## What is an AFFORDABLE, SUSTAINABLE, Healthy, Green, Energy-Efficient, TRI-GENERATIONAL Home?

## **Overview**

The home was conceived, designed and built to be as energy efficient and sustainable as possible, while still keeping it affordable. Although, it is over 3000 square feet, its compact, efficient design, maximizes energy efficiency at every level. There are four bedrooms, two of which are master bedrooms, with attached baths and walk in closets, each on a separate floor, to allow for multi-generational living. The basement is finished, conditioned space, including a large, carpeted, storm room; workshop and a separate entrance.

The property is located on one of the highest spots in the county and provides spectacular views of the surrounding countryside. It has many mature trees, including large oaks and beech trees. It has been professionally landscaped with over 100 flowering oak leaf hydrangeas, magnolias and dogwoods, in addition to many indigenous wild flowers. The home has been positioned on the property to maximize the amount of contiguous open space and there is a large, flat ± 3 acre open pasture that would be perfect for someone with horses.

## **Features/Benefits**

The home was constructed with the following energy saving devices, techniques and materials:

Solar panels provide electricity at reduced or no cost.

The solar system is tied into the electric grid and receives generation credits from the TVA that count towards any electric costs.

The geothermal system takes advantage of the earth's temperature to provide the most efficient heating and cooling.

Hot water generated by the geo-thermal reduces or eliminates any cost associated with producing hot water.

Upgraded insulation in the attic, walls and floors keep the home warm in the winter and cool in the summer with minimal HVAC use.

There are two zones and both have programmable thermostats to maximize system efficiency.

High efficiency windows and doors deflect the sun's heat in the summer and provide extra insulation in the winter.

The double porch, deflects direct sunlight in the summer and provides panoramic views year round.

Energy Star appliances and low flow toilets reduce energy and water consumption.

LED and Compact fluorescent lighting are used to reduce energy costs and save on replacement bulbs.

A high efficiency fireplace insert provides an alternative heat source if needed.

A whole house water filtration system eliminates chlorine added by the local water company, as well as any other possible contaminants.