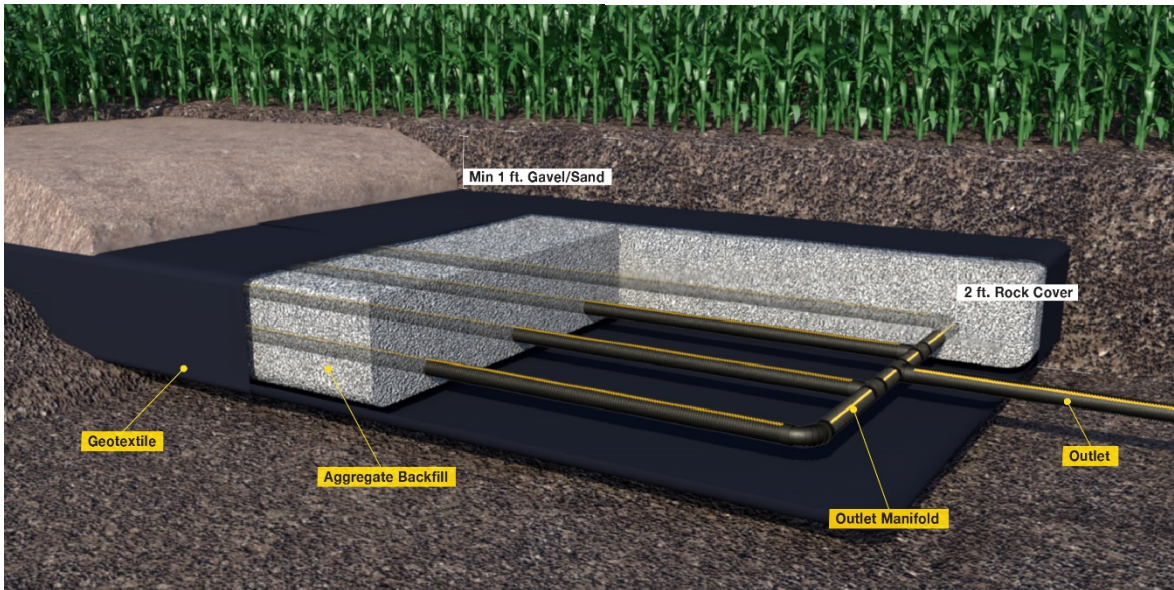


Practice Overview

Tightly spaced tile is laid in a bed of highly permeable backfill (rock, sand, etc.) to allow surface water to quickly infiltrate and enter the drainage system without direct surface inlets.

Benefits

- Reduced sediment erosion
- Phosphorus reduction
- Removes surface water
- Keeps trash & debris out of tile system
- Maintain farming operations (some designs)

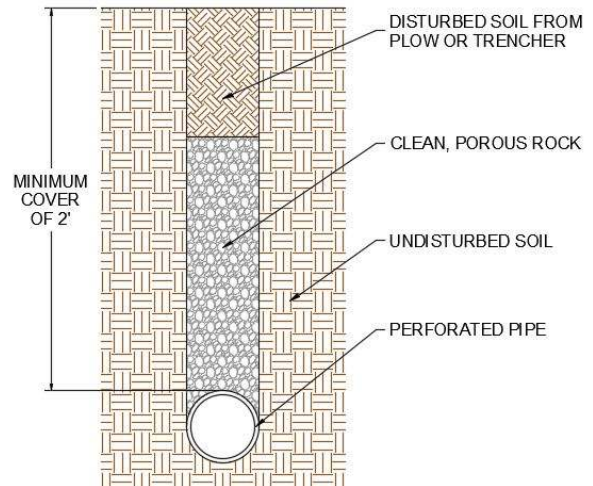


How it Works

Various designs can be used to accomplish the same objective.

Rock-bed Style: Pipe is placed at the bottom of a bed of rock backfill, capped with sand or soil (shown above). A geotextile should be used as a barrier around the rock keep it porous. This is the standard design for NRCS Underground Outlet (Code 620).

French Drain Style: Narrowly spaced laterals are backfilled with rock or sand above the pipe, commonly done with open trench, or gravity-fed rock box on a tile plow boot. Spacing and amount of backfill will vary depending on soil and site conditions. This is a more economic version of the above bed-style blind inlet.



Installation Considerations

Layout, pipe size, backfill material, backfill amount, can all be optimized depending on the site.

- Maintain a minimum of 24" of cover above the top of the pipe
- Use narrow slot or socked tile if backfill includes fines

Funding

- [NRCS Codes \(620\)](#)
- [NRCS Blind Inlet Design Calculator](#)
- [OSU Ag BMPs](#)
- [UW Tile Surface Inlet Replacement](#)