21 NCAC 56 .0601 is proposed for amendment under temporary procedures as follows:

SECTION .0600 - PROFESSIONAL LAND SURVEYOR

21 NCAC 56 .0601 REQUIREMENTS FOR LICENSING

(a) Education. The terms used by the Board for the specific education requirements to be eligible to be licensed as a Professional Land Surveyor are defined as follows:

(1) "B.S. in surveying or other equivalent curriculum." These degrees shall contain a minimum of 45 semester hours, or their quarter-hour equivalents. Of the 45 semester hours, a minimum of 12 semester hours of surveying fundamentals, 12 semester hours of applied surveying practice, and 12 semester hours of advanced or theoretical surveying courses are required. The remainder of the required surveying courses may be elective-type courses in any of the categories; and

(2) "Associate degree in surveying technology." This degree shall contain a minimum of 20 semester hours, or quarter-hour equivalents. Courses shall be in surveying fundamentals, applied surveying practice and advanced or theoretical surveying courses, including courses in surveying practices, subdivision design and planning, surface drainage, and photogrammetry which must be completed with a passing grade.

(3) "Land Surveyor Apprenticeship." The applicant shall have completed one of the following programs:

(A) Certified Survey Technician Program (CST) of the National Society of Surveyors (NSPS) levels I through IV.

(B) "Technologist" Certification Program of the American Society for Photogrammetry and Remote Sensing (ASPRS)

(C) Based upon the Surveying Education Standard of the National Council of Examiners for Engineering and Surveying (NCEES) by obtaining college semester credit hours, as modified to require the following 39 hours:

(i) 12 hours in mathematics beyond basic mathematics, but the credits include college algebra or higher mathematics. These courses must emphasize mathematical concepts and principles rather than computation. Mathematics courses may include college algebra, trigonometry, analytic geometry, differential and integral calculus, linear algebra, numerical analysis, probability and statistics, and advanced calculus.

(ii) 27 college semester credit hours of surveying science and surveying practice. Courses shall be taught by qualified surveying faculty. Examples of surveying courses are basic surveying, route surveying, geodesy, geographic information systems, land development design and planning, global positioning systems, photogrammetry, mapping, legal principles of land surveying, boundary law, professional surveying and mapping, and remote sensing. Graduate-level surveying courses can be included to fulfill curricular

requirements in this area.

(b) Experience:

(1) Definition. As used in the North Carolina Engineering and Land Surveying Act, the term "progressive practical experience" means that during the period of time in which an applicant made a practical utilization of the knowledge of the principles of geometry and trigonometry in determining the shape, boundaries, position, and extent of the earth's surface, such that continuous improvement, growth, and development in the utilization of that knowledge have been shown. In addition, the applicant shall show the continuous assumption of greater individual responsibility for the work product over that period of time.

(2) Required Experience. In evaluating the work experience required, the Board shall consider the total experience record and the progressive nature of the record. Not less than half of the required land surveying experience shall be of a professional grade and character, and shall be performed under the responsible charge of a Professional Land Surveyor. If the work was not under the responsible charge of a Professional Land Surveyor, the applicant shall submit a written explanation to the Board explaining why the experience should be considered. The Board shall approve the experience on a case-by-case basis if it is satisfied of the grade and character of the progressive experience. Experience gained under the technical supervision of an unlicensed individual shall be considered based upon the engineering education and experience credential of the unlicensed supervisor. Experience gained in the armed services, typically while serving in an engineering or surveying related group, shall be accepted only if substantially equivalent to that which would have been gained in civilian work.

(3) Other Experience. The applicant shall document the nature and details of the work done in the following areas to evidence to the Board its equivalency to land surveying:

(A) construction layout;

(B) engineering surveying; or

(C) part-time surveying work.

(c) Exhibits, Drawings, Maps:

(1) Required Exhibit Before Principles and Practice of Surveying Examination:

(A) General. The applicant shall submit, along with the application, an actual map of a boundary survey of an actual project prepared under the direct supervision and responsible charge of a Professional Land Surveyor who states that the applicant did the preparatory work of the survey; that shows, by its conformance, that the applicant is knowledgeable of the contents of the Standards of Practice for Land Surveying in North Carolina as set forth in Section .1600 of this Chapter; and that shows that the applicant is able to apply this knowledge by preparing a map in accordance with the various legal and professional requirements of land surveying.

(B) Physical Requirement. The map submitted shall be a clean, clear, legible print of an original map in the file of a Professional Land Surveyor.

(2) Specific Requirements. The details that shall be evaluated are those applicable to the particular project as described in the Standards of Practice for Land Surveying in North Carolina as set forth in Section .1600 of this Chapter, and as described in G.S. 47-30. In addition, the exhibit shall contain a statement that the field work, calculation, and mapping were performed by the applicant under the supervision of a Professional Land Surveyor, attested to by that Professional Land Surveyor.

(3) Requirements for Comity Applicant. The map submitted by an applicant under comity may be a representative map of an actual survey of a project or work performed in the state of licensure that is modified to meet the requirements in Subparagraph (c)(2) of this Rule and shall be evaluated in accordance with the requirements applicable to the particular project as described in the Standards of Practice for Land Surveying in North Carolina as set forth in Section .1600 of this Chapter, and as described in G.S. 47-30.