

STANDARD AND SPECIFICATIONS FOR SUMP PIT



Definition

A temporary pit which is constructed to trap and filter water for pumping to a suitable discharge area.

Purpose

To remove excessive water from excavations.

Conditions Where Practice Applies

Sump pits are constructed when water collects during the excavation phase of construction. This practice is particularly useful in urban areas during excavation for building foundations.

Design Criteria

The number of sump pits and their locations shall be determined by the contractor/engineer. A design is not required, but construction should conform to the general criteria outlined on Figure 7A.39 on page 7A.90.

A perforated vertical standpipe is placed in the center of the pit to collect filtered water. Water is then pumped from the center of the pipe to a suitable discharge area.

Discharge of water pumped from the standpipe should be to a sediment trap, sediment basin, or stabilized area, such as a filter strip. If water from the sump pit will be pumped directly to a storm drain system, filter cloth (Mirafi 100X, Poly Filter GB, or a filter cloth with an equivalent sieve size between 40-80) should be wrapped around the standpipe to ensure clean water discharge. It is recommended that $\frac{1}{4}$ to $\frac{1}{2}$ inch hardware cloth be wrapped around and secured to the standpipe prior to attaching the filter cloth. This will increase the rate of water seepage into the standpipe.

Figure 5A.39
Sump Pit

