

Proposal by Mel Yoo 2nd-year Doctorate of Architecture Student University of Hawaii at Manoa Class of 2025

The main objective of my ARU design is to provide a passive, near net-zero/ low energy building for Kauai's climate conditions. The ARU exterior is shaped by Kauai's Summer + Winter Sun, frequency of rainfall, and the Northeast tradewinds. The birth of the name "Wrapped" comes from the wood beamsturned-vertical louvers that act as rain diverters, which eventually gets absorbed by the soil, or feed directly into a concrete bioretention planter.

Moreover, the integration of rainwater harvesting systems at the rear, and solar panels on the Southern roof ensures a reduced carbon footprint, aligning with the philosophy of sustainable living. Wrapped is a testament to the synergy between climate-conscious design and the rich tropical milieu of Kauai.

The total square footage of the ARU is 792sf, and is affordable to build due to its limited cost of prefab construction. Only one plumbing wall is required to build. It's optional to park a vehicle next to the ARU, or off street-parking.

The ARU is designed with variety of users in mind:



Airbnb



Single+Pet



Couple



Senior

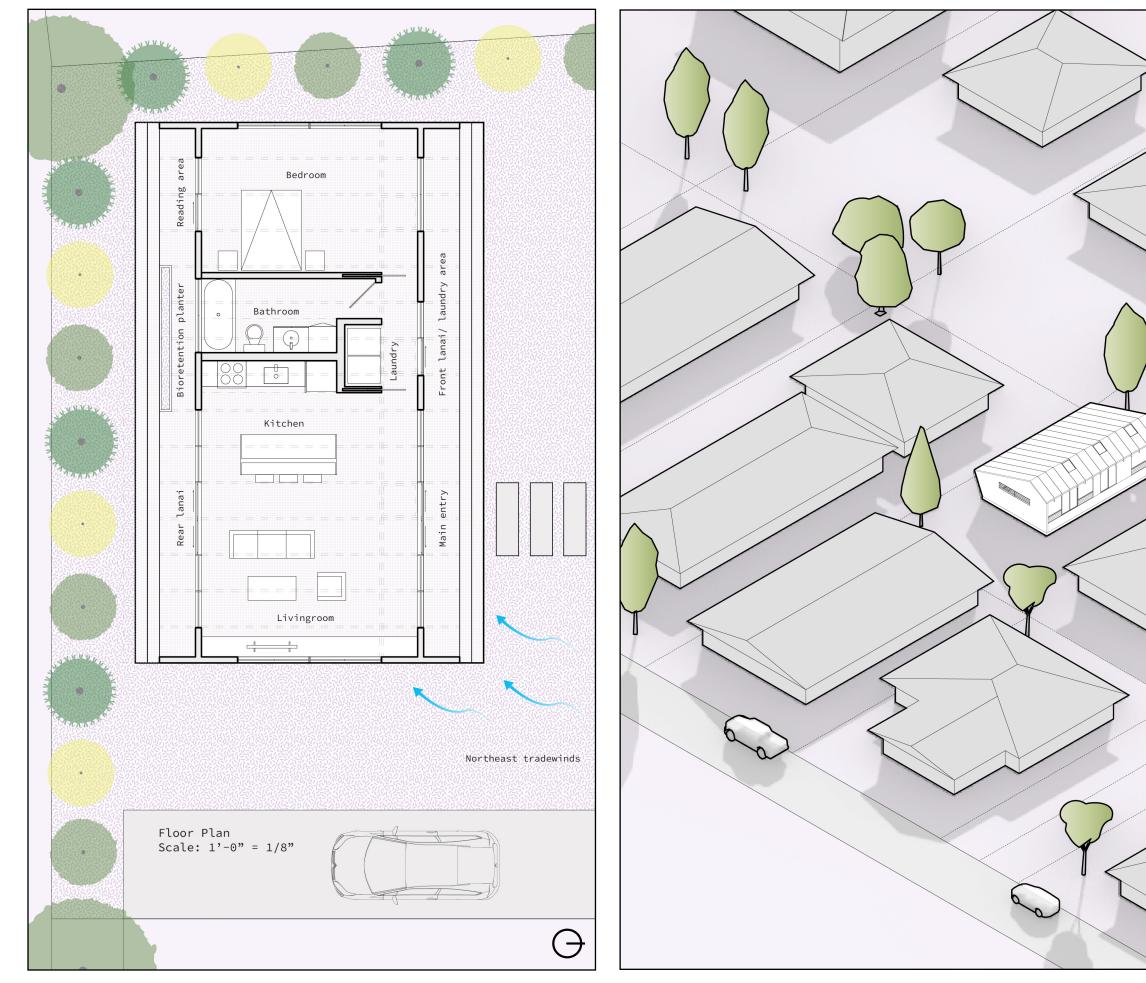


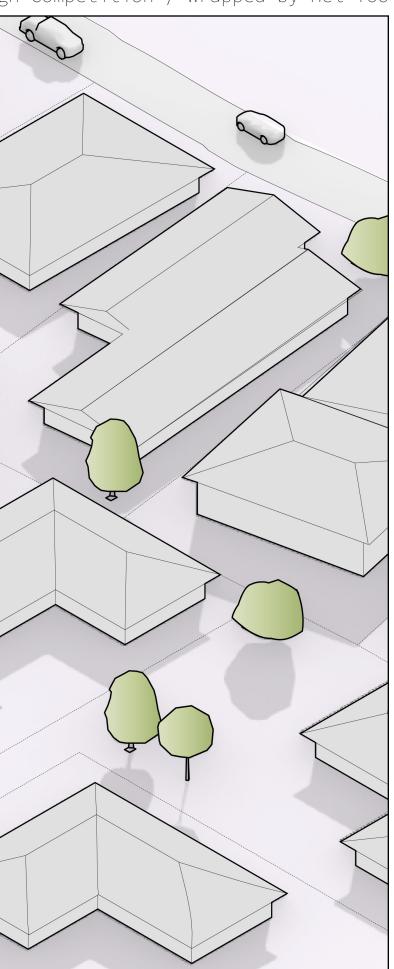
Single Parent





Affordable ARU Design Competition / Wrapped by Mel Yoo





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