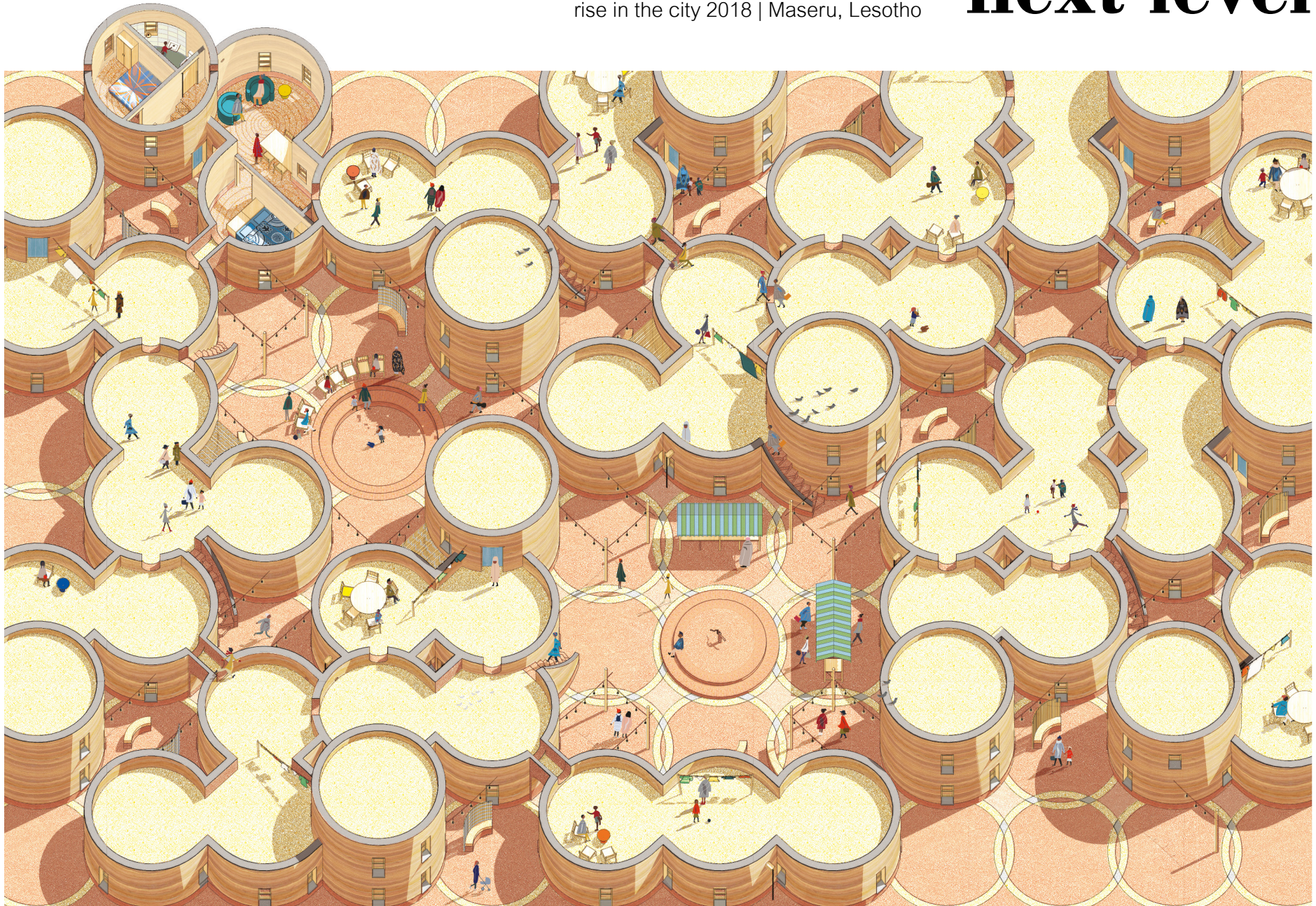


rise in the city 2018 | Maseru, Lesotho

next level





“



Let me take you to the Maseru I envision: a city where future inhabitants give shape to their culture by self-building their homes in a sustainable way, densifying the city, evoking the spirit of Lesotho, and elevating already present qualities to a next level.

Imagine ensembles of small houses being built all across the city. These ensembles form incentives for their neighbourhoods, where community life flourishes and the beautiful Sesotho traditions come back to life.

The houses seem to rise in the city from the red earth Maseru is named after. Together they resemble the mountainous landscape all around.

Walking the streets, the curved shapes and human scale make you feel embraced and protected, while every time again you are curious what to discover past the next corner. It feels as if this place is celebrating the Sesotho culture: the circular houses bring to mind the rontabole of the countryside in a modern way, the pattern of the pavement is like a litema drawing, the materials feel so natural because they are locally sourced, and the public space is shaped for storytelling, singing, dancing and markets.

It makes you realize that these ensembles can only be built this way right here, in Lesotho. On the one hand they blend with their environment, but on the other hand they are very distinguishable and have a big impact on the city.

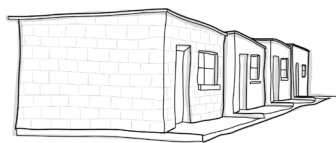
A bench marks the subtle transition from the streets to the entrance of each house. Inside, the house is organized around the living/dining room. The climate and atmosphere are comfortable: the earthen walls balance temperature and humidity, and plenty of light falls in through the tall windows which also breathe natural cross ventilation. The home feels larger - as if the exterior is just another room - because the interior materials blend with the ones outside.

To offer a more private outside space for the inhabitants within the dense ensemble, the roof is made accessible. Here you can take a break from the vibrant urban life, observe the activities below, meet with neighbours or hang cloths to dry. Each house can be enlarged with one room on top, which is then automatically linked to the roof scape. The possibility of growth, and seeing houses rise with time, gives a feeling of liveliness, hope and prosperity.

This vision for affordable housing in Maseru is based on the belief that most Basotho people are moving to the bigger cities for financial reasons, not for the wish to leave their families and traditions of the countryside. When arriving in Maseru, the current housing options are limited to building types like the malaene: indifferent boxes of concrete blocks, often unfinished and without any reference to the Sesotho culture.

My intention is to add quality to life in Maseru by translating traditional values into a more densified way of living. As J.L. Borges once wrote: “The words ‘preserve’ and ‘create’, which are contradictions here below, are synonyms in heaven.”

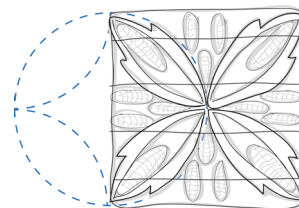
malaene,
concrete blocks



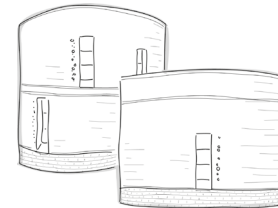
rontabole,
litema pattern



basotho blanket,
corn design



next level,
rammed earth



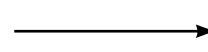
current situation

Ha Matala, Maseru



traditional situation

Kokolia, Berea

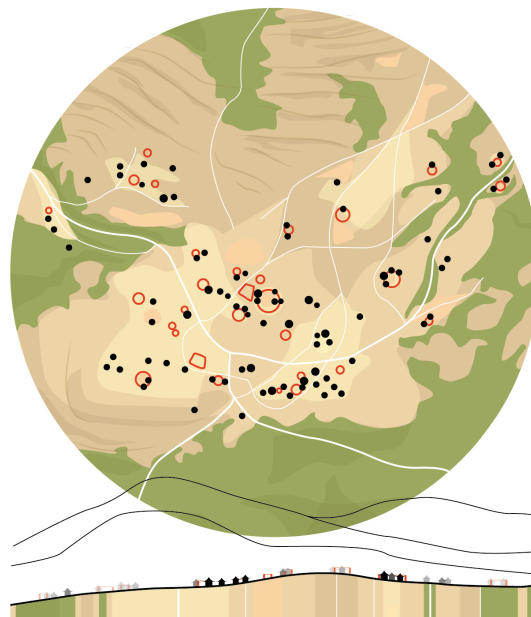


proposed situation

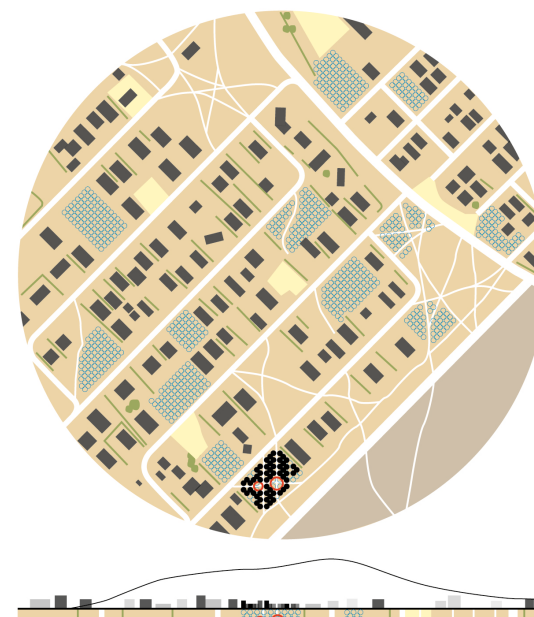
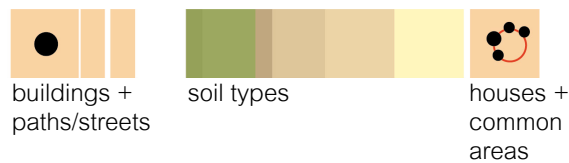
Thetsane West, Maseru



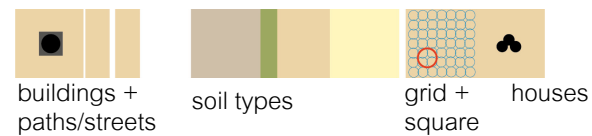
urban sprawl absorbing farm land

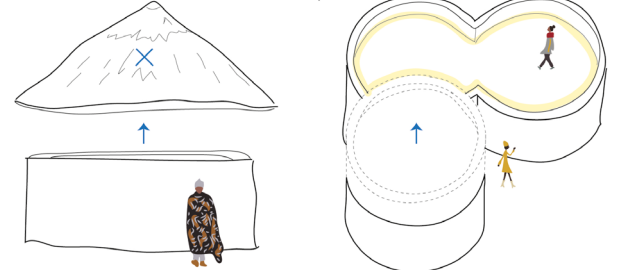
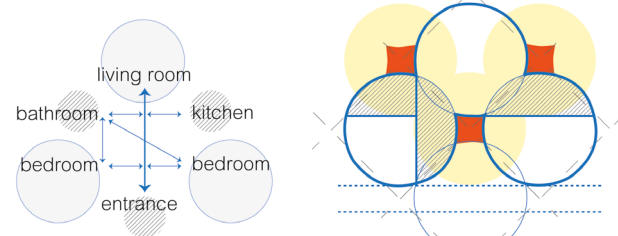
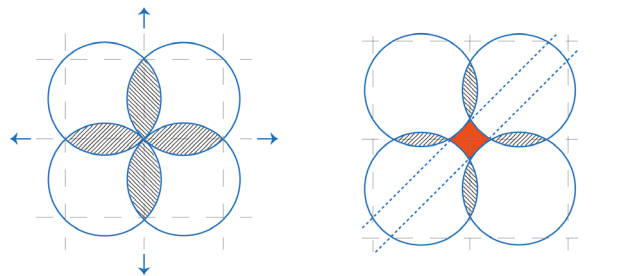
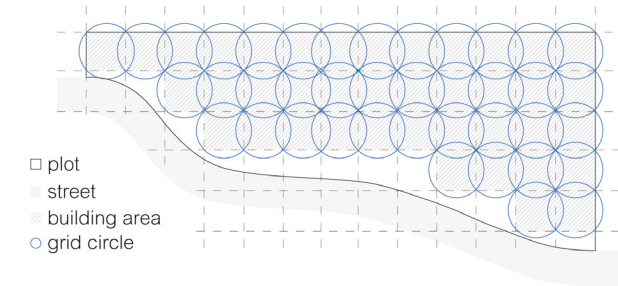


rontabole, defined common spaces



densification, mixed housing types





local materials

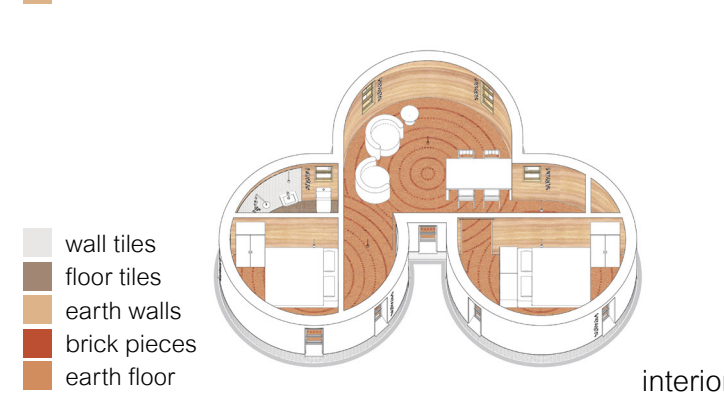
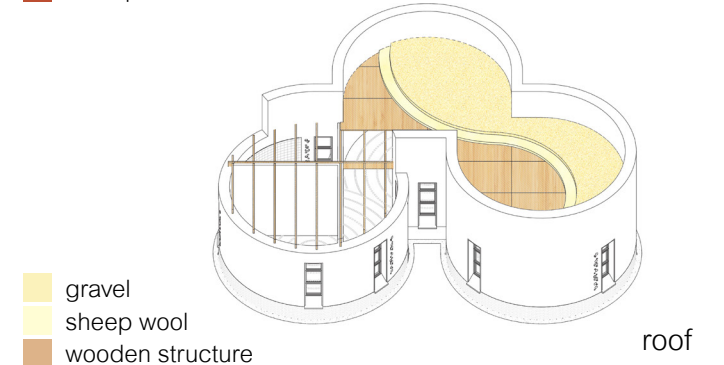
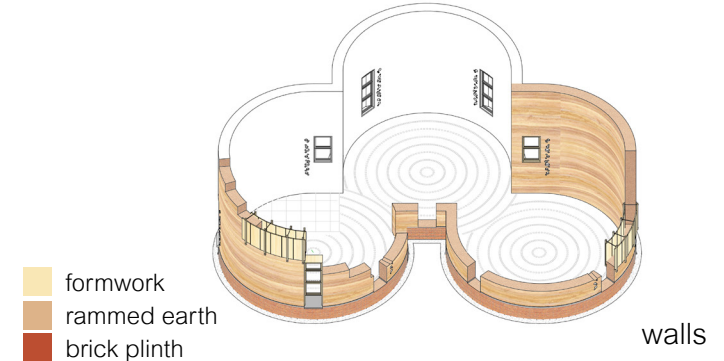
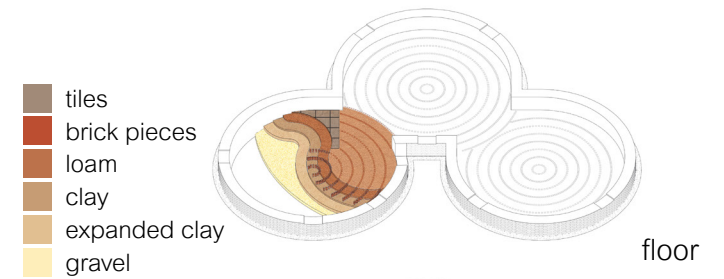
Almost every building material used is natural and locally sourced from riversides and quarries (clay, sandstone), and from the building site (earth). The loti bricks are produced in Maseru.

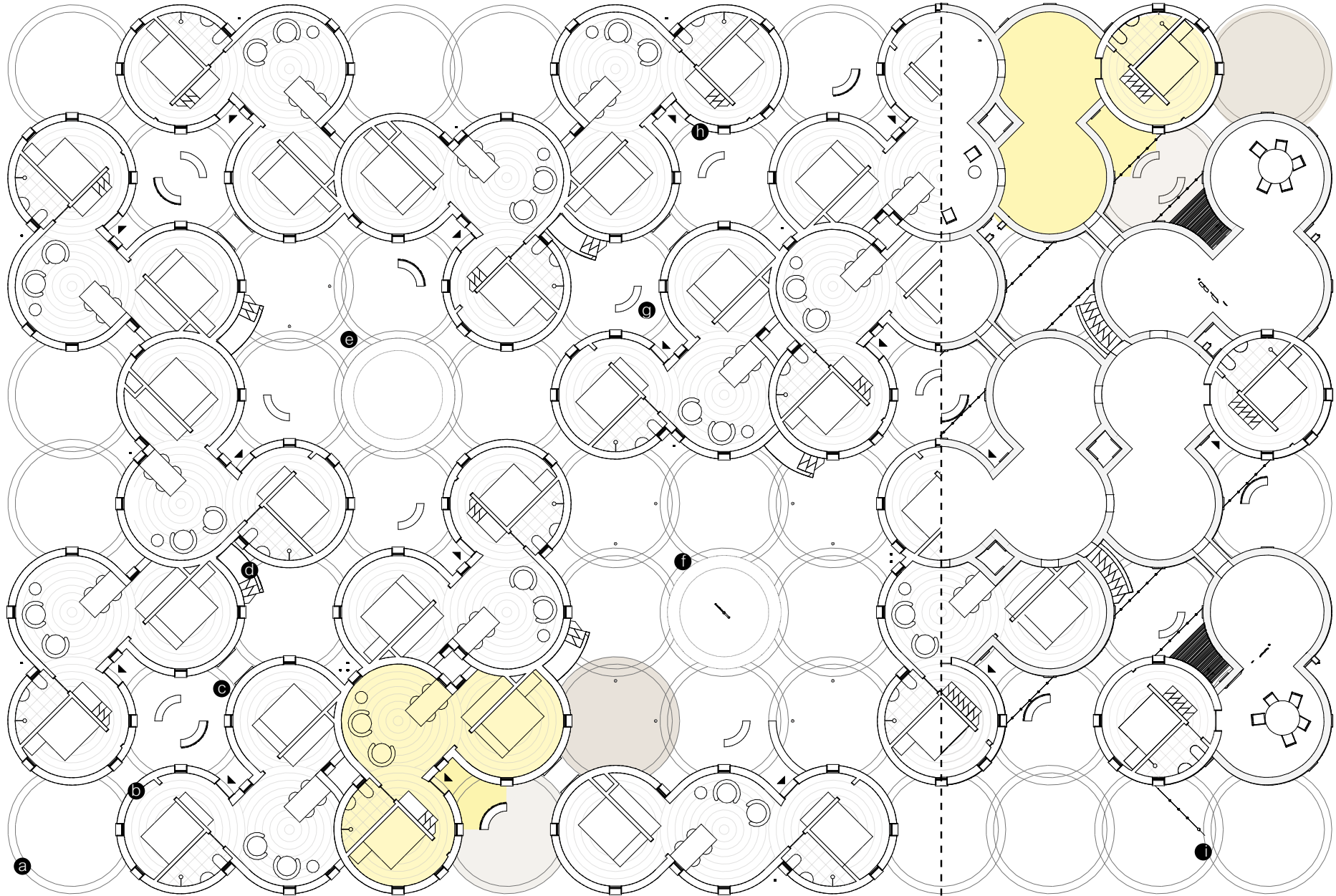
construction methods

The house can be self-built with the help of few craftsmen and rented tools. The main construction method is rammed earth, which has the potential to develop a new niche in the local building market: creating jobs for Basotho skilled workers. →

shape & layout

A grid based on a litema design is created to fit into plots of all shapes and sizes. Circles are moved apart slightly to allow space for circulation and services. Each house of 48m² occupies 3 circles within the grid, one for each main room. ←





a grid based on litema pattern

b 48m² houses positioned in the grid

c street

d staircase to semi-private roofscape

e small square with meeting area

f market square with water well

g benches defining the entrances

h entrances facing the inside of the ensemble

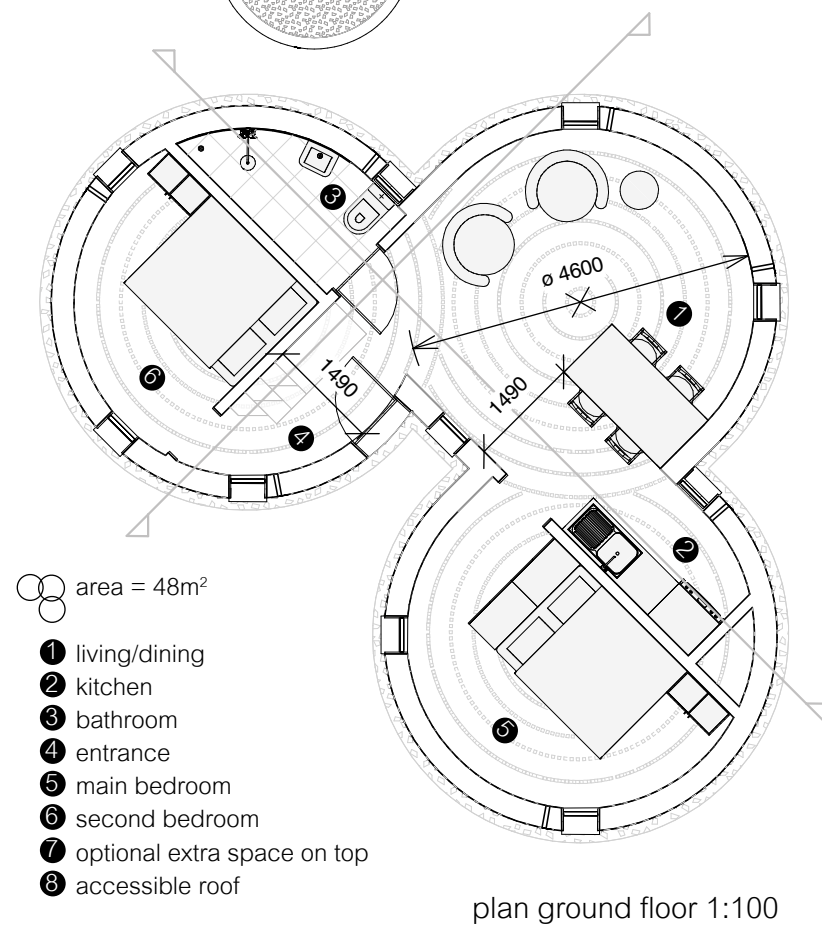
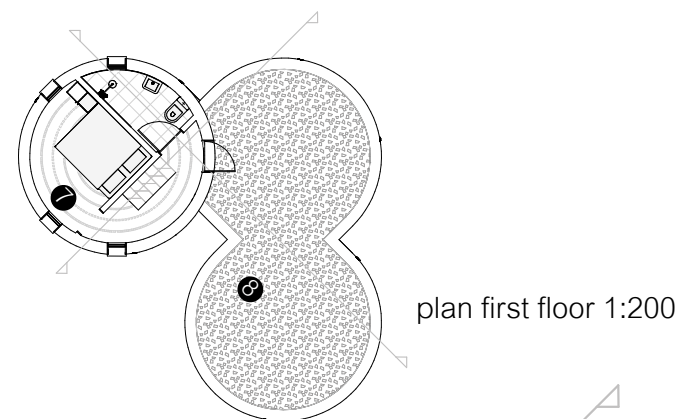
i space available for car parking

private

semi-private

semi-public

public

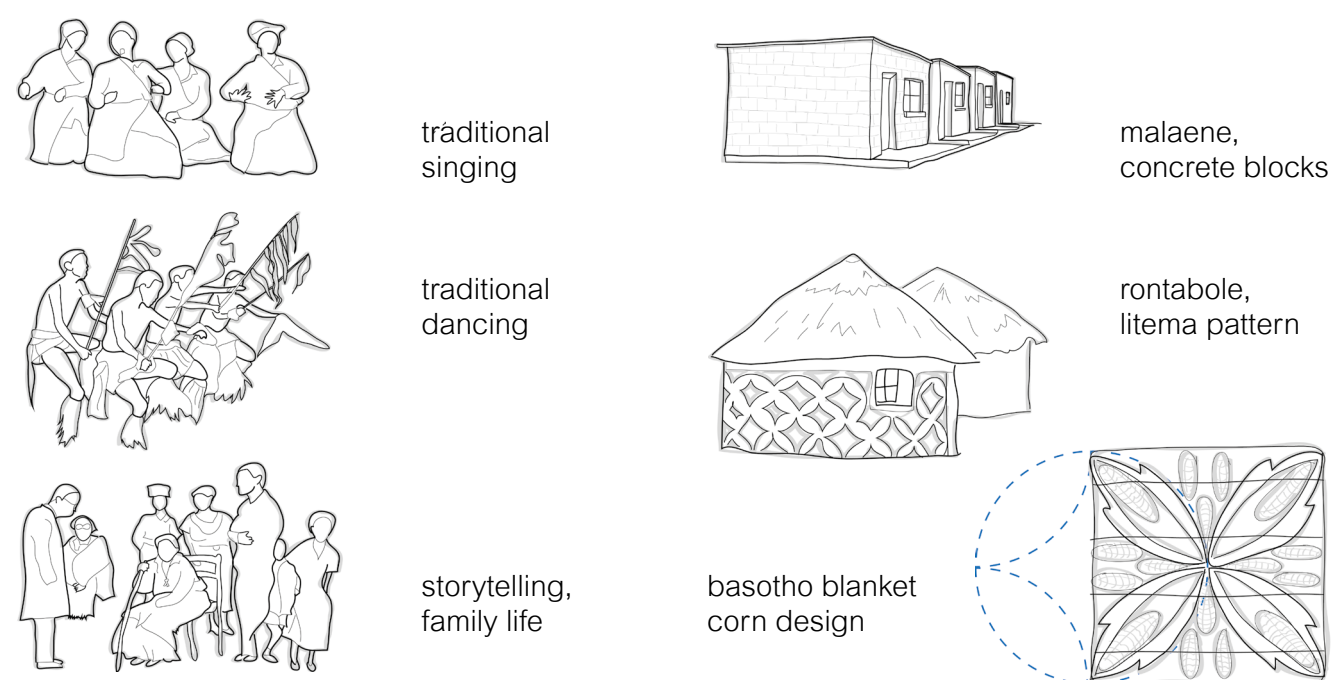


100 word statement | next level

Affordable housing seen not only as a necessity, but as an integral part of the future cultural heritage of Lesotho: that is what this proposal is all about. More than a rational answer or quick solution it offers a piece of poetry and architecture that ages with dignity and lives on in the memory of the Basotho people. New ensembles rise in the city from the red earth Maseru is named after, boosting the local market and forming incentives for public life in their neighbourhoods. The Sesotho traditions are translated to an urban setting, being elevated to a next level.

project cost estimate | next level

	price (M)	amount	costs (M)
gravel	$\pm 490/\text{m}^3$	2.5m^3	1,250
sheep wool insulation	$\pm 21/\text{m}^2$	48m^2	1,000
roof tiles for balustrade	$\pm 18/\text{m}$	36m	650
roof package			2,900
timber beams 230x60mm	$\pm 380/6.6\text{m}$	15m	850
timber beams 150x40mm	$\pm 140/4.8\text{m}$	90m	2,600
plywood 2240x1220x30mm	$\pm 340/\text{piece } (\approx 2.8\text{m}^2)$	48m^2	5,850
roof structure			9,300
rammed earth, smoothened	± 0 : collected on site	4m^3	≈ 0
ceramic wall tiles	$\pm 130/\text{box } (\approx 1.5\text{m}^2)$	$8.5\text{m}^2 \approx 6 \text{ boxes}$	800
bathroom door, handle, hinges	$\pm (425+100+75)/\text{piece}$	1 piece each	600
door frames bedrooms	$\pm 300/\text{piece}$	2 pieces	600
interior walls and openings			2,000
entrance door	$\pm 700/\text{piece}$	1 piece	800
door frame	$\pm 300/\text{piece}$	1 piece	350
door handle, lock and hinges	$\pm (100+125+75) / \text{piece}$	1 piece each	300
openable wooden windows	$\pm 800/\text{piece}$	8 tall ones, 2 small	7,200
recycled glass bottle windows	± 0 : self-made	$\pm 3 \text{ times } 15 \text{ bottles}$	0
wall openings			8,650
additional aggregates	$\pm 375/4\text{m}^3$	$\approx 4\text{m}^3$	375
additional sand	$\pm 850/4\text{m}^3$	$\approx 2\text{m}^3$	425
rammed earth	± 0 : collected on site	34m^3	≈ 0
exterior walls			800
brick pieces 35x35x100mm	1,000/10,000 pieces	2,400 pieces	250
ceramic floor tiles	$\pm 100/\text{box } (\approx 1.8\text{m}^2)$	$3.3 \text{ m}^2 \approx 2 \text{ boxes}$	200
clay	± 0 : collected on site	12m^3	≈ 0
gravel	$\pm 380/\text{m}^3$	5 m^3	1,900
floor package ground floor			2,350
rammed earth	± 0 : collected on site	4m^3	≈ 0
sheep wool insulation	$\pm 45/\text{m}^2$	18m^2	800
loti bricks plinth	$\pm 12,750/10,000 \text{ bricks}$	$45\text{m}^2 \approx 2700 \text{ bricks}$	3,450
render	$\pm 45/\text{m}^2$	45m^2	2,050
concrete strip foundations	$\pm 1,600/\text{m}^3$	7 m^3	11,200
foundations and plinths			17,500
toilet, basin and tap mixer	$(680+200+250)/\text{piece}$	1 piece	1,130
shower head and mixer	680/piece	1 piece	680
kitchen sink and tap mixer	$(340+250)/\text{piece}$	1 piece	590
light pendants	100/piece	6 pieces	600
plumbing and electricity			3,000
estimated discount for ordering in bulk (>10 houses per ensemble) $\approx 10\%$			-5,000
labour and tool rental (mainly self-built) $\approx 15\%$			7,500
total costs for one house of $48\text{m}^2 < 50,000 \text{ M (LSL)}$			49,000
possible extension on top			12,000

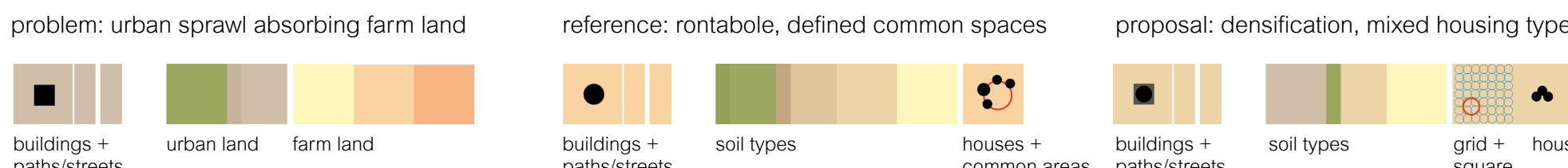
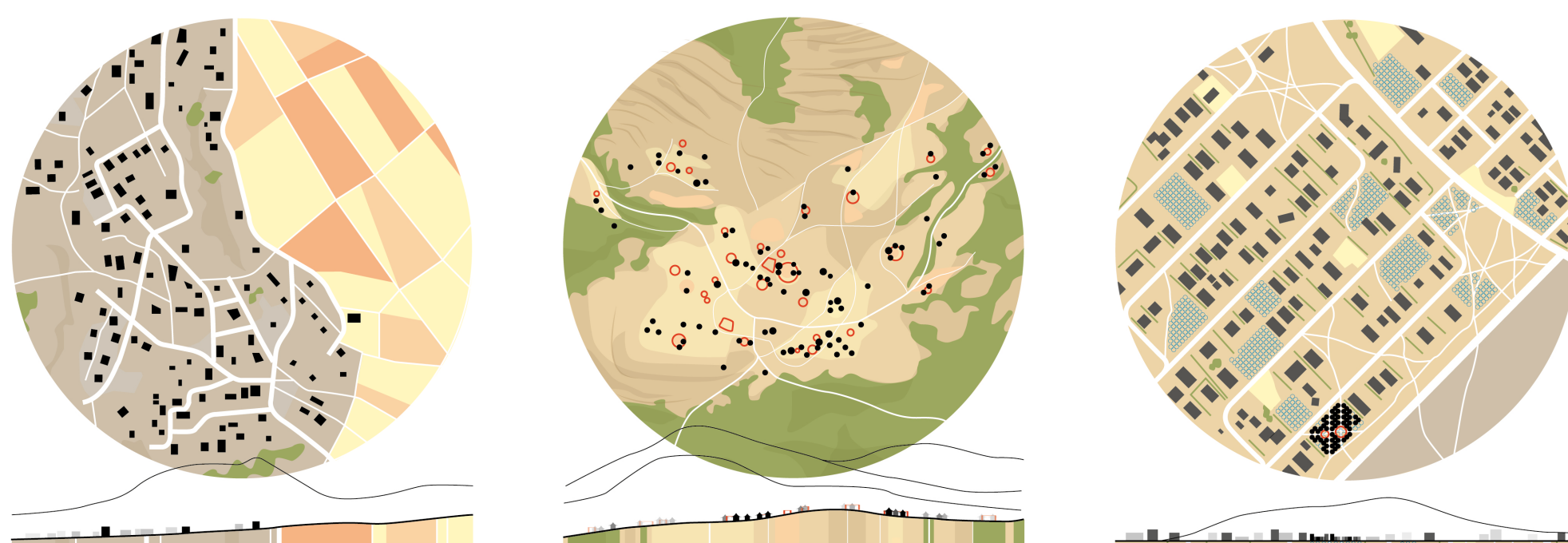


traditions

The Sesotho culture is rich of traditions which are still very alive in the villages of Lesotho, but less tangible in bigger cities like Maseru. This applies to the way of living, and of building/decorating.

shape & layout

Affordable housing solutions in Maseru are now limited to building types like the malaene, which have lost many qualities of the traditional rontabole mainly used on the countryside.



local materials

Almost every building material used is natural and locally sourced from riversides and quarries (clay, sandstone), and from the building site (earth). The loti bricks are produced in Maseru.

next level

vision & design process

Imagine ensembles of small houses being built all across the city. These ensembles form incentives for their neighbourhoods, where community life flourishes and the beautiful Sesotho traditions come back to life. The houses seem to rise in the city from the red earth Maseru is named after. Together they resemble the mountainous landscape all around.

Walking the streets, the curved shapes and human scale make you feel embraced and protected, while every time again you are curious what to discover past the next corner. It feels as if this place is celebrating the Sesotho culture: the circular houses bring to mind the rontabole of the countryside in a modern way, the pattern of the pavement is like a litema drawing, the materials feel so natural because they are locally sourced, and the public space is shaped for storytelling, singing, dancing and markets.

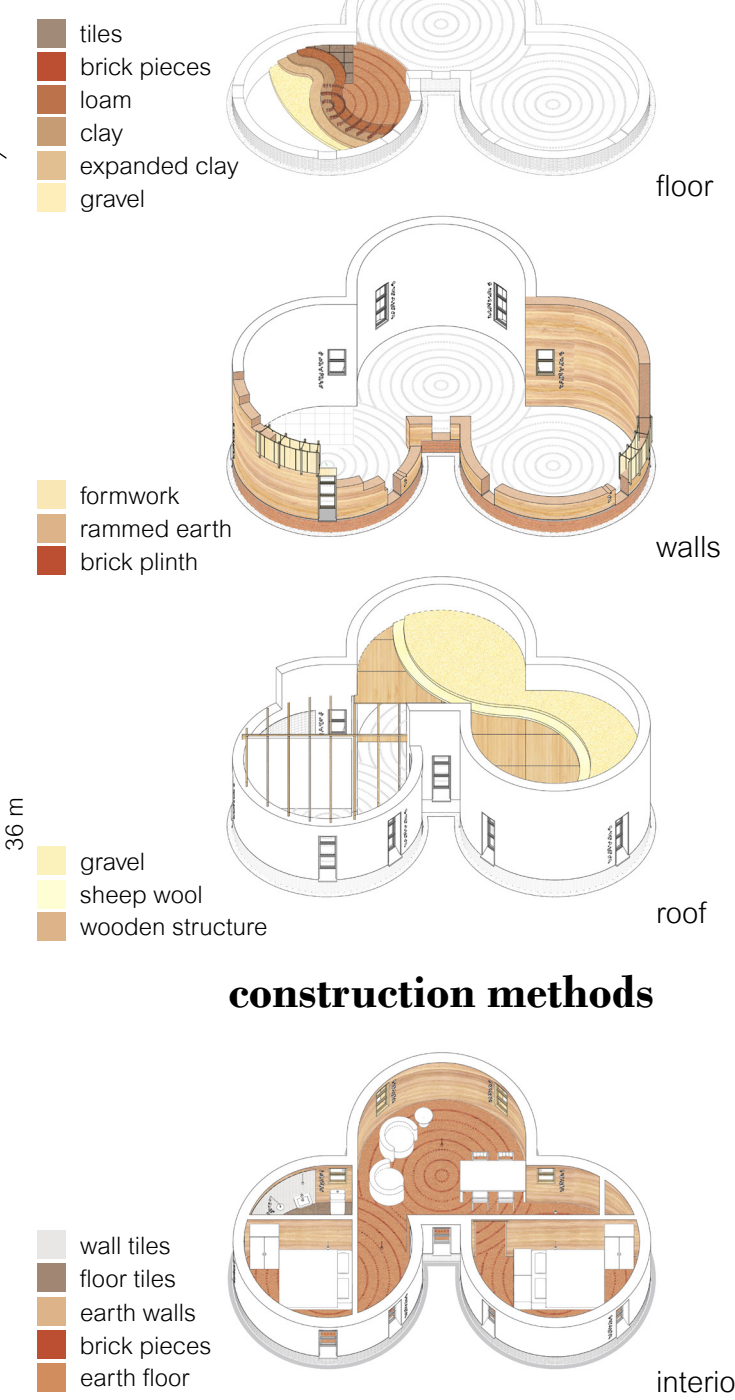
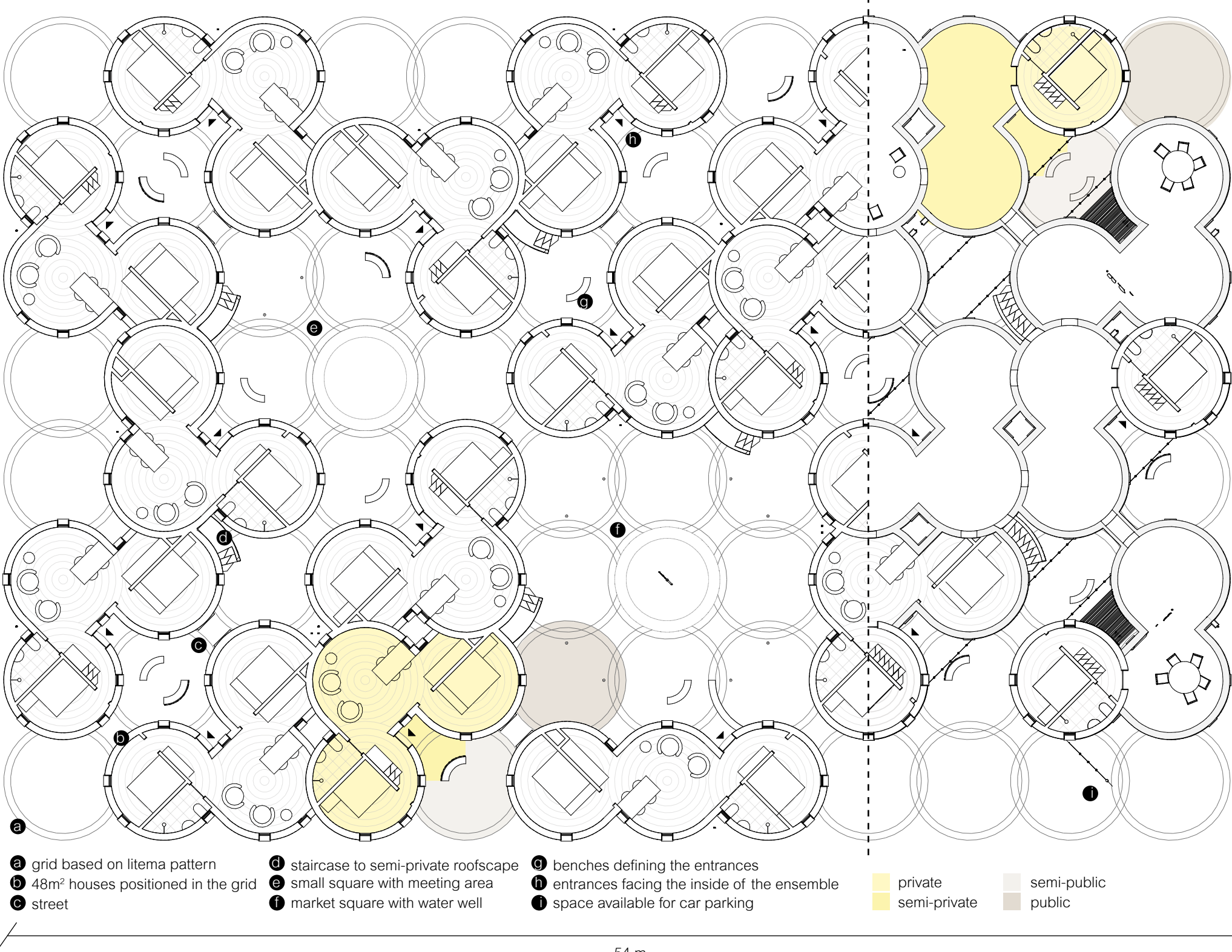
It makes you realize that these ensembles can only be built this way right here, in Lesotho. On the one hand they blend with their environment, but on the other hand they are very distinguishable and have a big impact on the city.

A bench marks the subtle transition from the streets to the entrance of each house. Inside, the house is organized around the living/dining room. The climate and atmosphere are comfortable: the earthen walls balance temperature and humidity, and plenty of light falls in through the tall windows which also breathe natural cross ventilation. The home feels larger - as if the exterior is just another room - because the interior materials blend with the ones outside.

To offer a more private outside space for the inhabitants within the dense ensemble, the roof is made accessible. Here you can take a break from the vibrant urban life, observe the activities below, meet with neighbours or hang clothes to dry.

Each house can be enlarged with one room on top, which is then automatically linked to the roof scape. The possibility of growth, and seeing houses rise with time, gives a feeling of liveliness, hope and prosperity.

site plan 1:200

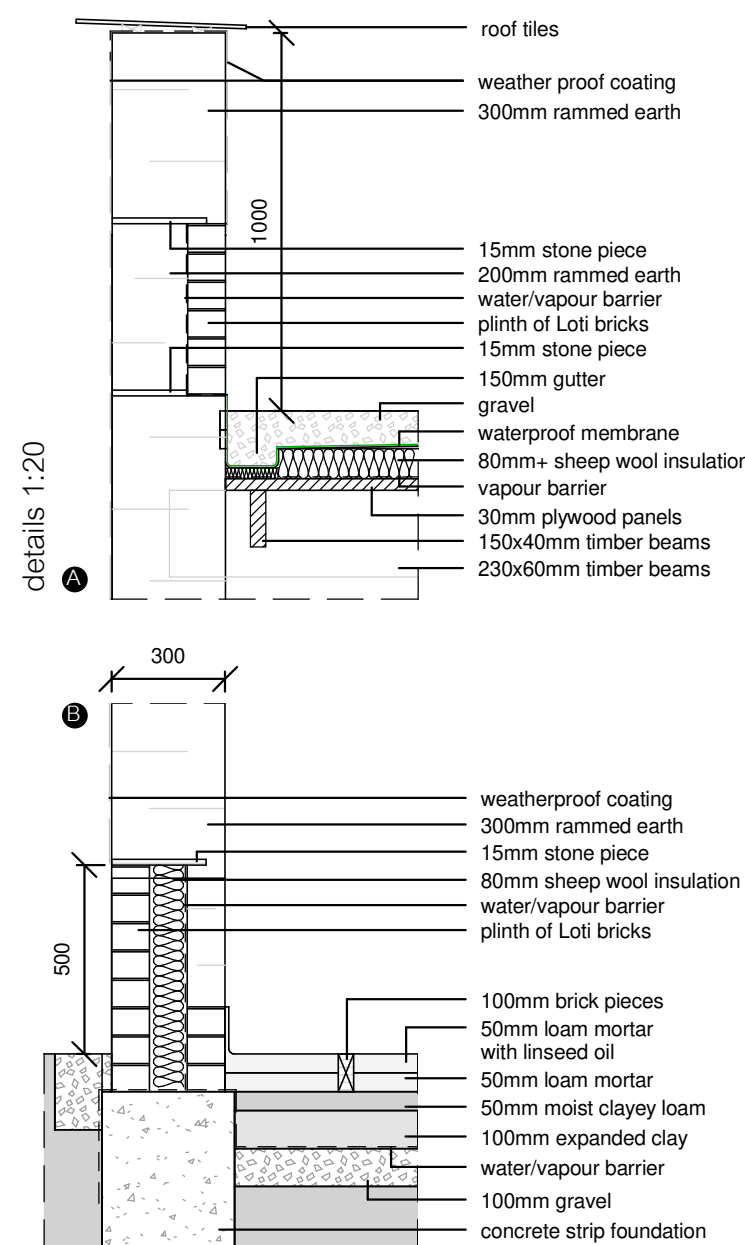
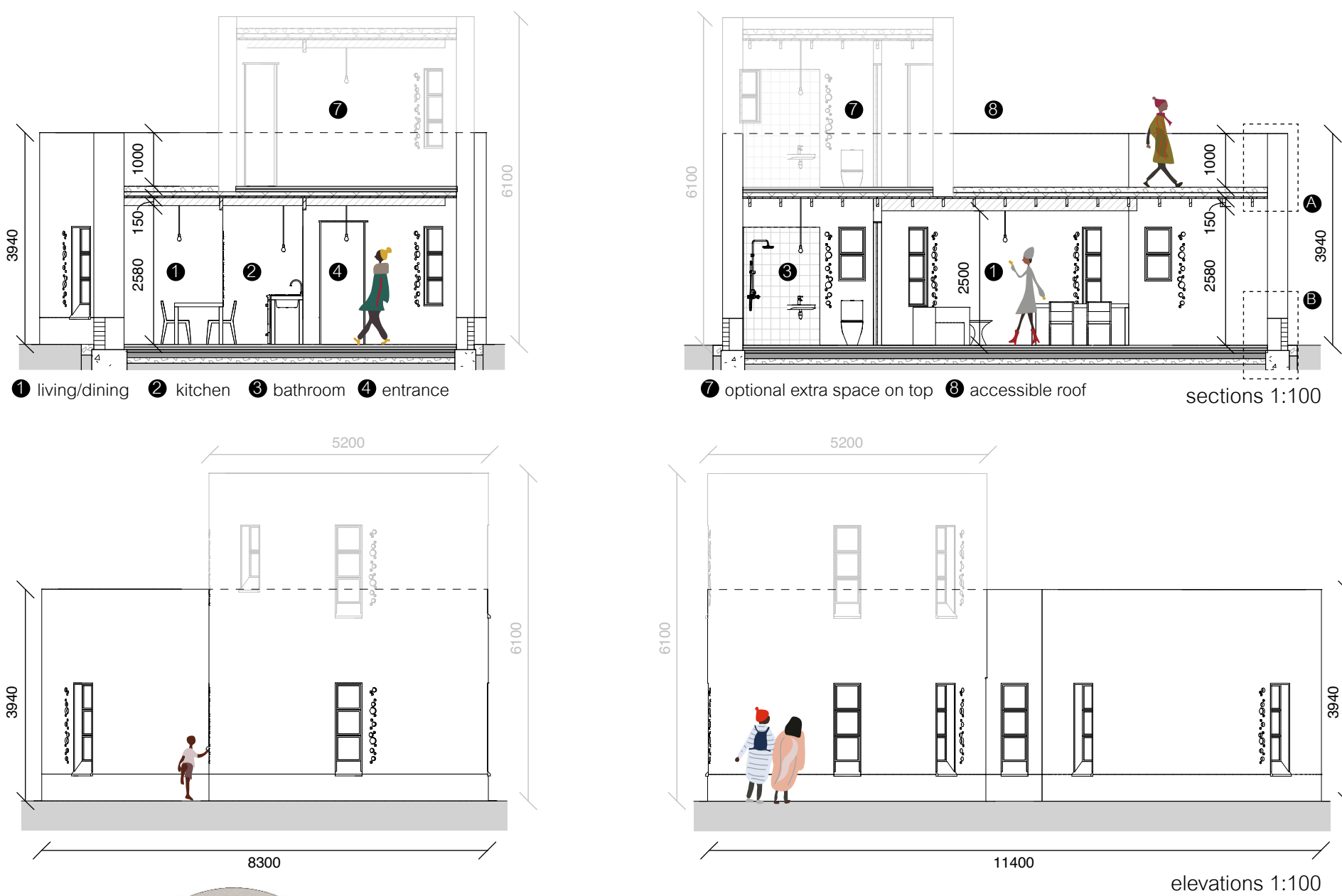
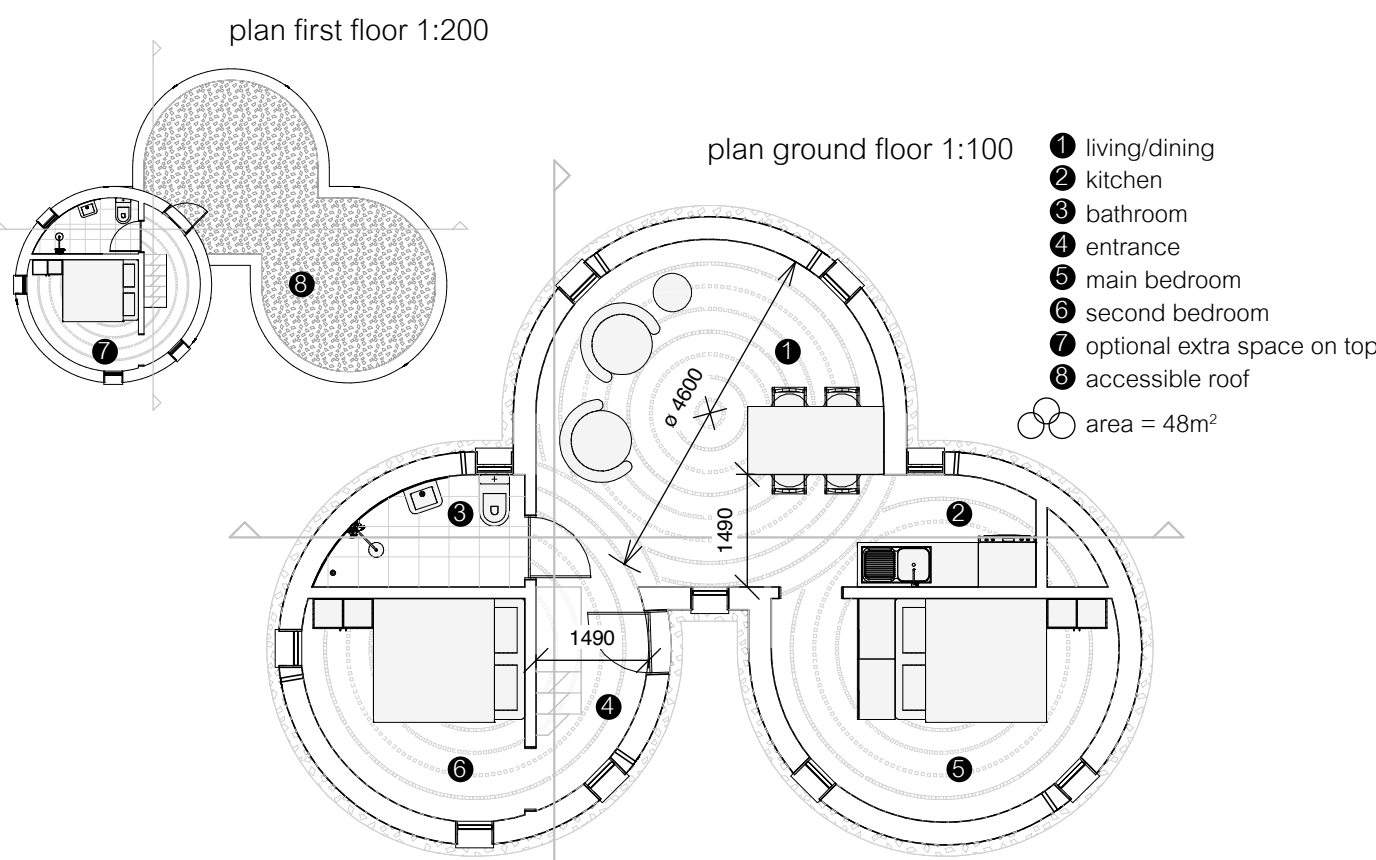


construction methods

The house can be self-built with the help of few craftsmen and rented tools. The main construction method is rammed earth, which has the potential to develop a new niche in the local building market: creating jobs for Basotho skilled workers.

plan first floor 1:200

plan ground floor 1:100



axonometric of the ensemble

