



Office of the Professions

Land Surveying Practice Guidelines - February 2000

The State Board for Engineering and Land Surveying issued the first draft of its proposed Land Surveying Practice Guidelines in July 1997. Thereafter, the Board received extensive comments from the field. To the extent possible these Guidelines were revised to accommodate the concerns raised by various parties. The Guidelines were approved by the Board for Engineering and Land Surveying, reviewed by the Education Department's legal counsel, and presented to the State Board of Regents. They are posted here to benefit licensees and consumers by broadening their understanding of what defines professional practice in the profession and what constitutes good practice.

Within the Department, practice guidelines are considered to be the articulation by a State board of good practices that are approved by the Deputy Commissioner for the Professions and presented to the Board of Regents.

The guidelines may be used by both practitioners and the public as a frame of reference as to what constitutes good practice. They may not be used as a basis for charges or disciplinary action in that such actions have to be based upon a demonstration of a violation of the Education Law, Rules of the Board of Regents and the Commissioner's Regulations.

Given the evolving nature of practice, these guidelines may be discontinued or updated as appropriate. Consequently, when a licensee faces a question as to a course of action which involves matters of "good practice," while the guidelines may be of assistance in giving a general understanding of the intent of statute and rules, the original language of the statute or rule should be consulted. Having applied the statute or rule to the particular situation at hand, the licensee then has a basis for making the appropriate decision. For a more complete description of the purpose and use of the guidelines, please contact the State Board for Engineering and Land Surveying by phone at (518) 474-3817 ext. 140 or by e-mail at lsurvbd@mail.nysed.gov.

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Section 1

A. Practice of a Profession

The practice of a profession is a public trust, earned through educational preparation, experience, and examination and a commitment on the part of the practitioner to public service. The professional carries out that trust in accordance with principles developed through years often decades and even centuries of the best professional traditions, and in accordance with State laws, rules, and regulations. Professional practitioners are

urged to be always conscious of the very special obligations of public service and of ethical conduct that the privilege of licensure creates.

B. The Practice of Land Surveying

(Re: NYS Education Law [Article 145 Section 7203](#))

The practice of the profession of land surveying is defined as practicing that branch of the engineering profession and applied mathematics which includes the measuring and plotting of the dimensions and areas of any portion of the earth, including all naturally placed and man or machine-made structures and objects thereon, the lengths and directions of boundary lines, the contour of the surface and the application of rules and regulations in accordance with local requirements incidental to subdivisions for the correct determination, description, conveying and recording thereof or for the establishment or re-establishment thereof.

A survey is the opinion of a Registered, Licensed Land Surveyor or Registered, Licensed Professional Engineer holding the "m" exemption, which is based on measurements, research, mathematical computation, analysis, and professional judgment consistent with rules of evidence, legal precedents, and in accordance with the applicable laws of New York State. This opinion is typically in the form of a graphic presentation (i.e.: map, electronic file, field monumentation, etc.) a written report (i.e.: Survey Report, suggested legal description, correspondence) or expert testimony.

Section 2

A. Purpose of Practice Guidelines

The following *Practice Guidelines* (hereafter referred to as *Guidelines*) for Land Surveying in this State of New York have been created to facilitate increased uniformity and ensure that surveys are performed and documented in accordance with acceptable procedures. All surveyors should consult with these *Guidelines* and be familiar with pertinent New York statutes, rules and regulations regarding the practice of the profession. These *Guidelines*:

1. Represent the current thinking of the State Board that amplifies a Regents Rule on unprofessional conduct.
2. May serve as a frame of reference by both the public and practitioners as to what constitutes good practice.
3. Are set forth to enable the surveying profession as a whole to better protect the health, safety, and welfare of the public.
4. Are intended to facilitate consumer awareness and knowledge on the part of users of the services of professional surveyors.
5. Are to be used in conjunction with the exercise of proper individual skill, professional discretion, and good judgment in fulfilling the legal or contractual requirements of any survey.

Section 3

A. Definitions

Terminology used in these *Guidelines* is either defined herein or when not defined herein the user should refer to the 1978 edition of "Definitions of Surveying and Associated Terms" as compiled by the joint committee of the American Society of Civil Engineers and the American Congress on Surveying and Mapping. A copy of this document is available from the American Congress on Surveying and Mapping.

Client: "Client" means the party who has retained the land surveyor to provide agreed-upon services. The client may retain the surveyor directly, through either verbal or written communication, or through an intermediate party, such as an agent or attorney, in which case the intermediate party is also considered to be the client.

Section 4

A. Type & Purpose of Survey

Each surveyor should confer with the client to determine the purpose of any surveying service. The specific purpose of a survey may determine the category of service needed, the information required and the work to be done.

A survey and/or survey map should be prepared for a specific identified purpose as stated in an agreement, a written contract, on a map, or noted in a Report of Survey.

Section 5

A. Research

The surveyor should develop, determine, and substantiate with reasonable certainty a professional opinion and provide a product that adequately addresses and reflects the historical development of the subject property or project. For the purposes of this section, a record is any documentary material filed in public repositories that maintain information about the location of real property.

1. For Boundary, Title or Similar Surveys:

Research of records and record sources should be performed with sufficient scope and depth to identify with reasonable certainty:

- a. The location of the clients record boundaries;
- b. Conflicting record and ownership boundary locations within, abutting or affecting the client's property or access to the same; and,
- c. Exceptions, easements, encumbrances, rights of way, privileges, restrictions and reversions affecting the client property or access to the same in so far as they affect the professional determinations to be made by the surveyor.

Note: None of the above is intended to require the surveyor to perform the title search. It is common practice for the surveyor to rely on title search information prepared by others qualified to do so.

2. For Other Surveys

Research of records and record sources should be performed with sufficient scope and depth to identify with reasonable certainty any historical information which will have an impact on survey computations, analyses and/or determinations that may affect the subject project, (i.e., record plans, information, geodetic information such as datum, coordinates, or other necessary historical information).

Note: Other surveys are intended to include, but not be limited to, construction layout, topographic surveys and flood elevation locations.

Section 6

A. Procedures

The surveyor, within the confines of the law, standards of the profession, and in consultation with or on behalf of the client, should determine the appropriate technical criteria or standards and the level of effort necessary to support that criterion.

1. Field

Survey control and boundary points should be located with sufficient redundant measurements to enable the detection of measurement blunders and ensure consistency which will result in precision estimates correlating with required accuracy. Other field data should be collected with care and techniques consistent with the established criteria.

2. Office

Data acquired should be reduced, adjusted, and analyzed as necessary, consistent with the technical criteria or standards to be met for the project.

Section 7

A. Equipment

Fieldwork should be performed with equipment that is technologically sufficient to support the technical criterion for the project. Equipment used by the surveyor should be maintained, checked, calibrated, and documented at reasonable intervals to achieve measurements and results compatible with the intended use, required technical criterion and industry standards.

Section 8

A. Measurement Standard

All measurements should be referenced to the Standard United States or metric measurements.

1. Distance and Elevation - U.S. Survey Foot and/or metric units and sub units of the same.
2. Angles - Degrees, decimal degrees, radians, azimuths or bearings.

3. If another standard of measurement is used, it shall be so referenced and the conversion factor shall be noted. (i.e. chains, rods, poles, perches, local area standards.)

Section 9

A. Monuments

Monuments, physical or referenced, are evidence of the survey determinations made by the surveyor and provide valuable information to the client, their agent, and the public and future surveyors. Monuments set should be constructed of reasonably permanent material, solidly embedded in the ground.

1. For Boundary, Title or Similar Surveys

The surveyor should provide Monuments, physical or referenced, upon completion of the survey so that the boundaries and/or reference points are apparent, obvious or may be reasonably determined using the final report, map or information presented at the conclusion of the survey. If monuments are not set and/or a release from this obligation is obtained from the client, a note should be placed on the map explicitly indicating that monuments will not be placed as part of that survey. For example, the note might state that "property corner monuments were not placed as a part of this survey".

When conditions require setting a monument on an offset rather than at the true corner, the location should be selected so that the monument lies on a boundary line. Offset monuments should be noted as such on the survey map along with the offset distance to the true corner.

It is suggested that monuments set have the surveyor's name and/or license number affixed thereto. Monuments shall be witnessed in such a manner that they will be easily discoverable. Where monuments can not be physically set, corners should be referenced to existing physical features and/or be noted on the map.

2. For Other Surveys

If required, the surveyor should determine the extent and necessity of setting and perpetuating physical or referenced monuments based on the proposed use and purpose of the survey being performed.

Section 10

A. Internal Documents/Field Notes

Details of daily work, sketches and data collected in the field should be legible, concise and accurately reflect the field procedures. Field notes in any form should be dated, indicate the identity and duties or position of those performing the work along with traditional information such as weather conditions, equipment used, etc. Copies of data collected and fieldwork performed should be made a permanent part of the project file and should be organized in such a way so as to support the basis for determinations made.

Section 11

A. Deliverables

The surveyor should provide a professional opinion in the form of a written report, visual graphic representation, (map or electronic file) and/or correspondence as necessary, appropriate and/or as outlined in the agreement. Any such report or deliverable should be based on the surveyors' findings and professional opinion and should be:

1. Within and cover the scope of the agreement with the client;
2. Within the scope of the professional knowledge of the surveyor;
3. Supported by the facts, evidence and information relied upon by the surveyor;
4. In a format which will convey relevant and/or record information, and organized and displayed to be as comprehensible and understandable as possible to the client or their agent.

B. Mapping Requirements

All maps prepared should include the following information and all such additional information necessary to visually convey the findings of the survey to the client or their agent, other knowledgeable practitioners and/or the public.

A boundary survey map is a drawing that depicts the mathematical and physical features of a parcel of land with relation to deeds of record, map lines, and/or other pertinent reference data based upon an actual field survey. The map should:

1. Identify the client or project name;
2. Identify the surveyor, the surveyor's address and license number;
3. Identify the instruments affecting title to the parcel surveyed;
4. Identify the north reference and/or basis of bearings;
5. Provide sufficient data for the mathematical closure of the boundary lines depicted with the area enclosed indicated;
6. Clearly relate the record description calls to the parcel including deviations;
7. Identify record documents (i.e. mapping or other information) utilized in the establishment of the boundary lines surveyed;
8. Reference the parcel to the local political or municipal entities and/or boundaries (i.e. county, town, village, street lines, tax map parcel number);
9. Reference a datum and a specific benchmark or reference point when elevations are shown;
10. Identify the scale and any conversion factor necessary;
11. Identify character and location of visible physical features with reference to boundary lines as necessary to inform the owner of critical issues affecting title (i.e. encroachments, easements, structural projects and openings, visible utilities);
12. Indicate date of field survey completion and date of map preparation;
13. Identify and describe monuments found or set on the property being surveyed;
14. Identify all revision dates to original map with changes clearly stated;
15. Reference apparent easements, rights of way and lease lines;
16. Indicate applicable ties (i.e. building corners, intersections, other monuments)

Map information and or survey reports should be clear, legible, and sufficient in nature so when associated with the record description, the boundary lines are evident without supplemental data or information.

C. Survey Reports

A Survey Report if prepared, should provide a narrative description of the project, scope of work performed, a detailed description of the procedures, record information used, findings and the basis of the findings.

Section 12

A. Map Notes

All maps (hard copy and /or electronic files) shall bear the following or similar note: "*It is a violation of the State Education Law for any person, unless acting under the direction of a licensed land surveyor, to alter an item in any way.*" The altering of a boundary or title survey should only be prepared for a specific purpose named in the alteration. Any re-survey map bearing a new date should conform to the requirements of a new survey.

Section 13

A. Project File Information

Section 29.3(a)(4) of the Rules of the Board of Regents defines unprofessional conduct to include "failure by a licensee to maintain for at least six years all preliminary and final plans, documents, computations, records and professional evaluations prepared by the licensee, or the licensee's employees, relating to work to which the licensee has affixed his/her seal and signature."

Section 29.1(b)(7) of the Rules of the Board of Regents defines unprofessional conduct to include " failing to make available to a patient or client, upon request, copies of documents in the possession or under the control of the licensee which have been prepared for and paid for by the patient or client."

Section 14

A. Supervision/Review

All work by or under the authorship and signature of the surveyor shall be the professional responsibility of the surveyor.

All plans, specifications, plats, and reports prepared by the surveyor or by a full time or part time subordinate under the surveyors' supervision shall be stamped with such seal and shall also be signed on the original with the personal signature of the surveyor when filed with public officials. (NYS Education Law Section 7209)

Any documents signed and sealed by a surveyor not prepared by the surveyor or an employee under the direct supervision of the surveyor shall meet the minimum requirements as set forth in section 29.3(a)(3) of the Rules of the Board of Regents.