

a k i v a @ w i n f i r s t . c o m

40,000 BTU Low Pressure Multi-fuel Boiler Back-up

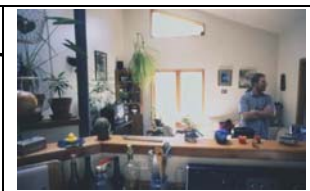


3-4x10 Solar Hydronic Heating Panels



500 gallon 180 degree Hot Water Storage Tank Dom. Hot Water Heat Exchanger

3000 sq ft Solar Bermed House with Garage, Storage, Shop, and Access.Bldgs 9000 sq ft Total
200 cubic yard Thermal-mass Storage In Floor & Walls

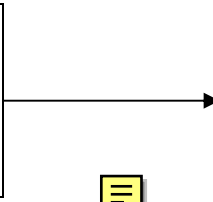


Select H/AC

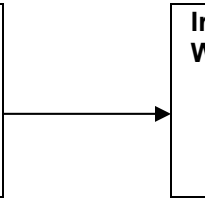
Gravity-fed Irrigation Water Supply



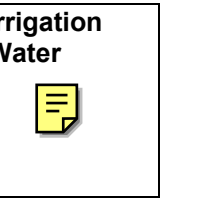
1800 feet Geo-thermal Cooling Pipe



200 cubic yard Thermal-mass Storage

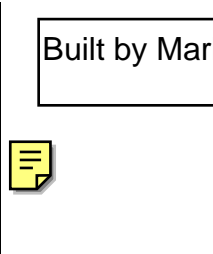


Irrigation Water



Built by Mark Taylor General Contractor, Sacramento, CA

1 kW Peak Demand Micro-Hydro-Electric Gen.



48-12 volt 200 Amp/hour Lead/acid Batteries 48 volts DC

6KW-(12KW Peak) 220 volt Inverter

Utility Grid
Extra Power Sold Back To Utility Company
Power Supply When All Systems Were Down Before Completion

Southern Exposure Tracker 32 --2x5 120 Watt Photo-voltaic Panels

DC Well Pump 40 foot Water Tower

DC Refrigerator

DC Freezer

10 kW Diesel Back-up Generator



8 kW Propane/Nat. Gas back-up Generator

