# South Carolina Board of Registration for Professional Engineers and Surveyors

# Minimum Requirements for Qualifying for Registration as TIER B Surveyor in South Carolina

Statutory Authority: SC Code of Laws (1976, as amended) Title 40, Chapter 22

### SC Code of Regulations, Chapter 49

SC Code of Laws §40-22-225(D): To be eligible for licensure and registration as a professional land surveyor TIER B, an applicant must be of good character and reputation and be able to effectively communicate in the English language. The minimum evidence satisfactory to the board that an applicant is qualified for licensure as a TIER B Professional Land Surveyor is:

**Graduation from a school or college** of four or more years with a board-approved degree, including in the curriculum not less than fifteen semester hours or the equivalent in quarter hours of surveying, mapping, hydraulics, and hydrology courses satisfactory to the board, or a bachelor of engineering technology degree in an ABET commission accredited curriculum of surveying or engineering technology, including in the curriculum not less than twelve semester hours or the equivalent in quarter hours of surveying, mapping, hydraulics, and hydrology courses satisfactory to the board, a specific record of **four or more years of progressive practical experience** of a character satisfactory to the board and performed under a practicing registered surveyor, and **passing the NCEES Surveyor-in-Training Fundamentals of Surveying examination and the NCEES Principles and Practice of Surveying examination.** 

(E) An applicant shall take state-specific examinations the board considers necessary to establish that the applicant's qualification satisfy the requirements of this chapter <u>and</u> regulations promulgated pursuant to this chapter.

**SC Code of Laws §40-22-20(27): "Practice of TIER B land surveying"** includes all rights and privileges of TIER A surveying discipline defined in Section 40-22-20(26)(a); and in addition to these rights and privileges, TIER B land surveying includes, for subdivisions, preparing and furnishing subdivision plans for sedimentation and erosion control and storm drainage systems, if the systems do not require the structural design of system components and are restricted to the use, where relevant, of any standards prescribed by local, state, or federal authorities. Regulations defining the scope of the additional powers granted to TIER B land surveyors must be promulgated by the board.

### SC Code of Regulations, Chapter 49

#### R.49-201F. TIER B Professional Land Surveyor. (Qualifying Experience and Documentation)

(1) An applicant shall be licensed as a TIER A Land Boundary Surveyor prior to submitting an application for licensure or registration as a TIER B Land Surveyor.

(2) An applicant must meet the requirements of education, experience and examinations.

(a) Education—Tier B Land Surveyor.

An applicant must meet the education requirements in S.C. Code Ann. Section 40-22-225(D).

(b) Experience—Tier B Land Surveyor.

1. Applicant must have qualifying experience acceptable to the Board in the design of storm drainage systems and preparation of sedimentation and erosion control plans associated with the development of residential subdivisions.

2. The experience must be obtained under the supervision of a licensed Tier B surveyor or a licensed professional engineer.

(c) Examinations—TIER B Land Surveyor.

1. An applicant must have taken and passed the written examinations required for licensure as a TIER A Land Boundary Surveyor which include the FS and PS examinations, prepared and graded by the NCEES, and the State Specific Land Surveying Examination.

2. An applicant must also take and pass a special written examination pertaining to the practice of TIER B land surveying in the State which includes the design of storm drainage systems and preparation of sedimentation and erosion control plans associated with the development of residential subdivisions.

(3) A TIER B land surveyor may practice as a professional photogrammetric surveyor only by meeting the requirements of the section R.49-201C of this Chapter, and may practice as a professional GIS surveyor only by meeting the requirements of the section R.49-201D of this Chapter.

### R.49-202(C): TIER B Professional Land Surveyor. (Classification and Scope of Authority)

(1) Persons registered as both Professional Land Surveyor and Professional Engineer are classified as TIER B Professional Land Surveyors.

(2) The practice of TIER B land surveying as described by Section 40-22-20(27) of the Practice Act, and regulated by the Board shall include the authority, within the limits set by these regulations, to practice the design of storm drainage systems and the preparation of sedimentation and erosion control plans associated with the development of residential subdivisions. Included within this practice of TIER B land surveying is the design of stormwater detention or retention facilities incidental to the surveyor's design of storm drainage systems; provided, however, that these facilities are not lakes, ponds or similar impoundments intended to contain water at all times.

(a) As used in this section, the term "residential subdivision" means property developed for single family residences and other type projects where individual lots are established for each residential unit. The density of these projects shall be limited to two lots or units per acre. Apartment projects and projects for developments of commercial or industrial properties are not included within the scope of authority.

(b) Where reference has been made to "lakes, ponds or similar impoundments intended to contain water at all times," such reference is not intended to limit a TIER B Land Surveyor's authority to prepare calculations pertaining to the hydrology or hydraulics of these impoundments. It is expected, however, that such impoundments will require a more detailed analysis and design with respect to soil mechanics. Consequently, design of impoundments intended to contain water at all times should be based upon appropriate geotechnical evaluations conducted under the direction of a licensed engineer experienced in such matters. The geotechnical investigations and report should, as a minimum, evaluate site conditions and provide recommendations for materials and methods of construction of the impoundment.

(3) The practice of TIER B land surveying shall not include the design of drainage structures, drainage systems, or other drainage features which are not incidental to the development of a residential subdivision. Projects which are purely drainage in nature or where a subdivision of a parcel of land into small parcels is not involved shall not fall within the scope of practice authorized for TIER B land surveyors. The design of such features as water systems, sanitary sewer systems, surcharged storm drainage systems or pumping stations which may also be incidental to the project are not included in this practice. The exclusion from the scope of authority of the design of "surcharged storm drainage systems" is not intended to apply to submerged outlet pipes routinely used in detention and retention basins.

(4) The practice of TIER B land surveying is further limited to the use of predesigned structures, which are approved by the county or municipal governmental agency having jurisdiction. Where standard design structures cannot be used because of extra loading, extreme depth or unusually large size, the structure shall be designed by a licensed engineer. "Predesigned Structure" is intended to cover two situations:

(a) As used in this section, the standard design for catch basins, junction boxes, and headwalls that are specified by local governments will be considered "predesigned".

(b) As used in this section, precast basins, junction boxes, and headwalls produced by concrete companies are considered as "predesigned" and may be used where allowed by the local authority.

(5) In exercising powers of a TIER B Land Surveyor, the surveyor shall undertake to perform only those assignments for which he is authorized by the statute and these regulations and for which he is qualified by education or experience in the specific technical area of TIER B land surveying involved.

Questions concerning qualifications or how to apply may be directed to the Board office by telephone at (803) 896-4422 or by e-mail at <u>Contact.EngLS@llr.sc.gov</u>

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