



MEMORANDUM
CITY OF SNELLVILLE
PLANNING & DEVELOPMENT DEPARTMENT

To: All Developers and Owners
From: Jason Thompson, Acting Director, Planning & Development
Date: September 12, 2007
RE: Executive Summary – Quality Control Requirements
City of Snellville Development Regulations

The following executive summary has been prepared to confirm the existing quality control testing and construction requirements as detailed in the City of Snellville Development Regulations. All construction conducted under a Development Permit within the City of Snellville is governed by these requirements. Specific sections are cited to allow the appropriate party to further research the requirements.

The general definitions of Quality Control and Quality Assurance are as follows:

- Construction Quality Control (QC) is a planned system of testing and inspections that is used to directly monitor the progress of construction and control the quality of work being installed. QC is the responsibility of the Owner, Developer, and Contractor, and is typically performed by the Contractor's field inspection staff or an independent laboratory under contract to the Owner. QC refers to the steps taken by the Contractor to measure and determine compliance with the materials and workmanship requirements as stated in the Development Regulations.
- Quality Assurance (QA) is a planned system of observations, inspections, and testing that provides the City and other governing authorities assurances that the Owner has constructed the project in accordance with the approved Development Permit and Development Regulations. QA includes inspections, review of Contractor certifications, audits, and evaluation of materials and workmanship to document the quality of the constructed development.

Developer's Responsibility for Compliance with the Development Regulations (DR):

No permit shall be interpreted to relieve any developer or subdivider of the responsibility of maintaining full compliance with all codes, ordinances, and other regulations of the City of Snellville except as amended by an approved Waiver, Variance, or other relief granted through applicable formal appeal procedures for a specific property or application. Any permit issued in error or in contradiction to the provisions of an adopted code, ordinance, or regulation of the City of Snellville shall be considered to have been null and void upon its issuance [DR 4.1.5]

Responsibility for Quality and Design:

The completion of inspections by City of Snellville officials or employees and authorization for work continuation shall not transfer responsibility for the quality of the work performed or materials used from the contractor or developer, nor imply or transfer acceptance of responsibility for project design or engineering from the professional corporation or individual under whose hand or supervision the plans were prepared [DR 11.4.4].

Authority for Enforcement:

In any case in which activities are undertaken in violation of these Regulations, not in compliance with the provisions of a permit issued under the authorization of these Regulations, or without authorization of a permit which would otherwise be required, the City Engineer and/or Director is hereby authorized to suspend or invalidate such permits, order that all unauthorized or improper work be stopped, direct correction of deficiencies, issue summonses to any court of competent jurisdiction, or take any other legal or administrative action appropriate to the severity of the violation and degree of threat to the public health, safety, and welfare [DR13.1.2]

Development Inspections (General):

Oral/electronic notification shall be made by the developer or contractor to The City of Snellville, (770) 985-3513, at least 24-hours prior to commencement of activity for each of the following phases as authorized by any permit for site work or development. Inspections shall be made by the Development Inspector and passed prior to continuation of further activity or proceeding into new phases. Similar notification shall be made to the Gwinnett County Inspection Department for any activity involving the water or sanitary sewer system. [DR 11.4.3]

1. Clearing and Grubbing
2. Grading
3. Installation of storm drainage pipe, detention, or other storm water facilities
4. Installation of sanitary sewer and appurtenances
5. Curbing of roadways
6. Sub-base or subgrade of streets. After compaction, the subgrade will be string-lined for depth and crown. The subgrade shall be roll tested and shall pass with no movement, the satisfaction of the inspector.
7. Street base. The base will be string-lined for depth and crown, and shall pass a roll test with no movement to the satisfaction of the inspector.
8. Paving. The inspector shall be on site during the paving process to check consistency, depth, and workmanship, as applicable. For asphalt paving, the temperature of the material will be spot-checked, and the roadways will be cored after completion to check thickness.

Street Improvements:

1. Unless otherwise specifically set forth herein, all of the materials, methods of construction, and workmanship for the work covered in reference to street construction shall conform to the latest specifications of the Georgia Department of Transportation (Georgia DOT) [DR 6.6].
2. Subgrade preparation shall be in accordance with the Georgia DOT specifications and these Regulations [DR 6.7.1].
3. Fill shall be placed in uniform, horizontal layers not more than 8" thick (loose measurement). Moisture content shall be adjusted as necessary to compact material to 95% of maximum dry density except for the top 12" which shall be compacted to 100% of maximum dry density [DR 6.7.3].
4. Utility trenches cut in the subgrade shall be backfilled as specified herein. Compaction tests at a rate of one per 150 feet of trench shall be provided to verify compaction [DR 6.7.5].
5. All trenches under paving shall be concreted with 8" of Class "A" concrete base and 1" of type "E" or "F" wearing course asphalt is to be spread. The paving cut shall be widened to a minimum of 9" beyond the edges of the trench. The edges of the paving cut shall be smooth [DR 7.5.4].

Grading

Embankments shall be placed in uniform layers not to exceed a compacted thickness of 6 inches per layer and shall be compacted to a density of 95 percent of the maximum laboratory dry weight per cubic foot as determined by AASHTO Method T-99 in all areas where structure, parking lots and drives, streets, and utilities are to be placed. All other embankments are to be compacted to at least 85 percent [DR 8.1.3].

Stormwater Management Facilities

Unless otherwise specifically set forth herein or in the Gwinnett County Standard Drawings, all of the materials, methods of the construction, and workmanship for the work covered in reference to storm water conveyance facility construction shall conform to the most recent Standard Specifications of the Georgia Department of Transportation (Georgia DOT) [DR 8.3.2].

Culvert and Pipe Installation

All pipe structures shall be placed on stable earth or fine granular foundation, the characteristics of which would be expected to provide long-term stability. In all live stream pipe installations, in areas of low bearing solid or non-uniform foundations, in area where rock is encountered at the foundation level, or in other locations where conditions warrant, a minimum of 6" of crushed stone bedding is required (maximum size of stone shall be $\frac{3}{4}$ "). The City may also require Geotextiles or geogrids in problem areas [DR 8.3.9(a)].

Backfill on all pipe installations shall be constructed using foundation backfill material Type I or Type II, as specified in Section 812.01 and 812.02 respectively, in Georgia DOT Standard Specifications. These materials shall be placed in layers of not more than six inches loose. Compaction of these materials shall be accomplished by hand tamping or machine tamping [DR 8.3.9(b)]. Required compaction levels are as follows:

- 1) Backfill within all street rights-of-way shall be compacted to 95% maximum density, tested using AASHTO Method T-99; and
- 2) Backfill in all other areas shall be compacted to 95% maximum density, tested using the AASHTO Method T-99.

Detention Pond Structures

The design of any concrete or rubble wall over 5 feet in height shall be certified by a Structural Engineer currently registered as a Professional Engineer in the State of Georgia, and the structural design shall be based on soil tests certified by a Geotechnical Engineer currently registered as a Professional Engineer in the State of Georgia. The construction of walls over 5 feet in height shall be monitored and approved by a qualified materials testing company [DR 9.8.2(d)].

Certificate of Development Conformance

Once the Department has approved the Certificate of Development Conformance and all other affected departments and agencies of government as required have certified compliance and signed the route sheet, the Director and City Engineer shall certify by his signature on the original of the Certificate of Development Conformance that all of the requirements of these Regulations, the Zoning Ordinance, and the conditions of zoning approval have been met, and that all other affected departments have approved the plat [DR 11.2.4(e)].

In order for the City Engineer to provide this certification at the completion of the project, each permit holder is to sign and return a copy of this form as acknowledgement of the quality control requirements of the City of Snellville Development Regulations. In addition, the permit holder shall provide a written

description of the testing program, test methods, field documentation/data, and/or engineer certifications the permit holder intends to present at the time of request for Development Conformance, to certify compliance with the appropriate regulations. Quality control testing is an ongoing activity during construction and specific data gathered during construction is required to show compliance with the Regulations. If field data is not provided, the permit holder will be required to conduct post-construction evaluations to confirm compliance with the Regulations.

Acknowledged by:

Owner/Developer Signature: _____

Printed Name: _____ Title: _____

Company/Firm: _____

Date: _____ Date of QC Plan Submittal: _____