



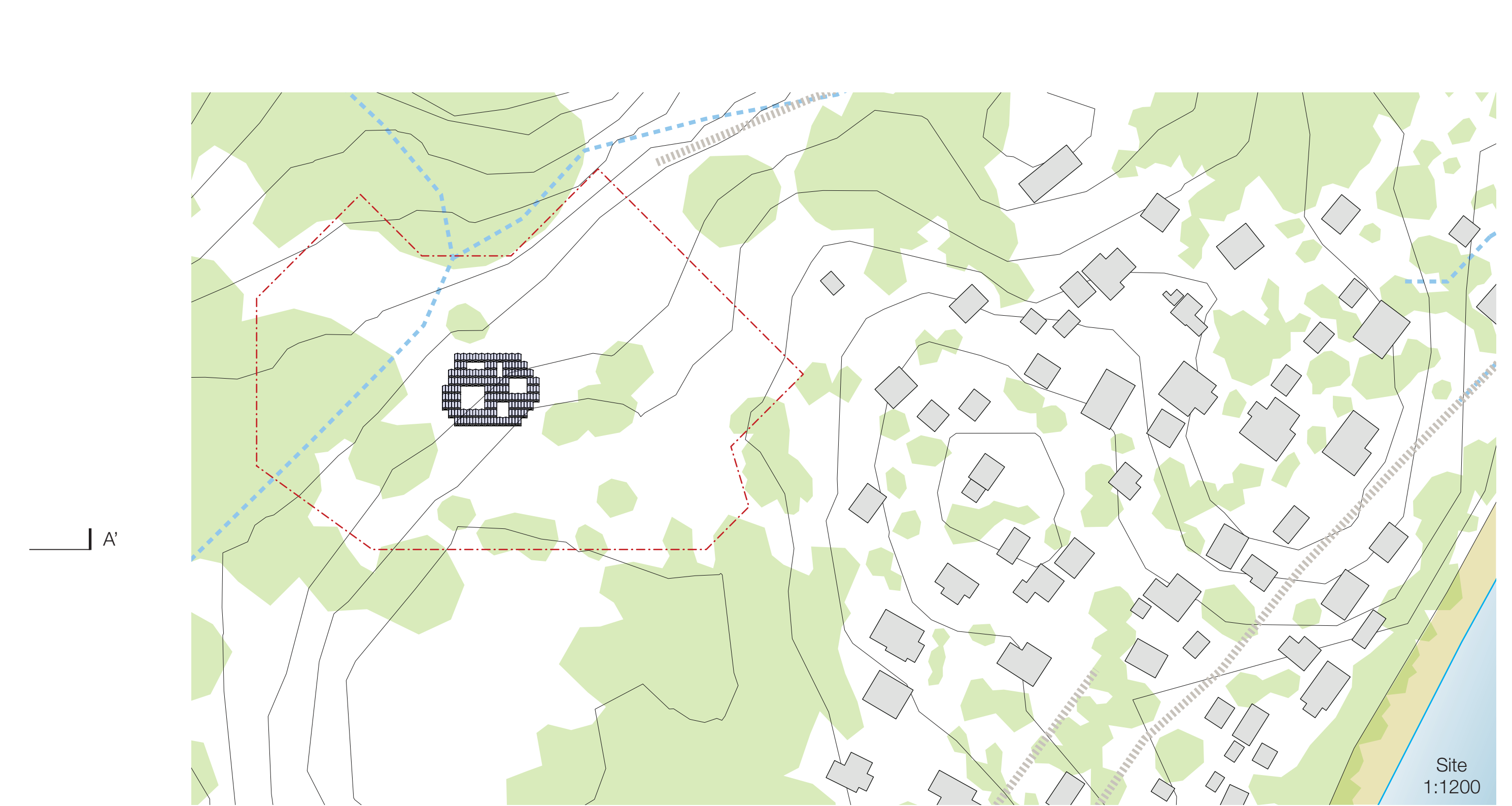
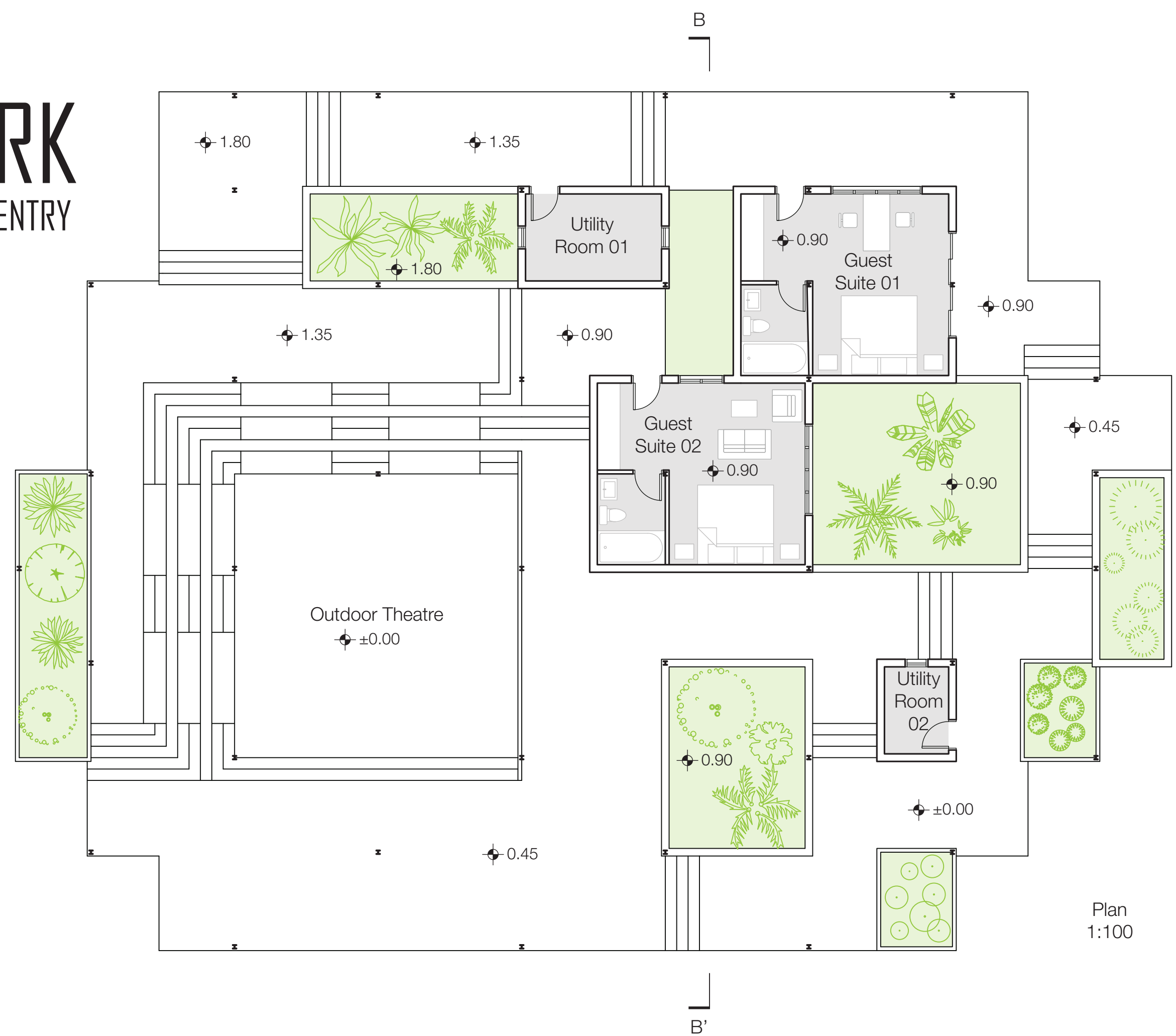
# CRISPY PARK

## LAGI2025 FIJI COMPETITION ENTRY

The proposed solar array and community space installation in Fiji is designed to minimize disruption to natural ecosystems while delivering renewable energy and communal benefits. The project's footprint, measuring approximately 30x22.7 meters, is intentionally compact to preserve existing vegetation, with no trees slated for removal. Three clusters of trees surrounding the site will remain intact, maintaining habitat continuity and reducing soil erosion risks. The elevated PV array, positioned on steel space trusses, allows sunlight to reach the ground through strategically hollowed sections,

supporting understory plant growth in landscaped areas below. Native species will be prioritized for planting, fostering local biodiversity and creating microhabitats for insects and small fauna.

However, certain aspects of the installation require careful consideration to mitigate potential ecological impacts. During construction, soil disturbance from foundation work and material delivery could temporarily affect soil structure and nearby root systems. To address this, the prototyping phase will occur off-site, minimizing on-site construction errors and reducing the duration of ground-level activity. Prefabricated components will be assembled with precision in controlled factory conditions, limiting the need for heavy machinery at the



final location. Additionally, permeable stone paving and gravel pathways will be used to promote natural water infiltration, mitigating runoff that could otherwise alter soil composition or harm adjacent vegetation.

The PV array's shading effect, while partially offset by its hollowed design, may still influence light-dependent species in the immediate area. To counter this, the landscaped zones beneath the panels will incorporate shade-tolerant native

plants, ensuring ecological continuity. The design also avoids impermeable surfaces in planting areas, allowing rainwater to nourish greenery and reducing the risk of localized drying. Furthermore, the structure's cyclone-resistant engineering—featuring truncated corners and wind-optimized geometry—prevents debris displacement during extreme weather, safeguarding surrounding ecosystems from secondary damage caused by structural failure.

Finally, the project's emphasis on local material sourcing—such as stone, timber, and vegetation—reduces transportation-related emissions and supports ecosystem preservation by avoiding invasive species introduction. By integrating community stewardship into maintenance protocols, the installation ensures long-term ecological oversight, aligning renewable energy goals with the preservation of Fiji's natural landscapes.

