

Easttown Township
566 Beaumont Road, P.O. Box 79
Devon, PA 19333
Phone (610) 687-3000, Fax (610) 687-9666
www.easttown.org

SOIL & EROSION PERMIT

The cost of a Soil & Erosion permit is \$50.00 as outlined in the current fee schedule. This is due and payable upon application.

Projects consisting of 500 square feet or more of disturbance require the Engineering Fee Agreement and must conform with all Township ordinances, including the Stormwater Management Ordinance. These permit applications will be reviewed by the Township Engineer. "Cost of review by the Township Engineer and of inspections will be billed to the Applicant as review and inspections are completed."

Projects consisting of less than 500 square feet of disturbance must conform with all Township ordinances, and specifically Appendix B of the Stormwater Management Ordinance (attached).

EASTTOWN TOWNSHIP
EROSION, SEDIMENTATION AND GRADING CONTROL

Ordinance Nos. 126 & 145

Application No. _____

Name of Applicant: _____ Date: _____

Applicant's Signature: _____

Address of Applicant: _____

Telephone Number: _____

Engineer's Name: _____

Name of Subdivision: _____

Address for Subdivision: _____

Total Area of Subdivision: _____

Is the property within the flood hazard district? _____

Phase# _____ (This application) area of phase: _____

Exhibit Checklist: (3 sets of plan required)

1. Application Form _____
2. Area Plan _____
3. Topographic Survey (scale 1"=50') _____
4. Improvement plan (scale 1" =50") _____
5. Narrative _____
6. Time schedule - start date: _____ Completion: _____
7. Approximate area to be opened: _____
8. Runoff calculations _____
9. Bond _____ Escrow _____ Where Req'd _____
10. Fee _____

TO BE COMPLETED BY TOWNSHIP ENGINEER:

Date of approval/refusal: _____

PERMIT NO: _____

Reason for refusal: _____

Township Engineer's Signature

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Agent's Affidavit

Date _____

Property Owner Information:

Property Owner _____

Address _____

Project Address (if different) _____

Chester County Tax Map Parcel Number (of Project Address) _____

Property Owner Signature _____

Contractor/Design Professional Information:

Contractor/Design Professional _____

Address _____

Easttown Township Contractor Registration Number (if applicable) _____

Contractor/Design Professional Signature _____

This document shall verify that, the above referenced individual(s) is/are the owner(s) of the property indicated within the Project Address and have identified the referenced Contractor/Design Professional to serve as their duly authorized Agent for the submission of the attached Zoning/Building or other application(s) to Easttown Township.

It is understood that, by signing this document all parties understand that all statements are true and correct and false statements made within this Affidavit may subject individuals to penalties under the laws of the Commonwealth of Pennsylvania.

Easttown  *Township*

**NOTICE TO ALL PROPERTY OWNERS
PLANNING TO DEVELOP LAND IN EASTTOWN TOWNSHIP**

The Township's consulting engineer and solicitor are required to review all erosion control, site development and subdivision plans.

The township must be reimbursed by the applicant for any costs incurred for reviews made by the engineer and/or solicitor, and for inspection of construction work made by the engineer. Furthermore, the costs of any meeting held with our consulting engineer and/or solicitor must also be borne by the applicant. The township will charge an administrative fee of \$40.00 per hour for processing Land Development Modules. This fee will be chargeable to the applicants escrow account.

Bills will be mailed for all reimbursable fees, at the current rate.

Before making the first contact with our engineer, the applicant must sign this notice acknowledging that he/she is aware of the costs to be paid by him/her.

I have read this notice, and I am aware
of the cost to be paid by me.

Title of Plan Being Submitted

Name of Applicant

Applicant's Address

Telephone Number(s)

Date

Applicant's Signature

cc: Applicant
Township Manager

VOLUNTARY STORMWATER MANAGEMENT PROCEDURES FOR PROJECTS MEETING THE LAND COVER EXEMPTION CRITERIA

What are the Act 167 stormwater management requirements?

Pennsylvania Act 167 was authorized on October 4, 1978 (32 P.S., P.L. 864) and gave Pennsylvania Municipalities the power to regulate activities that affect stormwater runoff and surface and groundwater quantity and quality.

Who is affected by these requirements?

The Act 167 stormwater management requirements affect all reconstruction or addition of new development or redevelopment in the Darby-Cobbs and Crum Creek watershed. Individual home construction projects on single-family lots which result in less than two thousand (2,000) square feet of impervious area (including the building footprint, driveway, sidewalks, and parking areas) or less than five thousand (5,000) square feet of earth disturbance are not required to submit formal drainage plans to the Municipality or County, however, they are still encouraged to address water quality and groundwater recharge criteria specified in the Darby-Cobbs Watershed Stormwater Ordinance (Ord. Sections 405 and 406).

Do I require professional services to meet these requirements?

This brochure has been developed to assist the individual homeowner in meeting the water quality and groundwater recharge goals of the Darby-Cobbs and Crum Creek Watershed Stormwater Ordinance. If the guidelines presented in this brochure are followed, the individual homeowner will not require professional services to comply with these water quality and groundwater recharge goals.

What do I need to send to the Municipality?

Even though a formal drainage plan is not required for individual lot owners, a brief description of the proposed infiltration facilities, including types of material to be used, total impervious areas and volume calculations as shown above, and a simple sketch plan showing the following information shall be submitted to Easttown Township with an Erosion and Sediment Control Application for approval.

- Location of proposed structures, driveways, or other paved areas with approximate size in square feet.
- Location of any existing or proposed on-site septic system and/or potable water wells showing rough proximity to infiltration facilities.

Determination of Recharge Volume

The amount of recharge volume that should be provided can be determined by following the simple steps below. Impervious area calculations should include all areas on the individual lots that are covered by roof area or pavement, which would prevent rain from naturally percolating into the ground, including sidewalks, driveways, or parking areas.

Example Recharge Volume:

STEP 1 – Determine Total Impervious Surfaces:

House Roof (Front)	12 ft. x 48 ft.	=	576 sq. ft.
House Roof (Rear)	12 ft. x 48 ft.	=	576 sq. ft.
Driveway	12 ft. x 50 ft.	=	600 sq. ft.
Parking Pad	12 ft. x 12 ft.	=	144 sq. ft.
Walkway	6 ft. x 20 ft.	=	120 sq. ft.

			2,016 sq. ft.

STEP 2 – Determine Required Infiltration Volume (Rv) Using the Following Equation

$$Rv = \frac{4.35 \text{ inch} \times (\text{total impervious area in square feet})}{12} = \text{_____ cubic feet of recharge}$$

$$Rv = \frac{4.35 \text{ in} \times 2,016 \text{ sq. ft.}}{12} = 768 \text{ cu. ft.}$$

STEP 3 – Sizing of Select Infiltration Method

The following pages show several methods of infiltrating stormwater runoff from residential areas. Their appropriateness depends on the amount of infiltration volume required and the amount of land available. More than one method can be implemented on a site, depending on site constraints. Dry wells should be used only for receiving runoff from roof drains. Infiltration trenches are appropriate for receiving runoff from driveways, sidewalk, or parking areas. Other methods may be appropriate, but these should be discussed with the municipal Engineer prior to installation.

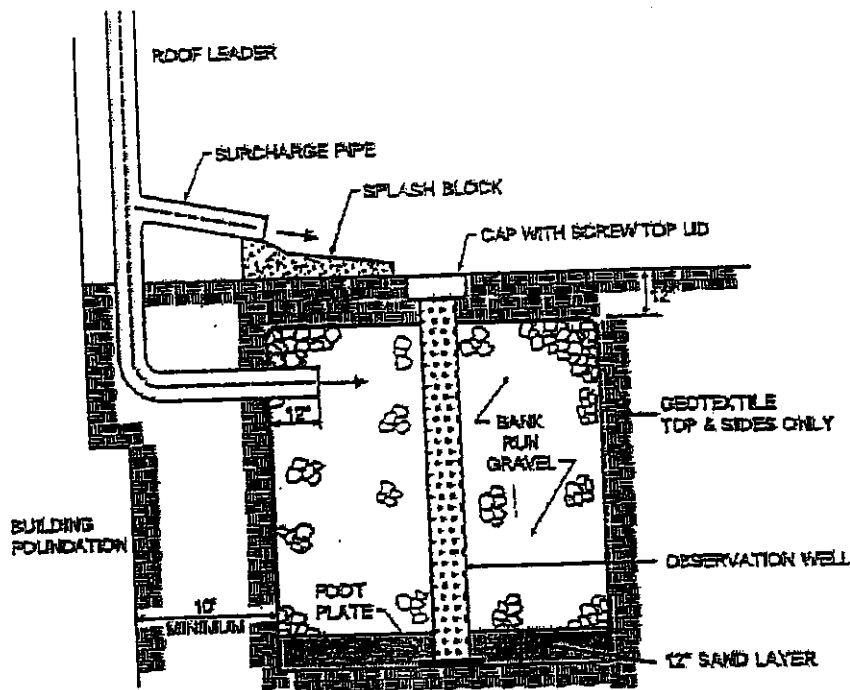
Dry Wells

Dry wells are effective methods of infiltrating runoff from roof leaders. These facilities should be located a minimum of ten (10) feet from the building foundation to avoid seepage problems. A dry well can be either a structural prefabricated chamber or an excavated pit filled with aggregate. Construction of a dry well should be performed after all other areas of the site are stabilized to avoid clogging. During construction, compaction of the subgrade soil should be avoided, and construction should be performed with only light machinery. Depth of dry wells in excess of three and one half (3½) feet should be avoided. Gravel fill should be an average one and one half to

three (1.5 – 3.0) inches in diameter. Dry wells should be inspected at least four (4) times annually as well as after large storm events.

FIGURE B-1

TYPICAL DRY WELL CONFIGURATION



Source: Maryland Stormwater Design Manual

Example Sizing:

STEP 1 – Determine Total Impervious Surfaces

House Roof Area: 12 ft. x 48 ft. = 576 sq. ft.

STEP 2 – Determine Required Infiltration Volume Using Equation

$$\frac{4.35 \text{ in.} \times 576 \text{ sq. ft.}}{12} = 20.8 \text{ cu. ft.}$$

$$\frac{20.8 \text{ cu. ft.}}{0.4^*} = 522 \text{ cu. ft. (* assume 40\% void ratio in gravel bed)}$$

STEP 3 – Sizing of Select Infiltration Method

Volume of facility = Depth x Width x Length

Set D = 3.5 ft; Set W = L for a square chamber

522 cu. ft. = 3.5 x L x L; L = 12.2 ft.

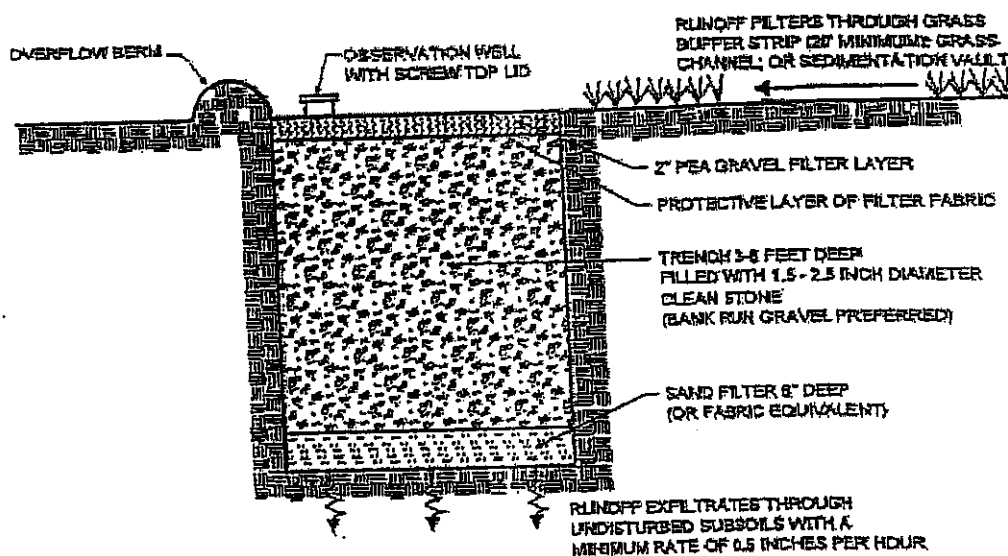
Final facility dimensions: 3.5 ft (D) x 12.2 ft. (W) x 12.2 ft. (L)

Infiltration Trenches

An infiltration trench is a long, narrow, rock-filled trench with no outlet that receives stormwater runoff. Runoff is stored in the void space between the stones and infiltrates through the bottom and into the soil matrix. Infiltration trenches perform well for removal of fine sediment and associated pollutants. Pretreatment using buffer strips, swales, or detention basins is important for limiting amounts of coarse sediment entering the trench which can clog and render the trench ineffective.

FIGURE B-2

TYPICAL INFILTRATION TRENCH CONFIGURATION



Source: Maryland Stormwater Design Manual

Example Sizing:

STEP 1 – Determine Total Impervious Surfaces

Driveway	12 ft x 50 ft	=	600 sq. ft.
Parking Pad	12 ft x 12 ft	=	144 sq. ft.
Walkway	6 ft x 20 ft	=	120 sq. ft.

			864 sq. ft.

STEP 2 - Determine Required Infiltration Volume Using Equation

$$\frac{4.35 \text{ in.} \times 864 \text{ sq. ft.}}{12} = 310 \text{ cu. ft.}$$

$$\frac{310 \text{ cu. ft.}}{0.4^*} = 775 \text{ cu. ft.} \text{ (* assume 40\% void ratio in gravel bed)}$$

STEP 3 - Sizing of Select Infiltration Method

Volume of facility = Depth x Width x Length

Set D = 3 ft: determine required surface area of trench

$$775 \text{ cu. ft.} / 3 \text{ ft.} = 258 \text{ sq. ft.}$$

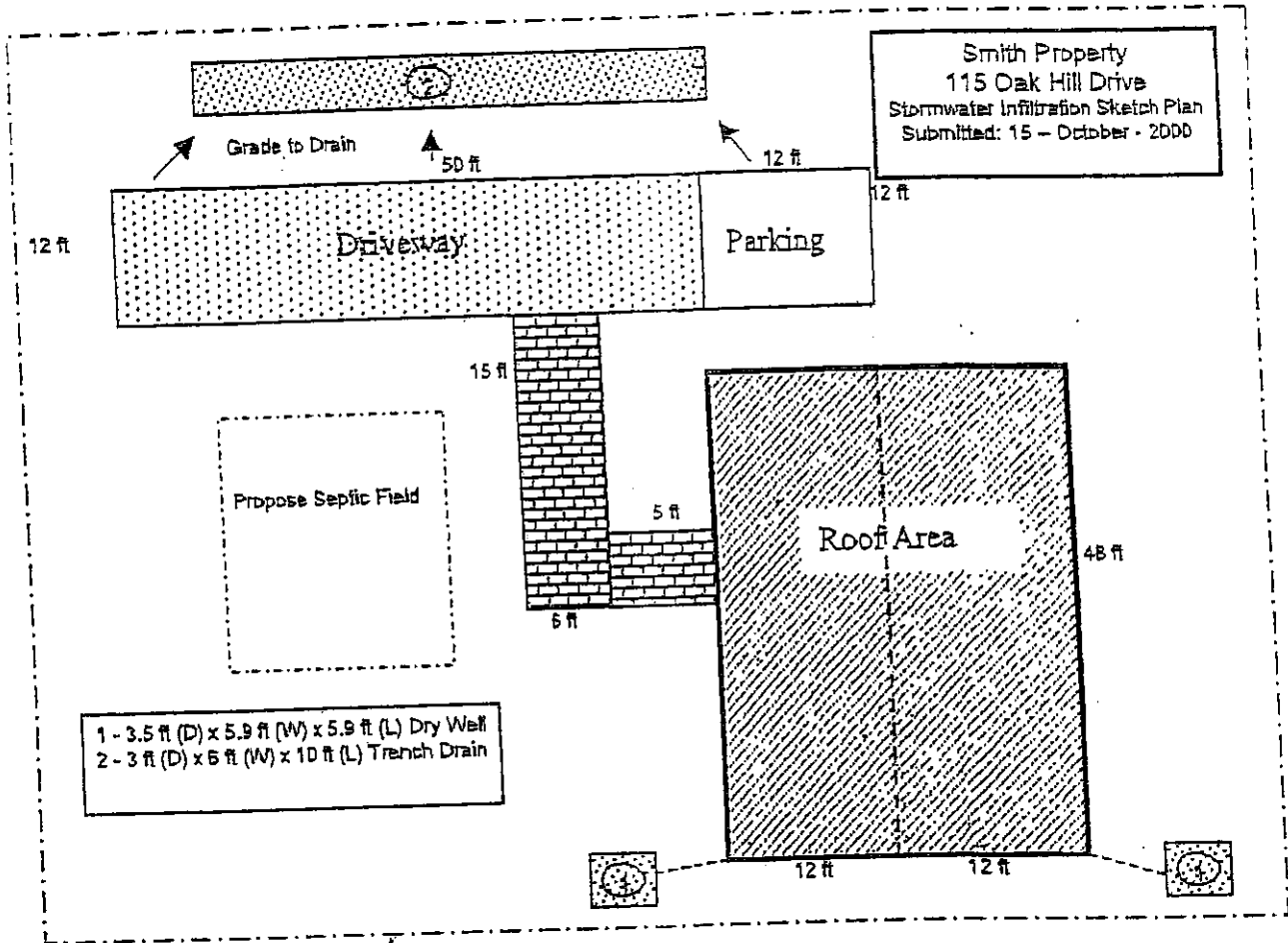
The width of the trench should be greater than 2 times its depth (2 x D); therefore, in this example a trench width of 6 feet is selected;

$$\text{Determine trench length: } L = 258 \text{ sq. ft.} / 6 \text{ ft.} = 43 \text{ ft.}$$

Final trench dimensions: 3 ft. (D) x 6 ft. (W) x 43 ft. (L)

FIGURE B-3

SAMPLE SITE SKETCH PLAN



Source: Maryland Stormwater Design Manual