

4.3 Capping Fill System

Revision: July 22, 2015

Installer registration permit: Property owner or standard and basic

Licensed professional engineer required: No

4.3.1 Description

A capping fill trench is a drainfield constructed so that its bottom is at least 3 inches into the natural soil but less than 2 feet deep in the natural soil. A selected fill material caps the trench to cover the drainfield aggregate or gravelless trench product. The two subcategories of a capping fill system are (1) below-grade capping fill system and (2) above-grade capping fill system. Capping fill systems may be installed by any installer with a basic installer's permit unless a complex component is used in conjunction with the capping fill system design.

4.3.2 Below-Grade Capping Fill System

A below-grade capping fill system is constructed so the bottom of the drainfield is less than 24 inches deep in the natural soil but deep enough in the natural soil to keep the entire drainfield below the natural soil. The installation depth is between 12 and 24 inches below the natural soil. The bottom depth of the drainfield necessary to keep the drainfield below the natural soil may be deeper for gravelless system products or combination extra drainrock and below-grade capping fill systems (Figure 4-5).

Below-Grade Capping Fill System Approval Conditions

1. Effective soil depths below the drainfield bottom must be met as required by IDAPA 58.01.03 or as allowed in section 2.2 of this manual following the separation distance hierarchy.
2. Site may not exceed 20% slope.
3. The soil cap may be constructed before system excavation but after natural soil scarification if the cap must extend above the natural soil to achieve the minimum cover requirement of 12 inches.
4. The fill material (section 4.3.4), construction (section 4.3.5), and inspection (section 4.3.6) requirements must be met.