21 NCAC 23 .0505 TRENCHING AND PIPING

- (a) All portions of an irrigation system that do not meet the standards in this Rule shall be noted on the record drawing.
- (b) An irrigation contractor shall install an irrigation system without trenching across the established root systems of existing trees and shrubs.
- (c) Notwithstanding the requirement in Paragraph (b) of this Rule, when the irrigation contractor finds that it is necessary to trench into the root zone of an established plant in order to provide adequate irrigation to the surrounding area, he shall dig the trench in such a way as to minimize the effect on the roots (for example, by digging the trench in a straight line towards the base of the tree or shrub such that, if the line of the trench were extended, it would intersect with the base of the tree or shrub).
- (d) An irrigation contractor shall cut damaged roots cleanly at right angles.
- (e) Piping in irrigation systems shall be selected so that the flow velocity will not exceed five feet per second for polyvinyl chloride (PVC), polyethylene (PE), and high density polyethylene (HDPE) pipe and seven feet per second for metal pipe.
- (f) The main line and lateral line piping shall be installed to provide a minimum of 12 inches between the top of the pipe and the finished grade. However, if a utility, man-made structure, or roots create an obstacle that makes the 12 inch depth coverage requirement impractical, the piping shall be installed at a minimum of 6 inches between the top of the pipe and the finished grade.
- (g) The bottom of the trench shall be smooth and level and provide a flat bed on which to rest the pipe.
- (h) The irrigation contractor shall clean backfill material of any debris that may damage the pipe.
- (i) When swing joints are used, the depth of the pipe shall allow the swing joint to operate as designed.
- (j) All trenches and holes created during installation of an irrigation system shall be backfilled and compacted to the final grade. The trench shall be compacted in lifts no greater than six inches to insure proper compaction.
- (k) All PVC connections installed in irrigation systems shall be prepared according to the manufacturer's recommendations (e.g. priming and glue application).
- (l) The irrigation contractor shall use the manufacturer's approved lubricant when assembling bell and gasket and pipe and fittings.
- (m) The irrigation contractor shall use Teflon tape on all threaded fittings, wrapping the tape around the pipe three times to insure a proper seal.
- (n) When the irrigation system uses reclaimed water, the irrigation contractor shall use purple pipe or mark the pipe with purple tape placed above all piping in the system. Tape shall be within six inches of the top of the pipe. The irrigation contractor shall use purple valve box covers and purple quick coupler flaps and place an eight inch by eight inch sign with purple background stating "RECLAIMED WATER-DO NOT DRINK," and "AGUA DE RECUPERION-NO BEBER."

History Note: Authority G.S. 89G-5(15); 89G-5(16);

Eff. July 1, 2011;

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