Note from the Codifier: The OAH website includes notices and the text of proposed temporary rules as required by G.S. 150B-21.1(a1). Prior to the agency adopting the temporary rule, the agency must hold a public hearing no less than five days after the rule and notice have been published and must accept comments for at least 15 business days. For questions, you may contact the Office of Administrative Hearings at 984-236-1850 or email oah.postmaster@oah.nc.gov.

TITLE 21 - OCCUPATIONAL LICENSING BOARDS AND COMMISSIONS

CHAPTER 56 – BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS

Notice is hereby given in accordance with G.S. 150B-21.1(a3) that the Board of Examiners for Engineers and Surveyors intends to adopt the rule cited as 21 NCAC 56 .0608 and amend the rule cited as 21 NCAC 56 .0601.

Codifier of Rules *received for publication the following notice and proposed temporary rule(s) on: March 29, 2022.*

Public Hearing:

Date: April 12, 2022 **Time:** 9:00 a.m. **Location:** Zoom viewing at 4601 Six Forks Road, Suite 310, Raleigh, NC 27609 & remotely by Zoom: Contact djevans@ncbels.org for Zoom access.

Reason for Proposed Temporary Action: The effective date of a recent act of the General Assembly or of the U.S. Congress, Session Law 2022-1 ss 1.(a)-(c).(S.B. 219) An act to revise the education requirements for licensure of a professional land surveyor, effective July 1, 2022. The Session Law requires that the Board adopt rules for the applicants for licensure to have the additional path to licensure beginning July 1, 2022.

Comment Procedures: Comments from the public shall be directed to: David S. Tuttle, Board Counsel, 4601 Six Forks Road, Suite 310, Raleigh, NC 27609; email NCBELSRulesComments@ncbels.org. The comment period begins April 5, 2022 and ends April 28, 2022.

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 quarterhour 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) <u>"Technologist" Certification Program of the American Society for Photogrammetry and Remote Sensing</u> (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) <u>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.</u>
 - (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.

- (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.

History Note:	Authority G.S. 47-30; 89C-10; 89C-13;
	Eff. February 1, 1976;
	Readopted Eff. September 29, 1977;
	Amended Eff. August 1, 2014; July 1, 2009; August 1, 2000; August 1, 1998; November 2, 1992; April 1, 1989;
	December 1, 1984; January 1, 1982;
	Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. April 27, 2019; Amended Eff.
	July 1, 2020;
	<u>Amended Eff.</u>

21 NCAC 56 .0608 SURVEYOR INTERN

(a) General. To obtain the optional certification as a Surveyor Intern, an applicant shall:

- (1) pass the fundamentals of land surveying examination and make application to the Board on a form prescribed and furnished by the Board.
 - (2) be of good character and reputation,
 - (3) submit three character references to the Board, one of whom is a professional land surveyor,
 - (4) comply with the requirements of this Rule, and
 - (5) satisfy one of the following requirements related to education and experience:
 - (A) Have a bachelor of science degree in surveying or other equivalent curricula, approved by the Board and a record satisfactory to the Board of one year of progressive practical experience under a practicing professional land surveyor.
 - (B) Have an associate degree in surveying technology approved by the Board and a record satisfactory to the Board of two years of progressive practical experience under a practicing professional land surveyor.

- (C) Have graduated from high school or completed a high school equivalency certificate and a record satisfactory to the Board of five years of progressive practical experience, under a practicing professional land surveyor.
- (D) Graduation from a high school or the completion of a high school equivalency certificate, completion of a Land Surveyor Apprenticeship, and a record satisfactory to the Board of three years of progressive practical experience under a practicing professional land surveyor.

(b) Request. The application form may be requested from the Board office or obtained from the website.

(c) Application Form. Surveyor Intern Certification Form. After passing the fundamentals of surveying examination an applicant may make application to the Board to become certified as a "Surveyor Intern." This form requires the applicant to set forth personal history, educational background, surveying experience, character references and exhibit. A passport-type photographic quality portrait that is adequate for current identification purposes is required.

(d) Reference Forms:

- (1) Persons applying to be certified as a Surveyor Intern shall submit to the Board names of individuals who are familiar with the applicant's work, character and reputation. The names shall be submitted by the applicant on the application form.
- (2) Persons applying for certification as a Surveyor Intern must submit three references, one of whom shall be a Professional Land Surveyor.
- (3) In addition to the applicant submitting names to the Board of such individuals, those individuals shall submit to the Board their evaluations of the applicant on reference forms supplied them by the applicant.
- (4) The reference form requires the individual evaluating the applicant to state the evaluating individual's profession, knowledge of the applicant and information concerning the applicant's land surveying experience, character and reputation.
- (5) The Board shall provide the reference forms to the applicant along with the application for licensure. The reference forms shall then be distributed by the applicant to the persons listed on the application as references. The applicant shall ensure that the individuals listed as references return the forms to the Board prior to the filing deadline for the examination applied for by the applicant.

(e) Fees. Surveyor Intern Certification Form. Once the applicant passes the examination on the fundamentals of surveying and makes application to the Board to become certified as a "Surveyor Intern" the application fee of one hundred dollars (\$100.00) is payable.

(f) Personal Interview. During the application process, the applicant may be interviewed by Board members if the members have questions regarding the applicant's education, experience or character, based upon the information submitted in the application.

Authority G.S. 89C-10; 89C-13; 89C-14; 89C-15.