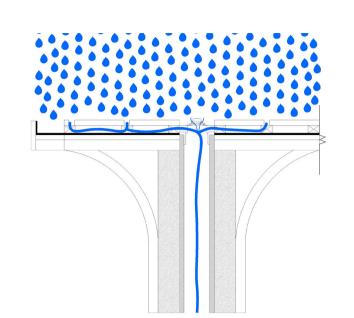
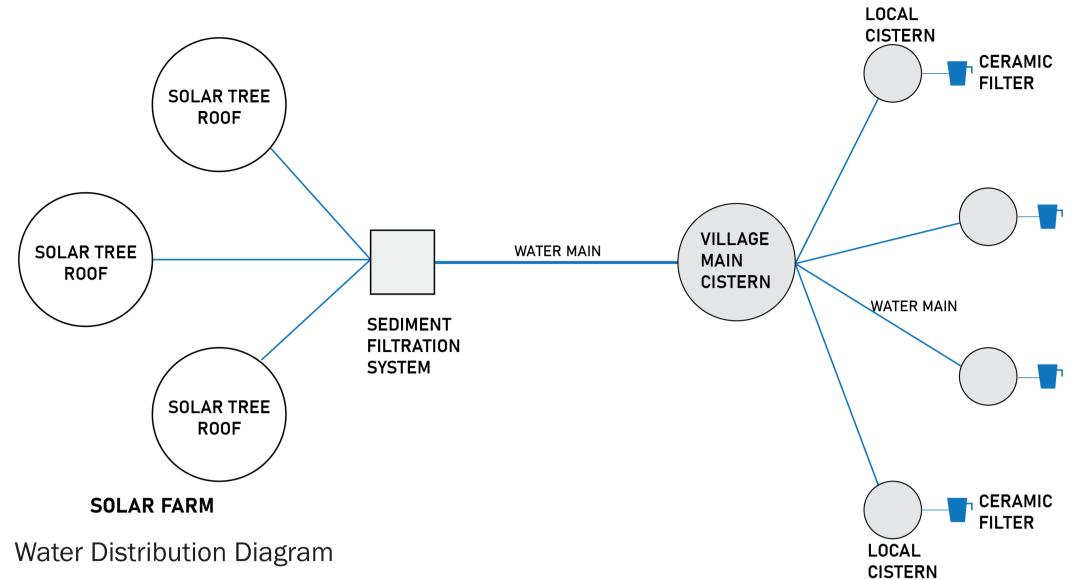
Rainwater Collection

The decentralized rainwater distribution system extends beyond the site, aiming to provide residents with easy access to water and ensure uninterrupted service to the village. Water collected from the Solar Farm will initially pass through an on-site sediment filtration system before moving to the village's main cistern. From there, it will be distributed to smaller, localized service cisterns strategically placed throughout the village to ensure most residents are within 50 meters (a one-minute walk) of a water source. Each local cistern will be equipped with a ceramic filter, providing residents with clean water for domestic consumption.



Water Collection Detail



COMMUNITY SPACE

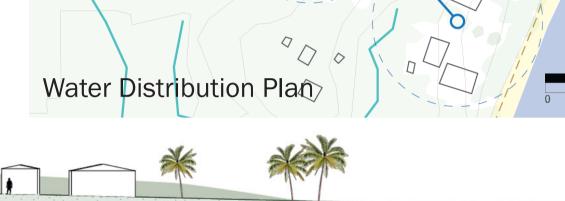
WATER PIPE TO MAIN VILLAGE CISTERN

ELECTRICAL TO BATTERY BARN



LOCAL CISTERN

WATER PIPE TO



WATER SUPPLY LINE

MAIN SERVICE TANK — (20,000 gal CAPACITY)

LOCAL SERVICE TANK

50m RADIUS (1-min WALK)

volume (m³) 264.8 225.4 263.3 123.5 68.7
225.4 263.3 123.5
263.3 123.5
123.5
68.7
50.2
34.7
50.2
54.0
78.7
101.9
137.4

Village Section

The Solar Farm is projected to harvest 1453M³ of rainwater annually. As the precipitation in Fiji varies drastically during the course of a year, the seasonal variation of harvested rainwater is pronounced (See the Table). It is the highest in the wet months (January through March), and lowest in the dry months (May through September). The monthly average is 121M³. The disparity of seasonal rainfall requires large capacity cisterns so that rainwater harvested in the wet season could be carried over for extended periods for use in the dry season.



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