SNELLVILLE
Planning and Development

CITY OF SNELLVILLE
Department of Planning & Development
2342 Oak Road, 2nd Floor
Snellville, GA 30078
Phone (770) 985-3513 (770) 985-3514
www.snellville.gov

RETAINING WALLS
CODE COMPLIANCE GUIDELINES

PLAN REVIEW AND PERMITTING REQUIREMENTS FOR RETAINING WALLS THAT ARE NOT DESIGNED TO RETAIN WATER

PERMITTING PROCEDURE:

1. A Building Permit is required for retaining walls that are **greater than 4 feet in height** from the top of the footing. A building permit is also required for retaining walls less than four feet in height when the slope of backfill materials exceeds a 1 foot rise in 3 feet length (1:3) or when the wall will be required to support a surcharge load.

2. Submit two (2) complete sets of construction documents and $400 review fee to the City of Snellville Planning Department to begin the review process.

3. For walls located within a single residential lot, provide a site plan that indicates the wall location on the site, specifies top and bottom of wall elevations along the wall, and indicates the wall setback from the property lines.

4. For walls located on a commercial property or for subdivision walls that extend across individual property lines, provide a site plan that indicates the locations of the wall, dimensioned from property lines, indicates site grading on each side of the wall, and specifies top and bottom elevations along the wall.

5. Once the permit documents have been authorized by the Planning Department, complete the Building Permit Application form and remit payment for the Building Permit. The permit fee is determined by the construction cost of Minor Renovation Projects less than $75,000 **or** greater than $75,000 (See Building Permit Fees effective April 1, 2025).

6. In addition to the site plan per item (3) or (4) above, provide complete structural construction details which specify the following information as applicable: required wall and footing materials, wall and footing dimensions, reinforcing (type, size, location within the member, and spacing), concrete design strength, drainage method for relief of hydrostatic pressure, type of backfill material, and slope of backfill finished grade. For modular walls, drawings shall also indicate the required types, spacing, and embedment length of all geogrid reinforcement. For concrete walls, drawings shall include minimum lap lengths for all reinforcement.

7. Retaining Wall design shall be in compliance with the current IBC and current Georgia Amendments and ASCE/SEI 7-10. As applicable, wall design shall also comply with ACI 318-11, TMS 402-11/ACI 530.1-11/ASCE 6- 11, and/or NCMA Design Manual for Segmental Walls.

8. For each retaining wall **exceeding 6 feet in height** (measured from top of footing to top of wall), the following requirements also apply: -Specify the applicable soil parameters utilized in the wall design, including but not limited to allowable soil bearing pressure, equivalent lateral fluid pressure (active and passive), surcharge load, internal angle of friction, coefficient of friction, and soil density.-Submit calculations, sealed and signed by the structural engineer-of-record, which demonstrate the structural adequacy of each proposed wall to resist the applicable design loads within the specified allowable soil bearing pressure and to maintain a minimum factor of safety of 1.5 against overturning and sliding.-Drawings and calculations shall be prepared by a Georgia Registered Professional Engineer and the engineer's seal and signature shall be provided on all documents.

9. For each retaining wall **up to 10 feet in height** (measured from top of footing to top of wall) the assumed soil bearing pressure used for foundation design shall not exceed 2000 psf, based upon material class #4 from IBC Table 1806.2, unless the documents are also accompanied by a site specific geotechnical report to justify a higher design bearing pressure. The site specific geotechnical report shall be sealed and signed by a professional engineer.

10. For retaining walls that **exceed 10 feet in height** (measured from top of footing to top of wall) the following notes shall be stated, verbatim, on the drawings: "Prior to construction, soil design parameters stated on the county-approved structural construction wall details including but not limited to allowable soil bearing pressure, equivalent lateral fluid pressure (active and passive), internal angle of friction, coefficient of friction, and soil density shall be field-verified by a Gwinnett County approved Third Party Geotechnical Testing Firm. A corresponding written report sealed and signed by a professional engineer registered in the state of Georgia and employed by the Third Party Geotechnical Testing Firm shall be submitted to the City of Snellville Director of Planning and Development prior to construction beyond footing installation. In the event of conflict between field-verified soil parameters and those stated on the county-approved details, construction shall not proceed until appropriate design modifications submitted by the wall design engineer-of-record have been reviewed and approved by the City of Snellville Planning Department."

    "Prior to issuance of a Certificate of Completion for each wall by the City of Snellville, written notification sealed and signed by the wall design engineer-of-record shall be submitted to the City of Snellville Department of Planning and Development which acknowledges receipt of a soils investigation report by a Gwinnett County approved Third Party Geotechnical Testing Firm and which confirms that all soil parameters applicable to the design of the wall are consistent with those reported as field-verified."

11. For walls that **exceed 10 feet in height** (measured from top of footing to top of wall), note directly on plans the name of the Gwinnett County approved Third Party Geotechnical Testing Firm responsible for performing the subsurface soils investigation and for verifying the soil design parameters specified on the structural construction details for each detention pond wall. The list of Gwinnett County approved Third Party Geotechnical Testing Firms is available on the county website.