
IMPORTANT - OFFICIAL NOTICE
RULE CHANGES APPROVED

Effective July 1, 2020

The rules are under Rules & Laws on the Board's website at this link to the official versions of rules maintained by the Office of Administrative Hearings (OAH).

[NCAC Title 21 - Occupational Licensing Boards and Commissions - Chapter 56 - Engineers and Surveyors](#)

For specific changes, the final markups to the 14 rules, as approved by the Rules Review Commission on June 18 and in final print form on July 3 are shown below. The yellow highlighted are changes made after the version that was published as "Proposed Rule Changes" previously on our website and in the NC Register. The final versions without the markups are in the link to the AOH website.

Summary of Changes to the Board Rules Effective July 1, 2020

- .0303 – Clarifies process to disperse funds for education programs.**
- .0304 – Adoption of new rule to address suspension of authority to expend funds pursuant to G.S. 93B-2(d) for failure to file an annual report.**
- .0501 – Clarifies requirements for licensing as a Professional Engineer.**
- .0503 – Reflects changes to the examination process for licensing as a Professional Engineer.**
- .0601 – Clarifies requirements for licensing as a Professional Land Surveyor.**
- .0603 – Reflects changes to the examination process for licensing as a Professional Land Surveyor.**
- .0804 – Clarifies business (firm) annual renewal and 30-day reporting of violations, criminal convictions, change of address(es), resident professional, company name, officers, directors or owners, or the services being offered.**
- .0902 – Clarifies the requirements for the business titles to be determined as not misleading.**
- .1301 – Clarifies and makes revisions to the disciplinary procedures for improper practice by a licensee.**
- .1302 – Clarifies and makes revisions to the disciplinary procedures for unlawful practice by a non-licensuree.**
- .1403 – Clarifies notice of contemplated action as to applicant for licensure.**
- .1603 – Clarifies positional accuracy standards for surveys.**
- .1604 – Clarifies mapping requirements for boundary surveys and deletes reference to the subdivision control corner statute G.S. 39-32.1 that was repealed.**
- .1607 – Updates the names of the satellite-based global positioning systems.**

1 21 NCAC 56 .0303 is amended as published in 34:12 NCR 1147 – 1158 with changes as follows:

2
3 **SECTION .0300 - INSTRUCTIONAL PROGRAMS**

4
5 **21 NCAC 56 .0303 DISBURSEMENT OF FUNDS**

6 The Board shall dispense Funds funds for educational programs ~~will be allocated and dispensed~~ in the following
7 manner:

- 8 (1) ~~Funds will be dispensed by vote of the~~ The Board shall dispense funds after Board Committees, as
9 organized, study each specific [committee-related] committee-related request and recommendation
10 recommend funding. of each specific request by the appropriate committee of the Board.
- 11 (2) The Board ~~will~~ shall consider requests for funds only from the following entities: approved schools
12 or professional organizations, community colleges, public or private institutions of higher learning,
13 State and county boards of education, or governing authorities for any industrial education center.
- 14 (3) ~~Requests will be considered for any use that will directly further engineering or surveying education~~
15 ~~and competence.~~
- 16 (3) The Board shall consider educational programs to establish instructional programs for individuals
17 currently licensed and those seeking to become licensed.
- 18 (4) ~~Requests~~ Approved entities for money shall ~~be~~ request funds in writing and provide the following
19 information:
- 20 (a) The amount ~~needed; needed, or appropriate limits thereof;~~
- 21 (b) ~~Intended uses to be made of the requested monies;~~ The intended use of the funds;
- 22 (c) Subject material to be presented ~~with~~ and qualifications of instructors to be employed;
- 23 (d) Itemized ~~estimate~~ breakdown of the amount needed and the total expected costs;
- 24 (e) Source and amount of assistance being given by any other person or organization.

25
26 *History Note: Authority G.S. 89C-10(g); ~~89C-11;~~*
27 *Eff. February 1, 1976;*
28 *Readopted Eff. September 29, 1977;*
29 *Amended Eff. April 1, 1989; January 1, 1982;*
30 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. April 27,*
31 *2019;*
32 *Amended Eff. July 1, 2020.*
33

1 21 NCAC 56 .0304 is adopted as published in 34:12 NCR 1147 – 1158 as follows:

2

3 **21 NCAC 56 .0304 SUSPENSION OF AUTHORITY TO EXPEND FUNDS**

4 In the event that the Board's authority to expend funds is suspended pursuant to G.S. 93B-2(d), the Board shall continue
5 to issue and renew licenses and collect all fees set forth in G.S. 89C-14, 89C-17, and 89C-24. The Board shall maintain
6 an escrow account into which any fees tendered during the Board's period of suspension shall be deposited. Once the
7 Board's authority is restored, the funds shall be moved from the escrow account into the general operating account.

8

9 *History Note: Authority G.S. 89C-10; 89C-11; 93B-2;*

10 *Eff. July 1, 2020.*

11

1 21 NCAC 56 .0501 is amended as published in 34:12 NCR 1147 – 1158 **with changes** as follows:

2
3 **SECTION .0500 - PROFESSIONAL ENGINEER**

4
5 **21 NCAC 56 .0501 REQUIREMENTS FOR LICENSING**

6 (a) Education. The Board shall consider the education of an applicant ~~shall be considered~~ in determining eligibility
7 for licensing as a Professional Engineer. The terms used by the Board for the ~~specific~~ educational requirements in
8 G.S. 89C-13(a1) to be eligible to be licensed as a Professional Engineer are defined as follows:

9 (1) "Engineering curriculum of four or more years approved by the Board" is defined as a program that
10 has been accredited by the Engineering Accreditation Commission (EAC) of the Accreditation
11 Board for Engineering and Technology (ABET). This program is incorporated by reference
12 including subsequent amendments and editions. This material is available at
13 www.abet.org/accreditation-criteria-policies-documents/ **at no cost**, or for inspection at the office of
14 the North Carolina Board of Examiners for Engineers and Surveyors. Copies may be obtained at the
15 Board office at a cost of five dollars (\$5.00) per copy.

16 (2) "Engineering or related science curriculum of four or more years other than ones approved by the
17 Board" is defined as a curriculum, although not accredited by ABET, of technical courses ~~which~~
18 that contains engineering or scientific principles.

19 (3) "Equivalent education satisfactory to the board" is defined as:

20 (A) A graduate degree in Engineering from an institution ~~in which~~ where the same discipline
21 undergraduate engineering program has been accredited by ABET (EAC) shall be
22 considered equivalent to an engineering curriculum of four or more years approved by the
23 Board.

24 (B) A bachelor's degree in Engineering Technology, whether or not accredited by the
25 Technology Accreditation Commission (TAC) of ABET, shall be considered equivalent to
26 an engineering or related science curriculum of four or more years other than one approved
27 by the Board.

28 (C) ~~Until June 30, 2016, an associate degree in an engineering related curriculum with an~~
29 ~~additional two years of progressive engineering experience shall be considered equivalent~~
30 ~~to an engineering or related science curriculum of four or more years other than one~~
31 ~~approved by the Board and may be used until that date as a basis for admission to the~~
32 ~~principles and practice of engineering examination. Once admitted to the examination, an~~
33 ~~applicant may continue to re take the examination until required to submit a new~~
34 ~~application as set out in Rule .0503 of this Section.~~ **After June 30, 2016 an associate degree**
35 **shall no longer be used as a basis for admission to that examination, unless the individual**
36 **has passed the fundamentals of engineering examination prior to June 30, 2016, in which**
37 **case the individual may continue the process to take the principles and practices exam**

1 based upon the associate degree and it will not be necessary to qualify for admission to the
2 principles and practice of engineering examination prior to June 30, 2016.

3
4 ~~(D)~~(C) Foreign degrees ~~are~~ shall be considered equivalent only after receipt of an evaluation report
5 that the degree is substantially equivalent to an EAC/ABET accredited engineering
6 curriculum from the Center for Professional Engineering Education Services, an affiliate
7 of the National Council of Examiners for Engineering and Surveying (NCEES), or from
8 the American Association of Collegiate Registrars and Admissions Officers (AACRAO).
9 The Board shall equate the degree to an EAC/ABET accredited engineering curriculum of
10 four or more years approved by the Board in Subparagraph (a)(1) of this Rule if it receives
11 a substantially equivalent evaluation.

12 (b) Experience. The experience of an applicant shall be considered in determining whether an applicant is eligible to
13 be licensed as a Professional Engineer.

14 (1) Required Experience. In evaluating the work experience required, the Board shall consider the total
15 experience record and the progressive nature of the record. Experience shall be of a progressive
16 engineering nature obtained after graduation from a program that meets the criteria set forth in
17 Paragraph (a) of this Rule. Not less than half of required engineering experience shall be of a
18 professional grade and character, and shall be performed under the responsible charge of a licensed
19 Professional Engineer, or if not, the applicant shall submit a written explanation to the Board
20 explaining why the experience should be considered acceptable. The Board shall approve the
21 experience on a case-by-case basis if it is satisfied of the grade and character of the progressive
22 ~~[experience on a case by case basis.]~~ experience. ~~a written explanation shall be submitted showing~~
23 ~~why the experience should be considered acceptable and the Board shall approve if satisfied of the~~
24 ~~grade and character of the progressive experience.~~ Experience gained under the technical
25 supervision of an unlicensed individual shall be considered ~~if the appropriate~~ based upon the
26 engineering education and experience credentials of the unlicensed ~~supervisor~~ supervisor. ~~are~~
27 ~~submitted to the Board.~~ Experience gained in the armed services, usually typically while serving in
28 an engineering or engineering related group, shall be ~~considered if of a character~~ accepted only if
29 substantially equivalent to that which would have been gained in the civilian sector doing similar to
30 civilian work.

31 (2) Definition. The word "progressive" in the terms "progressive nature of the record," "progressive
32 engineering experience" experience," "progressive land surveying," "progressive engineering
33 nature," or "progressive experience on engineering projects" mean means that during the period of
34 time that an applicant ~~has~~ made a practical utilization of acquired knowledge, knowledge and
35 continuous improvement, growth growth, and development have been shown in the utilization of
36 that knowledge as revealed in the complexity and technical detail of the work product or work
37 record. The applicant shall show continuous assumption of greater individual responsibility for the

1 work product over that period of time. The progressive experience on engineering projects shall be
2 of a grade and a character that ~~indicates~~ shows to the Board that the applicant is competent to practice
3 engineering.

4 (3) ~~Specific~~ Credit for Experience. In evaluating progressive engineering experience, the Board shall
5 give credit for experience in the following areas of work:

6 (A) Graduate schooling or research in an engineering program resulting in award of a master's
7 degree from an institution that offers EAC/ABET-accredited programs – one year;

8 (B) Graduate schooling or research in an engineering program resulting in award of an earned
9 doctoral degree in engineering from an institution that offers EAC/ABET-accredited
10 programs – two years, with or without a master's degree, but this includes the one year for
11 the master's degree, if obtained;

12 (C) Progressive land surveying - maximum two years; and

13 (D) Teaching of engineering subjects at the university level in an engineering program offering
14 a ~~four-year~~four-year or more degree approved by the Board.

15 The Board shall not accept combinations of the categories in this Subparagraph as fulfilling all the necessary statutory
16 experience requirements. Every applicant for licensure as a Professional Engineer, as part of the total experience
17 requirement, shall show a minimum of one year experience of a progressive engineering nature in industry,
18 government, or under a licensed Professional Engineer offering service to the public.

19 Full-time engineering faculty members who teach in an engineering program offering a ~~four-year~~four-year or more
20 degree approved by the ~~Board~~, Board may request and shall be granted waiver of the minimum one year experience
21 in industry, government, or private practice if they demonstrate consulting or research work of at least one year's
22 duration, which was pursued to ~~fruition~~, completion of the project, and ~~which~~ that is of a progressive engineering
23 nature. The faculty applicant shall document the work ~~and demonstrate~~ to evidence that the work meets the Board's
24 requirement.

25 (4) An exception to the requirement in Subparagraph (b)(1) of this Rule that experience be obtained
26 after graduation is for long-established practice of 20 years or more, as provided for in G.S. 89C-
27 13(a3).

28 (5) Other experience is considered if it is: ~~is~~ shall be: ~~is~~

29 (A) Experience obtained prior to graduation as part of an ABET accredited engineering
30 program shown on the transcript, with a maximum credit of one year; or

31 (B) Experience obtained in a foreign country that is performed under direct supervision of a
32 Professional Engineer licensed with a member Board of the National Council of Examiners
33 for Engineering and Surveying (NCEES).

34
35 *History Note:* Authority G.S. 89C-10; 89C-13;
36 Eff. February 1, 1976;
37 Readopted Eff. September 29, 1977;

1 *Amended Eff. August 1, 2014; August 1, 2011; May 1, 2009; August 1, 2002; August 1, 2000; August*
2 *1, 1998; November 2, 1992; April 1, 1989; January 1, 1982;*
3 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. April 27,*
4 *2019;*
5 *Amended Eff. July 1, 2020.*

1 21 NCAC 56 .0503 is amended as published in 34:12 NCR 1147 – 1158 with changes as follows:

2
3 **21 NCAC 56 .0503 EXAMINATIONS**

4 (a) The Board offers the following examinations that are the national examinations of the National Council of
5 Examiners for Engineering and Surveying (NCEES) with application made directly to NCEES to take the exam:

6 ~~(a)(1)~~ Fundamentals of ~~Engineering~~, ~~Engineering (FE)~~: This examination is designed to test the applicant's
7 proficiency and knowledge of the fundamentals of ~~engineering~~, ~~engineering~~, and

8 ~~(b)(2)~~ Principles and Practice of ~~Engineering~~ ~~Engineering (PE)~~: This examination is designed to test the
9 applicant's proficiency and knowledge of engineering principles and practices.

10 ~~(c)(b)~~ Examination Aids. Examinees may utilize examination aids as specified and published by ~~the exam preparer~~.
11 NCEES.

12 ~~(d) Preparation of Examination.~~ The examinations in the fundamentals of engineering and in the principles and
13 practice of engineering are national examinations provided by the National Council of Examiners for Engineering and
14 Surveying (NCEES), of which the Board is a member.

15 ~~(e)(c)~~ Examination Sequence. Before the applicant shall be permitted to be examined on the principles and practice
16 of engineering, the applicant shall pass the examination on the fundamentals of engineering, unless the applicant can
17 provide evidence of 20 years of progressive engineering experience, or as is a full-time engineering faculty member,
18 or possesses an earned doctoral degree in ~~engineering to be exempt from taking the fundamentals of engineering exam~~.
19 engineering. NCEES administers the fundamentals of engineering examination as a computer-based exam.
20 Application shall be made directly to NCEES to take the exam.

21 ~~(f) Examination Filing Deadline.~~ Only those applicants who have met the education requirements as set forth in Rule
22 [.0501(b)], .0501(a) of this Section, and have passed the FE exam may sit for the PE exam prior to gaining the required
23 experience. Upon gaining the required experience, as set forth in Rule .0501(b) of this Section, an applicant may apply
24 for the PE license. ~~The applicant who wishes to take the principles and practice of engineering examination shall~~
25 ~~deliver the completed application, including all necessary references, transcripts, and verifications, to the Board office~~
26 ~~prior to August 1 for Fall examinations and January 2 for Spring examinations.~~

27 ~~(g) Seating Notice.~~ After approval of an application the applicant shall be sent a seating notice. This notice shall
28 inform the applicant of the date, time and location of the examination and the seat number assigned.

29 ~~(h) Unexcused Absences.~~ After a seating notice has been issued for a scheduled examination by the Board, if the
30 applicant fails to appear, that applicant's record shall reflect "unexcused absence," unless the absence was for jury
31 duty or the applicant was not physically able to be present, as indicated by a doctor's certificate. The examination fee
32 shall be forfeited.

33 ~~(i)(d)]~~ Re Examination. A person who failed an examination may apply to take the examination again at the next
34 regularly scheduled examination period after a six month waiting period by making written request and submitting
35 the required exam fee. A person having a combined record of three failures or unexcused absences shall be eligible
36 only after submitting a new application with appropriate application fee, and shall be considered by the Board for
37 reexamination at the end of 12 months. After the end of the 12 month period, the applicant may take the examination

1 ~~no more than once every calendar year. The applicant shall demonstrate to the Board that actions, such as additional~~
2 ~~courses of study, have been taken to improve the applicant's chances for passing the exam.~~

3 ~~(j)(e)~~ Reasonable Accommodation. An applicant may make a written request to NCEES, before the application
4 deadline, for reasonable accommodation for the exam. Reasonable accommodation shall be granted based upon
5 meeting the Guidelines for Requesting Religious and ADA Accommodations published by the National Council of
6 Examiners for Engineering and Surveying ~~(NCEES),(NCEES)~~, which are hereby incorporated by reference, including
7 ~~subsequent amendments and editions. Copies are available at no cost at www.ncees.org.~~

8 ~~(k)(f)~~ Exam Results. Exam results shall be supplied in writing as pass or fail. No results will be given in any other
9 manner.

10 ~~(l)(g)~~ Review of Failed Exams. An applicant who fails to make a passing score on an exam shall receive an exam
11 analysis by NCEES.

12
13 *History Note: Authority G.S. 89C-10; 89C-13; 89C-14; 89C-15;*

14 *Eff. February 1, 1976;*

15 *Readopted Eff. September 29, 1977;*

16 *Amended Eff. August 1, 2014; September 1, 2009; May 1, 2009; April 1, 2001; August 1, 1998;*

17 *November 2, 1992; April 1, 1989; January 1, 1982;*

18 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. April 27,*
19 *2019;*

20 *Amended Eff. July 1, 2020.*

21

1 21 NCAC 56 .0601 is amended as published in 34:12 NCR 1147 – 1158 **with changes** as follows:

2
3 **SECTION .0600 - PROFESSIONAL LAND SURVEYOR**

4
5 **21 NCAC 56 .0601 REQUIREMENTS FOR LICENSING**

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

- 8 (1) "B.S. in surveying or other equivalent curriculum." These degrees shall contain a minimum of 45
9 semester hours, or their quarter-hour ~~equivalents. equivalents, of subjects directly related to the~~
10 ~~practice of surveying.~~ Of the 45 semester hours, a minimum of 12 semester hours of surveying
11 fundamentals, 12 semester hours of applied surveying **practice**, and 12 semester hours of
12 advanced or theoretical surveying courses are required. The remainder of the required surveying
13 courses may be elective-type courses ~~directly related to surveying; in any of the categories;~~ and
14 (2) "Associate degree in surveying technology." This degree shall contain a minimum of 20 semester
15 hours, or quarter-hour ~~equivalents. equivalents, of subjects directly related to the practice of~~
16 ~~surveying.~~ Courses shall be in surveying fundamentals, applied surveying practice and advanced or
17 theoretical surveying courses. [to include, at a minimum,]including courses in surveying practices,
18 subdivision design and planning, surface ~~drainage~~ drainage, and photogrammetry which must be
19 completed with a passing grade.

20 (b) Experience:

- 21 (1) Definition. As used in the North Carolina Engineering and Land Surveying Act, the term
22 "progressive practical ~~surveying~~ experience" means that during the period of time in which an
23 applicant **has** made a practical utilization of the knowledge of the principles of geometry and
24 trigonometry in determining the shape, boundaries, ~~position~~ position, and extent of the earth's
25 surface, such that continuous improvement, ~~growth~~ growth, and development in the utilization of
26 that knowledge have been shown. In addition, the applicant shall show the continuous assumption
27 of greater individual responsibility for the work product over that period of time.
28 (2) Required Experience. Experience Accepted. In evaluating the work experience required, the Board
29 shall consider the total experience record and the progressive nature of the record. ~~Half or more~~ Not
30 less than half of the required land surveying experience shall be of a professional grade and
31 character, and shall be performed under the responsible charge of a Professional Land Surveyor. If
32 the work was not under the responsible charge of a Professional Land Surveyor, the applicant shall
33 submit a written explanation to the Board explaining why the experience should be
34 ~~considered~~ considered, acceptable and the ~~[The] Board shall approve if it is satisfied of the grade~~
35 ~~and character of the progressive experience. [experience on a case by case basis.]The Board shall~~
36 approve the experience on a case-by-case basis if it is satisfied of the grade and character of the
37 progressive experience. Experience gained under the technical supervision of an unlicensed

1 individual shall be considered based upon the engineering education and experience credential of
2 the unlicensed supervisor. Experience gained in the armed services, [usually] typically while serving
3 in an engineering or surveying related group, shall be accepted only if substantially equivalent to
4 that which would have been gained in civilian work.

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

- 7 (A) construction layout;
8 (B) engineering surveying; or
9 (C) part-time surveying work.

10 (c) Exhibits, Drawings, ~~Plats:~~ Maps:

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

- 12 (A) General. The applicant shall submit, along with the application, an actual ~~plat~~ map of a
13 boundary survey of an actual project prepared ~~by, or~~ under the direct supervision and
14 responsible charge of a Professional Land Surveyor who states that of, the applicant did
15 the preparatory work of the survey; that shows shows, by its conformance, that the
16 applicant is knowledgeable of the contents of the Standards of Practice for Land Surveying
17 in North Carolina as set forth in Section .1600 of this Chapter, Chapter; and that shows that
18 the applicant is able to apply this knowledge by preparing a plat map in accordance with
19 the various legal and professional requirements of land surveying.
20 (B) Physical Requirement. The map submitted shall be a clean, clear, legible print of an original
21 map in the file of a Professional Land Surveyor.

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

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

34
35 *History Note:* Authority G.S. 47-30; 89C-10; 89C-13;
36 Eff. February 1, 1976;
37 Readopted Eff. September 29, 1977;

1 *Amended Eff. August 1, 2014; July 1, 2009; August 1, 2000; August 1, 1998; November 2, 1992;*
2 *April 1, 1989; December 1, 1984; January 1, 1982;*
3 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. April 27,*
4 *2019;*
5 *Amended Eff. July 1, 2020.*

6

1 21 NCAC 56 .0603 is amended as published in 34:12 NCR 1147 – 1158 with changes as follows:

2
3 **21 NCAC 56 .0603 EXAMINATIONS**

4 (a) The Board offers the following examinations that are the national examinations of the National Council of
5 Examiners for Engineering and Surveying (NCEES) with application made directly to NCEES to take the exam:

6 ~~(a)~~(1) Fundamentals of ~~Surveying~~ Surveying (FS): This examination is designed to test the applicant's
7 proficiency and knowledge of the fundamentals of surveying. ~~Reference~~ (Reference to
8 Fundamentals of Surveying is the revised name of the national exam that is the Fundamentals of
9 Land Surveying in G.S. ~~89C~~ 89C); and

10 ~~(b)~~(2) Principles and Practice of Surveying. This examination is designed to test the applicant's proficiency
11 and knowledge of land surveying practices and procedures generally and specifically within North
12 Carolina. (Reference to Principles and Practice of Surveying is the revised name of the national
13 exam that is the Principles and Practice of Land Surveying in G.S. 89C.)

14 (b) State-Specific Exam. The ~~[state specific]~~ State-specific portion of the principles and practice of surveying
15 examination shall be provided by the Board.

16 (1) Examination Filing Deadline. The applicant who wishes to take the ~~[state specific]~~ State-specific
17 portion of the principles and practice of surveying examination shall deliver the completed
18 application, including all necessary references, transcripts, and verifications, to the Board office at
19 least 60 days prior to the date for taking the exam.

20 (2) Unexcused Absences. For the ~~[state specific]~~ State-specific portion of the principles and practices
21 of surveying examination, after a seating notice for a scheduled examination has been issued, if
22 applicant fails to appear, the applicant's record shall reflect "unexcused absence," unless the absence
23 was for jury duty or the applicant was not physically able to be present, as indicated by a doctor's
24 certificate. The examination fee shall be forfeited if the applicant's record reflects an unexcused
25 absence.

26 (3) Re-Examination. A person who failed the ~~[state specific]~~ State-specific portion of the principles and
27 practices of surveying examination may apply to take the examination again at the after a six-month
28 waiting period by making written request and submitting the required exam fee. A person having a
29 combined record of three failures shall be eligible only after submitting a new application with
30 appropriate application fee, and shall be considered by the Board for re-examination at the end of
31 12 months after the last failure.

32 (c) Examination Aids. Examinees may utilize examination aids as specified and published by ~~the national exam~~
33 preparer, NCEES or the Board.

34 (d) Preparation of Examination. ~~The examination in the fundamentals of surveying and of the examination in the~~
35 principles and practice of surveying are national examinations provided by the National Council of Examiners for
36 Engineering and Surveying (NCEES), of which the Board is a member, or other examinations as adopted by the Board.
37 The North Carolina portion of the principles and practice of surveying examination shall be provided by the Board.

1 NCEES administers the fundamentals of surveying examination and the examination in the principles and practice of
2 surveying as a computer-based exam. ~~exams.~~ Application is [shall be] made directly to NCEES to take the exam.

3 ~~(e) Examination Filing Deadline. The applicant who wishes to take the principles and practice of surveying~~
4 ~~examination shall deliver the completed application, including all necessary references, transcripts, and verifications,~~
5 ~~to the Board office prior to August 1 for Fall examinations and January 2 for Spring examinations.~~

6 ~~(f) Seating Notice. After approval of an application, the applicant shall be sent a seating notice by NCEES. This notice~~
7 ~~shall inform the applicant of the date, time and location of the examination and the seat number assigned.~~

8 ~~(g) Unexcused Absences. After a seating notice for a scheduled examination has been issued, if applicant fails to~~
9 ~~appear, the applicant's record shall reflect "unexcused absence," unless the absence was for jury duty or the applicant~~
10 ~~was not physically able to be present, as indicated by a doctor's certificate. The examination fee shall be forfeited.~~

11 ~~(h) Re Examination. A person who failed an examination may apply to take the examination again at the next regularly~~
12 ~~scheduled examination period by making written request and submitting the required exam fee. A person having a~~
13 ~~combined record of three failures or unexcused absences shall be eligible only after submitting a new application with~~
14 ~~appropriate application fee, and shall be considered by the Board for re-examination at the end of 12 months. After~~
15 ~~the end of the 12-month period, the applicant may take the examination no more than once every calendar year. The~~
16 ~~applicant shall demonstrate to the Board that actions, such as additional courses of study, have been taken to improve~~
17 ~~the applicant's chances for passing the exam.~~

18 ~~(i)(c)~~ Reasonable Accommodation. An applicant may make a written request,request to NCEES, before the
19 application deadline, for reasonable accommodation for the exam. Reasonable accommodation shall be granted based
20 upon meeting the Guidelines for Requesting Religious and ADA Accommodations published by the National Council
21 of Examiners for Engineering and Surveying (NCEES).

22 ~~(j)(f)~~ Exam Results. Exam results shall be supplied in writing as pass or fail. No results shall be given in any other
23 manner.

24 ~~(k)(g)~~ Review of Failed Exams. An applicant who fails to make a passing score on an NCEES exam shall receive an
25 exam ~~analysis.~~ analysis by NCEES. An applicant who fails to make a passing score on the two-hour ~~North Carolina~~
26 state-specific portion of the exam may request in writing within thirty30 days of receiving the result to have an
27 opportunity to review that portion of the exam. The review shall be done in the Board Officeoffice under supervision
28 of staff and is limited to one hour.

29
30 *History Note: Authority G.S. 89C-10; 89C-15;*

31 *Eff. February 1, 1976;*

32 *Readopted Eff. September 29, 1977;*

33 *Amended Eff. August 1, 2014; May 1, 2009; April 1, 2001; August 1, 1998; November 2, 1992; April*
34 *1, 1989; January 1, 1982;*

35 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. April 27,*
36 *2019;*

37 *Amended Eff. July 1, 2020.*

21 NCAC 56 .0804 is amended as published in 34:12 NCR 1147 – 1158 **with changes** as follows:

SECTION .0800 - FIRM REGISTRATION

21 NCAC 56 .0804 ANNUAL RENEWAL AND 30-DAY REPORTING OF VIOLATIONS AND CHANGE OF ADDRESS

(a) Renewal. The certificate of licensure for a business ~~entity, including a professional corporation, limited liability company, Chapter 87 corporation, or business firm~~ shall be renewed annually.

(b) Expiration. The certificate of licensure expires on the last day of June following its issuance by the Board and becomes invalid on that date unless renewed.

(c) Written Application. ~~Upon~~ The applicant shall submit a written application on a renewal form **provided by the Board** that requires the physical place of business address and report of disciplinary ~~actions~~ actions, accompanied by a fee of seventy-five dollars ~~(\$75.00)~~ (\$75.00). ~~the~~ The Board shall renew the certificate of ~~licensure~~ licensure, providing that the ~~firm~~ business has complied with all **Rules** rules of the Board and applicable General Statutes of North Carolina. The form shall be provided to all licensees in good standing no later than June 1st.

(d) Reporting. The ~~licensed entity~~ business shall give notice to the Board **on a change form within 30 days** of **a any** change ~~of~~ of:

- (1) business address and branch locations;
- (2) resident professional ~~or~~ or licensee in responsible charge;
- (3) **[company]** business name;
- (4) officers, ~~directors~~ directors, or owners; or
- (5) the services being ~~offered~~ offered, **within 30 days of the [any] change**.

The ~~firm~~ business shall give notice to the Board of any disciplinary actions or conviction of any crime, in any jurisdiction on any license within 30 days of the disciplinary ~~action~~ action or conviction.

~~(d)~~ (e) If a ~~firm~~ business fails to renew its certificate of licensure within one year of the expiration date, the ~~firm~~ business shall submit a new application for a new certificate of licensure in accordance with all requirements of 21 NCAC 56 .0802.

~~(e)~~ (f) If any business ~~entity~~ that holds a current certificate of licensure ceases business because the professional licensee receives a waiver from paying the individual renewal fee under 21 NCAC 56 .0506 or 21 NCAC 56 ~~.0607~~ .0607, the annual renewal fee for the business shall be waived for the same time period.

*History Note: Authority G.S. 55B-11; ~~57C-2-01~~; 57D-2-01; 89C-10; 89C-14; 89C-17; 89C-24;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2011; July 1, 2010; July 1, 2009; December 4, 2002; April 1, 2001;
February 1, 1996; May 1, 1994;
Amended Eff. July 1, 2020.*

1 21 NCAC 56 .0902 is amended as published in 34:12 NCR 1147 – 1158 **with changes** as follows:

2
3 **SECTION .0900 - BUSINESS ENTITIES: GENERAL**

4
5 **21 NCAC 56 .0902 BUSINESS TITLES OF BUSINESS ENTITIES**

6 (a) Companies, partnerships, corporations, limited liability ~~companies~~ companies, or any other business ~~organization~~
7 providing professional engineering or land surveying services in North Carolina shall not practice under a name that
8 is misleading. Except as provided ~~below~~, in Paragraph (b), for purposes of this Rule, "misleading" means that the titles
9 of engineering or land surveying companies, partnerships, corporations, limited liability ~~companies~~ companies, or any
10 other business ~~organization~~ organized ~~primarily to provide~~ for the primary purpose of providing such professional
11 services shall not contain the name of an ~~individual~~ individual:

- 12 (1) **who is** not licensed to provide the professional services ~~offered~~ offered in North Carolina; or
13 (2) who is not eligible for licensure by comity to provide the professional services offered in North
14 Carolina under the provisions of ~~G.S. 89C-13~~, G.S. 89C-13; or
15 (3) **who** is licensed to provide the professional services, offered in North Carolina, in a state where the
16 business (or of a successor to that business or business created to comply with G.S. 55B), is
17 incorporated, organized, or is authorized to transact business.

18 (b) A ~~firm~~ business may include in its title the name or names of one or more deceased or retired former members of
19 the ~~firm~~ business, or of a successor to that business or a business created to comply with G.S. 55B, provided that the
20 ~~firm~~ business submits a letter of request and explanation with its application to the Board, and that the Board finds **as**
21 **fact** that the use of the name is not misleading.

22 (c) A business ~~organization~~ shall not change its title, or operate under an assumed name, without first applying to the
23 Board for a determination that the proposed title meets the requirements of Paragraph (a) or (b) of this Rule. Requests
24 for name changes shall be made in writing on the **change** forms **referenced in 21 NCAC 56 .0804(d)**, **provided by the**
25 **Board for this purpose. Requests to operate under an assumed name shall be made in writing.**

26
27 *History Note: Authority G.S. 55B-5; ~~57C-2.01~~; ~~57D-2.01~~; 89C-10; 89C-24;*

28 *Eff. February 1, 1976;*

29 *Readopted Eff. September 29, 1977;*

30 *Amended Eff. August 1, 2000; August 1, 1998; May 1, 1994; April 1, 1989; April 1, 1980;*

31 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. April 27,*
32 *2019;*

33 *Amended Eff. July 1, 2020.*
34

21 NCAC 56 .1301 is amended as published in 34:12 NCR 1147 – 1158 with changes as follows:

SECTION .1300 – BOARD DISCIPLINARY PROCEDURES

21 NCAC 56 .1301 IMPROPER PRACTICE BY A LICENSEE

(a) General. ~~Alleged practice~~ [Practice] Licensee practice that may violate the rules ~~in~~ of this Chapter or G.S. 89C ~~by a licensee~~ is subject to Board investigation and disciplinary action by the Board.

(b) Preferring Charges. Any person who believes that any licensed Professional Engineer, Professional Land ~~Surveyor~~ Surveyor, or ~~firm business~~ holding a certificate of ~~authorization~~ licensure is in violation of the provisions of G.S. 89C or the rules in this Chapter may prefer charges against that person or ~~firm~~ by setting forth in writing those charges and swearing to their authenticity, business, in the form of a complaint, completed to the best of that individual's knowledge and belief, along with providing corroborative ~~evidence.~~ evidence that helps support the charges. [A] An optional complaint form is provided by the Board to aid in filing the complaint. ~~The charges shall be filed with the Board's office in Raleigh, North Carolina.~~

(c) Preliminary Review:

- (1) Upon receipt of a ~~properly filed charge,~~ charge, charge that meets requirements of G.S. 89C and the rules of the Board a case shall be opened. ~~Other information indicating that a licensee is in violation of the provisions of G.S. 89C or the rules~~ [in this Chapter] of the Board may be a basis for opening a case ~~by the Board.~~
- (2) A field investigation may be performed if determined necessary by the Executive ~~Director.~~ Director in order to obtain additional information and evidence.
- (3) If the Executive Director determines that the charges are corroborated by evidence, a written notice and explanation of the charge shall be forwarded to the person or ~~firm business~~ against whom the charge is made and a response ~~is requested,~~ requested, within 15 days, of the person or firm so charged to show ~~[show, within 15 days,] show~~ compliance with ~~all lawful requirements~~ G.S. 89C and the rules [in this Chapter] of the Board for retention of the license. Notice of the charge and of the alleged facts or alleged conduct shall be given personally or by certified mail, return receipt request.
- (4) After preliminary evidence has been ~~obtained,~~ the matter shall be referred to the Board's review ~~committee~~ committee, which is made up of the following individuals:
 - (A) one member of the Board who is licensed in the respective ~~profession,~~ profession;
 - (B) the legal counsel of the ~~Board,~~ Board; and
 - (C) the Executive Director of the Board or Assistant Executive Director if designated by the Executive Director.
- (5) Upon review of the ~~available~~ evidence, the review committee ~~shall present to the Board a written recommendation that:~~ shall:
 - (A) recommend that the Board dismiss the charge ~~be dismissed~~ as unfounded or trivial;

1 (B) when the charge is admitted as true, recommend that the Board accept the admission of
2 guilt by the person charged and order that person not to commit in the future the specific
3 act or acts admitted and also not to violate any of the provisions of the Board ~~Rules~~ rules
4 or the statutes at any time in the future;

5 (C) present the charge, whether admitted or denied, be presented to the full Board for a hearing
6 and determination by the Board on the merits of the charge in accordance with the
7 substantive and procedural requirements of the provisions of Section .1400 of this Chapter
8 and the provisions of G.S. 150B; or

9 (D) whether the charge is admitted or denied, ~~the Board~~ give written notice to the licensee ~~of a~~
10 ~~contemplated action as set out in Rule .1403(b) of this Chapter. that:~~

11 (i) sufficient evidence exists which, if not rebutted or explained, would justify the
12 Board in taking an action set out in Rule .1402(4) through (12);

13 (ii) stating the nature of the evidence; and

14 (iii) that unless the licensee, within 20 days after service of said notice, deposits in the
15 mail a certified letter addressed to the Board and containing a request for a hearing
16 or settlement conference, that it will recommend that the Board take the action(s)
17 specified in the notice, set out in Rule .1402(4) through (12).

18 (d) Consultant. A consultant to the review committee shall be designated by the Board Chair if a board member is a
19 complainant, ~~witness~~ witness, or respondent in a case. The consultant shall be a licensed professional engineer or
20 professional land surveyor, depending on the nature of the ~~case,~~ case, ~~and selected from a list provided by the~~
21 ~~Executive Director of former Board members or other licensed professionals who are knowledgeable with the Board's~~
22 ~~processes.~~ The consultant shall review all case materials and make a recommendation for consideration by the review
23 committee as to the merits of the case. The consultant shall review any new information presented in the event of a
24 settlement conference and make a recommendation to the settlement conference committee.

25 (e) Board Decision. ~~Notice of the decision by the Board on recommendations of the review committee~~ When the
26 review committee proceeds pursuant to [any Part]Parts (c)(5)(A) or (B) of [Subparagraph (c)(5)] of this [Rule]Rule,
27 upon approval of the Board, notice shall be given to the party against whom the charges have been brought and the
28 party submitting the charge. ~~Though it is not forbidden to do so, the~~ The Board is not required to notify the parties of
29 the reasons of the Board in making its determination, decision.

30 (f) Settlement Conference. ~~When the Board issues a citation for hearing or notice of a contemplated action,~~ review
31 committee proceeds pursuant to Parts (c)(5)(C) or (D) of this Rule, the licensee may request in writing a settlement
32 conference to pursue resolution of the issue(s) through informal procedures. If, after the completion of a settlement
33 conference, the licensee and Board's settlement committee do not agree to a resolution of the dispute for the full
34 Board's consideration, the original administrative proceeding shall commence. During the course of the settlement
35 conference, no sworn testimony shall be ~~taken~~ taken, nor shall any witnesses be cross-examined.

36 (1) The Board's settlement committee shall be made up of the following individuals:

- 1 (A) the member of the Board who served on the review committee or ~~the replacement a~~
2 replacement member if the member is not ~~available~~, available;
- 3 (B) one public member from the ~~Board~~, Board;
- 4 (C) the legal counsel of the ~~Board~~, Board; and
- 5 (D) the Executive Director of the Board or Assistant Executive Director if designated by the
6 Executive Director.
- 7 (2) Upon review of the ~~available~~ evidence, the settlement committee ~~shall present to the Board a written~~
8 ~~recommendation that shall:~~
- 9 (A) recommend that the Board dismiss the charge ~~be dismissed~~ as unfounded or trivial;
- 10 (B) when the charge is admitted as true, recommend the Board accept the admission of guilt
11 by the person charged and order the person not to commit in the future the specific act or
12 acts admitted and, also, not to violate any provisions of the Board Rules or the statutes at
13 any time in the future;
- 14 (C) direct that the charge, whether admitted or denied, be presented to the full Board for a
15 hearing and determination by the Board on the merits of the charge in accordance with the
16 substantive and procedural requirements of the provisions of Section .1400 of this Chapter
17 and the provisions of G.S. 150B; or
- 18 (D) ~~whether the charge is admitted or denied, the Board give notice to the licensee of a~~
19 ~~contemplated action as set out in Rule .1403(b) of this Chapter.~~ recommend that the Board
20 approve a settlement agreed to by the licensee and proposed by the settlement conference
21 committee.

22

23 *History Note: Authority G.S. 89C-10; 89C-21; 89C-22;*
24 *Eff. February 1, 1976;*
25 *Readopted Eff. September 29, 1977;*
26 *Amended Eff. August 1, 2011; July 1, 2009; May 1, 2009; August 1, 2000; August 1, 1998; March*
27 *1, 1996; April 1, 1989; December 1, 1984; January 1, 1982;*
28 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. April 27,*
29 *2019;*
30 *Amended Eff. July 1, 2020.*

31

21 NCAC 56 .1302 is amended as published in 34:12 NCR 1147 – 1158 with changes as follows:

21 NCAC 56 .1302 UNLAWFUL PRACTICE BY AN UNLICENSED PERSON

(a) General. Alleged unlawful practice by an unlicensed person shall be subject to Board investigation and enforcement, to include applying for relief by injunction or referral to an agency of the stateState for appropriate legal action.

(b) Preferring Charges. Any person who believes that any person or firmbusiness (party) is in violation of the acts specified in G.S. 89C may prefer charges against that person or firm by setting forth in writing those charges and swearing to their authenticity. business, in the form of a complaint, completed to the best of that individual's knowledge and belief, in the form of a complaint, along with providing corroborative evidence. evidence that helps support the charges. An optional complaint form is provided by the Board to aid in filing the complaint. The charges shall be filed at [with] the Board's office in Raleigh, North Carolina.

(c) Preliminary or Threshold Determination:

(1) Upon receipt of a properly filed charge, charge that meets requirements of G.S. 89C and the rules of the Board a case an investigation shall be initiated, opened. Other information indicating that a party is in violation of the provisions of G.S. 89C or the rules [in this Chapter] of the Board may be a basis for opening a case by the Board.

(2) At the discretion of the executive director, a field investigation may be performed without notifying any of the parties involved, if determined necessary by the Executive Director in order to obtain additional information and evidence.

(3) If the Executive Director determines that charges are corroborated by evidence, a written notice and explanation of the charge shall be forwarded to the person or firm]business against whom the charge is made and a response is [requested]requested, within 15 days. [of the person or firm so charged] to show compliance with [all lawful requirements.]G.S. 89C. Notice of the charge and of the alleged facts or alleged conduct shall be given personally or by certified mail, return receipt requested.

~~(3)~~(4) After preliminary evidence has been obtained, the matter shall be referred to the Board's review committeecommittee, which is made up of the following individuals:

(A) one member of the Board;

(B) the legal counsel of the Board; and

(C) the Executive Director of the Board or Assistant Executive Director if designated by the Executive Director.

(4) The review committee shall recommend to the Board whether there is probable cause to believe that a party against whom a charge has been brought in fact has violated the provisions of G.S. 89C.

(5) Upon review of the available evidence, the review committee shall make a threshold determination of the charges brought. The review committee shall then present recommend to the Board written recommendations that:

- 1 (A) ~~The~~ the investigation be continued; continued and the party be notified with an explanation
2 of the charge(s) and given an opportunity to provide a response to show compliance with
3 [all lawful requirements;]G.S. 89C;
4 (B) ~~The~~ the charge be dismissed as unfounded or trivial; or
5 (C) a letter be issued informing of the possible violation of G.S. 89C and that further action
6 may be pursued under G.S. 89C-23; or
7 ~~(C)(D)~~ The the matter be referred to an appropriate agency for necessary legal action.
8 (d) Board Decision. Notice of decision by the Board on recommendations of the review committee shall be given to
9 the party submitting the charge.

10

11 *History Note: Authority G.S. 89C-10; 89C-23;*
12 *Eff. February 1, 1976;*
13 *Readopted Eff. September 29, 1977;*
14 *Amended Eff. August 1, 2011; August 1, 2000; August 1, 1998; May 1, 1994; April 1, 1989; January*
15 *1, 1982;*
16 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. April 27,*
17 *2019;*
18 *Amended Eff. July 1, 2020.*
19

1 21 NCAC 56 .1403 is amended as published in 34:12 NCR 1147 – 1158 as follows:

2
3 **SECTION .1400 - CONTESTED CASES**
4

5 **21 NCAC 56 .1403 NOTICE OF CONTEMPLATED BOARD ACTION: ACTION TO APPLICANT:**
6 **REQUEST FOR HEARING**

7 ~~(a)~~ When the Board takes an action of a type specified in Subparagraphs (1), (2) or (3) of Rule .1402 of this Section,
8 it shall give to the applicant a written ~~notice containing a~~ statement:

- 9 (1) that the applicant ~~has failed to satisfy the Board of~~ meet the qualifications to be examined or to be
10 issued a ~~license, as the case may be;~~ license;
11 (2) ~~indicating stating in what respects the applicant has so failed to satisfy the Board;~~ specific
12 deficiencies as to why the applicant failed; and
13 (3) that unless the applicant, within 20 days after service of ~~said~~ the notice, deposits in the mail a
14 certified letter addressed to the Board and containing a request for a hearing, the Board's action will
15 become final.

16 In any Board proceeding involving the denial of a ~~duly made~~ an application to take an examination, or refusal to issue
17 a license after an applicant has taken and passed an examination, the burden of satisfying the Board of the applicant's
18 qualifications shall be upon the applicant.

19 ~~(b) When the Board contemplates taking any action of a type specified in Subparagraphs (4), (5), (6), (7), (8), or (9)~~
20 ~~of Rule .1402 of this Section, it shall give to the licensee a written notice containing a statement:~~

- 21 (1) ~~that the Board has sufficient evidence which, if not rebutted or explained, will justify the Board in~~
22 ~~taking the contemplated action;~~
23 (2) ~~indicating the general nature of the evidence; and~~
24 (3) ~~that unless the licensee, within 20 days after service of said notice, deposits in the mail a certified~~
25 ~~letter addressed to the Board and containing a request for a hearing or settlement conference, the~~
26 ~~Board will take the contemplated action.~~

27
28 *History Note: Authority G.S. 89C-10; 89C-21; 89C-22; 150B-38;*
29 *Eff. February 1, 1976;*
30 *Readopted Eff. September 29, 1977;*
31 *Amended Eff. August 1, 1998; December 1, 1984; January 1, 1982;*
32 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. April 27,*
33 *2019;*
34 *Amended Eff. July 1, 2020.*
35

1 21 NCAC 56 .1603 is amended as published in 34:12 NCR 1147 – 1158 as follows:

2
3 **SECTION .1600 – STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA**

4
5 **21 NCAC 56 .1603 CLASSIFICATION OF BOUNDARY SURVEYS**

6 General. "Boundary surveys" are defined as surveys made to establish or to retrace a boundary line on the ground, or
7 to obtain data for constructing a map, plat, or report showing a boundary line. For the purpose of this Rule, the term
8 refers to all surveys, including "loan" or "physical" surveys, that involve the determination or depiction of property
9 lines. For the purpose of specifying minimum allowable surveying standards for boundary surveys, the following four
10 general classifications of lands in North Carolina are established from the standpoint of their real value, tax value, or
11 location. Each map shall contain a statement of the calculated ratio of precision before adjustments or a statement of
12 positional accuracy.

- 13 (1) Local Control Network Surveys (Class AA). Local control network surveys are traverse networks
14 utilizing permanent points for the purpose of establishing local horizontal control networks for
15 future use by local surveyors. For Class AA boundary surveys in North Carolina, the angular error
16 of closure shall not exceed ten seconds times the square root of the number of angles turned. The
17 ratio of precision shall not exceed an error of closure of one foot per 20,000 feet of perimeter of the
18 parcel of land (1:20,000). When using positional accuracy standards for Class AA control and
19 boundary surveys, neither axis of the 95 percent confidence level error ellipse for any control point
20 or property corner shall exceed 0.05 feet or 0.015 meters plus 30 ppm measured relative to the
21 position(s) of the horizontal control points used and referenced on the survey.
- 22 (2) Urban Land Surveys (Class A). Urban surveys include lands that normally lie within a town or city.
23 For Class A boundary surveys in North Carolina, the angular error of closure shall not exceed 20
24 seconds times the square root of the number of angles turned. The ratio of precision shall not exceed
25 an error of closure of one foot per 10,000 feet of perimeter of the parcel of land (1:10,000). When
26 using positional accuracy standards for Class A control and boundary surveys, neither axis of the
27 95 percent confidence level error ellipse for any control point or property corner shall exceed 0.10
28 feet or 0.030 meters plus 50 ppm measured relative to the position(s) of the horizontal control points
29 or property corners used and referenced on the survey.
- 30 (3) Suburban Land Surveys (Class B). Suburban surveys include lands in or surrounding the urban
31 properties of a town or city. For Class B boundary surveys in North Carolina, the angular error of
32 closure shall not exceed 25 seconds times the square root of the number of angles turned. The ratio
33 of precision shall not exceed an error of closure of one foot per 7,500 feet of perimeter of the parcel
34 of land (1:7,500). When using positional accuracy standards for Class B control and boundary
35 surveys, neither axis of the 95 percent confidence level error ellipse for any control point or property
36 corner shall exceed 0.12 feet or 0.037 meters plus 90 ppm measured relative to the position(s) of the
37 horizontal control points or property corners used and referenced on the survey.

1 (4) Rural and Farmland Surveys (Class C). Rural and farmland surveys include lands located in rural
2 areas of North Carolina and generally outside the suburban properties. For Class C boundary surveys
3 in North Carolina, the angular error of closure shall not exceed 30 seconds times the square root of
4 the number of angles turned. The ratio of precision shall not exceed an error of closure of one foot
5 per 5,000 feet of perimeter of the parcel of land (1:5,000). When using positional accuracy standards
6 for Class C control and boundary surveys, neither axis of the 95 percent confidence level error
7 ellipse for any control point or property corner shall exceed 0.15 feet or 0.046 meters plus 150 ppm
8 measured relative to the position(s) of the horizontal control points or property corners used and
9 referenced on the survey.

10
11 *History Note: Authority G.S. 89C-10; 89C-20;*
12 *Eff. July 1, 1989;*
13 *Amended Eff. August 1, 2014; May 1, 2009; August 1, 2000; August 1, 1998; November 2, 1992;*
14 *January 1, 1992;*
15 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. April 27,*
16 *2019;*
17 *Amended Eff. July 1, 2020.*
18

1 21 NCAC 56 .1604 is amended as published in 34:12 NCR 1147 – 1158 **with changes** as follows:

2
3 **21 NCAC 56 .1604 MAPPING REQUIREMENTS FOR BOUNDARY SURVEYS**

4 (a) The size of a map shall be such that all details are legible on a copy.

5 (b) Any lines that are not actually surveyed shall be indicated on the map and a statement included revealing the
6 source of information from which the line is derived.

7 (c) All surveys based on the North Carolina grid system shall contain a statement identifying the coordinate system
8 referenced datum used.

9 (d) All plats (maps), unless marked as "Preliminary Plat - Not for recordation, conveyances, or sales" shall be sealed,
10 ~~signed~~ signed, and dated by the Professional Land Surveyor and shall contain the following:

11 (1) An accurately positioned north arrow coordinated with any bearings shown on the plat. Indication
12 shall be made as to whether the north index is true, magnetic, North Carolina grid ('NAD 83' and
13 realization (date of adjustment of coordinate system) or 'NAD27'), or is referenced to old recorded
14 deed or recorded plat bearings. If the north index is magnetic or referenced to old recorded deed or
15 recorded plat bearings, the date and the source (~~note if determined~~) (note if not determined) shall be
16 indicated.

17 (2) The azimuth or courses and distances of every property line surveyed shall be shown. Distances
18 shall be in feet or meters and decimals thereof. The number of decimal places shall be appropriate
19 to the class of survey required in Rule .1603 of this Section.

20 (3) All plat lines shall be horizontal or grid measurements. All lines shown on the plat shall be correctly
21 plotted to the scale shown. Enlargements of portions of a plat ~~are acceptable in the interest of clarity,~~
22 ~~where shown as inserts.~~ are not required to be to scale. Where the North Carolina grid system is
23 used, the combined grid factor shall be shown on the face of the plat. If grid distances are used, they
24 shall be shown on the plat.

25 (4) Where a boundary is formed by a curved line, the following data ~~must~~ shall be given: actual survey
26 ~~data, data~~ or as a series of subchords with bearings and distances around the curve. If standard curve
27 data is used, the bearing and distance of the long chord (from point of curvature to point of tangency)
28 ~~must~~ shall be shown on the face of the plat.

29 (5) Where a subdivision of land is set out on the plat, all streets and lots shall be accurately plotted with
30 dimension lines indicating widths and all other information pertinent to retracing all lines in the
31 field. This shall include bearings and distances ~~sufficient~~ to form a continuous closure of the entire
32 perimeter.

33 (6) ~~Where control corners have been established in compliance with G.S. 39-32.1, 39-32.2, 39-32.3,~~
34 ~~and 39-32.4, as amended, the location and information as required in the referenced statute shall be~~
35 ~~shown on the plat. All Control corners, and all~~ other corners that are marked by monument or natural
36 object shall be ~~so~~ identified on all plats, and ~~where practical,~~ all corners of adjacent owners along
37 the boundary lines of the subject tract that are marked by monument or natural object shall be shown.

1 (7) The surveyor shall show one of the following ~~where they (or note if could not be determined;~~
2 determined):

3 (A) The names of adjacent land owners;

4 (B) The lot, block, ~~parcel~~ parcel, and subdivision designations; or

5 (C) Other legal ~~reference where applicable.~~ reference.

6 (8) All visible and apparent rights-of-way, easements, watercourses, utilities, roadways, and other such
7 improvements shall be accurately located where crossing or forming any boundary line of the
8 property shown.

9 (9) Tie lines as required and defined in Rule .1602(g) of this Section shall be accurately shown on the
10 face of the plat, whether or not the plat is to be recorded.

11 (10) A vicinity map (location map) shall appear on the face of the plat.

12 (11) Each map shall contain:

13 (A) the property designation;

14 (B) the name of owner or prospective owner;

15 (C) the location (including township, county, and ~~state~~); State);

16 (D) the date or dates the survey was conducted;

17 (E) a scale of the drawing listed in words or figures;

18 (F) a bargraph;

19 (G) the title source; and

20 (H) a legend depicting nomenclature or symbols not otherwise labeled.

21 (12) Any map not certified for recording under G.S. 47-30, and all reports of survey, shall contain this
22 certificate signed by the Professional Land Surveyor in substantially the following form:

23 "I certify that this map was drawn under my supervision from an actual survey made under my supervision (deed
24 description recorded in Book _____, page _____ or other reference source _____); that the
25 boundaries not surveyed are indicated as drawn from information in Book _____, page _____ or other reference
26 source _____; that the ratio of precision or positional accuracy is _____; and that
27 this map meets the requirements of The Standards of Practice for Land Surveying in North Carolina (21 NCAC 56.
28 1600)."

29 This _____ day of _____, 2_____.

30 Seal _____

31 Professional Land Surveyor

32

33 *History Note: Authority G.S. 89C-10; 89C-16; 89C-20;*

34 *Eff. July 1, 1989;*

35 *Amended Eff. August 1, 2014; May 1, 2009; August 1, 2000; August 1, 1998; February 1, 1996;*

36 *November 2, 1992; January 1, 1992;*

1
2
3
4

Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. April 27, 2019;
Amended Eff. July 1, 2020.

1 21 NCAC 56 .1607 is amended as published in 34:12 NCR 1147 – 1158 as follows:

2

3 **21 NCAC 56 .1607 GLOBAL POSITIONING SYSTEMS SURVEYS**

4 (a) General. ~~Global Positioning Systems (GPS) are defined as the~~ Navigation Satellite Systems (GNSS) is the generic
5 name of navigation and positioning systems with global coverage that is ~~comprise~~ comprised of the Global Navigation
6 Satellite System (GNSS), which includes GPS (Global Positioning System, United States, originally NAVSTAR,
7 Navstar), GLONASS, GLONASS (Global Navigation Satellite System, Russia), GALILEO, Galileo (Europe),
8 COMPASS, BDS (BeiDou Navigation Satellite System, China, also known as COMPASS), and any other satellite-
9 based navigation and positioning systems. ~~systems that provide global coverage.~~

10 (b) The Professional Land Surveyor in responsible charge of the GPS survey shall certify all prepared documents.
11 When a map or document consists of more than one sheet, only one sheet must contain the certificate and all others
12 must be certified. The certificate or metadata notes shall contain the following information:

- 13 (1) Class of GPS survey as defined in the Standards of Practice (or list the sections);
- 14 (2) Type of GPS field procedure, such as Static, Kinematic, Pseudo-Kinematic, Real-time Kinematic,
15 Real-time Kinematic networks, and Online Position User Service;
- 16 (3) Positional accuracy;
- 17 (4) Dates of survey;
- 18 (5) What datum and epoch coordinates or geographic positions are based on;
- 19 (6) Designation of fixed-control stations and their positional data;
- 20 (7) Geoid model used;
- 21 (8) Combined grid factor(s); and
- 22 (9) Units.

23 The certificate shall be substantially in the following form:

24 "I, _____, certify that this map was drawn under my supervision from an actual GPS survey made
25 under my supervision and the following information was used to perform the survey:

- 26 (1) Class of survey: _____
- 27 (2) Positional accuracy: _____
- 28 (3) Type of GPS field procedure: _____
- 29 (4) Dates of survey: _____
- 30 (5) Datum/Epoch: _____
- 31 (6) Published/Fixed-control use: _____
- 32 (7) Geoid model: _____
- 33 (8) Combined grid factor(s): _____
- 34 (9) Units: _____"

35 (c) GPS surveys ~~performed~~ to provide control networks shall be performed in such a manner that it meets a 95 percent
36 confidence level of the positional accuracy of each point relative to the published positions of the control points used
37 and shall meet the accuracy standards of a Class AA survey as set out in Rule .1603.

1 (d) GPS surveys performed to provide local horizontal or vertical Grid control on a parcel of land where the boundary
2 or topography of that parcel will be shown relative to NC Grid horizontal or vertical datum shall be performed using
3 techniques that will provide the standards of accuracy for the class of survey being performed while determining the
4 horizontal or vertical positions of objects as set out in Rule .1603 or Rule .1606 as applicable.

5 (e) Fixed station(s) used for the project shall appear on the map, plat, or report. The minimum data shown for each
6 fixed station shall be station name, horizontal position (northing and easting) or latitude, longitude, elevation (ellipsoid
7 or orthometric), and datum and epoch.

8

9 *History Note: Authority G.S. 89C-10; 89C-20;*

10 *Eff. November 2, 1992;*

11 *Amended Eff. August 1, 2011; May 1, 2009; August 1, 2002; August 1, 2000;*

12 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. April 27,*
13 *2019;*

14 *Amended Eff. July 1, 2020.*

15