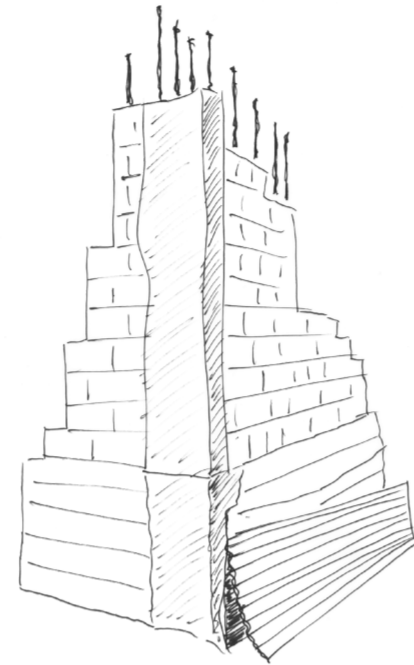


SKETCHES OF SINT MAARTEN



My house was destroyed by Irma | I sleep in my sisters house now | I don't have a job | I don't have money | I can build, but I need materials, materials, materials.



We are a family of four | During Irma a container flew into our house | Now we are trying to rebuild it with the help of the Red Cross | Only my daughter has a job | I would like to learn to build myself.



We could not find a job in tourism | Now we learn how to build via the Red Cross | And repair roofs in the neighborhood.



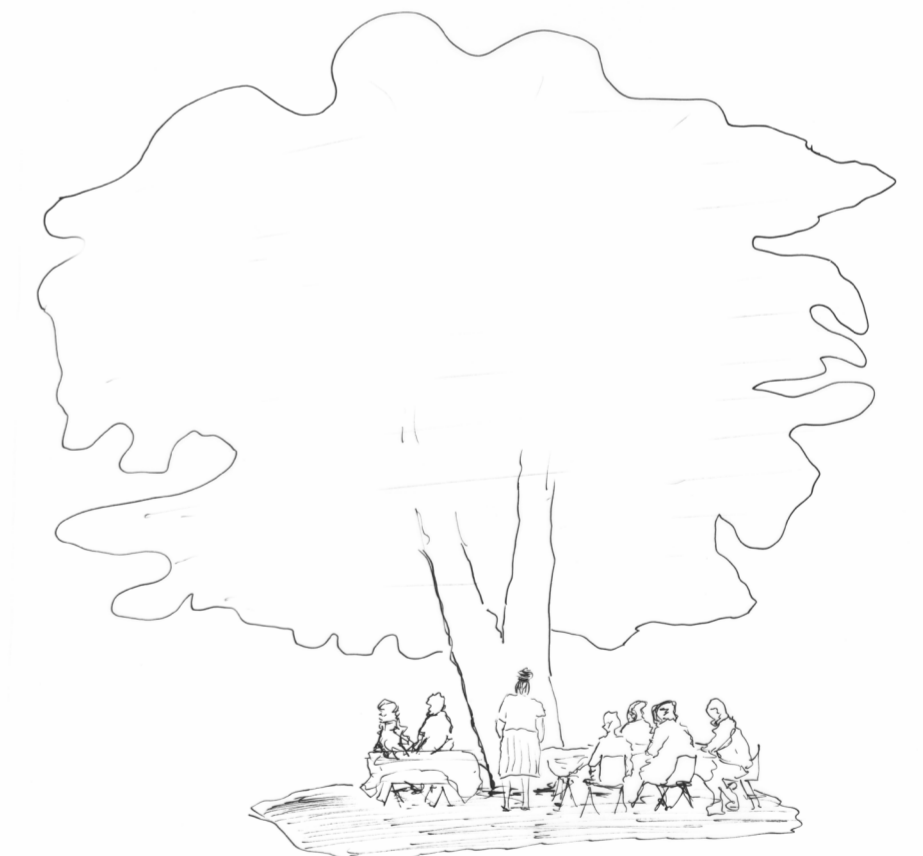
You know what agriculture means? | It means you have to agree with culture! | The government is more in confusion than looking for a solution | I have a restaurant and I farm my own vegetables.



I got some help from the Red Cross | I had left over materials, people tried to take it away | I am vexed | We need more help here.

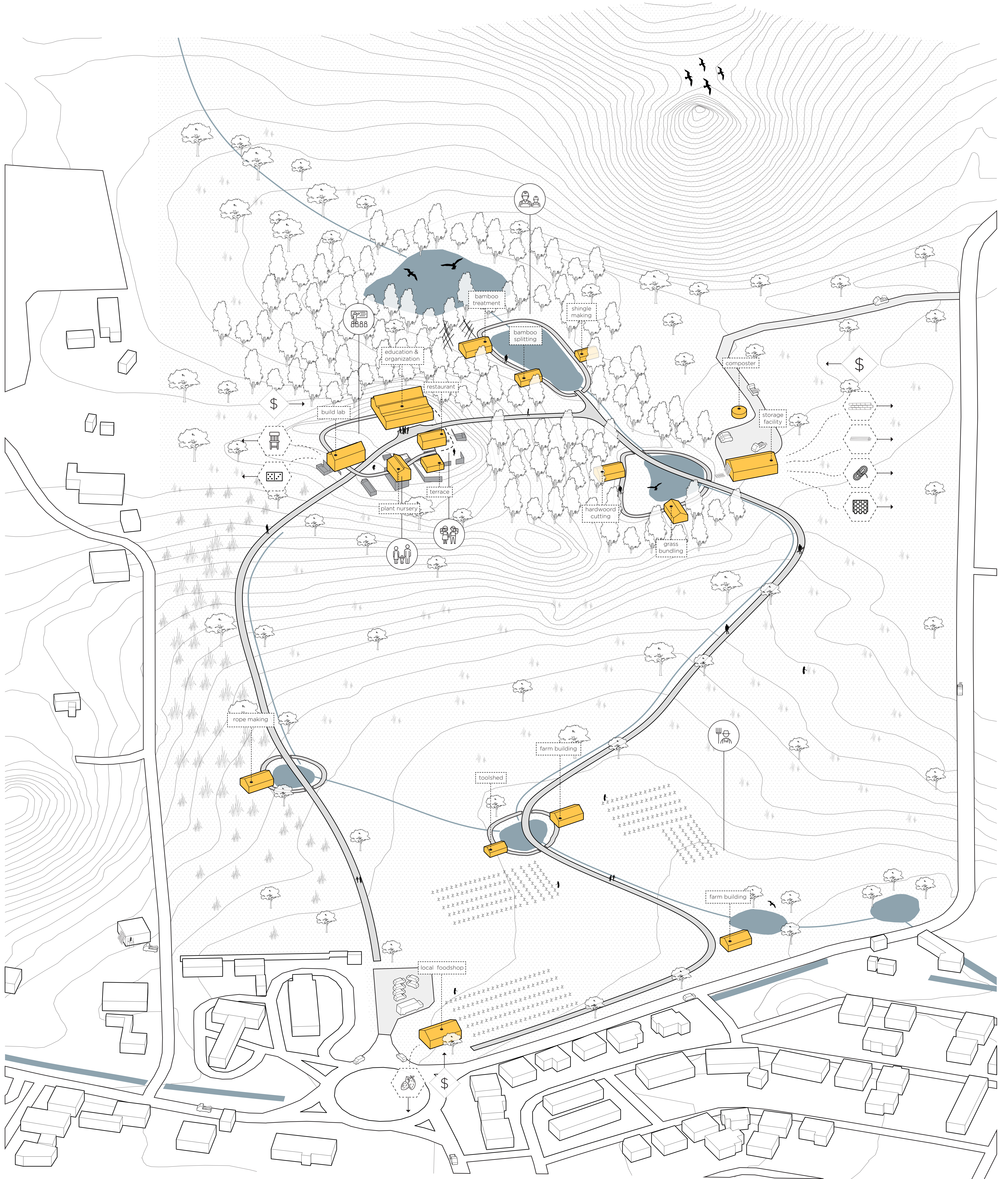


Our school closes at 1 pm | Then we go to the Lions Den | Together with the teacher, we grow plants in recycled plastic pots and cups.

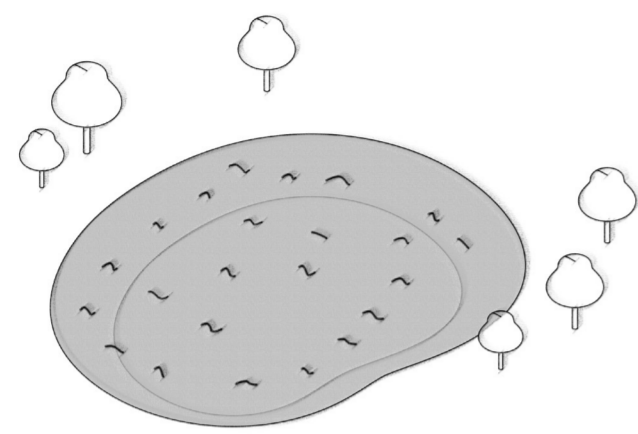


Sint Maarten does not have much meeting space | We meet in the shade under a seagrape | In the shade we share some jonnycakes an play dominos.

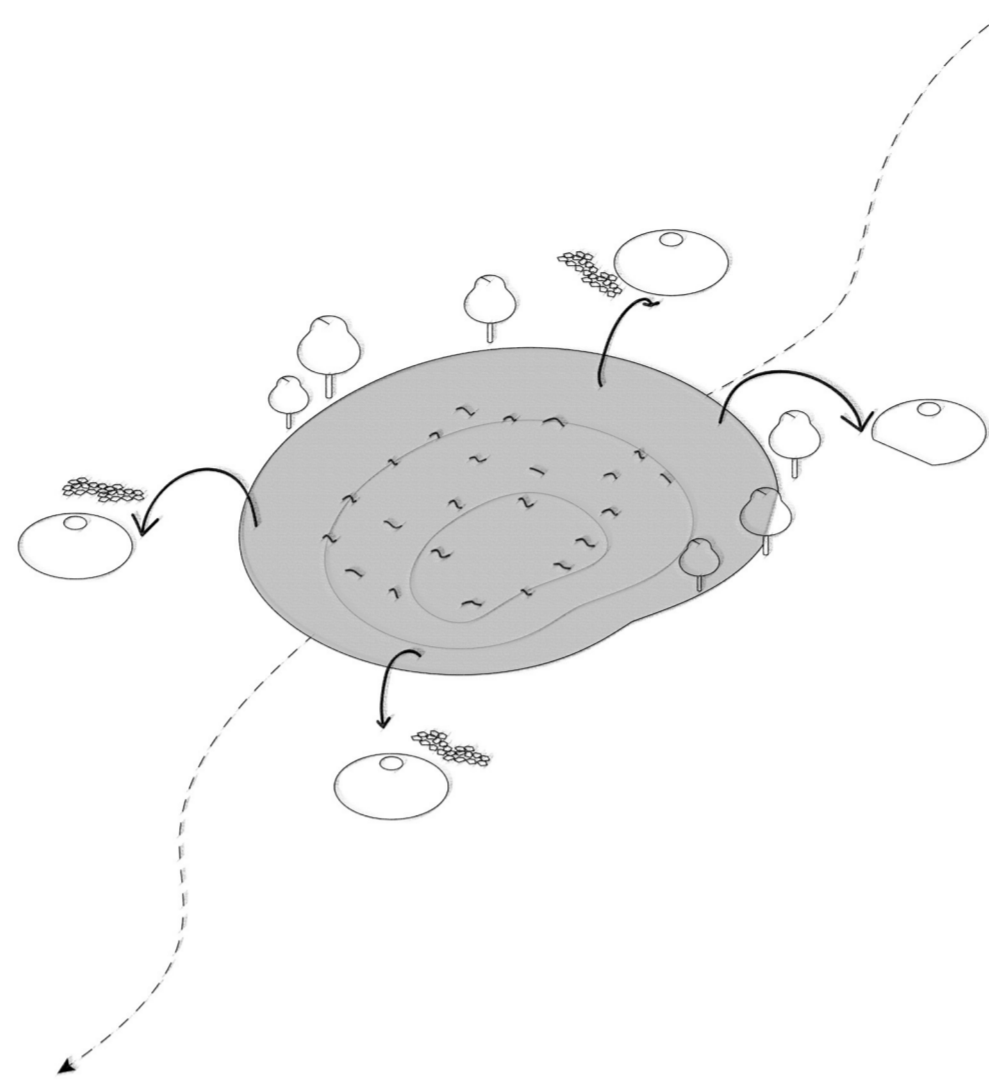
BETHLEHEM | OVERVIEW



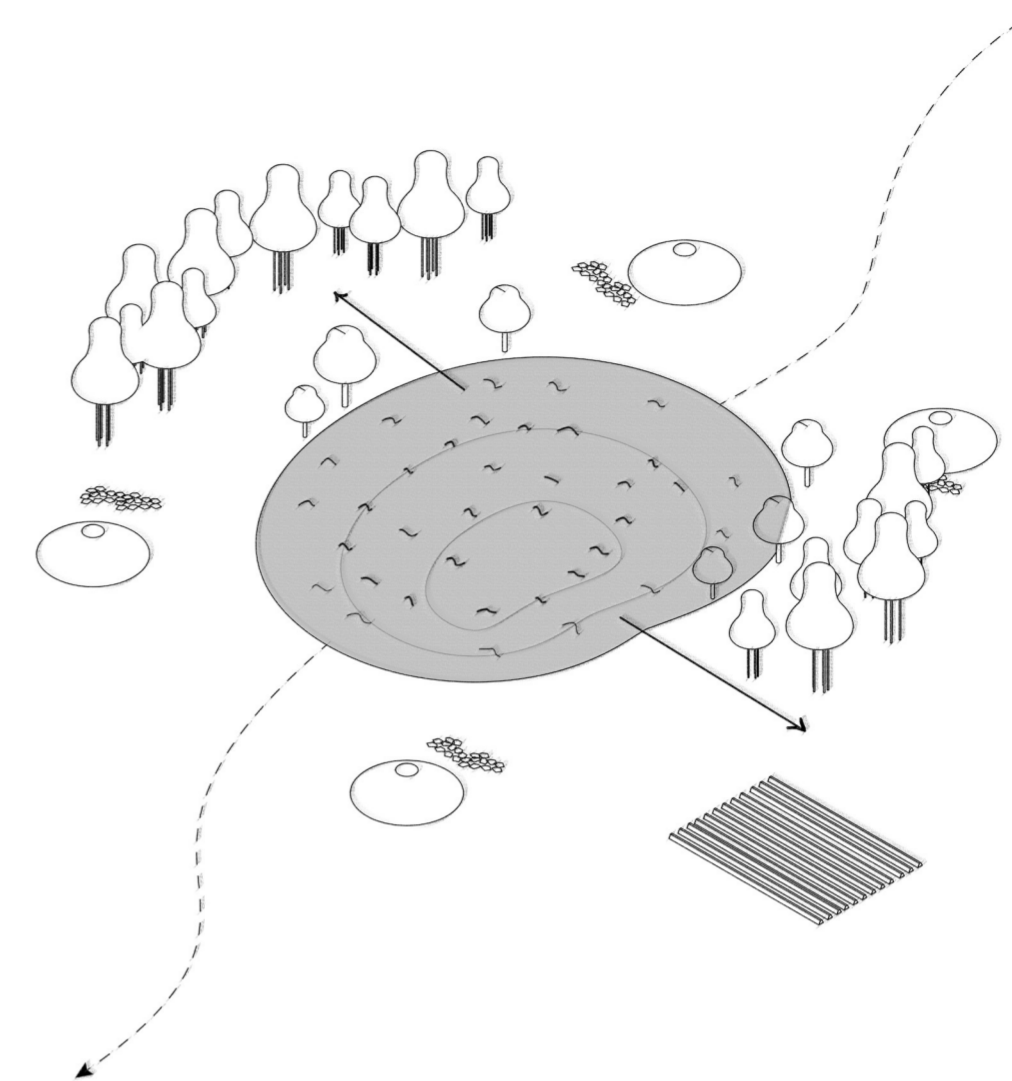
URBAN | LANDSCAPE CONCEPT



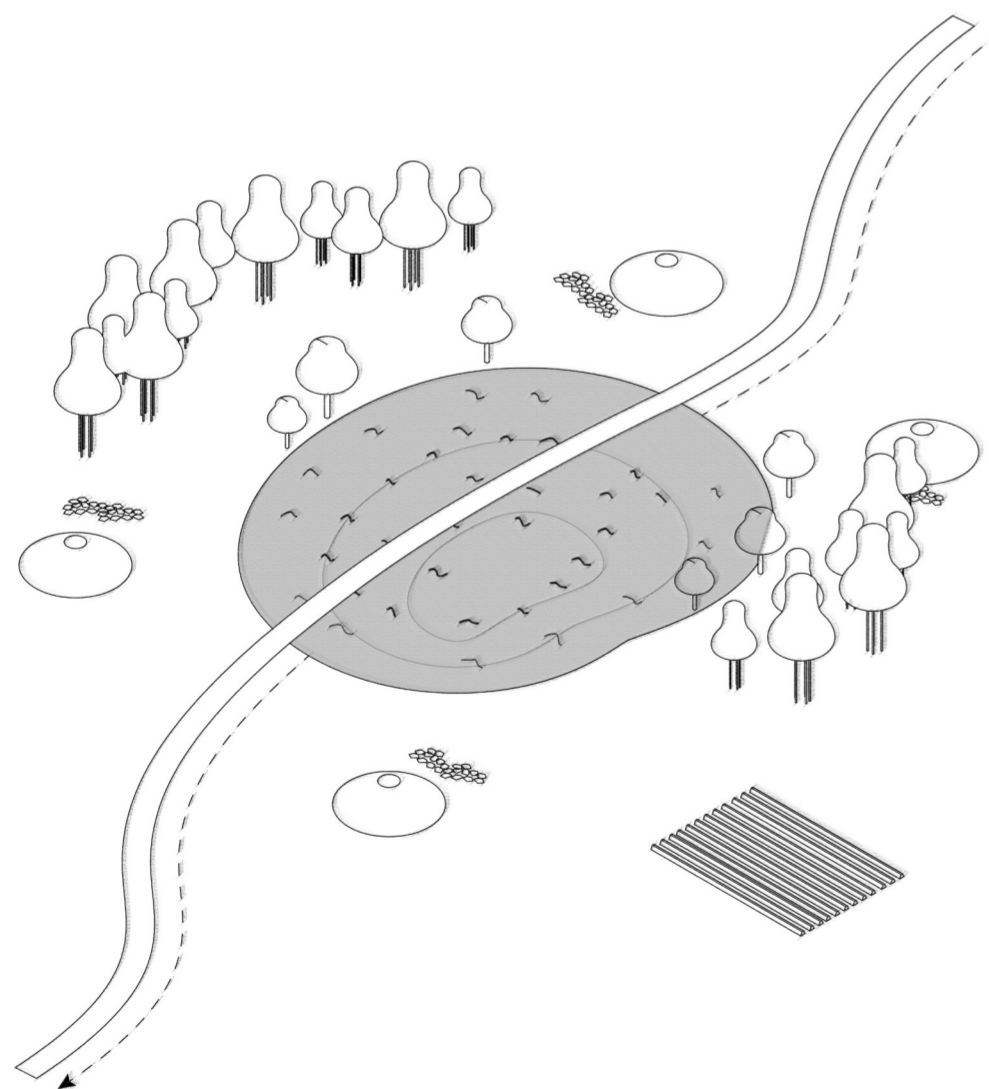
1. Initial waterstructure and vegetation



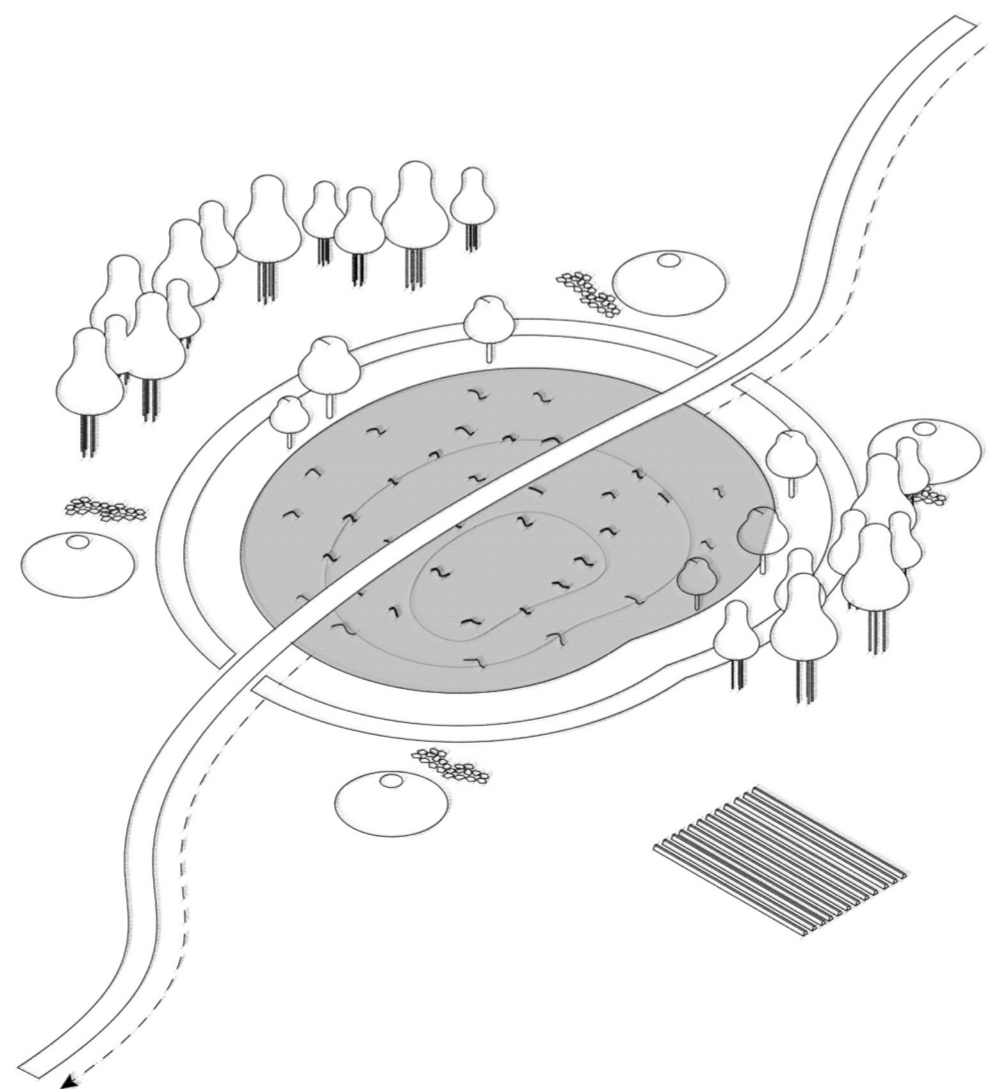
2. Waterstructure deepened, clay/loam and stone is stored



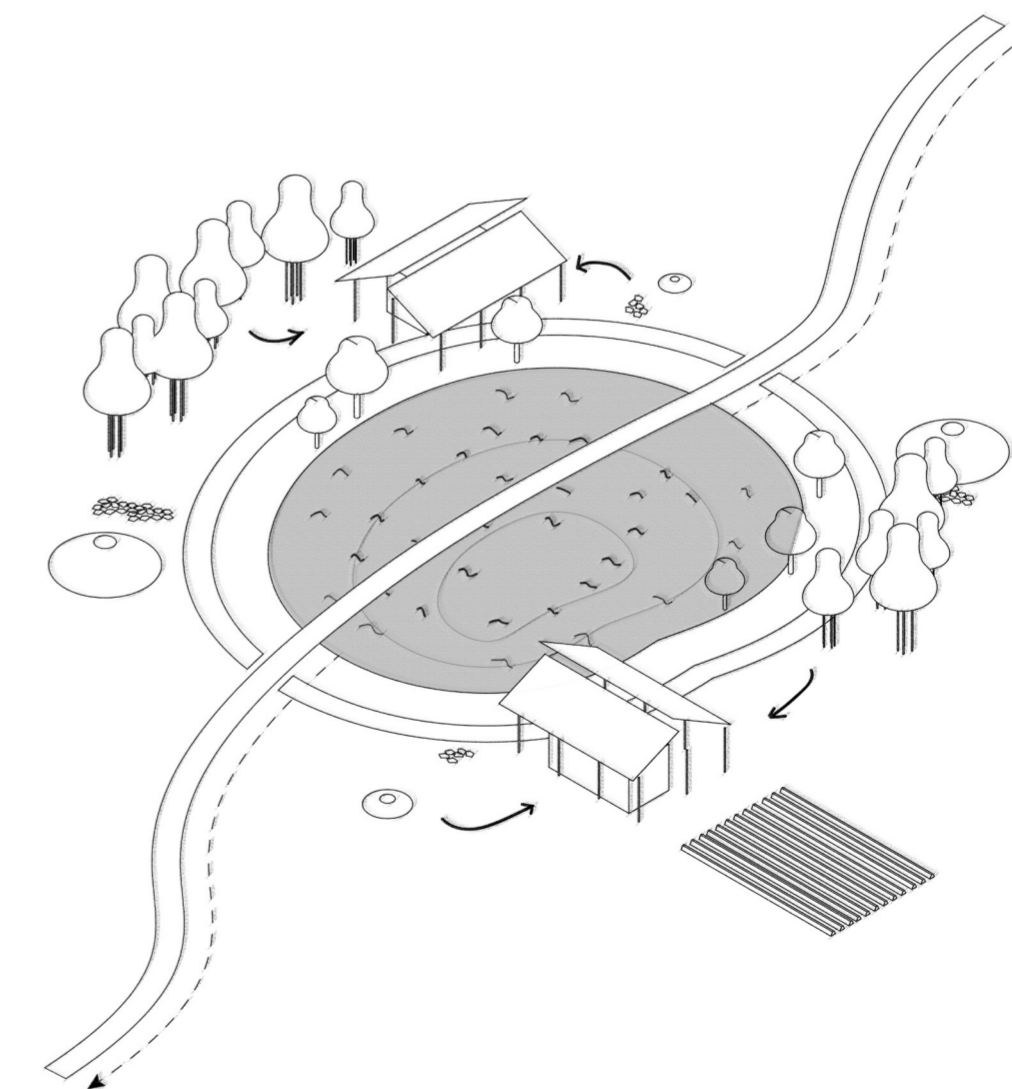
3. Improved waterstructure increases cultivation possibilities for surrounding vegetation and farming



4. A main path connects the waterstructures throughout the park

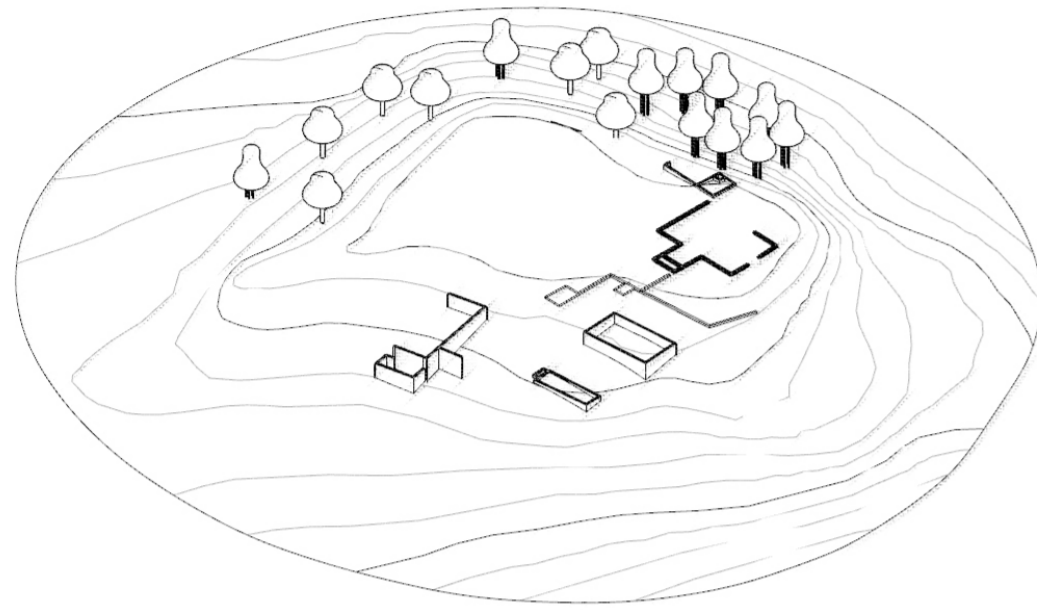


5. A second path connects the local program

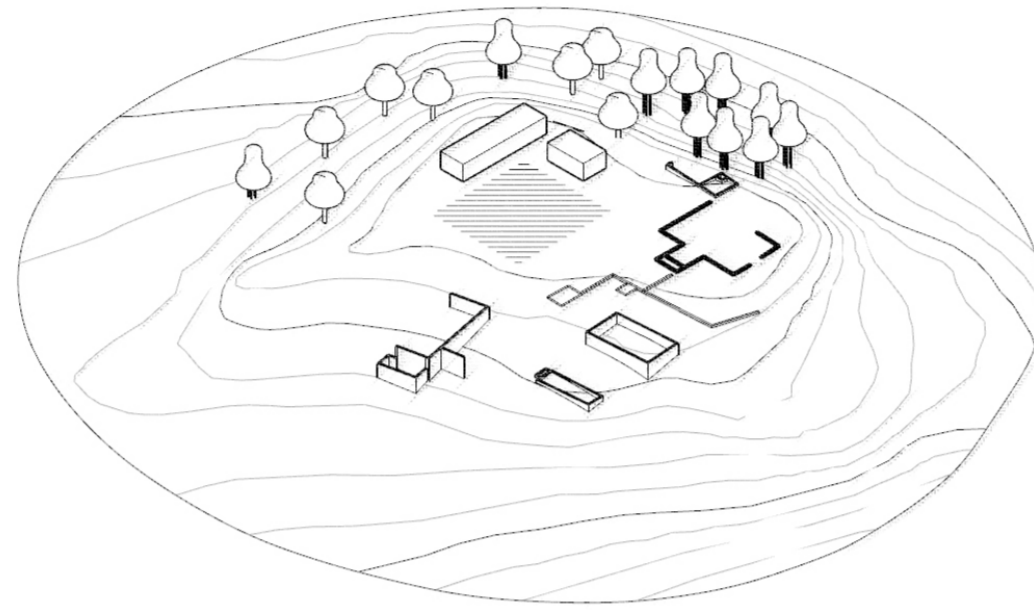


6. The intended program is built from the available materials

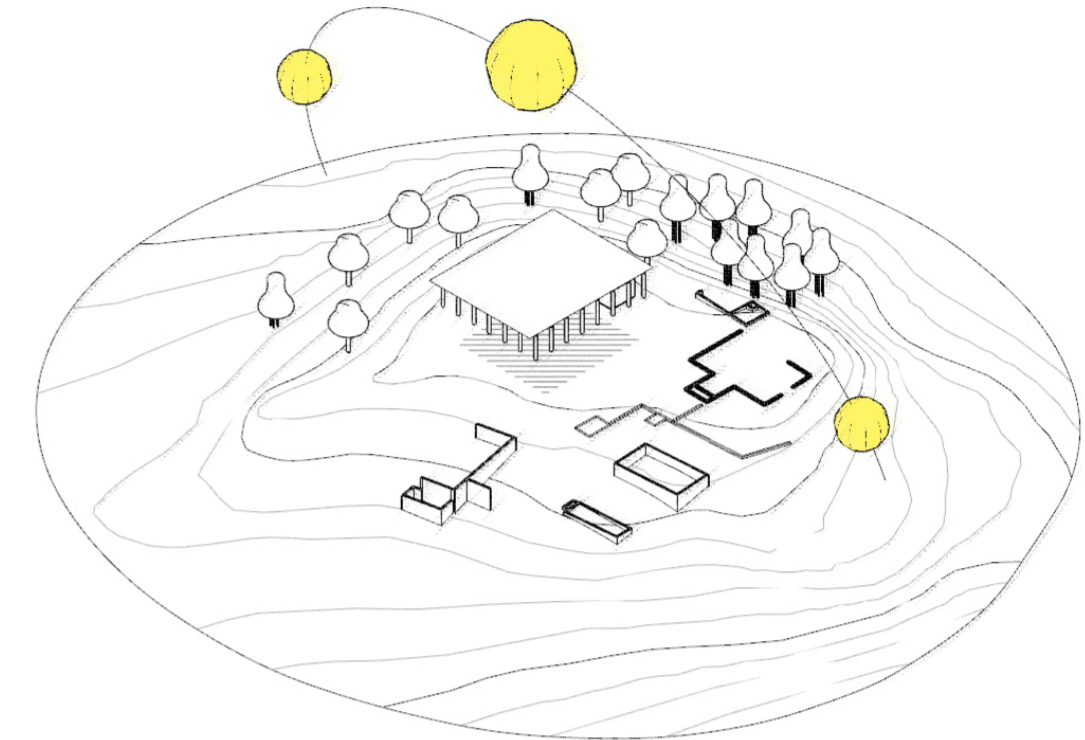
ARCHITECTURAL CONCEPT



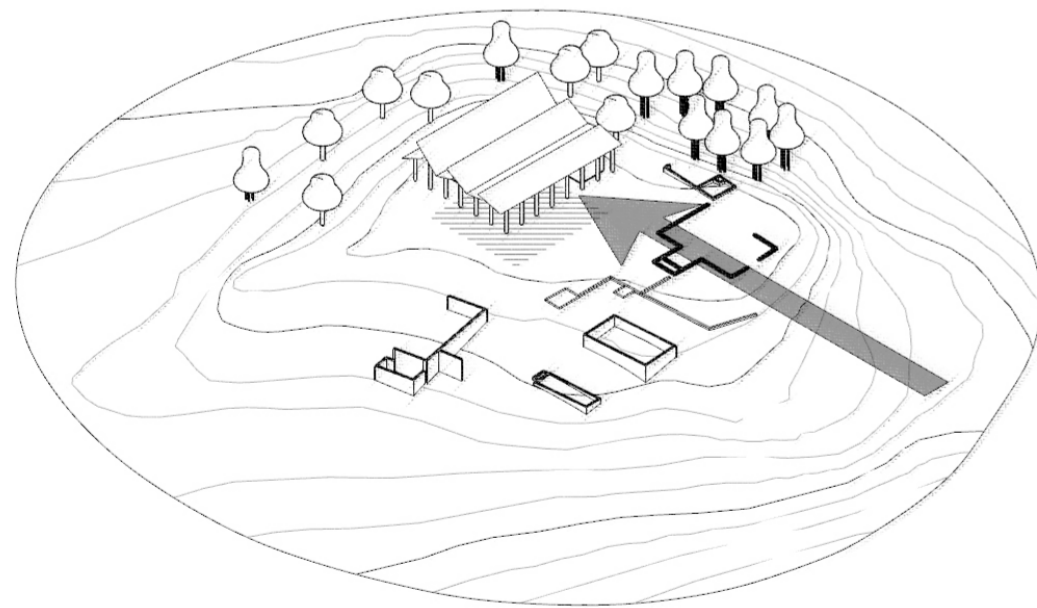
1. Initial ruin complex



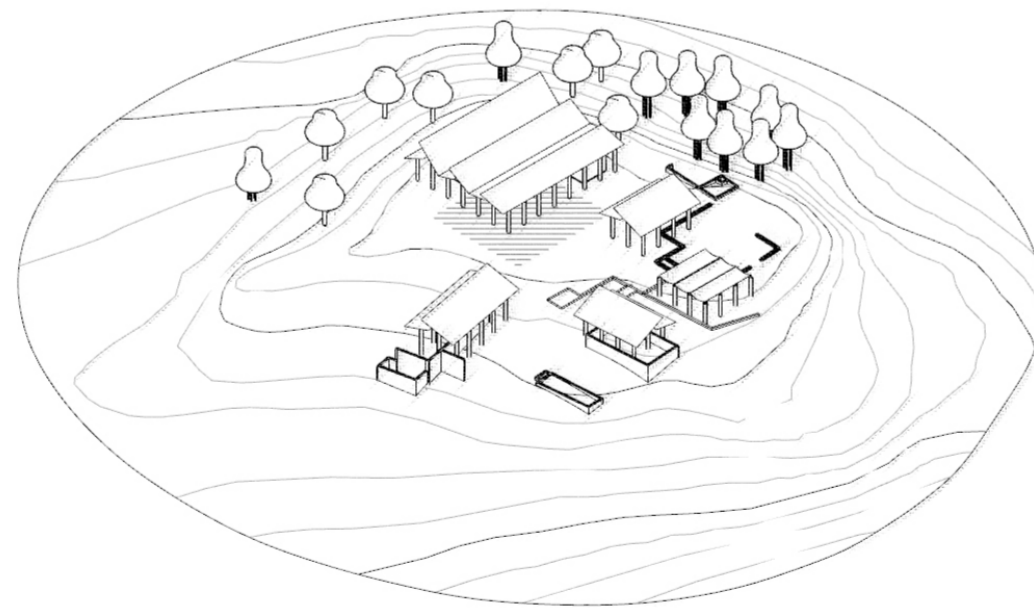
2. Outside meeting / building practice area and structures define central space



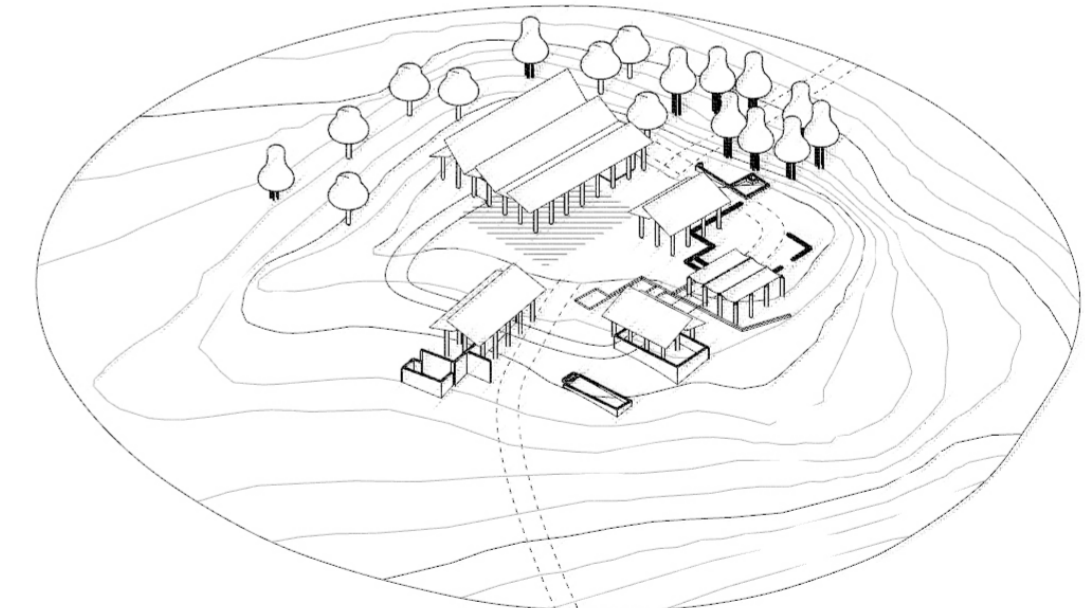
3. Large roof for shading



4. East wind defines shape of roof, improves natural ventilation and harvests rainwater that is stored under the structures visible in step 2



5. The program expands, the restaurant, terrace, plant nursery and build lab are build in a similar way



6. The paths connect the local program and the cluster to the park

BETHLEHEM | RUINS OVERVIEW



1. ENTRANCE



View 1; the entrance to the bethlehem ruins. The ruins attract the attention of tourists, that make photographs of it. The elevated walkway creates a porch-like effect into the bethlehem complex.

2. EDUCATION | ORGANIZATION | PRACTICE BUILDING



View 2: As you walk along the path, you are drawn towards the main building where people from the neighborhood can come for building advice and to learn how to build with the natural materials available from the bethlehem park. The organization of bethlehem has its office here, and there is a classroom. Under the canopy people meet and discuss, specifically how to build the houses of the neighborhood.

5. RESTAURANT | TERRACE | OUTDOOR EXHIBITION



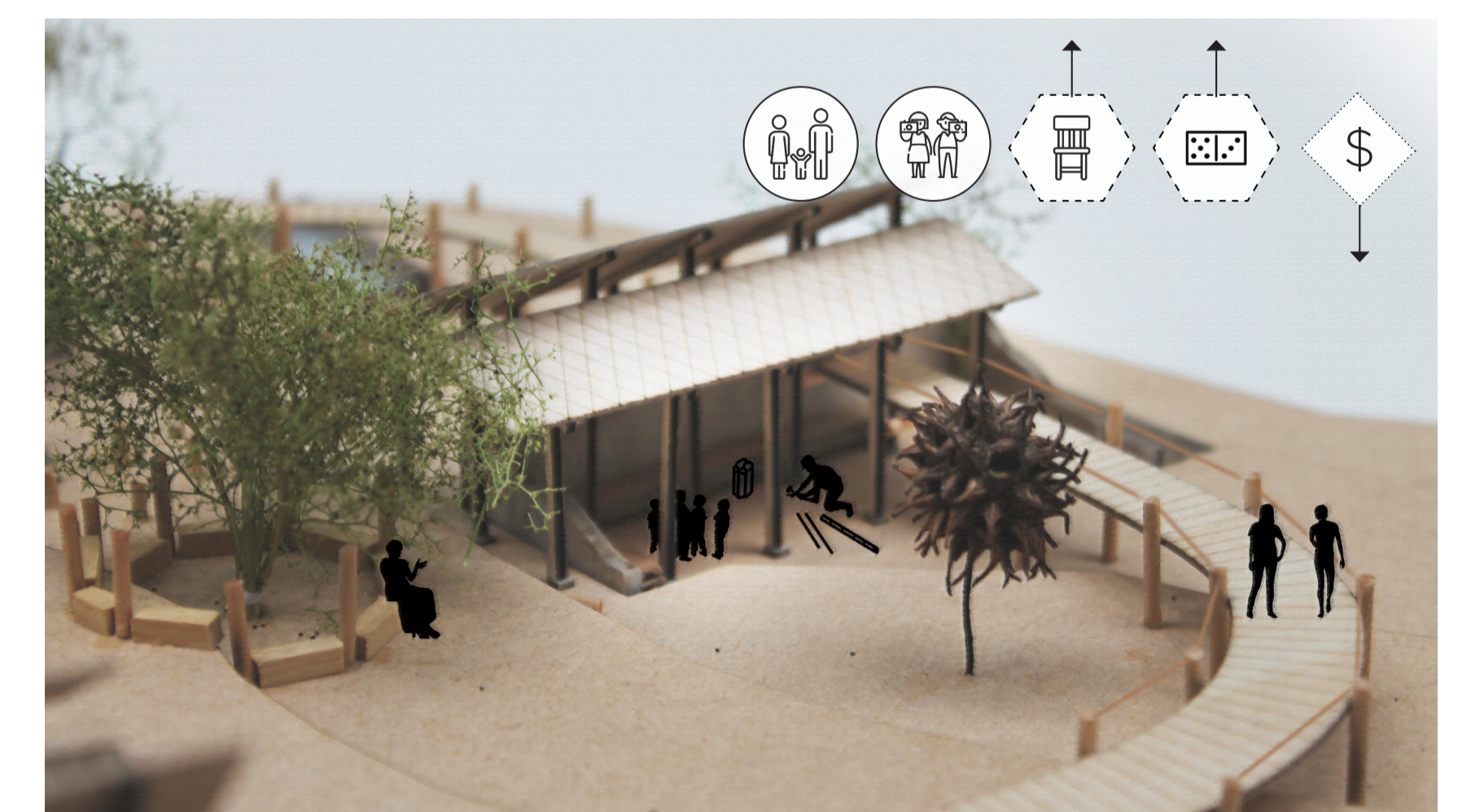
View 5; At the end of the elevated path you walk along the old entrance of the bethlehem plantation house. A restaurant serves local food to residents and tourists, creating revenue for the bethlehem park. A terrace where people can have a drink is placed in the same spot of the old plantation house terrace. Behind the terrace, artifacts of the plantocracy are exposed in an outdoor exhibition area. One can also enjoy the view over the whole bethlehem park here.

4. PLANT NURSERY

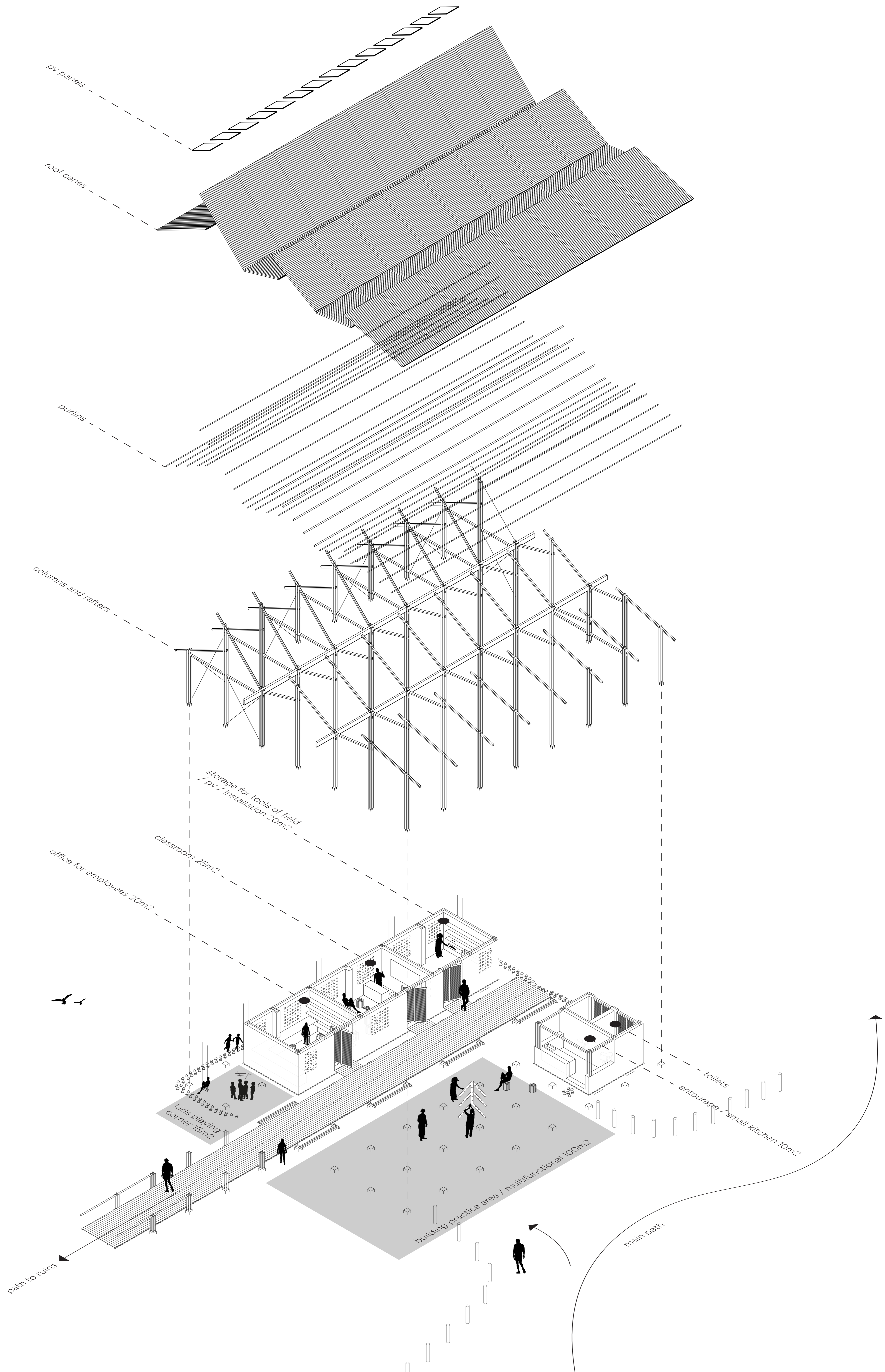


View 4; Further along the path you come across the old curing house, which is now a plant nursery. All cultivated plants of bethlehem are propagated here. Under the heat of the Sint Maarten sun, both plants and people need some shade. Local children can come here after school to help with the re-potting and placing of seedlings into bethlehems bamboo fields. Residents can bring some seedlings home to plant in their backyards.

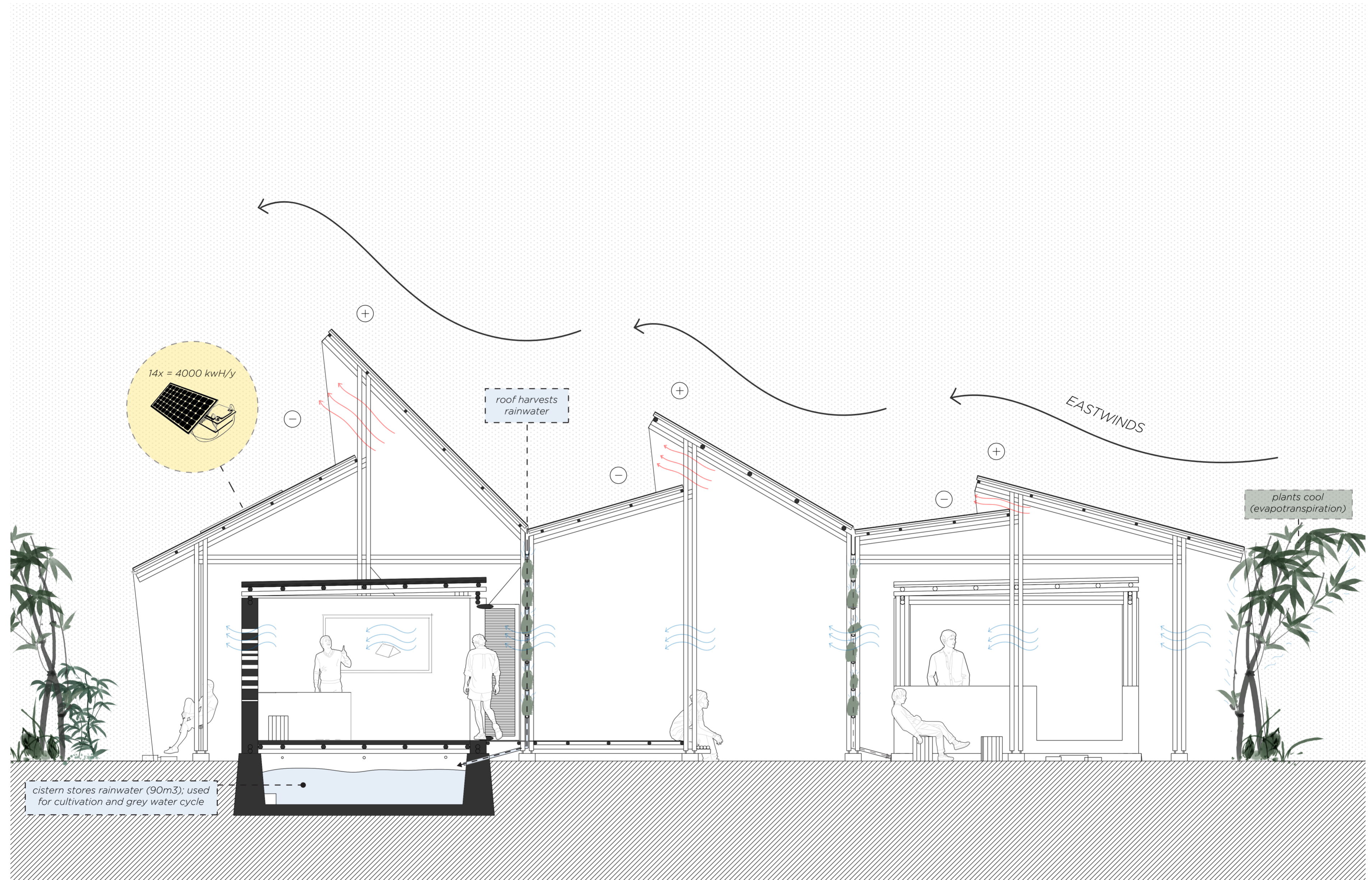
3. BUILD LAB



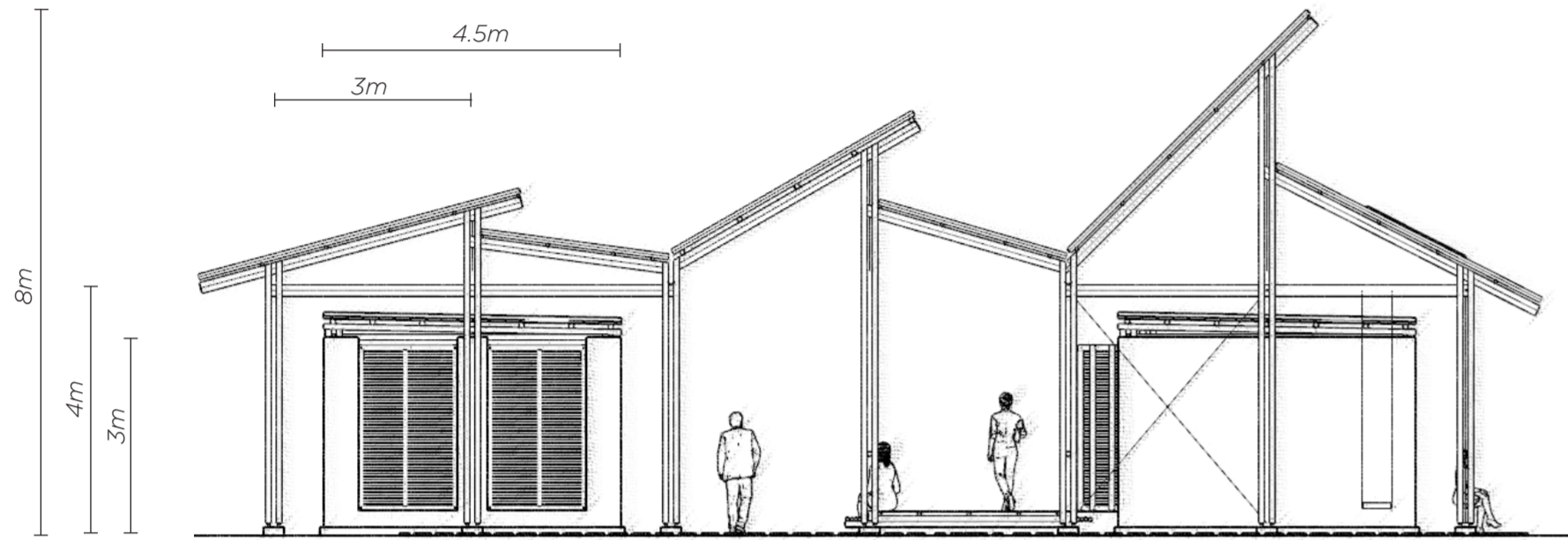
View 3; On the left you see the outline of the old sugarcane crusher. It is now a bench where people can enjoy shade under the bamboos. Via the elevated path you walk along the build lab, built over the old boiler house. Here, both locals and tourists can try to make craftwork of bamboo here, like small furnitures and souvenirs. These are sold at the entrance of the park, creating revenues for bethlem.



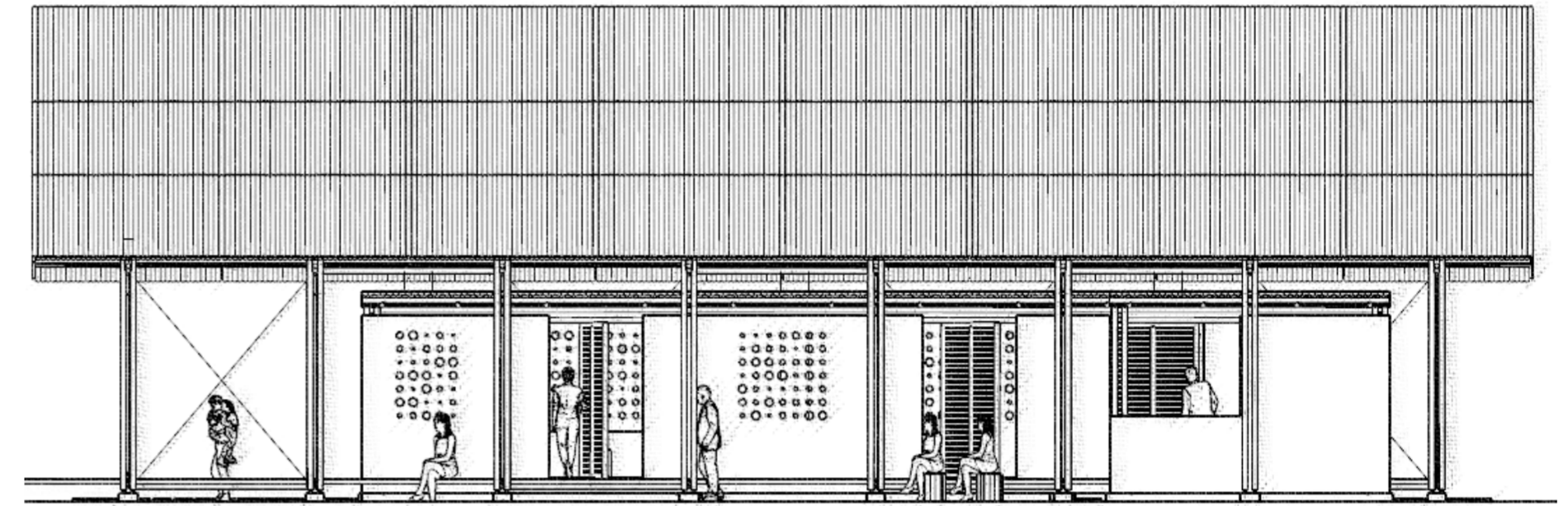
BETHLEHEM | MAIN BUILDING - SECTION WITH CLIMATE 1:50



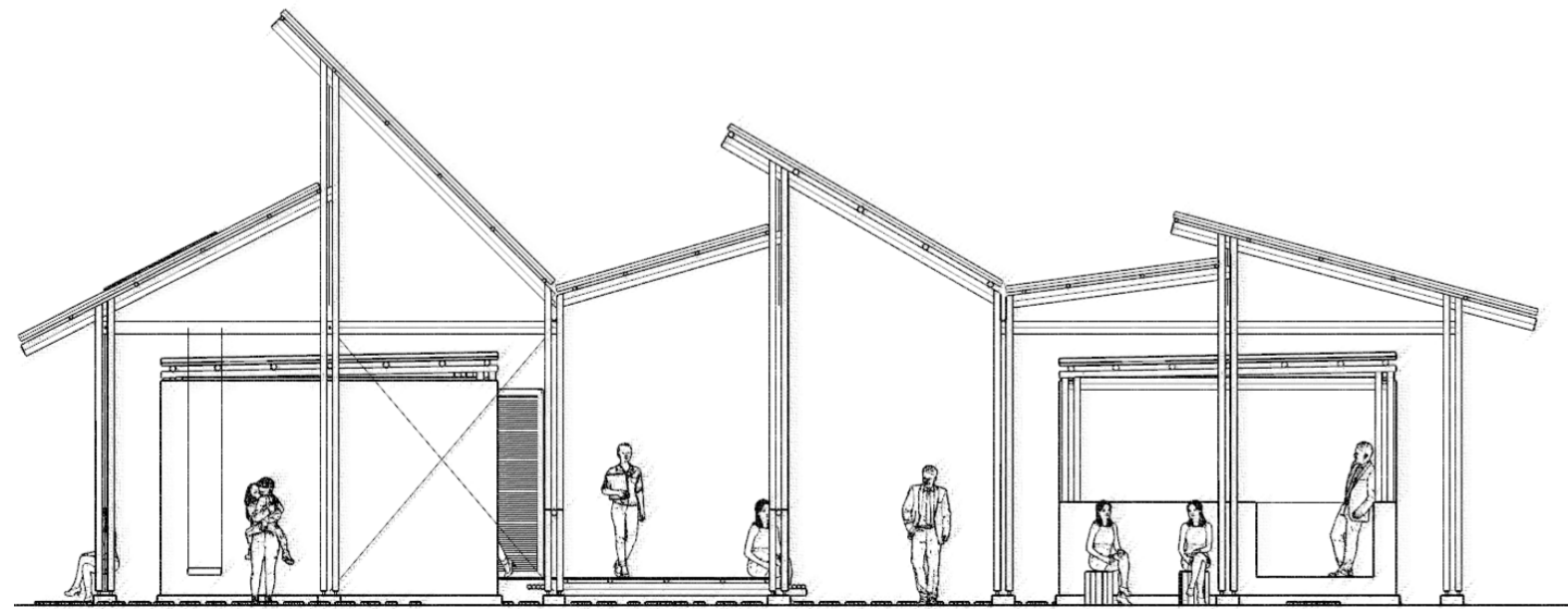
BETHLEHEM | MAIN BUILDING - ELEVATIONS 1:100



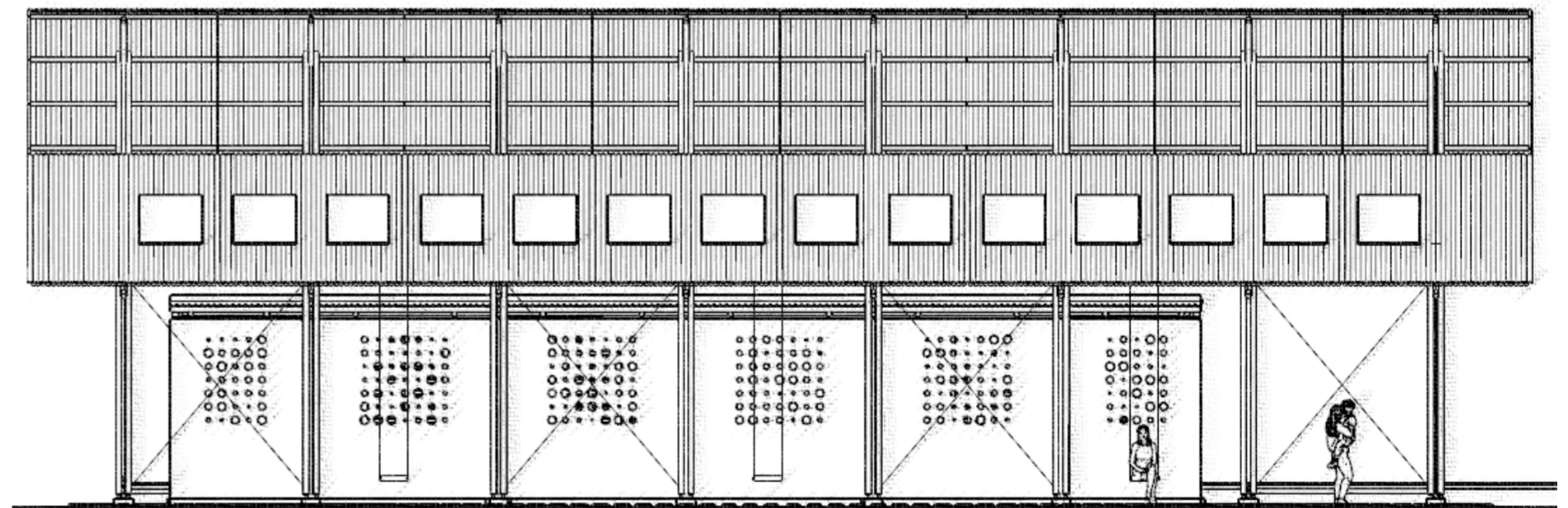
North



East



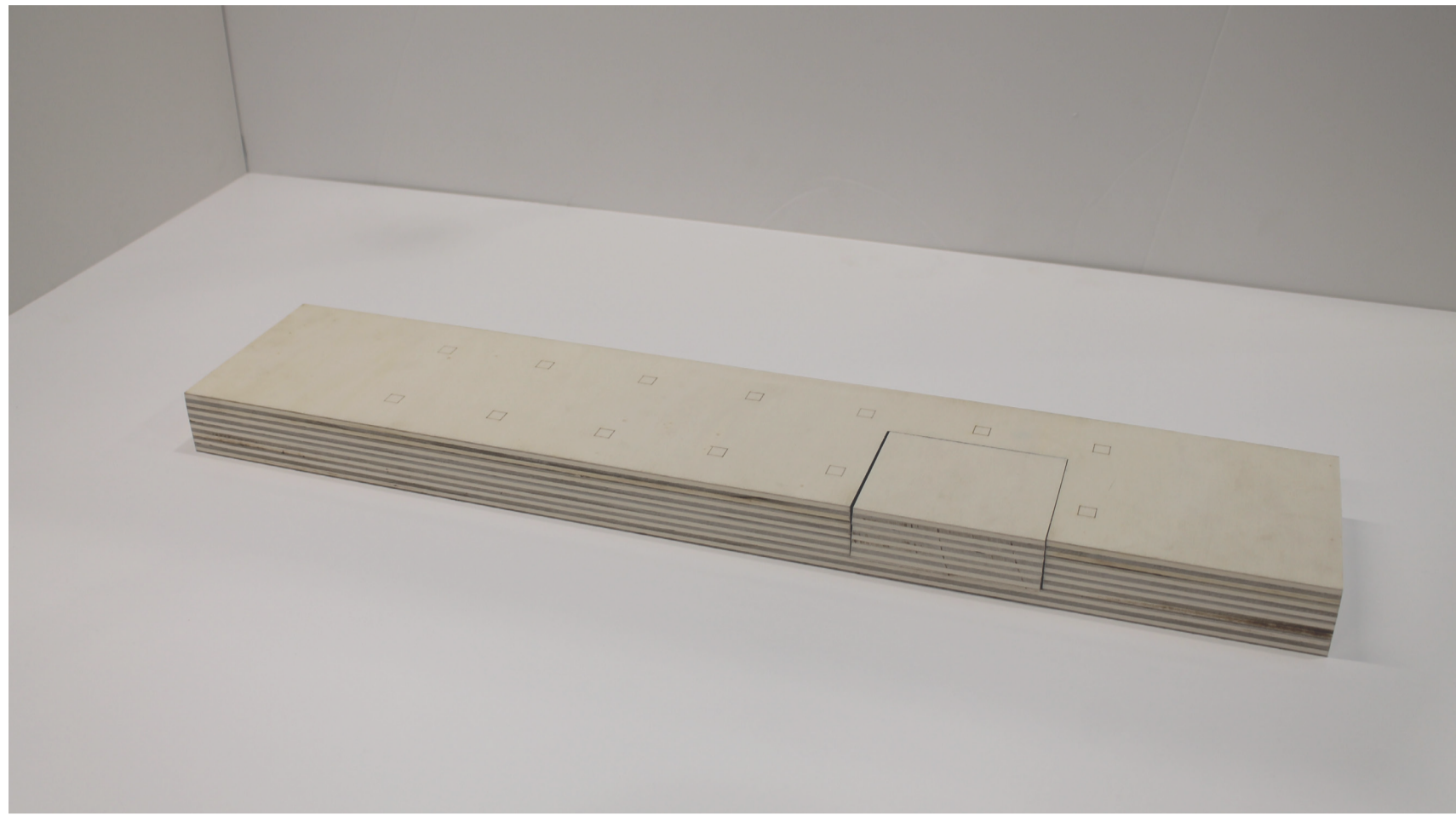
South



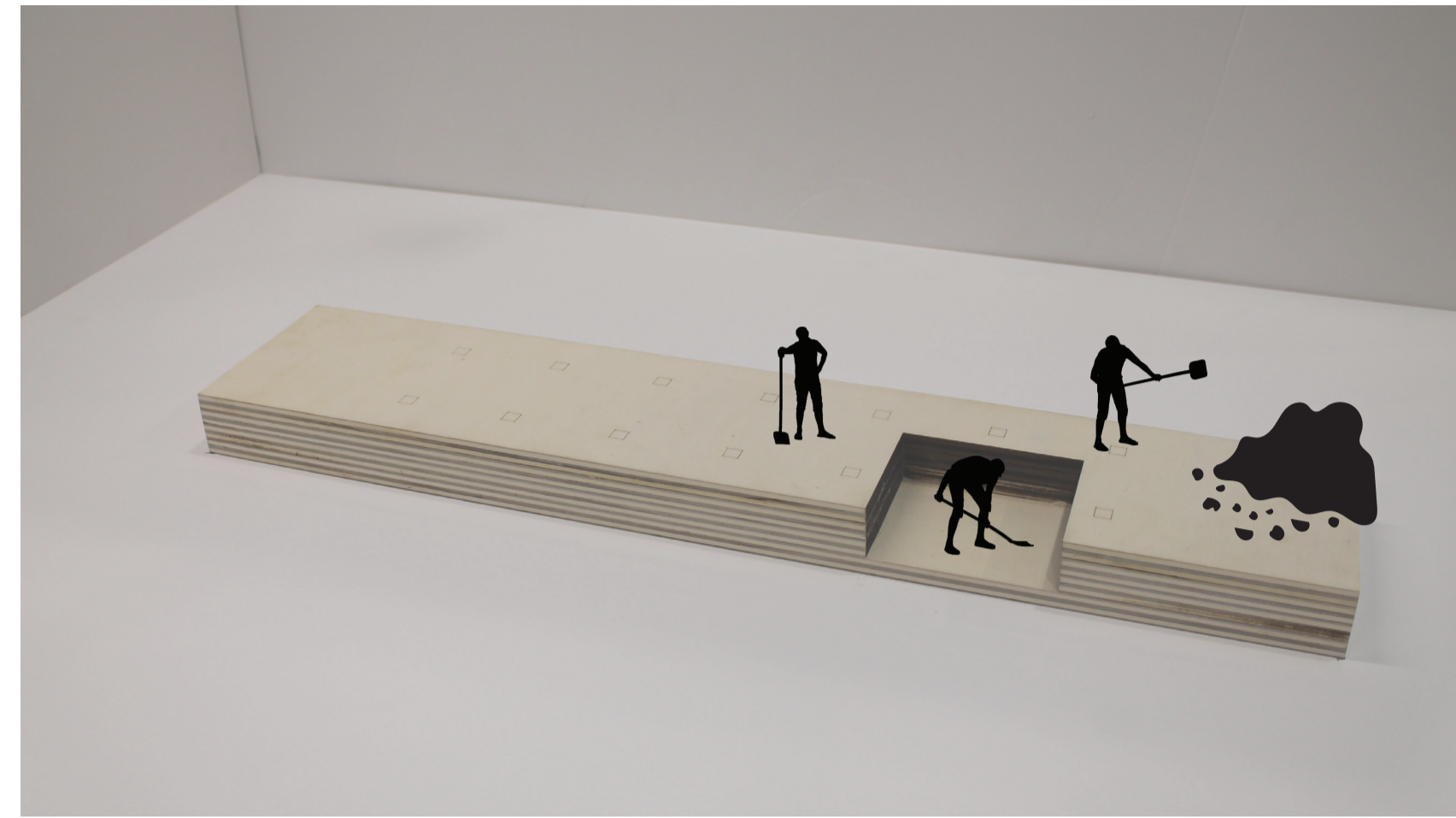
West

BETHLEHEM | MAIN BUILDING - CONSTRUCTION SEQUENCE

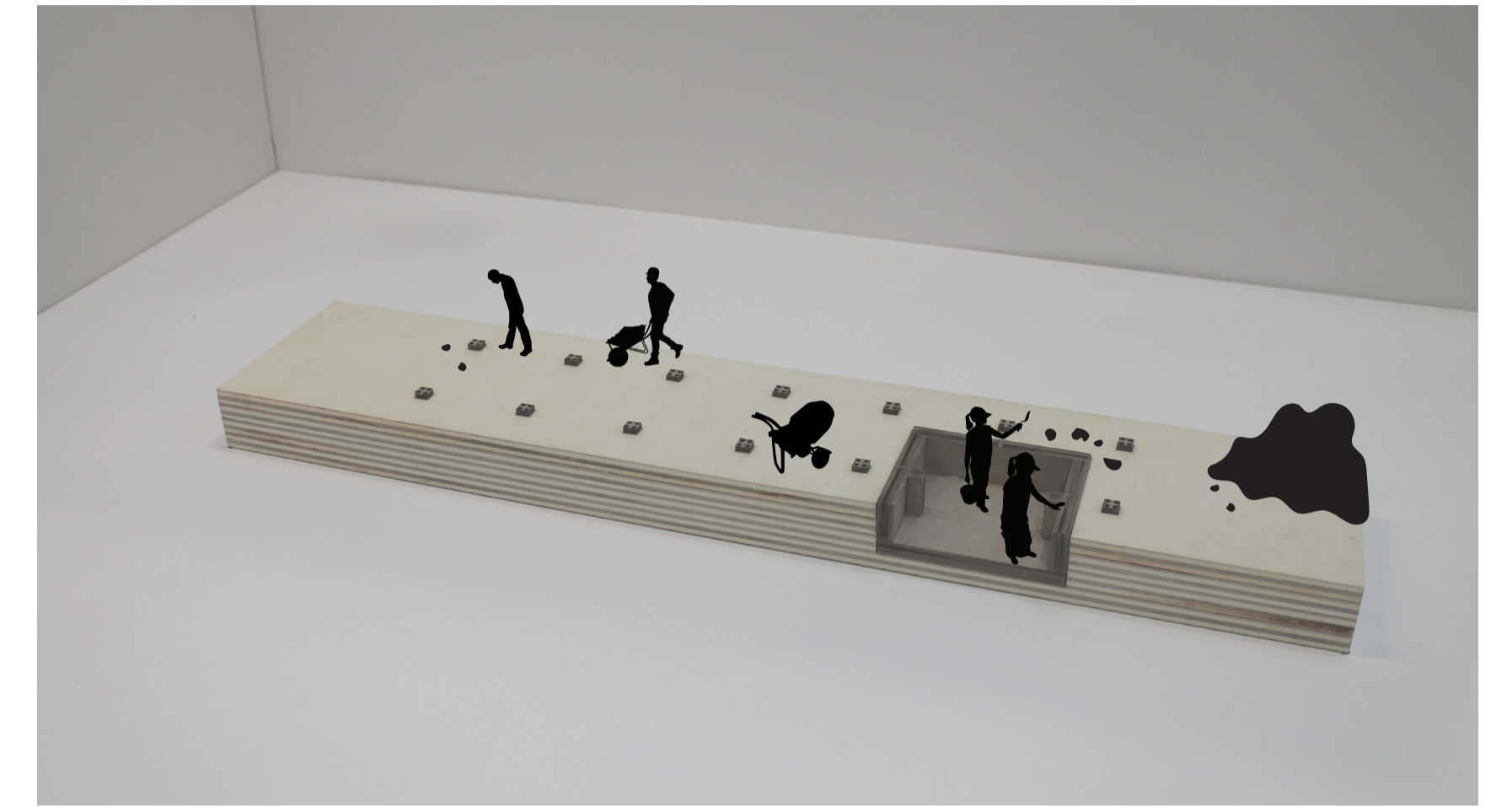
1. initial situation



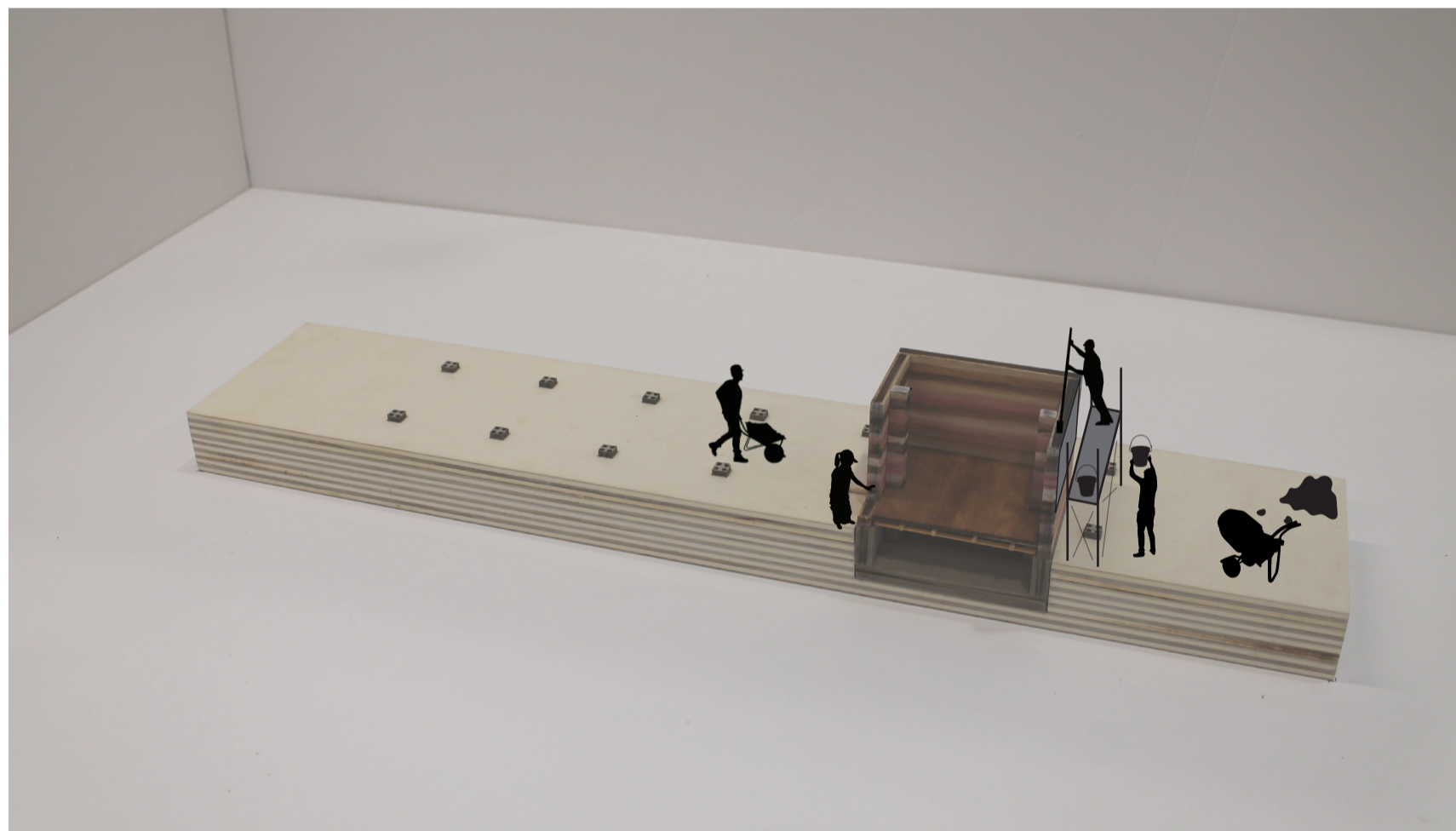
2. digging holes for foundation



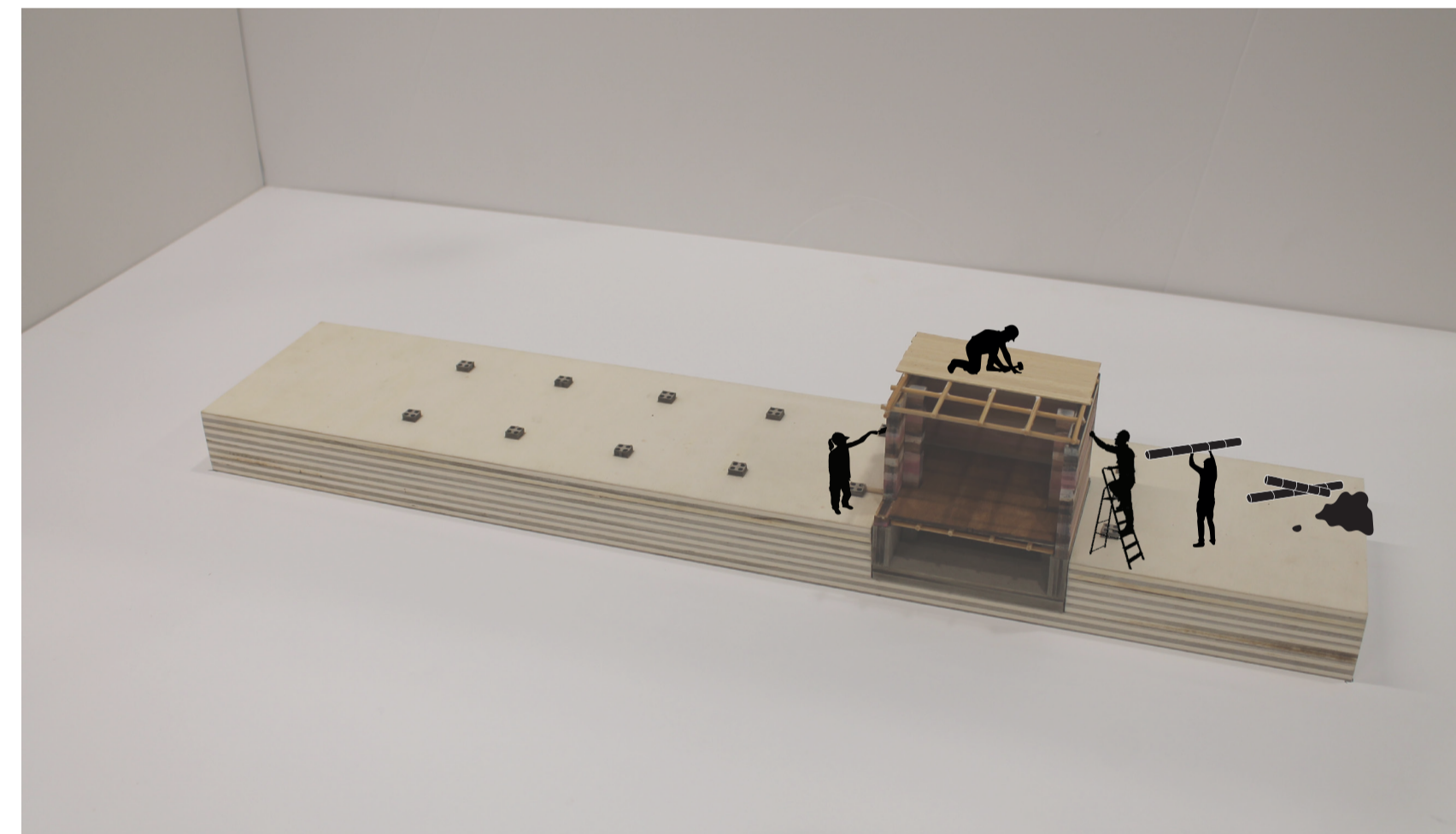
3. laying limestone / granodiorite cistern and foundation poles, bonded with lime mortar



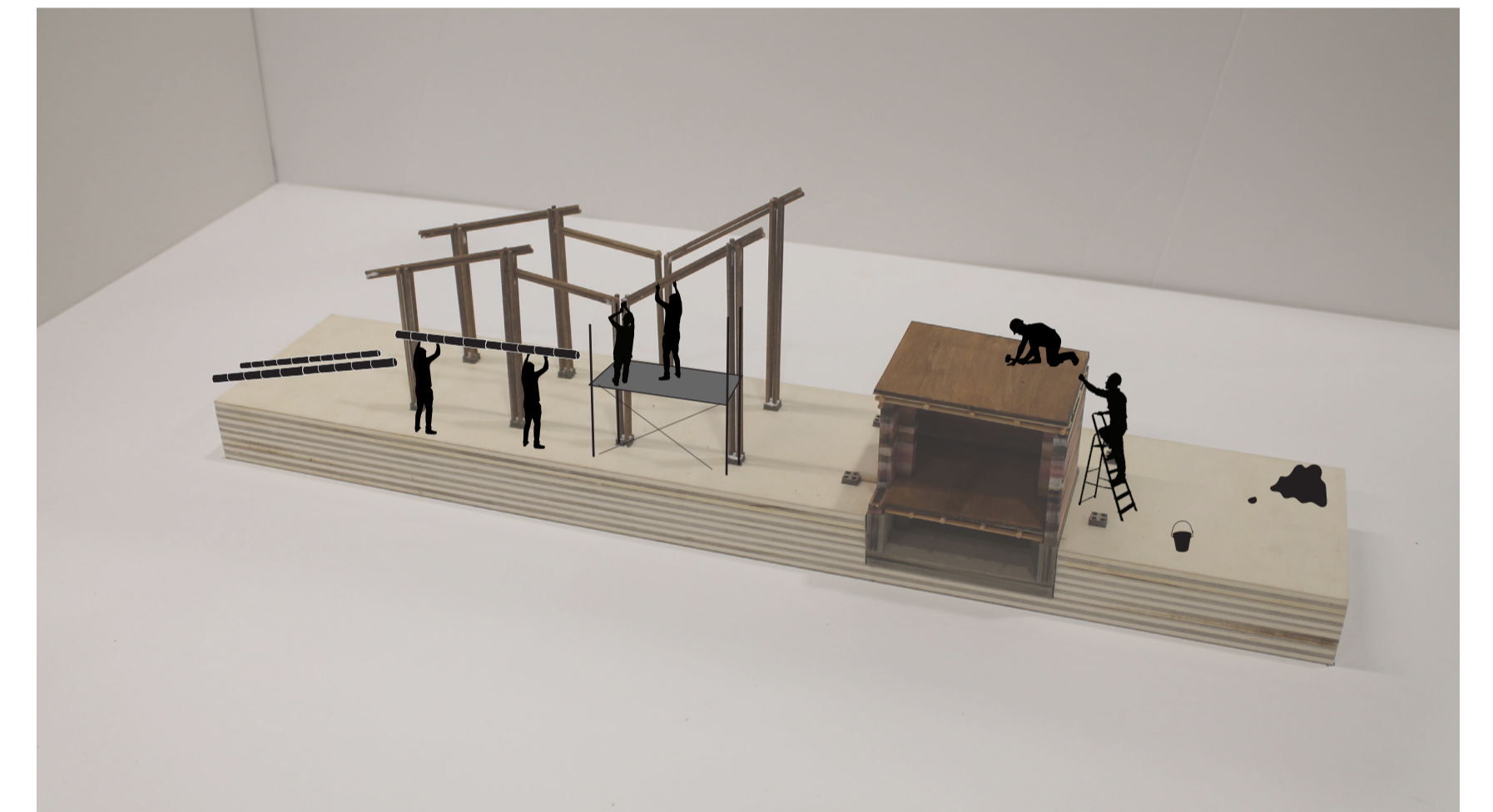
4. Ramming the earth walls and floor



5. laying roof and adding limewash to the rammed earth for waterprotection



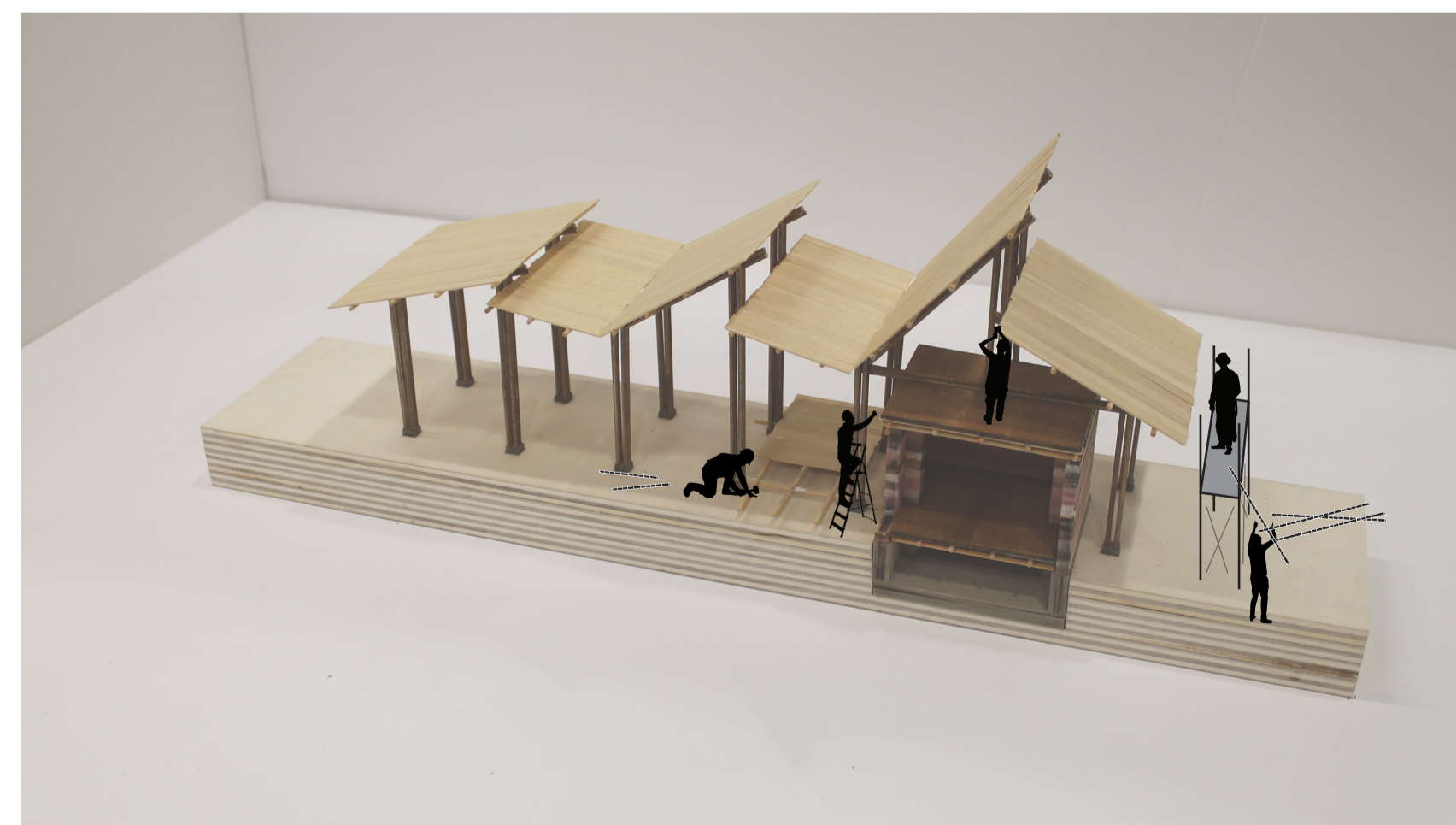
6. adding earth to the roof, finished with limewash. construction of bamboo columns and rafters



7. adding the bamboo purlins and rope bracing

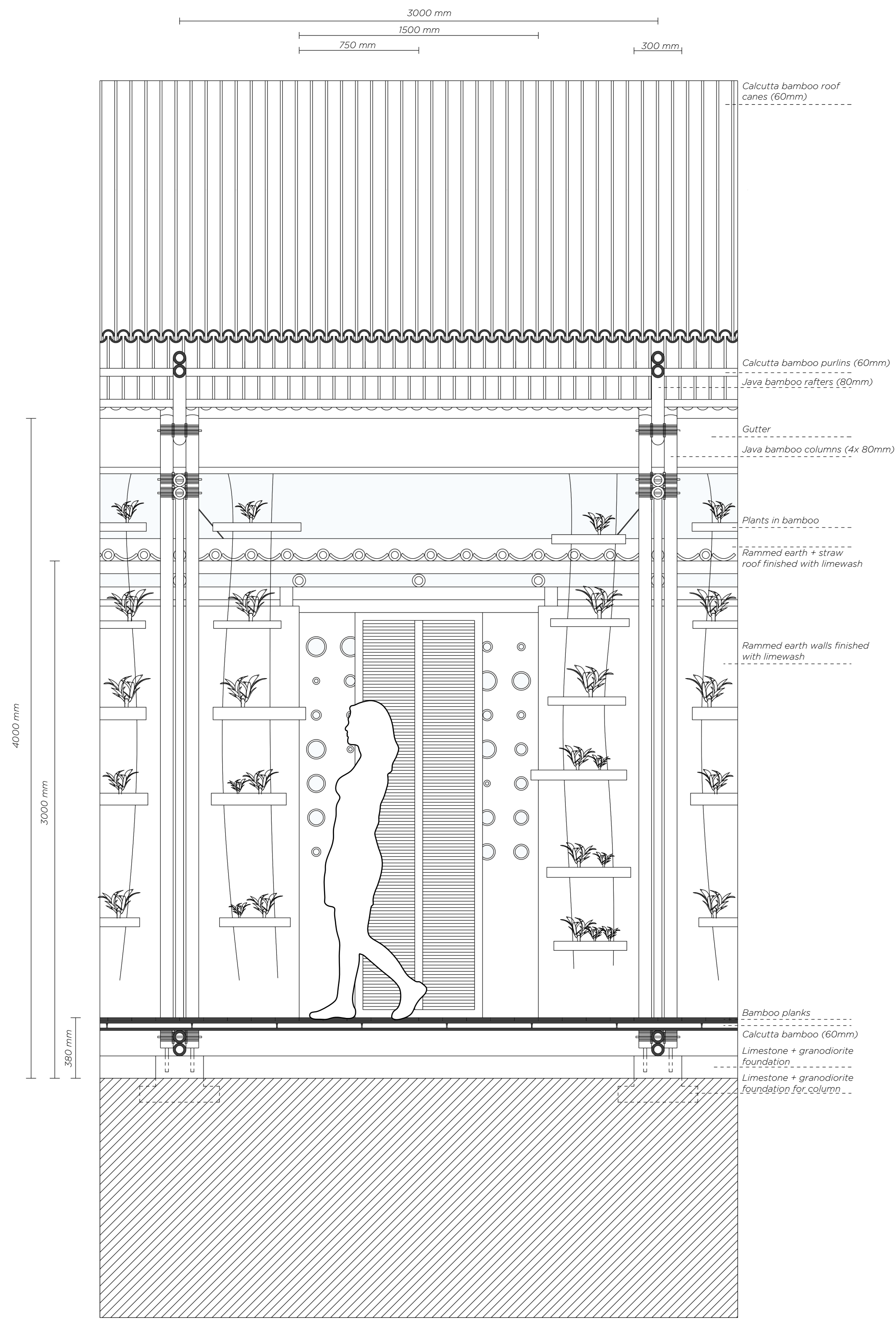


8. laying the roof canes and construction of the bamboo path

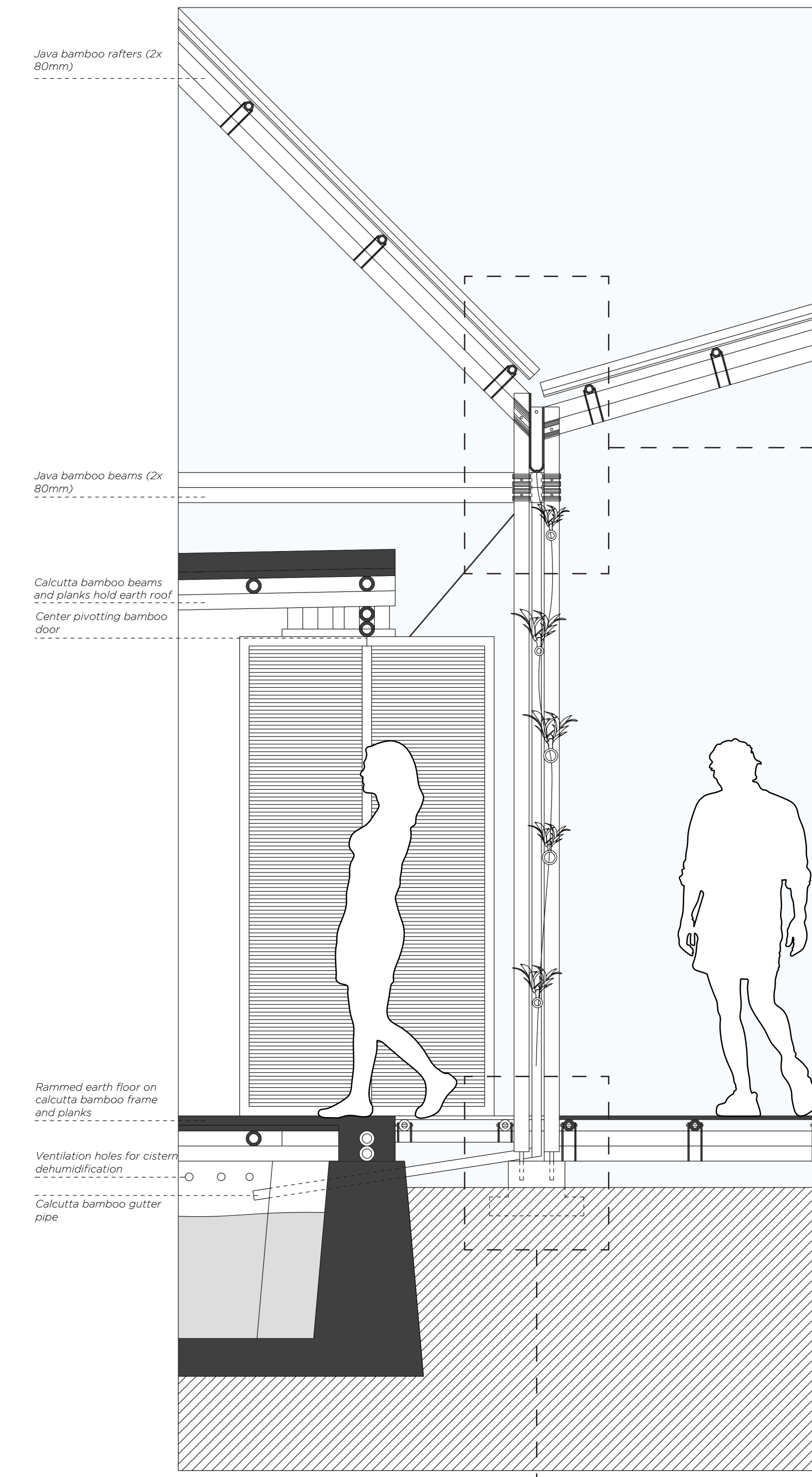


9. end result

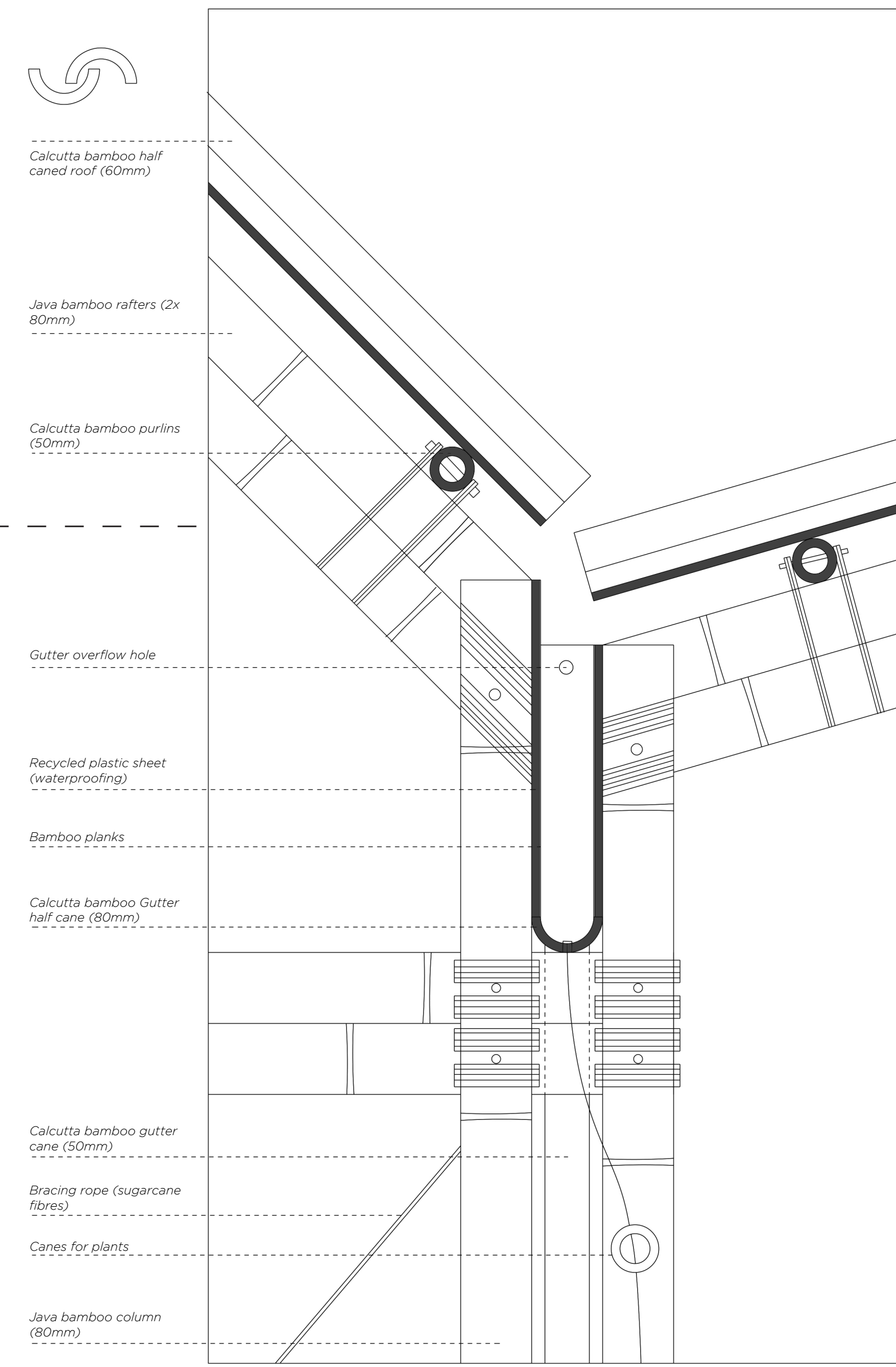




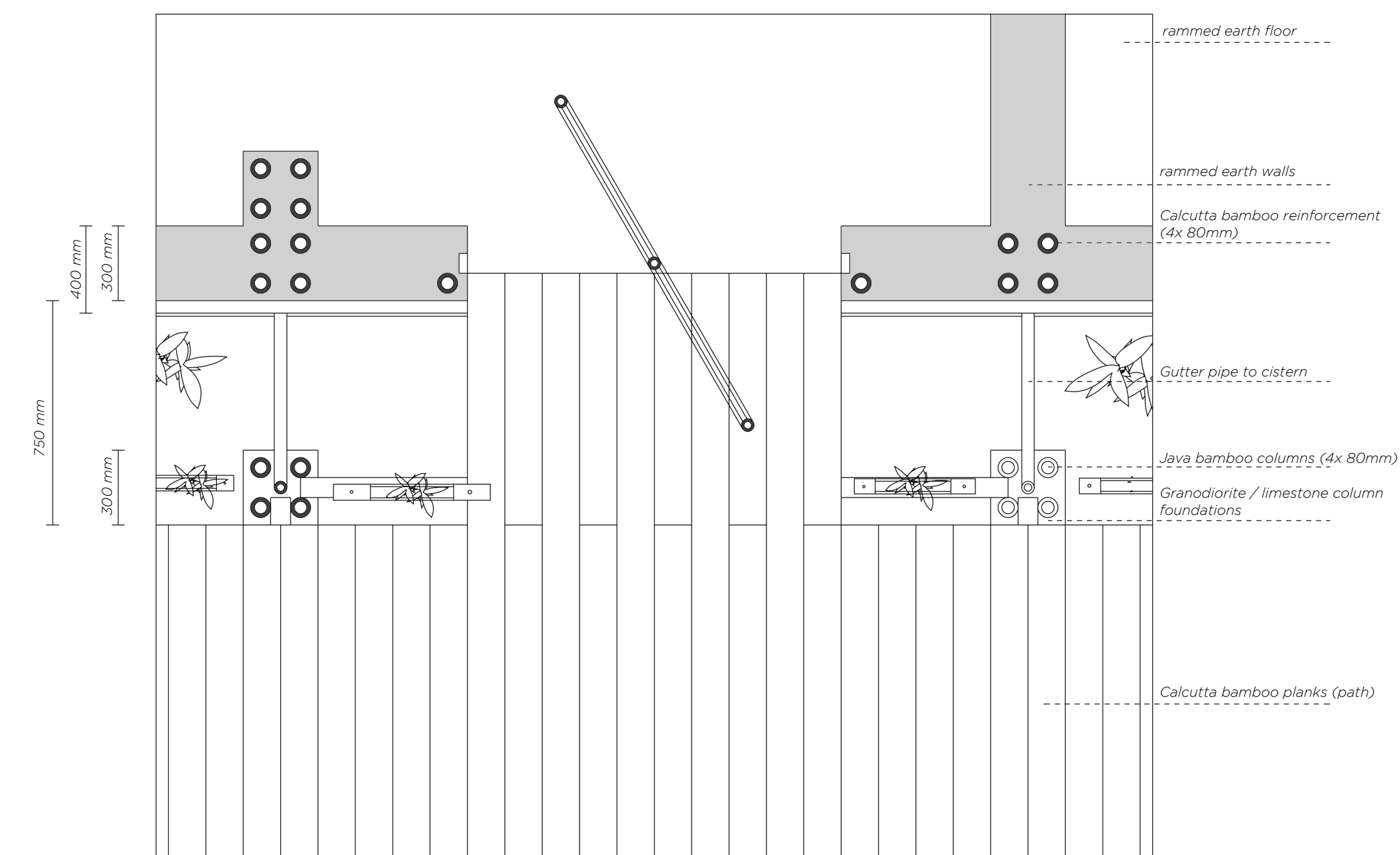
Fragment 120 front view



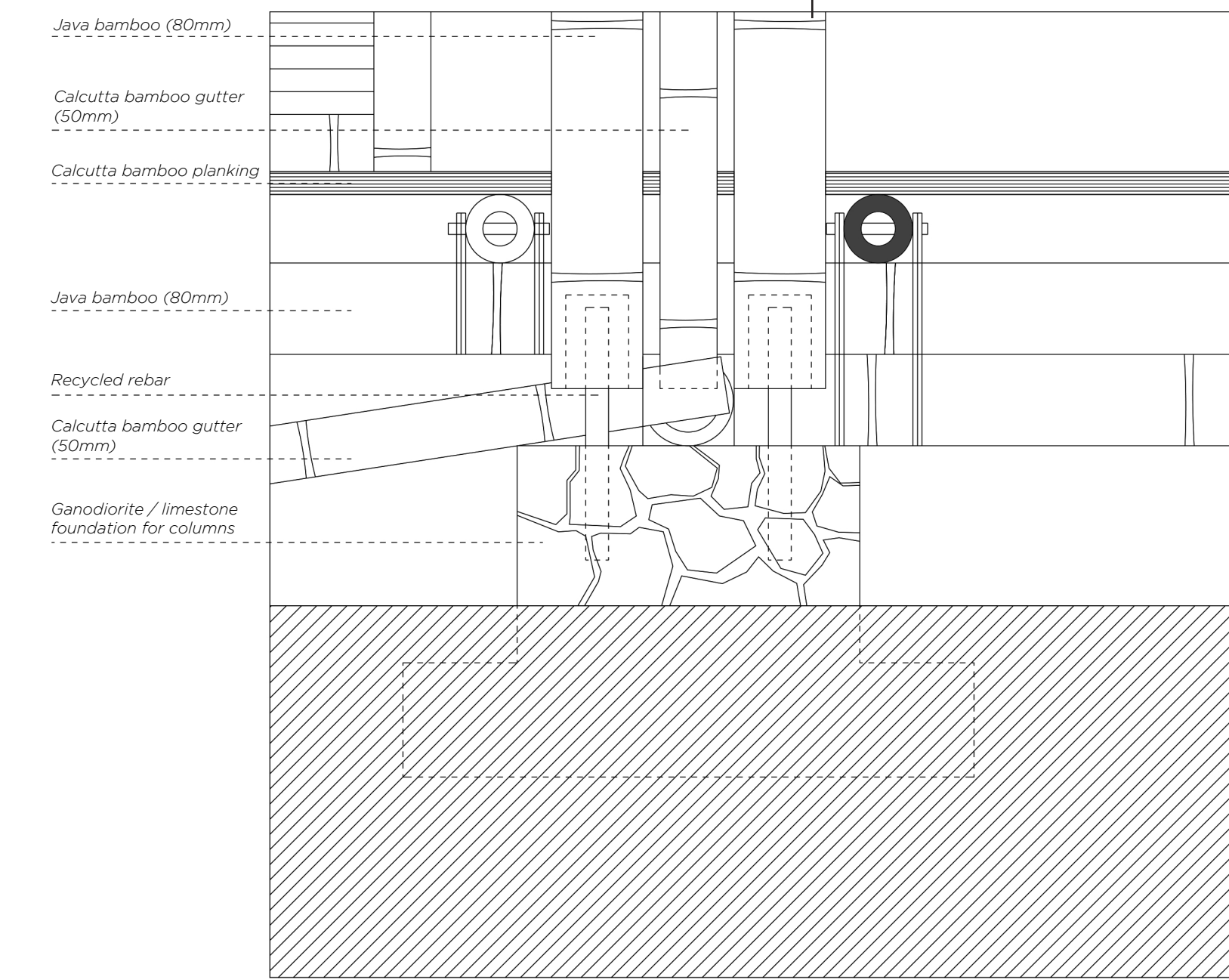
Fragment 120 section



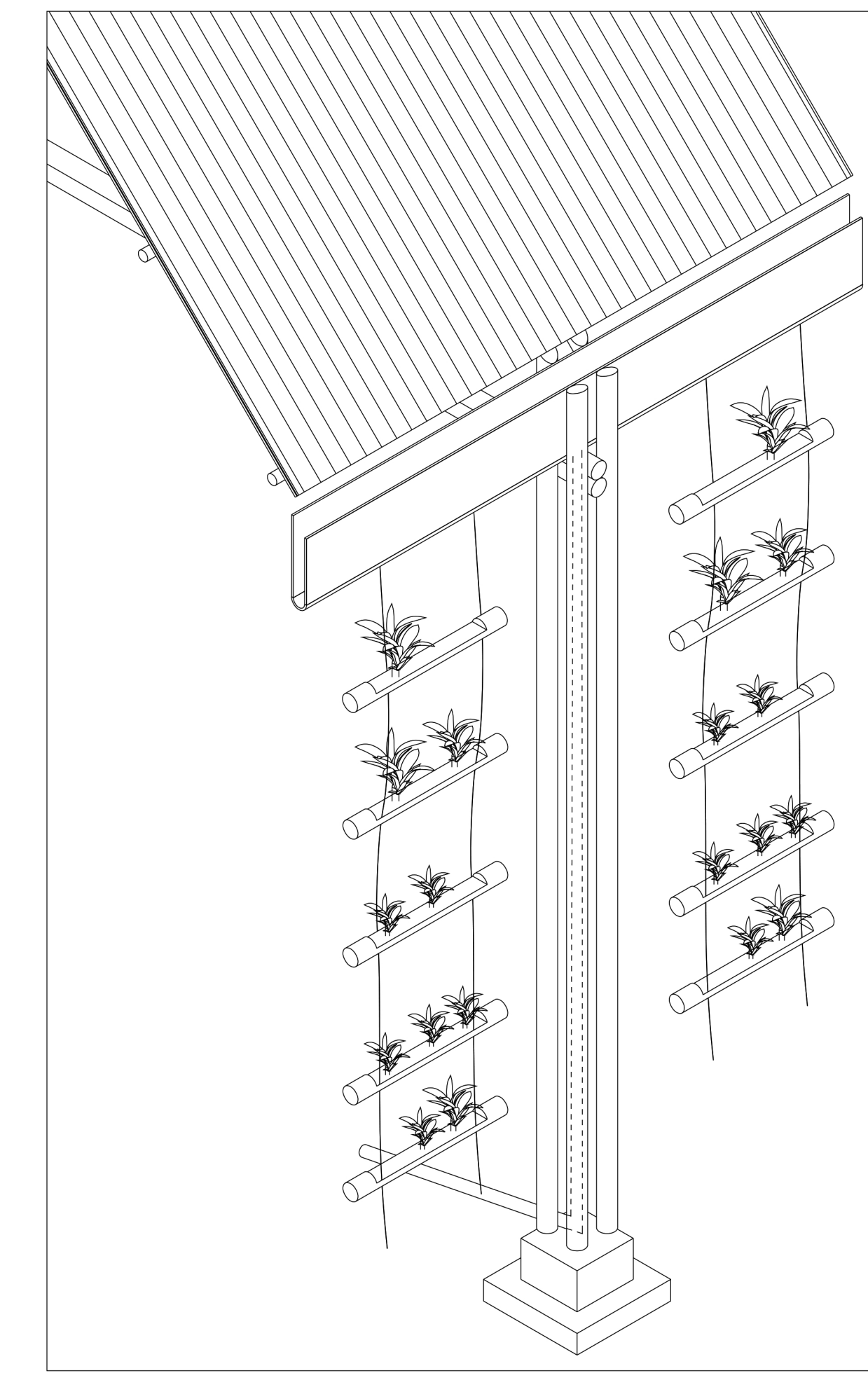
Detail gutter 15



Fragment 120 top view



Detail foundation columns 15



Isometry of gutter an plants

