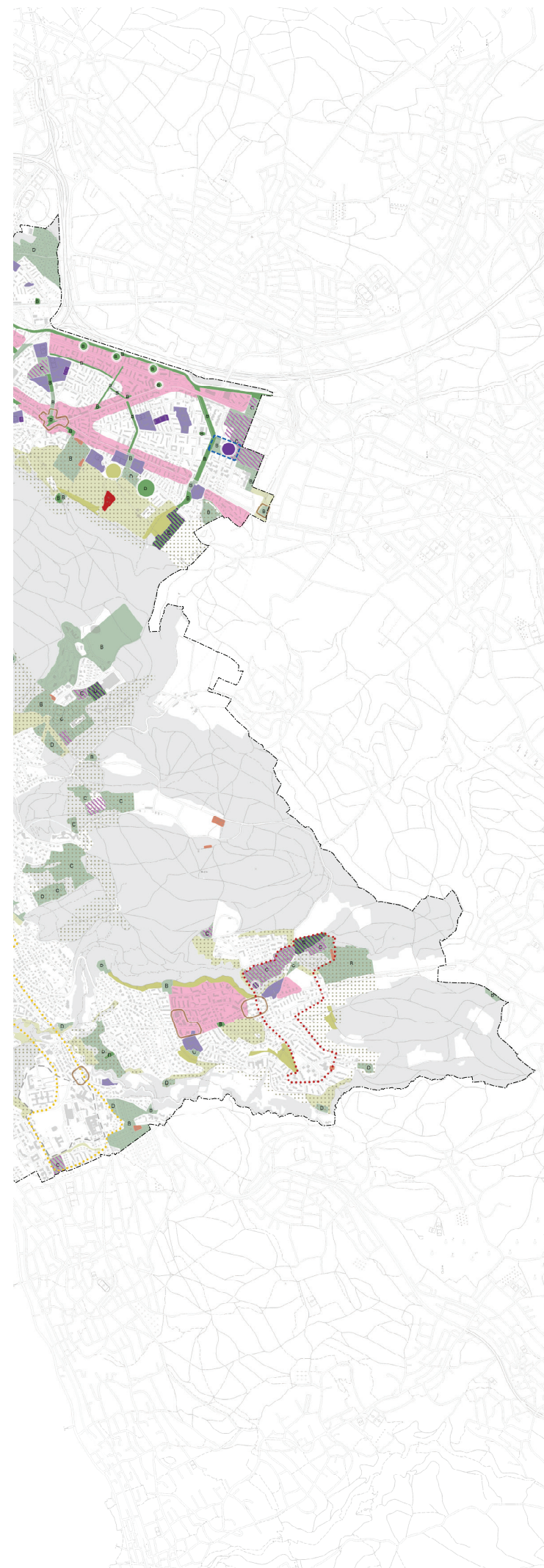
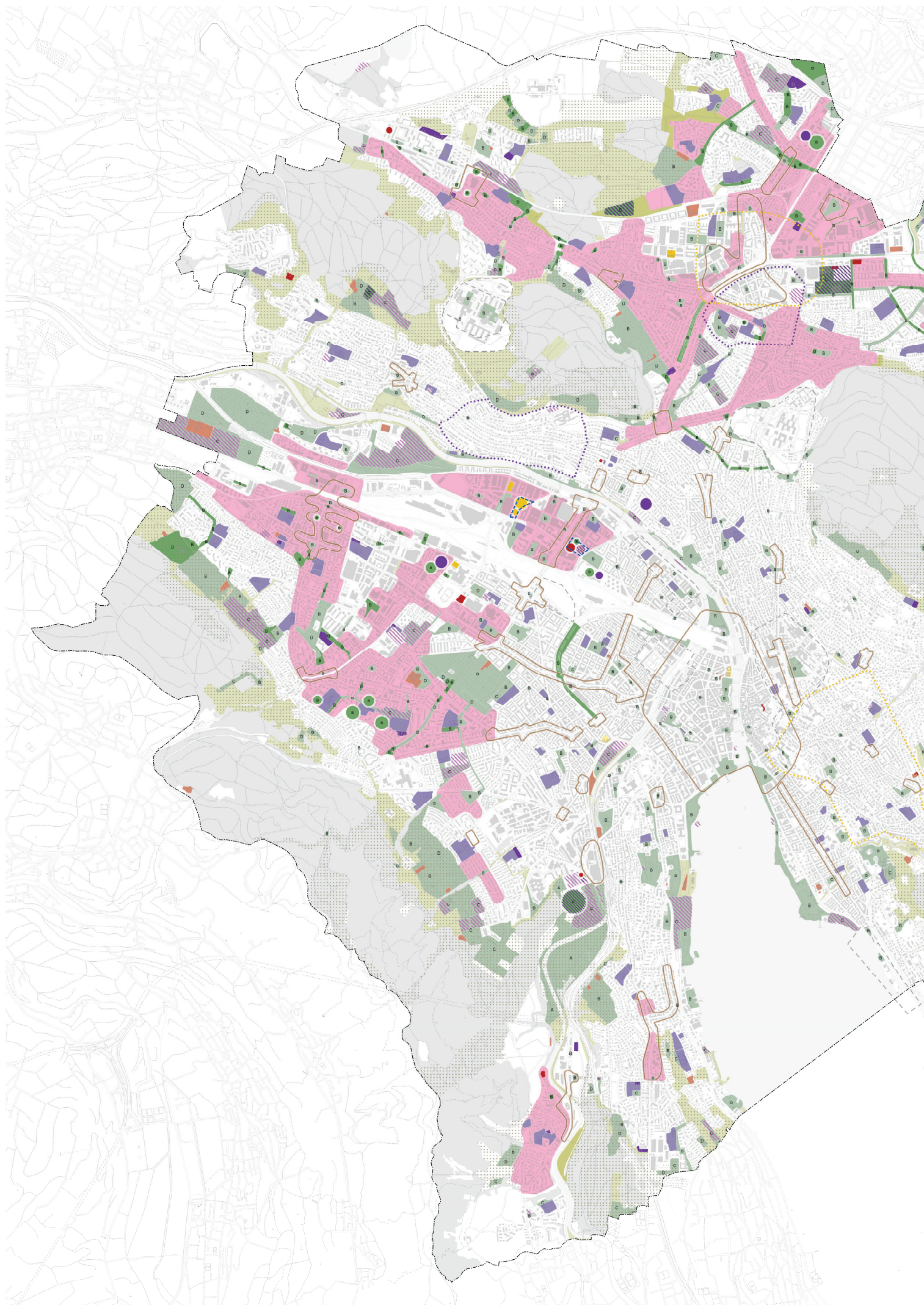
Specific character of Gertrudstrasse apartment



Furnished floor plan of Sandacker project



Working model of one floor of Sandacker project



2. Zurich – urban planning analysis and discovery of the city

(16th of September – 18th of October 2019)

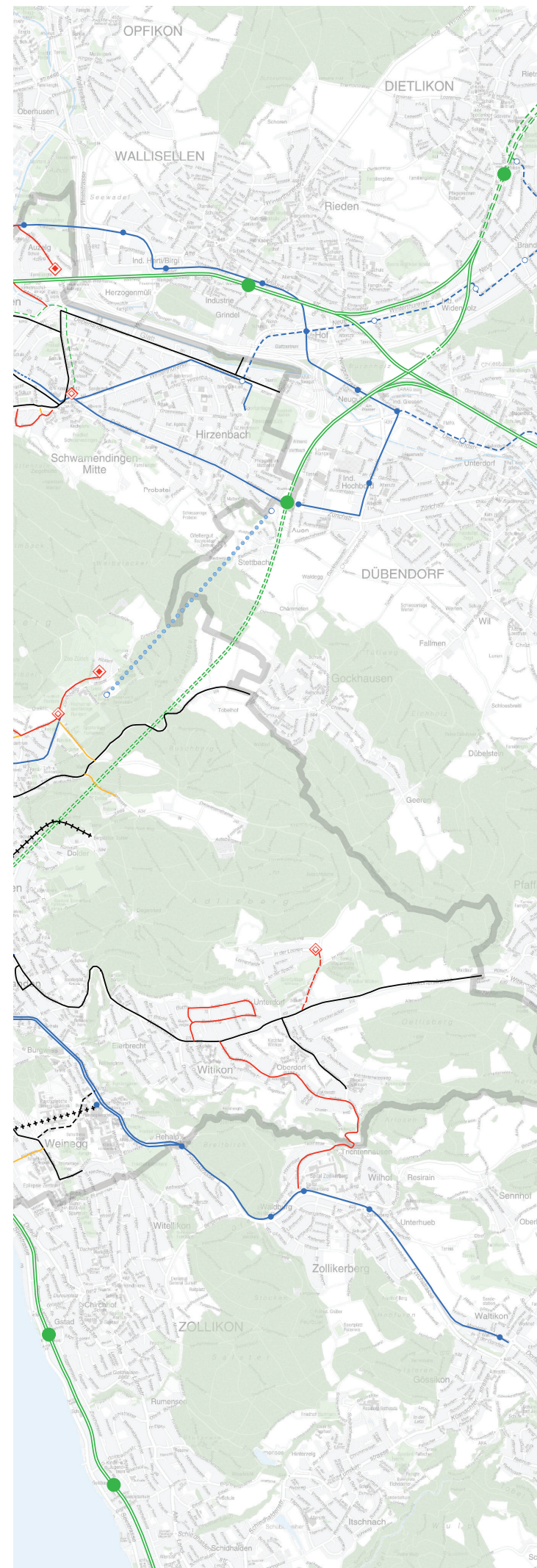
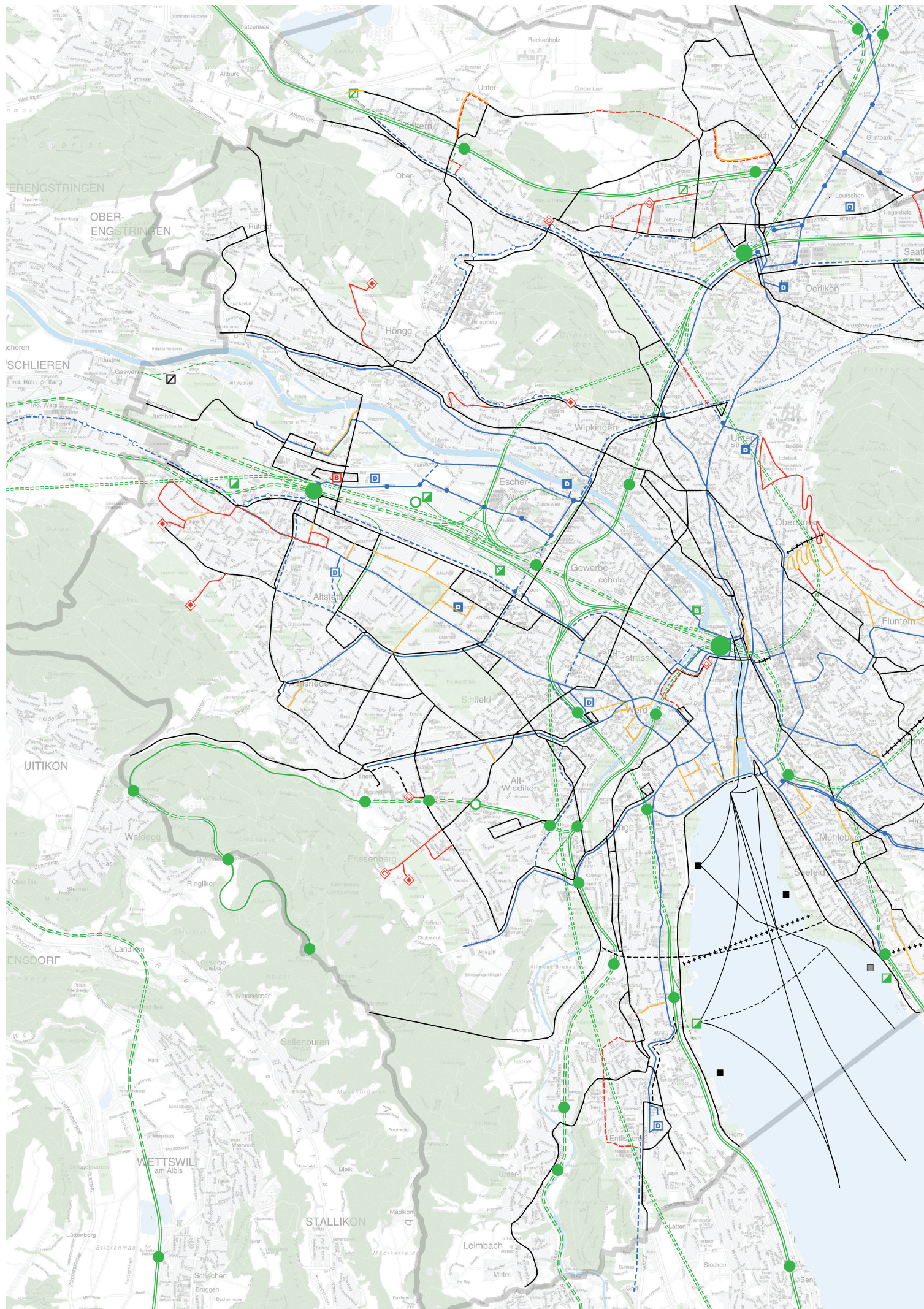
After having planned the apartment of a collector, we change the scale. During the following three weeks, we will get to know the city of Zurich and the processing perimeter for the semester paper. All students of the design studio will build collectively an urban planning model on a scale of 1:500. The model section comprises six plots for residential high-rises, but also the adjacent buildings. To do this, you first create an urban planning analysis of the location. We are interested in both the overarching relation to the city as a whole and the urban development and spatial relation of the immediate neighbourhoods. We pay attention to topics such as access, the relation to public transport and the adjacent open spaces and green spaces, but also the superordinate relations to neighbouring high-rise buildings.

From 28th of September to 4th of October 2019, a seminar week will be held in Zurich. This offers the opportunity to get to know the city of Zurich, but also the selected investigation area (perimeter). On the weekend of 28th and 29th of September 2019 an interesting event named „Open House“ will take place in Zurich (www.openhouse-zuerich.org). This is a unique opportunity to visit selected houses. *The exact program of the seminar week is expected to be handed out to students in mid-September 2019.*

The outcomes of the urban planning analysis will be presented and discussed to all students of the studio on Tuesday, 8th of October.

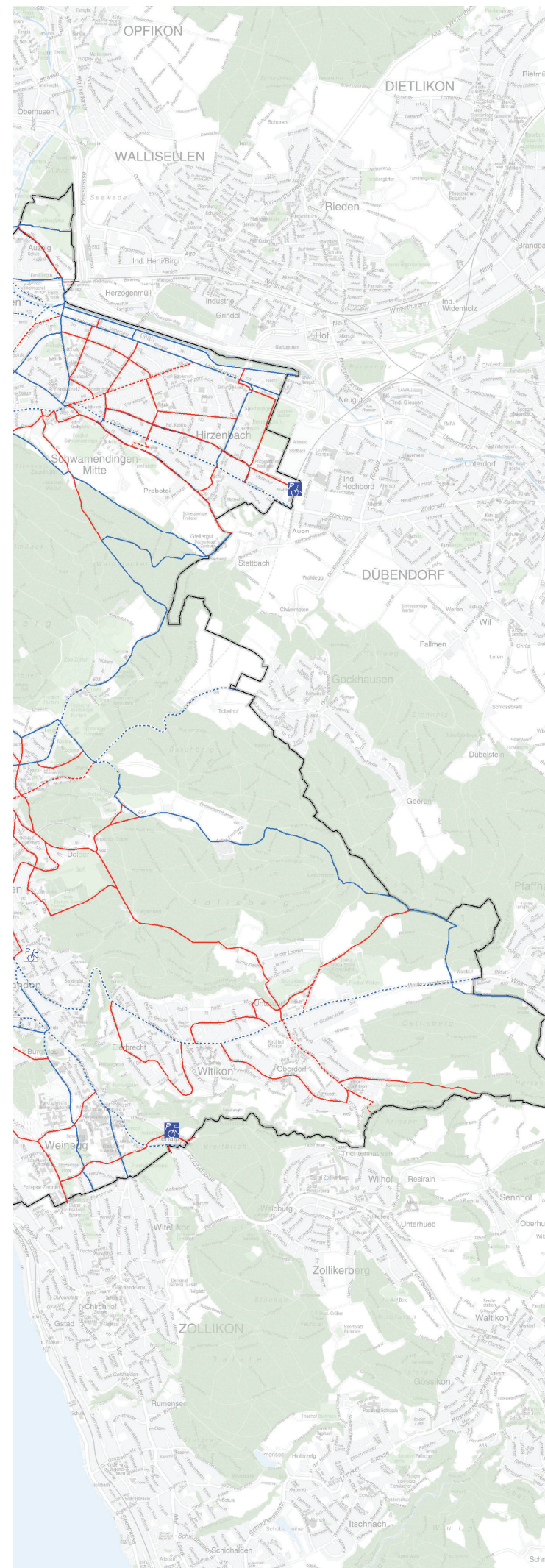
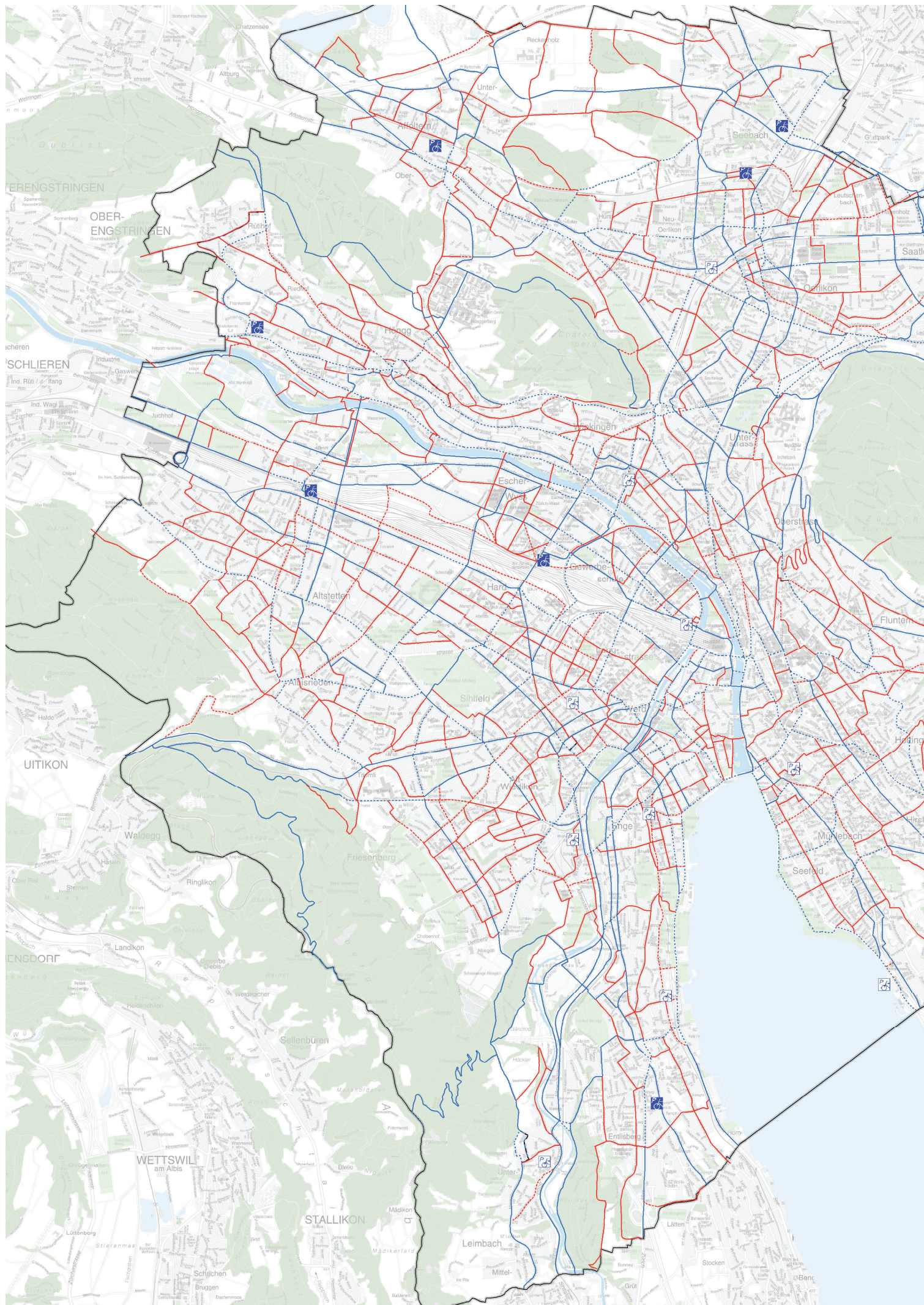
City plan of Zurich with indications of densification, neighbourhood centers, open spaces as well as general city's infrastructure.

(The original plan, with scale and captions, is available in the appendix.)



City plan of Zurich with indications of the public transport network.

(The original plan, with scale and captions, is available in the appendix.)



City plan of Zurich with indications of the urban bicycle lanes.

(The original plan, with scale and captions, is available in the appendix.)

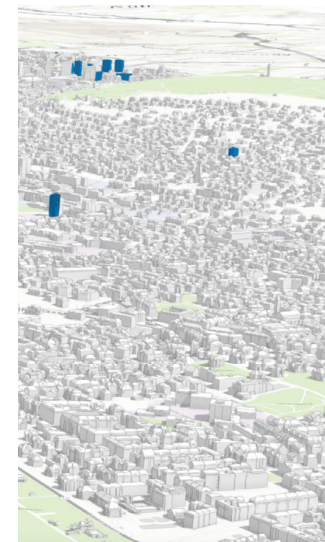




All high-rises of Zurich (available at <https://hochhaeuser.stadt-zuerich.ch>)



All residential high-rises of Zurich (available at <https://hochhaeuser.stadt-zuerich.ch>)

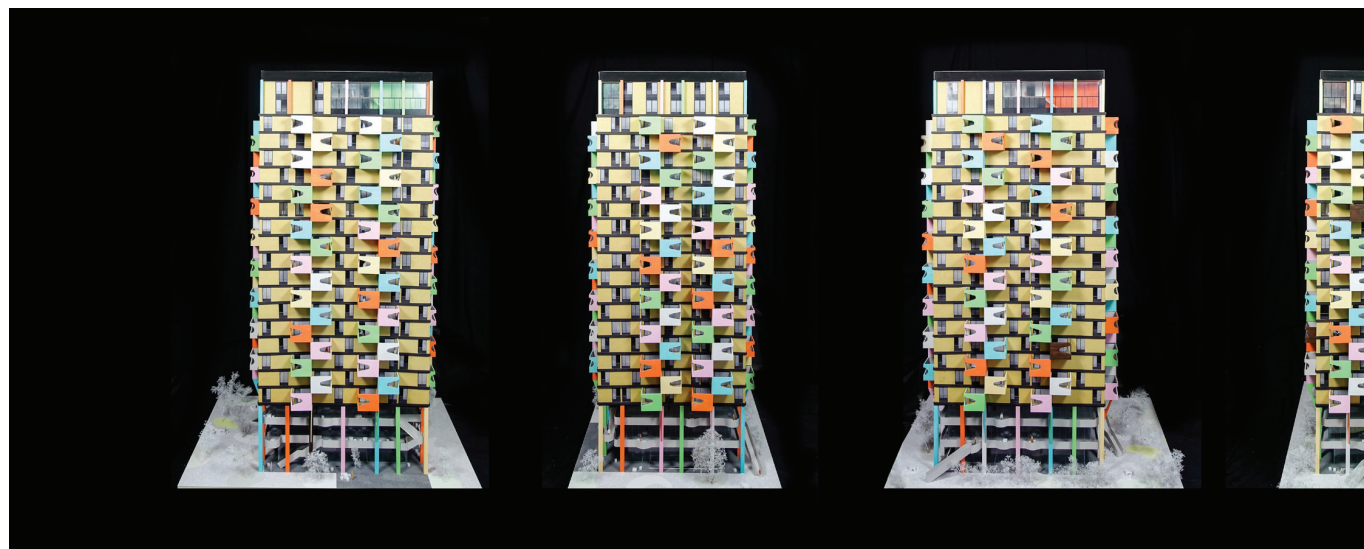


3. Design of a high-rise residential building in Zurich

(9th of October – 18th of December 2019)

In the third part of the semester, we design residential high-rise buildings along a street named Hohlstrasse on six different plots that are spatially connected. Two students each select one of these plots together and plan their own high-rise residential building on it.

The aim is to obtain two residential high-rise buildings per plot, which together with the other five residential high-rise buildings form a superordinate urban planning proposal.



Model 1:50 for a residential high-rise in Regensdorf



Residential high-rise with hotel program, Hard Turm Park

The investigation area

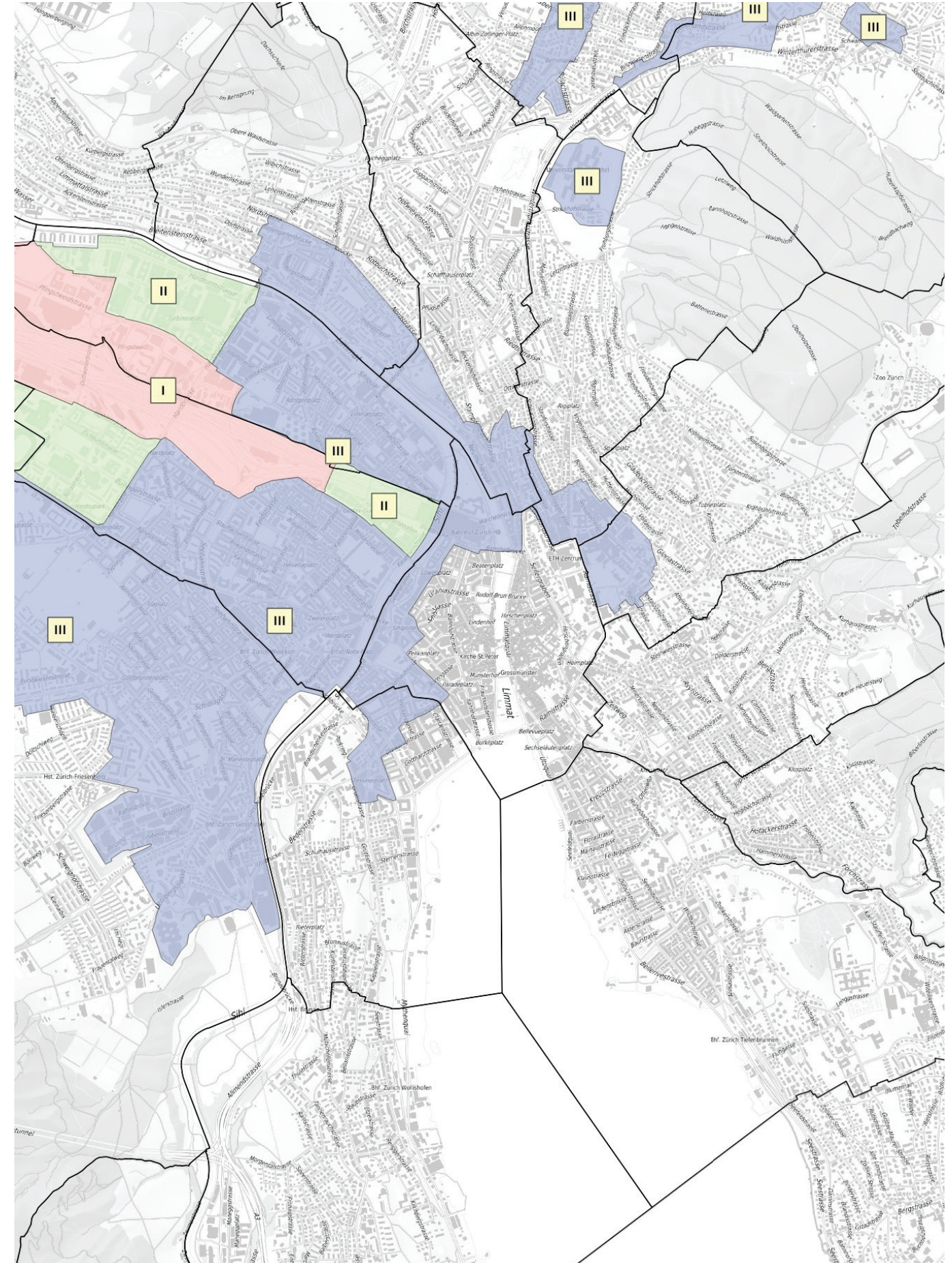
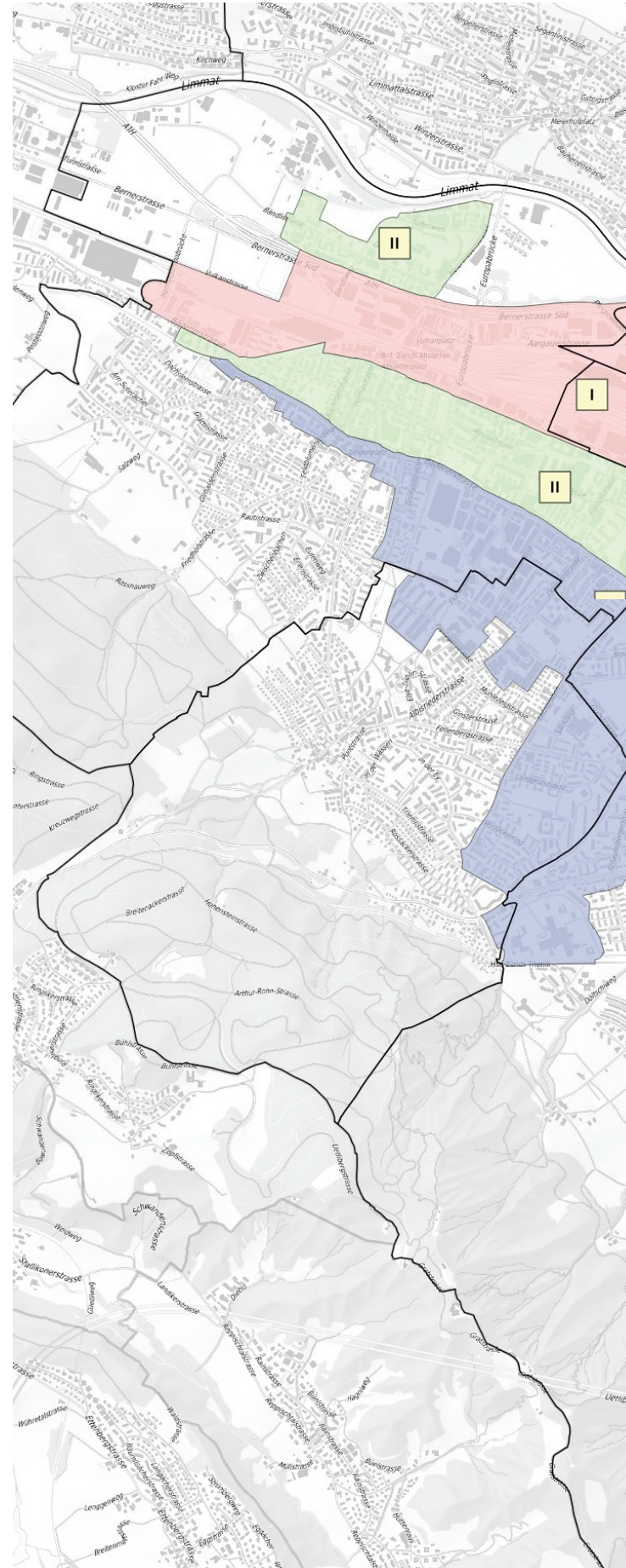
A street named Hohlstrasse connects the center of Zurich with one of its subcenters: Altstetten. There is an important train station (S-Bahn). For the future sustainable growth of the city of Zurich, it is planned that particularly well developed areas should absorb the forecast population growth. Therefore, it is only logical to condense the city in this area and on the direct connection street to the city center.

The scale of these high-rise residential buildings is to refer to the entire city of Zurich. Currently, the tallest building in the city of Zurich is 126 meters high. This modest building height is to be understood from the history of urban planning and with the building regulations. Therefore, Zurich cannot be compared to Chicago or downtown St. Louis. In Zurich, buildings over 25 meters are considered high-rises. The buildings we plan will be between 60 and 80 meters high, according to the high-rise mission statement (general principles) of the City of Zurich.

The variety and spatial richness, the most diverse situations and places, the differentiated materials and lighting conditions, but also the diverse mix of apartments and ground floor use characterise the design.

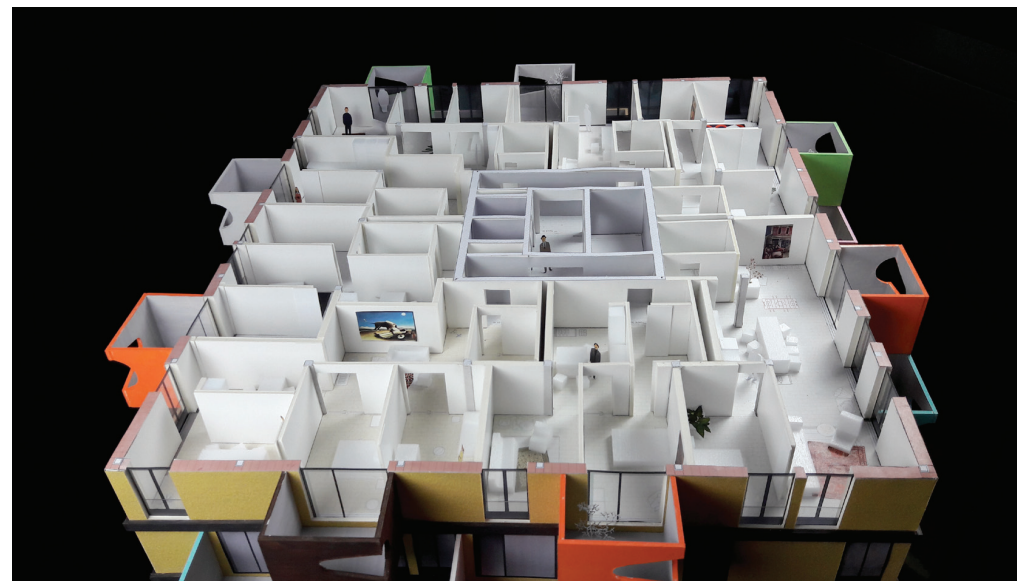
- High-rises max. 40m high
(area very recommended to build)
- High-rises max. 80m high
(area recommended to build)
- High-rises max. 80m high
(area less recommended to build)

High-rise mission statement plan,
City of Zurich



The room program and its conditions

It is part of the task that each and every student puts together his or her own individual room program. We are particularly interested in the entrance and address of the house, the access core with the fire brigade lift and the escape stairs, the common meeting points such as bicycle parking, laundry rooms, common rooms and the like. It is conceivable that the lower floors could be used for co-working or offices. A specific use in the attic should also be considered. The apartments must also be affordable, i.e. the floor plans must be as economically accessible as possible and optimized in terms of size. The question arises as to the exterior space and, of course, as to how easy it is to access and dispose of the building services.



Model 1:50 of one floor of the residential high-rise in Regensdorf



Furnished model of an apartment with roof light

Final hand-in and submission

The aim is to develop and design a project that is comprehensible as a whole. This includes all plans, sections, facades (elevations), models and visualizations necessary for understanding the project.

The reviews: Dates & deadlines

1st intermediate critique: 22nd of October 2019

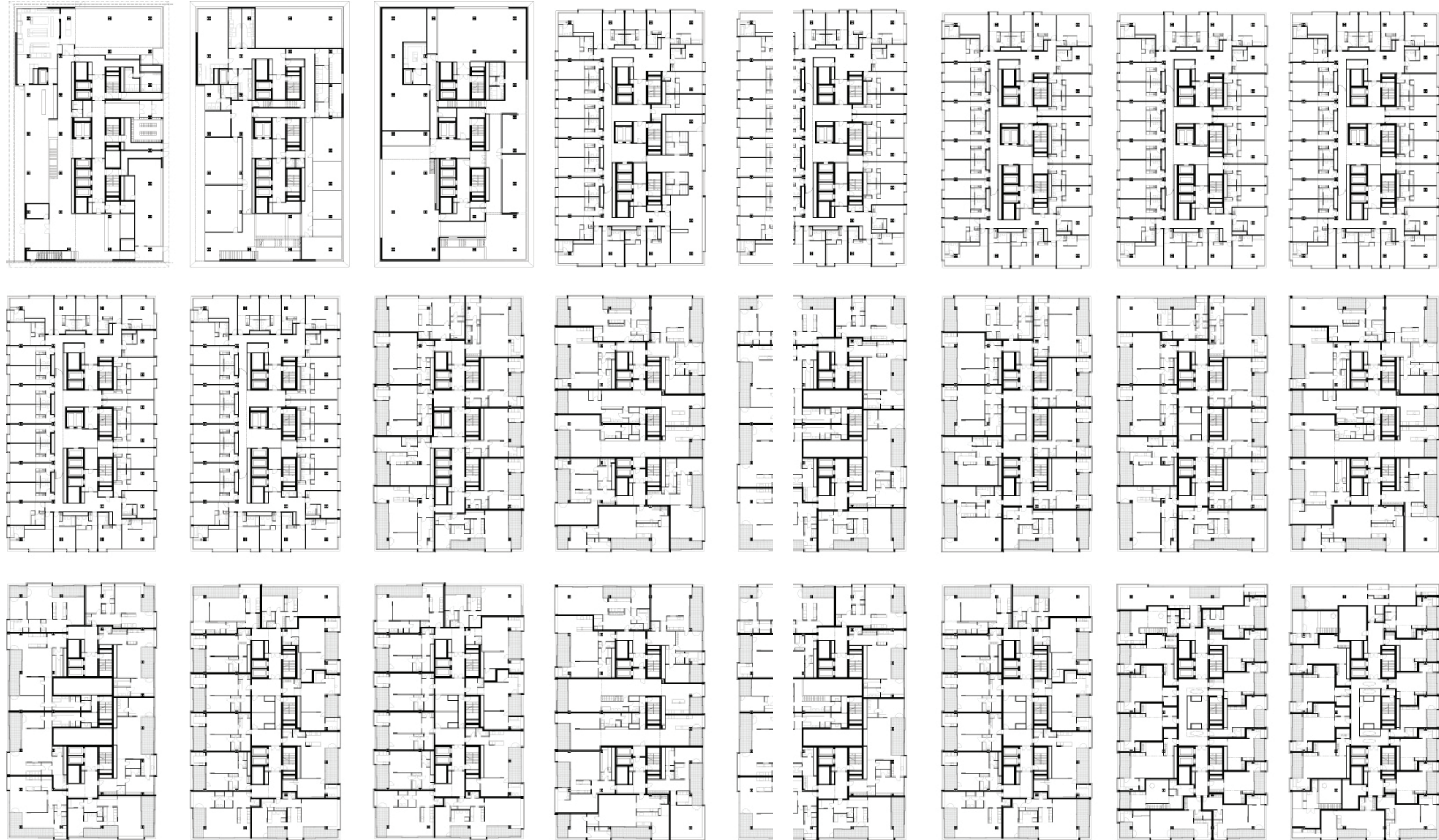
2nd intermediate critique: 12th of November 2019

3rd intermediate critique: 28th of November 2019

Final critique: 16th and 17th of December 2019



The view of an apartment, Hard Turm Park



Floor plans of the residential high-rise building, Hard Turm Park





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Book Reference



Kanchanjunga apartments in Mumbai,
Charles Correa