The intent is to design small affordable housing that is 90% recyclable and 100% off grid (electricity, gas, and water). The size and cost of the project allows the owner the option of building a second house built on the lot as a rental or as an extended family home. The cardboard structure (Sonotube) is waterproof, lightweight, and insulated with a recycled paper product (cellulose insulation). The south facing water wall used for both passive heating and night ventilation of the thermal mass. Photovoltaic panels with battery backup supply the energy needs. A cistern for rain catchment and a composting toilet eliminate water and sewer connections. Rainwater is used in the vegetable garden, which produces 382 lbs per year of organic produce.