1'-3' MIN COVER ROOF DRIN (MIN COVER ROOF DRIN) (MIN TR SLOPE) POR CRATE TO B ROOF DRIN (MIN SUPER) PULSH WITH SUPPACE PLUSH SUPPACE PL

INFILTRATION STRUCTURE DETAIL

NO SCALE

SEEPAGE PIT

A facility comprised of stone and located underground collecting stormwater runoff typically through direct discharge from roof downspouts and pipes.

www.thcahill.com/infilbed.html

Graphic Source: ARRO Consulting, Inc.

Due to the variability of soils, the efficiency of stormwater alternatives is dependent on soil permeability. As a result, seepage pits, infiltration trenches, and bioretention areas require a percolation test to verify suitability.

After selecting possible options for managing stormwater runoff from your site, you should contact a professionally licensed engineer or landscape architect to discuss if the options you have chosen are appropriate for your site. Also, the professional will assist you with plan preparation and be able to provide an estimate of construction costs. It is advisable for you and your consultant to discuss conceptual solutions with the Whitpain Township Engineering Department prior to preparation of plans and reports. All plans for stormwater management facilities need to be reviewed and approved by the Whitpain Township Engineering Department.

Whitpain Township Stormwater Management Program

Contact Information:

Whitpain Township
Engineering Department
960 Wentz Road
P.O. Box 800
Blue Bell, PA 19422
(610) 277-2400
www.whitpaintownship.org



Other Useful Web Links:

- ◆ Chesapeake Bay Foundation www.cbf.org
 Search for "Bay Friendly Landscaping"
- ♦ Greenworks TV www.greenworks.tv/stormwater/index.htm
- ◆ EPA Municipal Technologies www.epa.gov/owm/mtb/mtbfact.htm
- ♦ Low Impact Development Center www.lowimpactdevelopment.org
- ◆ PA Assoc. of Conservation Districts
 www.pacd.org/products/bmp/bioretention.htm
- ♦ Wissahickon Valley Watershed Association www.membrane.com/philanet/wwwa
- ◆ Perkiomen Watershed Conservancy www.perkiomenwatershed.org

Whitpain Township

Stormwater Management Program





Residential Solutions

Stormwater runoff from residential areas can be handled by simple, costeffective, and aesthetically pleasing methods. The following examples provide guidance for possible solutions to mitigate stormwater runoff from your project. Each example provides a brief description and an internet web link where you can obtain additional information. Information is also available from the Whitpain Township engineer's office. Plans must be prepared for any stormwater management facility and submitted to the Whitpain Township engineer's office for review and approval.

www.whitpaintownship.org

Whitpain Township - Possible Residential Solutions



RAIN BARREL
A rain barrel is a small scale conservation practice that collects and stores rooftop stormwater runoff for future use to water lawns and gardens.
Graphic Source: Garden Gate Magazine

INFILTRATION TRENCH Typically, a facility

comprised of stone and

located underground

collecting stormwater

pipes.

Science

runoff through absorption

from roof downspouts and

Photo Source: Edgewood College, Dept. of Natural

or through direct discharge

www.gardengatemagazine.com/tips/40tip11.html



www.thcahill.com/infiltrench.html



WET POND
Wet ponds are basins
designed to maintain a
permanent pool of water
and temporary storage
capacity for stormwater
runoff.

www.greenworks.tv/stormwater/wetponds.htm





BIORETENTION AREA

RAIN GARDEN

A soil and plant-based stormwater collection area employed to filter runoff and remove pollutants from impervious areas through infiltration and biological uptake. www.pacd.org/products/bmp/bioretention.htm

A rain garden is an attractive bowl-shaped garden, designed to absorb stormwater run-

Photo Source: Allen P. Davis, P.E., University of Maryland

off from impervious surfaces such as roofs and parking lots.

www.weemscreek.org/proj-mine-raingarden.html

Photo Source: ARRO Consulting, Inc.



POROUS PAVING BLOCKS

Porous Paving blocks are cement blocks or plastic grids that provide structural support for driveways, patios, and paths but allow water to flow through the gaps between the blocks, allowing infiltration into the soil.

www.ephenry.com/store/dept.asp?dept_id=120

Photo Source: Whitpain Township



POROUS PAVEMENT

Porous pavement is a permeable pavement surface with a stone reservoir underneath. The reservoir temporarily stores surface runoff before infiltrating it into the subsoil. www.greenworks.tv/stormwater/porouspavement.htm

Graphic Source: Forester Communications, Inc., Michele Adams, P.E., Cahill Associates



DETENTION BASIN

Facilities designed to collect and detain stormwater runoff before discharging to a stream or stormwater pipe system.

 $\underline{www.stormwatercenter.net} \ \ (then\ click\ Fact\ Sheet,\ Stormwater\ Mgt,\ Detention\ Basin)$ Photo\ Source: ARRO\ Consulting, Inc.