Montgomery County Department Of Permitting Services
255 Rockville Pike
Rockville, MD 20850
240-777-6320 Fax: 240-777-6339

SEDIMENT CONTROL/STORMWATER MANAGEMENT DETAIL PLAN & PERMIT PROCESS

INTRODUCTION:

The following is an overview of sediment control/stormwater management detailed plan and permit process. The process is separate from, but concurrent with the building permit process.

A. INITIAL SUBMITTAL:

The SM Concept should be approved prior to initial submittal:

1. S/C/SM Permit Application
2. Filing Fee (minimum) = $737.00
3. IF-1 Form (Information Form)
4. 2-sets of SC/SM Prints with the approved concept letter on them.
5. 2-sets of any necessary supporting computations

B. REVIEWS:

- Utilize local, state, and federal technical criteria. Comments are communicated to the consultant via technical criteria checklist and plan comments.
- Total permit fee and bond amounts are calculated. Consultant and permittee are notified of fee and bond amounts and bond formats via mailing.
- The County Attorney must approve non-standard bond formats; standard bond formats are approved in-house.
- If a waiver of quantity and/or quality controls has been granted in the SM Concept process, a waiver contribution dollar amount is established during the review process and is due prior to building permit issuance.
- An approved Forest Conservation Plan or Letter of Exemption is required from the MNCPPC prior to SC/SM plan approval.
- **REVIEW TIMING (2-TIER SYSTEM):**
  - T1 (average 2-4 week turnaround) – New submittal of plans involving stormwater management and large sediment control plans.
  - T2 (average 1-2 week turnaround) – New submittal without stormwater management or any resubmittals with minor comments.

C. RESUBMITTALS:

- Consultant addresses comments and resubmits revised plans with previous review and checklist.
- Balance of fee due with first resubmittal.

D. PERMITTING:

- Once plans are approved by DPS signatures on the mylars, the consultant supplies sets of folded prints (2 sets if only sediment control; 3 sets if sediment control and stormwater or sediment control and floodplain; 4 sets if sediment control, stormwater management, and floodplain).
- Bond must be posted.
- Sediment Control Permit is then issued and mailed to the permittee (permit may be picked up if so desired to save time).
- Sediment Control "hold" on Building Permit is then released as long as any applicable waiver contributions have been paid.
- Permittee should call 240-777-6366 to arrange a pre-construction meeting with the water resources inspector as soon as they have their sediment control permit in hand.

E. EXPEDITE PROGRAMS:

- Overtime-Priority: Permittee pays 25% more in permit fees and is assured significant reductions in review times. The extra permit fee is calculated during the initial review and is due along with the remainder of permit fees at the first resubmittal.
- Phasing Procedure: Plans and approvals may possibly be phased so that grading, utilities and building construction are approved first and can start. The plans are then revised and formally submitted for a revision to add the more complex stormwater management facilities, which are built later in the site process. Revision fees are charged.
- Advance Sediment Control #: Typically, the permittee applies for their sediment control permit in advance of, or concurrently with their building permit application. However, at times the architectural work may be ahead of the civil engineering work and the permittee anxious to start the building permit process. To address this situation, a completed application and filing fee are all that is needed to allow the creation of a Sediment Control Number, which is then used to make building permit application. The finalized civil drawings are then submitted as soon as possible to link up with their sediment control number and "catch-up" to the building permit process. Revision fees are charged.

EROSION AND SEDIMENT CONTROL DESIGN GUIDELINES

MONTGOMERY COUNTY

Department of Permitting Services

Water Resources Section

255 Rockville Pike
Rockville, MD 20850

March 2003

TABLE OF CONTENTS

APPENDICES

MONTGOMERY COUNTY
Department of Permitting Services
EROSION AND SEDIMENT CONTROL DESIGN GUIDELINES

1. Introduction

The Water Resources Management Section of the Montgomery County Department of Permitting Services (DPS) has prepared the following general guidelines for designing erosion and sediment control plans. These guidelines are intended to complement the Maryland Standards and Specifications for Soil Erosion and Sediment Control and MCDPS Erosion and Sediment Control checklist. They will assist designers in choosing effective and practical erosion and sediment control measures. These guidelines are based on years of experience in one of the oldest sediment control/stormwater management programs in the nation. Montgomery County's standards may exceed State standards in some areas. In addition, through the years Montgomery County has developed sediment control device details not in the State Standards. These details should be utilized. An Appendix has been provided at the end of the guidelines, which includes these details, as well as an overview of the permit process and numerous other standard plan requirements. Any suggested improvements to the guidelines are always welcome.

2. General Design Approach

Our emphasis is on stabilization and perimeter controls (dikes, rip-rap outlet traps, sediment basins, or stormwater facilities temporarily serving as sediment basins). Non-erosive conveyance (primarily storm drain diversions) to those controls is a priority. In sensitive watersheds, we emphasize stabilization, phased grading, and redundant controls. The sediment control plan must reflect controls for the site as it changes throughout development. All erosion and sediment control measures that are expected to be needed as development projects must be shown on the plans. Utilizing this approach, the job can be bid accurately and developers; and, contractors know what is expected of them. Also, relationships with the inspection staff are improved. This will reduce the number of field changes during development and avoid construction delays.

Some examples:

a) What happens to drainage divides once a road is graded, curb and gutter, and base course are installed? Special dikes, temporary asphalt berms, and curb cuts may be needed on the roadways to direct runoff to storm drain inlets or perimeter controls.

b) What happens when mountable berms across stone construction entrances are removed and the road is paved? Can the mountable berm be replaced with curb cuts and a temporary asphalt berm? Large drainage areas need temporary pipes under construction entrances instead of mountable berms. Small drainage areas may be controlled using silt fence along the up-slope curb line.

c) Where is excess excavated material or topsoil to be stockpiled?

d) Has equipment access been provided for removal and backfill of sediment traps and basins, and subsequent stabilization of the resultant disturbed area?

e) Will new homeowners have to endure a longtime presence of an earth dike or other sediment control measures on their property as the remainder of the subdivision is developed?

f) Is it necessary to import or export large quantities of earth to or from the site? If so, heavy-duty, longer, wider, construction entrances and wash racks, may be necessary to keep public streets free of sediment deposits and to minimize unsafe road conditions for the motoring public.

g) Has public utility construction been coordinated and addressed with the installation and maintenance of sediment control measures?

All sediment control measures must be shown on the plan. The installation and removal of measures must be addressed in the sequence of construction. Some important information required on the sediment control plan is as follows:

a) Always show and label acres of off-site drainage areas impacting the site, even when they are to be diverted around or through the site.

b) Show existing and proposed drainage divides **on the sediment control plan view sheet(s)**, not on a separate plan or topographical map. These divides are the best tool the reviewer and the sediment control inspector has in evaluating site sediment controls, and need to be an integral part of the plan layout.

c) Show tree protection areas on the sediment control plan view sheet(s) and provide appropriate measures to protect them.

d) Show 100-year floodplains, 25-foot building restriction lines, wetlands, wetland buffers, and stream valley buffers on the sediment control plan view sheet(s).

Sites large enough to require two or more sheets for their plan views need a composite sediment control plan view showing site layout (streets, lots, section, etc.) and schematic layout of the sediment control devices, and existing and proposed drainage divides. These aid both in review, inspection, and contractor planning of stabilization.

3. Sequence of Construction

Utilize MCDPS's standardized sequences for the initial steps, then be as detailed and site specific as possible; especially with regard to sediment control and stormwater management. The sequence of construction is a major part of the sediment control plan, and should provide detailed guidance. Sequences must be practical. A poor or unrealistic sequence can result in substantial construction delays and unexpected costs.

4. Silt Fence (SF)

This is probably the most abused and poorly used sediment control device. Silt fence is to be installed on the contour only, and should be shown on the plan this way only. Even the slightest grade along a line of silt fence causes the runoff to concentrate at its lowest point. This is where failures will occur.

Silt fence can not withstand fill material sliding against it. Even when installed properly, it is very maintenance intensive. In almost all cases, earth dikes and a trap below fill areas are more effective. MCDPS will require dikes and trap even when State standards and specifications criteria allow for silt fence. Silt fence should only be used on extremely small drainage areas or as a "finish-out" type device for developments (e.g., when traps are removed). When a silt fence must be used at the toe of a slope, provide a buffer area between the toe of the slope and silt fence to prevent immediate overtopping of the silt fence.

Super silt fence (SSF), a relatively new sediment control practice, has proved to be useful where regular silt fence or other sediment control devices will not work or are impractical, such as when there is not enough space for earth dikes and a trap. Utilize MCDPS's **Modified Super Silt Fence** detail (See Appendix E-3).

5. Earth Dikes (ED)

The correct ED channel size and flow channel treatment must be indicated on plans on the side of the dike which will actually receive the water. Contractors sometimes install the treatment on the wrong side, because that is where it is labeled. Delineate where different flow channel treatments change.

Make sure dikes are designed to convey runoff downhill. On flatter slopes and grades, they are subject to intense maintenance or overtopping due to sediment accumulations in the flowline decreasing their capacity. Moderate grades are best. A minimum 2% grade is recommended. Where a minimum 2% grade can not be provided, B type dikes should be called for regardless of drainage area. Sharp (90 degrees) turns of earth dikes should be avoided. If this is not possible, an enlarged or heavy armored dike face and channel should be provided.

Dikes should be installed along the tops of fills and traps or basin side slopes to keep gullies from forming on the slope. At low point along the tops of those fills, flexible pipe slope drains must be used to convey runoff down the slopes. As fills are being brought to grade, their outermost top edge should be sloped backward keeping runoff off the slope (thus serving the same function an ED). This should be spelled out with notes in the sequence and on the plan view.

Where the construction of an ED would impact tree-save areas, a flexible pipe slope drain can be used to pass the runoff through the tree area and outlet into a continuation of the ED.

Where any excavation might be needed to maintain positive drainage, use an ED in conjunction with a temporary swale. "Perimeter Dike/Swales" cannot be used. Their small size limits their drainage area; they silt up and are easily destroyed by construction activities.

6. Storm Drain Diversion

This practice removes concentrated water flows from the soil surface; thereby getting the water underground, out of the contractor's way, preventing surface erosion and flooding. Storm drain diversions are always required where they can be physically installed, and of-site, clean water drainage area to them is less than 50% of the on-site disturbed areas. This can be accomplished in almost every situation.

Several ways to install storm drain diversions:

a) Locate traps and basins downstream of permanent storm drain outfall.

b) Delay construction of the outfall or lower end of the permanent storm drain to temporarily direct runoff to a trap/basin.

c) A temporary CMP stub can be installed from a storm drain manhole or inlet to convey the dirty water to a trap/basin. The permanent outlet is bricked shut until the temporary outlet is no longer needed. The temporary pipe can be one size smaller than the permanent pipe, if no flooding problems will be incurred. Preferably, the temporary pipe should outlet at the storage elevation of the trap/basin. If it must outlet at a lower elevation, check for backwater surcharge effects.

For storm drain diversion methods b or c, detail what is to be done in both the plan view and profile on the Sediment Control Plan and on the Storm Drain Plan. This information must be shown on the Storm Drain Plan because the storm drain contractor for the developer usually performs this work according to that plan only, and does not have access to the sediment control plan. Storm drain profiles must be shown on the sediment control plan.

Once the drainage area to the storm drain diversion is permanently stabilized, and with the written approval of the inspector, the storm drain system should be flushed; temporary pipes removed; and remaining permanent pipes constructed. This should be spelled out in the construction sequence.

When a storm drain diversion is called for and in-line inlets are draining to it, use the MCDPS **temporary earthen/asphalt dikes** (see Appendix E-1) at all inlets when curb, gutter, and base course paving have been installed. This prevents the water in the street from bypassing the inlet throat and overwhelming the eventual sump or lowest inlet. Do not place inlet protection on diverted lines.

7. Inlet Protection

This is the least preferred method of sediment control and should only be used as a "finish-out" type device in conjunction with silt fence.

Problems:

Difficult installation and maintenance; pavement and roadbed saturation; minimal, if any, storage. Depending on the type of inlet, the following may also occur:

a) In-Line Curb Inlets:

Runoff bypasses unless top/surface course of paving is in place. If inlet protection must be used, include a temporary earth/asphalt dike to minimize the problem.

b) Sump Inlets:

When stone, filter cloth and/or overflow becomes clogged, runoff overtops the inlet. Large volumes of runoff can flood the entire sump area, create severe gully erosion on side slopes, and flood private property and roadways.

Whenever possible, use storm drain diversions to eliminate the need for inlet protection.

8. Sediment Traps/Basins:

In general, use **rip-rap outlet traps or sediment basins** depending upon the drainage area. The pipe outlet trap still remains a valuable practice when rip-rap trap outflows cause nuisance drainage, erosion, or icing problems. These situations can be avoided by having a pipe outlet trap outfall directly in to an existing storm drain or into a flexible pipe slope drain extending past the problem area. The **stone outlet trap, stone outlet/rip-rap outlet trap, and stone outlet structure** are not allowed because of questionable effectiveness and durability.

Always utilize the MCDPS **modified dewatering device** (see Appendix E-2) for the pipe and rip-rap outlet traps as well as sediment basins and stormwater management ponds temporarily serving as basins. Sedimentation efficiency is maximized when the trap provides both wet and dry storage. MCDPS developed the modified dewatering device in conjunction with the engineering community. When a gravity outlet can be obtained, this device allows designers to provide only 3600 cubic feet of storage, rather than the 5400 cubic feet required by the Sediment Control Standards.

To provide the longest flow path distance through a trap or basin, design dikes to outlet into a trap/basin at a point, as far as possible, from the outlet. Baffles should be considered when inflow points are near the outlet, and are required when inflow drainage areas are greater than three acres. Utilize MCDPS's detail for **Baffle and Stone Inflow Protection Installation** (See Appendix E-4).

Many traps fill up with sediment from erosion at concentrated in-flow points and their side slopes. Rip-rap inflow channels or pipe slope drains (PSD's) are required to convey runoff from such inflow points into a trap/basin. PSD's are required for inflow points with drainage areas greater than three acres. The addition of an earth dike, between inflow points, can greatly lessen erosion of interior trap/basin slopes.

Trap/basin outlets should outfall onto the flattest of slopes possible. If steep outfall slopes are unavoidable, consider using pipe outlet traps and extending the outlet to the tope of the slope (flexible, plastic, or corrugated pipes are the best) and to rip-rap outfall.

Utilize MCDPS's **Metal Connection for Pond Barrels** (See Appendix E-5) for the CMP pipe barrel of a sediment basin.

9. Stone Construction Entrances and Wash Racks

SCE's are badly abused on any size site and can be the source of many complaints and headaches. SCE's are absolutely not to be used as any sort of filter device. It is recommended to line their sides with silt fence to keep sediment out of the stone and to force the construction traffic to utilize their full length, rather than angling through them.

If a large volume of earth (> 25,000 cubic yards) is going to be hauled on or off a site, a wash rack is necessary. Cattle-guards work well. The runoff from the wash rack must be directed to a sediment trapping device. Provide details on the plans. Where large volumes of earth are going to be hauled on or off a site, utilize separate entrances for entering and exiting the site, if possible.

10. Stabilization Aids

Erosion and sediment control plans should call for temporary and/or permanent stabilization as soon as it is feasible to be implemented anywhere on the site. Establishment and maintenance of vegetation is the most important factor in combating erosion. There are several ways in which vegetation protects soil from erosive forces of raindrop impact and runoff scour. Vegetation shields the soil surface from raindrop impact while the root mass holds soil particles in place. Vegetation also can "filter" sediment from runoff. Vegetation also slows the velocity of runoff and helps maintain the infiltration capacity of a soil. This goal is to expose as small an area as possible for the shortest length of time. By minimizing the time and extent of soil exposure, the erosion hazard is also minimized. Montgomery County's Sediment Control Executive Regulation requires that all areas be stabilized which have not be actively under construction for 14 calendar days or longer. This stabilization must be maintained in good condition. Any disturbed areas on construction sites that fall within this category, or have been brought to final grade, must be "made green." In Montgomery County, a "stabilized" area is one which has an established growth of temporary or permanent vegetation. Mulching alone is not acceptable.

Design computations for non-erosive flow, stabilization treatments and cross-sectional details are required for any major overland flow channels. Even moderate or small sized channels should be evaluated and have channel treatment with seeding and erosion matting or sod (in season) at a minimum. Spell out flow channel treatments on the cross sectional detail. All sod and matted channels must call for pinning, stapling, or netting, as appropriate.

JRB:enm:EROSCDE3:8/9/01

APPENDIX A

OVERVIEW OF THE SEDIMENT CONTROL PERMIT PROCESS

Montgomery County Maryland
Department of Permitting Services
255 Rockville Pike
Rockville, MD 20850
240-777-6320/FAX 240-777-6339

HOURS: Monday-Friday 7:30 a.m. - 4:00 p.m.

SEDIMENT CONTROL PERMIT

WHEN DO I NEED A SEDIMENT CONTROL (SC) PERMIT?

The purpose of the Sediment Control Permit is to prevent excessive erosion and stormwater flow from land disturbing activiites from causing siltation and streambank erosion off site.

A permit is required for any land disturbing activity in Montgomery County that disturbs 5,000 sq. ft. or more of land, results in 100 cu. yds. or more of earth movement, or is for the construction of a new residential or commercial building. An applicant must have approved erosion and sediment control and stormwater management plans before construction begins. Agricultural land management activities are exempt if the land has been farmed by the same owner within the last 5 years or a Declaration of Intent has been filed with the Department. Nursery Operations and the cutting of trees are considered to be land disturbing activities.

WHICH TYPE OF SEDIMENT CONTROL PERMIT WILL I NEED?

Depending on the amount of land being disturbed and the type of development, one of the following permits will be required:

Small Land Disturbance Permit (SLDA)

- disturbance greater than 5,000 sq. ft., but no more than 30,000 sq. ft. for residential development and no more than 20,000 sq. ft. for commercial development.
- volume of earth moved must be under 1,000 cu. yds.
- single-family construction
- fewer than 15,000 sq. ft. of new impervious area.

Engineered Sediment Control Permit

- disturbance exceeding the above limits as outlined under the SLDA permit.

Forest Harvest Activities Permit

- For logging and timber removal operations

WHAT IS THE PERMIT APPLICATION PROCESS

Submit a completed SC permit application, with an engineered erosion and sediment control plan, where applicable. The appropriate permit fee and performance bond are required at this time. For the SLDA application, two copies of a site plan will be needed. For Forest Harvest Activities, one copy of all pertinent information is required.

Conditions of Approval

A permit will be issued when an erosion and sediment control plan is approved by the department, and the owner certifies that all land disturbance activities will be performed pursuant to the approved SC plan. As provided in Section 19-7 of the Montgomery County Code, the approved SC plan must be a condition of the permit and must not conflict with conditions shown on the approved subdivision plan, development paln, and forest-conversation plan.

Inspections Information

The permittee must notify the department 48 hours before commencing any land-disturbing activities and, must hold a preconstruction meeting with an authorized department representative, unless the department waives the meeting requirement. Call 240-777-6366 to schedule an inspection.

Other Agencies Involved

Any work within the public" rights-of-way will require a roadway grading permit from the subdivision development sectin of the department. The Montgomery Soil Conservation District must approve all SC plans for Forest Harvest Activities."or "right-of-ways"

Appeal Procedure

Appeals of the issuance of any SC permit sould be directed to Director of the Department of Environmental Protection within five work days from date of permit issuance.

(CONTINUED ON OTHER SIDE)

SEDIMENT CONTROL PERMIT (CONT.)

WHAT WILL THE SEDIMENT CONTROL PERMIT COST?

- **SLDA**.....$260.00
  Permits for Harvest Activities.....$100.00
  All other SC permits$.03 per sq. ft.of disturbed area
  Minimum fee.....$670.00

- **BONDS (not required for SLDA)**
  SC only..$300 plus $.02 per sq. ft. of disturbed area
  SC Maximum fee.....$10,000
  Stormwater Managementconstructionactual cost

- **PERMIT EXTENSION** $85.00

- **PERMIT REVISIONS** 35% of original fee(minimum $670, Maximum $1,450)

WHEN WILL I RECEIVE MY SEDIMENT CONTROL PERMIT?

- An Engineered SC plan takes approximately four weeks to review

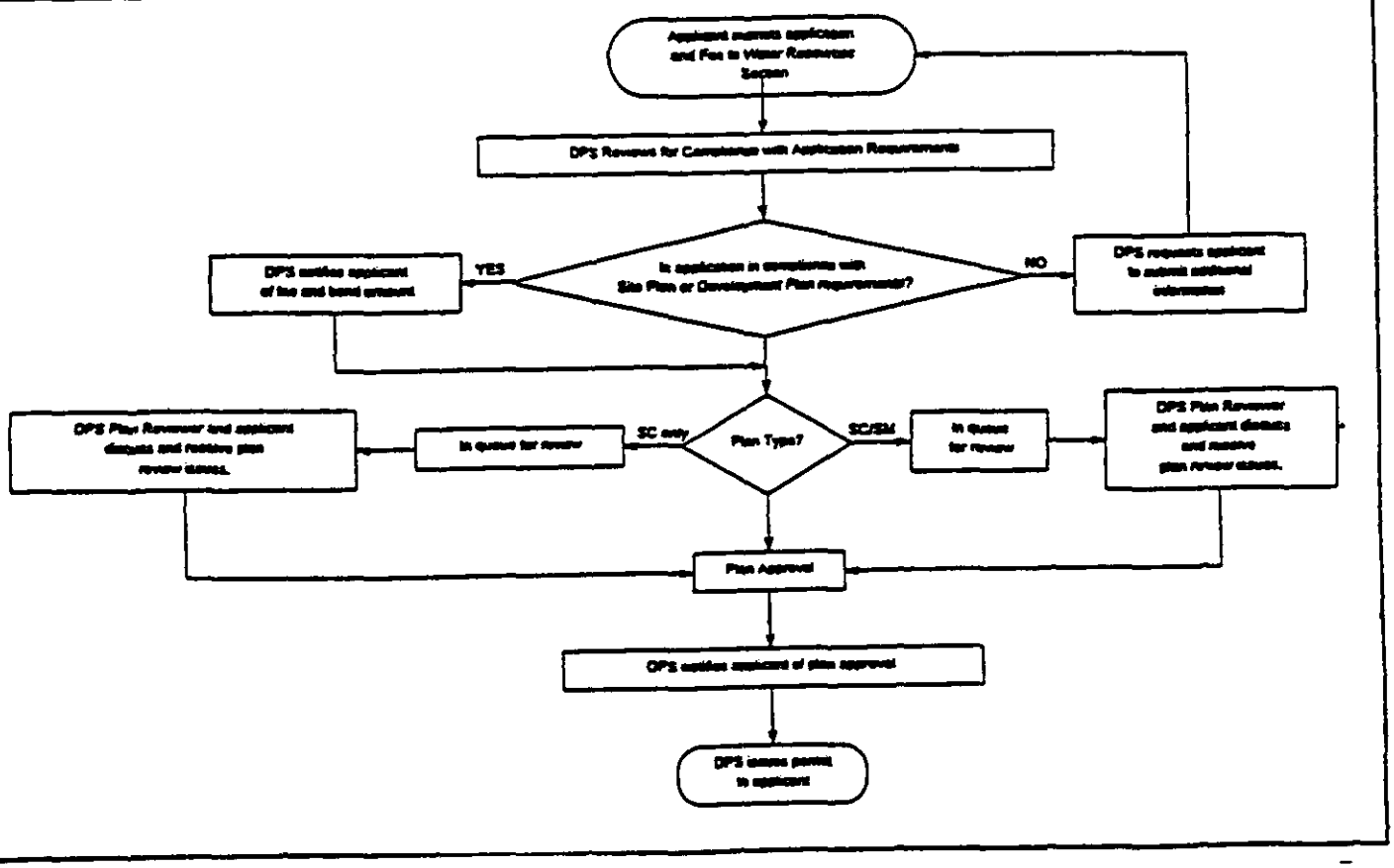
- SLDA and Forest Harvest permits are issued within the week, however, Forest Harvest Plans must also be approved by teh Montgomery Soil Conservation District.

- the total Engineered SC permit review is about three months

Actual processing time may vary due to workload, considerations/project complexity.

The permit is good for one year with two six month extensions.

THE SEDIMENT CONTROL PROCESS AT A GLANCE



. .s information is available in an alternate format by calling 240-777-6366

APPENDIX B

SEDIMENT CONTROL FEE AND BOND POLICY

DEPARTMENT OF PERMITTING SERVICES

Douglas M. Duncan
County Executive

Robert C. Hubbard
Director

DEPARTMENT OF PERMITTING SERVICES
DIVISION OF LAND DEVELOPMENT SERVICES/WATER RESOURCES SECTION
POLICY

Effective Date: ***November 30, 1999***

SEDIMENT CONTROL PERMIT FEES AND BONDS

A. **General**

All listed fees include a 10% automation surcharge.

B. **Engineered Plan Permit - New Applications:**

1. Each Sediment Control Application for an Engineered Plan (including revision application) must be accompanied by the minimum permit fee ($737).

2. Unless otherwise previously agreed to, all remaining fees must be paid prior to any subsequent submission for review or prior to permit issuance, whichever is first.

3. All new applications and plans shall be charged a total fee calculated as follows:

   Total disturbed area (Sq. Ft.) x $0.033 = Fee ($) [redacted]

4. New applications for previously approved plans submitted for the purpose of changing ownership shall be charged the minimum fee ($737).

C. **Engineered Plan Permit - Revisions:**

Each Sediment Control Application for an Engineered Plan (including revision application) must be accompanied by the minimum permit fee ($737). Fees for revisions to existing permits shall be calculated according to the following categories:

1. All revisions, which entail significant technical changes in the sediment control or stormwater management scheme and no additional disturbed area, shall be charged a fee calculated as follows:

   Original Permit Fee (excluding the automation fee)x 38.5% = Revision Fee (with automation fee included)
   Minimum - $737
   Maximum - $1,595

2. If the revision is only to add disturbed area, then the fee shall be calculated as follows: Additional Disturbed Area (sq. ft.) x $0.033 = Fee ($). Minimum fee of $737. No maximum fee limit applies in this case.

3. If the revision is for a significant technical change and the addition of disturbed area, then the fee shall be calculated by a combination of numbers 1 and 2 above. No maximum fee limit applies in this case.

4. If the revision is for the purpose of changing the legal description, providing a stormwater management as-built or a minor revision, the fee shall be the minimum of $737.

D. **Permits** issued for house construction using the **Application for Small Land Disturbing Activities** are charged fees of $330, $660, or $990, depending on the size of the property. For all other uses the fee is based on the amount of disturbance. Example: Construction of a tennis court.

E. **Permits** for **Forest Harvest Activities** are charged a fee of $110.

F. **Extensions:**

A permit issued using the Application for Small Land Disturbing Activities or a permit for forest harvest activities may not be extended. The fee for extension for all other sediment control permits will be $0.0033 (which includes 10% automation surcharge) per square foot of disturbed area as designated on the original permit or plan approval. The minimum fee for an extension is $110 ($100 extension fee plus $10 automation fee). Permit extensions are valid for one (1) year. After January 1, 1999, sediment control plans and permits are valid for a period not to exceed two (2) years from the date of issuance or approval.

G. **Bonds:**

1. Bonds for projects involving only sediment control are set at $.02 per square foot of disturbed area, plus $300, not to exceed $10,000.

2. For projects involving stormwater management, the estimated construction cost of the stormwater management facility or environmental enhancement is added to the sediment control bond. No limit.

H. **References:** Montgomery County Code, Chapter 19, Articles I & II and Executive Regulation #11-98 (July 1, 1998)

Approved

11/30/99
Date

ctc:SCFEES:11/30/99

APPENDIX D

MCDPS EROSION AND SEDIMENT CONTROL CHECKLIST

Montgomery County Maryland
Department of Permitting Services

Division of
Land Development
Services

255 Rockville Pike, 2nd Floor
Rockville, Maryland 20850-4166
(240) 777-6320 Fax (240) 777-6339

For Staff Use Only
☐ T-2
☐ O-T

Erosion and Sediment Control Plan Review Checklist

Project Name: _____ **Engineer/Phone No.** _____

Sediment Control Permit No : _____ _____

SWM File No.: _____ **Assigned/Phone No.** _____

Plan Type: _____ _____

Legend:

✔	Complete
INC	Incomplete/Incorrect
N/A	Not Applicable
SC	Sediment Control
SWM	Stormwater Management
FPDP	Floodplain District Permit
DA	Drainage Area
SPA	Special Protection Area

Submittal Date	Review Date	Initial
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

_____ _____

Design Acceptable Date

This checklist has been designed to provide specific instruction to engineers. All items are expected to be addressed in the first submittal. Failure to do so will result in less than a full first review. If any items marked with an asterisk (*) are not addressed, no further review of the first submittal will be made. The plan will be returned to the engineer for completion and will have to be resubmitted for a new first review. (Review fees already paid will be credited).

TO THE ENGINEER:

Your submission for Erosion and Sediment Control Plan approval has been reviewed. The review was made per the following checklist. **Please return the checklist and sediment control plan comment sheets with your resubmittal.** The second submission must include payment of the balance of the sediment control permit fee in order to be accepted for further review. If you do not address a checklist item, including comments on the sediment control plan sheets, explain your reasoning in your transmittal letter.

SUPPORTING INFORMATION

*___	___	___	Transmittal **specifically** explaining the purpose of the submission.
___	___	___	Completed Sediment Control/Stormwater Management Design Plan Information Form (IF-1).
*___	___	___	Stormwater Management Requirements: MCDPS concept approval letter on plan.
*___	___	___	Copy of the storm drain plans to be used by the storm drain contractor, to check consistency with the sediment control and stormwater management plans.

SEDIMENT CONTROL PLAN

___ ___ ___ Scale (1" = 50' maximum), north arrow.

*___ ___ ___ Existing and proposed topography (2' contour intervals maximum).

___ ___ ___ No permanent cut or fill slope with gradient steeper than 3:1 is permitted in lawn maintenance areas. A slope gradient of up to 2:1 is permitted in low maintenance areas provided that those areas are indicated on the SC plan and specific low-maintenance ground cover is called for.

___ ___ ___ Composite sheet for plans covering two or more separate sheets, showing schematic SC.

___ ___ ___ Title Block: Legal subdivision and common name with lots/blocks, parcels, liber/folio, or other legal references; station numbers for road projects; indicate **grading only** or **streets only**, as applicable. Include Standard Rough Grading Notes if applicable.

___ ___ ___ 3" x 10" MCDPS Approval Block in the lower right-hand corner of all sheets.

___ ___ ___ Owner/Permit Applicant name, address, phone number, and contact person on first sheet.

___ ___ ___ Vicinity map with site outlined (1:2,000 scale) on first sheet.

___ ___ ___ All sheets of final SC package numbered consecutively: Sheet # ___ of # ___.

___ ___ ___ Sealed by P.E., L.S., or architect on the first page of the plans, with date and signature.

___ ___ ___ Property lines and owner/legal description for adjacent properties.

___ ___ ___ Match lines corresponding sheet to sheet.

___ ___ ___ Certifications: Owner/Developer; Design; Cut/Fill/Disturbed Area. Include Stormwater Management Maintenance certification as appropriate. Plan revisions which increase the disturbed area require an updated Cut/Fill/Disturbed Area certification.

___ ___ ___ Disturbed area outlined and labeled. All SC devices must be shown within the disturbed limits.

___ ___ ___ Existing and proposed tree lines or individual trees labeled on all SC plan view sheets. Show Forest Conservation Easement and tree save areas per the approved Forest Conservation plan.

*___ ___ ___ Existing and proposed drainage divides on SC plan view sheets.

___ ___ ___ Offsite drainage area (acres) entering site on SC plan view sheets.

___ ___ ___ Show and label existing and proposed improvements (utilities, streets, buildings, etc.) on SC plan view.

___ ___ ___ Any designated wetlands (including 25-foot buffer) delineated on the SC plan view sheets.

___ ___ ___ Copy of approved State Wetlands permit. Indicate if not applicable _____.

___ ___ ___ 100-year floodplain and 25-foot BRL delineated on SC plan view sheets for any drainage way with >30 acre drainage area. No disturbance or structures permitted in this floodplain without MCDPS Floodplain District Permit (FPDP).

___ ___ ___ Approved MCDPS Floodplain District Permit, if applicable. Also if applicable, need State Waterway Construction Permit prior to FPDP issuance. **NOTE:** SC plans may be approved, but no permit will be issued until FPDP is issued.

___ ___ ___ "Related Required Permits" table completed and placed on the first SC plan sheet.

___ ___ ___ Label all SC devices.

___ ___ ___ Sediment trap(s): need safety fence; inflow point protection (PSD's required for drainage areas >3 acres), proper outlet location (maximizing flow length from inflow points); dewatering as necessary (include MCDPS dewatering device detail); and baffles (required for drainage areas >3 acres: include MCDPS baffle detail). Provide trap data information on the SC plan sheet as follows: trap type; existing DA; developed DA; storage required; storage provided; weir crest elevation; storage depth; bottom dimensions; cleanout elevation; channel depth of flow; maximum sideslopes (specify cut and/or fill); bottom elevation; embankment elevation; riser dimensions; barrel dimensions. Pipe outlet traps require separate dewatering device. Stone Outlet Sediment Traps (ST-II, ST-IV) are not allowed in Montgomery County.

___ ___ ___ Sediment basin(s): include sediment basin design and construction information as required by "Maryland State Standards and Specifications"; Low Hazard Class assured; barrel outfall cross-section; MCDPS CMP band and dewatering device detail; inflow point protection; safety fence. Show baffles as necessary. Show and address construction access and stockpiling on the SC plan and address sediment control during basin installation. Limit initial disturbance to installation of the principle spillway. If there is a baseflow, provide a clean water diversion; if there is no base flow, provide diversion dikes above the disturbed area.

___ ___ ___ No SC devices are to be located within 20 feet of building foundations.

___ ___ ___ Protection of interior tree save and undisturbed areas shown on plans.

___ ___ ___ Temporary storm drain diversion: detail in Sequence of Construction, show profile, give invert elevations of temporary pipe into trap on plan view, profile, and details; and show the diversion on the storm drain plan.

*___ ___ ___ Sequence of Construction: use MCDPS Standard Sequence [Forest Conservation Law (FCL) and Non-FCL] and expand to fit the specific needs of each site.

___ ___ ___ Standard Sediment Control Notes including **MISS UTILITY** note.

___ ___ ___ Standard details for SC devices.

___ ___ ___ Offsite grading requires documentation of permission from owner (letter of permission on plan or grading easement document submitted).

___ ___ ___ Any work on MNCPPC property must have Parks Engineer approval.

___ ___ ___ Adequate access, staging, and stockpile areas shown on the plan with appropriate sediment control for each.

___ ___ ___ Note on first plan sheet that "All disturbed areas must be topsoiled per the Montgomery County "Standards and Specifications for Topsoil", prior to final vegetative stabilization. Specifications must be on the plans.

STORM DRAIN SYSTEM (Show items on SC plan).

___ ___ ___ Plan view of storm drain system with topography to 100-feet below each outfall, showing dimensions, Q_{10}, V_{10}, d_{50}, and MSHA class.

___ ___ ___ All outfalls must release runoff to an existing system, adequate receiving channel, or slope $\leq 2\%$. Provide profiles of outfalls showing rip-rap slope, length, d_{50}, MSHA class, and V_{10} at pipe outfall.

___ ___ ___ Provide outfall cross-section detail(s) with the following information specific to each outfall: shape conforming to receiving channel; outfall dimensions, rip-rap size (d_{50}) and MSHA class; embedded depth ($2.0 \times d_{50}$); and filter cloth underneath.

CHANGE OF OWNERSHIP

___ ___ ___ Sediment control maintenance agreement completed and a copy placed on the SC plan.

___ ___ ___ All areas pertaining to new ownership clearly identified on plan.

___ ___ ___ Title blocks reflect revised legal description.

MISCELLANEOUS

___ ___ ___ Safe conveyance to previously approved central/regional facility, if applicable.

___ ___ ___ Site in conformance with preliminary plan and/or site plan requirements and forest conservation plan. Copy of approved preliminary plan, site plan with opinion, and forest conservation plan or exemption letter must be received prior to plan approval.

___ ___ ___ Stormwater management waiver fee: Submit a plan showing the waived area(s), and give the percent impervious and total waiver area in acres (if not using pre-set fees for single family zones).

___ ___ ___ For SPA sites, monitoring fee paid. NOTE: Fee must be paid prior to plan approval.

___ ___ ___ For SPA sites, a place copy of the SPA notice on the first plan sheet.

ADDITIONAL REQUIREMENTS:

COMMENTS:

APPENDIX D

MCDPS - IF-1 FORM

MONTGOMERY COUNTY DIVISION OF LAND DEVELOPMENT SERVICES
SEDIMENT CONTROL/STORMWATER MANAGEMENT DESIGN PLAN INFORMATION FORM (IF-1)

I. **PROJECT INFORMATION:**

PROJECT NAME: _____ SUBDIVISION: _____

LOT/BLOCK: _____ PARCEL: _____ PRELIMINARY PLAN #: _____

SITE PLAN #/APPROVAL DATE: _____ (If a site plan is not required enter N/A.)

RECORD PLAT #(s): _____ ZONE: _____ DISTURBED AREA (AC): _____

BUILDING PERMIT APPLICATION #(s): _____

WATERSHED: _____ Is this a Special Protection Area? / /YES / /NO (check one).

NOTE: Special Protection Area stream monitoring fees are due prior to plan approval.

II. **STORMWATER MANAGEMENT STATUS:** Enter information in the appropriate blanks for each form of control. The stormwater management concept letter must be shown on the detailed plans.

		QUANTITY CONTROL	QUALITY CONTROL
A.	**On-site facility proposed.** State type and number of facility(ies). Complete Section V of this form. (See reverse side).	_____	_____
B.	**On-site, Central or Regional Facility(ies) previously approved.** Provide name and original Sediment Control Permit Number. Include statement of such on plan.	_____	_____
C.	**Waiver** - Provide approval date.	_____	_____
D.	**Phasing** - Provide approval date - (Include approved phasing letter on plans).	_____	_____
E.	**Exempt**	_____	_____

III. **SOILS INFORMATION:** Provide Soil Survey sheet number and soil list symbols within property.

_____

IV. **ENGINEER**

Firm: _____

Address: _____

Project Engineer: _____ Phone _____

Prepared By: _____ Date _____

OFFICIAL USE ONLY

Reviewer Initials: _____ Number of Reviews: _____ Approval Date: _____

SC Revision #: _____ Plan Type: _____

Sediment Control #_____ Stormwater Management File #_____

V. STORMWATER MANAGEMENT FACILITY INFORMATION

A. Provide a brief description of the stormwater management facility design and provide the contributing drainage area to each facility. A schematic drawing can be used. If necessary, include an attachment.

_____

_____

_____

_____

_____

_____

B. Name of public street providing access to the stormwater management easement. _____

C. Developed RCN to each stormwater management facility._____

D. Check the appropriate ownership category:

___ Private Residential, ___ Commercial, ___ Montgomery County Public School, ___ MNCPPC,

___ Montgomery County Government, ___ Other; Describe _____

_____

E. USGS Quadrangle Sheet, where facility(ies) located _____,

MD (NAD 27) N/S Grid coordinates _____, MD (NAD 27) E/W Grid coordinates _____
(per ADC mapbook to the nearest 1,000)

F. Proposed drainage area cover type with acreage for the project:

Cover Type	Acreage
Single Family	_____
Townhouse/Multifamily	_____
Commercial	_____
Industrial	_____
Other (describe)_____	_____
_____	_____

G. ADC Mapbook Grid Coordinates _____ (Give Edition)

OFFICE USE ONLY

Stage _____, Multi _____, Easement _____, Covenants _____,

Structure Type _____

_____

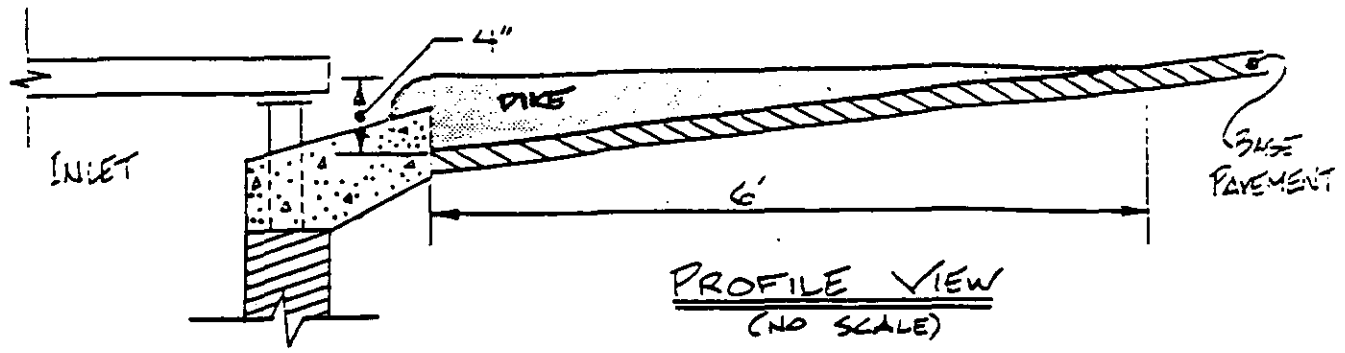
COMMENTS: _____

_____

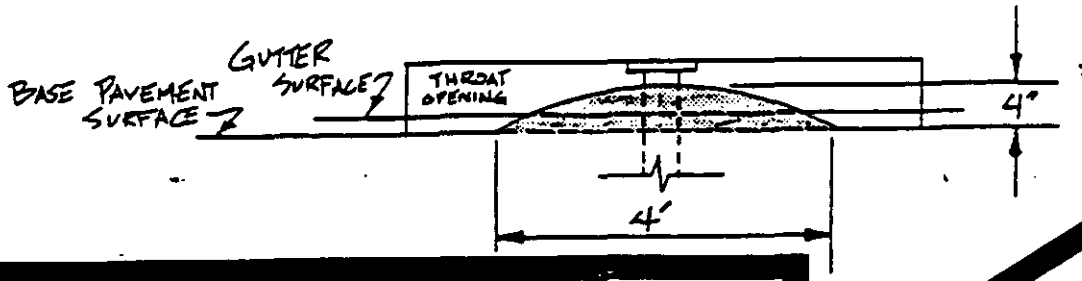
APPENDIX E

EROSION AND SEDIMENT CONTROL DETAILS SPECIFIC TO MONTGOMERY COUNTY

1. Temporary Earthen/Asphalt Dike
2. Modified Dewatering Device
3. Modified Super Silt Fence
4. Baffle and Stone Inflow Protection Installation
5. Metal Pipe Connections for Pond Barrels



PROFILE VIEW
(NO SCALE)

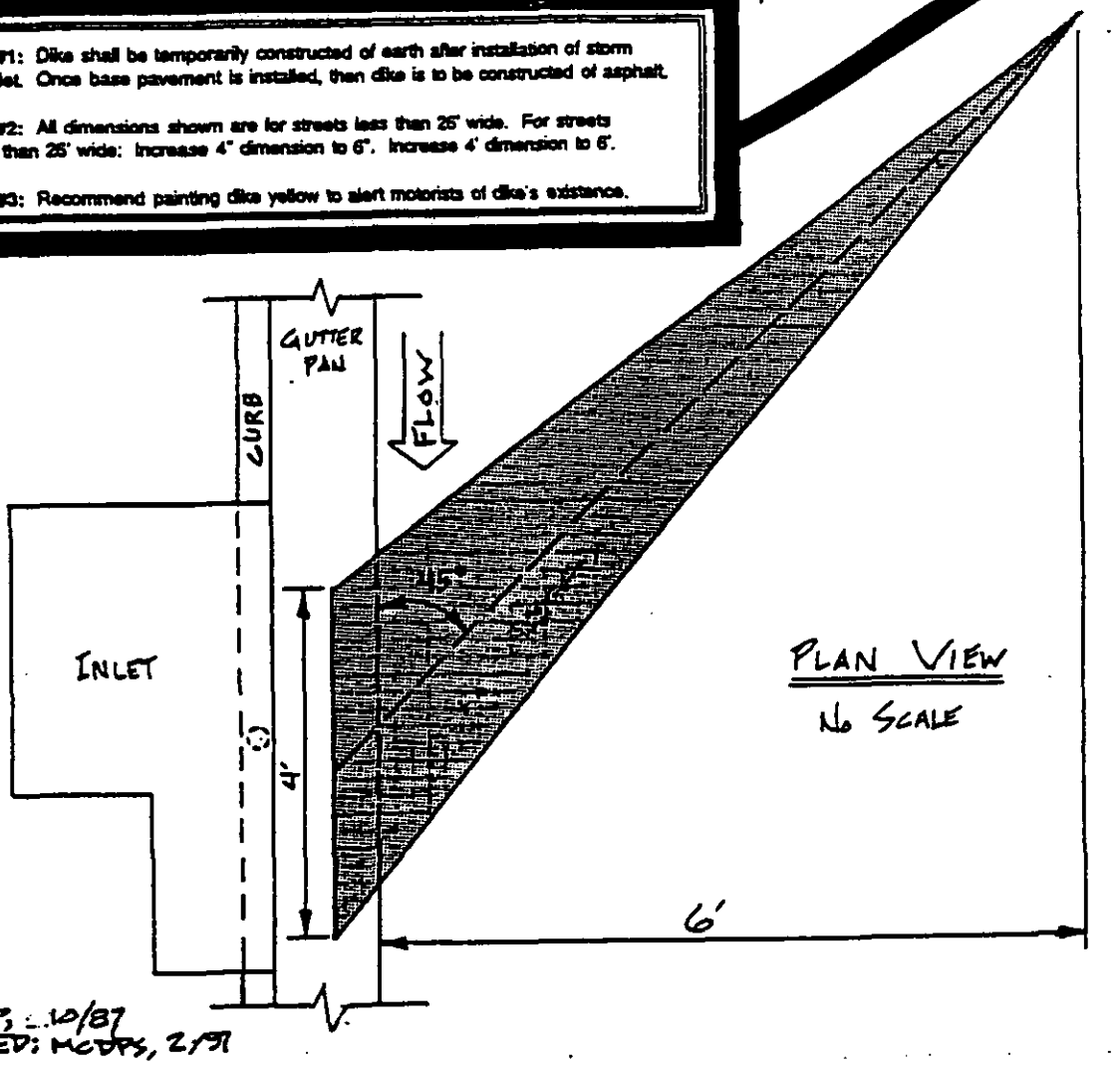


CROSS-SECTION VIEW
(NO SCALE)

NOTE #1: Dike shall be temporarily constructed of earth after installation of storm drain inlet. Once base pavement is installed, then dike is to be constructed of asphalt.

NOTE #2: All dimensions shown are for streets less than 25' wide. For streets greater than 25' wide: Increase 4" dimension to 6". Increase 4' dimension to 6'.

NOTE #3: Recommend painting dike yellow to alert motorists of dike's existance.



PLAN VIEW
No SCALE

MCDEP, 10/87
REVISED: MCDPS, 2/97

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES WATER RESOURCES MANAGEMENT

TEMPORARY ASPHALT DIKE

STANDARD SYMBOL: AD AD

DATE: February, 1997

SCALE: NONE

Guidelines For Sediment Control Dewatering Device Usage

The attached detail is to be used for dewatering sediment traps, sediment basins, and stormwater management ponds temporarily used as sediment basins, as a substitute for any of the methods given in the State Standards. When a gravity outlet can be obtained, this device will allow you to provide only 3600 cubic feet of storage in rip-rap outlet traps rather than the 5400 cubic feet required by the new sediment control standards.

I. This detail shall be placed on the detail sheet of the sediment control plans. The device is to be used on pipe outlet traps in addition to rip-rap outlet traps.

II. When the device is utilized on a pipe outlet trap, numbers 10 and 11 of the standard construction specifications shall be crossed out where they appear with the standard detail.

III. All the blank information on the new detail is to be filled out. This includes: (1) The sediment storage elevation; (2) the wet pool elevation; (3) the riser base dimensions; and (4) note numbers 6 through 8.

IV. The riser shall be sized according to the following criteria:

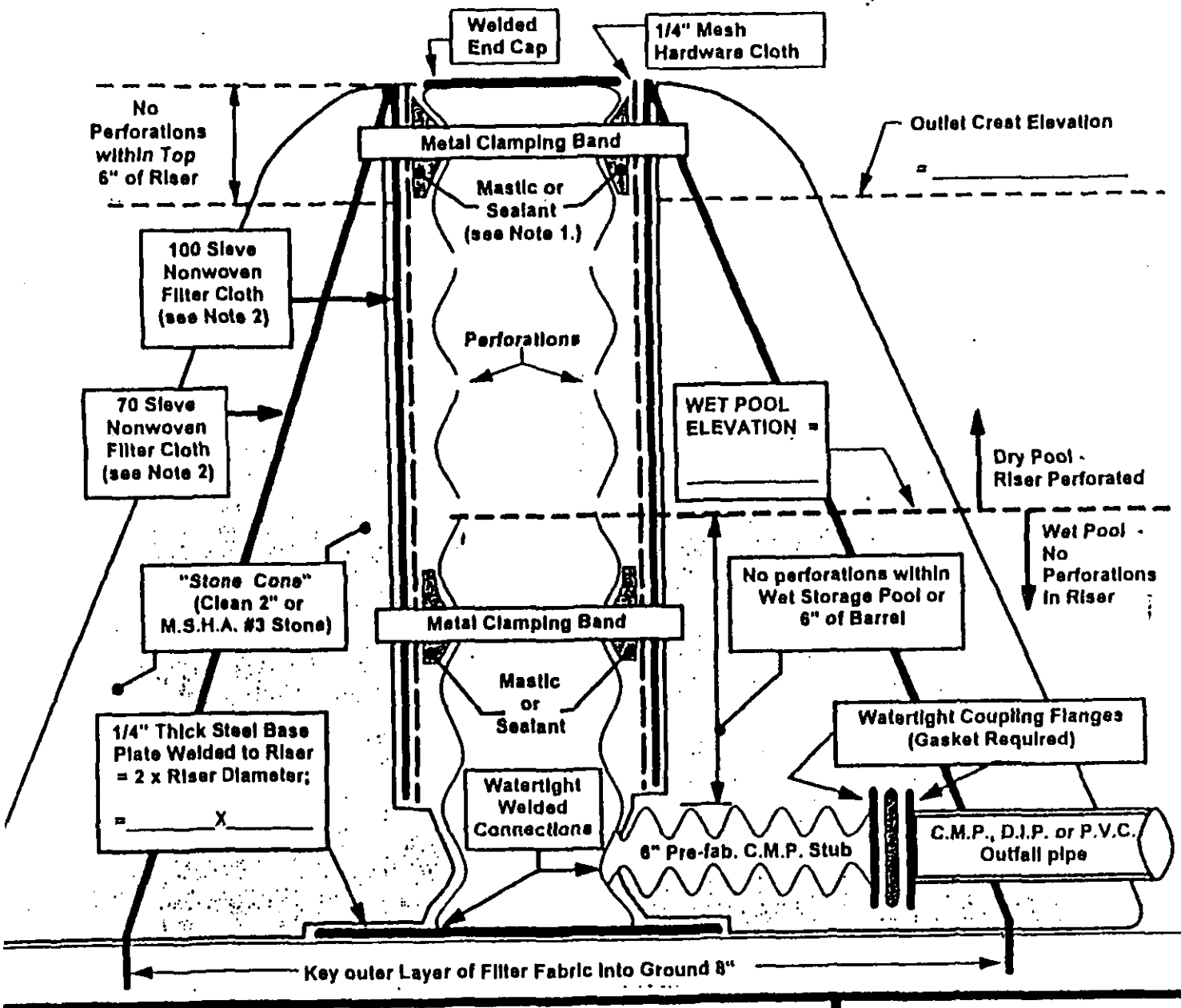
RISER SIZE:
- 6" for drainage areas < 5 acres
- 12" for drainage areas 5 to 10 acres
- 18" for drainage areas 10 to 15 acres
- 24" for drainage areas 15 to 20 acres
- 30" for drainage areas 20 to 25 acres
- 36" for drainage areas 25 to 30 acres
- 42" for drainage areas > 30 acres

V. The dewatering device should be shown schematically on a separate profile of whatever facility it is being utilized on. When the device is utilized on permanent ponds, a separate profile detail is required. The profile should state that a watertight connection must be made to the facility's low flow/drain pipe in accordance with the following:

Dewatering Barrel		Low Flow/ Drain Pipe		
CMP	to	CMP	-	Watertight flange or band connection
CMP	to	DIP	-	Watertight flange to flange connection
CMP	to	PVC	-	Slide the larger CMP over the smaller PVC pipe and secure with watertight concrete collar.

VI. When the device is utilized on a rip-rap outlet trap, the CMP outfall pipe: (1) must not be located beneath the overflow weir crest and (2) must outfall onto a three feet square apron of four inches average diameter stone.

JRB:F:\DEWATER:4/28/97



NOTES

1. Sleeve gasket & corrugated connecting band recommended to fasten 100 sieve filter cloth and hardware cloth to riser.
2. All filter cloth must be a non-woven geotextile fabric. The 100 sieve filter cloth must have a minimum permittivity of 1.0 sec.-1, the 70 sieve filter cloth must have a minimum permittivity of 1.5 sec.-1. The longitudinal ends of the first layer of filter cloth must be folded together and fastened to produce a lock seam.
3. Only 16 Gauge Corrugated Metal Pipe (C.M.P shall be used for the riser. Corrugations shall be 2-2/3" x 1/2".

   Perforations must be in the "valleys" of the corrugations.

   Perforations must be 3/4" diameter holes spaced 6" on center above the wet pool elevation only.
4. Inspection and approval of the riser and filter cloth and bands must be obtained before placement of the stone cone(s).
5. For risers taller than four feet (4'), earth fill may be used in lieu of stone below the wet pool elevation.
6. RISER DIAMETER = _____
7. CLEANOUT ELEVATION = _____
8. POND BOTTOM ELEVATION = _____

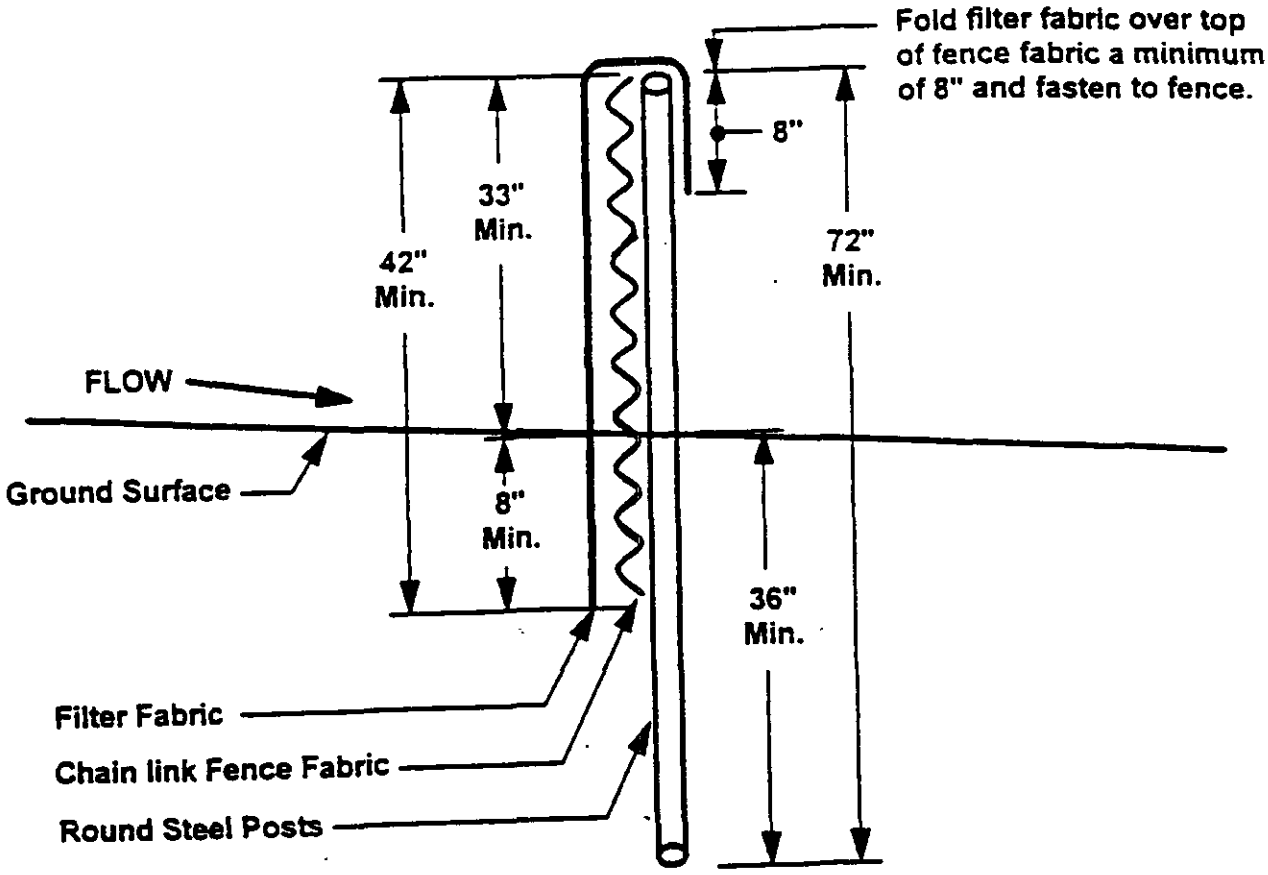
MONTGOMERY COUNTY
DEPARTMENT OF PERMITTING SERVICES
WATER RESOURCES MANAGEMENT

MODIFIED DEWATERING DEVICE FOR SEDIMENT TRAPS, SEDIMENT BASINS & STORMWATER MANAGEMENT PONDS

DATE: February, 1997

REVISION #1 May, 1997

SCALE: NONE



NOTES

1. Steel Posts must be Schedule 40 or 'SS-40", 2.5" diameter, galvanized pipe. Post spacing must not exceed 10 linear feet. Posts do not need to be set in concrete.

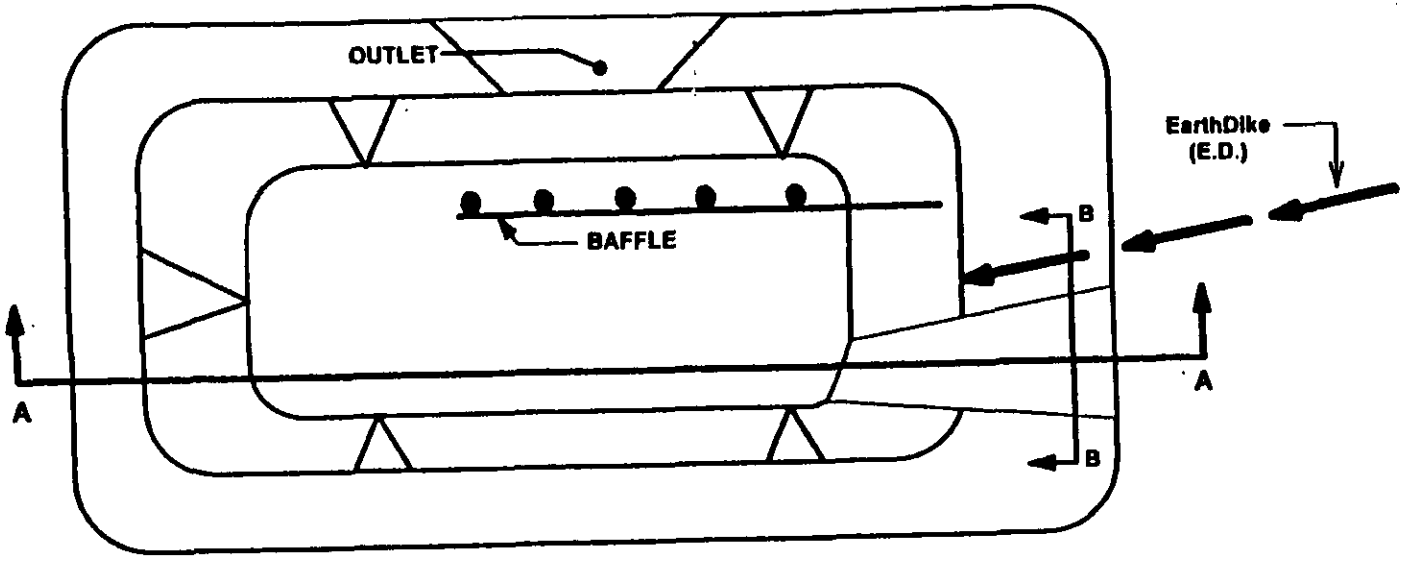
2. Chain link fence fabric must be 2" x #9 gauge x 42" KK galvanized wire. Chain link fence fabric must be stretched taut and securely fastened to posts with fence wire.

3. Filter fabric must be MSHA Class 'F' fabric. Filter Fabric must be stretched taut and securely fastened to chain link fence, front and back. Where two ends of filter cloth meet, they must be overlapped a minimum of 6", folded together and fastened.

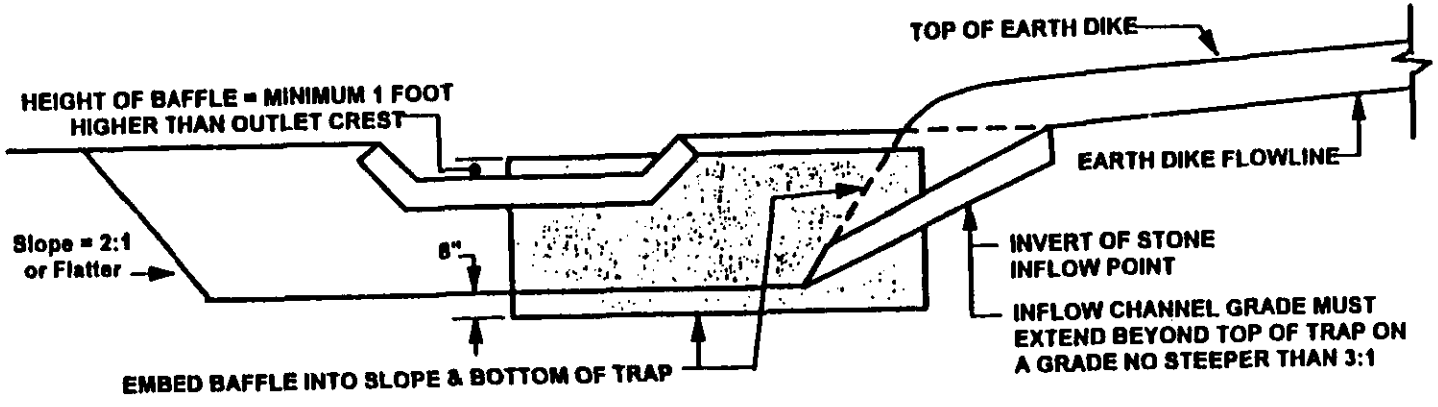
4. Maintenance must be performed as needed and silt buildups removed when they reach an 18" depth above existing ground or when"bulges" develop in the silt fence.

5. All other details and specifications shall be in accordance with U.S.D.A.-S.C.S., M.D.E.-W.M.A. and M.S.H.A. specifications.

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES WATER RESOURCES MANAGEMENT	MODIFIED SUPER SILT FENCE	DATE: February, 1997	SCALE: NONE



SECTION 'B-B'



SECTION 'A A'

NOTES

1. M.S.H.A. Class I Riprap shall be used in stone inflow channels.
2. Posts used to support baffles must be four inch (4") round or square posts. On baffles exceeding four feet (4') in height, posts must be placed a maximum of four feet (4') center to center.

MONTGOMERY COUNTY
DEPARTMENT OF PERMITTING SERVICES
WATER RESOURCES MANAGEMENT

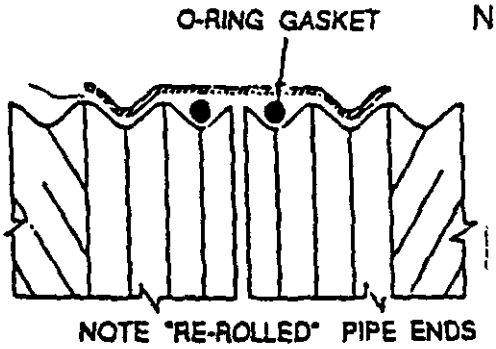
BAFFLE & STONE INFLOW PROTECTION INSTALLATION

DATE:
February, 1997

SCALE: NONE

APPROVED CONNECTIONS FOR PIPE
LESS THAN 24" DIAMETER

TYPE I - HUGGER TYPE BAND

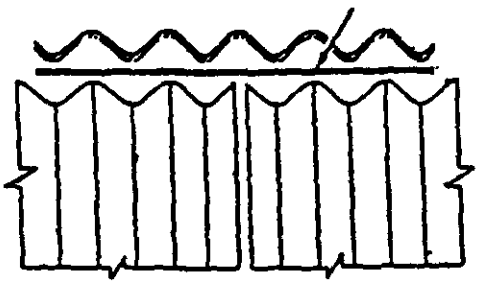


NOTES:

1. Metal Band must be minimum 13" width.
2. Indentations of band must rest in second corrugation from end of pipe.
3. O-Ring Gasket required on each pipe end.

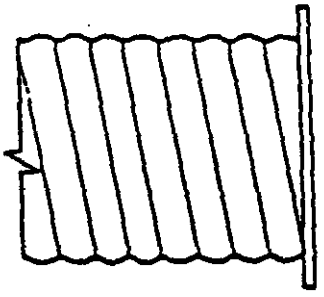
TYPE II - CORRUGATED BAND

NOTES:



1. Sleeve gasket(s) are required.
2. Sleeve gasket may be one or two pieces; one sleeve on each pipe end. Total width of one or two sleeves must equal or exceed width of metal connection band.
3. STRIP GASKETS ARE NOT PERMISSIBLE!
4. A minimum of two indentations of band must rest into two indentations on each end of pipe.

TYPE III - FLANGE JOINT CONNECTION



NOTES:

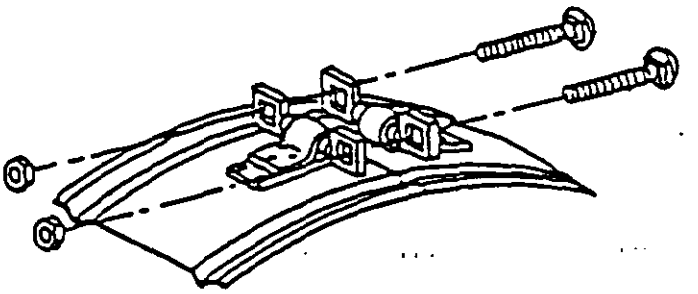
1. A gasket is required between the two flanges.
2. Flanges shall be drilled and bolted together.

MONTGOMERY CO. DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES MANAGEMENT

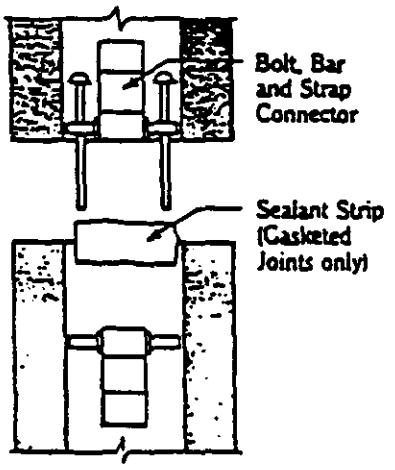
METAL PIPE CONNECTIONS For POND BARRELS

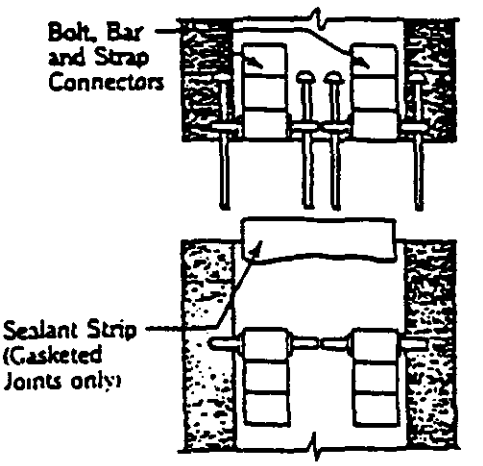
REQUIRED FASTENING CONNECTOR ON BANDS FOR USE ON PIPES
LESS THAN 24" DIAMETER

SHALL BE OF THE "BAR & STRAP" TYPE SHOWN BELOW.



CONNECTION DETAILS





SINGLE HARNESS OR DOUBLE HARNESS

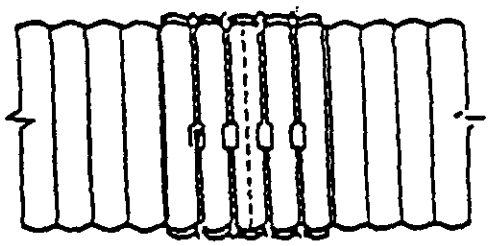
MONTGOMERY CO. DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES MANAGEMENT

METAL PIPE CONNECTIONS For POND BARRELS

SHEET 2 of 3

APPROVED CONNECTION FOR PIPE
EQUAL TO OR GREATER THAN 24" DIAMETER

TYPE IV - CORRUGATED BAND WITH RODS & LUGS

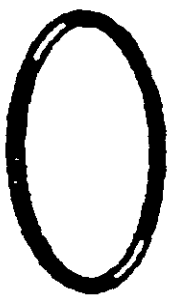


NOTES:

1. Use of a corrugated band is required.
2. Sleeve gasket(s) are required.
3. Sleeve gasket may be one or two pieces; one sleeve on each pipe end. Total width of one or two sleeves must equal or exceed width of metal connection band.
4. STRIP GASKETS ARE NOT PERMISSIBLE!
5. A minimum of two indentations of band must rest into two indentations on each end of pipe.
6. A minimum of four rods and lugs are required. Two rods and lugs on each end of pipe.

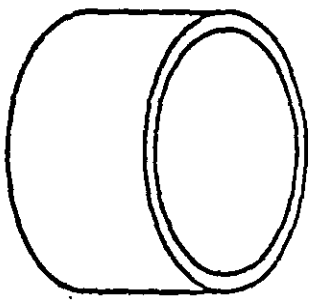
APPROVED GASKETS

O-RING GASKET



Use with Type I, Hugger Band Connections

SLEEVE GASKET



Use with Types II & IV Connections

MONTGOMERY CO. DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES MANAGEMENT	SHEET 3 of 3
METAL PIPE CONNECTIONS For POND BARRELS	

APPENDIX F

STANDARDIZED SEQUENCES OF CONSTRUCTION

STANDARD WORDING FOR INITIAL STEPS OF SEQUENCE OF CONSTRUCTION ON SEDIMENT CONTROL PLANS FOR SITES SUBJECT TO THE FOREST CONSERVATION LAW

1. Prior to clearing trees, installing sediment control measures, or grading, a preconstruction meeting must be conducted on-site with the Montgomery County Department of Permitting Services (MCDPS) Sediment Control inspector (240) 777-6210 (48 hours notice) and the MNCPPC, Planning Department, Plans Enforcement inspector (301)495-4571 (48 hours notice), the Owners representative, and the site Engineer.

2. The limits of disturbance must be field marked prior to clearing of trees, installation of sediment control measures, construction, or other land disturbing activities.

3. The permittee must obtain written approval form the MNCPPC inspector, certifying that the limits of disturbance and tree protection measures are correctly marked and installed prior to commencing any clearing.

4. Clear and grade for installation of sediment control devices.

5. Install sediment control devices. Traps and basins shall be constructed prior to construction of any earth dikes that convey drainage to a trap and/or basin.

6. Once the sediment control devices are installed, the permittee must obtain written approval from the MCDPS inspector before proceeding with any additional clearing, grubbing or grading.

NOTE 1: All sequences should call for the permittee to obtain written approval from MCDPS inspector, prior to the removal of any sediment control device.

NOTE 2: Any site that has a proposed storm drain diversion should have its Sequence of Construction state the following:

1) The construction of the diversion in the storm drain construction step; once

2) Once the drainage area is stabilized, the storm drain system must be flushed, and temporary pipes removed, and any permanent pipes unblocked or constructed.

enm:SCSEQFOR:01/02

STANDARD WORDING FOR INITIAL STEPS OF SEQUENCE OF CONSTRUCTION ON SEDIMENT CONTROL PLANS FOR SITES EXEMPT FROM THE FOREST CONSERVATION LAW

1. Prior to clearing of trees, installing sediment control measures, or grading, a preconstruction meeting must be conducted on-site with the Montgomery County Department of Permitting Services (MCDPS) sediment control inspector (240) 777-6210 (48 hours notice), the Owners representative, and the site Engineer.

2. The limits of disturbance must be field marked prior to clearing of trees, installation of sediment control measures, construction, or other land disturbing activities.

3. Clear and grade for installation of sediment control devices.

4. Install sediment control devices. Traps and basins shall be constructed prior to construction of any earth dikes that convey drainage to a trap and/or basin.

5. Once the sediment control devices are installed, the permittee must obtain written approval from the MCDPS inspector before proceeding with any additional clearing, grubbing, or grading.

NOTE 1: All sequences should call for the permittee to obtain written approval from MCDEP inspector, prior to the removal of any sediment control device.

NOTE 2: Any site that has a proposed storm drain diversion proposed should have its Sequence of Construction state the following:

1) The construction of the diversion in the storm drain construction step; and

2) once the drainage area is stabilized, the storm drain system must be flushed, any temporary pipes removed, and the construction or unblocking of any permanent pipes.

enm:SCSEQ02:01/02

APPENDIX G

PLAN CERTIFICATIONS

SEDIMENT CONTROL/STORMWATER MANAGEMENT CERTIFICATIONS

CERTIFICATIONS ON THIS SHEET MUST BE ON EVERY SEDIMENT CONTROL/STORMWATER MANAGEMENT PLAN.

OWNER'S/DEVELOPER'S CERTIFICATION

I/We hereby certify that all clearing, grading, construction, and or development will be done pursuant to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources approved training program for the control of sediment and erosion before beginning the project.

_____ _____

Signature Date

_____

Printed Name and Title

DESIGN CERTIFICATION

I hereby certify that this plan has been prepared in accordance with the "1994 Maryland Standards and Specification for Soil Erosion and Sediment Control," Montgomery County Department of Permitting Services Executive Regulations 5-90 and 36-90, and Montgomery County Department of Public Works and Transportation "Storm Drain Design Criteria" dated August 1988.

_____ _____

Design Engineer Signature Date

_____ _____

Printed Name Registration Number

CERTIFICATION OF THE QUANTITIES

I hereby certify that the estimated total amount of excavation and fill as shown on these plans has been computed to _____ cubic yards of excavation, _____ cubic yards of fill and the total area to be disturbed as shown on these plans has been determined to be _____ square feet.

_____ _____

Signature Date

_____ _____

Printed Name and Title Registration Number

MISS UTILITY

Call "Miss Utility" at 1-800-257-7777, 48 hours prior to the start of work. The excavator must notify all public utility companies with under ground facilities in the area of proposed excavation and have those facilities located by the utility companies prior to commencing excavation. The excavator is responsible for compliance with requirements of Chapter 36A of the Montgomery County Code.

CERTIFICATIONS ON THIS SHEET ARE REQUIRED ON ANY PLAN INVOLVING STORMWATER MANAGEMENT. THE STRUCTURAL CERTIFICATION IS REQUIRED FOR UNDERGROUND STORMWATER MANAGEMENT STRUCTURES WHERE POURED CONCRETE WALLS ARE TO BE UTILIZED, OR ON ANY OTHER STRUCTURE MCDPS DEEMS APPROPRIATE.

STRUCTURAL CERTIFICATION

I hereby certify that the structural design of this stormwater management facility is in accordance with applicable codes and that the plan for this has been designed for specified loading(s) as indicated hereon.

_____ _____

Design Engineer Signature Date

_____ _____

Printed Name Registration Number

_____

Design Loading

MAINTENANCE CERTIFICATION ON PRIVATE LANDS

I/We hereby certify that I/we assume maintenance responsibilities for all stormwater management structures shown hereon. If maintenance responsibility is legally transferred, I/we agree to supply the Montgomery County Department of Environmental Protection with a copy of the document (signed by both parties) transferring said maintenance responsibility at that time.

_____ _____

Owner/Developer Signature Date

_____

Printed Name and Title

MONTGOMERY COUNTY PUBLIC SCHOOLS MAINTENANCE CERTIFICATION

I hereby certify that Montgomery County Public Schools (MCPS) will assume maintenance responsibilities for all stormwater management facilities as listed on drawings in accordance with the MEMORANDUM OF UNDERSTANDING between MCPS and the Department of Environmental Protection, dated March 5, 1987. If for any reason, future improvements to the site are planned that would impact any of the stormwater management facilities included herein, MCPS will notify the Department of Environmental Protection during the planning or early design stage for such improvements.

_____ _____

Director, Division of Construction Date

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION MAINTENANCE CERTIFICATION

I hereby certify that the Department of Transportation will assume maintenance responsibilities for all stormwater management facilities as listed and shown, hereon, in accordance with the MEMORANDUM OF UNDERSTANDING between this Department and the Department of Environmental Protection dated September 1, 1986. If, for any reason, future improvements to the roadway are planned that would impact any of the stormwater management facilities included herein, this Department will notify the Department of Environmental Protection during the planning or early design stage for such improvements.

_____ _____

Chief, Division of Transportation Engineering Date

APPENDIX H

PLAN APPROVAL STAMPING BLOCKS

MCDPS
APPROVED FOR:

Stormwater Management:

_____

_____

_____
Reviewed Date

_____
Approved Date

_____
SWM FILE #

Sediment Control Technical Requirements:

_____
Reviewed Date

_____
Approved Date

Administrative Requirements:

_____
Reviewed Date

_____
SEDIMENT CONTROL PERMIT #

_____

_____

NOTE

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL, IF THE PROJECT HAS NOT STARTED, UNLESS THE PERMIT HAS BEEN EXTENDED.

THIS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT.

enm:TABLE05.8/96

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT.

Stormwater Management:

_____

_____

Reviewed Date

Approved Date

SM FILE #

Sediment Control Technical Requirements:

Reviewed Date

Approved Date

Administrative Requirements:

Reviewed Date

SEDIMENT CONTROL PERMIT NO.

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED UNLESS THE PERMIT HAS BEEN EXTENDED.

enm:TABLE03:8/86

APPENDIX I

RELATED PERMITS REQUIRED TABLE

RELATED REQUIRED PERMITS

To be completed by the consultant and placed on the first sheet of the Sediment Control / Stormwater Management plan set for all projects.

IT IS THE RESPONSIBILITY OF PERMITTEE/OWNER OF THIS SITE TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ISSUANCE OF THE APPROVED SEDIMENT CONTROL PERMIT

TYPE OF PERMIT	REQD	NOT REQD	PERMIT #	EXPIRATION DATE	WORK RESTRICTION DATES
MCDPS Floodplain District					
WATERWAYS/WETLAND(S):					
a. Corps of Engineers					
b. MDE					
c. MDE Water Quality Certification					
MDE Dam Safety					
N.P.D.E.S. NOTICE OF INTENT			N/A	N/A	DATE FILED
OTHERS (Please List):					

enm:TABLE01.12/00

APPENDIX J

STANDARD SEDIMENT CONTROL NOTES

STANDARD EROSION AND SEDIMENT CONTROL NOTES

January 2003

1. The permittee shall notify the Department of Permitting Services (DPS) forty-eight (48) hours before commencing any land disturbing activity and, unless waived by the Department, shall be required to hold a pre-construction meeting between them or their representative, their engineer and an authorized representative of the Department.

2. The permittee must obtain inspection and approval by DPS at the following points:

   A. At the required pre-construction meeting.

   B. Following installation of sediment control measures and prior to any other land disturbing activity.

   C. During the installation of a sediment basin or stormwater management structure at the required inspection points (see Inspection Checklist on plan). Notification prior to commencing construction is mandatory.

   D. Prior to removal or modification of any sediment control structure(s).

   E. Prior to final acceptance.

3. The permittee shall construct all erosion and sediment control measures per the approved plan and construction sequence, shall have them inspected and approved by the Department prior to beginning any other land disturbances, shall ensure that all runoff from disturbed areas is directed to the sediment control devices, and shall not remove any erosion or sediment control measure without prior permission from the Department.

4. The permittee shall protect all points of construction ingress and egress to prevent the deposition of materials onto traversed public thoroughfare(s). All materials deposited onto public thoroughfare(s) shall be removed immediately.

5. The permittee shall inspect periodically and maintain continuously in effective operating condition, all erosion and sediment control measures until such times as they are removed with prior permission from the Department. The permittee is responsible for immediately repairing or replacing any sediment control measures which have been damaged or removed by the permittee or any other person.

6. All sediment basins, trap embankments, perimeter dikes, and all disturbed slopes steeper or equal to 3:1 shall be stabilized with sod, seed, and anchored straw mulch, or other approved stabilization measures, within seven (7) calendar days of establishment. All areas disturbed outside of the perimeter sediment control system must be minimized and stabilized immediately. Maintenance must be performed as necessary to ensure continued stabilization.

7. The permittee shall apply sod, seed, and anchored straw mulch, or other approved stabilization measures to all disturbed areas within fourteen (14) calendar days after stripping and grading activities have ceased on that area. Maintenance shall be performed as necessary to ensure continued stabilization. Active construction areas, such as borrow or stockpile areas, roadway improvements, and areas within fifty (50) feet of a building under construction may be exempt from this requirement, provided that erosion and sediment control measures are installed and maintained to protect those areas.

8. Prior to removal of sediment control measures, the permittee shall stabilize all contributory disturbed areas with required soil amendments and topsoil, using sod or an approved permanent seed mixture and an approved anchored mulch. Wood fiber mulch may only be used in seeding season when the slope does not exceed 10% and grading has been done to promote sheet flow drainage. Areas brought to finished grade during the seeding season shall be permanently stabilized within fourteen (14) calendar days of establishment. When property is brought to finished grade during the months of November through February, and permanent stabilization is found to be impractical, an approved temporary seed and straw anchored mulch shall be applied to disturbed areas. The final permanent stabilization of such property shall be completed prior to the following April 15.

9. The site permit, work, materials, approved SC/SM plans, and test reports shall be available at the site for inspection by duly authorized officials of Montgomery County.

10. Surface drainage flows over unstabilized cut and fill slopes shall be controlled by either preventing drainage flows from traversing the slopes or by installing mechanical devices to lower the water down slope without causing erosion. Dikes shall be installed and maintained at the top of cut or fill slopes until the slope and drainage area to it are fully stabilized, at which time they must be removed and final grading done to promote sheet flow drainage. Mechanical devices must be provided at points of concentrated flow where erosion is likely to occur.

11. Permanent swales or other points of concentrated water flow shall be stabilized within 7 calendar days of establishment with sod or seed with an approved erosion control matting or by other approved stabilization measures.

12. Temporary sediment control devices shall be removed, with permission of the Department, within thirty (30) calendar days following establishment of permanent stabilization in all contributory drainage areas. Stormwater management structures used temporarily for sediment control shall be converted to the permanent configuration within this time period as well.

13. No permanent cut or fill slope with a gradient steeper than 3:1 will be permitted in lawn maintenance areas or on residential lots. A slope gradient of up to 2:1 will be permitted in non-maintenance areas provided that those areas are indicated on the erosion and sediment control plan with a low-maintenance ground cover specified for permanent stabilization. Slope gradient steeper than 2:1 will not be permitted with vegetative stabilization.

14. The permittee shall install a splashblock at the bottom of each downspout unless the downspout is connected by a drain line to an acceptable outlet.

15. For finished grading, the permittee shall provide adequate gradients so as to: (1) prevent water from standing on the surface of lawns more than twenty-four (24) hours after the end of a rainfall, except in designated drainage courses and swale flow areas, which may drain as long as forty-eight (48) hours after the end of a rainfall, and (2) provide positive drainage away from all building foundations or openings.

16. Sediment traps or basins are not permitted within 20 feet of a building which is existing or under construction. No building may be constructed within 20 feet of a sediment trap or basin.

17. All inlets in non-sump areas shall have asphalt berms installed at the time of base paving establishment.

18. The sediment control inspector has the option of requiring additional sediment control measures, as deemed necessary.

19. All trap elevations are relative to the outlet elevation, which must be on existing undisturbed ground.

20. Vegetative stabilization shall be performed in accordance with the Standards and Specifications for Soil Erosion and Sediment Control.

21. Temporary sediment trap(s) shall be cleaned out and restored to the original dimensions when sediment has accumulated to the point of one-half (1/2) the wet volume of the trap or when required by the sediment control inspector.

22. Sediment removed from traps shall be placed and stabilized in approved areas, but not within a floodplain.

23. All sediment basins and traps must be surrounded with a welded wire safety fence. The fence must be at least 42 inches high, have posts spaced no farther apart than 8 feet, have mesh openings no greater the two inches in width and four inches in height, with a minimum of 14 gauge wire. Safety fence must be maintained in good condition at all times.

24. No excavation in the areas of existing utilities is permitted unless their location has been determined. Call "Miss Utility" at 1-800-257-7777, 48 hours prior to the start of work.

25. Off-site spoil or borrow areas must have prior approval by DPS.

26. The grade away from foundation walls shall fall a minimum of six inches within the first 10 feet, except as restricted by lot lines where the fall will be a minimum of six inches, regardless of the horizontal distance available.

27. Sediment trap/basin dewatering for cleanout or repair may only be done with the DPS inspector's permission. The inspector must approve the dewatering method for each application. The following methods may be considered:

A. Pump discharge may be directed to another on-site sediment trap or basin, provided it is of sufficient volume and the pump intake is floated to prevent agitation or suction of deposited sediments; or

B. the pump intake may utilize a Removable Pumping Station and must discharge into an undisturbed area through a non-erosive outlet; or

C. the pump intake may be floated and discharge into a Dirt Bag (12 oz. non-woven fabric), or approved equivalent, located in an undisturbed buffer area.

Remember: Dewatering operation and method must have prior approval by the DPS inspector.

28. The permittee must notify the Department of all utility construction activities within the permitted limits of disturbance prior to the commencement of those activities.

29. Topsoil must be applied to all pervious areas within the limits of disturbance prior to permanent stabilization in accordance with Montgomery County standards and specifications for topsoiling.