

KAUKAUWA POWER PAVILLIONS

Kaukauwa Power Pavilions is conceptually based on the manner in which energy moves and can be stored. The pavilion is an acknowledgement to Fijian culture, history, and environmental context. This multi-functional structure creates a modern amalgamation of culturally significant Fijian forms: Bure houses, Tanoa bowls, and Lapita pottery. Their unified composition results in a pavilion-like structure, acting as an outdoor hallway that mirrors the energetic movement of the community, water, sun, and spirit, charging these energies towards one main point. This 'charging point' is designed to be a social amphitheatre that acts as both a gathering space for the community and an outdoor resting space. The design of the structure invites water, taking advantage of the extended roof space to direct water down curtains of rain chains with cups, inspired by Lapita pottery. The main hallway is a gesture towards spiritual energy and movement by stretching the architecture of a bure house form as a grounding force for the community. The roofs connect to a series of lime-washed bowls resembling scaled-up tanoa bowls to filter water for underground storage. The ribs of the bowls are reserved for solar panels, which compensates for just over the required 75 kw of energy. [modularity] The design implies modularity, allowing for expansion to occur with its form and construction in any direction linearly. If the need for solar energy and water retention increases, the design is flexible to accommodate those needs without compromising concept, beauty, or cultural significance. Social spaces within the hall structure and at its end and exterior, and a connection to the walking paths and agricultural fields just beyond the selected site. The main materials consist of local bamboo and timber for the construction of the main structures, lime wash for the roofing shingles, concrete footings, metal rain chains, local rock, coral or stone for pavings, and photovoltaic solar panels more specifically hantile solar roof tiles or standard 1x2 meter photovoltaic panels. The construction of these materials and other materials meaning energy, strength or resilience, is a root to this design proposal. The translation of the word gives way to drawing connections to where strength can originate from in the fiji island nation culture.



BURE STYLE



FLATTENED BAMBOO



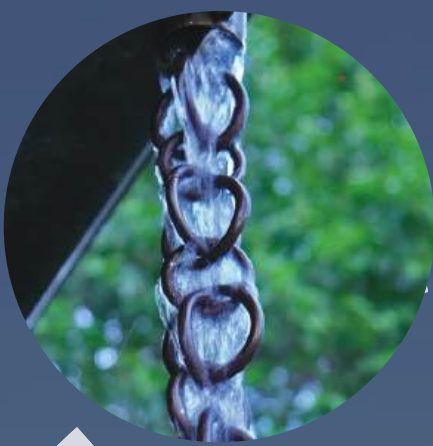
TANOA



LIMEWASH



LAPITA



RAINCHAIN

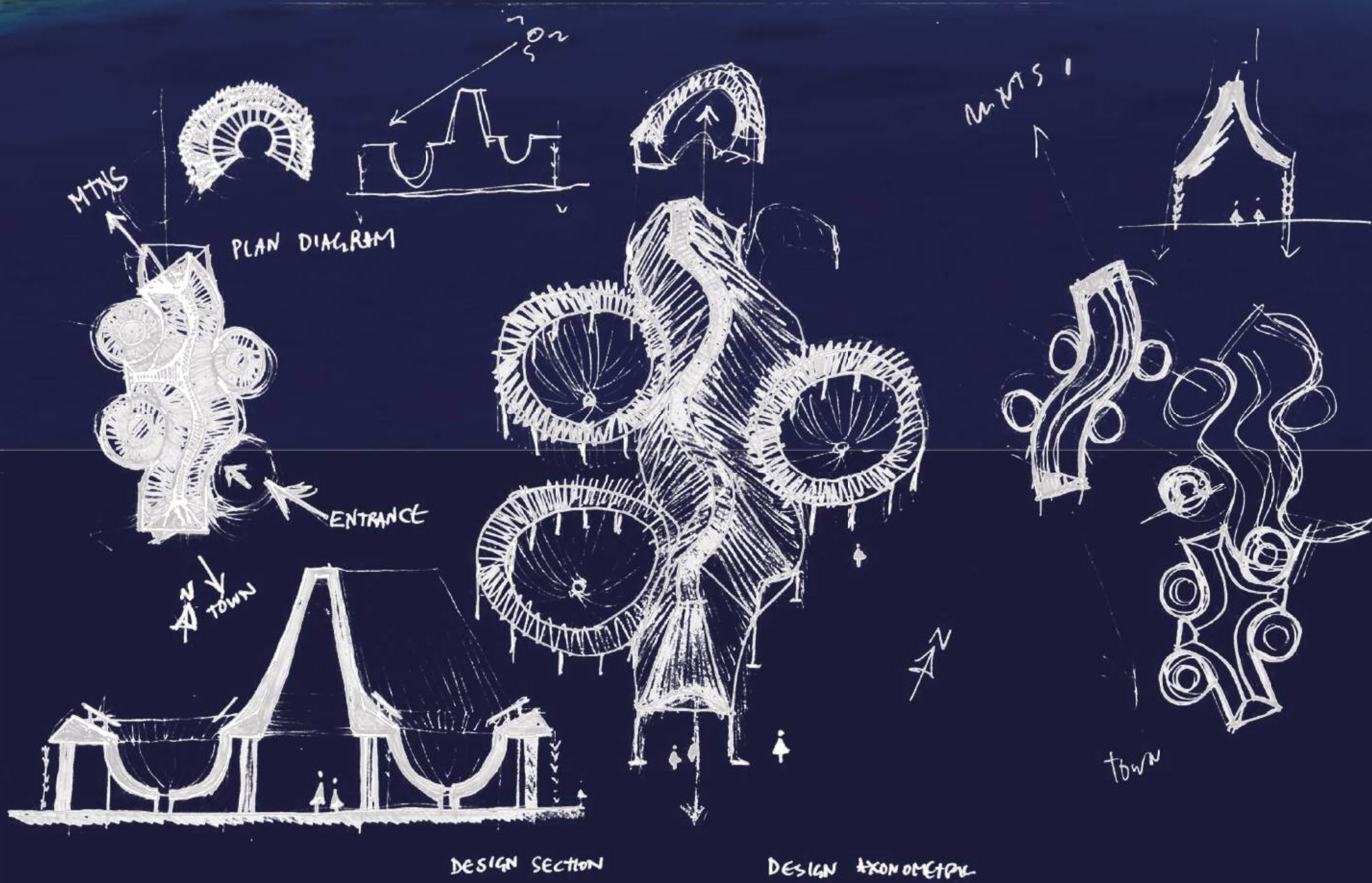
PREVAILING EASTERN WIND

PRIMARY WATER SHEDS

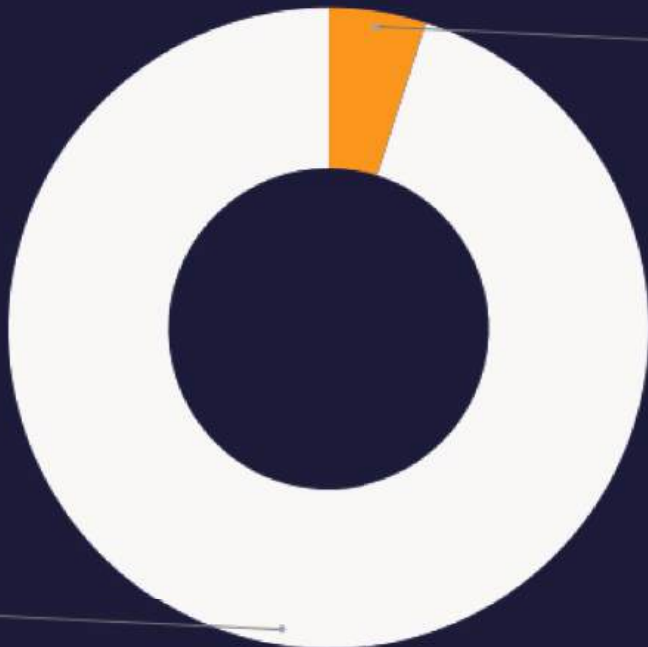
K.K.P SITE

TREELINE

STORMWATER CHANNELS



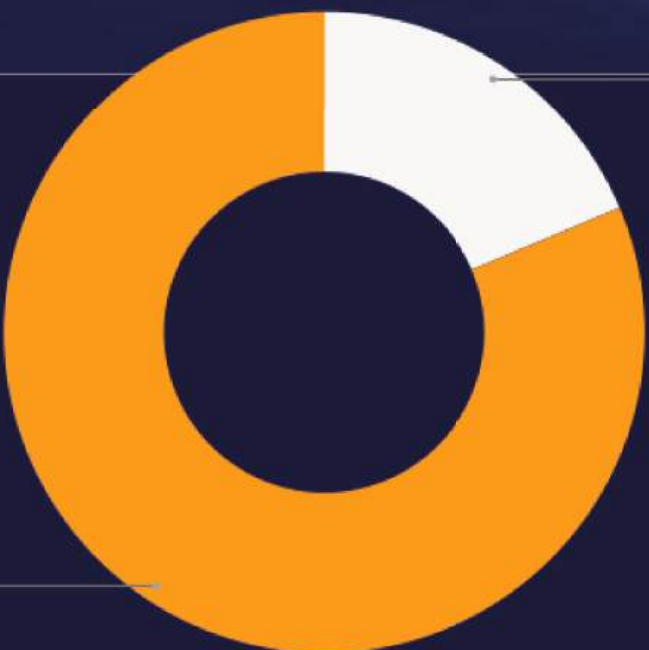
TOTAL AREA 14618 SQ M



720 SQ METERS USED FOR SOLAR

5% of total 14,618 sq meters used to meet 75+KW demands

3,924,930 LITRES COLLECTION CAPACITY



77% MORE WATER COLLECTED & STORED