

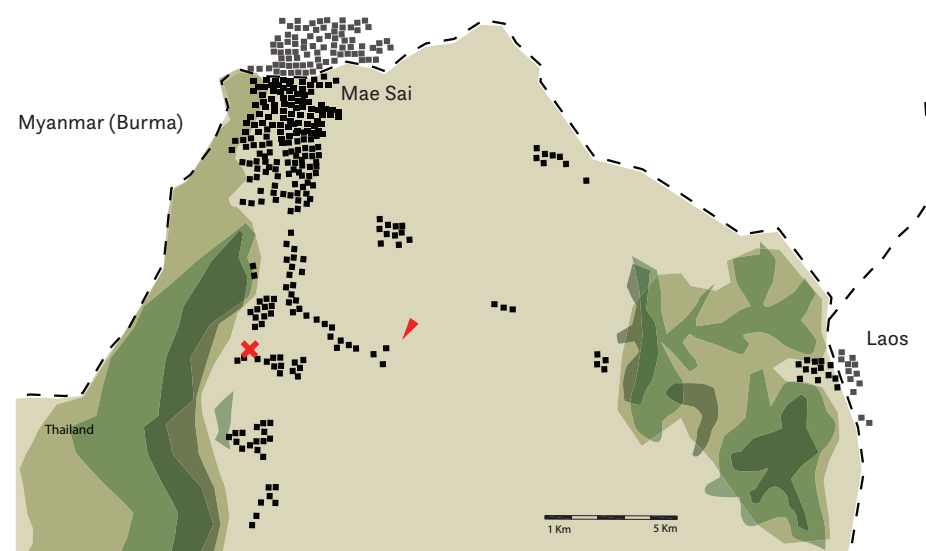
BASEhabitat
BAAN DOI Center for Agriculture, Thailand
Master Plan, Family House, Community Center and Guest Houses



Context



Thailand. construction site in the northern boarder region



children's house BAAN DOI and construction site near Mae Sai.

BAAN DOI is an NGO located in the Thai province of Chiang Rai, where the borders of Laos and Myanmar meet. Close to the border town of Mae Sai, the NGO runs a home for 20 orphans and offers projects for disadvantaged children in the region.

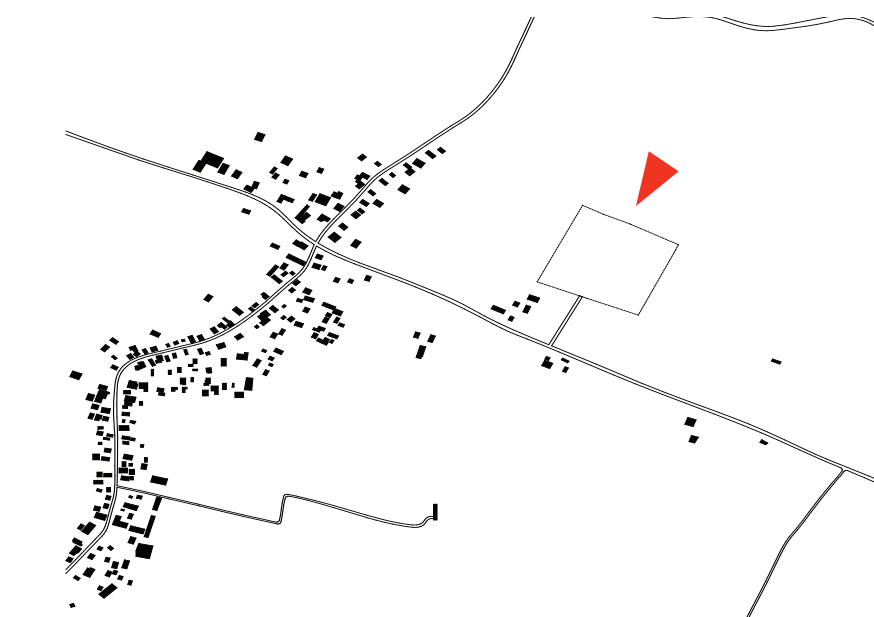
BAAN DOI seeks to ensure a healthy development and provide schooling for their fosterlings, for them to be able to lead independent and self-determined lives after leaving BAAN DOI.

The Austrian Barbara Meisl founded the NGO more than ten years ago. To her it is vital, that the NGO can provide healthy and organically harvested food for itself. Further they seek to give the youths a good education and even job opportunities for their future. Since BAAN DOI was also looking to generate income, the idea to build an agricultural center was born.

A 4 hectare rice field, 5 km east of BAAN DOI was purchased to start an organic farm based on permaculture principles. Should the space turn out to be insufficient, an adjacent field of another 2 hectare is available for purchase.

Aside from self-sufficiency and the sale of the produce, the NGO would like to open a restaurant, serving their locally grown food. Other business endeavors include training and workshops on permaculture and organic farming. For the attendees of those classes, as well as for other guests, BAAN DOI plans to build guest houses on site.

Because of its expertise in and experience with sustainable building, BASEhabitat was commissioned to plan the buildings of the new agriculture center.



construction site, east of a small settlement

The project will be realised in stages:

The first phase involves the

- **Family house:** a home for the manager of the farm, and his/her family
- **Community center:** a building to house seminars, with a kitchen unit, dining hall and bathrooms, as well as a greenhouse and a shed.
- **Guest houses:** cabins for tourists and participants of the seminars

A later phase will see the following constructions built:

- **A restaurant:** where the harvested produce will be cooked and served to guests
- **Place of silence:** a quiet spot to meditate and take in the magnificent surroundings

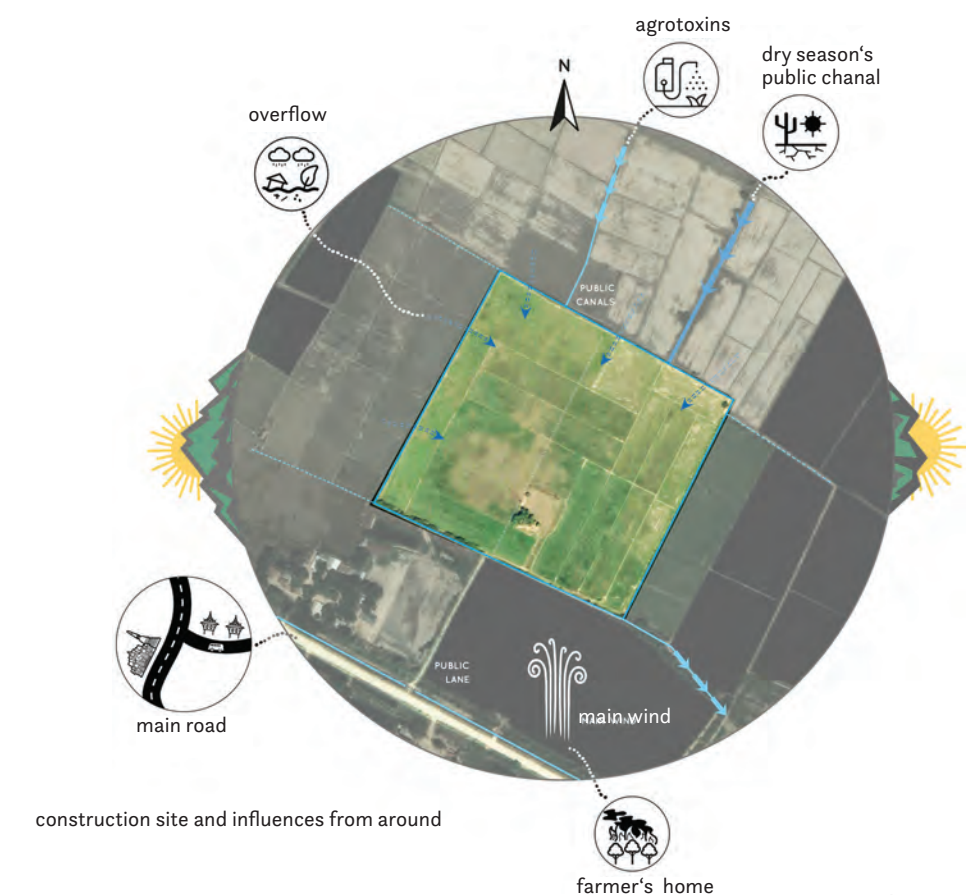
To establish a proper building site, a covered stacking ground is erect. After construction is complete, this area will serve as a parking space for cars and farm vehicles.

Process

After a fieldtrip in September 2018, a master plan for the whole plot was designed. Building site preparations, as well as work on the ponds and waterways has already been done. A simple bamboo treatment station has been built.

During the course of the winter term 2018/19 designs for the first three buildings were developed. Until the end of the summer term 2019, the project will be planned in detail.

Start of construction will be in September 2019. A tight operating schedule and logistics are vital factors to the construction.



construction site and influences from around

Master Plan

zoning, principles

Synergies

The project is based on a master plan that facilitates synergies. It includes the planning of the farming areas, a well-thought-out laying of paths and passageways, as well as a harmonious positioning of buildings (in relation to each other), was vital for the design.

Water

One of the greatest challenges is water management. Channels and trenches were planned with the objective to store water in reservoirs during the rainy season, to be released during the dry period.

Due to the lack of a sewer system, various ways to clean the waster water will be implemented.

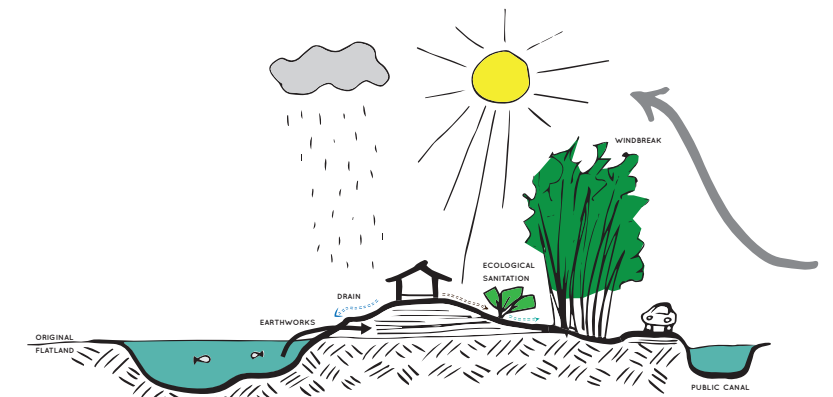
Climate

North Thailand's extremely hot and humid climate calls for a light and airy way of building, allowing the air to circulate easily. Traditionally a lot of social- and home life takes place outside, which makes roofed outside areas essential.

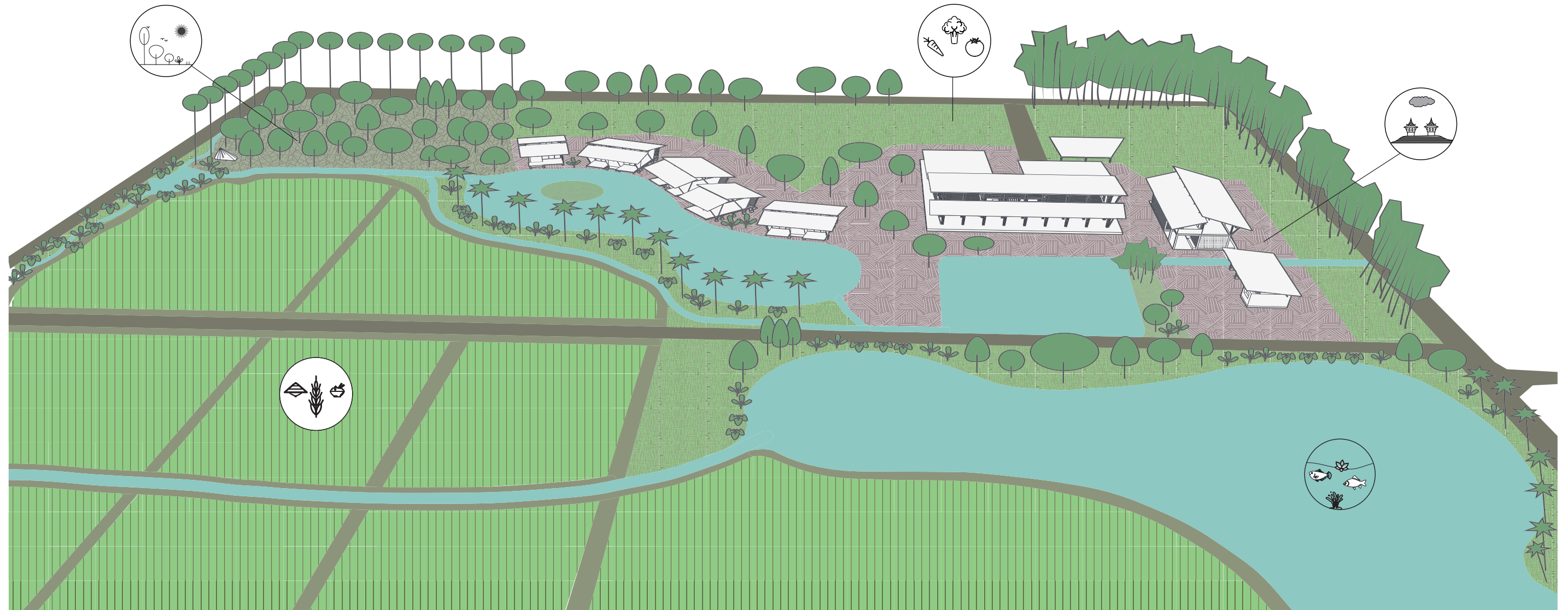
Material

A common formal language and design aesthetics tie the three designs together. The foundation of all buildings is made of fired bricks, on which a light bamboo structure rests.

Both materials are inexpensive and locally available. Roofing can either be done using roofing tiles or corrugated steel.



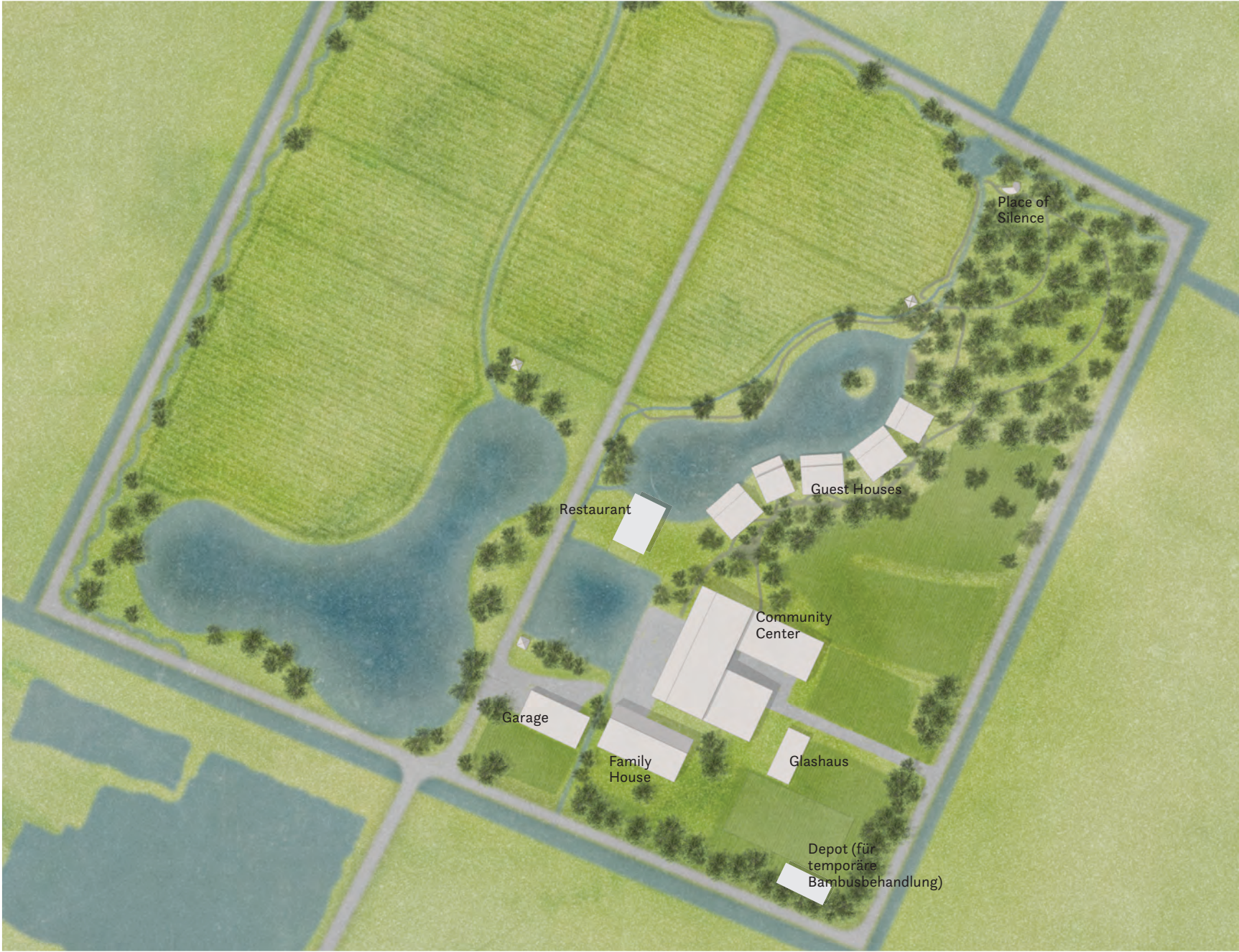
section wind, water, sun, rain and plants



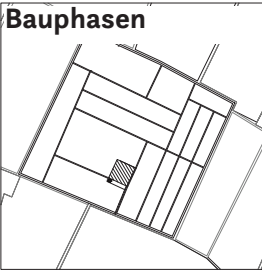
zoning master plan: rice field, fish breeding, fruits and vegetables, buildings

Master Plan

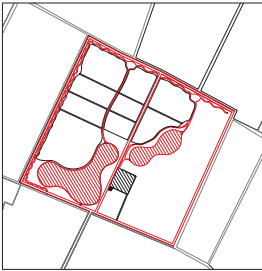
site plan, concepts and construction phases



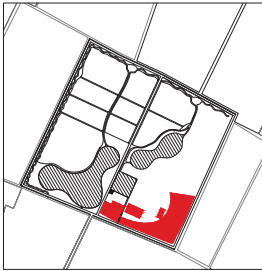
master plan. buildings and agricultural space, M 1:1.250



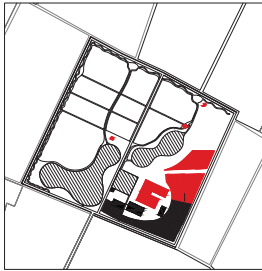
rice filed



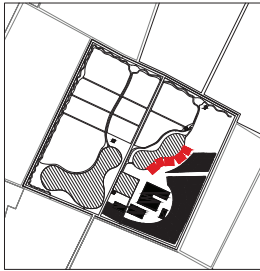
earth works



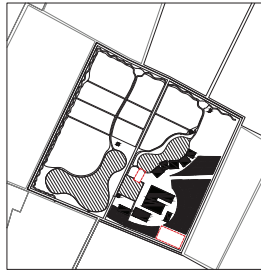
garage, family house
farming



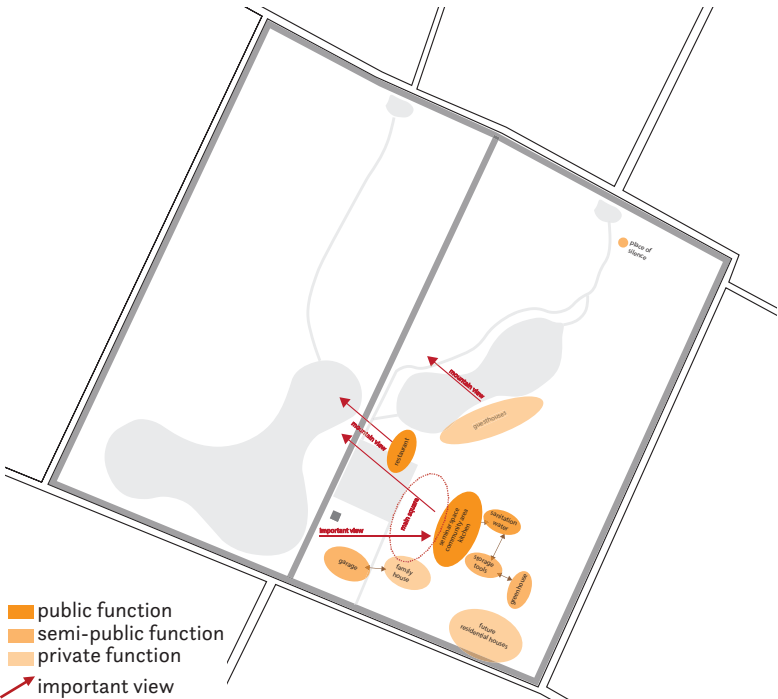
community center
more farming



guest houses



restaurant
additional housing



scheme pubic - semi public and private sections



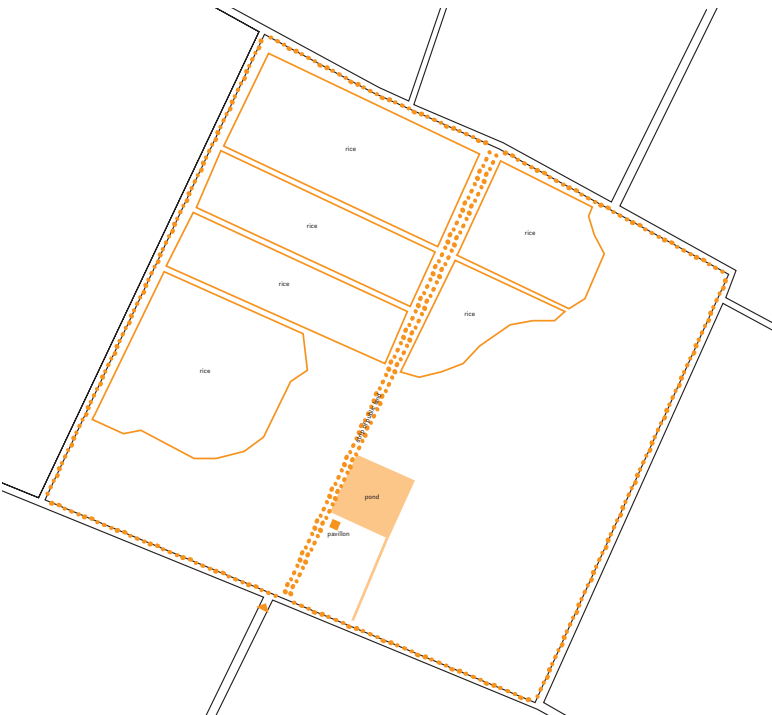
access, road network

Master Plan

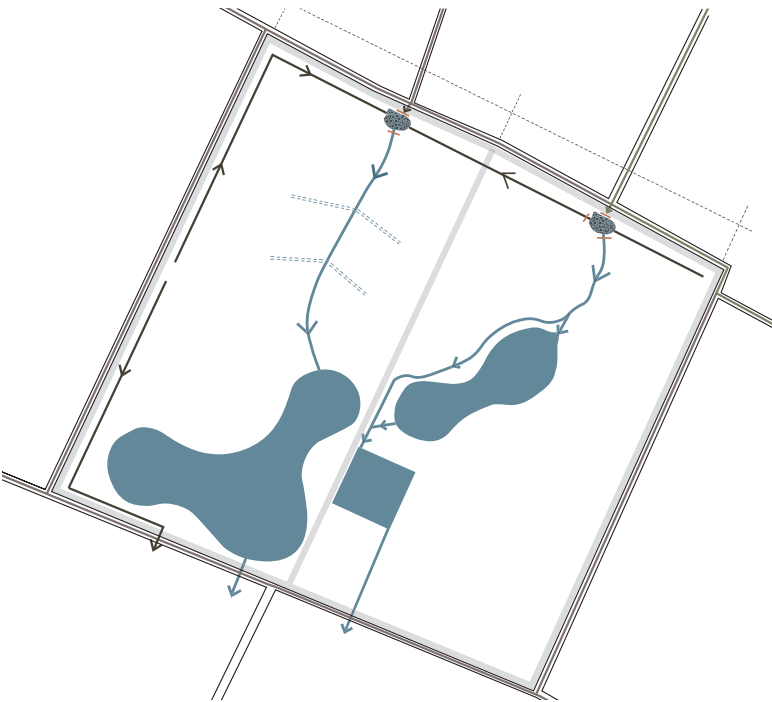
gradient diagram, water management



concept earth works, water management and flow



existing rice fields and pond



ponds and flow

Master Plan

site plan, sections, model



site plan center for agriculture, planned buildings, ponds, agriculture zones for fruits and vegetables. No scale.



model pictures



view towards south: community center and family house in the back, M 1:400



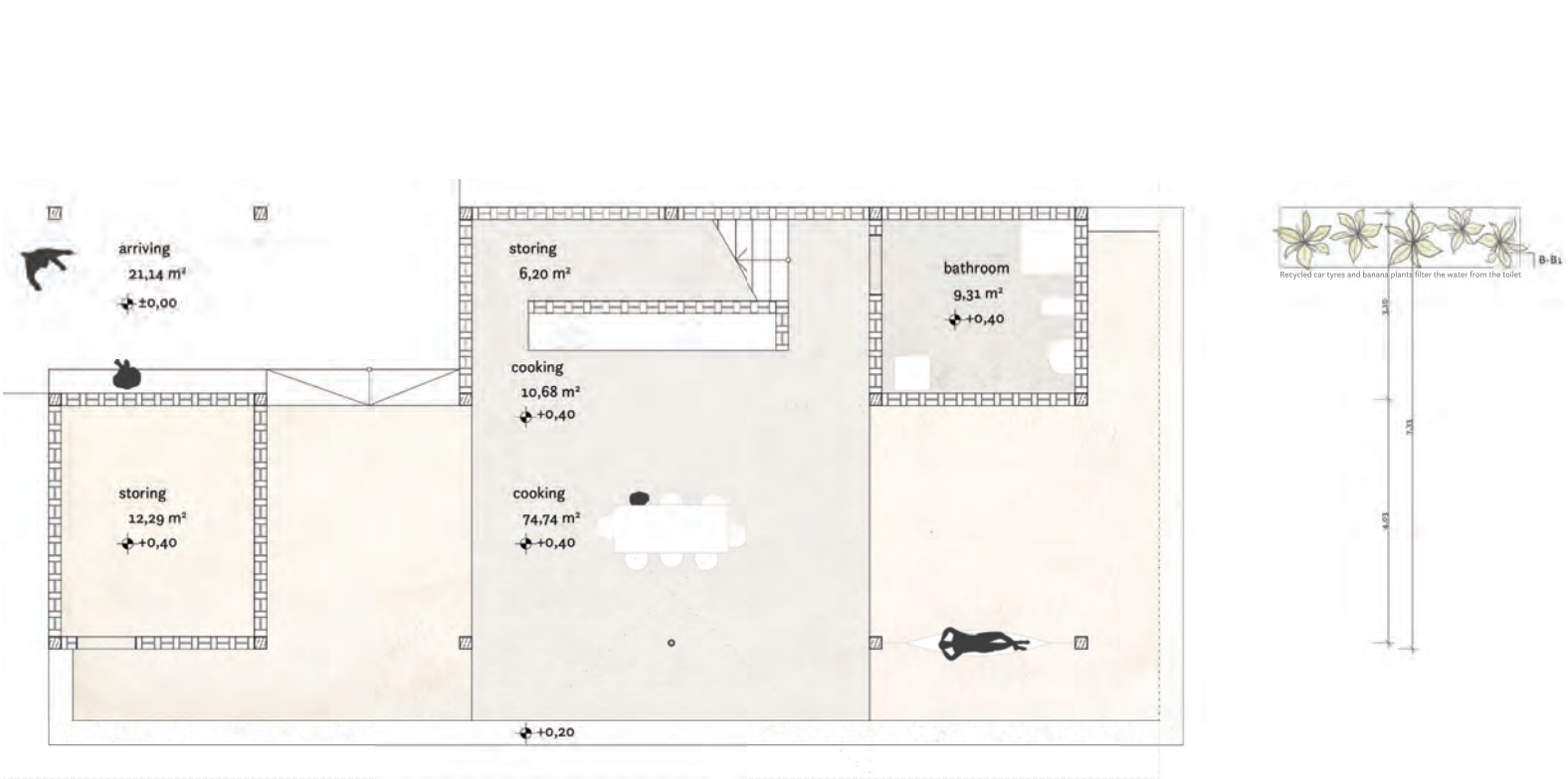
view towards north: family house and community center in the back, M 1:400

Family House

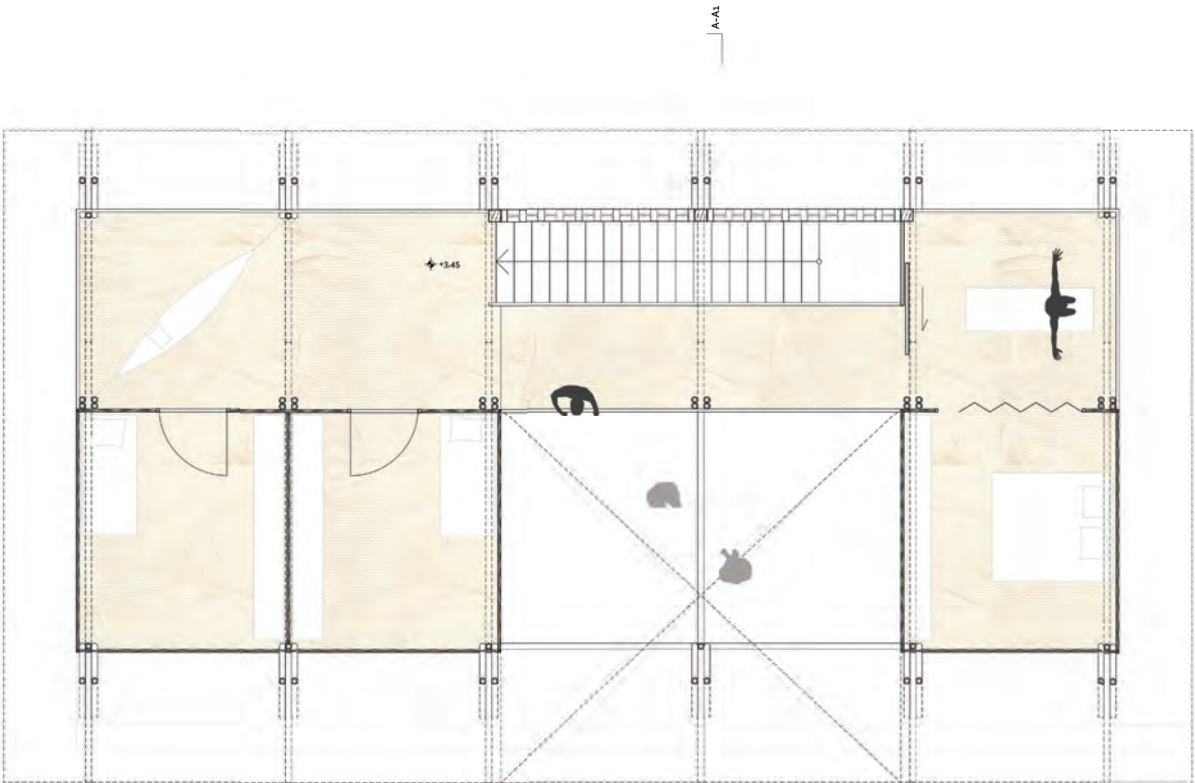


Family House

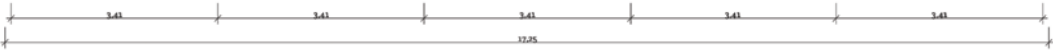
floor plans, views



floor plan family house, ground floor, M 1:125



floor plan family house, first floor, M 1:125



view east family house, M 1:200

view north family house, M 1:200



view west family house, M 1:200

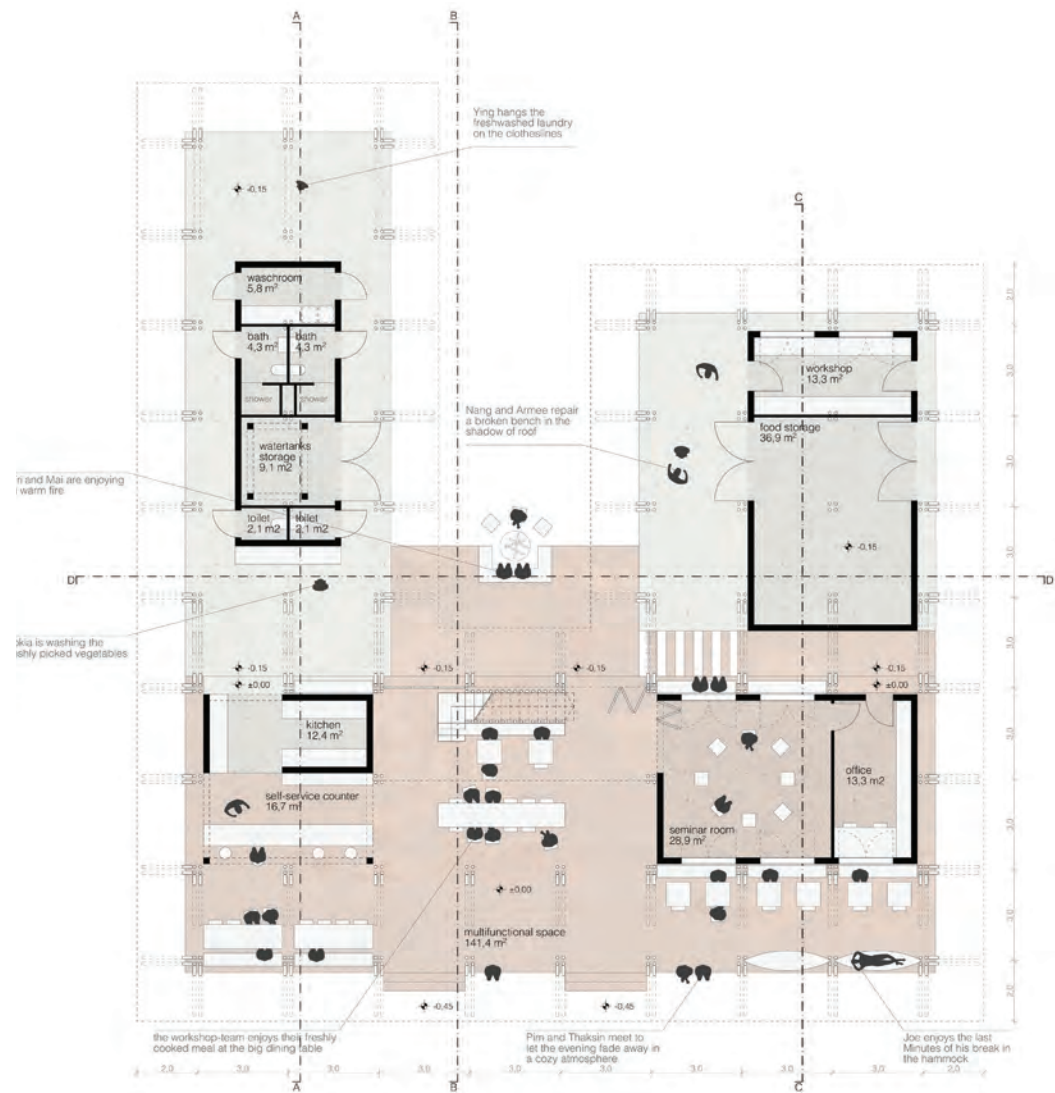
view south family house, M 1:200

Community Center

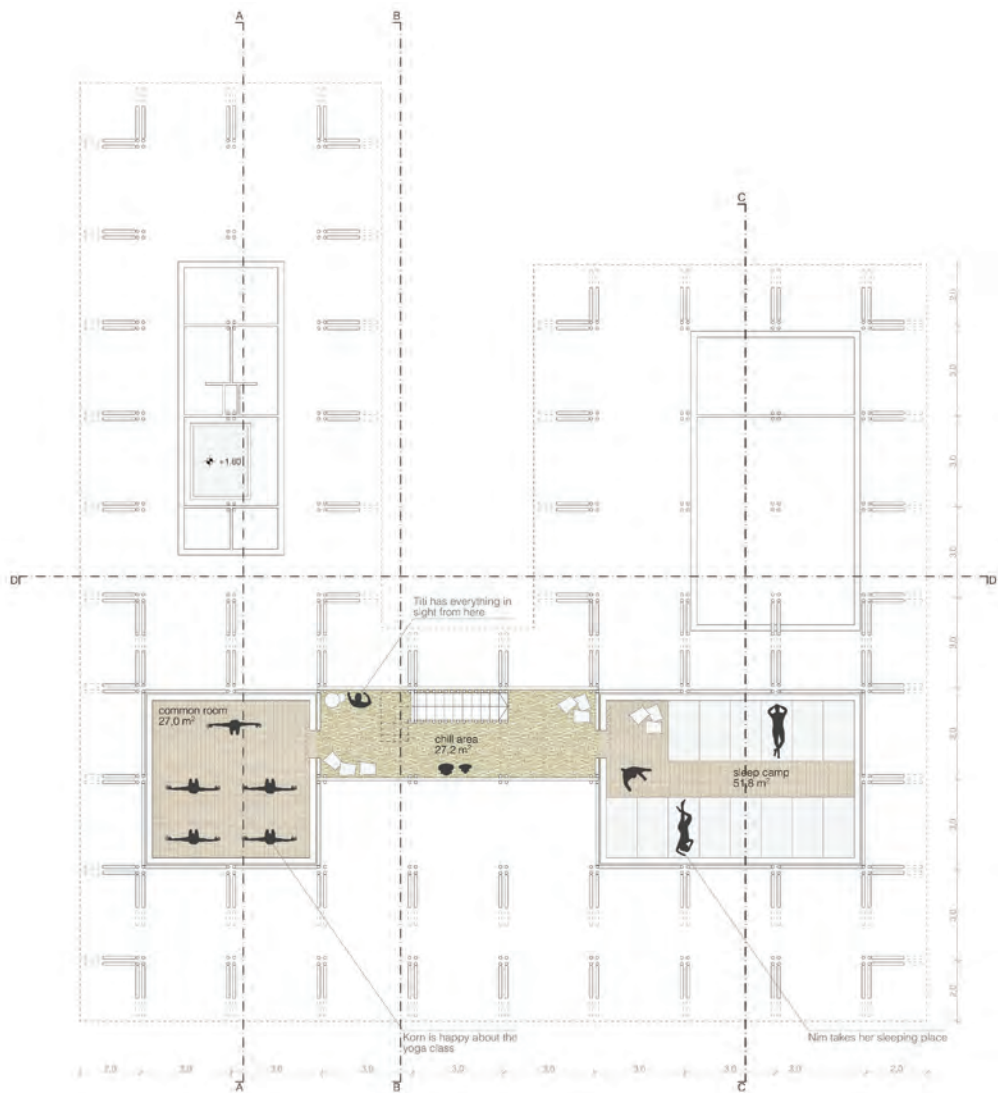


Community Center

floor plans, sections



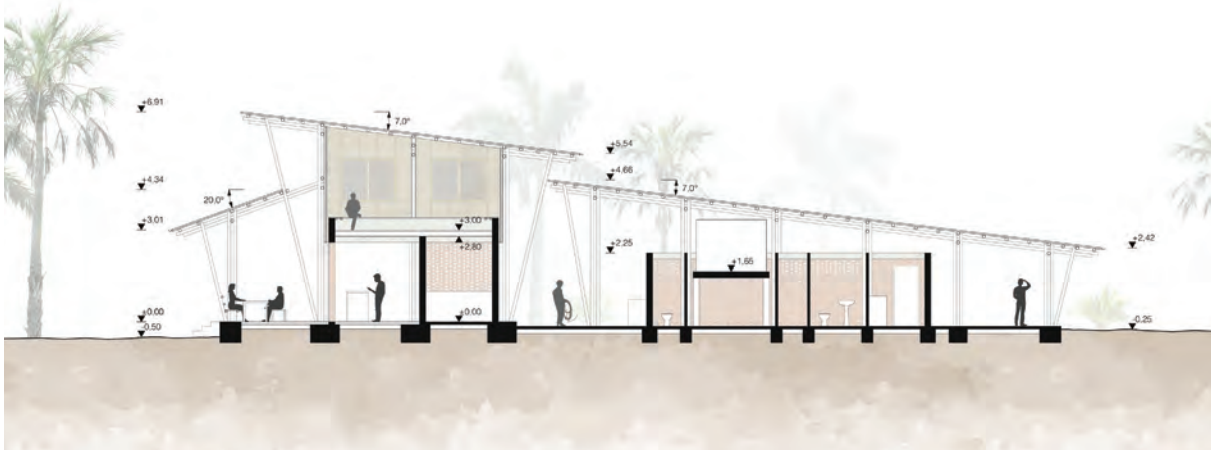
floor plan community center, ground floor, M 1:250



floor plan community center, first floor, M 1:250



view community center north-west, M 1:250



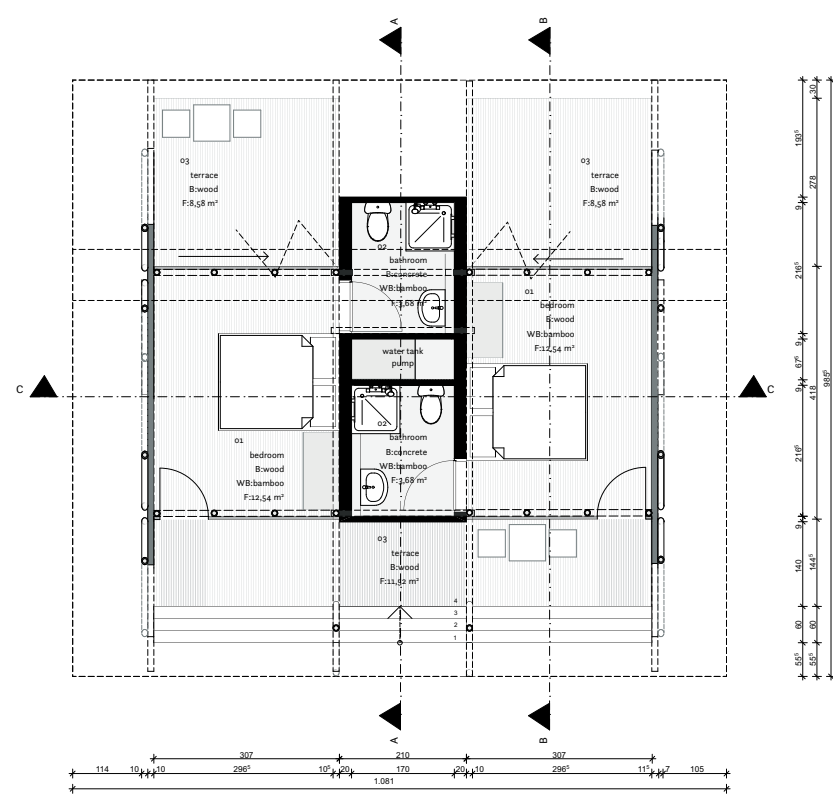
section A-A' community center, M 1:250

Guest Houses

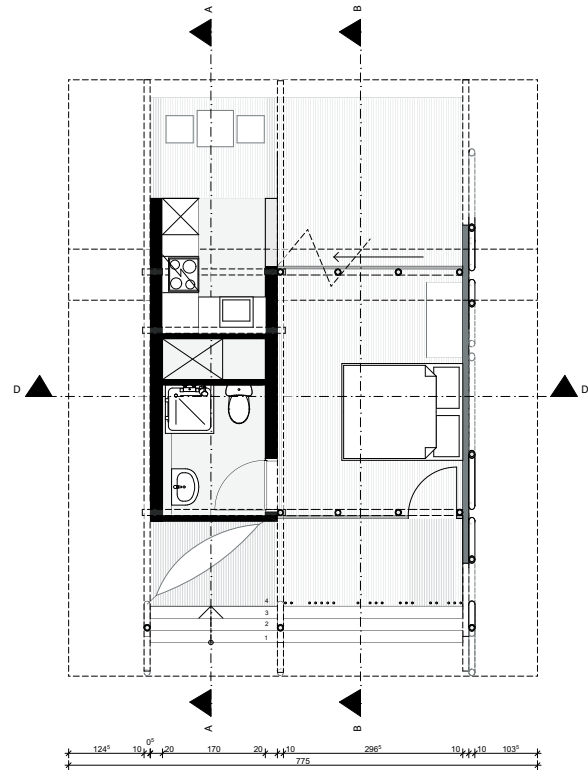


Guest Houses

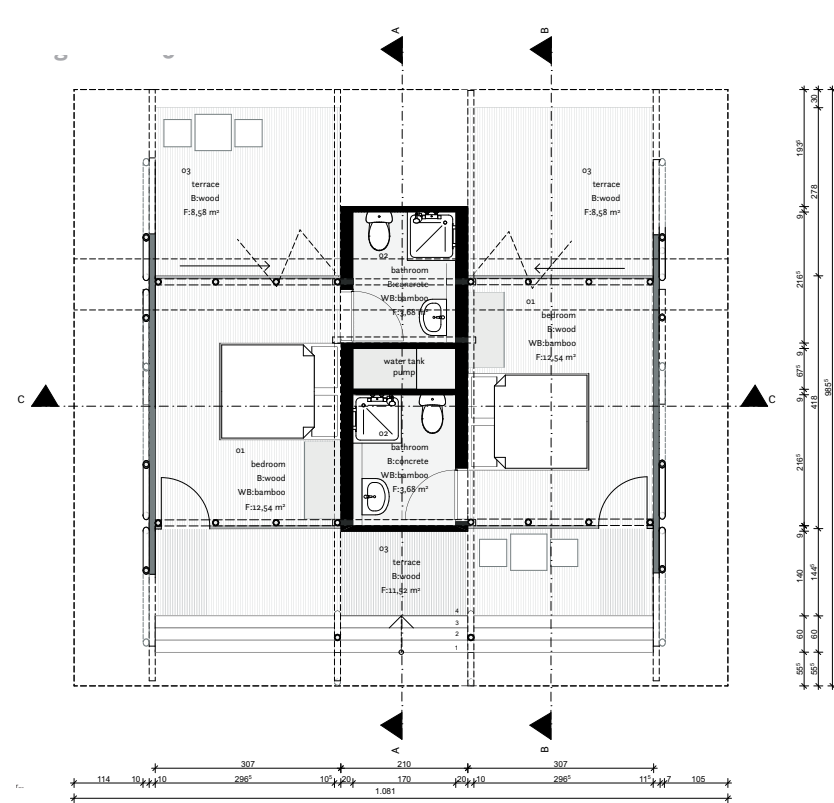
floor plans, sections



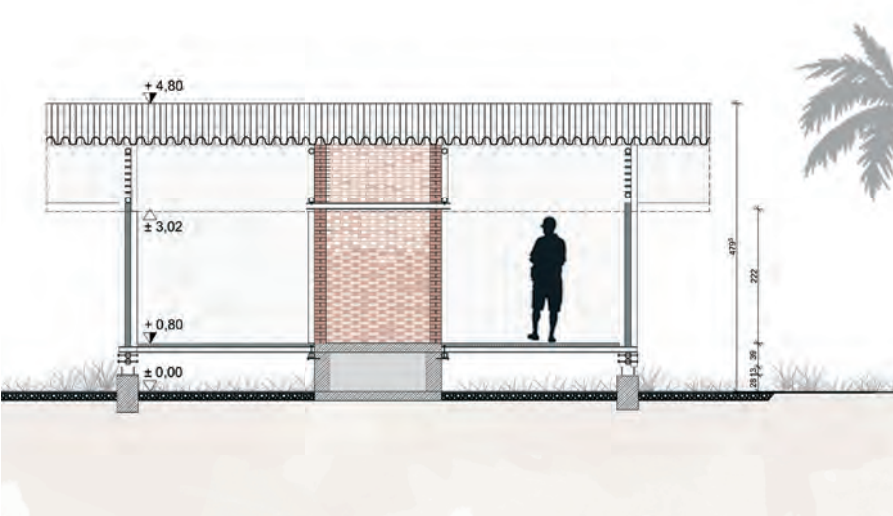
floor plan guest house double-unit, ground floor, M 1:125



floor plan guest house single-unit, ground floor, M 1:125



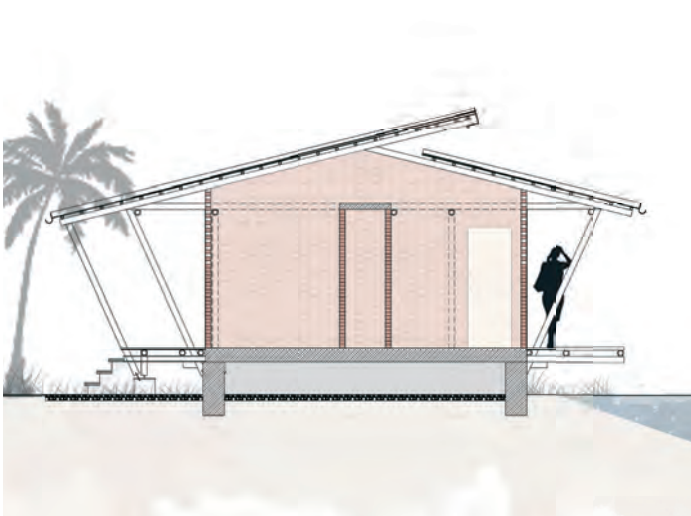
floor plan permanent living, ground floor, M 1:125



section guest house double-unit and Permanent Living, M 1:125



section guest houses single-unit M 1:125



section guest houses and permanent living, M 1:125



Recherchereise Thailand, Besuch am Bauplatz



Materialtests an der Kunstuniversität Linz



Abschlusspräsentation in Linz

BASEhabitat

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die architektur

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