

<http://www.virginiadot.org/business/locdes/rd-ii-memoranda-index.asp>* and the Virginia Erosion and Sediment Control Handbook, located at www.dcr.virginia.gov shall also be used in designing drainage systems.

2. Criteria

Standards appropriate to the functional classification of the street and the potential impact on adjacent property shall apply.

3. Design

Specific reference is made to the following design requirements:

- a. Roadside and median ditches should provide sufficient hydraulic capacity to contain the estimated runoff from a 10-year frequency storm. The estimated runoff and attendant velocity for the 2-year frequency storm is to be used for determining the needs, type and dimensions of special ditch lining for erosion control. Geometric configurations shall conform to appropriate safety standards.

Where standard ditches have insufficient capacity for the 10-year runoff, a storm sewer system shall be provided. Open channels may be considered in lieu of a storm water system, if their construction can be accomplished without creating a hazard or condition detrimental to the appearance of the subdivision.

- b. An acceptable easement shall be provided from all drainage outfalls to a natural watercourse, as opposed to a swale (See 24 VAC 30-91-10 for definitions). The department normally accepts and maintains only that portion of a drainage system that falls within the limits of the dedicated right of way for a street. The department's responsibility to enter drainage easements outside of the dedicated right of way shall be limited to undertaking corrective measures to alleviate problems that may adversely affect the safe operation or integrity of the roadway. In the event drainage to a natural watercourse is not accomplished or is interrupted, an acceptable agreement from the governing body may be considered as an alternative to providing an easement to a natural watercourse, provided the agreement acknowledges that the department is neither responsible nor liable for drainage from the roadway.
- c. Curb drop inlets – the spread of water on the pavement shall be limited to the width of one-half of the travel lane and the gutter width (if any) in each direction or 8 to 10 feet from the face of curb, whichever is less, for a rainfall intensity of 4 inches per hour.

* Rev. 1/06