Construction Stormwater Pollution Prevention Plan
Surface Water Minimum Requirements #1-5 Short Form

Effective November 15, 2016

Projects meeting the thresholds listed below may use this short form instead of having a professionally-designed construction Stormwater Pollution Prevention Plan (SWPPP) prepared. If your project meets the following thresholds and includes or may impact a critical area, please contact the City to determine if the SWPPP short form may be used.

This short form may be used if any of the following are met:

- Adding less than 5,000 square feet of hard surface area
- Redeveloping less than 5,000 square feet of existing hard surface area
- Clearing or disturbing 7,000 square feet or more of land
- Grading/filling 50 to 499 cubic yards
Definitions
Surface Water Minimum Requirements #1-5 Short Form

A number of terms are used in this packet that may not be familiar to you. This page includes definitions for some of these terms. Additional definitions for terms not described below may be found in the December 2015 Pierce County Stormwater Management and Site Development Manual (PCM) and within the Edgewood Municipal Code (EMC).

BMP:
Best Management Practice. The schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices, that when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to Waters of the State.

Critical areas:
Areas that include wetlands and their buffers, areas with a critical recharging effect on aquifers used for potable water, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, including unstable slopes, and associated areas and ecosystems.

Dewatering system:
A method used to remove excess water from soil during construction that impacts the development of a project. Dewatering often requires the transportation of water offsite to an approved dump location.

Erosion control supervisor:
The project manager (or property owner) who regularly reviews the erosion control on a project to assure all BMPs are followed.

FEMA:
Federal Emergency Management Agency

Hard Surface:
An impervious surface, a permeable pavement, or a vegetated roof.

Sensitive areas:
See critical areas definition.

Total existing impervious area:
The total area of a project site covered by roof, concrete, asphalt, gravel or highly compacted soil.

Total project area:
The total area of a property, minus critical areas and any associated buffers.

Total proposed area to be disturbed:
The amount of area that will be disturbed during the construction of a project.

Total proposed impervious area:
The total impervious area (new or replaced) of a site.

Total volumes of proposed cuts/fill:
The cubic yard total of land disturbing activity.
Construction Stormwater Pollution Prevention Plan
Surface Water Minimum Requirements #1 - 5 Short Form

Required Submittals

1. Project Narrative
   The Construction Stormwater Pollution Prevention Plan (SWPPP) Short-Form narrative must be completed as part of this packet. Any information described as part of the narrative should be shown on the site plan.

   NOTE: Between October 1st and April 30th (wet season), clearing, grading and other soil disturbing activities shall only be permitted by special authorization from the City of Edgewood.
A. Project Description (check all that apply)

- [ ] New Structure
- [ ] Building Addition
- [ ] Grading/Excavation
- [ ] Paving
- [ ] Utilities
- [ ] Other

1. Total project area ____________________________ (square feet)
2. Total proposed hard surface area ____________________________ (square feet)
3. Total existing hard surface area ____________________________ (square feet)
4. Total proposed area to be disturbed ____________________________ (square feet)
5. Total volumes of proposed cuts/fill ____________________________ (cubic yards)

Additional project information: ____________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________

B. Existing site conditions (check all that apply)

- Describe the existing surfaces on the site

- [ ] Forest
- [ ] Pasture/prairie
- [ ] Pavement
- [ ] Landscaping
- [ ] Brush
- [ ] Trees
- [ ] Other

- Describe how surface water (stormwater) drainage flows across/from the site

- [ ] Sheet flow
- [ ] Gutter
- [ ] Catch basin
- [ ] Ditch/swale
- [ ] Storm sewer
- [ ] Stream
- [ ] Other

- Describe any unusual site condition(s) or other features of note

- [ ] Steep grades
- [ ] Large depression
- [ ] Underground tanks
- [ ] Springs
- [ ] Easements
- [ ] Existing structures
- [ ] Existing utilities
- [ ] Other
C. Adjacent Areas (check all that apply)

1. Check any adjacent areas that may be affected by site disturbance and describe fully in item 2 below:
   - Streams*
   - Lakes*
   - Wetlands*
   - Steep slopes*
   - Residential areas
   - Roads
   - Ditches, pipes, culverts
   - Other

*If site is on or adjacent to a critical area, the City of Edgewood may require additional information, engineering and other permits to be submitted with this short form.

2. Describe how and where surface water enters the site from upstream properties.

   __________________________________________________________
   __________________________________________________________

3. (only if 2,000 sf or more hard surface or 7,000 sf of land disturbance is proposed)
   Describe the downstream drainage path leading from the site to the receiving body of water. Minimum distance of 1/2-mile (2,640 feet), or to the receiving water body (lake, pothole, stream).
   (e.g. water flows from site, into curb line to catch basin at the intersection of X and Y streets. A 10-inch pipe system conveys water another 1,000 feet to a ravine/wetland.)

   __________________________________________________________
   __________________________________________________________

D. Soils (check all that apply)

The intent of this section is to identify when additional soils may be required for applicants using this short form. There are other site-specific issues that may necessitate a soils investigation or more extensive erosion control practices. The City will determine these situations on a case-by-case basis as part of their review.

1. Does the project propose infiltration? (Infiltration systems require City approval and soils investigation/logs.)
   - Yes
   - No

2. Does the project propose construction near or on steep slopes?
   - Yes
   - No

If infiltration is proposed for the site or steep slopes have been identified, the City will require soils information as part of the project design. The applicant must contact a soil professional or civil engineer specializing in soil analysis to perform an in-depth soils investigation. If yes is checked for either question above, the City may not permit the use of this short-form.
E. Construction Sequencing/Phasing

1. The standard construction sequence is as follows:

   - Mark clearing/grading limits
   - Call Building Inspector to inspect clearing/grading limits
   - Install initial erosion control practices (construction entrance, silt fence, catch basin inserts)
   - Clear, grade and fill site as outlined in the site plan while implementing and maintaining temporary erosion and sediment control practices at the same time
   - Install permanent erosion protection (impervious surface, landscaping, etc.)
   - Contact Building Inspector for approval of permanent erosion protection and site grades
   - Remove erosion control methods as permitted by the Building Inspector and repair permanent erosion protection as necessary
   - Monitor and maintain permanent erosion protection until site is fully established

List any changes from the standard construction sequence outlined above.


2. Construction phasing: If construction is going to occur in separate phases, please describe:


F. Construction Schedule

1. Provide a proposed construction schedule (construction start and end and dates for any construction phasing).
   Start date: ___________________________  End date: ___________________________

   Interim phasing dates:____________________

   **Wet season construction activities:** * Wet season occurs from October 1st to April 30th. Describe construction activities that will occur during this time period.


*Additional erosion control methods may be required during periods of increased surface water runoff during the wet season.*
2. **Site Plan (see attached Guidelines for Erosion Control Practices and Sample Site Plan)**  
   A site plan, to scale, shall be included with this checklist that shows the following items:

   ____ a. Address, parcel number and street names
   ____ b. North arrow
   ____ c. Indicate boundaries of existing vegetation (e.g. tree lines, grassy areas, pasture areas, fields, etc.)
   ____ d. Identify any onsite or adjacent critical areas and associated buffers (e.g. wetlands, steep slopes, streams, etc. (see Critical Areas Checklist))
   ____ e. Identify any FEMA base flood boundaries and Shoreline Management boundaries
   ____ f. Show existing and proposed contours
   ____ g. Delineate areas that are to be cleared and graded
   ____ h. Show all cut and fill slopes, indicating top and bottom of slope catch lines
   ____ i. Show locations where upstream runon enters the site and locations where runoff leaves the site
   ____ j. Indicate existing surface water flow direction(s)
   ____ k. Label final grade contours and indicate proposed surface water flow direction and surface water conveyance systems (e.g. pipes, catch basins, ditches, etc.)
   ____ l. Show grades, dimensions and direction of flow in all (existing and proposed) ditches, swales, culverts and pipes
   ____ m. Indicate locations and outlets of any dewatering systems (usually to sediment trap)
   ____ n. Identify and locate all erosion control techniques to be used during and after construction

**Onsite field verification of actual conditions is required.**
Figure 1. Sample Erosion and Sediment Control Plan

ALL EXPOSED AREAS TO BE TOPSOILED, SEEDED & MULCHED BY OWNER AT THE COMPLETION OF CONSTRUCTION OR IF LEFT UNWORKED FOR 7 DAYS DURING SUMMER MONTHS AND 2 DAYS FOR WINTER.

TOPSOIL (STOCKPILE)

ELEVATION LINE

SURFACE WATER FLOW

PC

DS

DS

DS

DS

PC

DS

DS

PC

DS

PC

DS

PC

DS

PC

DS

PC

DS

EDGE OF TRAVELED WAY

CATCH BASIN

TRAP OUTLET TO CITY SYSTEM

(If applicable)

PROPERTY LINE

STREET NAME

EROSION CONTROL SYMBOLS

SILT FENCE

CLEARING & GRAVING LIMITS

CONSTRUCTION ENTRANCE

BERM BARRIER

CATCH BASIN PROTECTION

SEDIMENT TRAP

DRAINAGE SWALE (If proposed)

EROSION CONTROL BLANKET/MAT

RIP RAP

PLASTIC COVERING

MULCHES/SEEDING/HYDROSEEDING

NOTE

1. THESE ARE MINIMUM REQUIREMENTS. ADJUST EROSION CONTROL PRACTICES AND MAINTAIN AS CONDITIONS REQUIRE.

2. EROSION AND SEDIMENT CONTROL SHALL BE IN PLACE BEFORE INITIATING ANY CONSTRUCTION ACTIVITIES. AN INSPECTION MUST BE MADE AFTER INSTALLATION OF EROSION CONTROL PRACTICES.
Guidelines for Erosion Control Practices

This SWPPP must contain the following 13 required elements, per the 2015 PCM. Check off each element as it is addressed in the SWPPP Short Form and/or on your site plan.

_____ 1. Mark clearing limits (orange construction fence, staking with ribbon)
_____ 2. Establish construction access (gravel entrance, tire wash area)
_____ 3. Control flow rates (using pipe, drainage swales, berms)
_____ 4. Install sediment controls (silt fence, sediment traps)
_____ 5. Stabilize soils (mulch, hydroseed, straw)
_____ 6. Protect slopes (divert water from top of slope, cover with plastic or erosion control blanket)
_____ 7. Protect drain inlets (catch basin inserts)
_____ 8. Stabilize channels and outlets (cover with grass, riprap)
_____ 9. Control pollutants (maintain equipment to prevent leaks)
_____ 10. Control dewatering (pump to sediment trap)
_____ 11. Maintain BMP (weekly maintenance/replacement, preparation for the storm events)
_____ 12. Manage the project (establish construction schedule, phasing, contact numbers)
_____ 13. Protect Low Impact Development BMPs (e.g. rain gardens, pervious pavement, etc.)

Several common erosion control techniques are explained and described in this section. Standard details for installation of these methods are included in this document. The applicant does not need to reproduce these drawings, but must indicate where each BMP will be used on a site plan and indicate which detail will be used. An example site plan and symbols list is provided to assist the applicant in preparation of their own site plan.

Only those erosion and sediment control techniques most pertinent to small construction sites are included here. More detailed information on construction BMPs is located in the adopted PCM. The BMP numbers referenced are also located in the same manual.

For phased construction plans, clearly indicate erosion control methods to be used for each phase of construction.
Mark Clearing Limits
All construction projects must clearly mark any clearing limits, sensitive areas and their buffers, and any trees that will be preserved prior to any land disturbing activities, including clearing and grading. Clearly mark limits both in the field and on the plans. Plastic, metals or stake wires may be used to mark the clearing limits. Do not staple or wire fences to trees.

Applicable BMP include:
- BMP C101: Preserving natural vegetation
- BMP C102: Buffer zones
- BMP C103: High visibility fence

Construction Entrance
All construction projects subject to vehicular traffic shall provide a means of preventing vehicle “tracking” of soil from the site onto City streets. At a minimum, there shall be a rock pad construction entrance at every construction access point. The entrance(s) shall be inspected weekly and if excessive sediment is found, more rock shall be added to ensure proper functioning. NOTE: The applicant should consider placing the entrance in the area for future driveway(s), as the rock can be used for driveway base material.

If sediment is tracked off site, it shall be swept or shoveled from the paved surface on a daily basis. Washing of the streets to remove the sediment is not permitted because wash water can transport sediments to streams and other water courses via the City storm drainage system.

The entrance must be identified on the site plan and must conform to Figure 2.

Applicable BMP include:
- BMP C105: Stabilized construction entrance/exit
- BMP C106: Wheel wash
- BMP C107: Construction road/parking area stabilization

Sediment Barriers (Figure 3 through Figure 7)
Sediment barriers should be used downslope of disturbed areas. Sediment barriers are intended to create a barrier to slow the “sheet” flow of stormwater and allow the sediment to settle out behind the barrier. Do not use sediment barriers in streams, channels, ditches or around inlets/outlets of culverts. Sediment barriers selected shall be identified on the site plan and must conform to those shown in Figure 3 through Figure 7.

1. Silt Fence
A silt fence is a temporary sediment barrier consisting of filter fabric attached to supporting posts and entrenched into the soil (see Figure 3).
2. Berm Barriers
A continuous berm is a temporary diversion dike or sediment barrier. It may be constructed with:
- Soil, sand or aggregate encased with a geosynthetic fabric (see Figure 4 and Figure 5)
- Straw wattles (see Figure 6)
- Sand bags (see Figure 7)

Applicable BMP include:
- BPM C231: Brush barrier
- BPM C233: Silt fence
- BPM C234: Vegetated strip
- BPM C235: Wattles

Catch Basin Protection (Figure 8 and Figure 9)
To prevent sediment from entering drainage systems prior to site stabilization, install catch basin protection with onsite and nearby downstream catch basins. Figure 8 and Figure 9 are acceptable methods of catch basin protection. NOTE: Only Figure 8 is approved for use in the City of Edgewood right-of-way.

Applicable BMP include:
- BMP C220: Storm drain inlet protection

Water Runoff Containment/Control
As an alternative to or in conjunction with sediment barriers, a combination of drainage swales and possibly a sediment trap may be used to control runoff and trap sediment before it leaves the construction site.

1. Sediment Traps (Figure 10 and Figure 11)
Sediment traps are small temporary ponds (typically less than 3 feet deep) used to trap sediment suspended in the site runoff before it leaves a construction site. As concentrated surface water pools within the pond, sediment is allowed to settle out of the water. Typically, a sediment trap will not be required for small sites as long as concentrated stormwater runoff (swales or ditches) does not occur.

Use the table below for sizing your sediment trap:

<table>
<thead>
<tr>
<th>Contributing Area (acres)</th>
<th>Required Surface Area of Pond (square feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8 acre or less</td>
<td>130</td>
</tr>
<tr>
<td>1/4 acre or less</td>
<td>260</td>
</tr>
<tr>
<td>1/2 acre or less</td>
<td>520</td>
</tr>
<tr>
<td>3/4 acre or less</td>
<td>780</td>
</tr>
<tr>
<td>1 acre or less</td>
<td>1040</td>
</tr>
</tbody>
</table>

If expected time of construction or downstream conditions warrant more protection, see BMP C240 for sizing information. NOTE: If dewatering or significant stormwater runoff is expected, a sediment trap should be used to settle out solids before discharging to the City system.
2. Drainage Swales (Figure 12)

Drainage swales are temporary ditches (minimum slope of 0.5% and a maximum of 10%) used to convey concentrated stormwater flows away from construction activities into a temporary sediment trap. Drainage swales carrying concentrated flows must discharge into a sediment trap or pond. Swales should be stabilized with erosion protection (see below). **NOTE:** Swales should be completely stabilized before directing concentrated flows or they themselves will erode.

Applicable BMP include:
- BMP C240: Sediment trap
- BMP C201: Grass-lined channels
- BMP C202: Channel lining
- BMP C207: Check dams

**Soil Erosion Protection**

Soil erosion protection is applied over the soil surface to reduce erosion from rainfall and wind. It can also be used to aid the establishment of vegetation. Between October 1st and April 30th, no soils shall remain exposed for more than 2 days unless they are being actively worked. From April 1st to September 30th, no soils shall remain exposed for more than 7 days unless they are being actively worked. (See Table 2, Table 3 and Figure 13 through Figure 16.)

1. Mulches/Seeding/Hydroseeding (Table 2 and Table 3)

Mulching is the application of a protective layer of straw or other suitable material to the soil surface. Mulch can be applied to any site where soil has been disturbed and the protective vegetation has been removed. Materials that may be used for mulching include:
- Straw or hay
- Compost material
- Wood or bark chips
- Hydraulically applied grass seed (hydroseed)
- Bonded fiber matrix

Applicable BMP include:
- BMP C120: Temporary and permanent seeding
- BMP C121: Mulching
- BMP C124: Sodding
- BMP C125: Topsoiling/Compost
- BMP C126: Polyacrylamide (PAM) for soil erosion protection
- BMP C130: Surface roughening
- BMP C140: Dust control

**NOTE:** The applicant may wish to mix in grass seed with the above practices to further aid in soil stabilization. Please refer to Table 2 and Table 3.
2. Erosion Control Blankets/Mats (Figure 13)
Erosion control blankets are suited for post-construction site stabilization, but may be used for temporary stabilization of highly erosive soils. Erosion control blankets are suitable for steep slopes, stream banks and areas where vegetation will be slow to establish. These blankets are typically made from straw, coconut fiber, excelsior, or synthetic material that is enveloped in plastic, biodegradable netting, jute, polypropylene or nylon.

Applicable BMP include:
- BMP C122: Nets and blankets

3. Gravel/Riprap (Figure 14)
Gravel and riprap are used to protect hillsides, drainage channels, stream banks and pipe outlets from erosion due to surface water flow.

4. Pipe Slope Drains (Figure 15)
Pipe slope drains are used to prevent erosion and saturation of slide-prone soils by diverting surface water flow over (via piping) or away from the soils or slope.

Applicable BMP include:
- BMP C204: Pipe Slope Drains

5. Plastic Sheeting (Figure 16)
Plastic sheeting is a temporary method of erosion control. Plastic covering provides immediate, short-term erosion protection to slopes, soil stockpiles and other disturbed areas. Unlike the other erosion protection techniques mentioned above, plastic sheeting shall be removed prior to applying permanent erosion protection.

Applicable BMP include:
- BMP C123: Plastic covering

Protect Slopes
Design, construct and phase projects in a manner that will minimize erosion. Protect slopes by diverting water at the top of the slope. Reduce slope velocities by minimizing the continuous length of slope. This can be accomplished by terracing and roughening slope sides. Seeding and establishing vegetation on slopes will help protect slopes as well.

Applicable BMP include:
- BMP C120: Temporary and permanent seeding
- BMP C130: Surface roughening
- BMP C131: Gradient terraces
- BMP C200: Interceptor dike and swale
- BMP C204: Pipe slope drains

Control Pollutants Other Than Sediment
All pollutants must be disposed of in a manner that does not cause contamination of surface waters. Do not maintain or repair any heavy equipment of vehicles onsite. Clean any spills immediately. Handle concrete and concrete waste appropriately.
Applicable BMP include:
- BMP C150: Materials on hand
- BMP C151: Concrete handling
- BMP C152: Sawcutting and surfacing pollution prevention
- BMP C153: Materials delivery, storage and containment
- BMP C154: Concrete washout area

Control Dewatering
Any dewatering water must be discharged through a stabilized channel to a sediment pond and will require BMP be followed when discharging. Discharge is not permitted to creeks or wetland areas and shall instead be placed in baker tanks and disposed of at approved locations.

Maintain BMP
Maintain and repair temporary erosion and sediment control BMP as needed. Inspect all BMP at least weekly and after every storm event. Remove all temporary erosion and sediment control BMP within 30 days after final site stabilization.

<table>
<thead>
<tr>
<th>Table 2. Temporary Erosion Control Seed Mix</th>
<th>% Weight</th>
<th>% Purity</th>
<th>% Germination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chewings or annual bluegrass Festuca rubra var. commutate or Poa anna</td>
<td>40</td>
<td>98</td>
<td>90</td>
</tr>
<tr>
<td>Perennial rye Lolium perenne</td>
<td>50</td>
<td>98</td>
<td>90</td>
</tr>
<tr>
<td>Redtop or colonial bentgrass Agrostis alba or Agrostis tenuis</td>
<td>5</td>
<td>92</td>
<td>85</td>
</tr>
<tr>
<td>White Dutch clover Trifolium repens</td>
<td>5</td>
<td>98</td>
<td>90</td>
</tr>
</tbody>
</table>
### Table 3. Mulch Standards and Guidelines

<table>
<thead>
<tr>
<th>Mulch Material</th>
<th>Quality Standards</th>
<th>Application Rates</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straw</td>
<td>Air-dried; free from undesirable seed and coarse material</td>
<td>3” thick; 5 blades per 1,000 square feet or 2 to 3 tons per acre</td>
<td>Cost-effective protection when applied with adequate thickness. Hand-application generally required greater thickness than blown straw. The thickness of straw may be reduced by half when used in conjunction with seeding. In windy areas, straw must be held in place by crimping, using a tackifier, or covering with netting. Blown straw always has to be held in place with a tackifier, as even light winds will blow it away. Straw, however, has several deficiencies that would be considered when selecting mulch materials. It often introduces and/or encourages the propagation of weed species and it has no significant long-term benefits. Straw should be used only if mulches with long-term benefits are unavailable locally. It should also not be used within the ordinary high-water elevation of surface waters (due to flotation).</td>
</tr>
<tr>
<td>Hydro-mulch</td>
<td>No growth inhibiting factors.</td>
<td>Approximately 25-30 pounds per 1,000 square feet or 1,500 to 2,000 pounds per acre</td>
<td>Shall be applied with hydromulcher. Shall not be used without seed and tackifier unless the application rate is at least doubled. Fibers longer than about 3/4 to 1 inch.</td>
</tr>
<tr>
<td>Composted mulch and compost</td>
<td>No visible water or dust during handling. Must be purchased from supplier with a Solid Waste Handling permit (unless exempt)</td>
<td>3” thick, minimum; approximately 100 tons per acre (approximately 800 pounds per yard)</td>
<td>More effective control can be obtained by increasing thickness to 3 inches. Excellent mulch for protecting final grades until landscaping because it can be directly seeded or tilled into soil as an amendment. Composted mulch has a coarser size gradation than compost. It is more stable and practical to use in wet areas and during rainy weather conditions.</td>
</tr>
<tr>
<td>Chipped site vegetation</td>
<td>Average size shall be several inches. Gradations from fine to 6” in length for texture, variation and interlocking properties</td>
<td>3” minimum thickness</td>
<td>This is a cost-effective way to dispose of debris from clearing and grubbing, and it eliminates the problems associated with burning. Generally, it should not be used on slopes above approximately 10% because of its tendency to be transported by runoff. It is not recommended within 200 feet of surface waters. If seeding is expected shortly after mulch, the decomposition of the chipped vegetation may tie up nutrients important to grass establishment.</td>
</tr>
</tbody>
</table>
IT IS RECOMMENDED THAT THE ENTRANCE BE CROWNED SO THAT RUNOFF DRAINS OFF THE PAD

EXISTING ROAD

R = 25' MIN.

INSTALL DRIVEWAY CULVERT IF THERE IS A ROADSIDE DITCH PRESENT, AS PER CITY OF TACOMA STANDARDS.

4"-8" QUARRY SPALLS

GEOTEXTILE

12" MIN. THICKNESS

PROVIDE FULL WIDTH OF INGRESS/EGRESS AREA

Figure 2. Construction Entrance
Figure 3. Sediment Barrier – Silt Fence

Joints in filter fabric shall be spliced at posts. Use staples, wire rings, or equivalent to attach fabric to posts.

2" x 2" by 14 Ga. wire or equivalent, if standard strength fabric used

6' max.

Minimum 4" x 4" trench

Post spacing may be increased to 8' if wire backing is used

2" x 2" wood posts, steel fence posts, rebar, or equivalent

Note: Filter fabric fences shall be installed along contour whenever possible

2" x 2" by 14 Ga. wire or equivalent, if standard strength fabric used

Filter fabric

Minimum 4" x 4" trench

Backfill trench with native soil or 3/4" - 1.5" washed gravel

2" x 2" wood posts, steel fence posts, rebar, or equivalent

Silt fence

Not to scale
Figure 4. Sediment Barrier - Triangular Sediment Filter Dikes
Figure 5. Sediment Barrier - Geosynthetic Dike
Figure 6. Sediment (Berm) Barrier - Straw Wattle Rolls

STRAW ROLLS MUST BE PLACED ALONG SLOPE CONTOURS

SPACING DEPENDS ON SOIL TYPE AND SLOPE STEEPNESS

SEDIMENT, ORGANIC MATTER, AND NATIVE SEEDS ARE CAPTURED BEHIND THE ROLLS.

NOTE:
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"-5" (75-125mm) DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.

1" X 1" STAKE
(25 x 25mm)

3"-5" (75-125mm)

8"-10" DIA.
(200-250mm)

LIVE STAKE

STRAW WATTLE ROLLS
NOT TO SCALE

CONSTRUCTION SWWPPP SHORT-FORM
SEDIMENT (BERM) BARRIER
Figure 7. Sediment (Berm) Barrier - Sandbag Berm

1) When sandbag is filled with coarse grade sand material, the open end should be stapled or tied with nylon or poly cord. The weight shall be 90 - 125 lbs.

2) Sandbags should be stacked in at least three vertical rows abutting each other, and in staggered arrangement. (Refer to front view).

3) The base of the berm should be at least 3 sandbags deep and can be reduced to 2 and 1 bag in the second and third rows respectively. (Refer to cross section).
Figure 8. Catch Basin Protection - Bag Filter

INLET PROTECTION NOTES:

1. FILTERS SHALL BE INSPECTED AFTER EACH STORM EVENT AND CLEANED OR REPLACED WHEN 1/3 FULL.

BAG FILTER

CONSTRUCTION SWWPP SHORT-FORM
CATCH BASIN PROTECTION

NOT TO SCALE
Figure 9. Catch Basin Protection – Inlet Gravel and Filter Fabric
Figure 10. Water Runoff Containment/Control – Sediment Trap Cross-Section
Figure 11. Water Runoff Containment/Control – Sediment Trap Outlet
Figure 12. Water Runoff Containment/Control – Drainage Swale Cross-Section
Figure 13. Soil Erosion Protection – Erosion Blankets and Turf Reinforcement Mats

NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

Erosion Blankets & Turf Reinforcement Mats

Construction SWPPP Short-Form Soil Erosion Protection

Not to Scale
Figure 14. Soil Erosion Protection – Rip Rap Protection

NOTE:
'T' = THICKNESS; THICKNESS SHALL BE DETERMINED BY THE ENGINEER.
MINIMUM THICKNESS SHALL BE 1.5 x THE MAXIMUM STONE DIAMETER, NEVER LESS THAN 6" (150mm).
Figure 15. Soil Erosion Protection – Pipe Slope Drains
Figure 16. Soil Erosion Protection – Tarp Covering

NOTE: USE OLD TIRES OR SAND BAGS TO ANCHOR PLASTIC COVERING.