Building Baladi - design & build
PORTFOLIO

Earth Chapel

where - Westwood Valley, Zahle, Lebanon
INPUT - Design and Construction
when - completed 2018
SIZE - floor 9m² (total footprint 16m²)

Concept
Situated 100m above the Wadi Arayish valley floor, with views to Zahle, the Beqaa and anti-Lebanon mountains beyond. The Chapel, able to fit around 10 people inside, has a Green roof and is fronted with a circular tower. Complete with porch and functioning bell, this modest structure has all the features of a larger church, but being built almost entirely from materials on the site, it sits very discretely within the landscape. Used by visitors to the Westwood Valley project and as part of wedding ceremonies it has become an integral part of the valley.

Technical
A rough stone foundation supports an Adobe double brick wall with natural fibre insulated infill. The roof structure is made from local roundwood poplar topped with a waterproof membrane and green 'living' roof. Inside are sealed earth floor and benches. No concrete or cement was used.

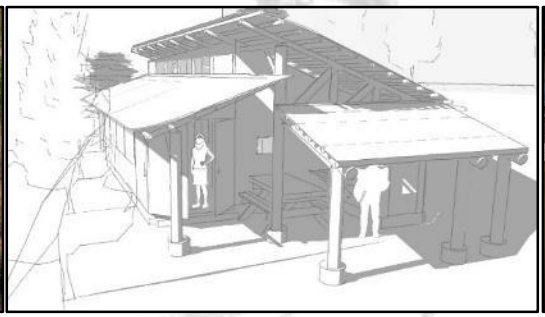



Wattle & Daub Workshop

where - Westwood Valley, Zahle, Lebanon
INPUT –Design and Construction
when - completed 2021
SIZE - floor 60m² (interior)

Concept
The first building in the Natural Building School, the Workshop was designed to be a practical space to support the rest of the construction work. Inside it is well lit, with a hard tiled floor. It has a covered Kitchenette and Bathroom attached to its North side and was built almost entirely by volunteers.

Technical
The main structure and roof consist of a roundwood timber frame, made from locally grown poplar. A rough stone foundation supports Wattle & Daub earth walls with inbuilt double-glazed windows. The roof is covered with Onduline sheets made from asphalt & recycled fibres. No concrete or cement was used.


The Nest – Multi-function space

where - Westwood Valley, Zahle, Lebanon
INPUT –Design and Construction
when – under construction since Oct 2022
SIZE - floor 80m² (interior)

Concept

The Nest is a Multi-function space whose principal use will be as the Learning Space for the Natural Building School. The building was designed as a high quality space for a variety of uses from teaching, meetings, events or even sleepovers. Inside it is well lit, with generous views to Zahle and the anti-Lebanon mountains. The highly insulated walls and roof and passive-solar design combined with a sculpted earthen fireplace will make it comfortable year round. It has an annex with Kitchenette and Bathrooms, an attached outdoor shaded space and was built almost entirely by volunteers.

Technical

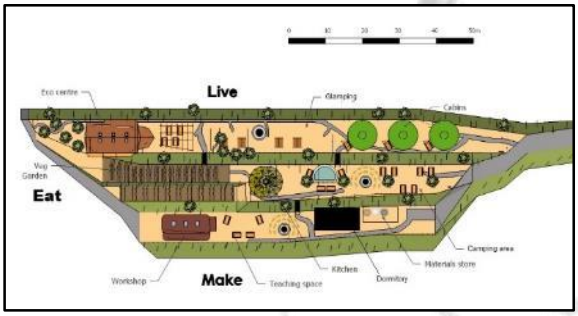
The main structure and roof consist of a roundwood timber frame, made from used electricity poles. A rough stone foundation supports Strawbale walls rendered with an earthen plaster and an additional lime based plaster outside. A Tadalakt waterproof lime plaster is also used in parts of the kitchen and bathroom. The Roof is covered with terracotta tiles and ceiling insulated with local straw and sheep's wool. No concrete or cement was used.

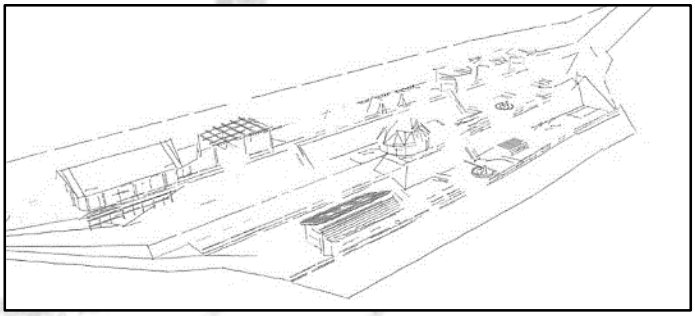
Westwood Valley Eco-Village Masterplan

where - Westwood Valley, Zahle, Lebanon
INPUT – Masterplan Design and Construction
when – under construction since Oct 2019
SIZE – 400m² (over 3 terraces)

Concept
Set inside the Westwood Valley Zahle project, the Eco-Village houses The Natural Building School but is also open to visitors wanting to stay in an ecologically sustainable space even for just a few days. The 3 terraces roughly follow 3 themes of; MAKE (Workshop & The Shed warehouse), EAT (Permaculture garden & Kitchen) & LIVE (Camping, Glamping, Dormitory & Private Cabins).

Technical
All buildings aim to have a minimal ecological impact, while using local natural or recycled materials and remaining low-cost. The principal building material is always earth, with a rough stone foundation. Natural insulation is used for all living areas to moderate the extreme summer and winter temperatures. A variety of techniques are applied depending on use and also to demonstrate a range of possibilities to visitors





Ferzol Agri Centre

where – Ferzol, Lebanon
INPUT – Design and Construction
when – completed May 2024
SIZE - floor 45m² (interior)

Concept
A 'Organic' building for a new organic farming teaching space in the Dar al Sadaqa Technical College in Ferzol. The main indoor area is used for equipment storage, teaching and office space. A separate 'natural refridgerator' room (highly insulated semi-underground) and Bathroom are part of the same structure

Technical
A rough stone foundation supports an Adobe brick wall with natural fibre insulated. The roof structure is made from recycled timber topped with Onduline roof sheeting. Floors consist of a broken paving tile mosaic with a lime mortar. The inside is finished with an earth plaster (sealed with linseed oil at a lower level) and outside with a lime render. No concrete or cement was used.

Bhousha House

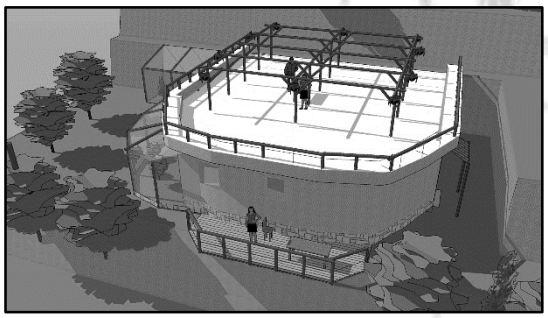
where – Bhousha, Zahle, Lebanon
INPUT – Design and Construction
when – under construction since April 2024
SIZE – Total 210m² (Ground floor 90 + roof 120m²)

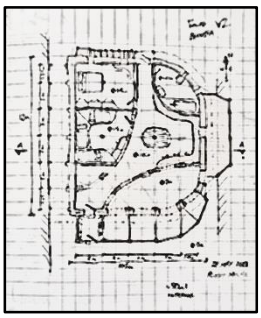
Concept

A house on private land, nestled amongst a vineyard in a quiet valley. A place for the family to live in harmony with nature, following permaculture principles and actively reforesting the land. Built into the land, 'cool-rooms' will sit at the back of the house for natural food storage and also helping to regulate temperature extremes. The two bedrooms and open-plan kitchen and salon are all connected with gentle curving walls and arched openings. A flat roof with a shade structure on top provides further usable space and will extend to the terrace above creating a continuous flow between the levels. Arches and curved walls made of adobe earth bricks will marry traditional local architecture with organic shapes that follow and flow with the shape of the land. Large south-facing windows, fronted with glass greenhouses will provide impressive views, solar passive heating and year-round indoor gardening.

Technical

A 1m thick stone foundation supports a structural adobe brick wall wrapped with 45cm of plastered strawbales to benefit from high thermal mass and insulation. The interior structure consists of roundwood pine columns with cut-timber for the roof structure. Living spaces will have sealed earthen floors and kitchen and bathroom broken floor tile mosaic. An accessible green 'living' roof will be built up using a waterproof membrane topped by 10cm of earth. Local sheeps wool will be used to insulate the ceiling. No concrete or cement will be used.



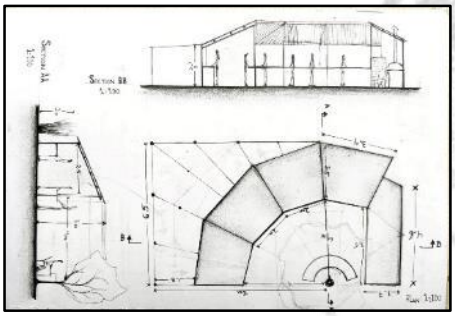
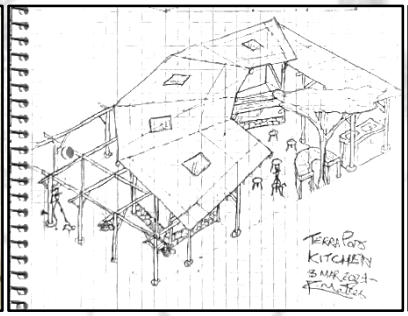


TerraPods
Outdoor Kitchen & Bathroom

where – Baskinta, Lebanon
INPUT – Design and Construction support
when – under construction since March 2024
SIZE - 25m² (kitchen) & 15m² (bathroom block)

Concept
TerraPods, based in the mountains of Baskinta, is growing a biodiverse food forest, medicine and dye garden following agroecology principles. A Learning Centre will include a bio-design maker space, four residency units, a community kitchen and an EcoSouk marketplace. Building Baladi designed the semi-outdoor kitchen and Bathrooms and supported the construction phase. The kitchen, built radially around an ancient Walnut tree, in open on its front side, giving majestic views and an outdoor feel while still being protected from the elements and a clean space to cook, create and experiment.

Technical
The main structural columns, made from local round poplar, support a timber roof structure. A rough stone foundation supports Wattle & Daub earth walls. The roof is covered with Onduline sheets made from asphalt & recycled fibres.

The Earth Burrow

Kroum family house

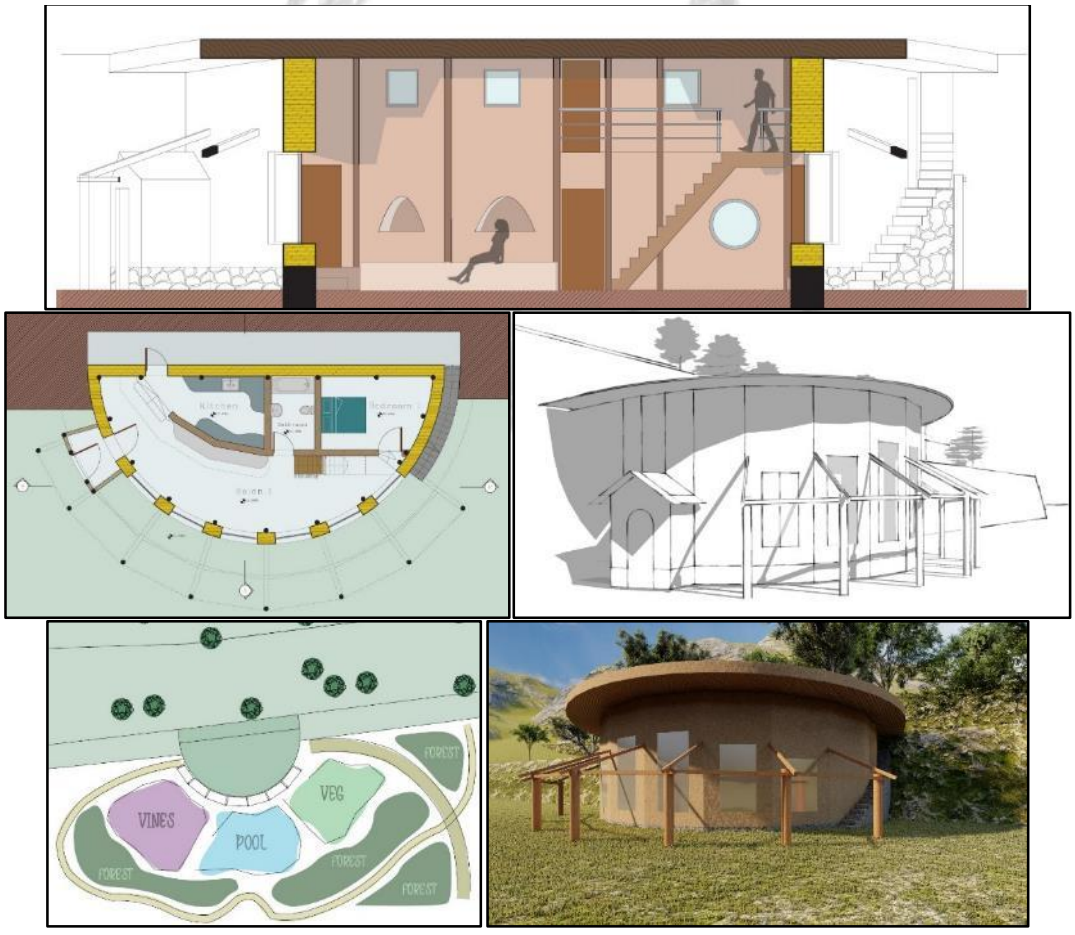
where – Kroum, Zahle, Lebanon
INPUT – Concept Design
when – delivered May 2024
SIZE - floor 135m² (ground floor + mezzanine)

Concept

A natural building on family vineyard that melts into the steep terraced landscape. The 3 bedrooms and spacious living room on the ground floor and a further 2 bedrooms on the mezzanine give ample space to accommodate family and friends. Well insulated with an accessible green roof and outdoor shade structure 'skirt' provide many areas for congregating, in summer or winter. The house is surrounded radially by recreational and food producing zones and then native trees beyond this.

Technical

A stone foundation supports an earth-plastered strawbale wall to benefit from thermal mass and insulation. The interior structure consists of roundwood pine columns with cut-timber for the roof structure. Living spaces will have sealed earthen floors and kitchen and bathroom broken floor tile mosaic. The green 'living' roof will be built up using a waterproof membrane topped by 10cm of earth. Local sheeps wool will be used to insulate the ceiling

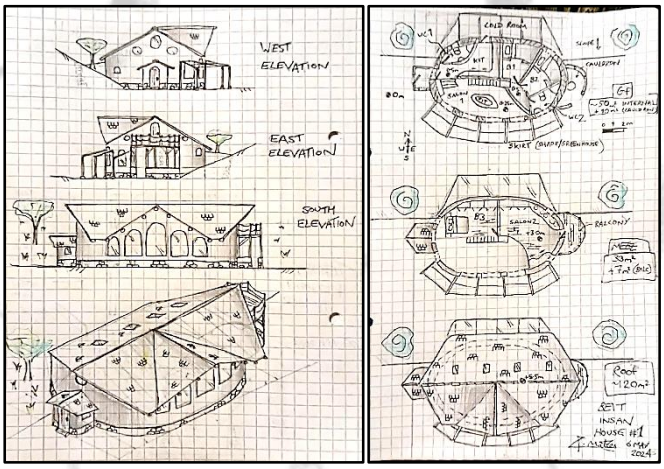


Beit Insan
Holistic Therapy centre

where – Rashaya, Lebanon
INPUT – Design and Construction support
when – Concept Design ongoing since April 2024
SIZE – Total 100m² (Ground floor + Mezzanine)

Concept
The first building for a Holistic therapeutic centre, at the base of Mount Hermon. Providing psychological healing not only through a variety of techniques, not least through the patients' contact with the natural materials and aesthetics of the buildings.

Technical
A stone foundation supports an earth-plastered strawbale wall to benefit from thermal mass and insulation in this mountainous region. The interior structure consists of roundwood pine columns with cut-timber for the roof structure. Living spaces will have sealed earthen floors and kitchen and bathroom broken floor tile mosaic. The pitched roof with large dormer to the front will use locally produced terracotta tiles. Local sheeps wool will be used to insulate the ceiling



Earth Pizza Ovens

where – Westwood Valley, Zahle, Lebanon
INPUT – Design and Construction
when – Constructed in 2020 and 2022
SIZE - floor space 120cm diameter

Concept
A beautiful wood-fired oven for baking pizza, bread and anything else

Technical
An earth-based structure surrounded by insulation (straw or volcanic rock) finished with an earth plaster.


Rocket Mass Heater

where – Westwood Valley, Zahle, Lebanon
INPUT – Design and Construction
when – Constructed in 2022
SIZE – Total length 3m, height 1.5m

Concept
A highly-efficient stove and heated bench

Technical
Fire bricks frame the heating chamber, old metal barrel the main radiator and then metal flue pipe passing through the bench made of stone and earth