

Blind Inlets

Design:

A Blind inlet is defined as an excavated earthen box with perforated collector tubing placed in the bottom and filled to the surface with rock or gravel. The rock is the inlet for surface water. The advantage of the blind inlet over a surface grate is that a larger infiltration area is achieved. The blind inlet is not designed to collect the large amount of water from a storm event, but the small, irritating trickle flow that continues for days after the storm. The collector tubes are usually corrugated, perforated plastic tubing. Two parallel tubes connect to a “main line” which transports the water to the outlet. Outlets can be roadside ditches or curb drains. If the outlet is a curb drain, please contact the appropriate authorities before proceeding. The “main line” should be corrugated, non perforated tubing if trees and bushes are present. Roots will get into the system and clog the lines.

Uses:

Blind inlets can be used to:

- Catch and drain seep areas
- Pick up the low flow from sump pumps
- Help dry out a spring area
- Can be used to collect and divert surface water away from buildings and structures.

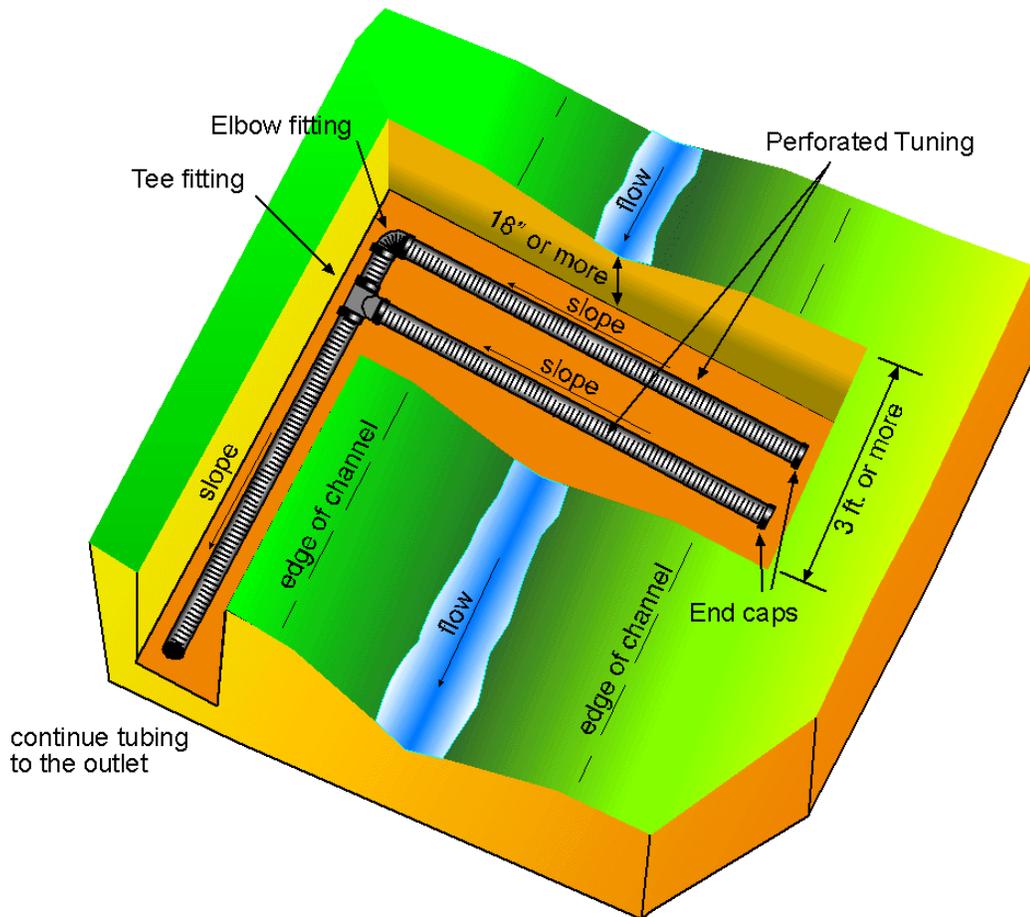
How to build a Blind Inlet:

- The location of the blind inlet is key to success. It must be placed where the water to ponds or flows. It can be placed near property lines, fence lines, or in the middle of the property.
- The in-flow box cuts across the channel and extends beyond the edge of the channel. This helps insure that the drain will have the ability to collect water from wide shallow channels.
- The inflow box should be at least 18 inches deep at the channel or gully location and at least 3 ft wide so 2 lines of perforated tubing can be separated by 12 inches.
- Use the tubing manufacture's tee, elbow, connectors, and end-cap fittings to insure a proper fit and a tight connection.
- After the tubing is installed, the inflow box should be filled completely

with stone and not gravel. Gravel has the tendency to contain fine material causing the inlet to plug. Large stone, about the size of your fist, will insure large air spaces between the rock resulting in high infiltration of water into the inlet.

- The outlet line should be placed outside the edge of the channel. If the line is placed down the middle of the channel, a rainfall event will likely wash out the soil backfill as well as the outlet line.

The outlet trench should be fertilized and re-seeded to match the lawn as soon as possible.



Blind Inlet Excavation Detail

It is very important that you "call before you dig" to determine if there are any underground utilities present. Today, it is not uncommon to find buried telephone, electric, water and gas lines on your property. So please, call the appropriate utility or the Ohio Utilities Protection Service at 1-800-362-2764 two working days before you dig.