



SITE PLAN



SECTION A-A sc 1 : 100



INCREMENTAL STEPS

- 1) start with 180 (360m2) of framed solar pv modules , 190m3 of groundfloor pod-laps and flexible solar pvs.
- 2) add one 200m3 groundfloor pod between the channel (NW) and the platform pod-laps and + 60 framed solar pv.
- 3) add another 200m3 \approx gf pod similarly to 2) and build more slabs around if desired to harvest more water and photons

cat.	item	quantity	labour (intensity)	material (usd)	freight origin	obs
undations	plum (stone, sand, gravel, cement a 30m3	48 u	medium	0	Viti Levu	low cement ratio need freight
	galvanised screw piles	80 m2	easy	3360	New Zealand	
	very low depth 60 cm	170 m2	medium	0		separate fertile soil for vertical planters
cavations	low depth 1.5 m	880 m2	medium	810	Viti Levu	low cement ratio need freight
	stabilized earth pre-flooring	880 m2	medium	1967	Viti Levu	high cement ratio need freight
	fiber reinf. mortar flooring	880 m2	easy	800	Viti Levu	a coat to finish a waterproof the mortar
site	waterproof finish layer	18m3	e-m	0	Site and nearby	
	rammed earth	55m3	easy	0	Naviti	collected locally by rugby communiti pre-season
	gabion stones	51 u	easy	0	Naviti	as many of the columns used locally
s and posts	local log posts	24 u	medium	2200	New Zealand	24 units of 1.1m lenght, or 5.5m jointed
	trinned log beams	6 u	medium	200	Viti Levu	structural rods plus net-fence
	gabion cages	110m2	easy	1900	New Zealand	cost very approximated
planters	fabrics	190 m	easy	400	New Zealand	190 linear m of 3x3 rec frame
	framing	128 u	medium	0	Naviti	steel, alu, supports
	other	623 m2	easy	25900	New Zealand	7 x 25 x 665 cm aprox
slabs	local timber beams	623 m2	medium	1300	Viti Levu	could be made with local timber + plywood (more labour)
	cilt slabs	400				
	vp and mortar layers	80 m	medium	800	New Zealand	80 linear m of 3x3 rec frame
other	framing	85 m2	easy	21000	New Zealand	price in Marou from New Zealand, can be less if found in Viti L.
	aluminum panels	64 u	easy	12800	Canada / China	price in Australia and N. Zealand is 6400, doble by the freight
	flexible solar modules		medium	1300	New Zealand	Renewable energy produced Aluminum from New Z.
main solar arrays	extra framing, railing	240 u	medium	91200	International	cost deemed in Marou, double than in New Z./Aust. Initially can be bought a portion and then increment
	modules	96kWh	easy	84000	International	byd box premium 96kWh price deemed to Marou, doble than in N.Z.
	bess		difficult	5900	International	
hydro system	inverter, controllers, etc	1500	Viti Levu	4000	International	could be less
	pipes	2kW	medium	400		
	equipment and micro turbine	1 u	easy	50	Viti Levu	a 40cm h, thin all, almost equal pressure both sides
other	desalinating in-pool wall	45 m2	easy	250		2x pvc 0.3mm lip, each one with 1 stone to pitch them
	desalination pvc covers (lips)		easy	3100	Naviti and Viti L.	
	toilet, furniture, racks, etc		to be defined	265557		

COST ESTIMATION