WELL ANATOMY

All wells must be constructed by licensed well drillers in accordance with state regulations. The well must pass inspection and the water should be certified as potable (drinkable) by the health department before the well can be used. The components of a typical domestic well are as follows:

**Casing:** A metal or plastic pipe used to line a portion of the bore hole. The minimum length (depth) of the casing is determined by state regulations based on the geology of the area. In Maryland it is currently 40 feet or to bedrock. The casing must extend a minimum of 8 inches above the ground (24 inches in flood zones) to keep water runoff out of the well.

**Grout:** Material used to provide a watertight seal between the bore hole and the casing to prevent surface water contaminants from running down the side of the well and contaminating the well water.

**Well cover:** A cap that screws or clamps onto the top of the well casing to prevent contaminants from entering the well. If earwigs are a problem, an earwig shield should be installed.

**Screen:** A pipe-like attachment at the bottom of the well. Well screens are usually not required when drilling in bedrock, but they may be necessary if loose sand or fragmented rock is encountered.

**Pump:** Draws water from the bottom of the well and into the distribution system. The two most commonly used types are submersible and jet pumps.

**Pitless adapter:** Provides a frost proof and sanitary hookup between the water line inside the well and the household water distribution system. The pitless adapter must be located below the frost line and needs to be leak free.