PERMIT CENTER

HANDOUT OF MINIMUM T.E.S.C. REQUIREMENTS FOR SMALL SITES

Informational Brochure

February 2010

Prepared by:

City of Auburn

Customer Service Center

(253) 931-3010
FAX (253) 931-3053
SMALL SITE TEMPORARY EROSION & SEDIMENTATION CONTROL (TESC)

A small site (Level 1 Storm Permit) is defined as a project, not located in a Critical Area, which adds or replaces less than 2,000 square feet of impervious surface or disturbs less than 7,000 square feet of land.

The following handout information is to be used to aid in the design of erosion and sedimentation control measures. A small site erosion control plan must be submitted with the permit application, see the Small Lot Site Erosion Control Plan. As an additional resource, refer to the City of Auburn Design Standards Manual Chapter 5 and Volume II of the City of Auburn Surface Water Management Manual (SWMM).

Guidelines for Erosion Control Practices

Check off each element as it is addressed 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).
___ 12. Manage the Project (establish construction schedule, phasing, contact numbers).

Several common erosion control techniques are explained and described in this handout. 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, See Figure below:
NOTES:

1) CONTOUR LINE ELEVATIONS ARE ARBITRARY AND ARE FOR ILLUSTRATION PURPOSE ONLY.

2) FOR USE ON SINGLE FAMILY OR DUPLEX RESIDENTIAL LOTS.
Only those erosion and sediment control techniques most pertinent to small construction sites are included here. More detailed information on construction BMPs can be found in Volume II of the SWMM.

**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 beginning 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.

**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. *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.* The entrance(s) shall be inspected weekly and if excessive sediment is found, more rock shall be added to ensure proper functioning.

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 the Figure as shown below (except the minimum length and width may be reduced to 25’ and 15’ respectively for small sites):
MAINTENANCE STANDARDS:

1) QUARRY SPALLS SHALL BE ADDED IF THE DRIVEWAY PAD IS NO LONGER IN ACCORDANCE WITH THE SPECIFICATIONS.

2) IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRAILED ONTO PAVEMENT, THEN ALTERNATIVE MEASURES TO KEEP THE STREETS FREE OF SEDIMENT SHALL BE USED. THIS MAY INCLUDE STREET SWEEPING, AN INCREASE IN THE ENTRANCE DIMENSIONS, OR THE INSTALLATION OF A WHEEL WASH, SEE STANDARD DETAIL EROSION-02.

3) ANY SEDIMENT THAT IS TRACKED ONTO STREET PAVEMENT SHALL BE REMOVED IMMEDIATELY BY SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ONSITE. PAVEMENT SHALL NOT BE CLEANED BY WASHING DOWN THE STREET, EXCEPT WHEN SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH THE STREETS, A CONSTRUCTION OF SMALL SUMP SHALL BE CONSIDERED. SEDIMENT WOULD THEN BE WASHED INTO THE SUMP.

4) ANY ROCK SPALLS THAT ARE LOOSENED FROM THE DRIVEWAY PAD AND ONTO THE ROADWAY SHALL BE REMOVED IMMEDIATELY.

5) VEHICLES SHALL NOT ENTER OR EXIT THE SITE OTHER THAN THE CONSTRUCTION ENTRANCE(S). FENCING SHALL BE INSTALLED TO CONTROL TRAFFIC WHERE DESIGNED BY THE ENGINEER.
Sediment Barriers

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. A silt fence is a temporary sediment barrier consisting of filter fabric, attached to supporting posts and entrenched into the soil. See Figure below:

![Diagram of Sediment Barriers and Silt Fences]

**Maintenance Standards:**

1) Any damage shall be repaired immediately.

2) If concentrated flows are evident uphill of the fence, they must be intercepted and conveyed to a sediment pond.

3) The uphill side of the fence shall be periodically checked for signs of clogging causing channelization of the flows parallel to the fence. In such case, replace the fence and or remove the trapped debris and sediment.

4) Sediment and debris must be removed when 6" high.

5) Remove and replace deteriorated filter fabric due to ultraviolet breakdown.

6) Upon completion of work and when allowed by the city of Auburn, the contractor shall remove all filter fabric fence and gravel, provide finish grades with surfacing material and landscaping as required.

**NOTE:**
Filter fabric fences shall be installed along contour whenever possible.
**Catch Basin Protection**

To prevent sediment from entering drainage systems prior to site stabilization, install catch basin protection within onsite and nearby downstream catch basins. The following figure is approved for use in City of Auburn right of way.

**MAINTENANCE STANDARDS:**

1) **ANY ACCUMULATED SEDIMENT ON OR AROUND THE FILTER FABRIC SHALL BE REMOVED PROMPTLY AND DISPOSED OFF AS FILL MATERIAL ON SITE OR HAULED OFF SITE.**

2) **SEDIMENT SHALL NOT BE REMOVED WITH WATER.**

3) **REGULAR MAINTENANCE IS REQUIRED. ANY SEDIMENT IN THE CATCH BASIN INSERT SHALL BE REMOVED WHEN IT HAS FILLED 1/3 OF THE AVAILABLE STORAGE. THE FILTER MEDIA FOR INSERT SHALL BE CLEANED OR REPLACED AT LEAST MONTHLY.**
Control Dewatering

All discharges to the City sewer system require City and King County approval. This approval process may be initiated by contacting the City. The City will coordinate the request for a letter of authorization from the King County Wastewater Treatment Division.

Any dewatering water must be discharged through a stabilized channel to a sediment pond.

Maintain BMPs

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

Additional Information

1. The erosion control facilities shown on the attached small site erosion control plan and details are to be used as guidelines for site construction. The City Inspector may require additional measures depending on individual site conditions. In addition, certain sites may require the submittal of a TESC site plan for review by the City. During construction these facilities shall be maintained or replaced by the contractor as determined by the City Inspector.

2. The implementation, maintenance and replacement of erosion control facilities are the responsibility of the applicant until all construction is approved. The erosion facilities shall be inspected daily by the applicant, and maintained to ensure continued proper functioning.

3. Drainage, Erosion, Sedimentation Control facilities shall be sized for runoff volumes associated with graded sites.

4. TESC measures shall be designed so as not to adversely affect any public right-of-way or adjacent properties.

5. Siltation control measures (i.e., silt fences, ditches, etc.) shall be provided to protect adjacent properties.

6. Measures shall be taken to prevent silt-laden water from entering the City's public storm system and/or adjacent or downstream rivers, streams, and sensitive areas. If these measures are not taken, the applicant shall be responsible for such remedial action as deemed necessary by the City Inspector.

7. No fill or cut slopes shall be steeper than 2H:1V unless a geotechnical report indicates otherwise.

8. When filling a site, particular care should be taken to prevent disrupting existing upstream surface drainage flow.

9. All TESC facilities shall be installed and in operation prior to the start of all other construction activities to insure that sediment-laden water and storm drainage runoff does not impact the adjacent properties or the natural drainage ways.
10. The TESC facilities, including all perimeter controls, shall remain in place until final site construction is completed and approval has been received from the City Inspector.

11. Individual sites may require special needs depending on the circumstances. For example, many single family residential lots may not be large enough for the required construction entrance. In such cases the City inspector may allow the applicant to install a smaller entrance with the provision that the street will be cleaned of all construction debris at the end of each work day.