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Septic System Alternatives

There are generally three types of septic systems that are issued by SCDHEC. In addition, systems can be designed by a licensed engineer where SCDHEC standard systems will not work. The three types of systems that SCDHEC issues are:

Conventional- Tank with a drain field consisting of 3' wide rock trenches. The entire system is below the existing ground level. Very rare in the low country, lowest cost to build. Typically costs around \$2000.

Modified Conventional- Tank with a drain field consisting of 3' wide rock trenches. The entire system is at or above the existing ground level, usually has 12"-18" fill cap (above ground level). Typically costs around \$2500 to \$3000.

Elevated Infiltration System (EIS)- Requires two tanks with a pump and a drainfield that is elevated above the surface and contained in a 35' metal ring. The system typically ends up 4' above the ground surface, so it also requires a large taper completely around the system. There is a 75' setback from property lines. System typically costs between \$18,000 and \$20,000.



Engineered Alternatives- Under SCDHEC regulations, a SC licensed engineer can design and certify an alternative system. These systems can vary greatly. One system that I have been permitting is a Bed System

Bed system: Similar to a modified conventional system, varies in that drainfield consists of large gravel bed instead of trenches. Typical fill cap is still 12"-18". System works where water table is high, but soil is sandy. Replaces Elevated Infiltration system. Also can be used where soils are good, but space is too small for a conventional system. Typically costs, w/ design fees around \$11,000 - \$13,000.



Left is a house originally permitted with an EIS, but replaced with a Bed System. Fill cap is blended in with surrounding area. Right is an installed EIS. Fill and taper take up a large portion of the yard.



With smaller setbacks there is more flexibility in the location of the system. It allows for system approval where it wasn't possible with an EIS system and even the possibility of subdivision. This flexibility along with the lower profile makes the system more attractive and easier to integrate into your yard.