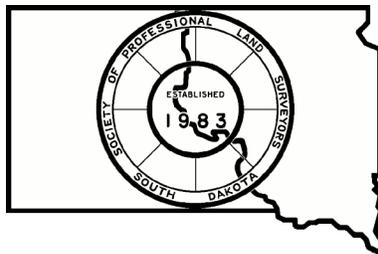


Guidelines for the Professional Practice of Land Surveying in South Dakota

Second Edition



a publication of the
South Dakota Society of Professional Land Surveyors, Inc.

Guidelines for the Professional Practice of Land Surveying in South Dakota

Second Edition, ©2016

first draft: Jan. 1985
second draft: Jan. 1986
third draft: Jan. 1989
fourth draft: Dec. 1991
fifth draft: Jan. 2000
sixth draft: Apr. 2000
First Edition: Apr. 2003

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1. Introduction

1.1. Purpose

In order to promote public confidence in the Land Surveying profession and to safeguard the welfare of the public and persons with interest in real property, as well as to facilitate the specific goals of the South Dakota Society of Professional Land Surveyors (SDSPLS), this document entitled *Guidelines for the Professional Practice of Surveying in the State of South Dakota* has been produced and officially adopted by the membership of SDSPLS.

1.2. Ethics and Professionalism

Recognizing that these efforts require vigilance and open communication, the guidelines herein are presented as methods for fostering, developing, maintaining, and advancing professionalism in the day-to-day practice of professional Land Surveying in South Dakota. The foundation on which this work is based is the ethical responsibilities inherent in any profession, especially as those ethical responsibilities extend to the public, to clients, and to other professionals. For this reason, it is incumbent upon practicing Land Surveyors to ensure that services are performed at or above minimally acceptable standards.

It is in this spirit that the professional Land Surveyor should strive for excellence, and in the same spirit this manual has been prepared - not as a final authority or procedural checklist, but as an openly accessible guide to the technical and complex aspects of our profession, illustrating by example when such desired levels of professionalism and ethics practiced by reasonable and prudent Land Surveyors have been reached.

Additionally, Land Surveyors are required by law to adhere to specific *Rules of Professional Conduct* promulgated by the South Dakota Board of Technical Professions. At the time of this writing, the following excerpt from the Administrative Rules of South Dakota, Chapter 20:38:36 indicates the high standard of "*integrity, skill, and practice*" expected of licensed Land Surveyors:

"...to safeguard the life, health, safety, welfare, and property of the public, the following rules of professional conduct are binding upon each person holding a license and on all business entities authorized to offer or perform professional services under this article. Noncompliance with any of the rules of professional conduct can result in disciplinary actions. Licensees shall comply with the following rules of professional conduct:

- (1) *Licensees shall maintain interest in the public welfare and be ready to apply their special knowledge, skill, and training for the use and benefit of the public;*
- (2) *Licensees shall be cognizant that their first and foremost responsibility is to the public welfare in the performance of services to clients and employers;*
- (3) *Licensees may not associate with or allow the use of their name in connection with any enterprise, person, or firm of questionable character such as engaging in fraudulent or dishonest business or professional practices;*
- (4) *Licensees shall carry on professional work in a spirit of fairness to all concerned, fidelity to clients and employers, and loyalty to country and shall be devoted to high ideals of courtesy and personal honor;*
- (5) *Licensees shall act with reasonable care and competence and shall apply the technical knowledge and skill which are ordinarily applied by other professionals of good standing who are practicing in this state;*

1.3. Scope

All professionals, in either public or private capacity, practicing or offering to practice Land Surveying as defined in South Dakota Codified Law §36-18A-4 are charged with having knowledge of the existence of this document, and shall be deemed to be familiar with the provisions contained herein, and to understand and strive to abide by these provisions.

The procedures described herein are recommended for all surveys or survey documents relating to the establishment, retracement, or depiction of property boundaries, or for the planning of public or private works within the definition of Land Surveying practice, or in general business correspondence with the public, clients, or fellow professionals of all disciplines in the State of South Dakota, whether on public or private lands. These recommended guidelines shall apply to every survey performed in this state.

It is intended that these guidelines will assist in meeting public and private needs as follows:

1. That real property will be mapped and documented in a clear and concise manner.
2. That newly created parcels of land will be accurately described and depicted.

3. That, in cases of retracement surveys, the client will be informed as to gaps, overlaps, or encroachments with adjoining properties that are known to the surveyor or discovered during the performance of the survey.
4. That all property corner monuments discovered and relied upon or newly placed during the survey are clearly documented.
5. That the precision, resulting accuracy, and documentation of any survey measurements be such that if a relevant property corner monument is destroyed it may be replaced by a qualified professional Land Surveyor within the guidelines recommended herein.

The guidelines recommended in this document are intended to provide professional Land Surveyors and others with a realistic expectation of properly and professionally performed services. Land Surveyors are expected to exercise individual skill, discretion and judgment in each specific task performed, and to serve the public, clients, and the surveying profession with equal fidelity.

2. Definitions

2.1. Terminology

For some of the terms used in this document, the professional Land Surveyor should refer to *South Dakota Codified Laws*, the *BLM Manual of Surveying Instructions, 2009*, or latest edition thereof, and *Blacks Law Dictionary*.

2.2. Land Surveying Practice

South Dakota statutes restrict the practice or offering to practice Land Surveying to individuals possessing a valid license issued by the South Dakota Board of Technical Professions, a division of the South Dakota Department of Labor. State law asserts that it is a Class 2 misdemeanor to attempt unlicensed practice, or to mislead the public by any false implication of qualification to perform Land Surveying services. At the time of this writing, South Dakota Codified Law §36-18A-4 defines the practice of Land Surveying as:

"...the practice or offering to practice professional services such as consultation, investigation, testimony evaluation, land-use studies, planning, mapping, assembling, interpreting reliable scientific measurements and information relative to the location, size, shape, or physical features of the earth, improvements on the earth, the space above the earth, or any part of the earth, and utilization and development of these facts and interpretation into an orderly survey map, plan, report, description, or project.

The practice of land surveying includes any of the following:

- (1) Locates, relocates, establishes, reestablishes, lays out or retraces any property line or boundary of any tract of land or any road, right-of-way, easement, alignment, or elevation of any of the fixed works embraced within the practice of land surveying;*
- (2) Makes any survey for the subdivision of any tract of land;*
- (3) Determines, by the use of principles of land surveying, the position for any survey monument or reference point; or sets, resets, or replaces any such monument or reference point;*
- (4) Determines the configuration or contour of the earth's surface or the*

position of fixed objects on the earth's surface by measuring lines and angles and applying the principles of mathematics;

- (5) Geodetic surveying which includes surveying for determination of the size and shape of the earth utilizing angular and linear measurements through spatially oriented spherical geometry;*
 - (6) Creates, prepares, or modifies electronic or computerized data, including land formation systems and geographic information systems, relative to the performance of the activities in subdivisions (1) to (5), inclusive, of this section."*
-

3. Procedural Outline for New Projects

3.1. Determining the Scope of Services

The professional Land Surveyor shall attempt to the best of his or her ability to obtain sufficient information from the client so as to obtain an understanding of the client's needs and requirements. If the required scope of services is not evident based on the client's request and the expertise of the surveying professional, and it is necessary to obtain additional information not supplied by the client, it is recommended that the Land Surveyor advise the client that such information should be furnished or obtained prior to determining the necessary services.

3.2. Self-Evaluation of Capabilities

It is the Land Surveyor's responsibility to determine whether he or she is properly qualified, or has the proper knowledge, experience, personnel, equipment and resources available to undertake the contemplated project. Having appraised the problem and evaluated the foregoing criteria, the Land Surveyor should plan a method of operation to accomplish the intended purpose of the project.

3.3. Acceptance of the Project

For the mutual protection of both client and Land Surveyor, the Land Surveyor should prepare and provide the client or the client's agent with a contract, Professional Services Agreement, memorandum, or letter of confirmation of services to be performed. The Land Surveyor should also consider informing the client as to the extent of any known limitations to the Surveyor's professional liability insurance, staffing, or schedule.

4. Records and Research

4.1. Identifying the Property

If the proposed survey work requires knowledge of or identification of the correct legal description of real property, the Land Surveyor should not rely on cadastral records such as property tax notices, computer databases, or other geographic information systems for this information. Deeds, abstracts of title, Certificates of Title, written title opinions, or combinations thereof are more appropriate evidence of correct land descriptions.

Realizing that errors or omissions caused by defects in the chain of title may exist, reasonable care shall be exercised during record research. Title defects may be revealed through an examination of title by those professionals trained and experienced in this area. As part of a contract for services, a professional Land Surveyor should consider requiring that the client provide a current title insurance commitment and disclose knowledge of any unrecorded agreements.

4.2. Acquiring Necessary Records

Along with the legal description and current plat of the subject property, it is recommended that the Land Surveyor obtain legal descriptions and/or plats of adjoining or otherwise related properties in the area. In South Dakota, the primary repository of deeds, plats, and other public records is the office of the county Register of Deeds. Additional records, often not recorded by the county, include but are not limited to:

1. Original PLSS township subdivision records from the South Dakota State Archives or other sources,
2. Original surveys and retracement survey documents from the U. S. Department of the Interior, Bureau of Land Management,
3. State, county, township, or municipal highway department records,
4. Maps of railroads and utilities,
5. U. S. Geological Survey topographic maps,
6. Aerial and satellite photography,

7. Internet-based information from the National Geodetic Survey and Federal Emergency Management Agency,
 8. Consultation with other professionals.
 9. Consultation with client(s) or landowner(s) regarding additional information that may be available in the form of private or unrecorded surveys, easements, agreements, or other known encumbrances.
-

5. Executing the Survey

5.1. Preparing for the Field

1. Examine and analyze the data obtained.
2. Form preliminary calculations.
3. Plan a procedure for performing the field survey.

5.2. Collecting Existing Evidence

1. Search for, locate and identify monuments and other evidence that may affect the survey.
2. Take appropriate measurements to correlate found evidence.
3. Where relevant, locate visible evidence of occupation, and apparent use and/or servitude between adjoining properties.
4. Maintain appropriate records of accumulated information.
5. Conduct the survey in the field utilizing accepted procedures (*See Section 6*).

5.3. Evaluating Evidence

When retracing a prior survey, the Land Surveyor should make a concerted effort to determine if any original monuments or accessories are intact, and compare recovered evidence against the record to re-establish the location of any missing monuments. When identifying property boundaries, the surveyor shall evaluate all the information available, and attempt to locate the boundary as closely as possible to the original position.

5.4 Statutory Requirements

At the time of this writing, South Dakota Codified Law §43-18-6 states:

"The resurvey and subdivision of lands by all surveyors shall be in all respects according to the laws of the United States and the instructions issued by the officers thereof in charge of the public land surveys..."

6. Methods of Survey Measurement

6.1. 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.

Many resources are available relating to surveying methods, accuracy & precision, and analysis of data.

6.2. Survey Instruments

Land Surveying relies on large-scale measurements of distance and direction, which are reduced to positions relative to a specific datum. Experience in various field procedures and equipment is necessary in order to choose the best measurement method(s), and to determine if the results obtained are reliable. All measurements are subject to random and systematic error, as well as blunders, and Land Surveyors are expected to use their expertise and training to minimize these effects. Knowledge and experience in the use of various measurement methods employable in a survey and the use of properly maintained equipment appropriate for the specific task is paramount to obtaining reliable data.

6.3. Quality Control

The professional Land Surveyor should establish and utilize quality control procedures, practices, and training for specific surveying tasks.

7. Survey Monumentation

7.1. Requirements

At the time of this writing, South Dakota Administrative Rule 20:38:37:05 states:

"All corner markers including points of curvature set by licensed land surveyors, whether they are retracement surveys, aliquot boundaries, or the subdivision of lands, must either be constructed of ferrous metal or must contain sufficient magnetic material so that the markers can be found with metal detecting devices. All corner markers set by licensed land surveyors must have affixed to the top of the corner marker a device commonly known as a survey cap which clearly shows the registration number of the surveyor."

Past practice of Land Surveying in some localities has allowed the monumentation of points of curvature without a survey cap, provided that it does not form an actual corner or intersection of property lines. As indicated in the prior paragraph, however, this practice does not conform to current regulations and should no longer be practiced.

7.2. Acceptable Composition

All property corners to be perpetuated shall be marked or referenced with a physical monument of a permanent and easily distinguishable type or character, and set in a manner providing a degree of permanency consistent with that of adjacent terrain and physical features. Monuments set by a Land Surveyor shall be made of durable material and include an element that makes it possible to detect the monuments by means of some device for finding ferrous or magnetic objects. (*ref: Administrative Rules of South Dakota, Chapter 20:38:37:05*)

Monuments that have been used to mark property boundaries in the past have included stones, pits & mounds, charred stakes, posts, iron pipe, cast concrete, cast iron, iron rods or pins, spikes or nails, chiseled crosses, masonry nails, wood stakes, and various other items.

Some of these historically acceptable forms of property corner monuments remain appropriate for present-day applications, when conforming to South Dakota Administrative Rule 20:38:37:05 by being composed of iron or other magnetic material and having a survey cap affixed to them. In certain cases, however, it is recognized that site conditions may preclude setting a standardized type of survey monument. The following list summarizes what may generally be considered as acceptable forms of survey monumentation:

1. Steel rebar: ½ inch diameter or larger, a minimum of 18" long with properly stamped survey cap.
2. Steel pipe: ½ inch inside diameter or larger, a minimum of 18" long with properly stamped survey cap.
3. Concrete markers: minimum of 4 inch diameter or 4 inch square, a minimum of 18" long and buried in the ground, with a rebar or metal pipe cast within and properly stamped cap encased in the concrete.
4. A drill hole, or a clearly scribed or chiseled mark, in existing concrete or stone. This shall only be used if it is impractical to set a prescribed ferrous-based monument. If it is necessary to use this type of mark, it must be clearly and descriptively identified as to location and character in an accompanying report, map or on the face of a plat document.
5. A hardened, and preferably magnetized, steel spike driven through a washer properly stamped with the Land Surveyor's license/registration number and recessed into a paved surface or similar location where a prescribed monument is impractical.

7.3. Witness Monumentation

Where it is not possible or practical to set a survey monument at the actual property corner, a Land Surveyor may choose to set what is termed a "witness corner", sometimes abbreviated as "W. C.". For example, in some areas such as a business district or urban area, buildings may be erected directly upon the property line. In such cases, a cross-mark could be chiseled on the concrete sidewalk nearby, on the extension of one of the lot lines at a convenient distance from the true property corner.

Where conditions warrant setting a witness corner monument on an offset, the location must be selected so the monument lies on a line of the survey or on the prolongation of such line. The witness corner offset distance shall not be in fractional feet unless a physical obstruction makes a non-fractional distance impractical. In all cases involving witness monumentation accompanied by the preparation of a map, plat, or report, the offset distance and direction to the witness monument shall be clearly identified.

7.4. Visibility

In most circumstances, it is recommended that property boundary monuments be identified or marked in such a manner as to facilitate visibility and recovery. The markings should be appropriate to the site conditions and vegetative cover. Consideration should be given to avoid inadvertent misidentification of temporary survey control points as property corners. When possible or feasible, avoid placement of control points near property corner positions, and remove or obscure excessive flagging at the conclusion of the survey.

The Land Surveyor should caution the client on the value and importance of his boundary monuments and recommend various methods whereby they can be protected and preserved. The Land Surveyor should also caution the client on the ramifications of moving or damaging a monument.

8. Graphic Representation of Surveys

8.1. Legibility

All information placed on a map or plat must be designed with care and foresight. Text and symbols should be placed, scaled, and oriented to convey information clearly and easily. The permanence of many survey maps also calls for consideration of the effects of time and storage. The fact that most users of recorded survey maps do not have unlimited access to original documents means that most evaluation of their content will eventually be made from scans or copies, with associated loss of detail.

South Dakota Codified Law §11-3-10 allows three sizes for recorded plats:

1. fifteen by twenty-six inches (15" × 26"),
2. eleven by seventeen inches (11" × 17", or "tabloid" size), and
3. eight and one-half by fourteen inches (8½" × 14", or "legal" size).

A number of local jurisdictions have disallowed the smaller sheet sizes in their platting ordinances, requiring all plats to be fifteen by twenty-six inches -- ostensibly due to issues of legibility.

At the time of this writing, there are no laws in South Dakota related to the minimum acceptable size of text or symbols on recorded maps or plats. Other jurisdictions are known to have very specific regulations related to this issue. Land Surveyors in South Dakota must consistently strive to produce highly legible documents to avoid outside regulation in the future.

8.2. Essential Survey Map Information

Maps prepared by professional Land Surveyors should contain the following:

Date	either or both of the performance of the field survey or certification or issuance of the map;
North Arrow	clearly visible and accurately correlated to the cardinal direction;
Map Scale	a numeric and graphic scale, designed in such a way as to remain useful if subjected to a reasonable amount of copy reduction, scanning, faxing, etc.;

- Location brief but accurate text within the map area labeling the current legal description of each tract or parcel of land surrounding and adjoining the subject property or properties, the word "unplatted" and common abbreviations being acceptable, with each adjoining public or private street or right-of-way labeled with names and overall widths, or "variable width" if appropriate. One or both of the two following methods of locating the subject area in relationship to its surroundings must be considered unless specific conditions warrant their exclusion or the employment of other methods:
1. a vicinity map depicting not less than one Public Land Survey System (PLSS) Quarter-Section or equivalent area, the nearest or most significant public street or streets, and the subject area or subject property or properties indicated within or crossing through the vicinity;
 2. depiction of at least two generally cardinal lines, approximately perpendicular to each other, drawn within, around, or near the mapped area, said lines defined by an actual or approximate nearby aliquot division of the PLSS, and labeled appropriately as "section line", "quarter line", "sixteenth line", "1/4 line", "1/16 line" or equivalent, along with text written across, around, within, or extending into the subject area, such text identifying the aliquot part(s) of the PLSS Section or Sections. Similar identification can be applied when the subject property lies within an H.E.S. or M.S., rather than part of the PLSS. If the map scale precludes positioning these lines to scale, "break line" symbols may be used;
- Surveyor's Seal and signature a representation of the seal as required by law, and the Land Surveyor's signature nearby or overlapping. The Land Surveyor's name and license number must be clearly visible. A handwritten date can also be added. It is advised but not required in every case that a Surveyor's Certificate be employed to clarify the purpose and extent of the survey work (*see Section 9*);

Contact Information the Land Surveyor's business or personal name (as appropriate),
mailing address and telephone number;

8.3. Information for Property Boundaries

Maps prepared for the purpose of documenting property boundaries, property line measurements, subdivision calculations, property line location, boundary retracement or establishment should contain the following nomenclature in addition to the items described in Section 8.2:

Description	<p>the full, complete legal description of the subject property or properties, including, as appropriate:</p> <ul style="list-style-type: none">• Lot• Block• Subdivision Name• Quarter-Quarter Section or Government Lot• Section• Township• Range• Meridian• Homestead Entry or Mineral Survey• City• County• State <p>either within the depicted/mapped area, and/or in a sheet title, or title block;</p>
Basis of Bearings	<p>a written statement, or labeled property line, or other fixed, identifiable and recoverable labeled line. If based on a specific map projection (such as the South Dakota State Plane Coordinate System (SPCS)) the mapping angle for directions represented must be provided, the SPCS zone must be identified, and the scale factor relationship between grid and surface distances must be given;</p>
Dimensions	<p>the direction, by bearing or azimuth, of each straight property line, or the angle between each pair of intersecting property lines. Under certain circumstances, such as a simple rectangular figure, a single angle may be appropriate and acceptable. In the case of a curved property line, a minimum of any two (preferably three or more) curve elements, one of which should be the curve length, serving to define the specific, unique location of the curve including its start point and end point. If the curve is non-tangent to a connecting line or curve, it shall be labeled as "non-tangent" and either a radial bearing or chord bearing and distance must be included;</p>

Area(s)	calculated acreage or square feet (as and where appropriate). Area(s) of record may be used if appropriate and identified as being of record;
Certification	a Land Surveyor's Certification is recommended. The Certification may be written to inform the user as to the scope of the survey, but should not be worded so as to remove responsibility for performing substandard work or for excluding services that a prudent professional would include (<i>see Section 9</i>);
Legend	showing symbols, linetypes, and abbreviations, explaining jargon, and representing such items as recovered and accepted property corner monuments, property corner monuments set during the course of the survey, and identifying measurements as being made during the course of the survey, or as shown on a plat of record;
Easements	where appropriate or specified, easements as located in accordance with research performed or furnished, or as shown on a plat of record;
Other	where appropriate or specified, other information such as visible, observed encroachments, boundary gaps or overlaps, and other relevant information discovered during the performance of the survey may also be shown;

8.4. Specific Cadastral Survey Maps

1. Subdivision Plats

Surveys intended to divide tracts into multiple parcels, or to revise the location of property lines, or to separate one or more parcels out of a larger "parent" tract, or to combine one or more parcels, must follow numerous state-legislated requirements, as well as local governmental regulations. In addition, it is often beneficial to follow local custom, if it does not contradict any laws or regulations.

Chapter 11 of South Dakota Codified Law establishes most of the basic requirements for subdivision plats, however, local jurisdictions -- especially in urban areas -- often have extensive, complicated regulations. Before practicing in

a specific area, in order to adequately serve the client and the public, the Land Surveyor should study and become familiar with all relevant platting, planning, and zoning requirements of that jurisdiction, and/or consult with another professional Land Surveyor with local expertise.

2. Record of Survey

A Record of Survey within the purpose and intent of this document is defined as a graphic representation of any parcel or tract of real property whose primary purpose is to show the results of a boundary retracement survey.

Recommendations for a Record of Survey

A. Map Size

The size of the document(s) should conform to the requirements of the project. A minimum size of eight and one-half inches by eleven inches (8½"x11" or "letter" size) is recommended. A larger size drawing may be used so that the drawing will be of sufficient size and scale to easily note the features required.

B. Ownership of Documents

The original map, along with the associated research and related materials, should be retained by the Land Surveyor as part of his permanent records. If retained, he or she shall have free use of this document, the field notes, and any other records so developed to facilitate future surveys. The Land Surveyor should be cautious and exercise good judgment in such use to reasonably protect the interest of the client for whom the survey was prepared.

C. Depicted Elements

In addition to the elements previously addressed in Sections 8.1, 8.2, and 8.3, a Record of Survey drawing shall be neatly prepared at an appropriately legible scale; shall indicate the location of recovered boundary monuments or other evidence forming the basis of the Land Surveyor's opinion of the boundary lines being documented; shall indicate the location of property corner monuments set or replaced during the survey; and shall contain optional pertinent physical features (natural, artificial or both); and include other data and information

developed by and during the survey that is relevant, or important to the boundary surveyed.

The title of the document shall exhibit the heading "Record of Survey", and observed apparent encroachments, or other information discovered during the performance of the survey should be shown graphically and/or labeled if the acquisition and depiction of such information forms part of the purpose of the survey.

Record of Survey documents may also depict, document, or describe other measurements, properties, descriptions, structures, owners, contract owners, easements, utilities, recording information, topography, encroachments, etc. The Land Surveyor is advised to include a statement or certificate on the face of the Record of Survey, informing the intended user as to the purpose for depicting certain information, and to describe any limitations (*see Section 9*).

3. Land Title Surveys

Within the purpose and intent of this document, Land Title Surveys are defined as surveys conforming to the most recent effective version of *Minimum Standard Detail Requirements For ALTA/NSPS Land Title Surveys*, jointly adopted by the American Land Title Association and the National Society of Professional Surveyors.

As specified within the ALTA/NSPS minimum standard, any modifications to this standard or elimination of some of the requirements therein prohibits the survey from being labeled or referred to as an ALTA/NSPS Land Title Survey, thereby removing the legal protections covered by the standard.

4. Improvement Location Exhibits

An Improvement Location Exhibit is defined herein as an instrument, common to the mortgage lending industry, whereby substantial proof is submitted regarding the location of building(s) and other depicted improvements on or within the land covered by a specific legal description. It is the product of a professional service provided by a licensed professional Land Surveyor.

Federal mortgage regulations administered by the Federal National Mortgage Association (FNMA, or 'Fannie Mae') and the Federal Home Loan Mortgage Corporation (FHLMC, or 'Freddie Mac') require mortgages that are subject to sale

on the secondary market to be covered by an acceptable title insurance policy. To be acceptable, a title insurance policy may not include what is commonly referred to as a "survey exception". In general terms, a "survey exception" is a clause in a title insurance policy intended to absolve the insurer from any property defects that *"an accurate survey and inspection of the land"* would disclose.

To remove a "survey exception" from a title insurance policy, title insurance companies solicit "accurate surveys" for their own benefit as well as the benefit of potential lenders. Although the Real Estate Settlement Procedures Act (RESPA) allows the fee for this service to be recovered from the mortgagor (the buyer or party gaining interest in the depicted property), it is important to remember that the beneficiary of the "accurate survey" at this stage is the lender and the insurer for the lender.

As a professional service performed by a licensed Land Surveyor, mortgagors often desire to rely upon the information provided for extrapolated purposes, especially since they have borne the expense of the service. Confusion introduced by the use of jargon can go unrecognized by the various parties engaged in the process of title transfer - many of whom are unaware of the differences between boundary retracement surveys and exhibits that may be based on more limited acquisition of boundary evidence.

For these reasons, it is incumbent upon the Land Surveyor to communicate with clients and clearly indicate the purpose and any constraints under which the service may have been performed.

Recommendations for Improvement Location Exhibits

A. Research

If the Land Surveyor's research indicates that the existing legal description is insufficient, or may be subject to junior/senior rights, the Land Surveyor shall advise the client that additional information or services may be required to complete the Improvement Location Exhibit. If the Land Surveyor is to proceed, he or she must identify the correct legal description and obtain reliable record property boundary information.

After the required written documents have been acquired (*see Section 4*) and reviewed by the Land Surveyor, a field investigation of the property

shall be conducted. The Land Surveyor shall make a thorough search for physical monuments, make measurements, and observe evidence of occupation.

B. Depicted Elements

In addition to the elements addressed in Sections 8.1, 8.2, and 8.3, all Improvement Location Exhibits shall contain the following information:

1. The title of the document shall include the heading "Improvement Location Exhibit".
2. Specific indication of all observed points of physical vehicular access to the property that are in-use, potentially available for use, or in use by other parties.
3. Observed apparent encroachments onto or from the property.
4. The physical/ mailing address of the property, if available.
5. Permanent structures (e.g., residences, garages, outbuildings with foundations) shall be shown and labeled with their exterior dimensions and located by including at least two dimensions roughly perpendicular to each other and shown perpendicular or radial to the nearest property line(s). Structure location dimensions should be within 0.5 foot for dimensions under 50 feet. Structure location dimensions greater than 50 feet may exceed 0.5 foot. The unquantified operators "+/-" or "±" (as well as the phrases "plus or minus" or "more or less") should not accompany dimensions as an indicator of uncertain measurement. Instead, a statement as to the statistical tolerance or margin of error of measurements is recommended.
6. All property corner monuments found and utilized shall be identified as to character and dimensioned as to location.
7. Possible boundary or description gaps or overlaps should be shown.
8. Property line dimensions wherein such dimensions are of public record such as in a deed or on a recorded plat must be shown as

originally given. Measured dimensions may be also be shown if identified as such.

9. Name of the owner of the property or the name of the person who requested the Improvement Location Exhibit.
10. Easement information requested by the client and contained in documents provided to the Land Surveyor by the client. If the inclusion of any easement information on the Improvement Location Exhibit is not meant to imply that all easements are represented, a note should be included explaining that all easements may not be shown.

C. Certification

1. An Improvement Location Exhibit must contain a statement that the information shown is correct as of a specific date and that the Improvement Location Exhibit does not constitute a boundary retracement survey. It may state that the information shown may contain discrepancies that a subsequent boundary survey may disclose, that no property corners were set unless shown as set on this document, and/or the information shown should not be relied upon to establish any fence, structure or other improvements. If the linear or directional values shown are based only on record or deed information and have not been verified a note to that effect must be placed on the drawing.
2. The Improvement Location Exhibit shall be signed and sealed by the Land Surveyor who performed or supervised the Improvement Location.

8.5. Surveys for Design Professionals

1. Topographic Surveys

Topographic surveys determine the horizontal and vertical location of the physical features on the surface of the earth, chiefly to provide the information on the basis of which improvements can be designed. Topographic surveys can also be underground (e.g. mining) surveys and aerial surveys. The primary intent of topographic surveys is to present existing conditions.

Topographic maps should include the following information in addition to the items described in Section 8.2:

- A. Generous use of contour labels,
- B. Vertical datum, bench mark(s), or control network reference,
- C. Contour interval.

Care must be taken that the purpose and limitations of this type of map are understood by the user. When the topographic map is combined with a boundary survey, it should include the provisions required when depicting property boundaries. If no property boundaries are depicted, the title should avoid use of the word "survey", instead the title "Topographic Map" is suggested, and the words "THIS IS NOT A BOUNDARY SURVEY" should be prominently printed upon the map.

9. Surveyor's Certifications

9.1. Statutory Requirements

At the time of this writing, South Dakota Codified Law §11-3-4 states, in part:

"...Every plat provided for in this chapter shall be certified by the registered land surveyor, who shall attach an official seal thereto as specified in §36-18A-45 as being in all respects correct... No such plat may be recorded until all the provisions of this section have been fully complied with..."

and SDCL §36-18A-45 states, in part:

"...The application of the licensee's seal and signature and the date constitutes certification that the work on which it was applied was done by the licensee or under the licensee's responsible charge..."

"...Preliminary work shall contain a note that the submittal is Not for Construction, Preliminary, or other such explanation that it is not final;..."

9.2. Certification and Liability

All certifications for boundary surveys must follow South Dakota Codified Law and be signed and sealed by the Land Surveyor who performed or supervised the survey. The wide variety of client needs may require other types of certification.

The Land Surveyor should use sound and practical reason when certifying a drawing, and should take care that the requirements of the client are necessary and do not legally bind him to those things to which he does not wish to be bound.

10. Recording Survey Information

10.1 Subdivision Plats

Subdivision plats and right-of-way plats shall be surveyed and platted as provided in South Dakota Codified Law. If a Land Surveyor encounters a local or state regulation or planning request that is in violation of state statute, the Land Surveyor should point out such discrepancy and refrain from perpetuating a non-conforming subdivision procedure.

10.2 Highway Plats

If a Land Surveyor in the employ of the state or in the private sector is engaged in the preparation of right-of-way plats, such plats shall be prepared with the same standard of care as other subdivision plats, including parent tract boundary retracement, and permanent monumentation at or beyond the limits of proposed construction.

10.3 Easements and Exhibits

An easement is most simply defined as a limited non-possessory interest in the land of another. Easements transfer specific, defined property rights from the owner of a property to another person, entity or property. The easement should be defined by the use, duration, and boundary location.

Laws related to Easements can be found in South Dakota Codified Law in Chapters 31, 46, and 49. Determination of the boundary of the easement is regulated by SDCL Chapter 36-18A-4(1). It establishes that the "Practice of land surveying includes ... Locates, relocates, establishes, reestablishes, lays out, or retraces any ... easement ...".

A land surveyor preparing documentation for an easement should follow standard survey practices as when conducting any boundary survey. The easement boundary depicted on the easement exhibit should be reviewed and approved by both the owner and the holder of the easement rights.

In some cases the owner of the easement may desire to have the easement defined by a lot. These lots should be identified in the title of the exhibit as "Plat of Lot _ of (legal description of the owner's property)". Typical uses of this format in South Dakota are commonly encountered in connection with South Dakota Department of Transportation and other local government highway/street rights of way easements (H-Lots), drainage easements (P-Lots),

and levee easements (E-Lots).

In most cases the Land surveyor should refrain from assisting with the narrative portions of easement documents, describing the use and duration of the easement. As legal documents, the owner should be advised to retain the services of a qualified attorney, however, the property owner and the beneficiary of the easement may agree to prepare the documents.

All permanent and long duration easements should be filed against the property in the office of the county register of deeds.

10.4 Certified Land Corner Records

At the time of this writing, South Dakota Codified Law §43-20-3 states:

"A surveyor shall complete, sign, and file with the register of deeds of the county where the corner is situated, a written record of corner establishment or restoration to be known as a "corner file" for every public land survey corner and accessory to the corner which is established, reestablished, monumented, remonumented, restored, rehabilitated, perpetuated, or used as control in any survey by the surveyor, and within ninety days thereafter, unless the corner and its accessories are substantially as described in an existing corner record filed in accordance with the provisions of this chapter."

At the time of this writing, a clearer explanation of this process is given by Administrative Rules of South Dakota, Chapter 20:38:37:05:

"...A licensed land surveyor shall perform the following services:

(1) Filing certified land corner records. On certified land corner records, a licensed surveyor shall date, sign and affix the licensed surveyor's number and seal on 8½ by 14-inch sheets before presenting a certificate for filing. The certified land record form shall show by sketch and explanation a complete description of the found or reestablished corner monument. The accessories established, stating how marked, material used, witness trees, witness objects, bearing objects, and courses and distances to adjacent corners if determined in reestablishing the corner described shall be on the certificate. The licensed surveyor shall describe evidence found of the original corner and give the original record if known. The licensed land surveyor may include other reference information such as State Plane Coordinates or other specified geodetic coordinates as evidence of the corner position. The licensed land surveyor may use the back of the certificate for additional sketches;

(2) File with the register of deeds. The certified land corner shall be indexed by the register of deeds in each county on a township index sheet provided by the board. Counties using microfilm or similar devices for storage of documents shall return the original to the land surveyor unless notified otherwise..."

10.5 Affidavit of Surveyor

At the time of this writing, South Dakota Codified Law §43-18-11 states:

"If any typographical error or omission of data is detected on a recorded plat, the original land surveyor shall record an affidavit confirming the error or omission. If the original land surveyor is deceased, is not licensed as a land surveyor pursuant to chapter 36-18A, or cannot be located, two licensed land surveyors may record an affidavit confirming the error or omission. The surveyor or surveyors shall file an affidavit describing the nature and extent of the error or omission and the correction or addition to the recorded plat. The surveyor or surveyors shall also note the document reference number or recording information of the recorded plat on the affidavit. The register of deeds shall stamp on the plat of record, the word, corrected, and note the document reference number or recording information on the recorded affidavit. A copy of the recorded affidavit shall be filed with the director of equalization and shall be mailed by the surveyor or surveyors to any owner of record. No affidavit of correction may be used to change or modify the plotted or recorded property lines as originally monumented. This affidavit of correction does not require prior approval by any governing body."

11. Legal Land Descriptions

11.1 Platted Land Descriptions

(intentionally left blank in Second Edition)

11.2 Aliquot Descriptions

(intentionally left blank in Second Edition)

11.3 Metes and Bounds Descriptions

At the time of this writing, South Dakota Codified Law §19-01 states:

"When any owner of a government subdivision or a platted tract or lot divides that land into parcels for the purpose of transfer that cannot be described except by metes and bounds, the parcels of land so divided must be platted before any instrument of transfer can be recorded. Real property descriptions using metes and bounds may be recorded only if a previous conveyance by the same metes and bounds has been made and recorded."

Although metes and bounds cannot be used for the division and transfer of land in South Dakota, such descriptions are commonly requested when conforming to specific Federal requirements such as wetland delineation, and for other purposes such as local government zoning.

11.4 Resolving Ambiguities

When a new land description is to be drafted but is restricted along one or more boundary lines because of undesirable wording, and is already of record, every attempt should be made to:

1. clarify the existing description as much as possible, within limitations, to eliminate doubts as to that description's intent; or
2. write the "new" portion of this description to comply as much as possible with accepted guidelines.

Such a new description is often called *"A Suggested Revised Land Description"*.

When preparing a Retracement Survey, the existing land description should be examined within itself, with respect to its adjoiners, and with respect to encroachments. If necessary, “*A Suggested Revised Land Description*” may be prepared. The client should then be advised to seek competent and experienced legal help. The Land Surveyor should recognize his limitations, and refrain from giving legal advice. Platting of the existing deeded land can clarify the description with respect to its adjoiners.

12. Survey Reports

Due to insufficient field evidence, ambiguous legal descriptions, other errors and/or omissions in available research material, the physical location for boundary lines may be uncertain. The Land Surveyor should clearly indicate the nature of discrepancy on his Record of Survey, and may include a written report offering his professional opinion as to the nature of the problem and the probable cause and effect. The Land Surveyor may want to recommend that his client seek legal assistance. It should be kept in mind that the duty of the Land Surveyor is to locate and mark lines indicated by deeds and descriptions, and not to confirm the validity of these lines as property lines. The question of a line being a property line must be resolved by a court of law.

13. Data Preservation

Every Land Surveyor is encouraged to preserve his records, field notes and plats. It is of particular importance that arrangements be made for proper transfer of records. Filing records in a public place may excuse this obligation.

The Land Surveyor should keep a file and index of all field notes, calculations, maps, plats, photographs, and other data accumulated during surveys.

Land Surveyors are encouraged to accumulate information on the historical development of surveys in the geographical area of their practice.

Although communications between the Land Surveyor and client are confidential, he or she must be prepared to discuss the technical aspects of surveys with other Land Surveyors.
