

CHAPTER 9

MISCELLANEOUS

9.5 Surface Drainage

9.5.1. Design Standards:

- 9.5.1.1 All new proposed channels shall be designed to carry at least the fully developed 25year storm with freeboard equal to 20% of the design flow depth.
- 9.5.1.2 Transition channels shall be provided at the inlet and outlet ends of all culverts and pipe systems, unless otherwise provided herein.
- 9.5.1.3 The maximum flow velocity at the project site's downstream property line shall not exceed the pre-developed velocity.
- 9.5.1.4 In cases of potential erosion due to irregular channel alignment, extreme velocities, or excessive slopes, a paved ditch may be required. However, if, in the opinion of the Department, the expected long-term maintenance of a surface drainage system could prove impractical, a pipe design may be required.
- 9.5.1.5 The cross-sectional shape of channels shall be as found in the Standard Drawings. "V" shaped cross-sections are not permitted in grassed channels.
- 9.5.1.6 If the channel will be affected by backwater from culverts, bridges, other structures or floodplains, backwater curves shall be shown in profiles of the channel.
- 9.5.1.7 All channels, must be capable of conveying flows sufficient to ensure that overflow of the channel would not result in a likelihood of dwelling flooding, property damage or public access and/or utility interruption shall be greater than one (1) chance in 100 years.
- 9.5.1.8 Channels shall be designed to carry the fully developed 25-year flow in accordance with the City of Lawrenceville Storm Water Manual.
- 9.5.1.9 Any pipe or culvert crossing any street within the right of way (R/W) shall be reinforced concrete pipe (RCP) conforming section 9.6.4.2.

9.5.2 Construction Standards

- 9.5.2.1 The Channel shall be shaped to the dimensions specified on the approved plans and shall be free of over-falls, gullies, or other irregularities.
- 9.5.2.2 Channels in fills shall be lined.
- 9.5.2.3 Protective cover in grassed channels shall be installed as soon as the earthwork is completed.

9.5.3 Erosion Control

- 9.5.3.1 The procedures and requirements of the Soil Erosion and Sediment Control Ordinances, as may be amended from time to time, shall be applicable whenever any land disturbance is proposed to occur which requires a permit to be obtained by these regulations and shall continue to apply until the project has been completed.
- 9.5.3.2 Any project, whose permit has lapsed under terms expressed in Section 9.4, shall immediately have all disturbed areas stabilized. This responsibility shall fall upon the owner, developer, contractor, or any and all other responsible parties involved in the land disturbance activity.

END OF SECTION 9.5