



## Loudoun County, Virginia

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### Department of Building and Development

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# Technical and Procedural Newsletter

December 28, 2012

**To:** Members of the Land Development and Home Building Community

**From:** Terrance Wharton, Director

*The purpose of this correspondence is to inform the Land Development and Home Building Community of technical and procedural updates that have recently transpired. Please distribute this information to applicable personnel within your organization.*

### IN THIS EDITION:

Changes to the County's criteria for determining the adequacy of a stormwater receiving channel.

### APPLICABLE STANDARDS:

Loudoun County Facilities Standards Manual (FSM), Section 5.230.A.1

**DISCUSSION:** The Virginia Department of Conservation and Recreation (DCR) recently reviewed the adequate channel criteria in the FSM and has directed the Department of Building and Development to revise several of the criteria that they deemed inconsistent with the State standards found in the Virginia Stormwater Management Regulations (4VAC50-60). The required changes to the current criteria are summarized in the following chart:

Current SWM Receiving Channel Criteria in FSM	Required Changes
<b>FSM 5.230.A.1, 5<sup>th</sup> paragraph</b> – requires an adequate channel analysis [only] when there is an increase in the velocity or peak runoff rate.	An adequate channel analysis* must be performed at <u>any point where concentrated runoff leaves a development site.</u>
<b>FSM 5.230.A.1.e</b> – similar to the intent of the above-referenced section, allows designation of adequate channel when there is no increase in the peak runoff rate and corresponding velocities for the 2-year frequency storm (for natural channels) and the 10-year storm (for man-made channels).	This item cannot stand alone in the determination of channel adequacy. Again, a channel analysis* must be performed at all discharge points for concentrated runoff.

**Technical & Procedural Newsletter  
December 28, 2011**

Current SWM Receiving Channel Criteria in FSM	Required Changes
<b>FSM 5.230.A.g</b> – allows designation of channel adequacy if the total increase in runoff is less than 1% of the total design storm at the point of analysis.	This criterion cannot be used to determine channel adequacy. A channel analysis* must be performed at all discharge points for concentrated runoff.

\*At a minimum, the analysis must include calculations for at least 3 channel cross-sections spaced 50' apart for the first 150' and then at points where there are distinct changes in channel geometry or in characteristics such as channel lining, soils, areas of constricted or impeded flow (e.g., inadequate drainage structures), etc. Notably, once these initial criteria are met, the remainder of the channel analysis can be completed by following the procedures defined in **FSM.230.A.6.**

**EFFECTIVE DATE: These amendments will take effect on January 16, 2012.**

All applicable development plans submitted to Loudoun County or to the local Engineers and Surveyors Institute after January 16, 2012 will be subject to these changes.

**For questions or additional information please contact Jimmy Edmonds of my staff at 703-737-8052.**