

Rise in the city - Maseru Lesotho 2019 competition house project.

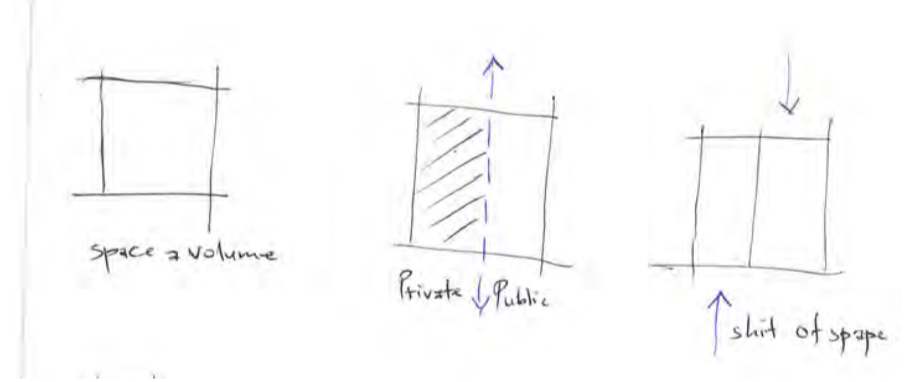
Project Brief:
 Design a house consist of two bedrooms, bathroom, kitchen, lounge and eating area within 48sqm. The cost of should be less or LSL 50 000. This house is design for four people for instead parents and two kids or four factory employees.

Project Location: Maseru Lesotho
 Lesotho: is home of 2.06 000 inhabitants within an area of about 30 335km². The land locked country within South Africa lies at 29.4667° S 27 9333°E.

Maseru: is the capital city of Lesotho. The district is situated on the CALDON river which boards South Africa. It has population of about 350 000 inhabitants. The elevation is about 1 600 above SEA LEVEL. Its area is about 138km²

Maseru Image
 To understand the image of maseru existing house from urban to rural were studied in terms of block space, roof type, openings material, mass, solid, shade and shadow, rhythm, texture to adopted into new proposal.

Project Description:
 This project is going to be constructed by local material more over affordable material or free material like earth after digging foundation trenches. This is going to be built by people in community under professional supervision in order to give back to society. Foundation will be constructed by earth bags using remaining from foundation trenches. Floor will made be timber logs and mud and then mixed mud with cementitious material especially for wet room for instead bathroom. Wall costructed by timber logs joined by mud and for window and door frames S.A pine timber will be used as it is found in great piles in most construction material shop in Lesotho. Thatch will be used for roof joined with wire and timber. There will be no ceiling as thatch can act in both ways of being instulation of sound , heat and cooling or water proof.

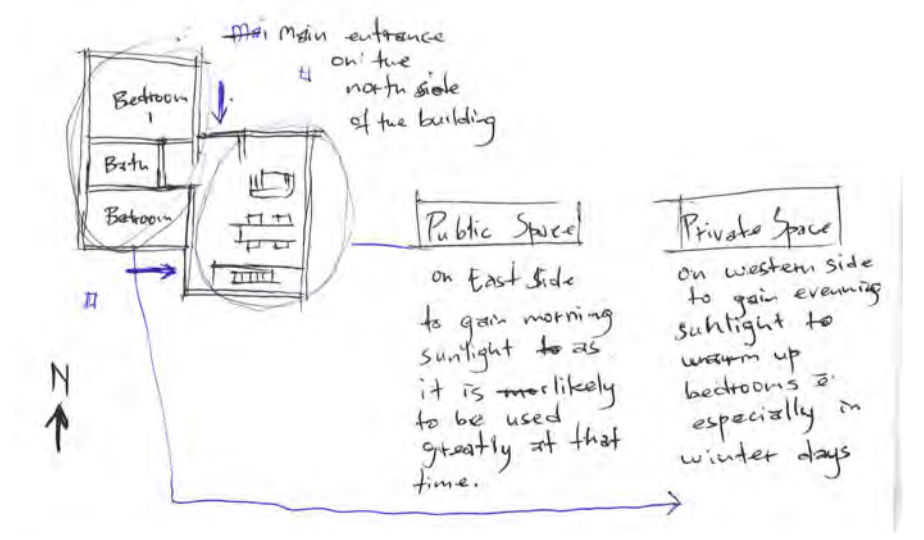


Foundation Construction
Tool and Material
 woven polypropylene bags, bucket chute, metal Chisel and scrap steel for cutting barbed wire, sheet metal slider, gauge galvanizes wire, knife, wire cutters, tape measure, 4 point barbed wire, corner guide, grub hoe, level, tampers, bundle bags, shovel. This means there is no machinery needed in this project just labour

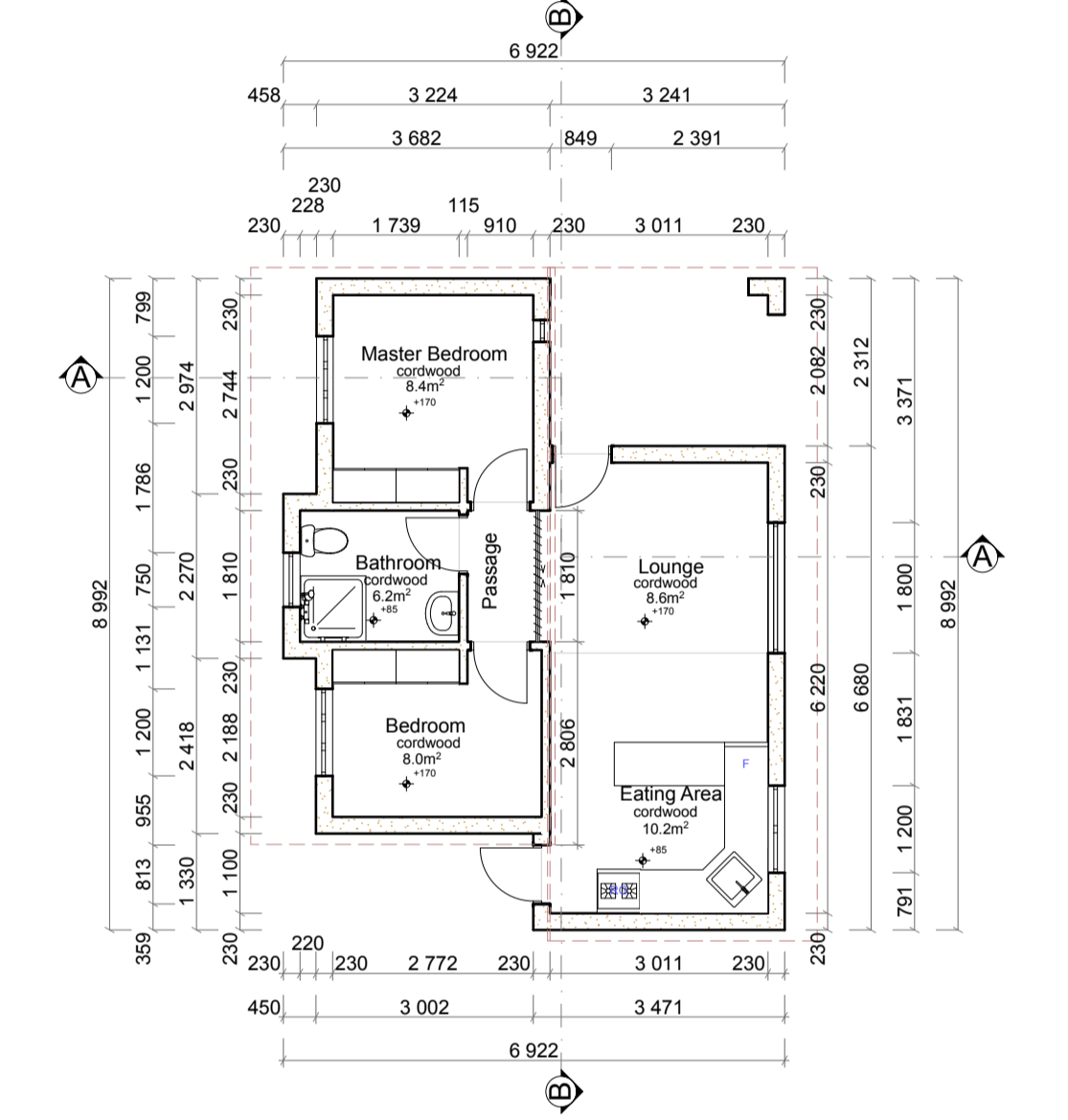
How to Earthbag
 Fill bags approximately 90% full, leave just enough to sew the bags closed. That technique ensures each bag is filled to capacity to save bags and each bag is the same size which helps keep walls level. Stitching bags Place gravel-filled bags from corner or from openings Add barbed wire act like brick force Place additional course with sheetmetal slider. Use a sheetmetal slider to place additional courses so that bags do not snag on the barbed wire.



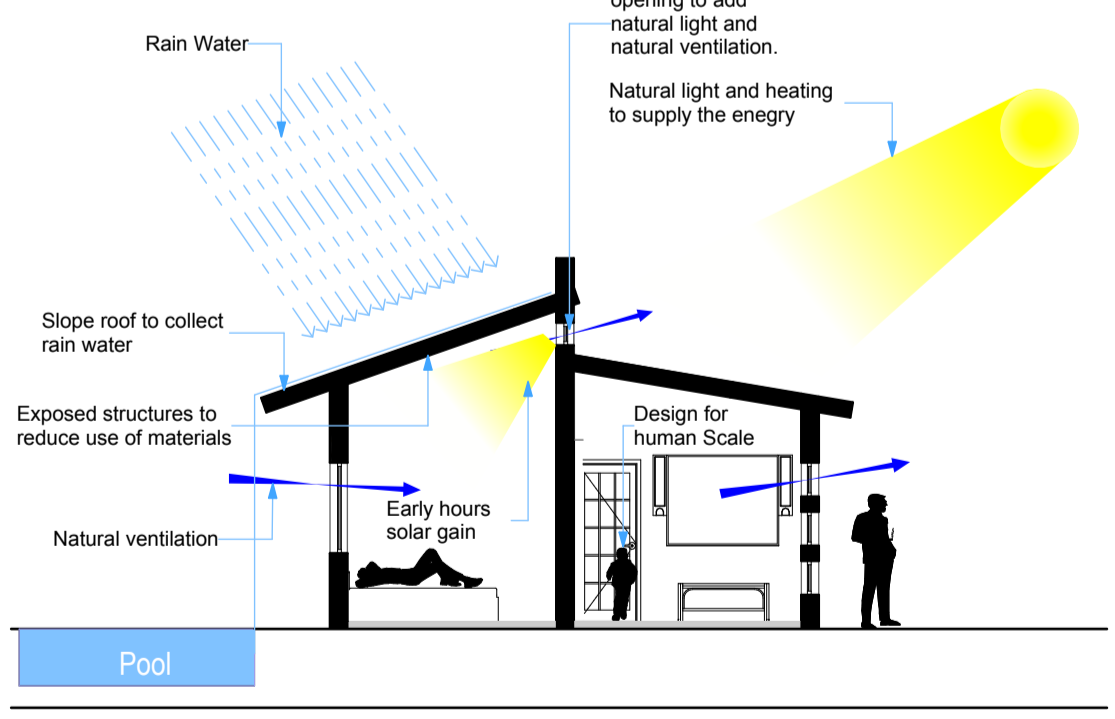
Site Plan 1:200



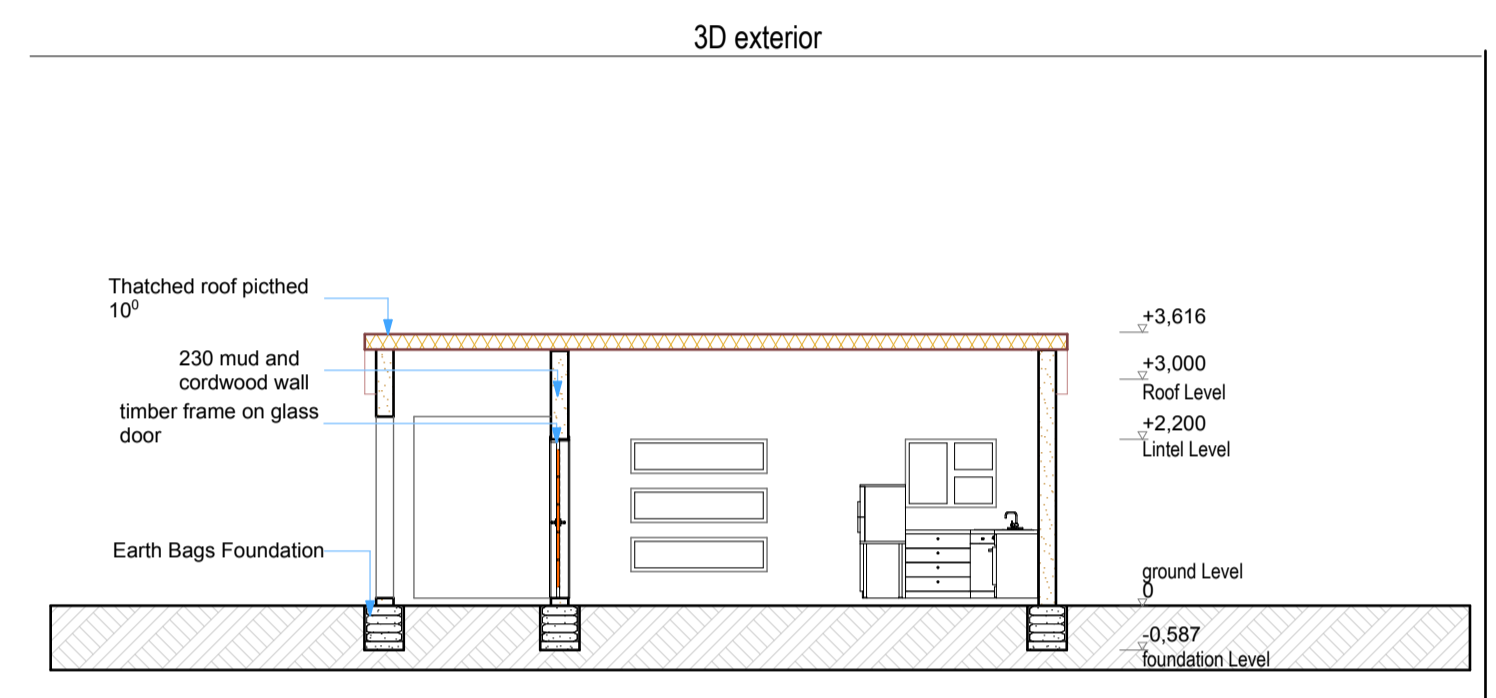
Ground Floor Plan 1:1



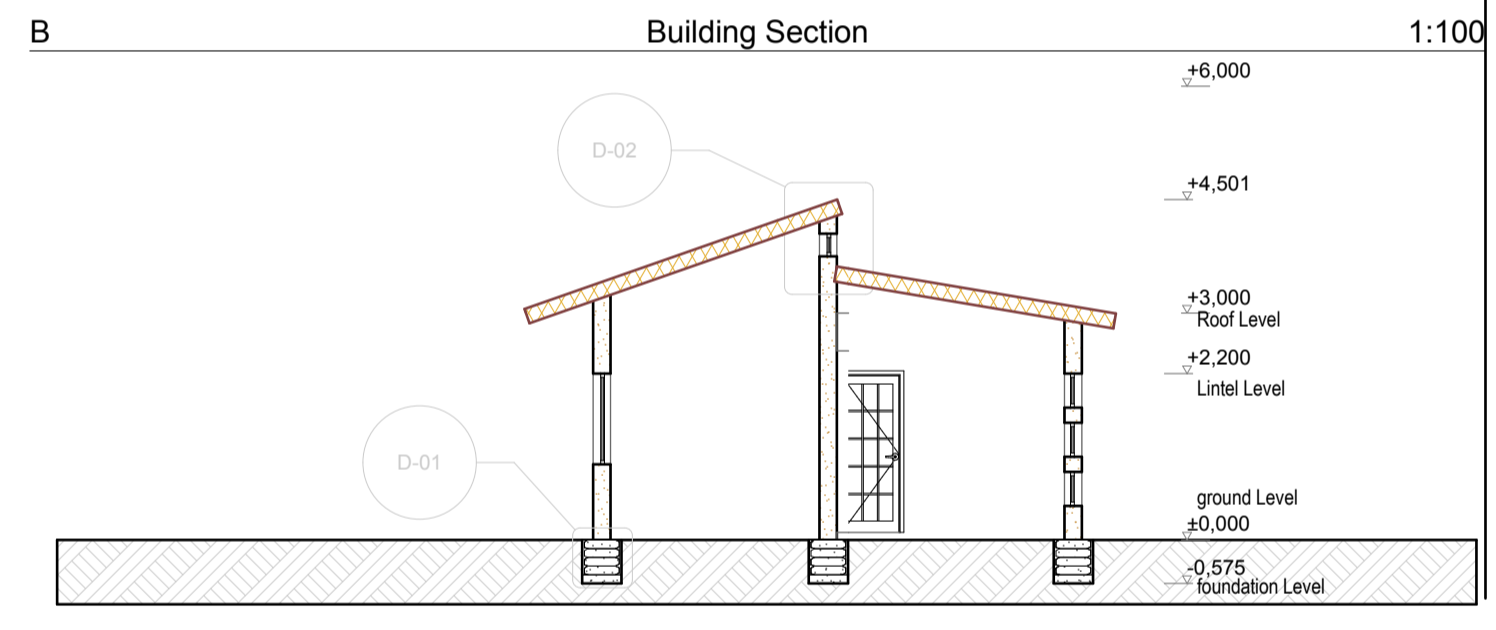
0. Ground Floor 1:100



a Building Section 1:100



3D exterior

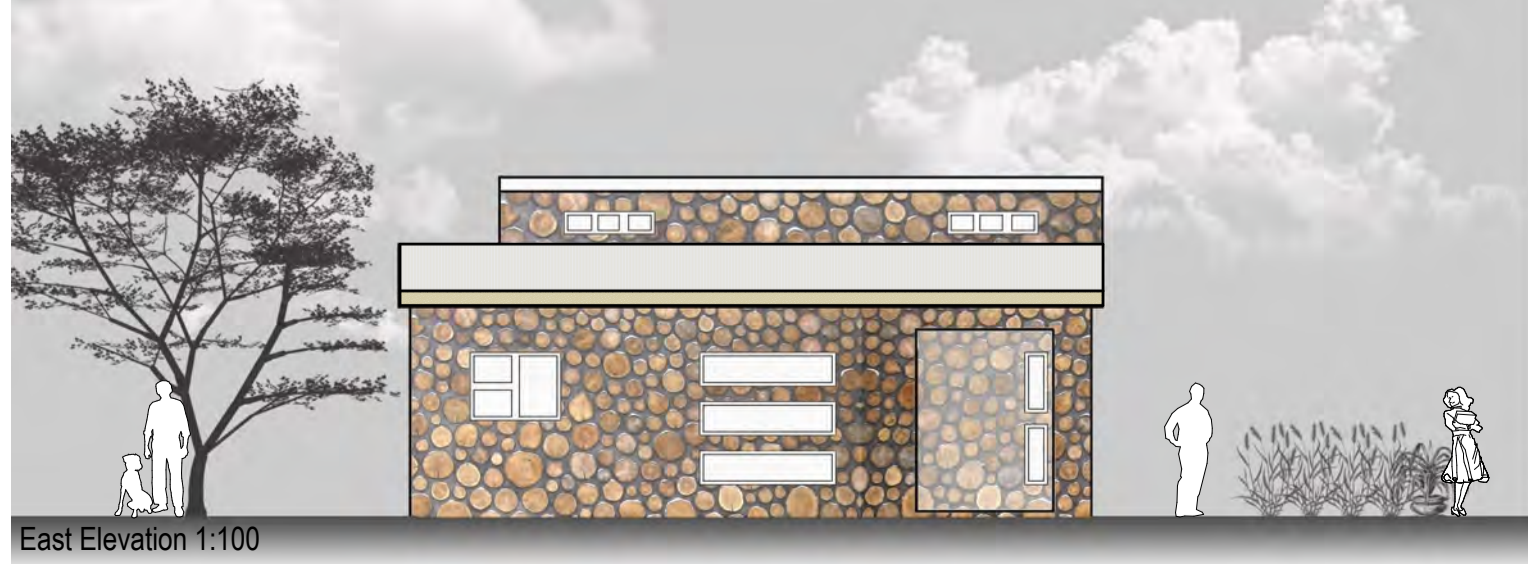


B Building Section 1:100

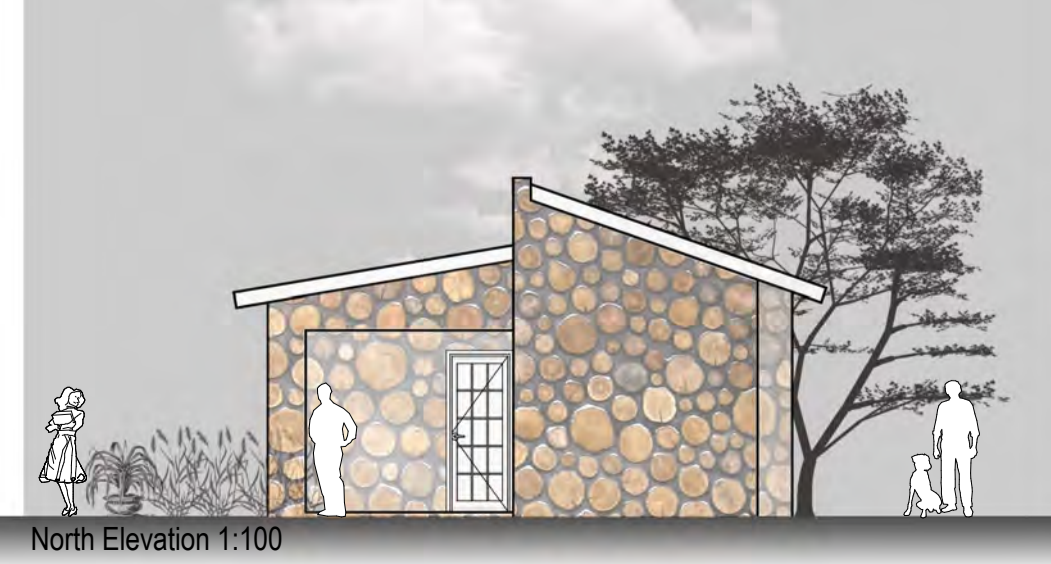


A Building Section 1:100

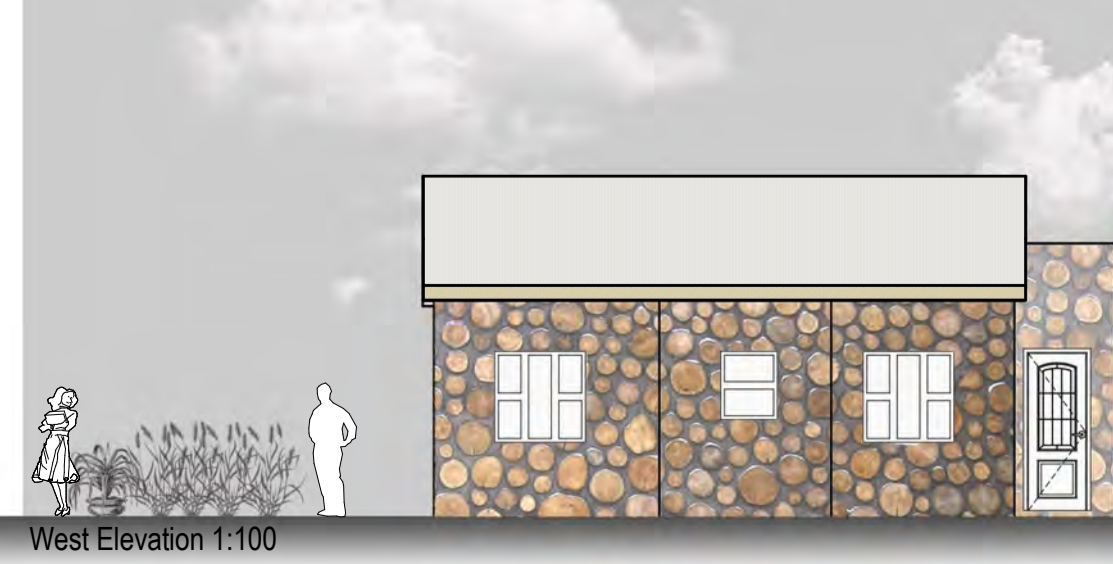
Details 1:20



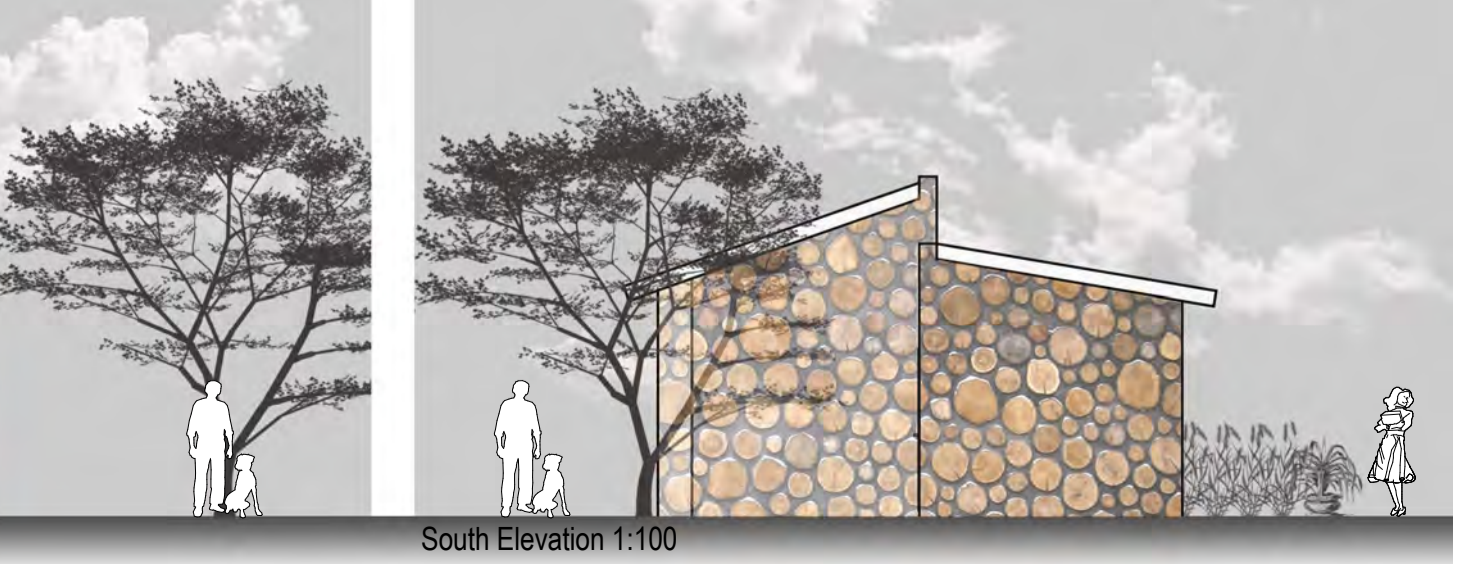
East Elevation 1:100



North Elevation 1:100



West Elevation 1:100



South Elevation 1:100

Bill of Quantity of Maseru House for Rise In The City Competition 2019

Type of construction	Material description	Unit Rate or Bag/M ² LSL	Quantity will be need	Transport of total material LSL	Total LSL
Foundation	Gravel,clay and silt wheelbarrow		20	no	
	Bags to fill earth	2	180		
	Wax Linen Thread 30m to close bags	20	1	50	430
	Foundation digging labour	10	32		320
	Trench soil fill in bag and place/Labour	7	32		224
					974
Wall & Opennings	Cordwood 50kg bag make 3m ²	50	48	1300	3700
	Cow duny to mix soil			600	600
	Special soil to construct wall.			1300	
	Rafter 114x38x6 600mm for frame work	36	4		
	Batterns 38x38x6 600mm for frame work	24	1		168
	Windows glasses already cut				840
	Glass door exterior	1200	1		
	Timber Door interior with lever handle	640	1		
	Timber Door exterior with privacy lockset	380	3		
	Drywall nail package	45	1	500	3275
					8833
Floor	Cordwood 50kg bag make 2m ²	50	24	600	1800
	Cow duny to mix soil			700	
	Gypsum to add on mix	82	3	150	396
					2896
Roof	Rafter 114x38x6 600mm	36	12		
	Batterns 38x38x6 600mm	24	7	250	850
	Thatch as two Hands hold	20	564	3600	14880
	Thread	125	3		
	Drywall nail package	45	2	30	495
					16225
	Delivery Unpack labour and storage for five days				3400
	Construction four workmen for five days				4000
	Increase of material or transport and supervision				5000
Total cost of construction of House is estimated to be					LSL 41 328.00