



+++++This form is a tool provided for Applicants as a blueprint for which a proposed earth disturbance project can meet Chapter 102 Erosion and Sedimentation Control throughout the proposed earthmoving activities. Applicability and inclusiveness of this form relative to individual proposed projects may vary.

Instructions: Fill out all sections of this form and submit to Monroe County Conservation District (MCCD).

Section 1: Check the option that applies to you

1. What type of project are you proposing?
 Home Construction Commercial
 Soil Waste Area/Borrow Area Other: _____
2. Is the proposed project subject to Land Development Approval through the County's Planning Office and/or your municipality?
 Yes No
3. Total estimated disturbed area in square feet or fractions of an acre: _____
4. Over the life of your project, will the total area to be disturbed be equal or be greater than one (1) acre (43,560 square feet)? Yes No

Section 2:

I. Applicant Information

Applicant Name: _____ Municipality: _____
 Applicant Address: _____ Disturbed Area (sqft): _____

 Phone Number: _____ Contractor (if known): _____
 Site Owner: _____ Plan Preparer: _____
 Owner Address: _____ Planner Address: _____

 Phone Number: _____ Phone Number: _____

II. Site Description

Include a sketch map or plan drawing of the site. The template found in Appendix B of this form may be used. Sample sketch map/plan drawings are provided in Appendix A. USGS topographical maps indicating the quad are acceptable. The map should include the following aspects:

- North arrow

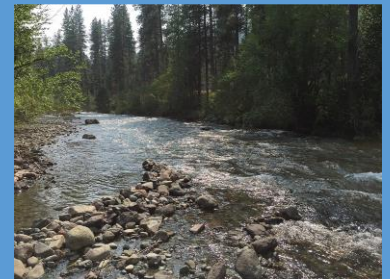
**EROSION & SEDIMENT
(E&S) CONTROL PLAN
FOR LOTS UNDER 1 ACRE**

Purpose

Did you know that sediment is the #1 pollutant to waters of the Commonwealth? The point of an E&S plan is to minimize sediment pollution due to accelerated erosion from earth disturbance activities.

What if my site has over an acre of earth disturbance?

Any sites over 1 acres of disturbance require an NPDES permit. Please contact Monroe County Conservation District (MCCD) to schedule a pre-application meeting.



Did you know?

NPDES stands for National Pollutant Discharge Elimination System. The Clean Water Act protects our waters by requiring a NPDES permits for projects earth disturbance over 1 acre. The permit translates general requirements of the Clean Water Act into specific requirements for the operations discharging pollutants.



- Significant landscape features
- Streams
- Outline of the project area
- Area of disturbance labeled “Limit of Disturbance”
 - This area should encompass all areas on the project site where earth disturbance
- Proposed E&S control measures, Best Management Practices (BMPs)

Include a site narrative that describes through words the proposed project and the earth disturbance activities that corresponds with it.

III. Total Disturbed Area Calculation

- If using this form digitally, enter each of your measurements into the table below and a formula will automatically calculate your total area of earth disturbance. The number in red is your total area of earth disturbance in acers.
- If you are printing out this form and writing on it, multiply your total length by your total width for each feature to get the area in square feet. Add together the area for all the features and divide it by 43,560 to get your total area of earth disturbance in acres.
- *If your total area of earth disturbance is greater than or equal to 1 acre, please contact our office to schedule an NPDES pre-application meeting.*

Total Disturbed Area Calculator			
Feature	Total Length (ft.)	Total Width (ft.)	Area (sq. ft.)
Access Road/ Driveway			0
Foundation/Building 1			0
Foundation/Building 2			0
Lawn/ Landscape Area			0
Water/ Sewer/ Septic			0
Other			0
		Total Area (sq ft.)	0
Total Area (sq ft.):	0	43,560	0 Acres

IV. Soil Map

Include a soil survey map identifying the types and locations for all soils in the project site. The USDA soil survey website allows you to create soils maps for your project at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

Soil Symbols: _____

Identify all soil limitations:

- Seasonal High Water Table
- Shallow Depth to Bedrock
- Poor Source of Topsoil
- Easily Erodible

**EROSION & SEDIENT (E&S)
CONTROL PLAN**

FOR LOTS UNDER 1 ACRE

What is considered Earth Disturbance?

Construction or other human activity which disturbs the surface of the land including but not limited to; clearing and grubbing, grading, excavations, embankments, land development, agricultural plowing or tilling, timber harvesting activities, road maintenance activities, mineral extraction, and the moving, depositing, stockpiling, or storing of soil, rock or earth materials.



Common Plan of Development

If there are contiguous or adjacent lots within ¼ mile of each other that are under construction or proposed for construction and are owned or operated by a common individual/developer/or contractor, an NPDES permit may be needed.

Contact MCCD to schedule a pre-application meeting.



Acidic Soil (low pH) _____

Address how these soil limitations will be managed during the project.

V. Characteristics of Earth Disturbance Activity

How has the site been used for the last 5 years?

Agriculture Barren
 Forest Other _____

Is this parcel part of any larger development? Yes No

If yes, please give the name and phase of development: _____

Have all necessary municipal approvals or requirement been obtained or otherwise met? Yes No

Will soil or fill be placed on site? Yes No

- If yes, name where soil or fill will be obtained from:

Will soil or fill be removed from the site? Yes No

- If yes, name where soil or fill will be disposed of:

Has the site been previously disturbed? If so, for what?

VI. Waters of the Commonwealth

Are there streams or rivers near the project area? Yes No

If yes, name the nearest stream: _____

Approximate distance of stream from the disturbed limits of the project: _____

*If distance is 50' or less, a Chapter 105 permit will be needed. Contact MCCD.

Are there wetlands, swampy areas, springs, or wet areas within the proposed disturbance area? Yes No

*If yes, a wetland delineation should be obtained and Chapter 105 permitting may be required. Contact MCCD for a list of wetland consultants.

*Streams, wet areas, wetlands, and swampy areas must be shown on the plan drawing/sketch map.

**EROSION & SEDIMENT
(E&S) CONTROL PLAN**
FOR LOTS UNDER 1 ACRE

Clean Fill

Not all earthen fill is created equal. Beware of fill that has a funky odor and ads for "free fill" on sites such as Facebook Marketplace.

Clean Fill Requirements:

Any person placing clean fill that has been affected by a spill or release of a regulated substance must certify the origin of the fill material and the results of the analytical testing to qualify the materials as clean fill.



Questions to ask prior to accepting fill on your property:

1. What is the location and background description of where the fill was generated?
2. Is there a description of the Environmental Due Diligence performed at the fill generation site?
3. Is there a table summarizing the soil sampling performed at the fill generation site and a copy of the analytical results available for review?
4. Is there a complete copy of Form FFP-001 (Certification of Origin of Clean Fill)?



Is the project located within a mapped FEMA Floodway or within 50' of a Water of the Commonwealth? Yes No

*FEMA maps are available at your local municipal office or online at:
<https://msc.fema.gov/portal/home>

VII. Erosion & Sediment (E&S) Control Best Management Practices (BMPs)

Earth Disturbance activities shall be planned and conducted to minimize the extent and duration of the disturbance. Please take this into account when planning and designing your earthmoving project.

The implementation and maintenance of E&S BMPs are required to minimize the potential for accelerated erosion and sedimentation, including those activities which disturb less than 1 acre. This means regardless of if a plan is reviewed by the Conservation District, BMPs must be in place, operated properly, and maintained throughout the life of the project.

Temporary BMP Controls

Check any temporary controls that will be used. All BMP locations should be shown on the plan drawing/sketch map.

- Rock Construction Entrance
- Filter Fabric Fence
- Rock Filters
- Compost Filter Sock
- Temporary Swale
- Vegetated Filter Strip
- Water Bar
- Culvert
- Pumped Water Filter Bag
- Rock Apron
- Erosion Control Matting
- Seeding and Mulching
- Sediment Trap
- Other: _____

*All temporary controls should be installed as per the manufacturer and meet any minimum requirements from the DEP's Erosion and Sediment Pollution Control Program Manual, 2012 edition:

<http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4680>

Maintenance Program

All erosion control devices will be inspected on a weekly basis and after each rainfall/snow melt event. Sediment will be removed from erosion control devices when sediment has reduced the erosion control's storage capacity of 50%. Sediment removed from the storage device will be placed in a location that is protected with erosion controls and will be seeded and mulched. Needed repairs or replacements of any erosion control devices will be made within 24 hours.

**EROSION & SEDIMENT
(E&S) CONTROL PLAN**
FOR LOTS UNDER 1 ACRE

Waters of the Commonwealth

Rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth

Non-Point Source Pollution

One of the greatest threats to the health of Pocono streams is nonpoint source pollution. This type of pollution is generated as the region's landscape is converted from forested open space to bedroom communities to accommodate those from the urban areas of New York, New Jersey and Philadelphia.



Did you know?

Here in Monroe County we are all residents of the Delaware River watershed. Those of us living east of the Pocono Plateau drain directly to the Delaware via the Brodhead, Bushkill or Cherry Creeks. Those living on or South of the Plateau drain into the Lehigh River, on the way to the Delaware, via the Tobyhanna, Pohopoco and Aquashicola Creeks.



I agree to follow the above maintenance program to ensure that all BMPs continually function before, during, and after construction.

I will provide an alternative plan for site maintenance which will be included with this E&S plan to be approved by the district.

Recycling or Disposal of Material

Construction wastes such as, but not limited to, excess soil material, building material, concrete washout water, or sanitary wastes can adversely impact water quality. Measures should be in place and planned for control of the materials. Please identify recyclable and waste materials and indicate how they will be handled.

Thermal Impacts

Identify BMPs used to avoid, minimize or mitigate potential increases to stream temperature from runoff. Check each control that will be used and show it on the plan drawing/sketch map.

- Distance to receiving waterway
- Vegetated filter strips
- Avoid direct discharge to surface waters
- Maintain Riparian Buffer areas
- Limit the duration of earth disturbance activities
- Other: _____

Permanent Controls

Prior to the completion of the project, any stage or phase of the earth disturbance activity requires immediate seeding, mulching, or other protection from accelerated erosion and sedimentation. Please check any permanent BMP Controls you plan on using.

- Seed and mulch
- Pavement
- Ditches, channels, or swales
- Landscaping (other than grass)
- Stone (aggregate)
- Storm water detention

**Implementation and maintenance of BMPs are required until the completion of permanent stabilization of the disturbed area. Permanent stabilization includes uniform 70% perennial vegetative cover, or erosion resistance species or other acceptable BMPs that permanently minimize accelerated erosion and sedimentation.

Sequence of Construction

A detailed sequence of construction for installation and removal of BMPs in relation to the scheduling of earth disturbance activities is required. The sequence

EROSION & SEDIMENT
(E&S) CONTROL PLAN
FOR LOTS UNDER 1 ACRE

Monroe County Streams

Nearly all of the streams in Monroe County are designated by the state as being of High Quality (HQ) or Exceptional Value (EV). These designations mean that these waters deserve "special protection" to maintain their present condition. Of the 83,000 miles of streams in PA, only 2% are classified as EV, and 80% of those EV streams are here in the Monroe, Pike, and Wayne County portions of the Poconos.

Wetlands

Wetlands are critical in preserving biodiversity and are important to local hydrological cycles. Wetlands act as "pollution sponges" by filtering out sedimentary and organic pollution from water run-off. And, as well, wetlands hold much economic significance to property owners, commercial fishers, and land developers.



Did you know?

One of the best ways to manage water resources is on a watershed scale. What residents in watershed communities do on their property will in some way have an impact on the watershed.

We "all live down stream."



should explain in detail BMP installation and removal, prior to, during, and after earth disturbance activities to ensure the proper function of all BMPs.

The following is a general construction sequence- indicate below if the intent is to follow this general sequence or attach your own construction sequence to this form.

1. Install rock construction entrance
2. Install temporary erosion control BMPs. BMPs must be properly installed and operating before proceeding with earth disturbance activities
3. Site grading/excavating including utility trenching, site pad and/or building construction
4. Temporary seeding and mulching of disturbed areas
5. Building or project completion
6. Install permanent erosion control BMPs when a uniform 70% perennial vegetative cover, stone base, or pavement has been established over the entire disturbed area.
7. Remove temporary E&S control BMPs

I have read and understand the above sequence and plan to use this sequence for the project.

I intend to utilize another construction sequence (your alternative construction sequence needs to be attached to this form)

EROSION & SEDIMENT (E&S) CONTROL PLAN *FOR LOTS UNDER 1 ACRE*

About the District

Monroe County Conservation District (District or M CCD) offers a wide variety of technical services and assistance to Monroe County residents. The District provides assistance with soils and wetlands mapping, aerial photography interpretation, prime farmland, topographic and floodplain mapping.

The District administers both Chapter 102 and 105 PA Department of Environmental Protection (DEP) delegated programs internally; including permit application, E&S review, and engineer review of Post Construction Stormwater Management (PCSM), site inspections, complaint investigations and technical assistance.



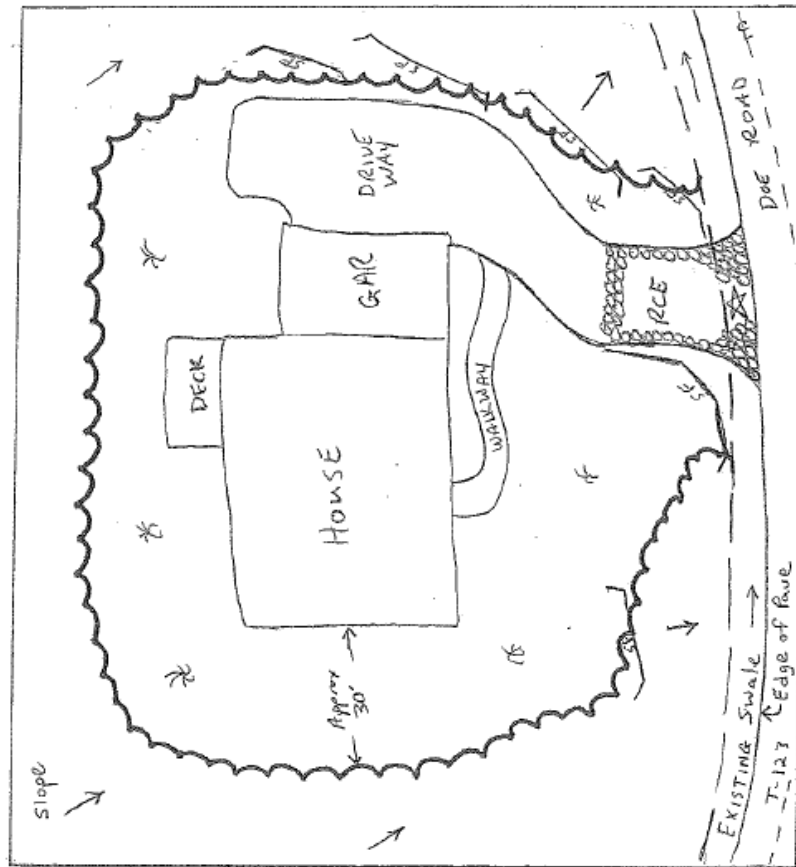
Did you know?

Each Conservation District is led by a Board of Directors made up of local people from all walks of life. These volunteers study county natural resource issues and make decisions which enhance and protect the local community.



Appendix A: Plan Drawing/Sketch Map Basic Residential Lot Samples

**This sample plan is provided for illustrative purposes and is not a site specific plan. Where a site specific plan is required by a municipality or other governmental entity, the services of a qualified erosion and sediment control plan preparer should be secured.



- DRAINAGE EASEMENT
- - - - - Filter Fence
- ~ ~ ~ ~ ~ Limit of Clearing/
Limit of DISTURBANCE
- [ROCK] Rock Construction Entrance
- Direction of Slope
- ☼ Areas to be grassed or
otherwise landscaped

See attached Construction Sequence
and Details

* GRASS SELECTED FOR SITE SLOPE/SHADE
CONDITIONS AS APPROPRIATE

★ DRIVEWAY- DO NOT BLOCK SWALE

EROSION + SEDIMENT POLLUTION CONTROL PLAN

LOT 4 OAKWOOD ESTATES
JOE + JOAN PUBLIC

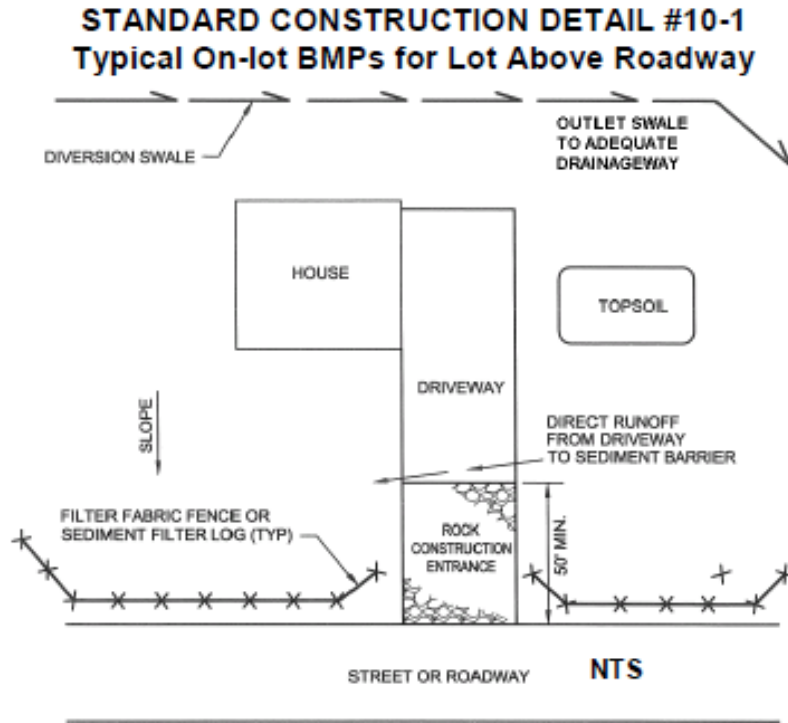
CLEARWATER TOWNSHIP
CLEAN COUNTY, PA

7/2004



TYPICAL CONFIGURATIONS

Wherever a lot is sloping toward the roadway, a layout as shown in Standard Construction Detail #10-1 should be used.



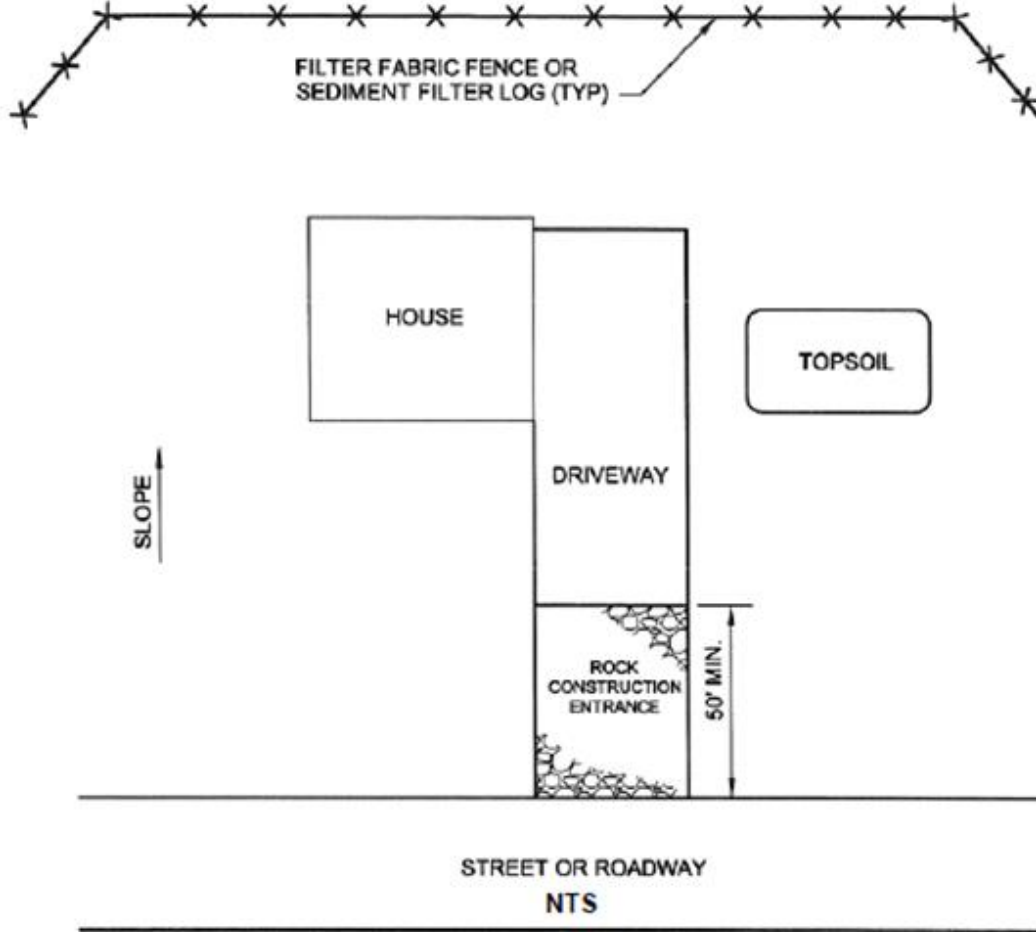
THE UPSLOPE DIVERSION CHANNEL SHOULD BE INSTALLED WHEREVER THE LOT EXTENDS MORE THAN 150 FEET ABOVE THE ROADWAY OR WHERE RUNOFF FROM AREAS ABOVE THE LOT IS NOT OTHERWISE DIVERTED AWAY FROM THE LOT. THE CHANNEL SHOULD BE PROPERLY SIZED AND PROVIDED WITH A SUITABLE PROTECTIVE LINING. THE DESIGNER MUST EXERCISE CAUTION TO PROTECT ALL DOWNSTREAM PROPERTY OWNERS WHEN SELECTING THE DISCHARGE POINT FOR THIS CHANNEL.

PA DEP



Wherever a lot is sloping away from the roadway, a layout as shown in Standard Construction Detail #10-2 should be used.

**STANDARD CONSTRUCTION DETAIL #10-2
Typical On-lot BMPs for Lot Below Roadway**



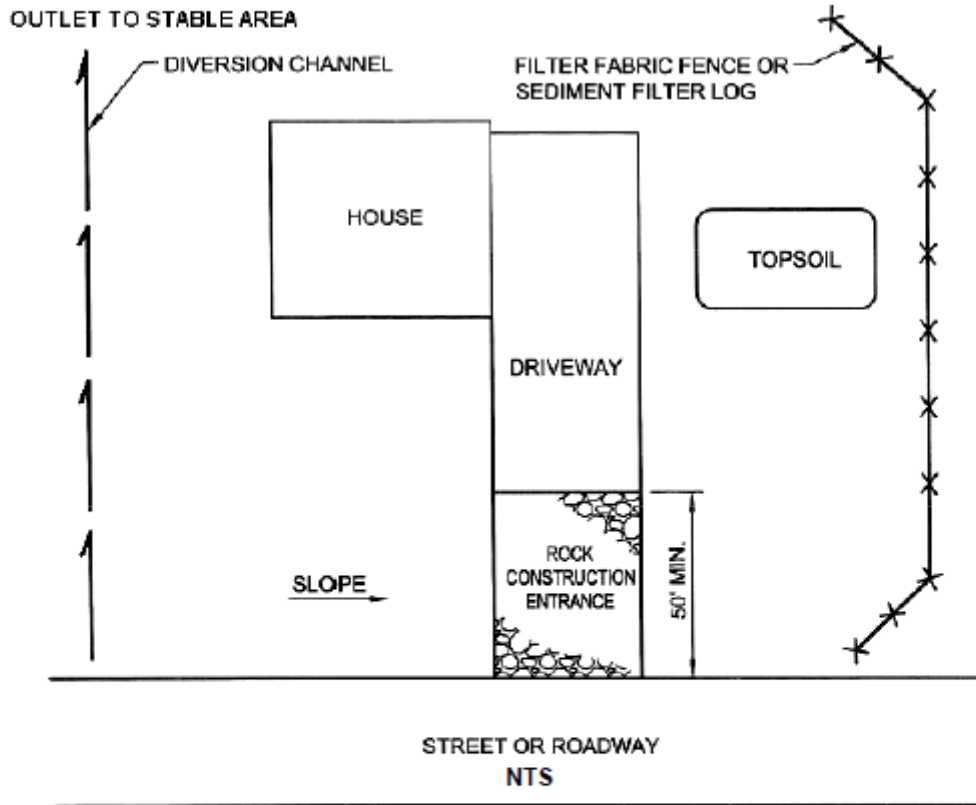
THE AREA DOWNSLOPE FROM THE FILTER FABRIC FENCE MAY NOT BE UNDER DEVELOPMENT OR OTHERWISE DISTURBED .

PA DEP



Wherever the slope parallels the roadway, a layout as shown in Standard Construction Detail #10-3 should be used.

STANDARD CONSTRUCTION DETAIL #10-3
Typical On-lot BMPs for Lot Along Ascending or Descending Roadway



THE AREA DOWNSLOPE FROM THE FILTER FABRIC FENCE MAY NOT BE UNDER DEVELOPMENT OR OTHERWISE DISTURBED .

THE UPSLOPE DIVERSION CHANNEL SHOULD BE INSTALLED WHEREVER RUNOFF FROM AREAS ABOVE THE LOT IS NOT OTHERWISE DIVERTED AWAY FROM THE LOT. THE CHANNEL SHOULD BE PROPERLY SIZED AND PROVIDED WITH A SUITABLE PROTECTIVE LINING.

PA DEP

In areas where slope is at an oblique angle to the roadway, BMPs shall be adjusted accordingly.

Diversion channel may outlet to roadside ditch or storm sewer system, but not onto street or roadway.



Appendix B: Plan Drawing/ Sketch Map

Project Name: _____

Date: _____

A large, empty rectangular box with a thin black border, intended for the user to draw a plan drawing or sketch map for the project.

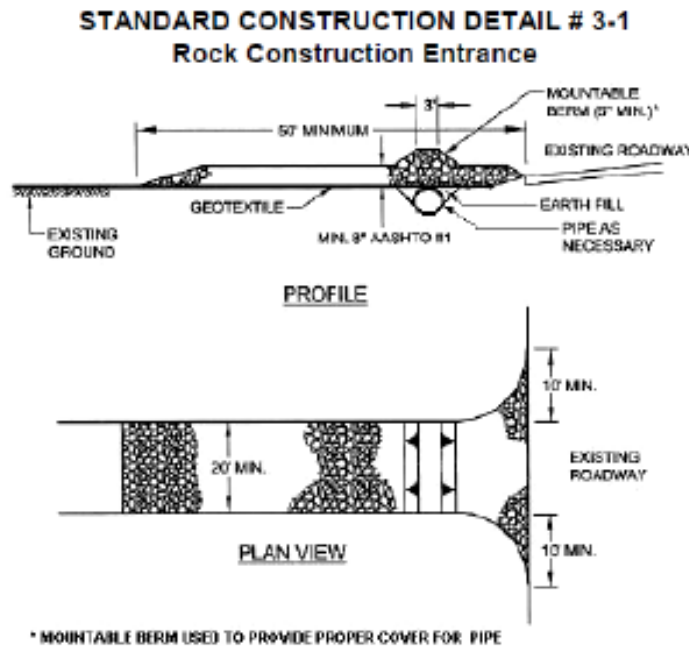
Legend

Site Narrative:



Appendix C: Common E&S BMP Standard Construction Details

*Additional Standard Construction Details can be found in DEP's Erosion and Sediment Pollution Control Program Manual, 2012 edition at: <http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4680>



Modified from Maryland DOE

Remove topsoil prior to installation of rock construction entrance. Extend rock over full width of entrance.

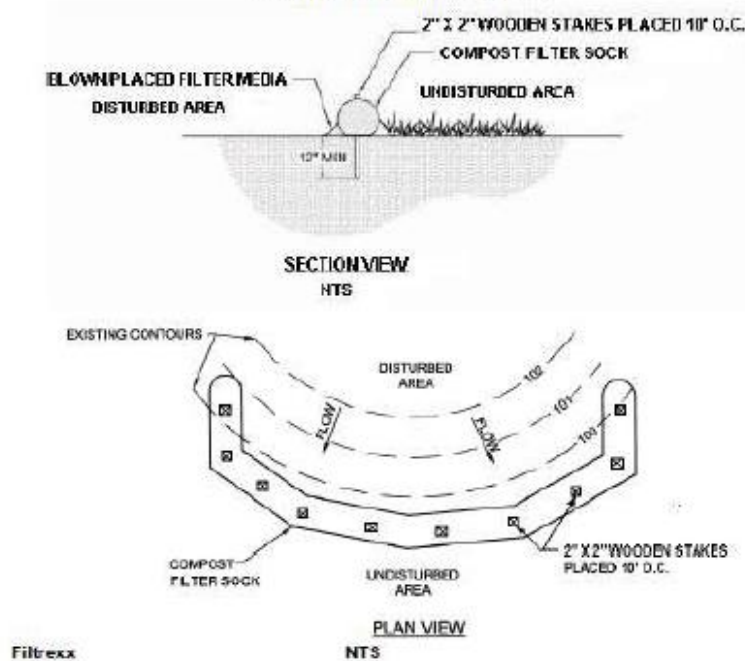
Runoff shall be diverted from roadway to a suitable sediment removal BMP prior to entering rock construction entrance.

Mountable berm shall be installed wherever optional culvert pipe is used and proper pipe cover as specified by manufacturer is not otherwise provided. Pipe shall be sized appropriately for size of ditch being crossed.

MAINTENANCE: Rock construction entrance thickness shall be constantly maintained to the specified dimensions by adding rock. A stockpile shall be maintained on site for this purpose. All sediment deposited on paved roadways shall be removed and returned to the construction site immediately. If excessive amounts of sediment are being deposited on roadway, extend length of rock construction entrance by 50 foot increments until condition is alleviated or install wash rack. Washing the roadway or sweeping the deposits into roadway ditches, sewers, culverts, or other drainage courses is not acceptable.



**STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK**



Sock fabric shall meet standards of Table 4.1. Compost shall meet the standards of Table 4.2.

Compost filter sock shall be placed at existing level grade. Both ends of the sock shall be extended at least 8 feet up slope at 45 degrees to the main sock alignment (Figure 4.1). Maximum slope length above any sock shall not exceed that shown on Figure 4.2. Stakes may be installed immediately downslope of the sock if so specified by the manufacturer.

Traffic shall not be permitted to cross filter socks.

Accumulated sediment shall be removed when it reaches half the aboveground height of the sock and disposed in the manner described elsewhere in the plan.

Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired according to manufacturer's specifications or replaced within 24 hours of inspection.

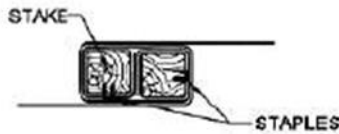
Biodegradable filter socks shall be replaced after 6 months; photodegradable socks after 1 year. Polypropylene socks shall be replaced according to manufacturer's recommendations.

Upon stabilization of the area tributary to the sock, stakes shall be removed. The sock may be left in place and vegetated or removed. In the latter case, the mesh shall be cut open and the mulch spread as a soil supplement.

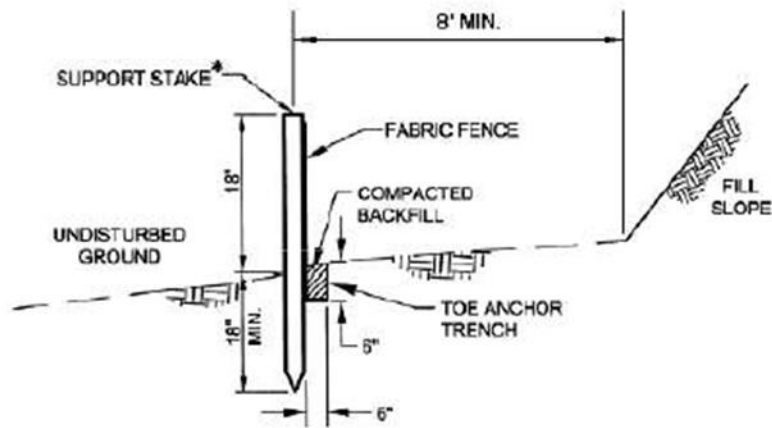


STANDARD CONSTRUCTION DETAIL # 4-7
Standard Silt Fence (18" High)

*STAKES SPACED @ 8' MAX.
USE 2" x 2" (± 3/8") WOOD
OR EQUIVALENT STEEL
(U OR T) STAKES



JOINING FENCE SECTIONS



ELEVATION VIEW

PA DEP

Fabric shall have the minimum properties as shown in Table 4.3.

Fabric width shall be 30" minimum. Stakes shall be hardwood or equivalent steel (u or t) stakes.

Silt fence shall be placed at level existing grade. Both ends of the fence shall be extended at least 8 feet up slope at 45 degrees to the main fence alignment (see Figure 4.1).

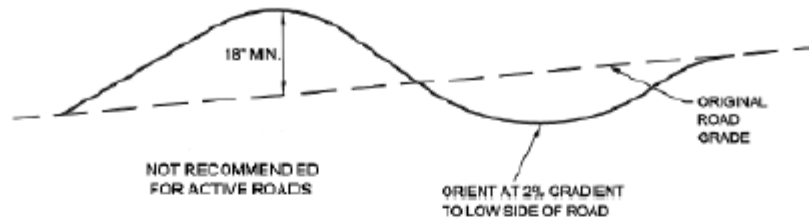
Sediment shall be removed when accumulations reach half the aboveground height of the fence.

Any section of silt fence which has been undermined or topped shall be immediately replaced with a rock filter outlet (Standard Construction Detail # 4-6).

Fence shall be removed and properly disposed of when tributary area is permanently stabilized.



**STANDARD CONSTRUCTION DETAIL #3-5
Waterbar**



Adapted from USDA Forest Service

Waterbars shall discharge to a stable area.

Waterbars shall be inspected weekly (daily on active roads) and after each runoff event. Damaged or eroded waterbars shall be restored to original dimensions within 24 hours of inspection.

Maintenance of waterbars shall be provided until roadway, skidtrail, or right-of-way has achieved permanent stabilization.

Waterbars on retired roadways, skidtrails, and right-of-ways shall be left in place after permanent stabilization has been achieved.

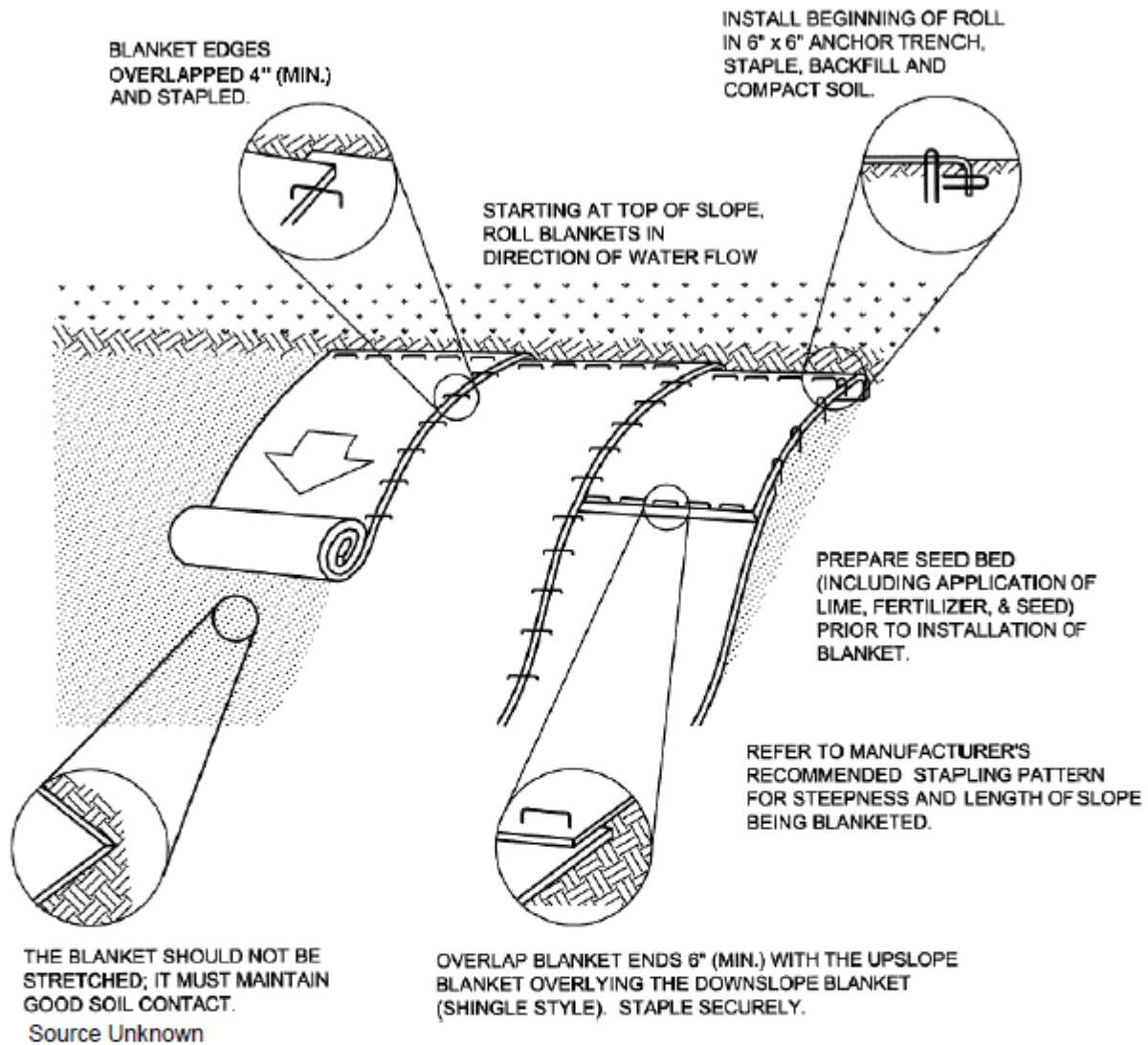
TABLE 3.1 – Maximum Waterbar Spacing

PERCENT SLOPE	SPACING (FT)
<5	250
5 - 15	150
15 - 30	100
> 30	50

Adapted from USDA Forest Service



**STANDARD CONSTRUCTION DETAIL # 11-1
Erosion Control Blanket Installation**



Seed and soil amendments shall be applied according to the rates in the plan drawings prior to installing the blanket.

Provide anchor trench at toe of slope in similar fashion as at top of slope.

Slope surface shall be free of rocks, clods, sticks, and grass.

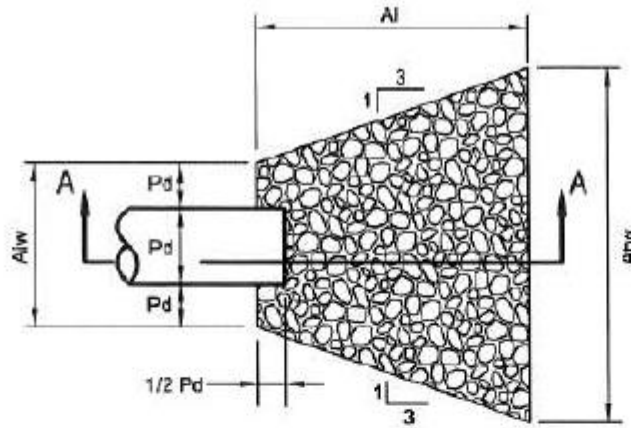
Blanket shall have good continuous contact with underlying soil throughout entire length. Lay blanket loosely and stake or staple to maintain direct contact with soil. Do not stretch blanket.

The blanket shall be stapled in accordance with the manufacturer's recommendations.

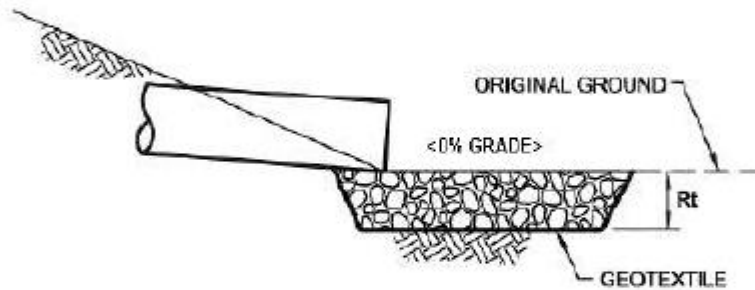
Blanketed areas shall be inspected weekly and after each runoff event until perennial vegetation is established to a minimum uniform 70% coverage throughout the blanketed area. Damaged or displaced blankets shall be restored or replaced within 4 calendar days.



**STANDARD CONSTRUCTION DETAIL # 9-2
Riprap Apron at Pipe Outlet without Flared Endwall**



PLAN VIEW



SECTION A - A

Adapted from USDOT, FHA HEC-14

NOTE: This table is intentionally blank and should be filled in by the plan preparer.

OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP			APRON	
		SIZE (R-)	THICK. Rt (IN)	LENGTH Al (FT)	INITIAL WIDTH Aiw (FT)	TERMINAL WIDTH Atw (FT)

All aprons shall be constructed to the dimensions shown. Terminal widths shall be adjusted as necessary to match receiving channels.

All aprons shall be inspected at least weekly and after each runoff event. Displaced riprap within the apron shall be replaced immediately.

Extend riprap on back side of apron to at least 1/2 depth of pipe on both sides to prevent scour around the pipe.



TABLE 11.6
Mulch Application Rates

Mulch Type	Application Rate (Min.)			Notes
	Per Acre	Per 1,000 sq. ft.	Per 1,000 sq. yd.	
Straw	3 tons	140 lb.	1,240 lb.	Either wheat or oat straw, free of weeds, not chopped or finely broken
Hay	3 tons	140 lb.	1,240 lb.	Timothy, mixed clover and timothy or other native forage grasses
Wood Chips	4 - 6 tons	185 - 275 lb.	1,650 - 2,500 lb.	May prevent germination of grasses and legumes
Hydromulch	1 ton	47 lb.	415	See limitations above

TABLE 11.4
Recommended Seed Mixtures

Mixture Number	Species	Seeding Rate - Pure Live Seed ¹	
		Most Sites	Adverse Sites
1 ²	Spring oats (spring), or	64	96
	Annual ryegrass (spring or fall), or	10	15
	Winter wheat (fall), or	90	120
	Winter rye (fall)	56	112
2 ³	Tall fescue, or	60	75
	Fine fescue, or	35	40
	Kentucky bluegrass, plus Redtop ⁴ , or	25	30
	Perennial ryegrass	3	3
3	Birdsfoot trefoil, plus Tall fescue	15	20
		6	10
4	Birdsfoot trefoil, plus Reed canarygrass	30	35
		6	10
5 ⁵	Crownvetch, plus Tall fescue, or Perennial ryegrass	10	15
		20	25
		20	25
6 ^{5,8}	Crownvetch, plus Annual ryegrass	10	15
		20	25
7 ⁹	Birdsfoot trefoil, plus Crownvetch, plus Tall fescue	6	10
		10	15
		20	30
8	Flatpea, plus Tall fescue, or Perennial ryegrass	20	30
		20	30
		20	25
9 ⁶	Serecia lespedeza, plus Tall fescue, plus Redtop ⁴	10	20
		20	25
		3	3
10	Tall fescue, plus Fine fescue	40	60
		10	15
11	Deertongue, plus Birdsfoot trefoil	15	20
		6	10
12 ⁷	Switchgrass, or Big Bluestem, plus Birdsfoot trefoil	15	20
		15	20
		6	10
13	Orchardgrass, or Smooth bromegrass, plus Birdsfoot trefoil	20	30
		25	35
		6	10

¹Penn State, "Erosion Control and Conservation Plantings on Noncropland"



FIGURE 11.4
Straw Mulch Applied at 3 Tons/Acre



PA DEP

**Rule of thumb: If you are seeing a lot of bare ground, there is not enough straw.
(Caution: Too much straw can be as harmful as too little straw.)**

Mulches should be applied at the rates shown in Table 11.6

Straw and hay mulch should be anchored or tackified immediately after application to prevent being windblown. A tractor-drawn implement may be used to "crimp" the straw or hay into the soil — about 3 inches. This method should be limited to slopes no steeper than 3H:1V. The machinery should be operated on the contour. Note: Crimping of hay or straw by running over it with tracked machinery is not recommended.

Polymeric and gum tackifiers mixed and applied according to manufacturer's recommendations may be used to tack mulch. Avoid application during rain and on windy days. A 24-hour curing period and a soil temperature higher than 45° F are typically required. Application should generally be heaviest at edges of seeded areas and at crests of ridges and banks to prevent loss by wind. The remainder of the area should have binder applied uniformly. Binders may be applied after mulch is spread or sprayed into the mulch as it is being blown onto the soil. Applying straw and binder together is generally more effective.