Overview

A capping fill drainfield is similar to a standard drainfield; however, the soil is manipulated to maintain adequate separation to the ground surface while allowing sufficient distance from:

- An impermeable layer;
- A rapidly draining layer (sand or gravel);
- A water table

Separation is made by installing shallow trenches in the native soil and then adding fill to the top of the drainfield to form a cap.

Special Considerations

Construction of capping fill drainfields may only occur between June 1st and October 1st, unless authorized by a County Environmental Health Specialist. **Do not install a capping fill drainfield when the approved area is wet or frozen.**

The Environmental Health Specialist will determine whether or not the upper eighteen (18) inches of the native soil profile is too moist for construction. If the soil is manipulated when wet, it can damage the soil structure, which is very important to the successful operation of the drainfield.

Cap material may be sourced from the site or brought from another location. It must be clean soil of the same textural class (i.e., sandy loam) or one textural class finer than is native to the site. The ground must be scarified and all rocks larger than a softball shall be screened out of the cap material.

Please drop off your **SMALL** cap soil sample at the Klamath County Onsite Division offices for testing.

You can view alternate approved drainfield products on the DEQ’s website at [https://www.oregon.gov/deq/Residential/Pages/Onsite-Products.aspx](https://www.oregon.gov/deq/Residential/Pages/Onsite-Products.aspx)
Capping Fill Installation

1. Scarify the drainfield area, including a ten (10) foot perimeter around drainfield.
2. Install the drainfield trenches shallow in the native soil, using a transit or laser level to ensure the trenches are level. The trench bottom should be at least twenty-four (24) inches wide. The trench depth is determined during the site evaluation process, is specific to each site, and is indicated in the installation permit. The maximum trench depth is measured from the native ground elevation to the bottom of the trench and it is very important not to exceed it.
3. Install at least six (6) inches of gravel at the base of the drainfield trenches. The gravel should be (3/4 - 2 1/2) inch river rock or crushed rock that has been sorted and washed. It may be installed after the pipe is laid if the pipe rests on six (6) inch blocks or 2x4s.
4. Install the perforated pipe with the stripes and holes facing down on top of the gravel.
5. Each drainline lateral must be covered with at least two (2) inches of gravel.
6. Each trench must be covered with filter fabric or untreated building paper before backfilling.
7. Cover the entire drainfield with a minimum of (10-16) inches of fill material depending on the site and indicated on the permit. Fill may be excavated from the site or brought onto the property after being inspected (typically at the initial Capping Fill Inspection). The cap must extend at least ten (10) feet beyond the edge of the trench and sloped to drain away from the drainfield. Cap material must be clean soil of the same textural class (i.e., sandy loam) or on textural class finer than the native soil.
8. Install a vegetative cover on the drainfield to enhance treatment and prevent erosion.
The Department of Environmental Quality (DEQ) keeps an updated list of approved drainfield products that may be used instead of pipe and rock. The list of approved products and their installation guides can be found at https://www.oregon.gov/deq/Residential/Pages/Onsite-Products.aspx. Please note that wire mesh with (1/2-1) inch openings should be placed below all gravel-less half pipes like Infiltrator Chamber.

Cap Drainfield with Fill & Plant Vegetation

Inspections

The first inspection in this process will include the installation of the septic tank and drainfield.

The second inspection will include the soil cap installation over the drainfield.

This second and final inspection will require the Final Inspection Request Form to be completed and submitted in advance of scheduling the second and final inspection.

Please complete the Final Inspection Request Form (available online) and submit to the Klamath County Onsite Department in person or via mail or fax at 305 Main Street, Klamath Falls, Oregon 97601.

You must include the materials list, the as built drawing, watertype test levels, and trench depths.

Your inspector will arrive within seven (7) business days.

Please ensure your inspector has access to the property; this includes securing livestock and dogs and making gates accessible.

Upon completed inspections, your inspector will contact you with the results.

If you have any questions, you may contact our offices at (541) 883-5121, Option #6, Monday through Friday, 8 a.m. to 5 p.m.

This installation guide is designed to explain the basic workings of the capping fill septic system and the basic layout. For construction and material standards for all septic system types, refer to Oregon Administrative Rules (OAR) 340, Division 71 and 73, available online at: https://www.oregon.gov/deq/Residential/Pages/Onsite-Rules.aspx