



# Fact Sheet #7

Revised 9/4/2009

## 2009 DRAINAGE DESIGN AND EROSION CONTROL MANUAL FOR THURSTON COUNTY

### Single Family Residential Projects – On Single Lot

In the 2009 Drainage Manual, construction of a single family residence (or duplex) on a single lot must comply with the minimum requirements as would any other project. However, simplified submittal options are available if your project meets certain criteria. This Fact Sheet outlines these criteria.

#### **What are Minimum Requirements for Single Family Residential Projects**

There are twelve Minimum Requirements that must be met for projects in accordance with the 2009 Drainage Manual. Depending on project size, type and location as few as one or as many as all twelve may be required for a single family residential project. See Fact Sheet #6 for details on which minimum requirements apply to a project. In general any single family residential project that creates less than 5,000 square feet of new impervious surface and converts less than 3/4 of an acre- from native vegetation to landscape or lawn will be required to meet the following Minimum Requirements:

- #1: Stormwater Site Planning
- #2: Construction Stormwater Pollution Prevention
- #3: Source Control of Pollution
- #4: Preservation of Natural Drainage Systems and Outfalls
- #5: On-site Stormwater Management
- #12: Off-Site Analysis and Mitigation

If your project creates more than 5,000 square feet of new impervious surface including driveways, roofs, parking areas, etc. or creates greater than 3/4 of an acre of lawn or landscape from native vegetation you need to meet all 12 Minimum Requirements.

The Minimum Requirements are met by submitting documents in accordance with Volume I of the Drainage Manual. This may include an Abbreviated Drainage Plan or Engineered Abbreviated Drainage Plan and a Short Form or Full Construction Stormwater Pollution Prevention Plan.

#### **Can I Still Submit an Abbreviated Drainage Plan for my House Construction?**

The 1994 Drainage Manual allowed for submittal of an Abbreviated Drainage Plan for the majority of single family residential construction projects on a single lot. An Abbreviated Drainage Plan is not required to be prepared by a Civil Engineer. The 2009 Drainage Manual still allows an Abbreviated Drainage Plan but only under more limited circumstances. You may submit an Abbreviated Drainage

Plan in accordance with the requirements of the Drainage Manual, Volume I, if you meet the following conditions:

- Create less than 2,000 square feet of new impervious surface and less than 7,000 square feet of land disturbing activity occurs, or
- Create less than 5,000 square feet of new impervious surface and the soils are predominately (greater than 85%) Type A/B (outwash/gravel & sand) soils, or
- For a project of any size if the lot is within a subdivision that has an accepted and functioning stormwater system that accounts for the development of the lot, or
- The project is outside of the urban area, is on a parcel greater than 1-acre in size, has predominately (greater than 85%) Type A/B soils, the total new plus existing impervious surface area is less than 10% of the parcel area and at least 65% of the site remains native vegetation, and no increase in discharge (>0.1 cfs) from the site occurs as a result of the project, or
- The project is outside of the urban area, is on a parcel greater than 2.5-acres in size, the total new plus existing impervious surface area is less than 10% of the parcel area, at least 65% of the site remains native vegetation, and no increase in discharge (>0.1 cfs) from the site occurs as a result of the project.

When calculating the existing impervious area of a parcel, the area to centerline of any public or private roads fronting the property shall be included in the area calculations.

## **When Would I Need to Hire an Engineer to Do my Abbreviated Drainage Plan?**

An Engineered Abbreviated Drainage Plan is a streamlined submittal that is prepared by a civil engineer licensed in the State of Washington. An Engineered Abbreviated Drainage Plan is allowed/required for the following project types:

1. If you meet the requirements to do an Abbreviated Drainage Plan but any of the following conditions apply to your project:
  - Any critical areas defined by Thurston County Code, Title 17, such as steep slopes, aquifer recharge areas, high groundwater areas, wetlands, streams, lakes, etc. existing within 200 feet of the boundaries of the disturbed area of your project.
  - Any project located within 200 feet of a Marine Bluff Hazard Area as defined by Thurston County Code, Title 17.
  - If your lot is less than 1-acre in size, soils are Type C or D (till/hardpan), or the average slope is greater than 10% across the lot, or any slope of greater than 15% and 10 foot or greater height exists on the lot.

- If your project is located in an area that has historically had drainage problems including flooding, and/or water quality problems.
2. Any other single family residential or duplex project on a single lot and not located within a Marine Bluff Hazard Area.

If your project does not meet the requirements for an Abbreviated Drainage Plan or Abbreviated Drainage Plan then a full Drainage Design and Erosion Control Plan & Report will be required to be prepared by a licensed Civil Engineer.

## **Stormwater Management During Construction**

If your project creates more than 2,000 square feet of new impervious surface or disturbs more than 7,000 square feet of land you will need to prepare a Construction Stormwater Pollution Prevention Plan (SWPPP). If the total disturbed area of your project is less than one acre, then a “Short Form” SWPPP can be prepared. A template for a Short Form SWPPP can be found in the Drainage Manual in Appendix II-C of Volume II. If your project disturbs greater than 1-acre then a full Construction SWPPP is required to be prepared per the requirements of Volume II of the Drainage Manual (if there is any discharge of stormwater from the site then an NPDES Construction Stormwater Permit will also be required to be obtained from the Washington State Department of Ecology).

## **Source Control Plan Requirement**

For most single family residential construction projects a Source Control Plan will be required. Volume IV of the Drainage Manual includes requirements for Source Control. Generally, your source control plan will be a written document that includes general practices (Best Management Practices) to prevent pollutants from getting into the stormwater. These include guidance on management of lawn fertilizers, pesticides, and herbicides; storage and use of household chemicals such as paints and lubricants; autowashing, and other routine household activities that if improperly conducted could release pollutants to the stormwater system. The approved source control plan shall be recorded against the property at the Thurston County Assessor’s office.

### **For More Information:**

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