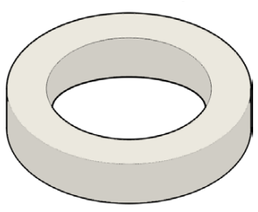
DLALA NURSERY

Rooted in the KwaZulu-Natal Lowlands, Dlala Nursery reimagines early childhood development through the lens of play, community and resilience. Named after the isiZulu word for “play,” the centre embraces learning through play as a transformative foundation for early years education. The design creates a nurturing environment where spatial boundaries between inside and outside dissolve, forming a continuous landscape of discovery. A shaded central courtyard, echoing traditional gatherings beneath a tree, anchors the scheme and invites storytelling, curiosity and connection. Modular classrooms loop around this heart, allowing for flexibility, ease of construction and future growth. Using earth bricks for thermal comfort, timber for shading and vibrant textiles to stimulate the senses, the design combines vernacular techniques with sustainable technologies such as rainwater harvesting, passive cooling and renewable energy. Inclusive and community-focused, Dlala’s layout encourages interaction across all users; children, caregivers and families through features like sensory nooks, accessible paths, shaded play zones and open gathering spaces. More than a preschool, Dlala Nursery serves as a civic anchor for learning and local development, offering a dignified, adaptable prototype for South Africa’s future ECD infrastructure.

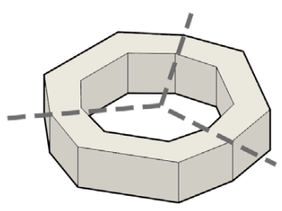
CONCEPT DEVELOPMENT

Circular Loop



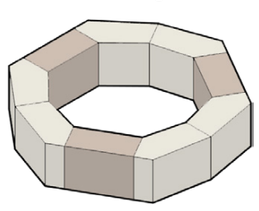
Massing begins as a circular loop form symbolizing unity of humanitarian act.

Dissection



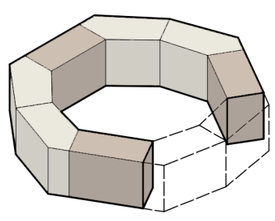
Dissect the loop into equal geometrical form for better construction.

Modular Segment



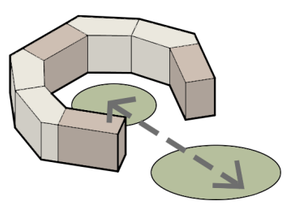
Slice up the form to create modular segments, each module corresponds to a program space connected in a loop.

Open Loop



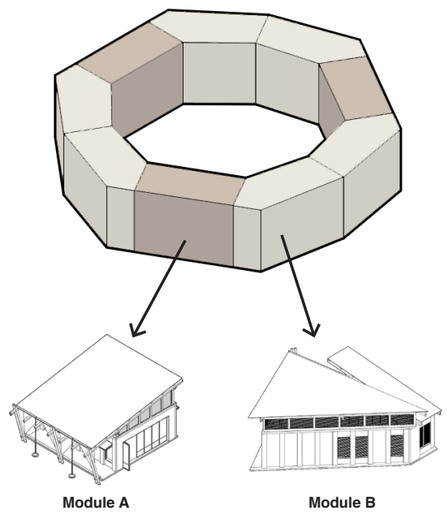
Break open the loop to enhance ventilation and circulation.

Final Scheme



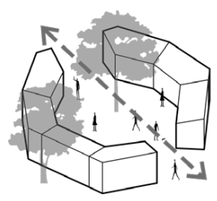
The building forms are connected to a central courtyard, which introduces a welcoming entrance and a landscaped playground at the front.

FLEXIBILITY OF MODULAR CONFIGURATIONS

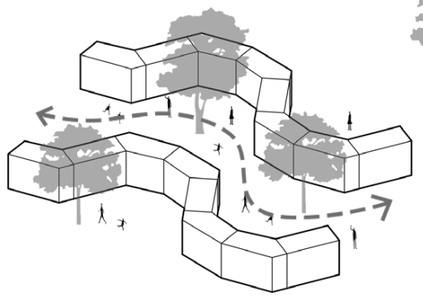


The building is mainly made up of two modular components which can be assembled and reconfigured to generate different arrangements to accommodate new programmes in the future.

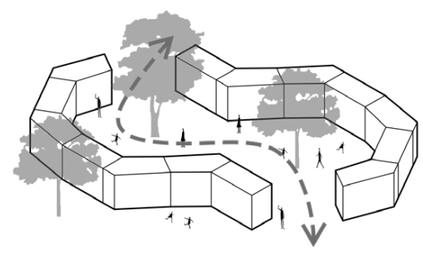
Arrangement 1



Arrangement 2



Arrangement 3



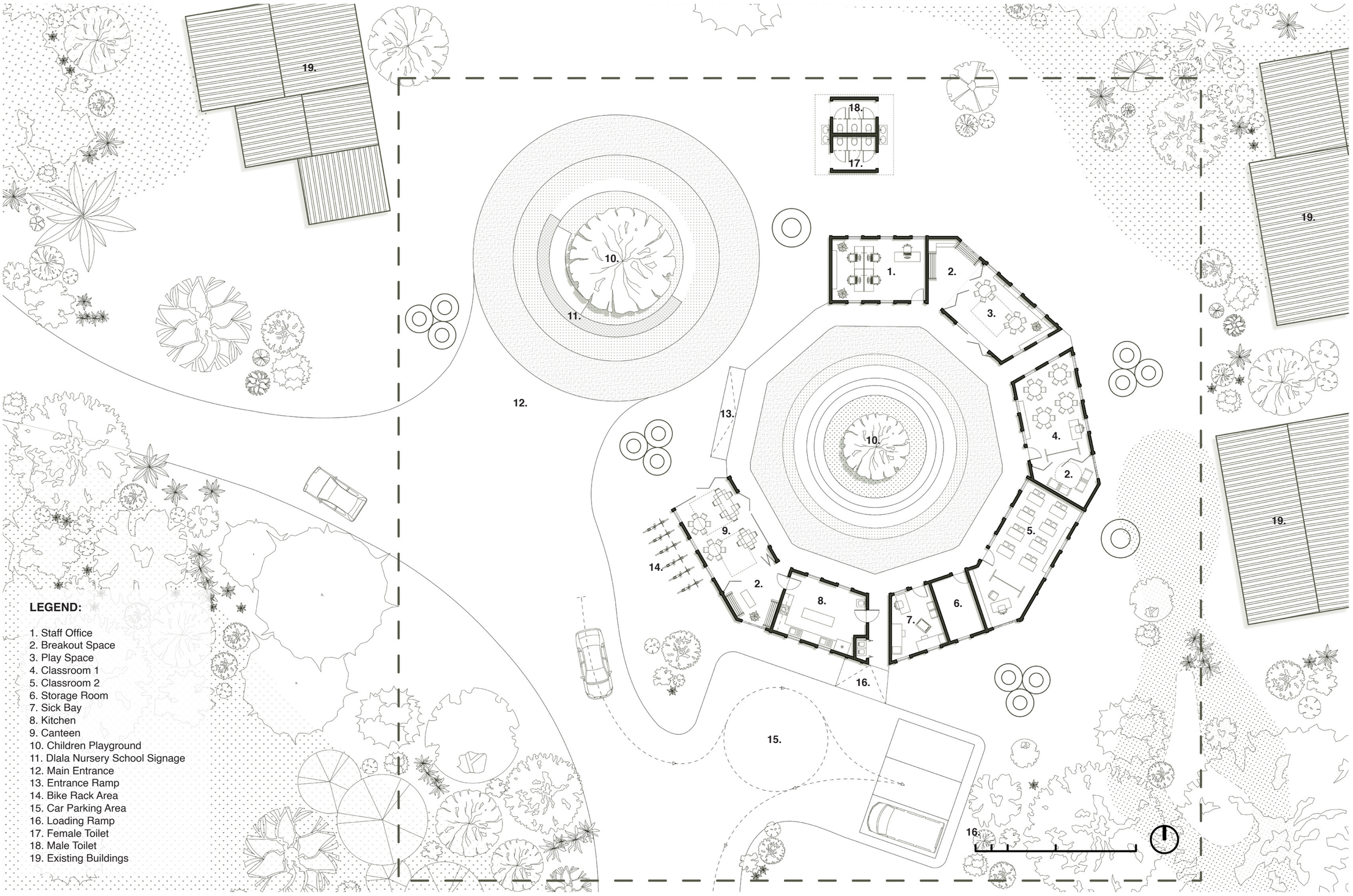








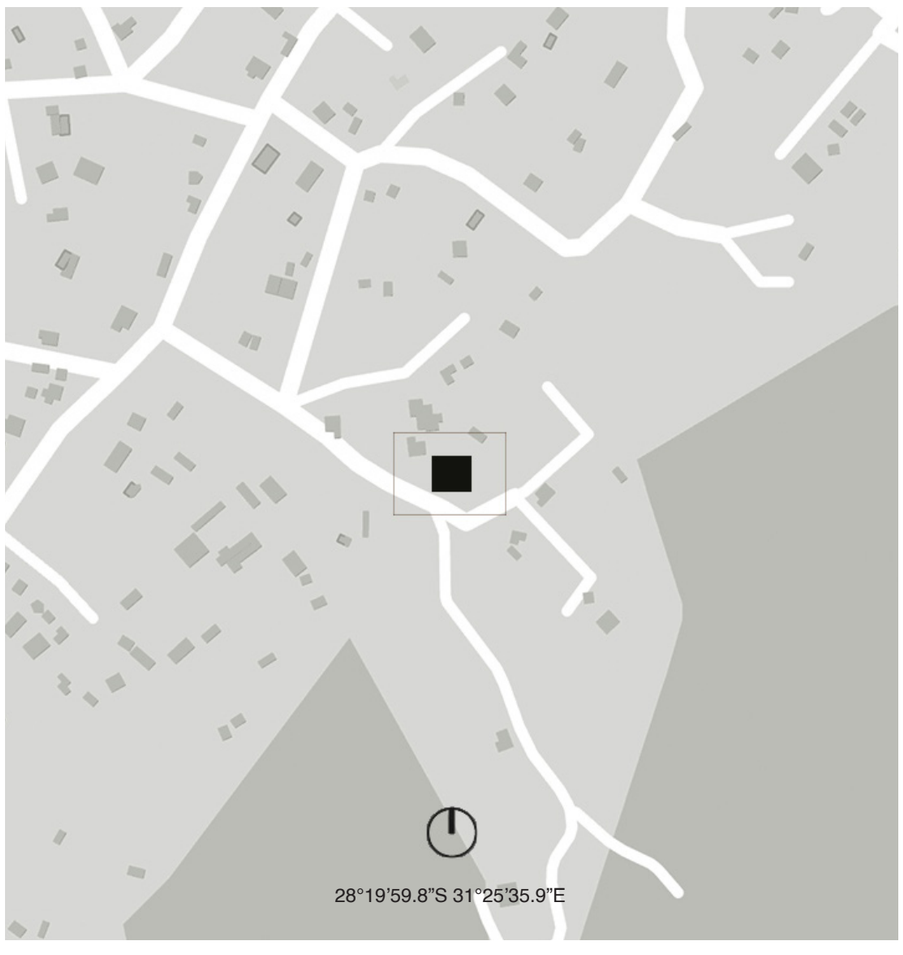
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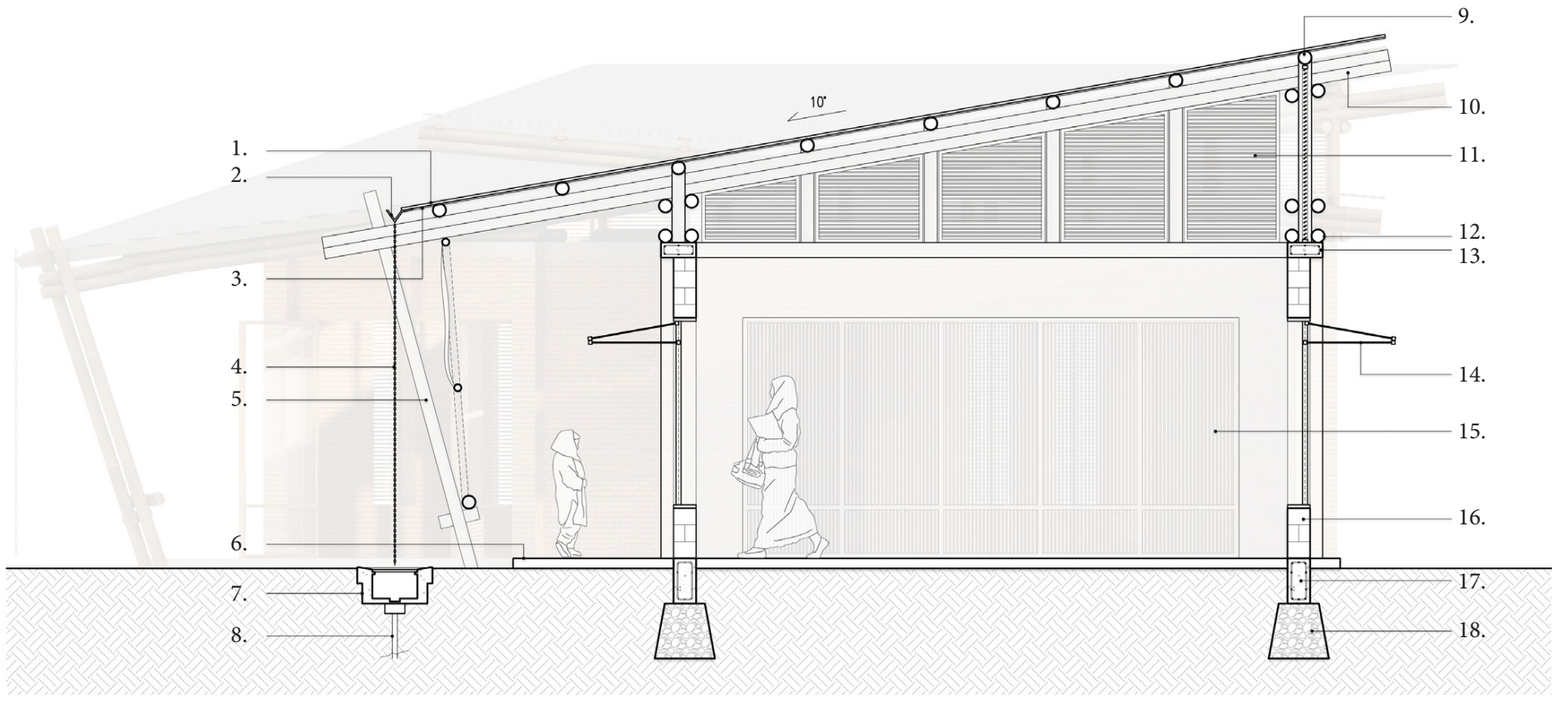
LEGEND:

1. Staff Office
2. Breakout Space
3. Play Space
4. Classroom 1
5. Classroom 2
6. Storage Room
7. Sick Bay
8. Kitchen
9. Canteen
10. Children Playground
11. Dlala Nursery School Signage
12. Main Entrance
13. Entrance Ramp
14. Bike Rack Area
15. Car Parking Area
16. Loading Ramp
17. Female Toilet
18. Male Toilet
19. Existing Buildings

LOCATION PLAN

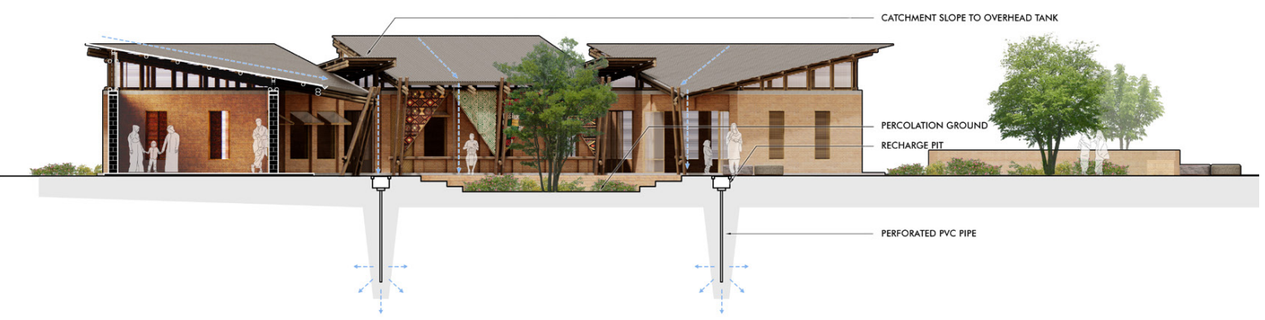


SECTION DETAIL



1. Corrugated zinc roof sheets at 10° slope for rainwater runoff
2. Powder-coated metal gutter in grey finishrunoff
3. Planked bamboo ceiling
4. Metal chain downpipe (exposed rainwater drainage element)
5. Bamboo pole column supporting a cantilevered roof extension
6. Concrete floor slab
7. Cast-in-situ concrete drain, serving as a rainwater catchment or groundwater recharge pit
8. Perforated PVC drainage pipe, embedded for water dispersion
9. Bamboo purlins, secondary members supporting roofing sheets
10. Bamboo rafters, 150mm diameter
11. Fixed bamboo louvres for passive ventilation
12. Bamboo roof beams, 150mm diameter, spanning between supports
13. Pigmented reinforced concrete top base (serving as coping or aesthetic band)
14. Timber-framed window with tpolycarbonate sheets, upward-folding operation
15. Timber-framed folding door with polycarbonate sheets
16. 225mm thick load-bearing earth brick wall
17. Pigmented reinforced concrete base, forming lower plinth band
18. Rock footing, natural stone foundation

SITE SECTION / RAINWATER HARVESTING FEATURE



Rainwater is collected using two main strategies. First, the courtyard surface is gently sloped to direct rainwater into two percolation ponds. Each pond features a borehole that is approximately 5 meters deep, into which a slotted PVC pipe is installed. This pipe allows the collected water to gradually filter into the soil, helping to replenish the groundwater and restore the nearby well. Additionally, gutters can be installed along the edges of the roof to channel rainwater directly into a storage tank located near the restroom, making it available for future non-potable uses.

FRONT ELEVATION



KEY COMPONENTS AND MATERIALS

