

URBAN CONTEXT

The project is situated in an inner block located at the intersection of Pekařská and Údolní streets. The area is therefore located in the wider centre of Brno. The plot Pekařská 88 is located in the wider centre of the city of Brno, in the Brno-central district. It is a key location, which is close to a number of important places and institutions, especially the connection of Sladová and Pekařská Streets, which is located in close proximity to this parcel.

These streets are important thoroughfares that connect different parts of the city. A number of important institutions are also located in this area, such as the Faculty of Architecture of Brno University of Technology, the Faculty of Fine Arts of Brno University of Technology, and the Faculty of Education of Masaryk University.

Another important place in close proximity to the plot Pekařská 88 is Mendlovo náměstí, located about 100 metres to the south-east. This square is an important centre of Brno, where many institutions, shops, restaurants and offices are located. Last but not least, it is also important to mention the very well accessible means of public transport. In the vicinity of the plot there is a bus stop at St. Anne's and less than 100 meters from the plot there is a transport hub Mendlovo náměstí, which connects the place with other parts of the city.

Overall, the plot at 88 Pekařská Street is located in an area that is well connected to various parts of the city and where a number of important institutions and places are located. The proposed library building extends primarily within the courtyard of the subject site and does not interfere with the context of the existing surrounding buildings. It creates a new corridor connecting Sladová Street with Pekařská Street by means of a staircase.

PROGRAMME

This project offers the Brno community more than just a traditional library. The main idea of this concept is to create a multifunctional space that will serve not only as a library, but also as a centre for education, cultural activities and meeting people. The space is designed to become a place where different typologies such as cafes, study rooms, workshops, info-centres, book archives and gallery spaces intersect.

With this concept, people will be able to learn, have fun, meet and work on their projects, all in one place. The project will not only focus on students and academics, but will also be open to the wider public. The space is therefore designed to be accessible and available to all, regardless of age, gender and other factors.

In this way, the project places a strong emphasis on making the library a community hub that brings people together and offers them the opportunity for education, cultural growth and entertainment all in one place.

ARCHITECTURAL DESIGN

The decentralized multifunctional library project is located in the block between Sladová and Pekařská streets. In order to achieve maximum flexibility and adaptability, the entire design was divided into modules.

This decentralization allows for different levels of accessibility, which encourages communication and collaboration between users. Access to the library is possible from both Pekařská Street and Sladová Street, which is created by a cascading terrace system with a staircase.

The entire design of the multifunctional library is based on a combination of intimate and public spaces, which are divided into modules and then differentiated according to their function and programme. The entrance level from both streets is taken as completely public, including modules that have functions such as a gallery space or an information centre. This is also accentuated by the several possibilities of access to the building and the entire space. The subsequent levels are then more intimate, creating moments of 'plazas' where public spaces intermingle with intimate ones. The new building is not a compact whole, but is divided into modules and the public space around them that define their levels of accessibility.

This decentralisation creates variability in working with outdoor and indoor spaces and encourages interaction. Overall, the structural system of the modules is designed to encourage interaction between indoor and outdoor spaces.

OPERATIONAL SOLUTIONS

The multifunctional library building has two entrances, one from Pekařská Street and the other from Sladová Street. Upon entering from Pekařská Street, visitors encounter the Gallery module, which then seamlessly transitions into the Coffee and Workshop module. This is followed by the Information Centre module, which is also the first module encountered by visitors coming from Sladová Street. These public modules are smoothly followed by the intimate modules, forming 3 separate objects for study and work. Within these modules, visitors can choose the space that best suits their needs. All these objects are located on the ground floor.

The Kafe module is connected to the study modules by an unheated conservatory, which visitors can use during periods of rain, snow or strong winds. Stair cores leading to the underground part of the building are located in the study and information centre modules. The underground contains a book archive, technical rooms and other study areas.

All spaces in the building are wheelchair accessible with the possibility of using a ramp or lift except for the boxes, which are stored in the Workshop and Café modules and are accessible only by stairs and ladders. The Information Centre is the only building in the facility that has two floors. This houses the library staff, the library director's office, other staff and the kitchen.

BUILDING SOLUTIONS

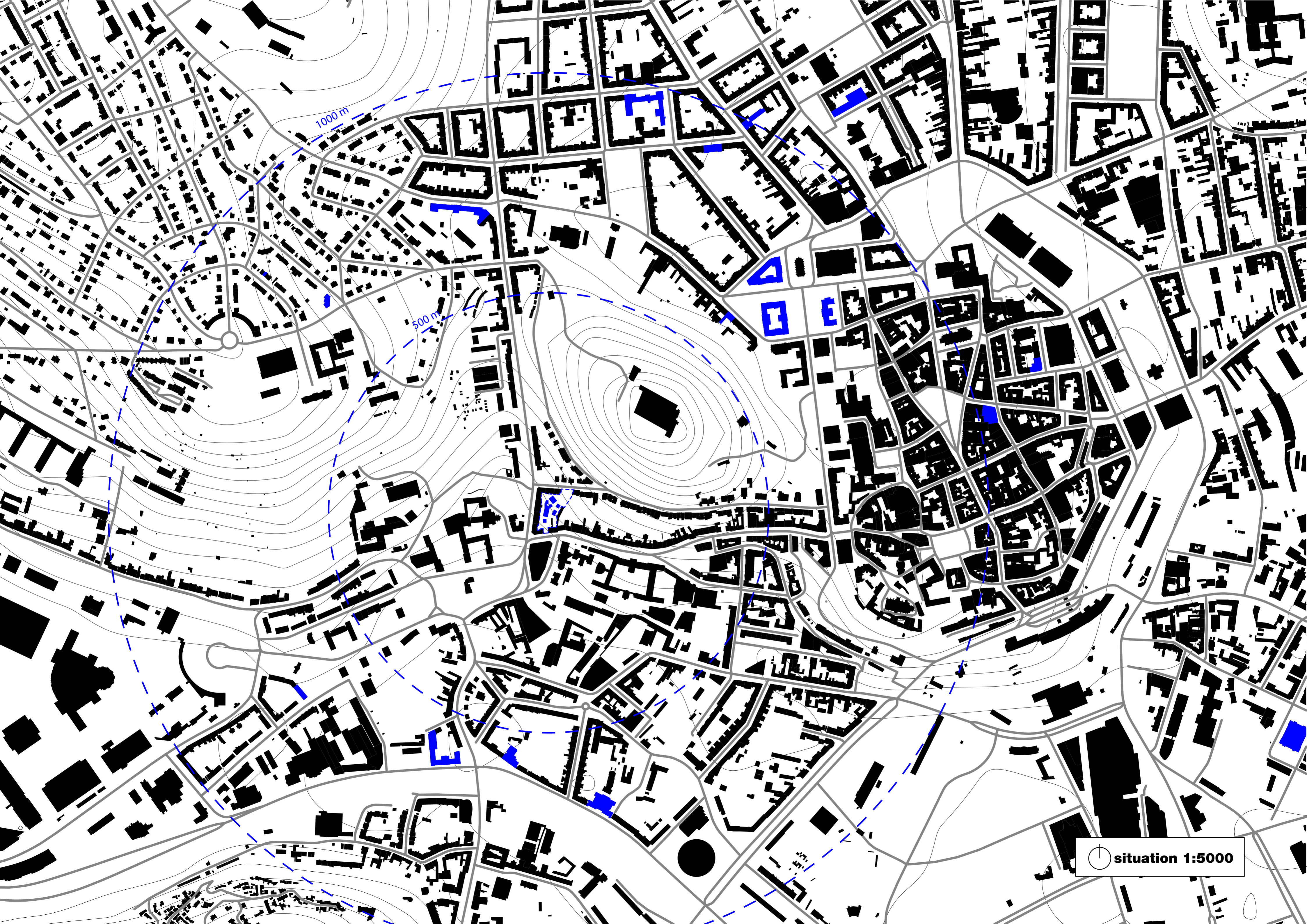
The individual modules are made of steel frames. Vertical load-bearing structures are designed as steel frames of profiles - 200mm. The individual modules differ in frame spacing. Module coffee and workshop 2,2m, study rooms and information centre 1,5. These columns are based on reinforced concrete footings and piles on the outer face and a combination of white tub. This lightweight steel structure displays a system façade - a combination post and beam system with horizontal joints cemented, vertical joints addressed by a system of buttresses to accentuate the verticality of the structure, lift and slide, tilt and turn, el. operated and entrance door - which is designed as a glazed thermal insulation around the entire perimeter. The roofing is made up of a system of the so-called "supplementary facade" - glazing over the interior made of triple glazing. Some elements in the structure are designed with fermacell panels and reinforced concrete elements.

FLOOR AREA BY FLOOR LEVEL

-1 underground floor	774,6m ²
1 plan ground floor	1509,1m ²
2 plan first floor	122,9m ²

Balance

Land area	3378,50m ²
Floor area	2405m ²
Built-up area	1509,1m ²



 situation 1:5000



Sladová

Úvoz

Pekařská

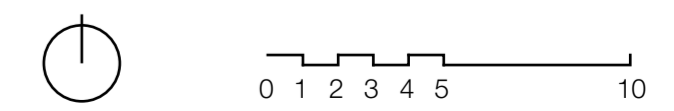
Pekařská

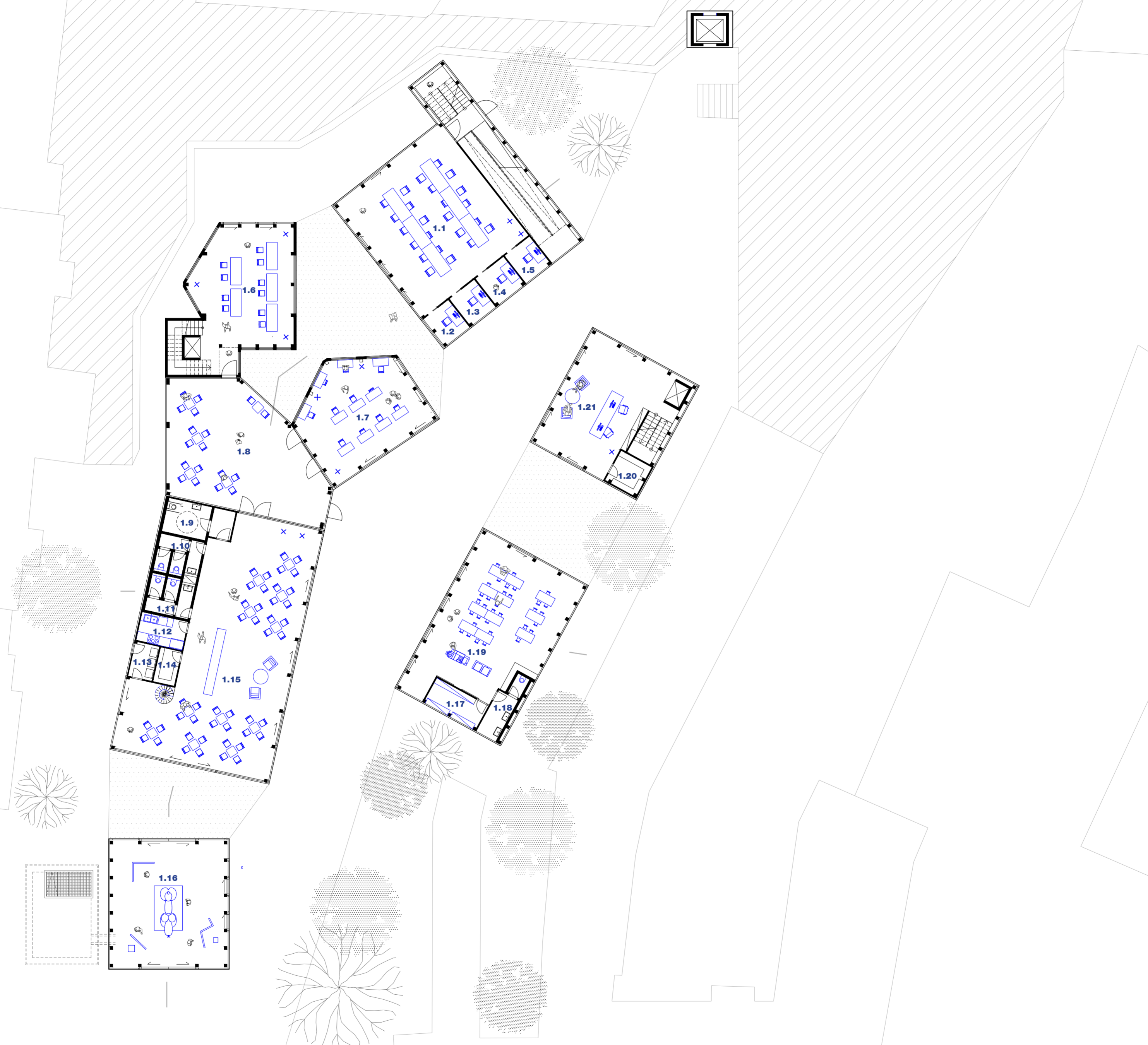
Mendlovo náměstí

 **situation 1:500**

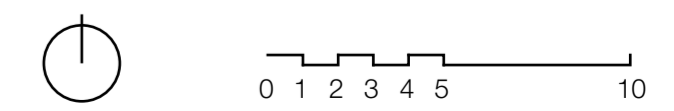


0.1 technical room	19.0 m ²
0.2 technical room	19.4 m ²
0.3 archive	43.7 m ²
0.4 toilet	28.0 m ²
0.5 accessible toilet	7.0 m ²
0.6 toilet	8.0 m ²
0.7 toilet	8.0 m ²
0.8 study room	8.5 m ²
0.9 technical room	23.1 m ²
0.10 technical room	17.6 m ²
0.11 individual study room	15.9 m ²
0.12 archive	74.8 m ²
0.13 technical room	13.4 m ²
0.14 technical room	11.6 m ²
0.15 utility room	5.8 m ²
0.16 study room	434.1 m ²
0.17 technical room	23.3 m ²





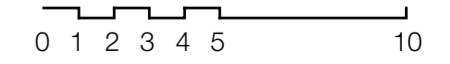
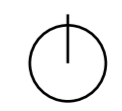
1.1 study room	92.0 m ²
1.2 study room	5.4 m ²
1.3 study room	5.4 m ²
1.4 study room	6.0 m ²
1.5 study room	5.4 m ²
1.6 study room	56.8 m ²
1.7 study room	56.7 m ²
1.8 winter garden	85.0 m ²
1.9 toilet accessible	10.5 m ²
1.10 toilet	8.1 m ²
1.11 toilet	8.1 m ²
1.12 toilet	6.4 m ²
1.13 garbage	4.1 m ²
1.14 storage	3.7 m ²
1.15 cafe	150.2 m ²
1.16 exhibition center	73.5 m ²
1.17 storage	7.9 m ²
1.18 toilet	8.5 m ²
1.19 study room	81.8 m ²
1.20 storage	3.2 m ²
1.21 infocenter	55.8 m ²



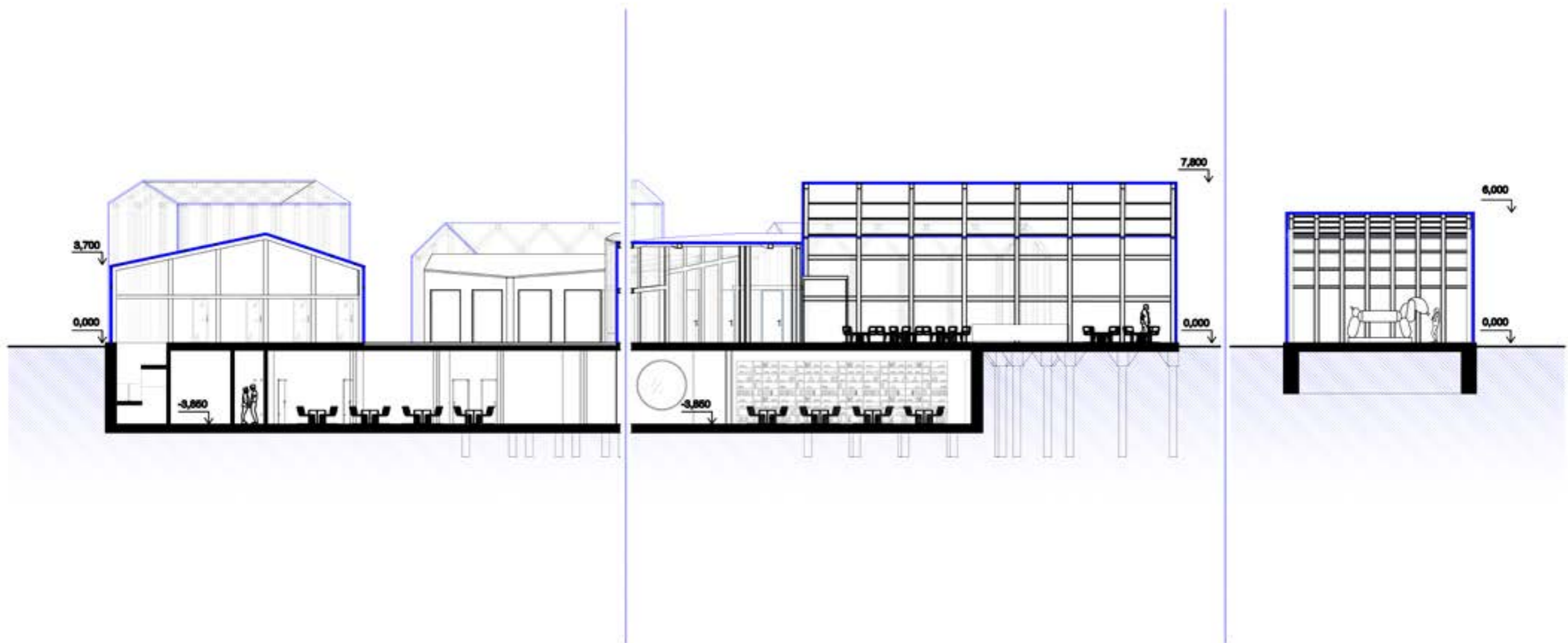
1 Plan Groundfloor



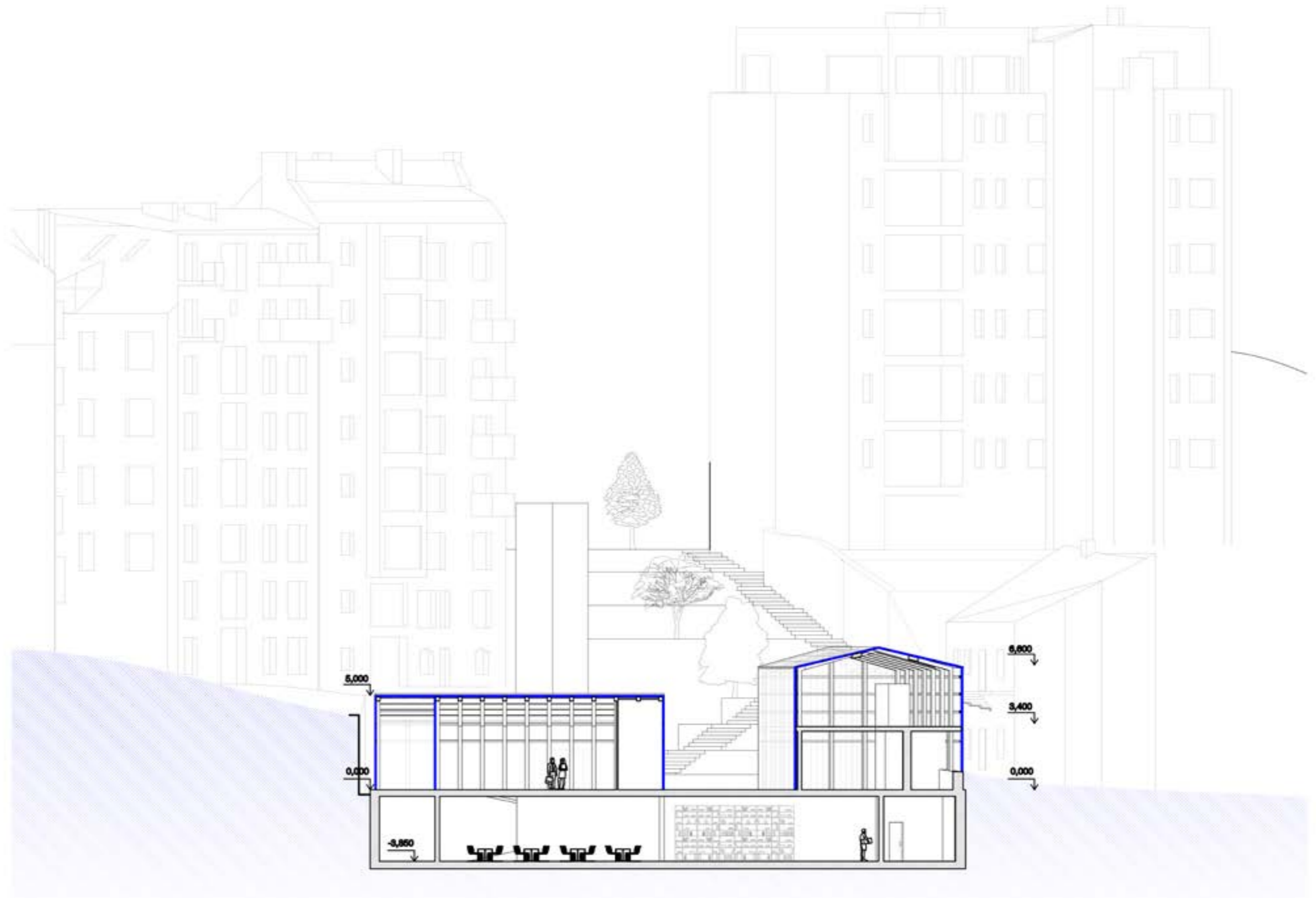
2.1 cafe	46.5 m ²
2.2 storage	16.3 m ²
2.3 office	12.6 m ²
2.4 director office	12.6 m ²
2.5 kitchen	34.9 m ²



2 Plan First Floor

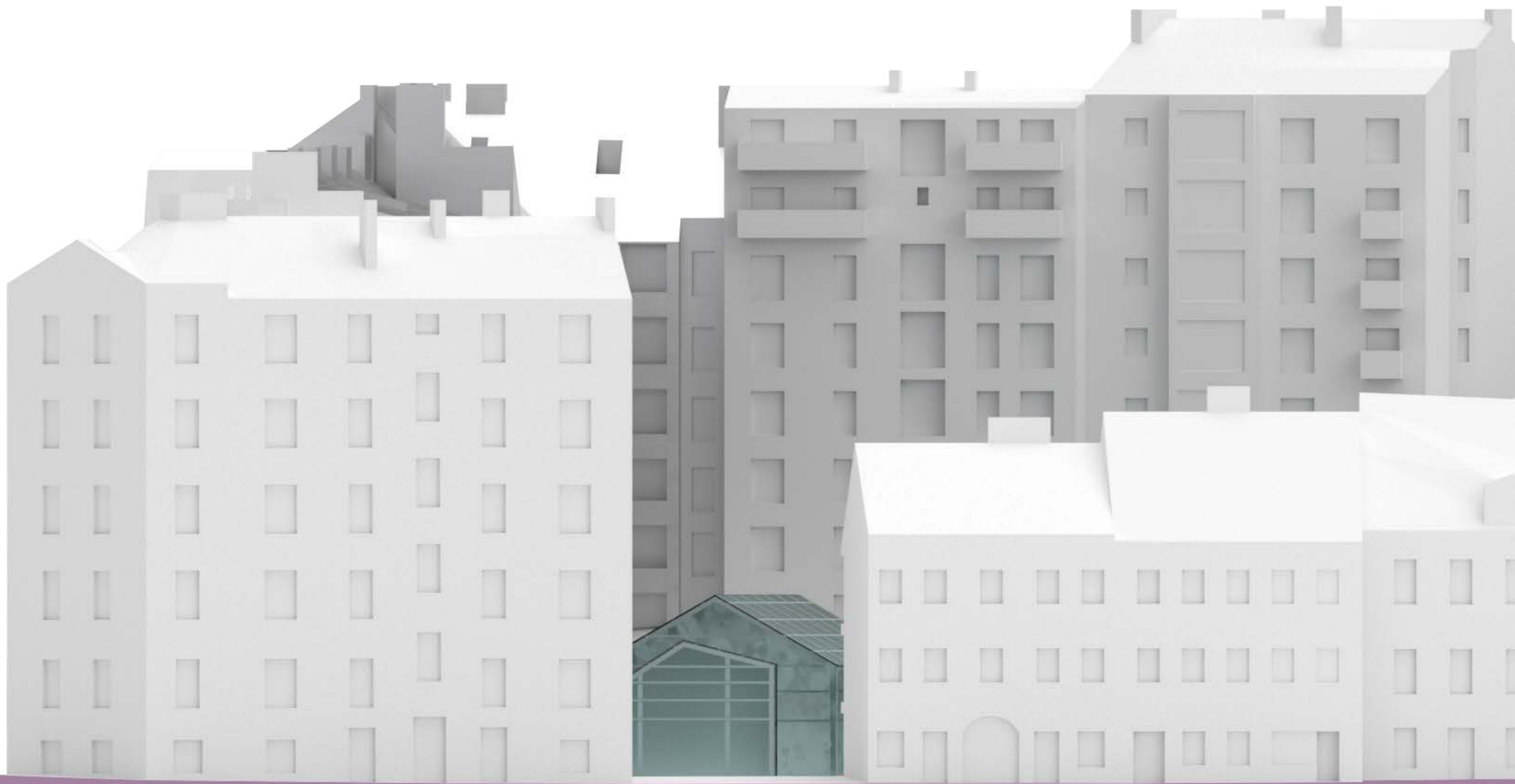


section 1

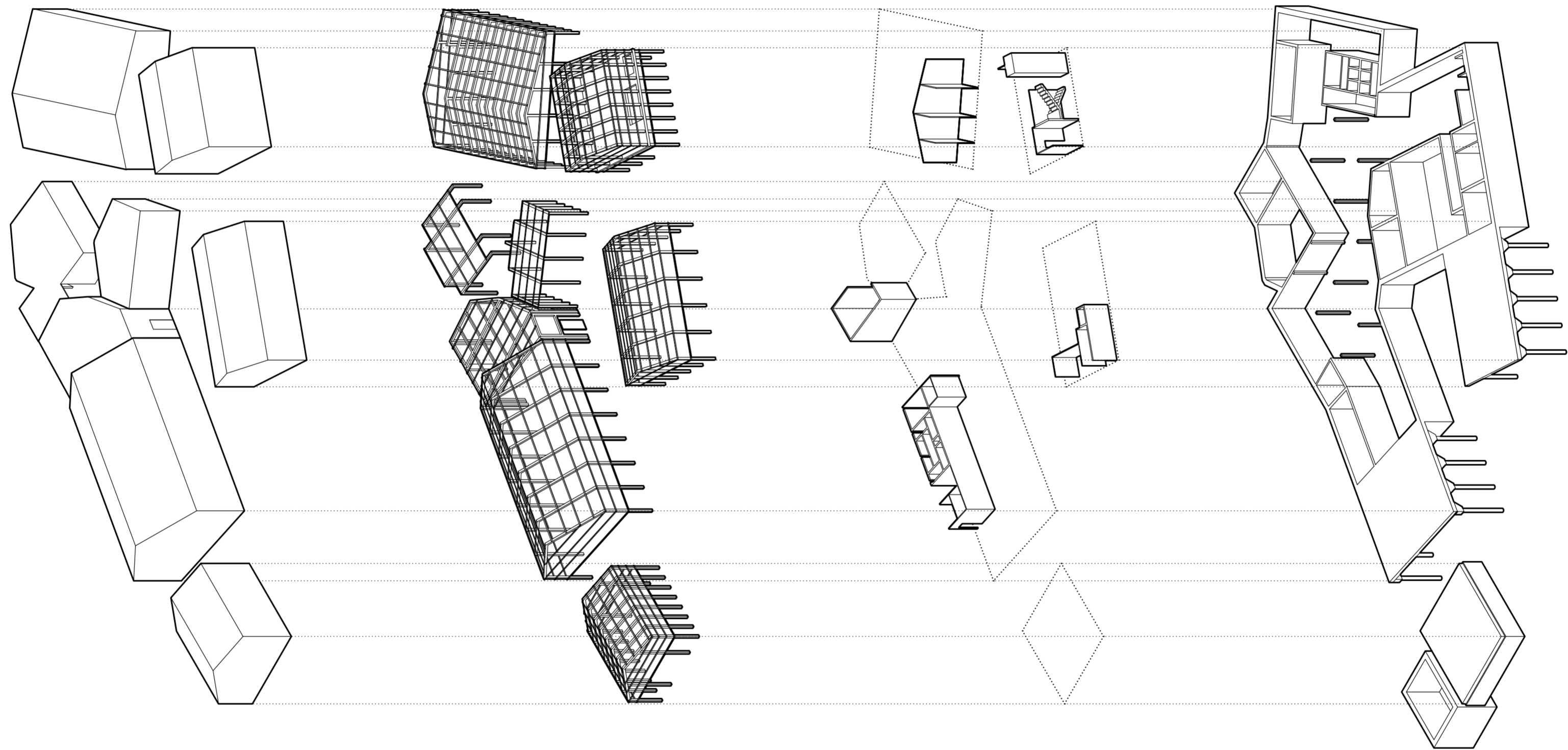


section 2



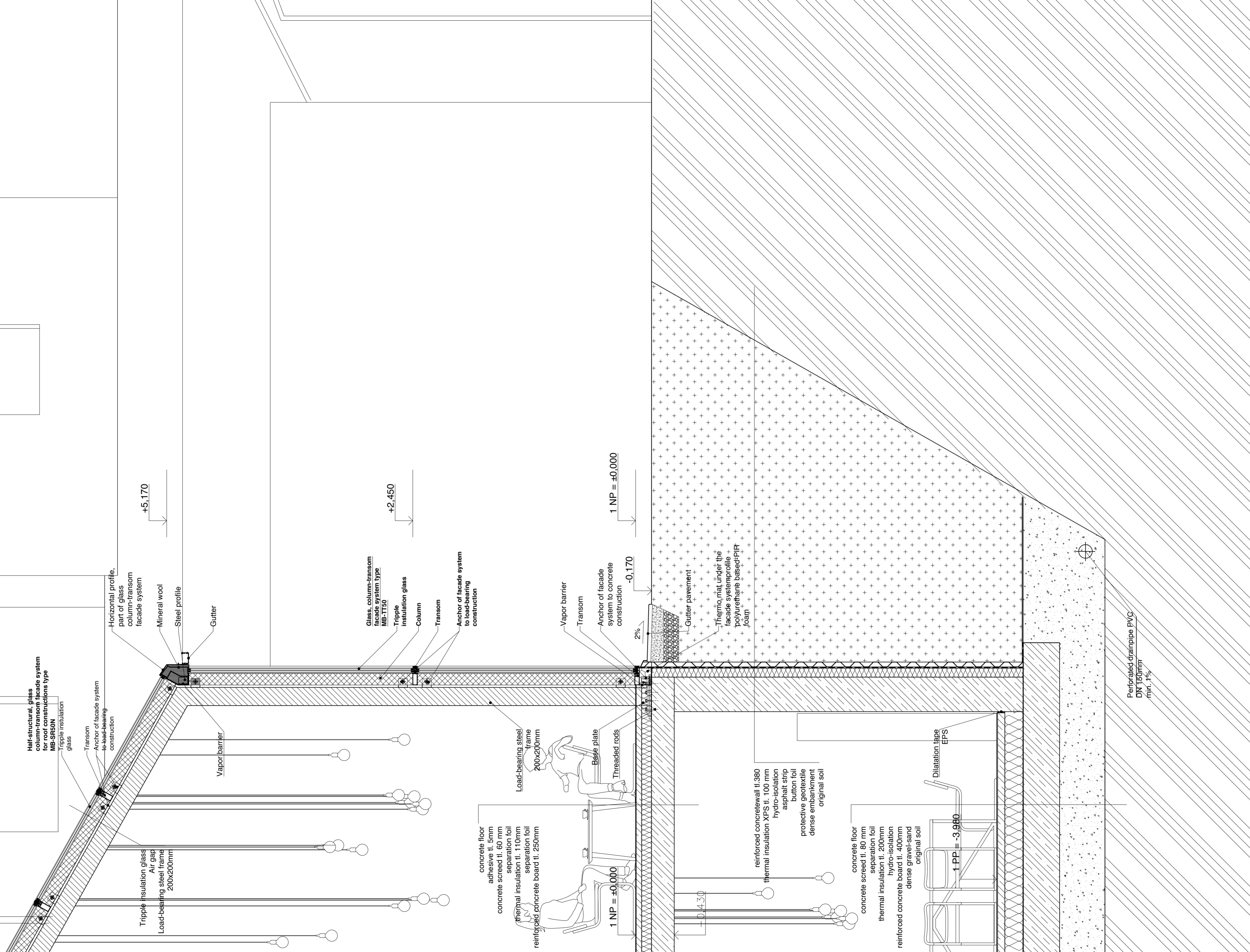












Half-structural, glass column-transom facade system for roof constructions type MB-SR50N

Triple insulation glass

Transom Anchor of facade system to load-bearing construction

Triple insulation glass Air gap Load-bearing steel frame 200x200mm

Vapor barrier

Horizontal profile, part of glass column-transom facade system

Mineral wool

Steel profile

Gutter

Glass, column-transom facade system type MB-TT50

Triple insulation glass

Column

Transom

Anchor of facade system to load-bearing construction

concrete floor adhesive tl. 5mm concrete screed tl. 60 mm separation foil thermal insulation tl. 110mm separation foil reinforced concrete board tl. 250mm

Load-bearing steel frame 200x200mm

1 NP = ±0.000

Base plate Threaded rods

Vapor barrier

Transom

Anchor of facade system to concrete construction

1 NP = ±0.000

-0.170

2%

Gutter pavement

Thermo mat under the facade system profile polyurethane based-PIF foam

reinforced concrete wall tl. 380 thermal insulation XPS tl. 100 mm hydro-isolation asphalt strip bitumen foil protective geotextile dense embankment original soil

concrete floor concrete screed tl. 80 mm separation foil thermal insulation tl. 200mm hydro-isolation reinforced concrete board tl. 400mm dense gravel-sand original soil

1 PP = -3.980

Dilatation tape EPS

Perforated drainpipe PVC DN 150mm min. 1%