Policy #12: Construction Standards for Curtain Drains

Effective Date: November 1, 2008

Purpose: The purpose of this policy is to establish specific construction standards for curtain drains intended, or required, to protect onsite sewage systems.

Policy: Pursuant to Section 10.F.8. of Ordinance 2008-01, ground and surface water interceptors designed or intended to protect an onsite sewage system are subject to review and approval by the Health Officer. In order to help ensure that the construction of a curtain drain will achieve the desired level of protection for an onsite sewage system, it shall be policy that the following standards will be met:

1. The location of the curtain drain shall meet the minimum horizontal setback requirements of Table 1 of Ordinance 2008-01;
2. The curtain drain shall be located up-gradient, and generally parallel to the orientation of the dispersal component, of the onsite system that it is intended to protect;
3. Curtain drains shall be considered for sites with at least 3% slope in the dispersal component area, where the drain pipe daylight elevation is below the lowest elevation of the curtain drain collector (perforated) pipe;
4. The curtain drain daylight discharge must be situated to have both positive drainage and be directed so as not to create a water drainage issue to other properties;
5. The curtain drain shall extend a minimum of 10 feet past both ends of the dispersal component;
6. The curtain drain collector (perforated) pipe shall be placed at least six inches into the uppermost restrictive layer identified for vertical separation, or at least 3 feet below the lowest elevation of the dispersal component;
7. The curtain drain shall be constructed of approved materials and be filled with an appropriate material that allows adequate collection and diversion of groundwater into the collector (perforated) pipe (Refer to Figure 1);
8. For curtain drains installed in Soil Types 1 - 4, some type of flexible, impermeable barrier (e.g., minimum 6-mil polyethylene plastic, etc.), that is not subject to damage during the construction process, shall be installed on the down-gradient (dispersal component) side of the curtain drain, and shall extend: below the collector pipe, to the original ground surface, and the length of, the curtain drain;
9. The curtain drain shall include observation ports, constructed of rigid pipe and allowing a clear view from the surface of the ground to the inside of the curtain drain collector pipe, to the finished grade at both ends of the collector (perforated) pipe.
10. Curtain drains installed to protect onsite sewage systems shall be constructed under permit by the Health Officer.
Other configurations or specifications shall be detailed and supported by a designer, and approved by the Health Officer, prior to construction. State Health-approved technologies or products may be considered for use as a substitute for the construction specifications shown in Figure 1.

FIGURE 1 - TYPICAL CURTAIN DRAIN CONSTRUCTION

- Minimum Slope of 3%
- Clean Gravel or Approved Gravel Substitute
- Curtain Drain Trench
- 10' Minimum
- Min. 4-mil Plastic (Soil Types 1-4)
- Min 4" Perf. Pipe
- Min. 6" into Restrictive Layer or Min. 3-feet below Lowest Dispersal Elev.
- Dispersal Trench or Bed or Dripline
- Restrictive Layer