

# DRAINAGE INFORMATION FOR HOME BUILDERS

## For Projects Vested Prior to September 30, 2010

All site development activities that change or affect drainage patterns by grading or creating new impervious surfaces, (e.g. surfaces that are water-resistant or non percolating), require a storm water drainage plan per SCC 30.63A.220. Your initial storm water drainage plan needs to be indicated on the site plan you will turn in with your building permit application. The type of drainage plan needed will depend on whether your project is considered a **small parcel development activity**, (i.e. one that creates **less** than 5000 square feet of new impervious surface) or a **major development activity**, (i.e. one that creates 5,000 square feet or **more** of new impervious surface).

### SMALL PARCEL DEVELOPMENT ACTIVITIES

Storm drainage plans for most single-family residences, additions, and accessory buildings can be as simple as a few slope arrows and a note somewhere on the plan.

**For lots in a recent subdivision, plat, or short plat:** In most cases new plats or short plats have an already approved detailed drainage plan and constructed systems for individual lots within the plat or short plat. The approved constructed storm water drainage system has physical facilities such as yard drains, storm drain pipes, (under the streets), drainage ditches, and detention ponds to tie into. In these cases, the following note may be sufficient; "*Roof and footing drains to be connected to plat drainage system*". **Important:** Pre-existing approved plat drainage plans have within them an assumed new impervious surface area for lot improvements. If your project creates less than 5,000 square feet of impervious surfaces but exceeds the approved per lot impervious area, you will be required to submit additional drainage plan information. This will trigger a **Targeted Drainage Plan** review. See discussion below.

**For lots NOT in a recent subdivision, plat or short plat:** A note such as, "*Downspouts to splashblocks*", along with an indication of how the lot slopes will probably be adequate as a storm water drainage plan. This is true for approximately 80 percent of lots not created by a recent subdivision, plat or short plat. See site plan checklist and site plan examples.

Sometimes, it may be necessary or desirable to *tightline roof and footing drains* away from foundations, slopes, creeks, or neighboring properties to an *energy dissipation pad* or other *more complicated drainage systems*, (such as subsurface infiltration systems). This will mean you will need to supply more specific slope and construction details. Additionally, it may require a **Targeted Drainage Plan** review as discussed below.

Proposals using *sub-surface drainage* systems such as *infiltration trenches or rock or dry wells* will require additional soil and slope information. Cross-sectional information that shows the construction dimensions and high winter water table elevation will also be required. Sub-surface drainage systems will always need to be analyzed to make sure they will function properly. Consequently, a **Targeted Drainage Plan** review will be required. See discussion on Targeted Drainage Plans below.

Per SCC 30.63A.100, your initial drainage plan proposal will be evaluated by the site reviewer for sufficiency. If the site reviewer accepts your initial drainage plan, no other drainage review will be required unless your proposal changes, or controlling regulations change prior to permit issuance.

If the site reviewer does not accept your initial drainage plan, then an alternate Targeted Drainage Plan will be required. Your alternate drainage plan will be reviewed by one of the County's drainage plan reviewers. You will be charged a Targeted Drainage Plan review fee. Your Targeted Drainage Plan processing fee will be at least \$350.00 - a base fee of \$100.00, plus a plan review fee of \$125.00, and a construction inspection fee of \$125.00.

## TARGETED DRAINAGE PLAN

If you need a Targeted Drainage Plan, several options are open to you. One is to consult and/or hire a Civil Engineer licensed in the state of Washington to design an acceptable drainage system for you. Another is to propose an infiltration system based on the enclosed Small Parcel Infiltration BMP attached detail. If you choose this option you will need to 1) Provide the length and location of your system on your site plan, 2) Provide the high winter water table elevation, and 3) Provide soil log data or a percolation rate of the soil where you are installing your system. Soil log data or percolation rate must be provided by a certified septic designer or a civil engineer. The length of your trench will depend upon the soil type and high winter water table elevation. Generally speaking, for soils with poor perk rates, a trench length of about 65 feet per 1,000 square feet of impervious surface is a good **FIRST GUESS!** Soils that perk at a faster rate may be shorter.

## MAJOR DEVELOPMENT ACTIVITIES

A **Full Drainage Plan** is required for all **major development activities**, (i.e. those projects that create 5,001 square feet or **more** of new impervious surface), unless waived pursuant to SCC 30.63A.120. The site reviewer does not have any discretionary authority to waive the Full Drainage Plan requirement for major development activities. Information regarding the waiver procedure is available upon request. If your project is a major development activity, you will be charged the Full Drainage Plan review fee, and will be at least \$370.00 - a base fee of \$250.00, plus a plan review fee of \$60.00 per lot, and a construction inspection fee of \$60.00 per lot. As mentioned above, pre-existing approved plat drainage plans have within them an assumed new impervious surface area for lot improvements. If your project creates 5,001 square feet or more of impervious surfaces, (including the assumed lot improvements), and also exceeds the approved per lot impervious area, you will also be required to submit additional drainage plan information. This will trigger a Full Drainage Plan review. See the discussion above.