



DESIGN STUDIO EFLER
DEPARTMENT OF
ARCHITECTURAL CONSERVATION
FA CTU IN PRAGUE

CHANTAL PLANTÖR, GERMANY /
LOUIS LE BRETON, FRANCE
CONNECTING AN URBAN FARM WITH
THE TOWN SQUARE / EDUCATION
MNICHOVO HRADIŠTĚ - CENTER REGENERATION
WINTER SEMESTER 2022/23

STRUCTURE

0. general location

1. history

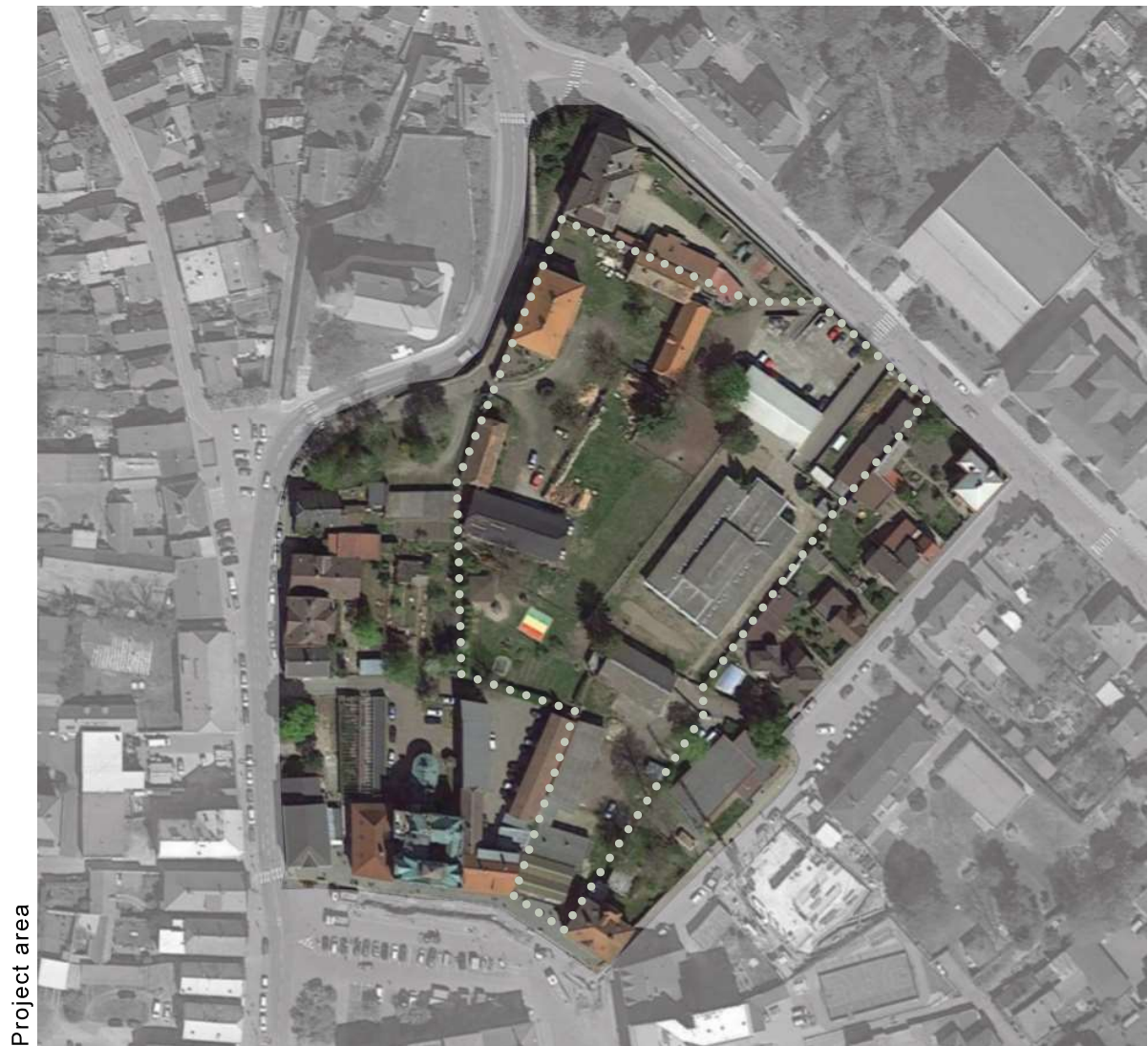
2. urban concept

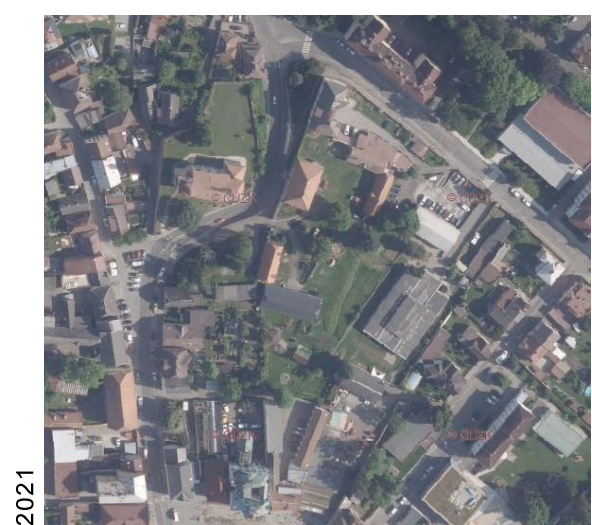
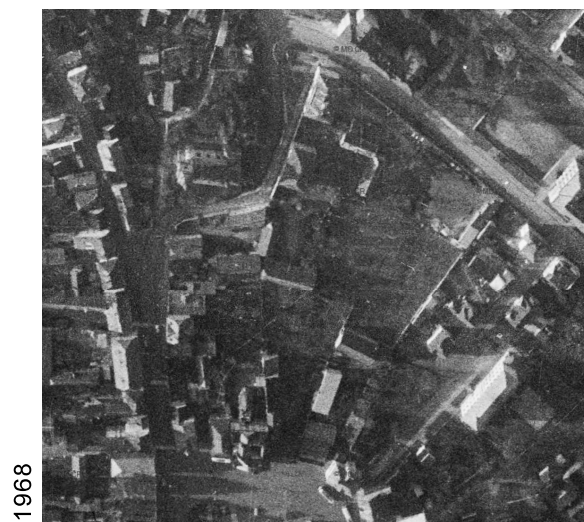
3. the farm

4. the square area

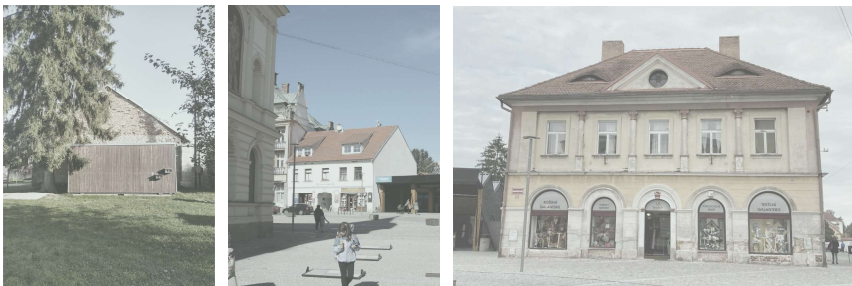
5. the after school care area

0. general location





1. history









historical inspiration
square site

historical inspiration after
school care site

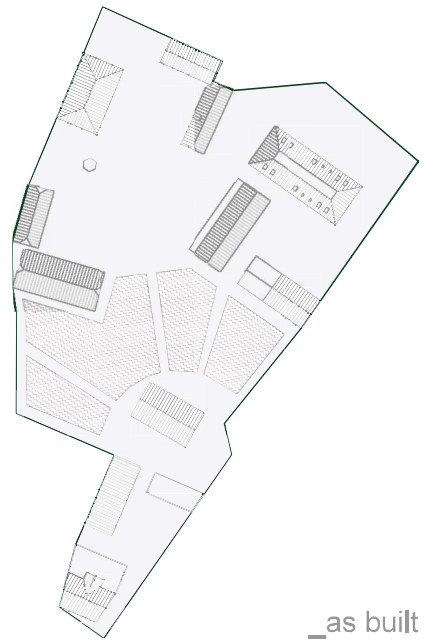
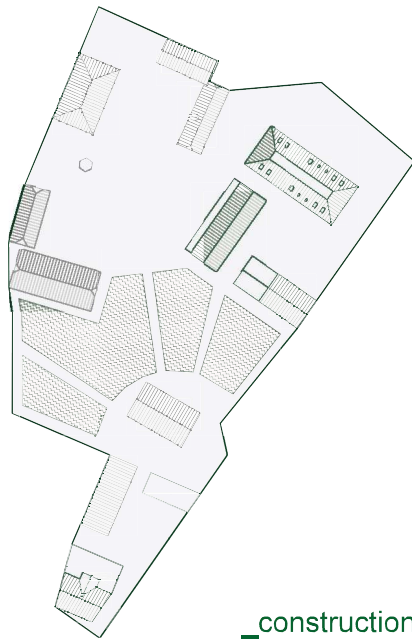
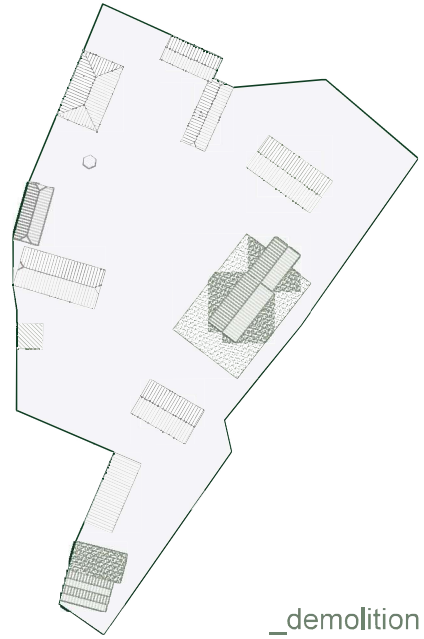
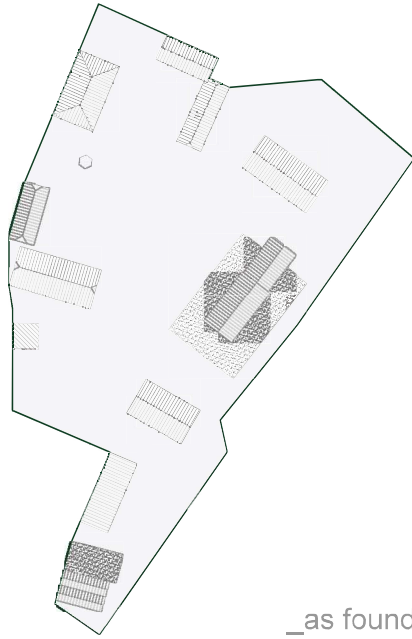




HISTORICAL MAP

	_before 1848		_between 1968-1975
	_between 1848-1948		_between 1975-2000
	_between 1948-1968		_after 2000

2. urban concept



URBAN FARM

how to revitalize a historical city center?

Located in the historical city center of Mnichovo Hradiste, our intervention's aim was to preserve the urban coherence of this zone. As the edges are mainly

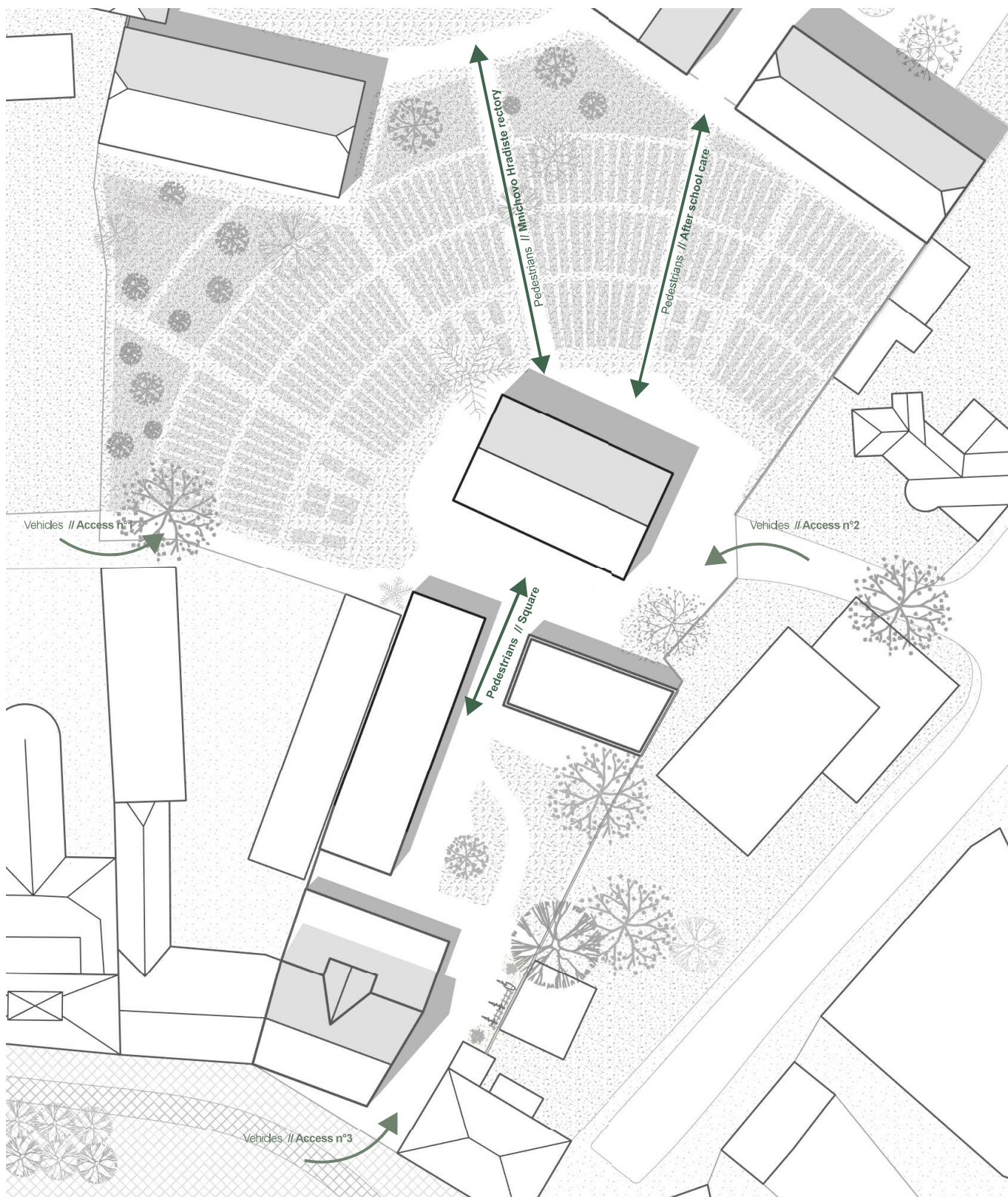
occupied by high and historical buildings, our intervention attempts to bring a new breath to the area by creating an contemporary urban farm in its core.

As a former barn was located in the center of the plot, we decided to shed lights on its vernacular architecture.

Thus, we restore it in a conservative way and bring it back to its initial function of agricultural building.

Cornerstone of the project, this urban farm connects so numerous actors of the area, and particularly the new after school care and the main square area.

2. urban concept



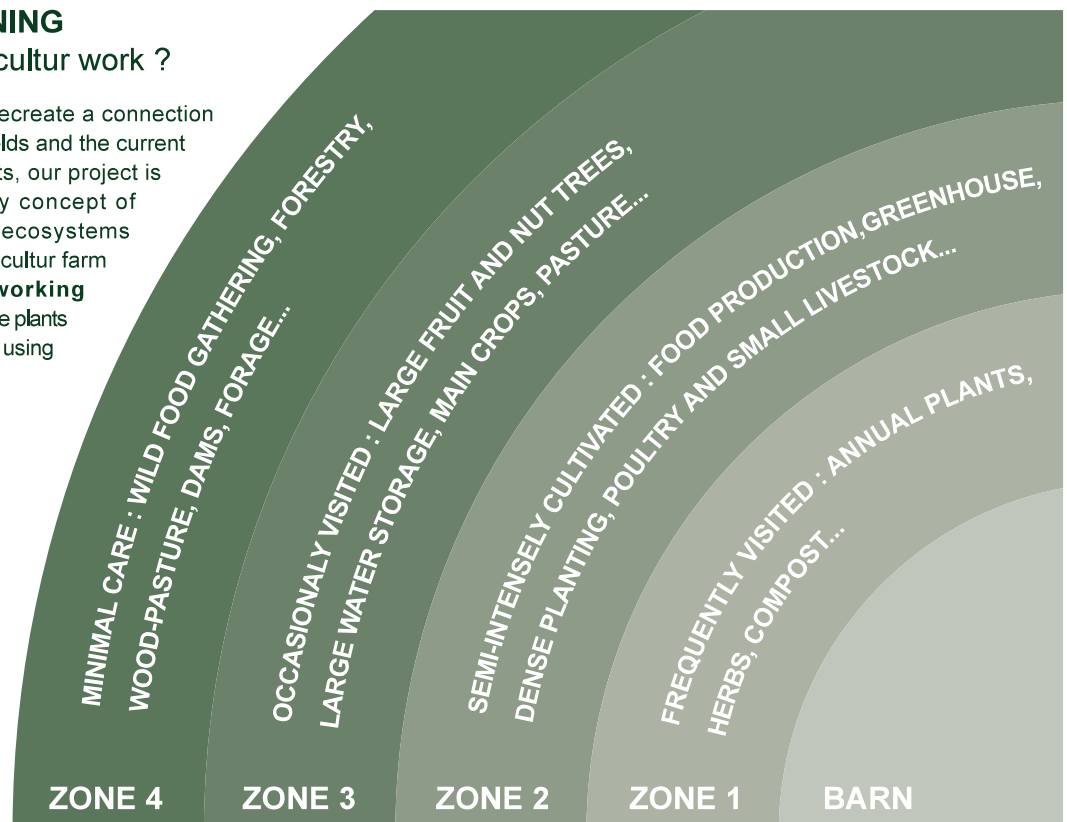
URBAN FIELDS PLAN

How to connect city actors around a farm?

FIELDS FUNCTIONNING

How does the permacultur work ?

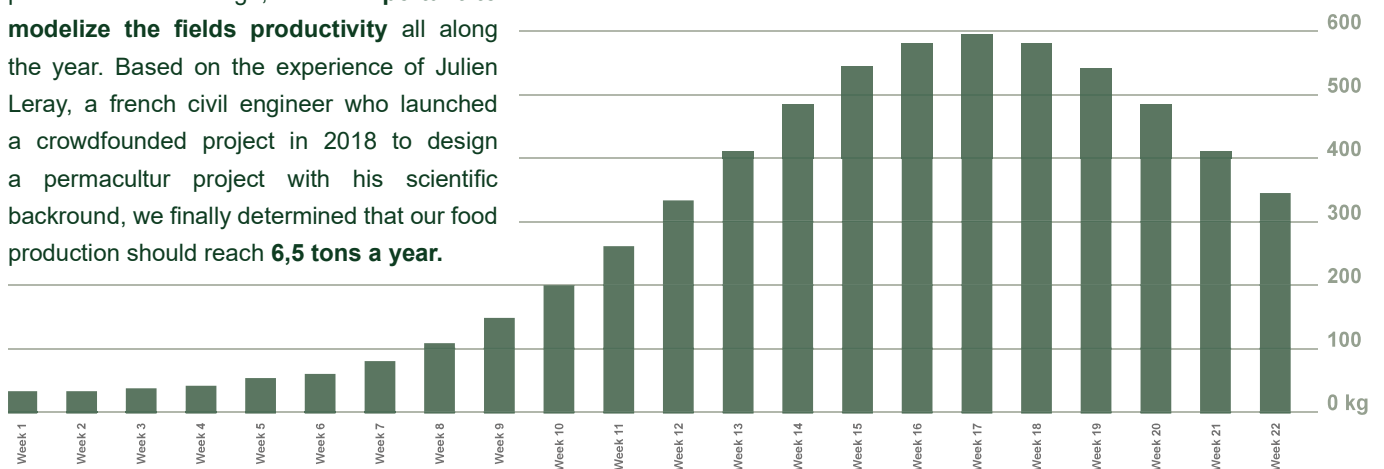
As our urban farm aim is to recreate a connection between former agricultural fields and the current Mnichovo Hradiste inhabitants, our project is based on the contemporary concept of **permacultur** based on the ecosystems fonctionning. Thus, our permacultur farm creates **differeents zones working together in symbiosis** to increase plants productivity without any biocide using and any industrial machine.



FIELDS PRODUCTION

According to the year

In order to understand the needs of our food production and storage, it was **important to modelize the fields productivity** all along the year. Based on the experience of Julien Leray, a french civil engineer who launched a crowdfounded project in 2018 to design a permacultur project with his scientific background, we finally determined that our food production should reach **6,5 tons a year**.



3. the farm

STORAGE FUNCTIONNING

How to design food storage?

As our urban farm will produce tons of vegetables a year, it was necessary to design a storage system which fits perfectly with the farm production. Our research drove us to imagine three different storage spaces in the café basement.

STORAGE SPACE N°1 | 14 - 18°C

Tomato : 280 kg

STORAGE SPACE N°2 | 8 - 13°C



Beans, raspberry : 280 kg

Cucumber, guerdin, and zucchini : 30 kg

Melon : 820 kg

Peas : 50 kg

Radish : 170 kg

Salad, Lamb's lettuce, mesclun, and spinach : 550 kg

Shallot and onion : 1400 kg

Squash : 790 kg

STORAGE SPACE N°3 | 0 - 7°C



Apple : 180 kg

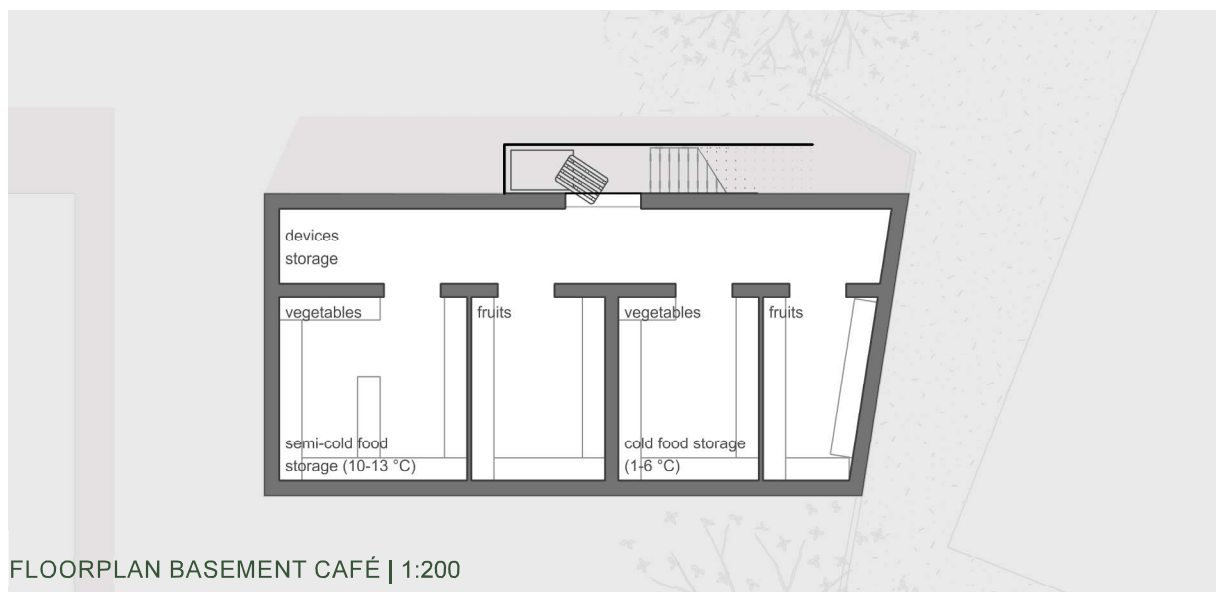
Beet and carrot : 600 kg

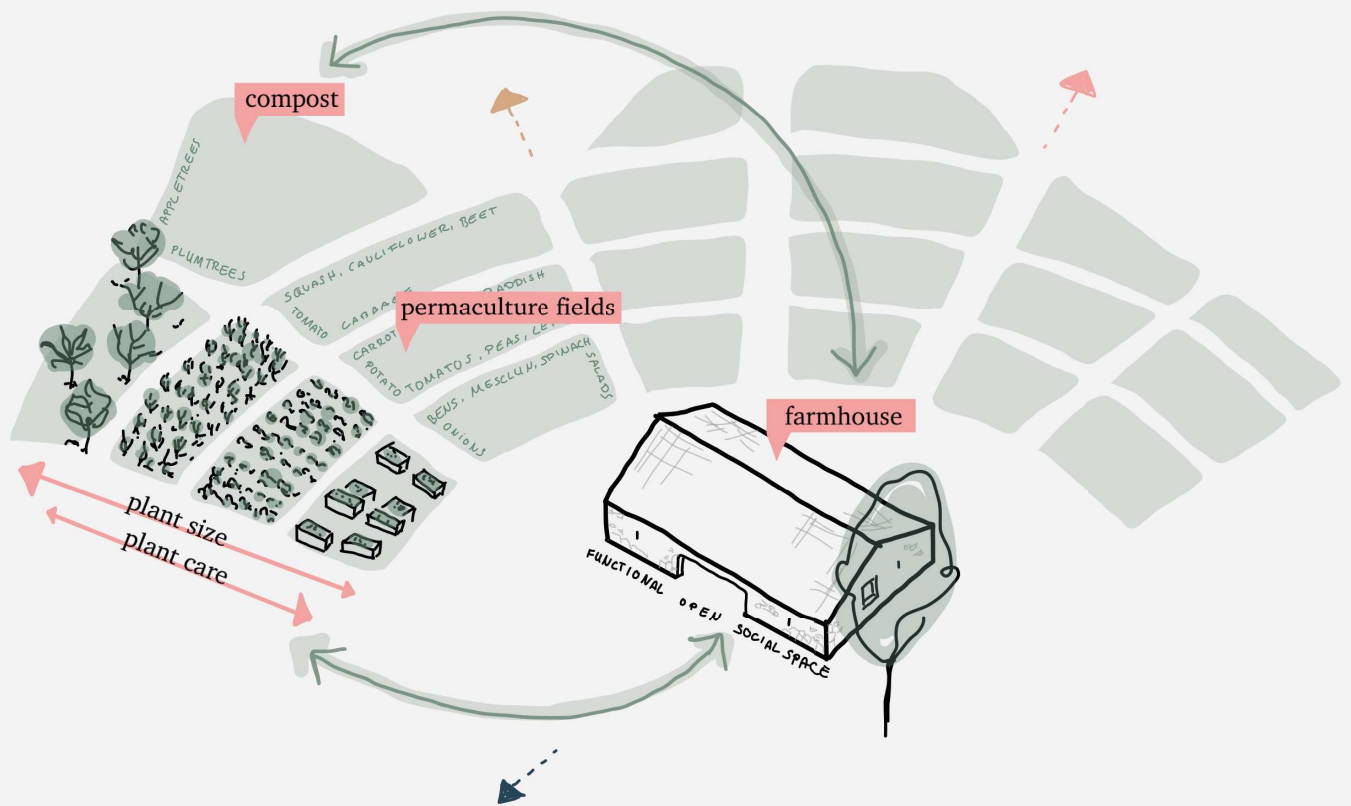
Cauliflower and cabbage : 420 kg

Pear : 120 kg

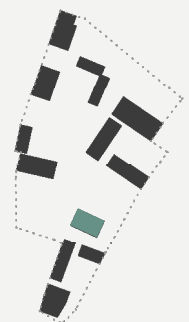
Plum : 120 kg

New potato : 310 kg





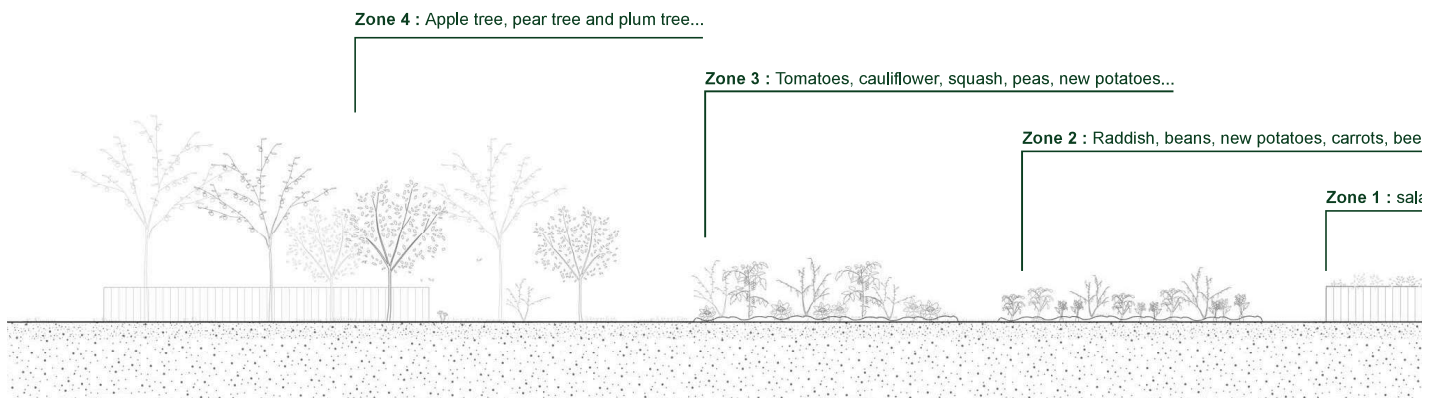
DESIGN CONCEPT



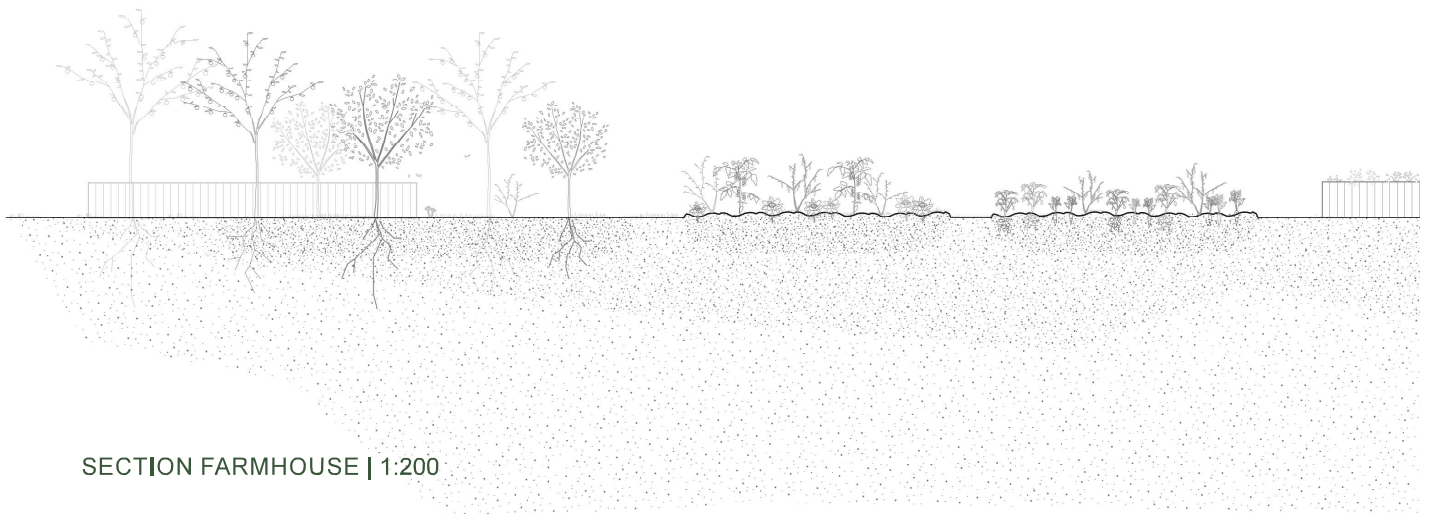
3. the farm

URBAN FARM

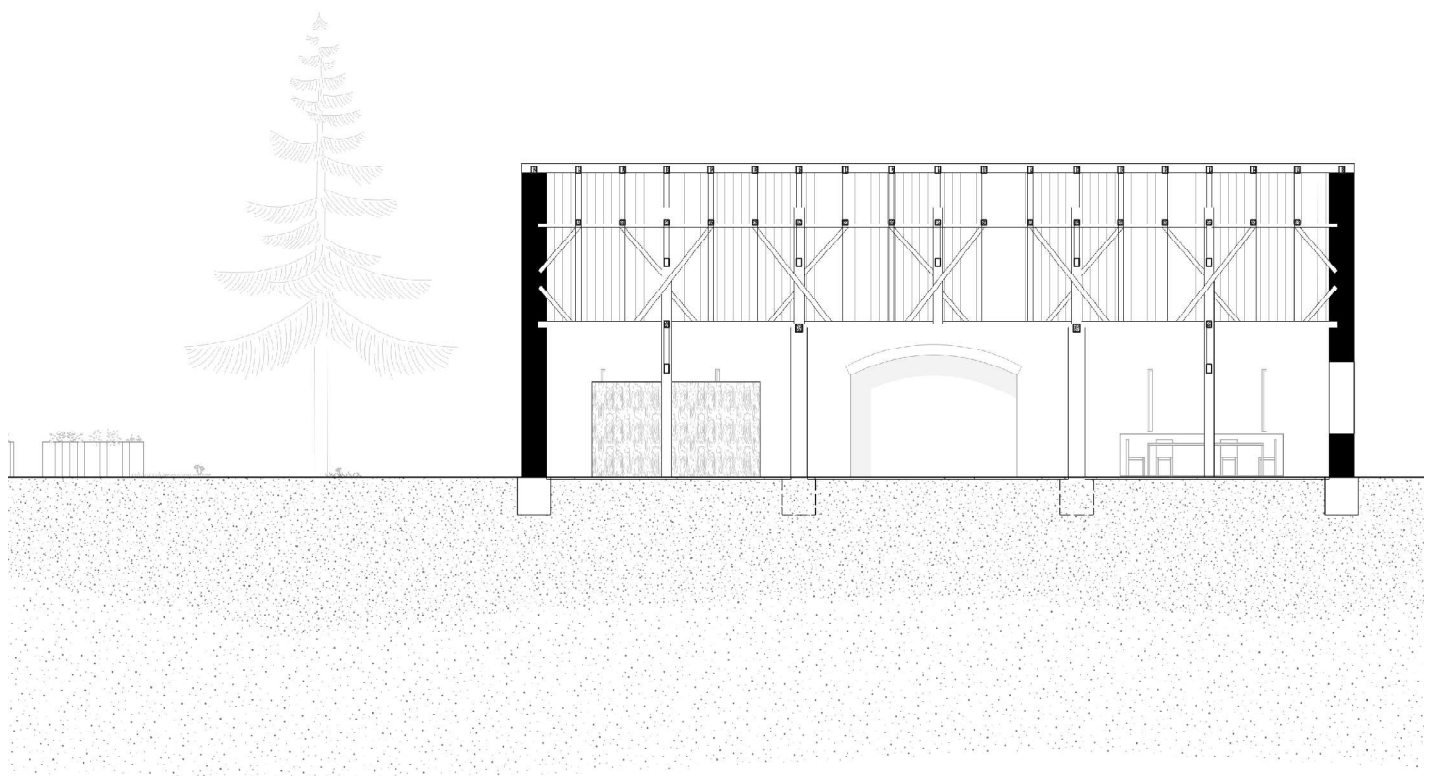
How to apply permacultur principles in Mnichovo Hradiste ?



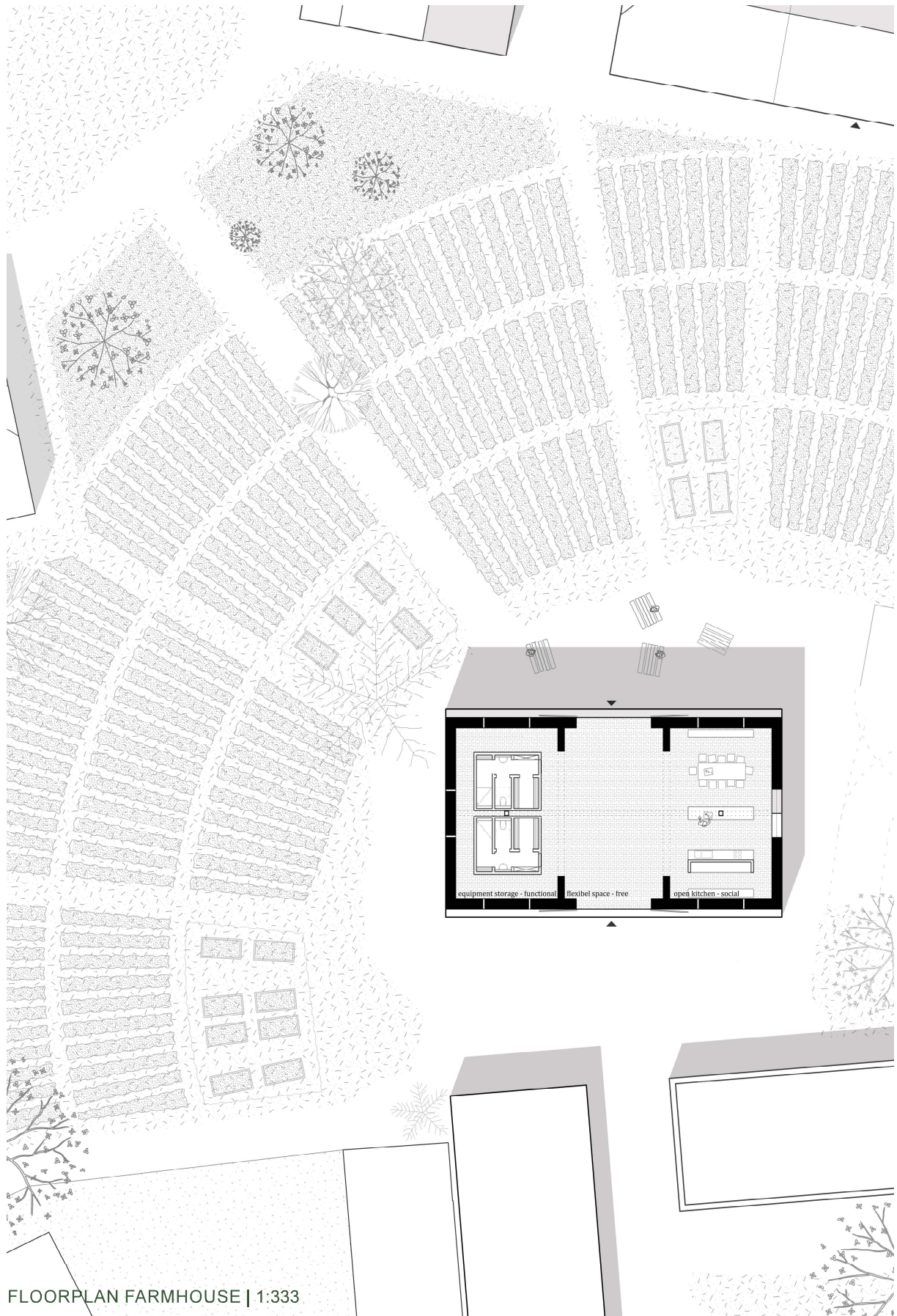
ELEVATION FARMHOUSE | 1:200



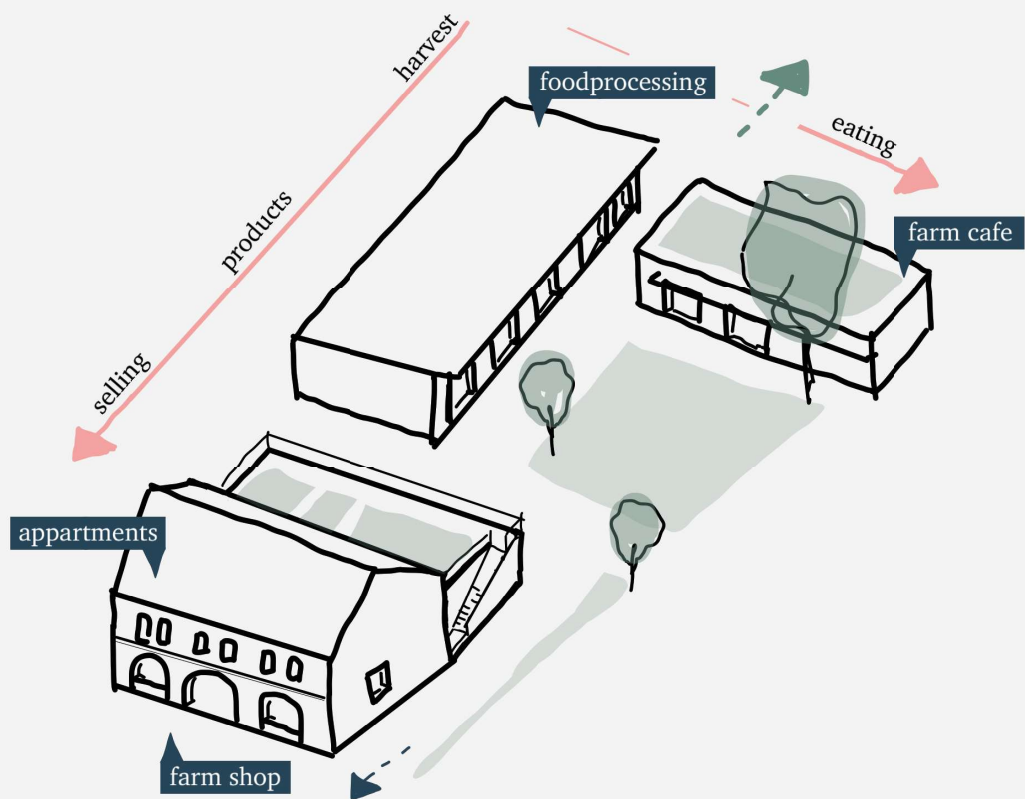
SECTION FARMHOUSE | 1:200



3. the farm

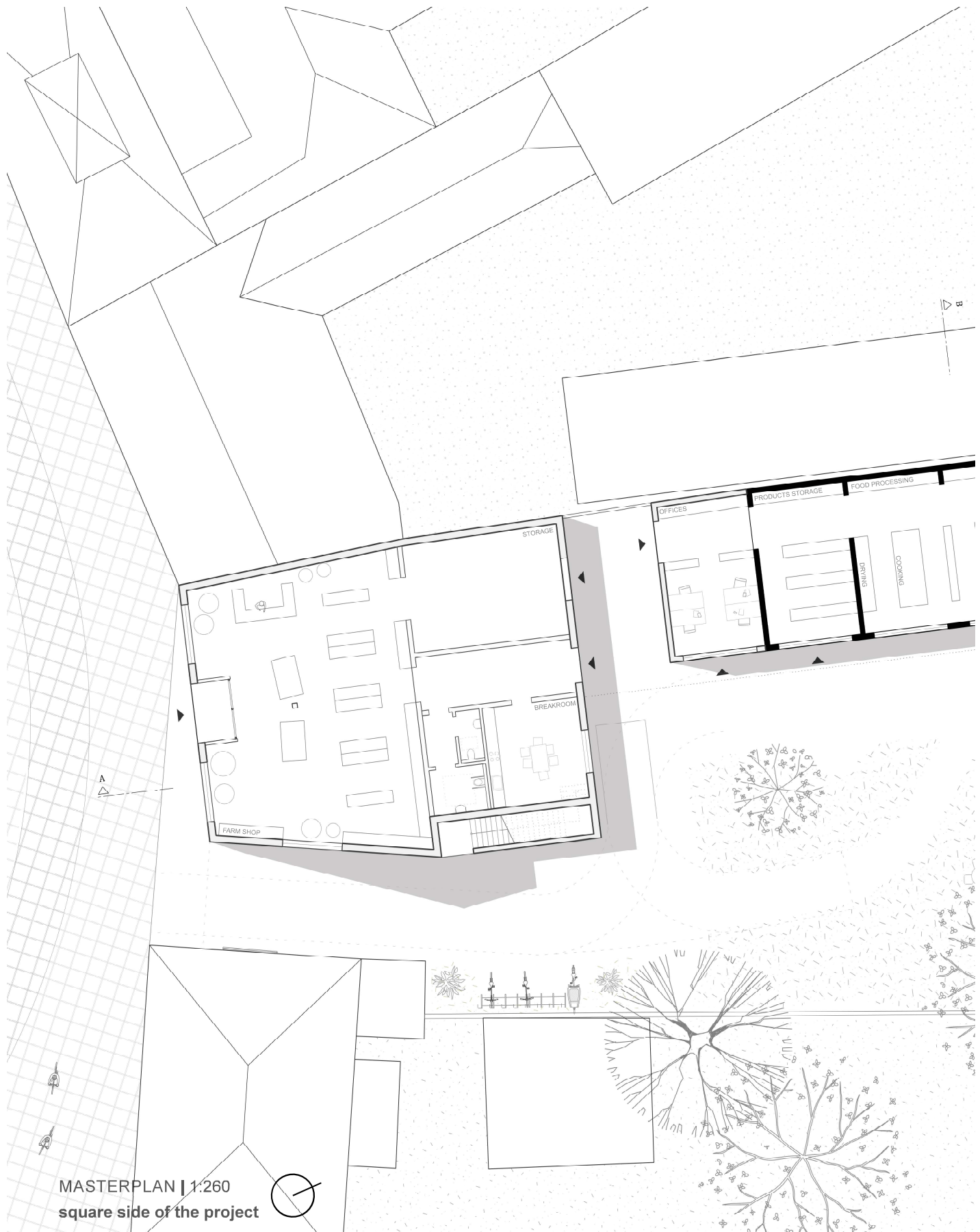


FLOORPLAN FARMHOUSE | 1:333

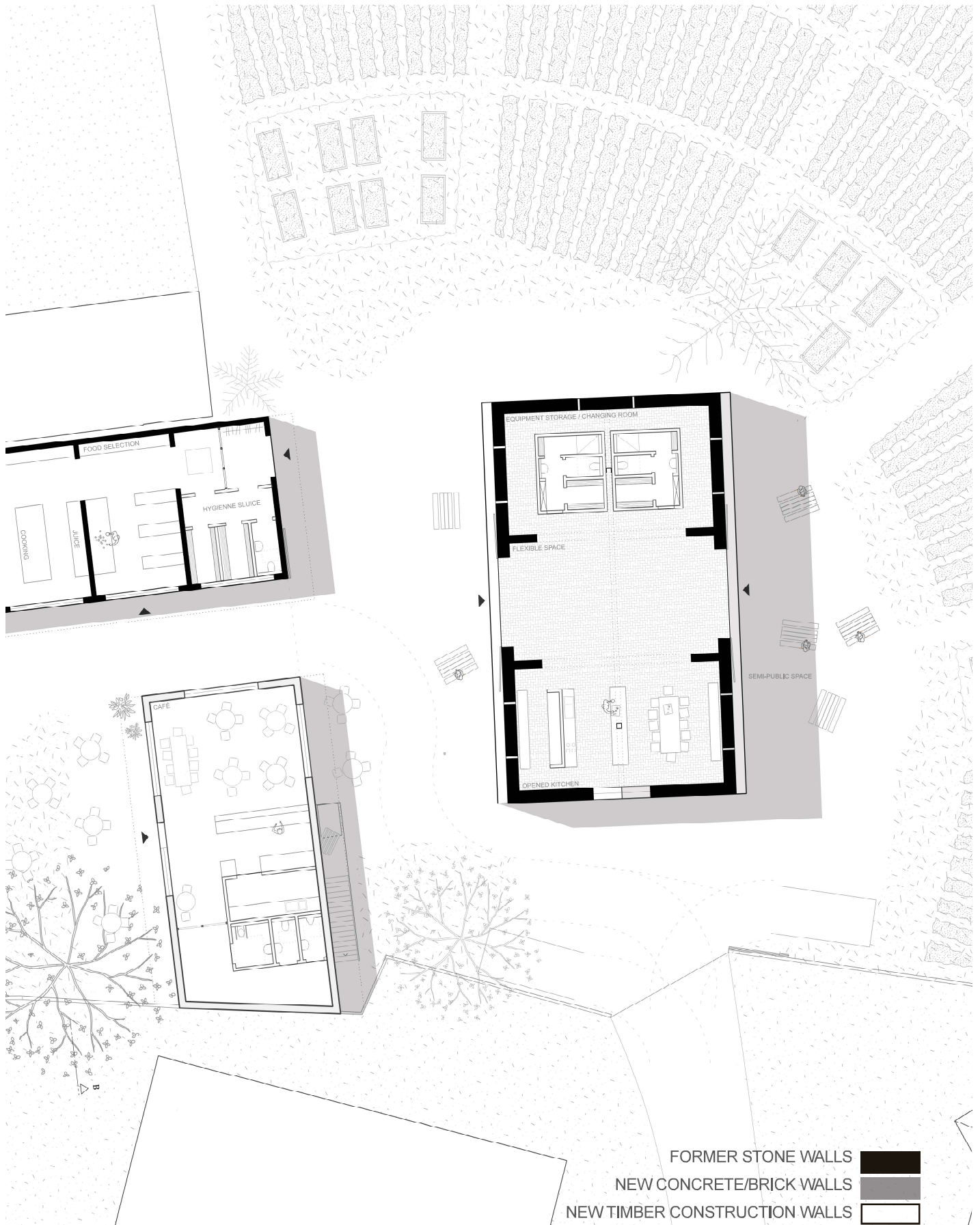


DESIGN CONCEPT

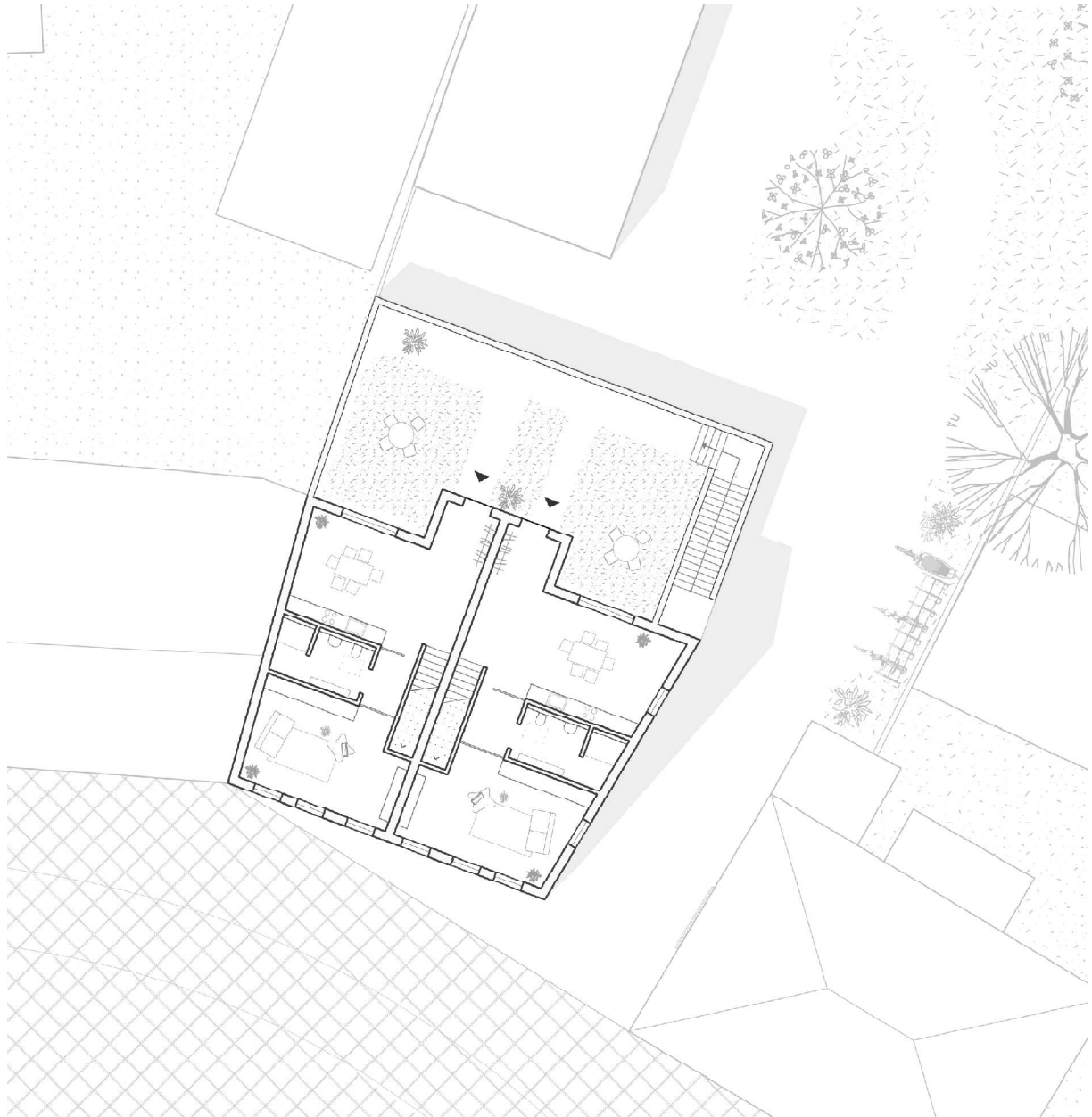
4. the square area



4. the square area



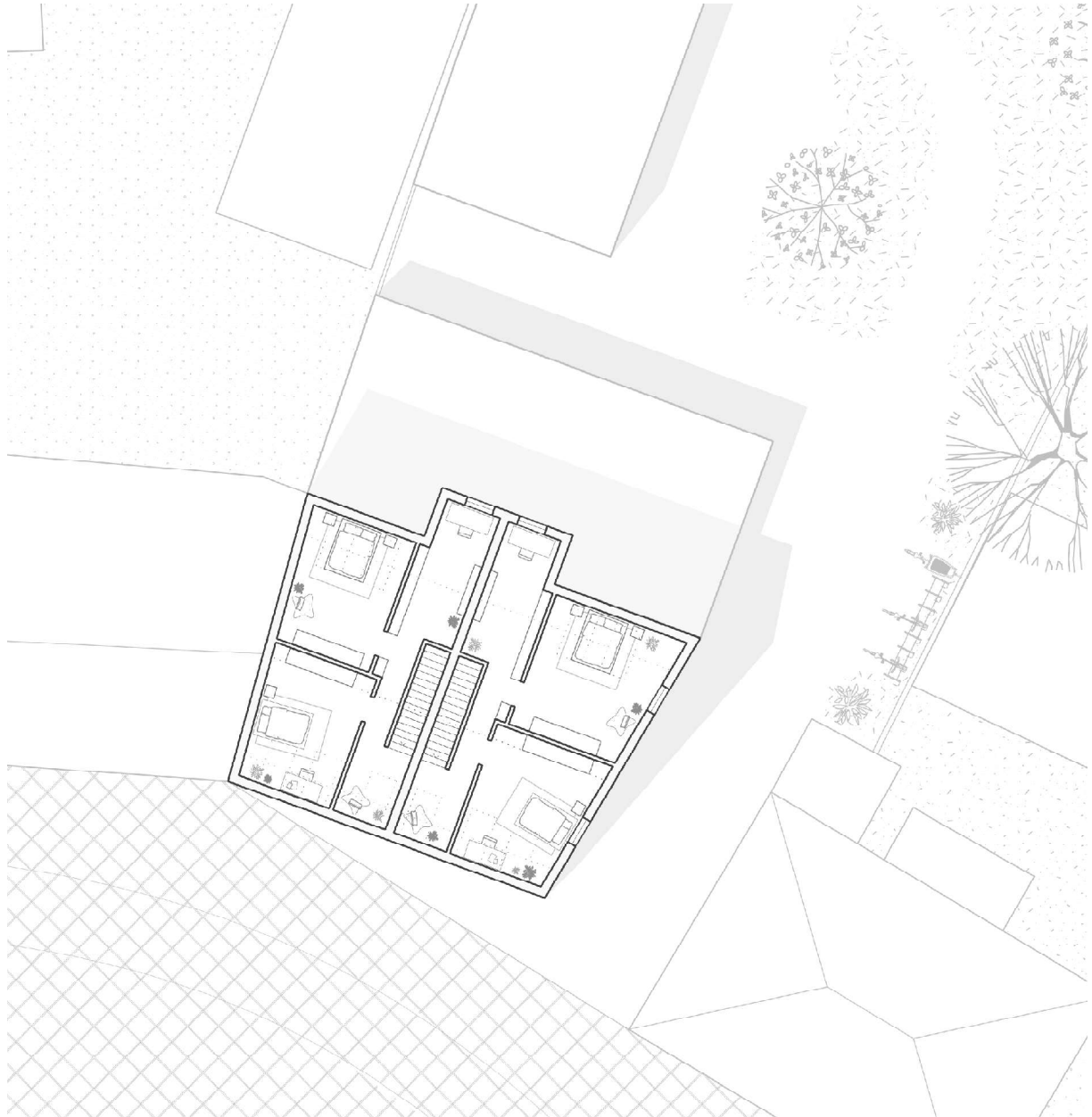
4. the square area



FLOORPLAN 1. FLOOR | 1:260
square side of the project



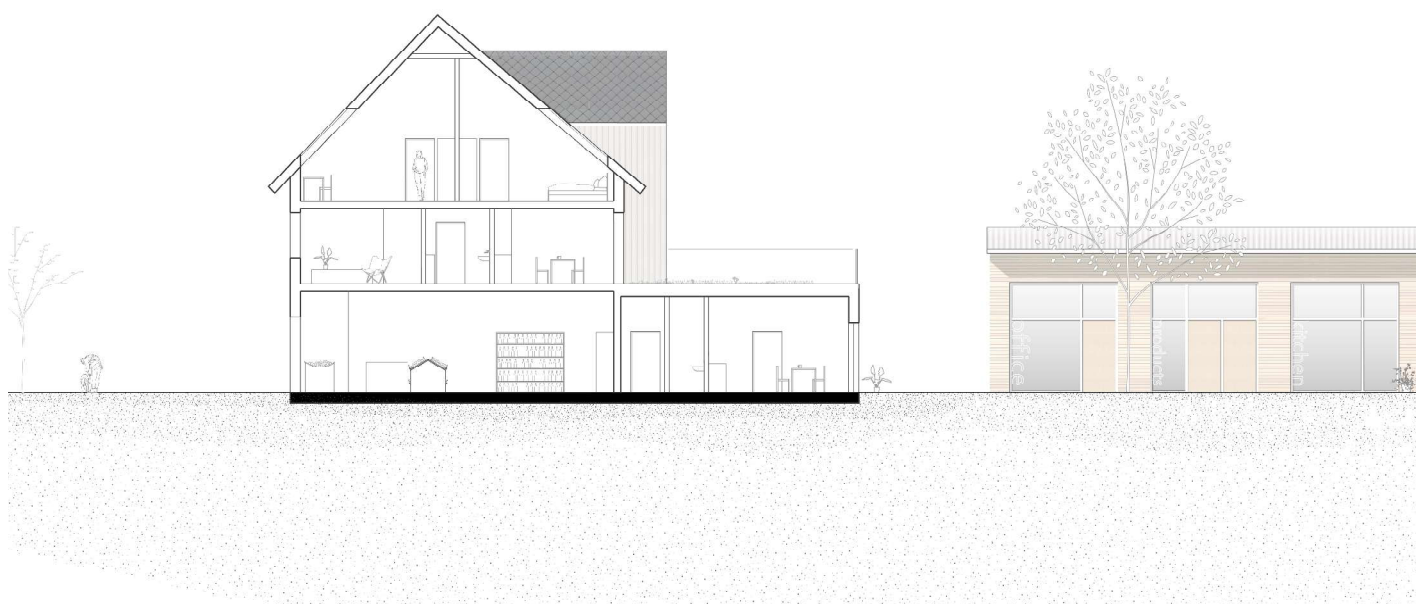
4. the square area



FLOORPLAN 2. FLOOR | 1:260
square side of the project

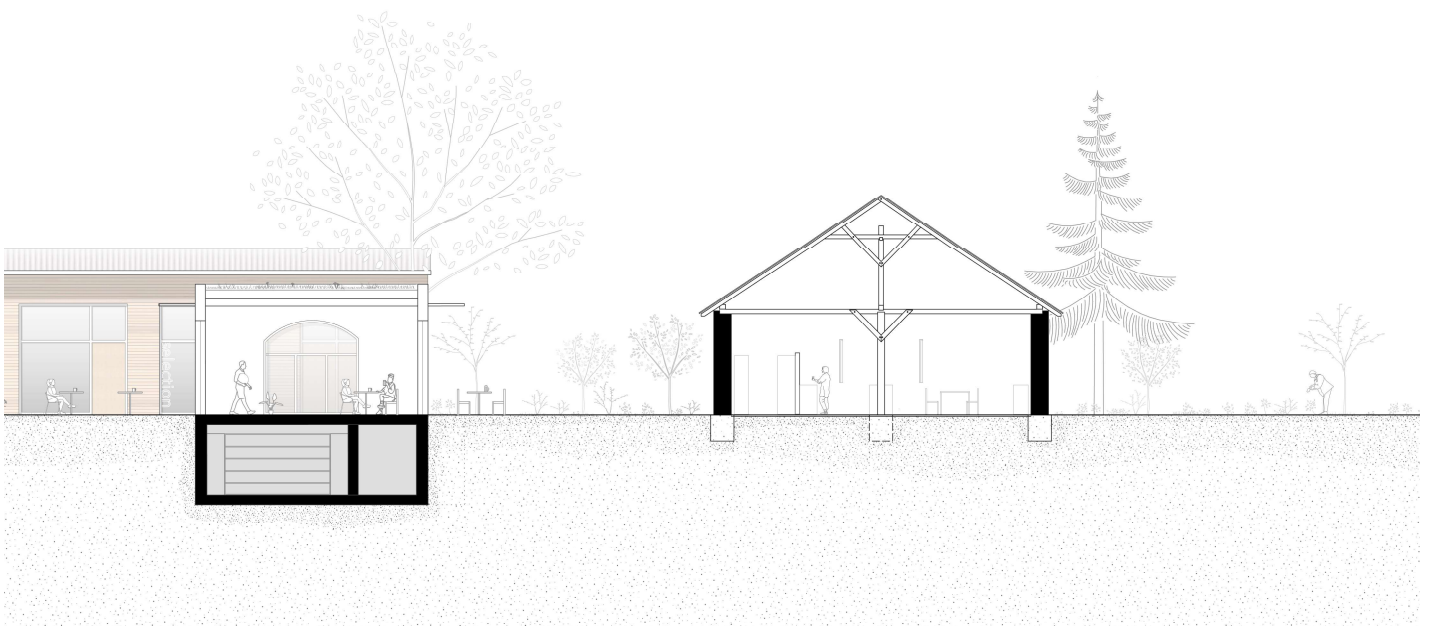


4. the square area

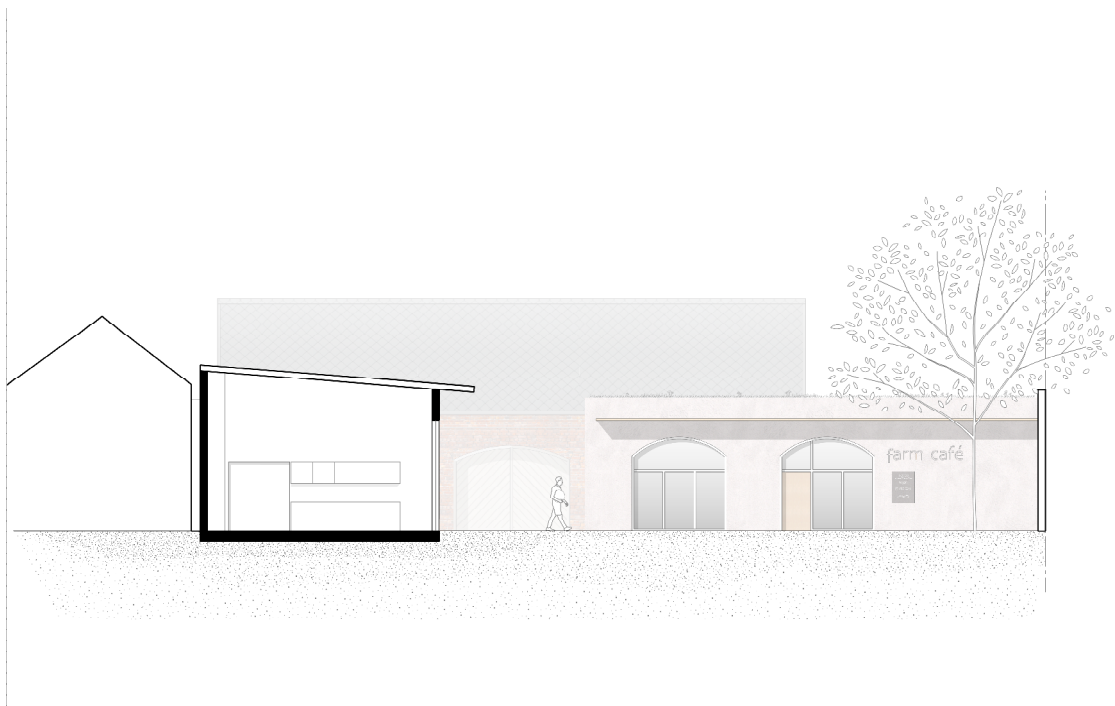


SECTION AA' | 1:260
square side of the project

4. the square area



4. the square area



SECTION BB' | 1:260
square side of the project

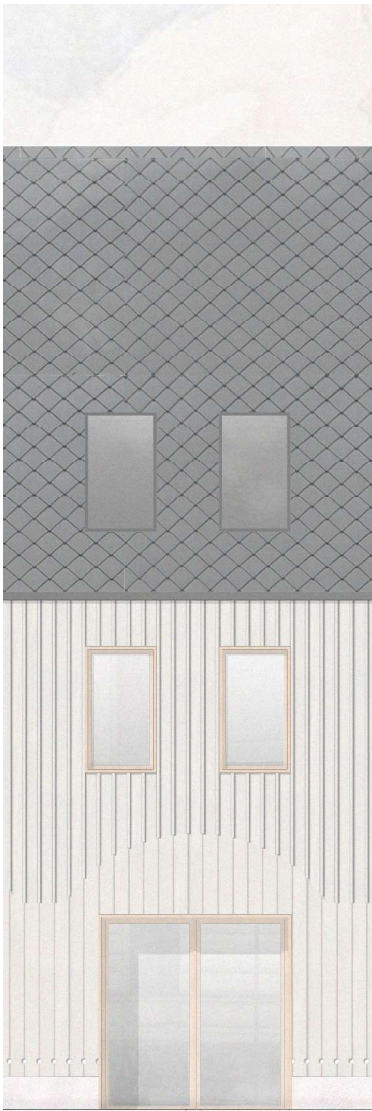
4. the square area



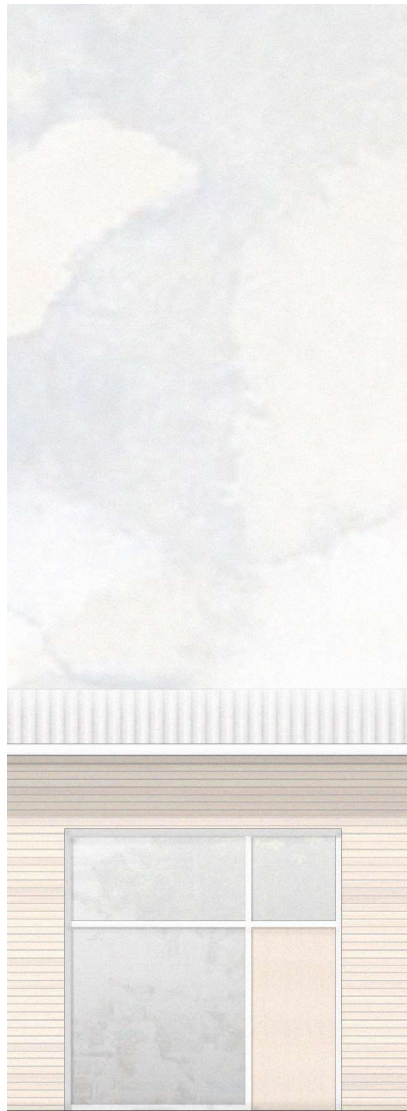
ELEVATION SOUTH | 1:260
square side of the project

4. the square area

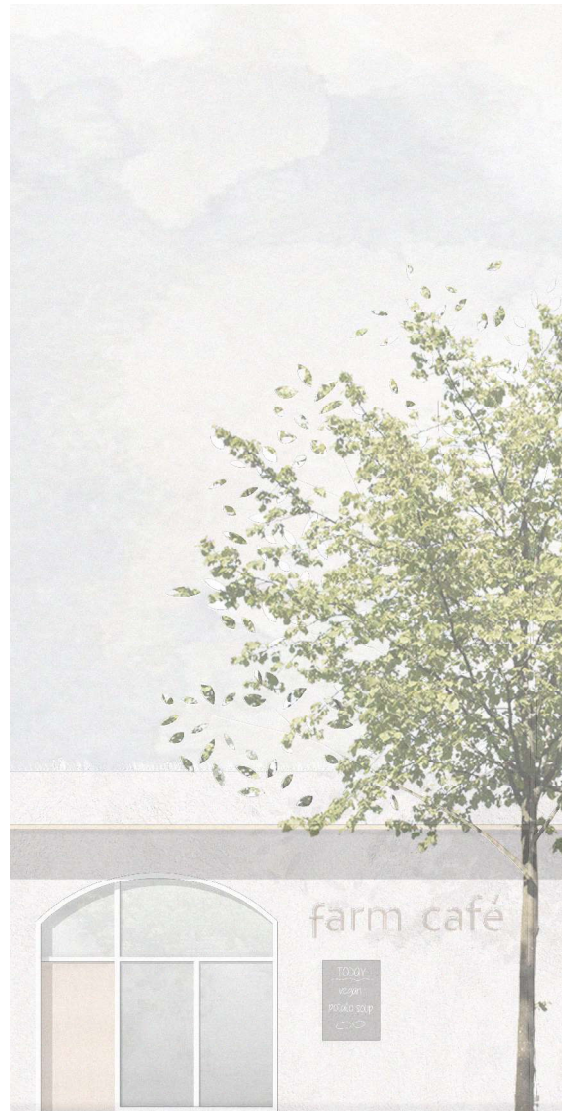
SQUARE BUILDING
residential house & farm shop



FOODPROCESSING BUILDING
treatment of farm products
preparation for the café and the shop



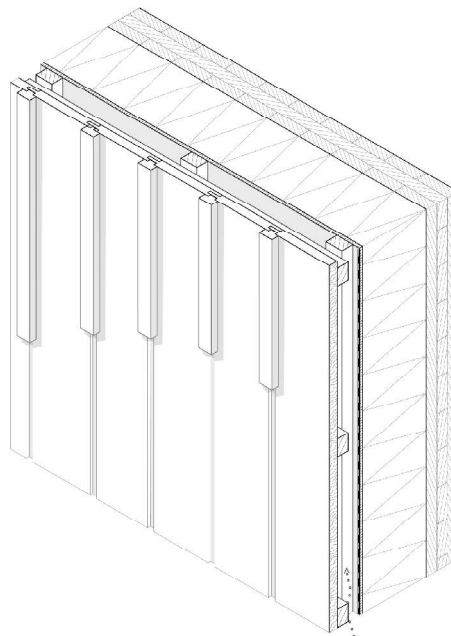
CAFÉ
degustation of farm products & meeting place
for the neighbourhood, tourists and workers



FACADE CHARACTER | 1:100

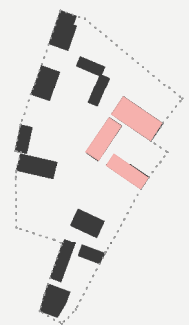
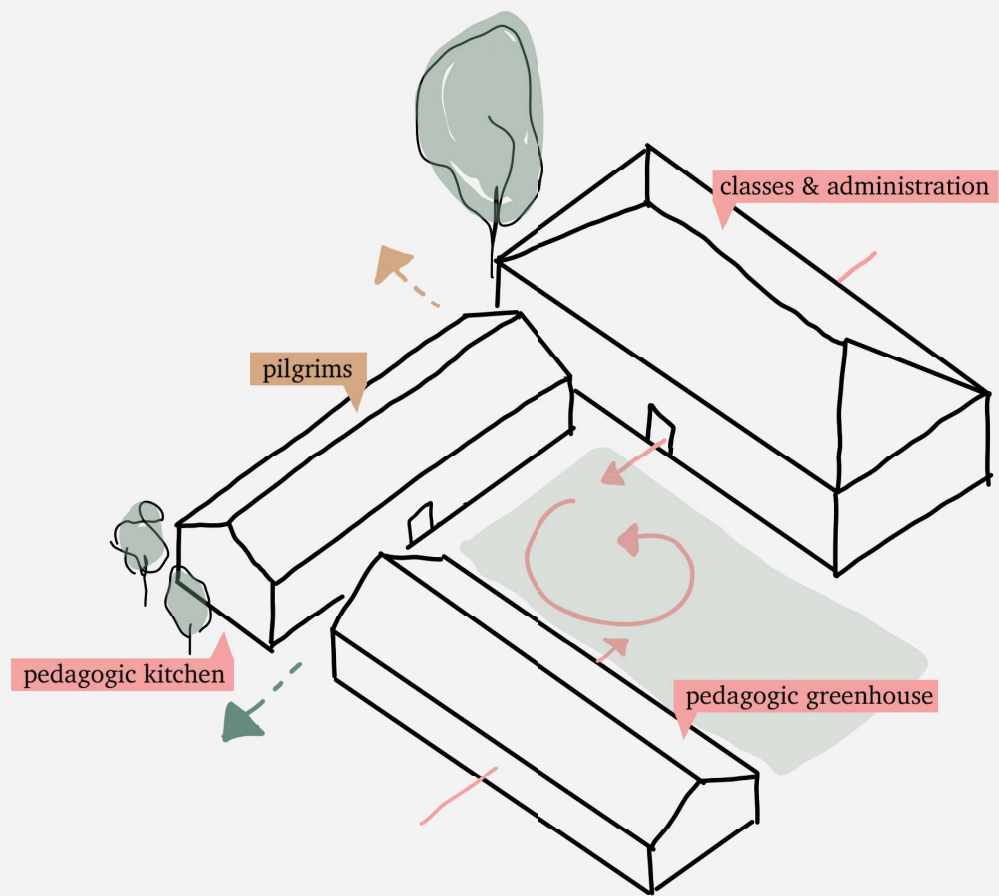
WALL CONSTRUCTION

3-layer solid wood panel
Insulation
Gypsum fibreboard
Diffusion-open foil
Battens & rear ventilation
Counter-battening
Wooden boarding, light grey glazed
Wooden battens, light grey glazed



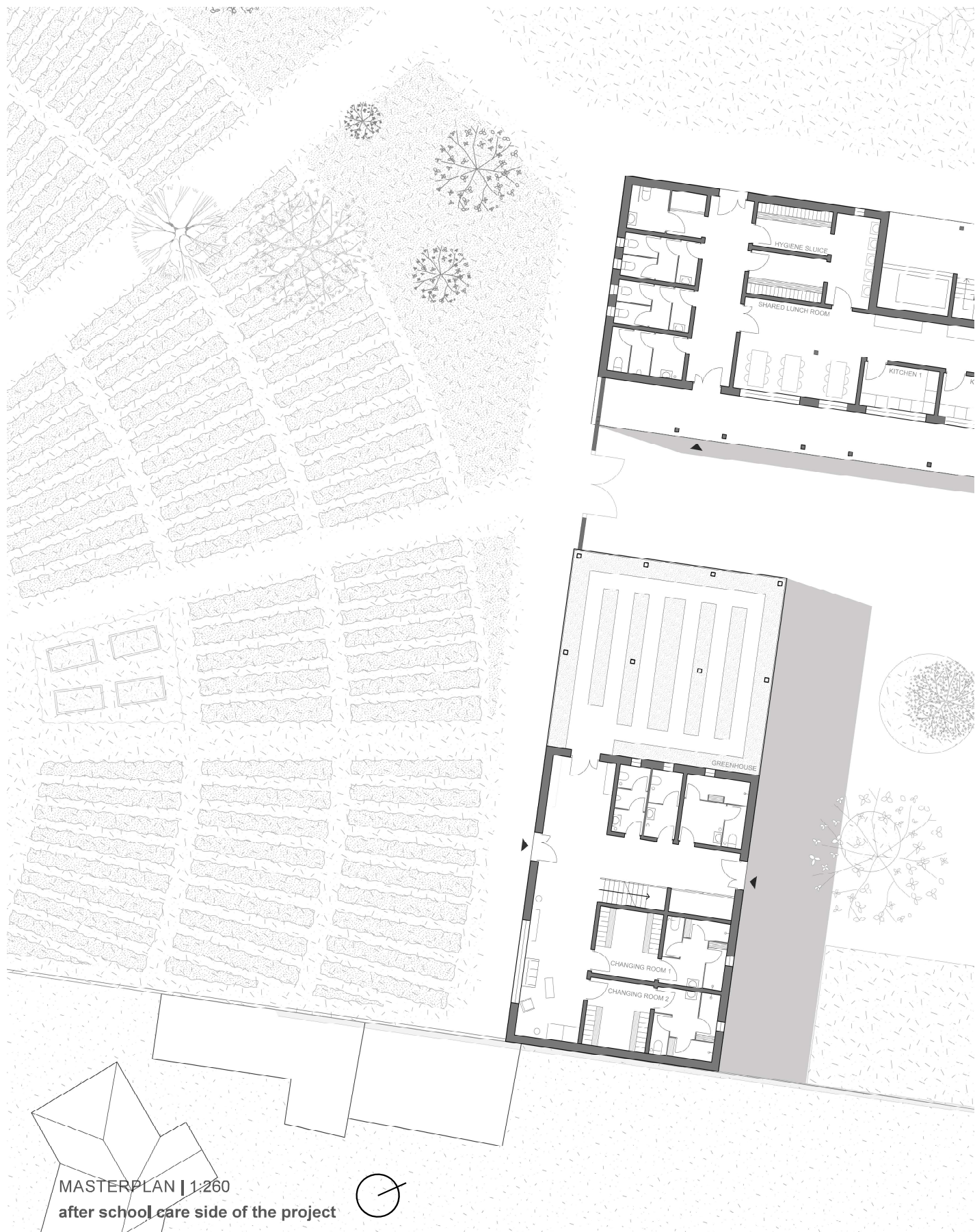


5.
the after school care area



DESIGN CONCEPT

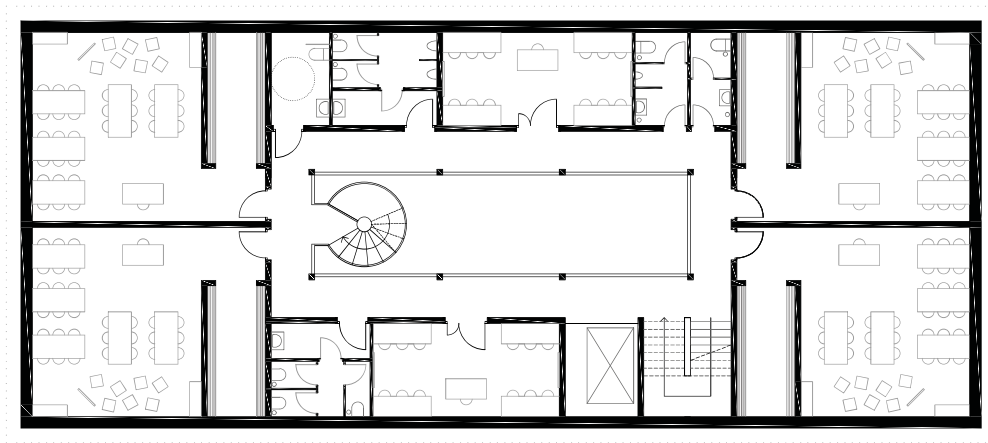
5. the after school care area



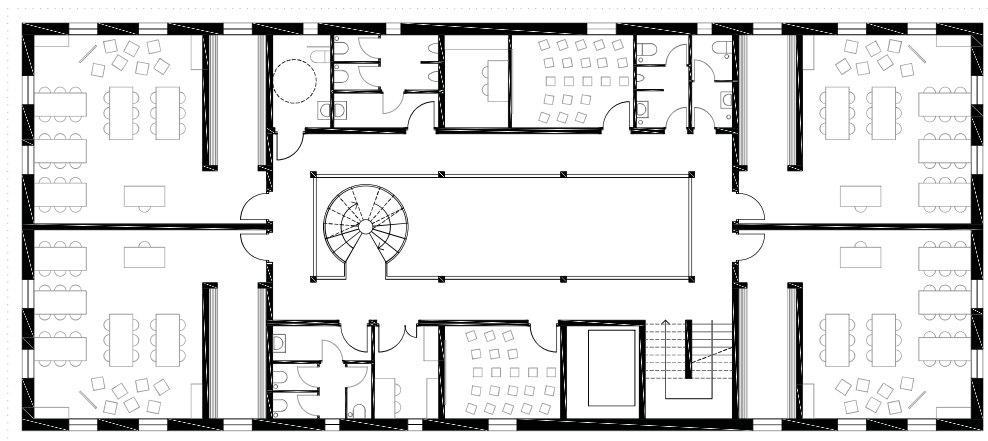
5. the after school care area



5.
the after school care area



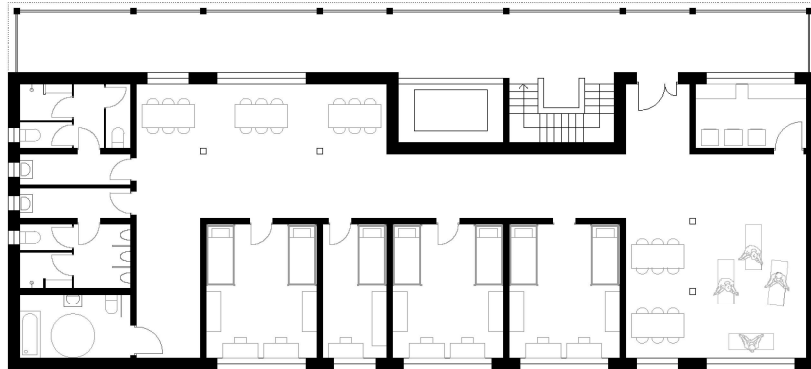
FLOORPLAN 2. FLOOR | 1:260



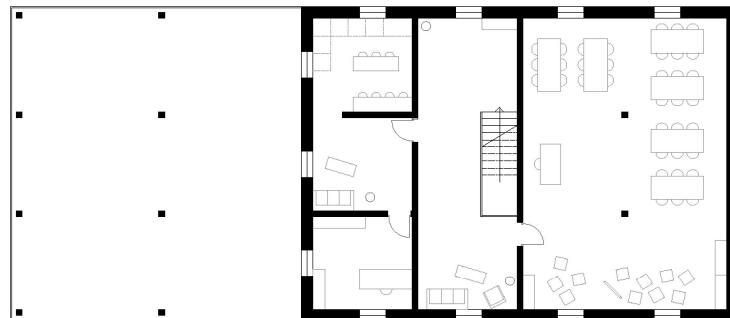
FLOORPLAN 1. FLOOR | 1:260
after school care



5. the after school care area



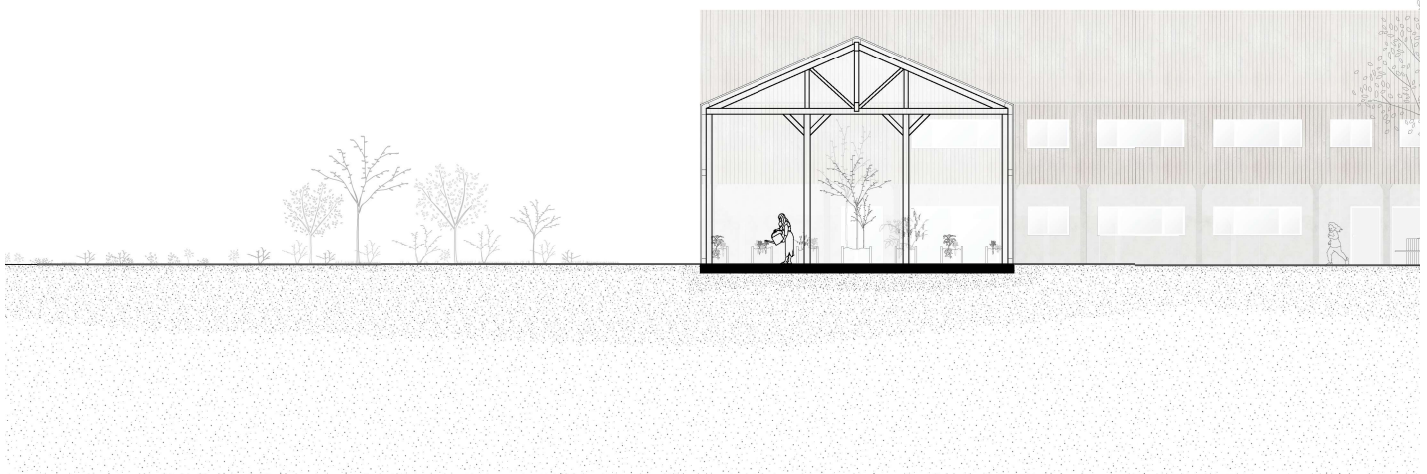
FLOORPLAN 2. FLOOR | 1:260
pilgrim accommodation



FLOORPLAN 2. FLOOR | 1:260
educational greenhouse

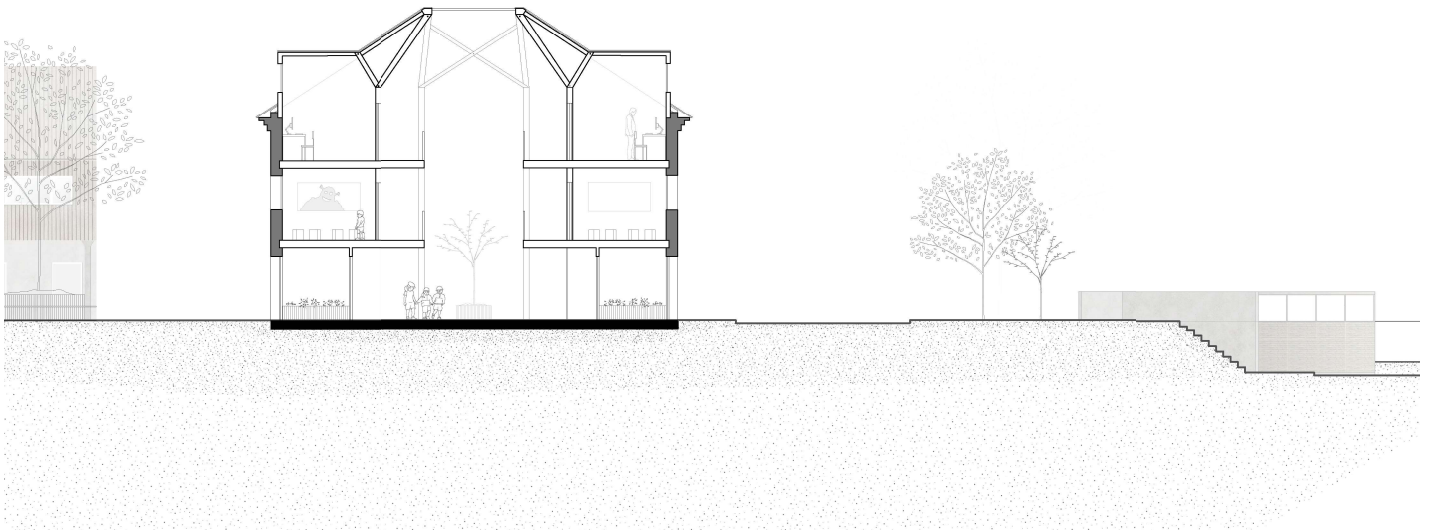


5.
the after school care area

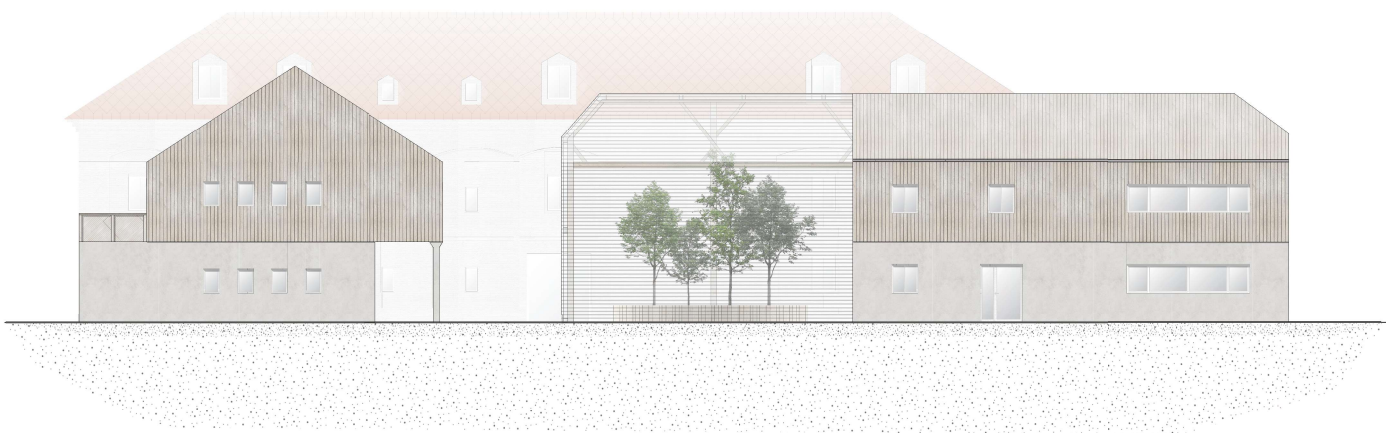


SECTION AA' | 1:260
after school care side of the project

5. the after school care area



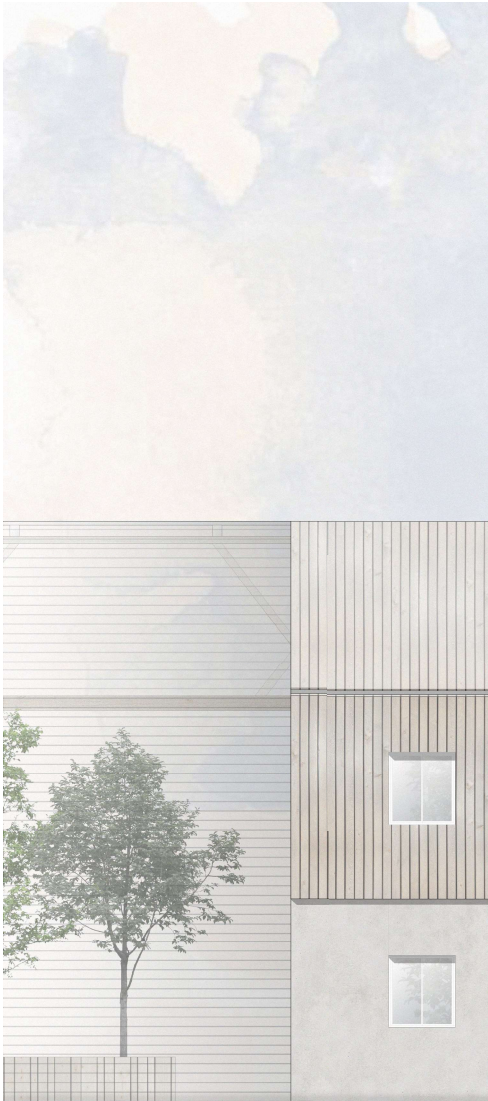
5.
the after school care area



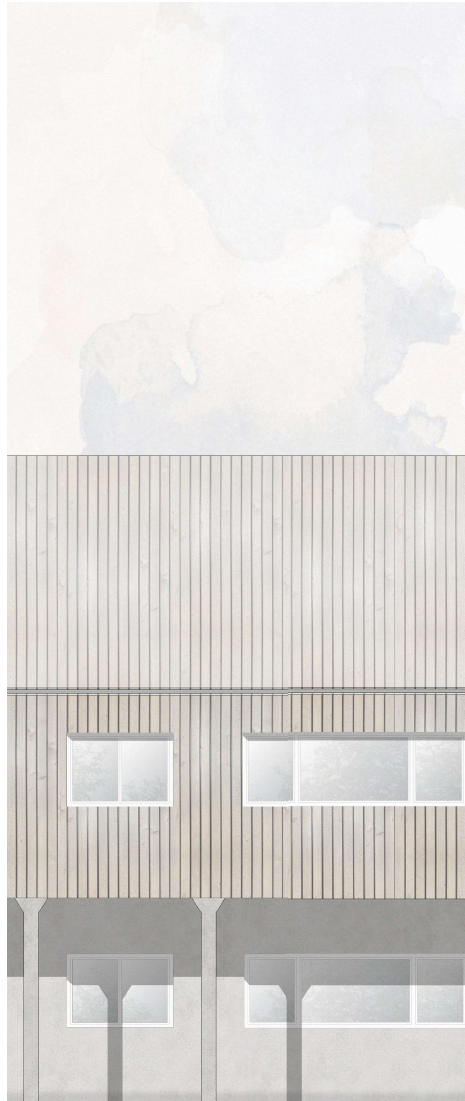
SECTION BB' | 1:260
square side of the project

5. the after school care area

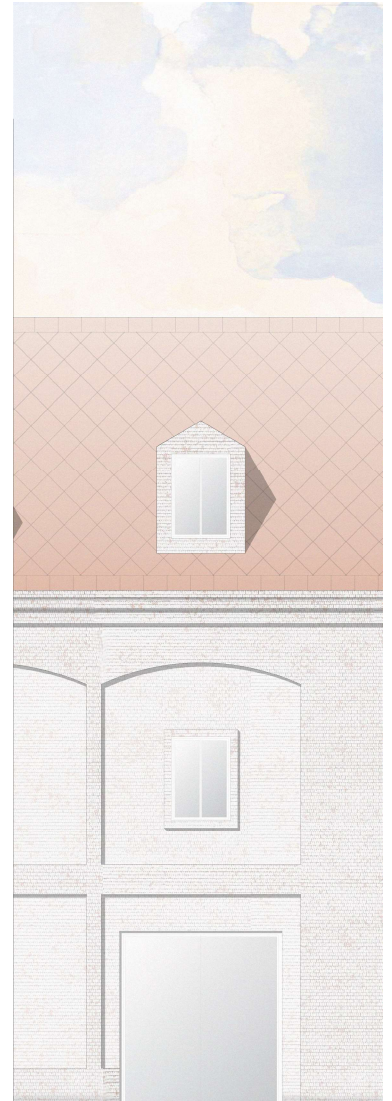
PEDAGOGICAL GREENHOUSE
Classroom for mediation
Children adapted greenhouse



AFTER SCHOOL CARE
Accommodations for farm volunteers
Kitchen workshops for children



AFTER SCHOOL CARE
Classrooms and computer rooms & Projection rooms

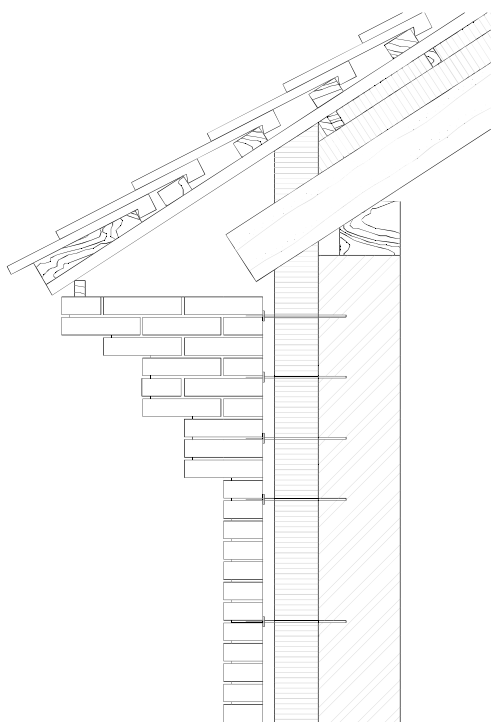


FACADE CHARACTER | 1:100

5.
the after school care area

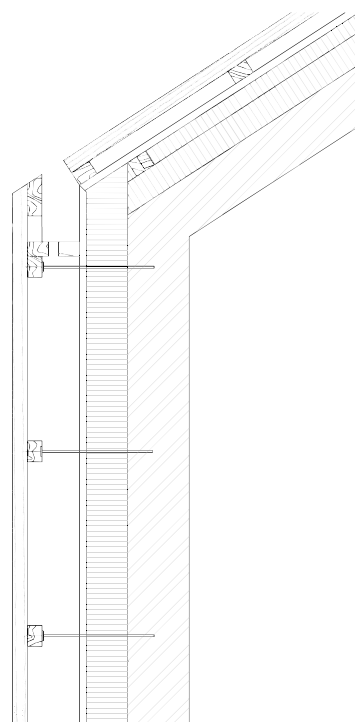
WALL CONSTRUCTION

hand-broken bricks
air chamber
thermal insulation
brick wall
white plaster finish



WALL CONSTRUCTION

2 layers solid wood panel
air chamber
thermal insulation
concrete wall
white plaster finish



FACADE DETAILS | 1:20

5.

the after school care area

