

# **WATER WELL**

## **INFORMATION PACKET FOR A SELF WELL**



**Revised October 1, 2002**

**Suwannee River Water Management District  
Resource Management Department**

# Self Well Information Packet

According to 373.326(2), Florida Statutes, a person can construct his own well provided the well is: (1) two inches or less in diameter; (2) on his own or leased property; (3) intended for use only in a single family house which is his residence or intended for use only for farming purposes on a farm (a Water Use Permit is required if the well use is other than residential); and (4) not intended for use by the public or any residence other than his own.

Department of Health Rule, Chapter 62-532.400(7), states, "Private water systems wells shall maintain a minimum of 75 feet lateral distance to any septic tank or drainfield unless specified by the Department in advance of any construction that a greater separation is required."

Individuals shall obtain a permit for the well and comply with all rules and regulations as to construction of the well.

## DEFINITIONS

"Abandoned well" means a well the use of which has been permanently discontinued. Any well shall be deemed abandoned which is in such a state of disrepair, as determined by a representative of the District, that continued use for the purpose of obtaining ground water or disposing of water or liquid wastes is impracticable. In addition, any well shall be deemed abandoned when it does not meet current well construction standards or is in such a state of disrepair that it could have an adverse impact on the water resource.

"Well seal," means an approved arrangement or device to prevent contaminants from entering the well at the upper terminal.

"Aquifer" means an underground water-bearing formation sufficiently permeable to yield water to wells or springs.

"Drive shoe" means any device specifically designed, fabricated, and installed to protect the bottom end of a well casing or liner pipe from collapse or other damage while the casing or liner pipe is being driven into place in a well.

"Annulus" means any artificially created void existing between a well casing or liner pipe and a borehole wall or between two casings.

"Neat cement grout" or "grout" means a mixture consisting of water and Portland cement (American Concrete Institute Type I, American Concrete Institute Type III, or any other types of cement in acceptable amounts of those additives approved for use in cement grouts by the permitting authority).

## TYPES OF CASING

Polyvinyl chloride (PVC) pipe may be used for well casing. However, this type of casing cannot be driven into place. It must be installed into a borehole, which in the case of a 2" PVC casing would be 4" in diameter. A minimum 1" thickness of grout must surround the casing making a 4" hole necessary. The neat cement grout must be installed from the bottom up as shown in Illustration Number 1. Centralizers are used to center the PVC in the borehole while the neat cement grout is being installed. If a clay bed is encountered, the grout must extend from the bottom of the casing to the clay top or ten feet into the clay. See Illustration 1A. If no clay bed is encountered, the grout must extend from the bottom of the casing to just above the top of the aquifer or rock. See Illustration 1B.

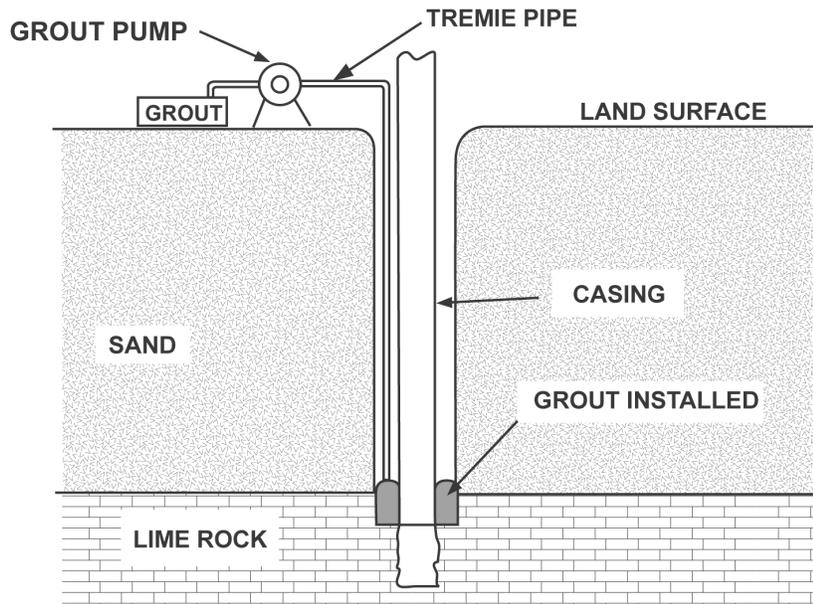
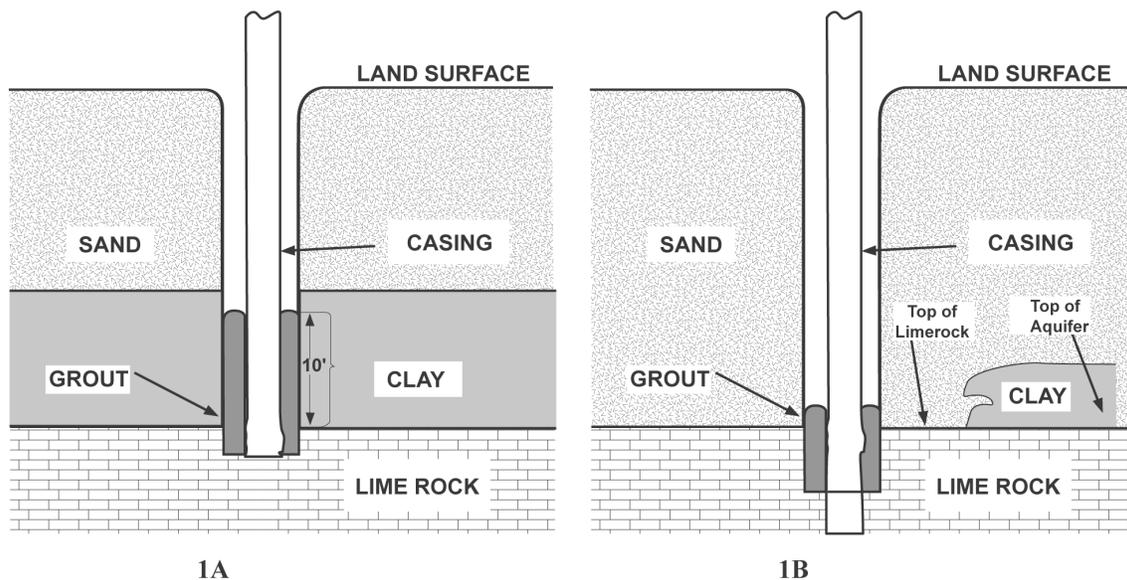


Illustration #1



Black or galvanized steel casing may be driven into place into the consolidated rock formation known as the "aquifer." Grouting is not required around a driven well. For well casing installed by driving, the casing must not butt together inside threaded couplings unless the joint is electrically welded so as to be completely watertight. A drive shoe is required for use on casing installed by driving unless exempted by the District. See Illustration Number 2.

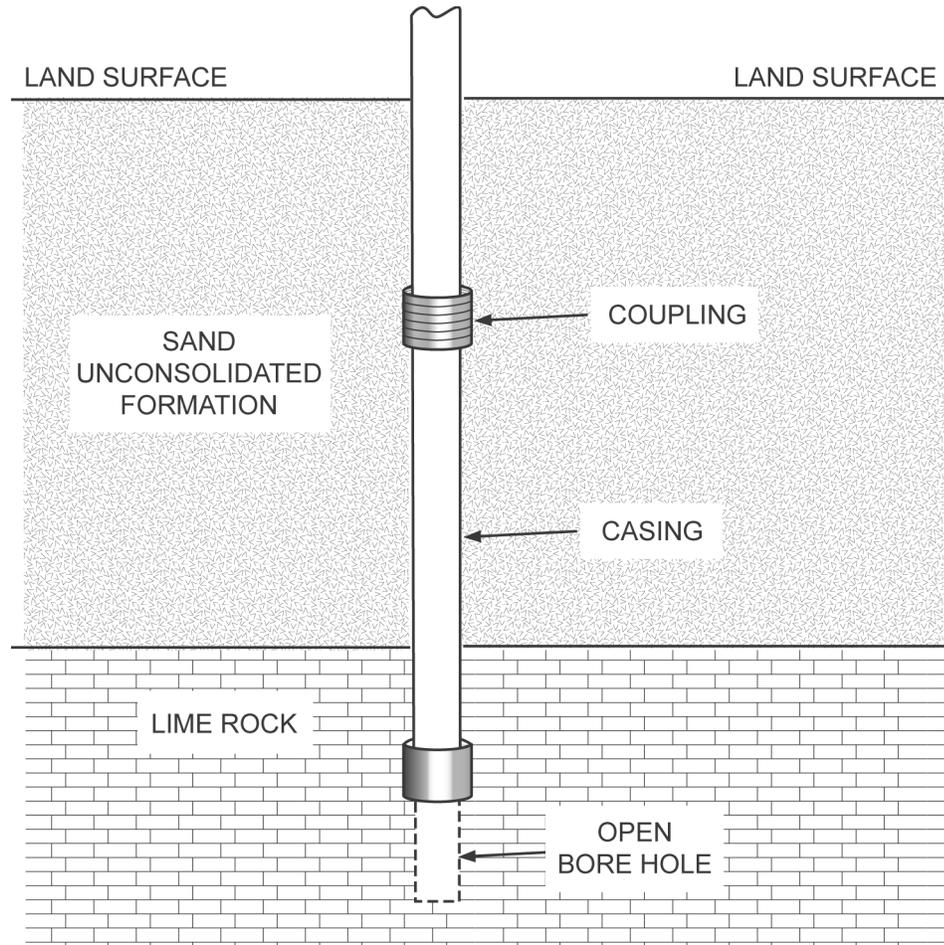


Illustration #2

All wells constructed to provide water for human consumption shall be thoroughly cleaned of all foreign substances after the well has been constructed. Such wells shall be disinfected.

Temporary well seal – Whenever there is a temporary interruption in work on the well during construction, repair, or abandonment, the well opening shall be sealed with a substantial water tight cover.

Any well in which pumping equipment is installed seasonally or periodically shall, whenever pumping equipment is not installed, be capped with a watertight cap or valve.

For wells obtaining water from unconsolidated aquifers, casing must extend from the land surface to the well screen. The well screen shall be attached to the casing with a watertight seal. No grout is required. See Illustration Number 3:

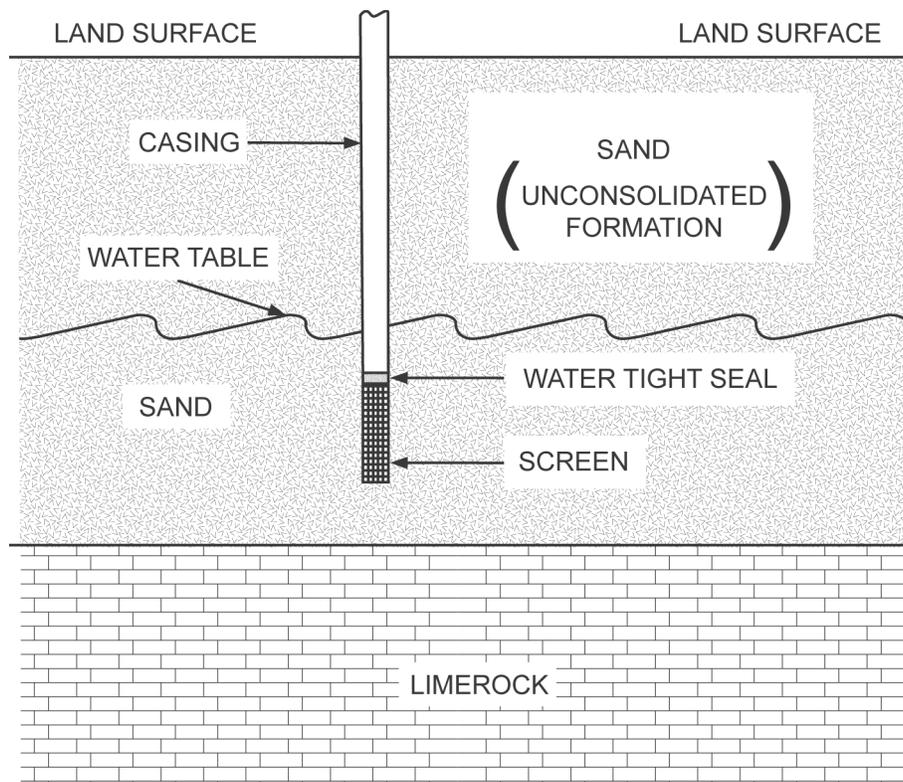
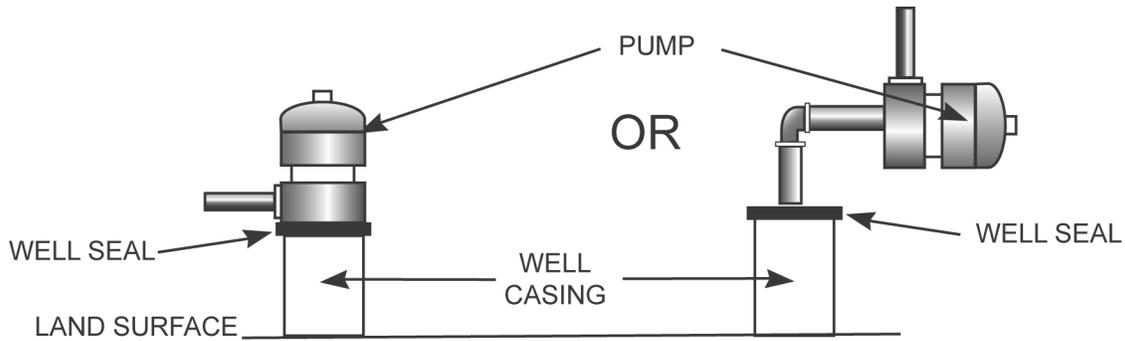


Illustration #3

If you have been unsuccessful in constructing your own well, there is a possibility your effort needs to be abandoned as per the rules and regulations. If this is the case, please contact the permitting office; we will have an inspector visit your site.

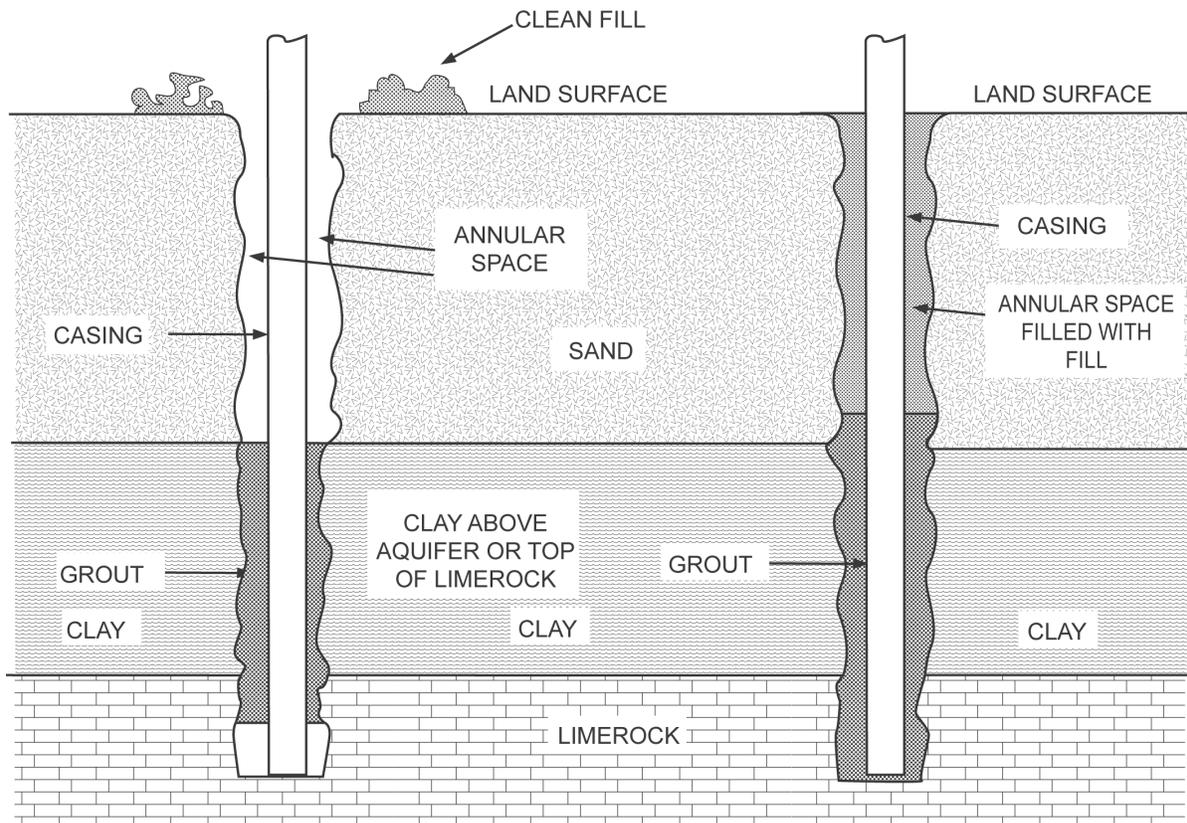
All abandoned wells must be plugged by filling them first from the bottom towards the top (refer back to Illustration 1) with neat cement grout unless otherwise provided in writing by the District. The plugging must restore or improve the hydrologic conditions, which existed before the well was constructed.

Permanent well seal – Any cased well equipped with permanently installed pumping equipment must have that pumping equipment or any necessary piping installed through a well seal. See Illustration Number 4.



**Illustration #4**

Any annular space existing after the casing is installed and the required grout used must be completely back filled with clean native earth material or cuttings. See Illustration Number 5.



**Illustration #5**

Wells located on ground subject to flooding must be properly sealed to prevent the movement of contaminants and surface water into the well. For such wells, the upper end of the well casing shall include a watertight seal with any vent above the 100-year flood level. Pumping equipment and any necessary pipe or electrical connections shall be installed to prevent inadvertent introduction of contaminants into the well. Pumping equipment and any necessary piping to electrical connections installed within the casing shall in installed through a well seal. An unobstructed inspection port equipped with a removable plug shall be provided and be accessible at the wellhead.

If your well location is in the coastal area of Levy, Dixie, Taylor, or Jefferson counties, your permit might be issued with the following “conditions:” As per 40B-3, “well must be grouted from bottom of well casing to top of consolidated rock formation.” This condition applies to your well construction regardless of method or casing material of construction. See Illustration Number 6.

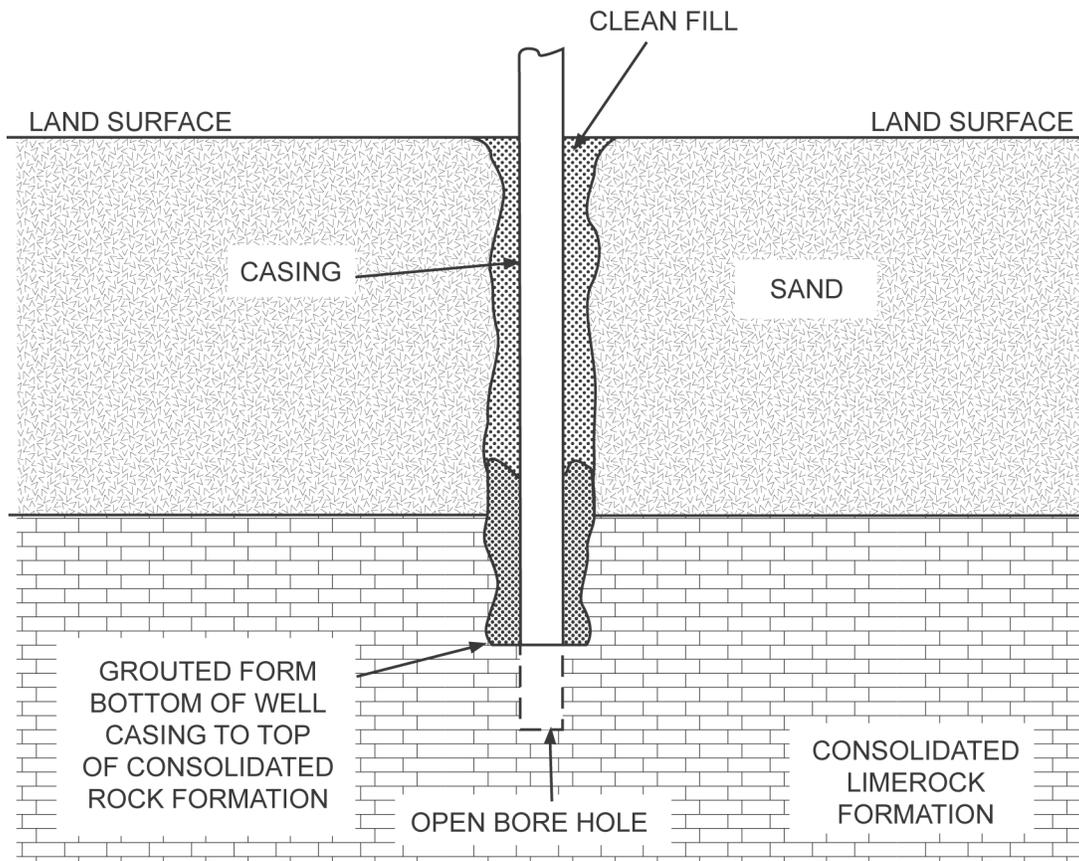


Illustration #6