

# 2010 Salina Seminar Series

Kansas

Minimum Standards for Boundary Survey  
and

Mortgagee Title Inspections Standards of Practice

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# Preface

These standards were first adopted by the Kansas Society of Land Surveyors at the Annual Meeting in 1978, amended February 1988 and October 23, 1998. It is the intent of these Standards to provide the surveyors and the recipients of surveys a realistic and prudent yardstick of adequate surveying performance. Includes KSLs-approved revisions of 10/17/05 and 10/20/06. *Changes in italics were approved by the KSLs Board and ratified by the general membership December 2009 for clarification as requested by the Kansas State Board of Technical Professions. The Rules and Regulations that reference these Minimum Standards were adopted by the Kansas State Board of Technical Professions on May 24, 2010.*

## Scope

The minimum standards of this section apply to every boundary survey performed in the State of Kansas, except that where higher standards for boundary surveys are prescribed by statute, administrative rule or ordinance, then such standards shall govern.

# Definitions

**BOUNDARY SURVEY.** A 'boundary survey' as used in this section means any land survey performed for the purpose of describing, monumenting, locating the boundary lines of, or platting one or more parcels of land.

**PLAT.** 'Plat' or "Certificate of Survey" as used herein means any graphic representation of the survey as defined in KSA 74-7001 et seq.. "Plat of Subdivision" means any survey requiring a subdivision of land into lots and blocks requiring ratification.

**SURVEYOR.** 'Surveyor' as used in this section means a Licensed Land Surveyor, or any person authorized by statute KSA 74-7001 et seq..

# KSA 74-7001 et seq.

## Chapter 74.--STATE BOARDS, COMMISSIONS AND AUTHORITIES

### Article 70.--STATE BOARD OF TECHNICAL PROFESSIONS

#### **74-7001. Technical professions; unlawful practice; representation and use of title.**

- (a) Except as otherwise provided in this act, it shall be unlawful for any person to practice or to offer to practice in the state of Kansas, any profession included within the term technical professions, as such term is defined in the provisions of this act, unless such person has been duly licensed to practice such profession under this act or holds a certificate of authorization issued under K.S.A. 74-7036.
- (b) Any person practicing any technical profession in this state, or calling or representing such person as a licensed practitioner of such technical profession, or using the title of a licensed practitioner of such technical profession shall be required to submit evidence that such person is qualified to practice such technical profession and is duly licensed under this act or holds a certificate of authorization issued under K.S.A. 74-7036.

**History:** L. 1976, ch. 334, § 1; L. 1978, ch. 326, § 1; L. 1980, ch. 244, § 2; July 1.

# Definitions Cont...

**DIRECT SUPERVISION:** Direct supervision defines the relationship between the Land Surveyor and those persons who are performing the work controlled by the Land Surveyor. Direct supervision means the Land Surveyor has control over those decisions that are the basis for the findings, conclusions, analyses, rationale, details and judgments that are embodied in the development and preparation of land surveying projects, plats, reports, and related activities. Direct supervision requires providing personal direction, oversight, inspection, and supervision of the work being certified.

**RESPONSIBLE CHARGE:** Responsible Charge may be delegated to an individual by the Land Surveyor for the purpose of initial supervision of surveying projects. The final decisions on all surveying projects shall be made by the Land Surveyor having direct supervision as defined previously.

# Boundary Descriptions (AKA: LEGAL DESCRIPTIONS)

Descriptions defining land boundaries written for conveyance or other purposes shall be complete, providing definite and unequivocal identification of lines and boundaries thereof. The description shall contain dimensions sufficient to enable the description to be plotted and retraced and shall describe the land surveyed by either government lot, aliquot parts, quarter section, section, township, range and county; or by metes and bounds commencing with a corner marked and established in the U.S. Public Land Survey System; or if such land is located in a recorded subdivision or recorded addition thereto, then by the number or other description of that lot, block or subdivision thereof. If the parcel is described by metes and bounds it may be referenced to known lot or block corners in recorded subdivisions or additions.

## RESEARCH & INVESTIGATION

Every boundary survey should be made in accordance with the existing or proposed record title boundaries as nearly as is practicable. The surveyor shall, insofar as practical, acquire the necessary data, which may include but are not limited to deeds, maps, abstracts of title, section corner ties, subdivision plats, road records, County Surveyor's records, section lines, and other boundary line locations in the vicinity. The surveyor shall analyze the data and make a careful determination of the record title boundaries of the property to be surveyed.

# CONDUCT OF SURVEY

The surveyor shall, or under his or her direct supervision, conduct his or her survey consisting of, but not limited to, the following items:

1. Search thoroughly for necessary controlling monuments and other physical evidence.
2. If considered necessary, investigate possible parcel evidence supporting positions of obliterated control monuments and take necessary oaths.
3. Cooperate with appropriate public officials.
4. Take necessary measurements to analyze and evaluate evidence.
5. Make sufficient check measurements and computations to satisfactorily verify the initial fieldwork.

# CONDUCT OF SURVEY Cont...

6. Where relevant, locate lines of possession.
7. Evaluate the evidence, and apply the proper theory of location in accordance with statutes and/or precedents in determining the position of all corners to be established or re-established.
8. In the event of the discovery of a material difference with the work of another surveyor, an attempt shall be made to contact the other surveyor and discuss the difference.
9. Monuments set as required herein shall comply with statute, administrative regulations and contractual agreement with the client.
10. All pertinent information, measurements, and observations made in the field during the course of the survey shall be recorded and kept in a manner that is intelligible to another surveyor.



# PLAT OR CERTIFICATE OF SURVEY And/or PLAT OF SUBDIVISION

The client shall be furnished a plat of survey showing the following information as defined by Items 1 through 12:

1. The name, address, and phone number of the surveyor, company, or corporation responsible for the survey.
2. The boundary description (as defined in K.S.A. 74-7003) of the parcel surveyed.
3. North arrow, scale, (graphic scale if deemed appropriate), and angles, bearings or azimuths. When bearings or azimuths are shown, the basis shall be indicated.
4. All pertinent measured dimensions. On other dimensions, sufficient notations shall be used to identify their source; such as, but not limited to the following examples:
  - Record measurement (R)
  - Calculated from record value (CR)
  - Calculated from measurements (CM)

# K.S.A. 74-7003

## Chapter 74.--STATE BOARDS, COMMISSIONS AND AUTHORITIES

### Article 70.--STATE BOARD OF TECHNICAL PROFESSIONS

**74-7003. Definitions.** As used in K.S.A. 74-7001 et seq., and amendments thereto:

(a) "Technical professions" includes the professions of engineering, land surveying, architecture, landscape architecture and geology as the practice of such professions are defined in K.S.A. 74-7001 et seq., and amendments thereto.

(b) "Board" means the state board of technical professions.

(c) "License" means a license to practice the technical professions granted under K.S.A. 74-7001 et seq., and amendments thereto.

(d-i) REMOVED FOR SLIDE SHOW PRESENTATION

(j) "Land surveyor" means any person who is engaged in the practice of land surveying as provided in K.S.A. 74-7001 et seq., and amendments thereto, and who is licensed by the board.

(k) "Practice of land surveying" includes:

(1) The performance of any professional service, the adequate performance of which involves the application of special knowledge and experience in the principles of mathematics, the related physical and applied sciences, the relevant requirements of law and the methods of surveying measurements in measuring and locating of lines, angles, elevation of natural and man-made features in the air, on the surface of the earth, within underground workings and on the bed of bodies of water for the purpose of determining areas, volumes and monumentation of property boundaries;

(2) the planning, mapping and preparation of plats of land and subdivisions thereof, including the topography, rights-of-way, easements and any other boundaries that affect rights to or interests in land, but excluding features requiring engineering or architectural design;

# K.S.A. 74-7003 Cont....

- (3) the preparation of the original descriptions of real property for the conveyance of or recording thereof and the preparation of maps, plats and field note records that represent these surveys;
  - (4) the reestablishing of missing government section corners in accordance with government surveys;
  - (5) the teaching of land surveying by a licensed land surveyor in a college or university offering an approved land surveying curriculum of four years or more; and
  - (6) the locating or laying out of alignments, positions or elevations where such work is part of the construction of engineering or architectural works.
- (l) "Person" means a natural person or business entity.
- (m) "Plat" means a diagram drawn to scale showing all essential data pertaining to the boundaries and subdivisions of a tract of land, as determined by survey or protraction. A plat should show all data required for a complete and accurate description of the land which it delineates, including the bearings (or azimuths) and lengths of the boundaries of each subdivision.
- (n-o) REMOVED FOR SLIDE SHOW PRESENTATION
- (p) "Business entity" means a general corporation, professional corporation, limited liability company, limited liability partnership, corporate partnership or other legal entity created by law.
- (q) "Principal" means a person who serves in a business entity as an officer, member of a board of directors, member of a limited liability company or partner.

**History:** L. 1976, ch. 334, § 2; L. 1978, ch. 326, § 2; L. 1992, ch. 240, § 3; L. 1995, ch. 104, § 3; L. 1997, ch. 128, § 1; L. 2009, ch. 94, § 1; July 1.

# PLAT OR CERTIFICATE OF SURVEY And/or PLAT OF SUBDIVISION Cont...

5. All pertinent monuments found or set with a notation indicating which were found and which were set, and identified as to size and type. Found monuments shall be accompanied by a reference to their origin, or noted "Origin Unknown." The relationship of monuments to the surveyed lines and corners shall be indicated.
6. All found or set monuments and evidence of possession beyond the surveyed premises on which establishment of the corners of the surveyed premises are dependent.
7. Where possession affects the survey, the character or type of observed evidence of possession and the location of such evidence in relation to the surveyed boundary lines shall be noted.
8. Delineation must be such that gaps, gores and overlaps are clearly shown and dimensioned. When a gap, gore or overlap is determined and shown by dimension or note, adjoining parcels identified by the title description or record reference, shall be shown.

# PLAT OR CERTIFICATE OF SURVEY And/or PLAT OF SUBDIVISION Cont...

9. Easement lines, where known. All easements, evidenced by a record document which have been provided to the surveyor, shall be shown, both those burdening and those benefiting the property surveyed. Indicate the source document and/or recording data of record documents. Observable evidence of unrecorded easements and/or servitudes of all kinds on or across the surveyed property and adjoining properties if they appear to affect the surveyed property shall be shown.
10. Sufficient data to clearly indicate the theory of location applied in finalizing the locations of the corners, any data at variance with this theory of location, and sufficient data to allow the facile retracement of all pertinent lines and points shown on the plat.
11. Any data which is excluded from the survey by agreement with the client, such as easements, setbacks, or other encumbrances shall be noted on the survey as “not shown by agreement with client.”

# PLAT OR CERTIFICATE OF SURVEY And/or PLAT OF SUBDIVISION Cont...

12. A certificate stating the following: The date the survey was completed in the field, and that the survey was made by the surveyor or under his or her direct supervision. Such certificate shall be accompanied by an original signature and seal. The signature and date shall be placed across the surveyor's seal in blue ink *OR, if filed electronically, shall otherwise adhere to the electronic certification standards approved by the Kansas State Board of Technical Professions rules and Regulations as described in K.A.R. 66-6-1.*
  
13. Where Kansas State Plane Coordinates ( As Defined by KSA 58 2006 ) are shown on a survey they will be shown in meters or US Survey Feet, with the conversion factor of 39.37 inches per meter plainly shown on the plat.

# *K.A.R. 66-6-1*

## Board of Technical Professions Permanent Administrative Regulations

### Article 6.—PROFESSIONAL PRACTICE

#### 66-6-1. Seals and signatures.

- (a) Each licensee shall obtain a seal of the design approved by the board in compliance with K.S.A. 74-7023, and amendments thereto. The seal may be a rubber stamp, an embossed seal, or a computer-generated seal
- (b) Each original drawing, document, technical report, legal description, record, and paper prepared by or under the direct supervision of the licensee in the licensee's professional capacity shall be stamped with the licensee's seal, unless the project is exempt from the requirements for licensure pursuant to K.S.A. 74-7031, K.S.A. 74-7032, K.S.A. 74-7033, K.S.A. 74-7034, or K.S.A. 74-7042, and amendments thereto.

After the licensee's seal has been applied to the original or record copy, the licensee shall place the licensee's handwritten signature and date across the seal.

- (c) (1) Any licensee may use a digital signature if the signature meets all of the following requirements:
  - (A) Is unique to the person using it;
  - (B) is able to be verified;
  - (C) is under the sole control of the person using it; and
  - (D) is linked to an electronic document bearing the digital signature in such a manner that the signature is invalidated if any data in the document is altered.
- (2) Each displayed copy of, and each hard copy printed from, a transmitted or stored electronic document containing a digital signature shall bear the facsimile of the signature, date of signing, and seal and shall be a confirmation that the electronic document was not altered after the initial digital signing of the document. If the electronic document is altered, the facsimile of the signature, date, and seal shall be caused to be voided.

(Authorized by K.S.A. 74-7013; implementing K.S.A. 74-7023; effective May 1, 1978; amended May 1, 1984; amended May 1, 1985; amended May 4, 1992; amended Feb. 22, 1993; amended Feb. 13, 1995; amended March 1, 1996; amended Feb. 6, 1998; amended Nov. 2, 2001; amended March 28, 2008.)

# KSA 58 20a06

## Chapter 58.--PERSONAL AND REAL PROPERTY

### Part 6.--MISCELLANEOUS PROVISIONS

#### Article 20a.--STATE PLANE COORDINATE SYSTEM

**58-20a06. Same; coordinate system, defined.** For purposes of more precisely defining the Kansas coordinate system of 1983, the following definition by the national ocean survey/national geodetic survey is adopted:

The "Kansas coordinate system of 1983 north zone (zone code 1501)" is a Lambert conformal conic projection of the North American datum of 1983, having standard parallels at north latitudes 38 degrees 43 minutes and 39 degrees 47 minutes along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian 98 degrees zero minutes west of Greenwich and the parallel 38 degrees 20 minutes north latitude. This origin is given the coordinates: N = 0 meters and E = 400,000 meters.

The "Kansas coordinate system of 1983 south zone (zone code 1502)" is a Lambert conformal conic projection of the North American datum of 1983, having standard parallels at north latitudes 37 degrees 16 minutes and 38 degrees 34 minutes along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian 98 degrees 30 minutes west of Greenwich and the parallel 36 degrees 40 minutes north latitude. This origin is given the coordinates: N = 400,000 meters and E = 400,000 meters.

**History:** L. 1995, ch. 80, § 6; July 1.



# MONUMENTATION

Unless specifically excluded by agreement with the client, the surveyor shall establish, or confirm the prior establishment of, permanent monuments at each and every corner on the boundaries of the parcel or tract of land being surveyed. In such cases where the placement of a required monument at its proper location is impractical, it shall be permissible to set a reference monument close by the point, and if such reference monument is set, its location shall be properly shown on the plat of survey. When conditions warrant setting a reference monument on an offset, the location shall be selected so the reference monument lies on a line of the survey or on the prolongation of such line. Reference monuments shall not be offset in fractional feet or less than two feet from the true corner unless a physical obstruction affects their location. Even half meter offsets may be utilized for surveys requiring metric measurements. Set monuments, when possible, shall be constructed of material capable of being detected by commonly used magnetic locators. Where practical, said monuments shall be firm and substantially free from movement. These monuments shall have affixed thereto a cap or other device bearing the registration number of the surveyor in direct supervision or the corporate registration number of the corporation registered to practice land surveying in the State of Kansas (i.e. CLS 000) or the name of the governmental agency legibly stamped or imprinted thereon. Unless extenuating circumstances dictate, the minimum size monument shall be an iron pipe not less than  $\frac{1}{2}$ " O.D. or a solid steel rod not less than  $\frac{1}{2}$ " in diameter, and minimum length shall be 24 inches.

# PERPETUATION

1. Ties to government corners must be filed for record as provided by KSA 1987 Supp. 58-2001, et seq. and shall indicate whether the tie measurements are horizontal or slope.
2. All existing government corners accepted by the surveyor which do not meet the minimum monumentation standards shall, when existing conditions permit, be remonumented to standards. Original government stones shall have a metal monument or magnet placed in close proximity to the stone to facilitate the relocation.
3. After a boundary survey which results in the re-establishment of lost government land monuments or replacement of obliterated monuments, sufficient documentation of the theory applied in finalizing the locations of corners, any data at variance with this theory, and sufficient data to allow the facile retracement of all pertinent lines and points shall be provided to the appropriate County Agency charged with the preservation of this information.
4. Surveys involving the platting, replatting, lot splitting or subdividing of land into lots or tracts, and any surveys creating a new description or revised description, **shall be filed** for record in the office of the Register of Deeds of the appropriate County, *or any other County office designated for archival purposes as directed by the Board of County Commissioners.*
5. It is the duty of every surveyor to insure permanent preservation of his or her records, field notes, and plats.

# KSA 1987 Supp. 58-2001, et seq.

## Chapter 58.--PERSONAL AND REAL PROPERTY

### Part 6.--MISCELLANEOUS PROVISIONS

#### Article 20.--LAND SURVEYS

**58-2001. Monumentation of corners in boundaries of subdivisions before recording plat; type.** All corners in the boundary of a subdivision of land shall be monumented prior to recording of the plat submitted for recording after the effective date of this section. This monument shall be a metallic bar or tube set rigidly in a concrete base.

**History:** L. 1967, ch. 309, § 1; July 1.

# TECHNICAL MINIMUMS

The degree and accuracy necessary for a particular survey should be based upon the intended use of the land without regard for its present use, provided the surveyor has knowledge of the intended use. If the surveyor has no such knowledge, the degree of precision may be based on the knowledge of local regulations, requirements and conditions and the present use of the land.

The relative precision shall meet or exceed the following:

The true horizontal distance between any two points whose positions are stated relative to each other, whether directly or indirectly by calculation, shall not differ from the reported distance by more than 1 part in 10,000 plus 0.10 feet.

# MINIMUM STANDARDS FOR MORTGAGEE TITLE INSPECTIONS (MTIs)

A licensed land surveyor in the State of Kansas shall not provide to any party a mortgagee title inspection unless in possession of a work order signed by the borrower indicating that they have been advised of the different types of services available and the scope of each of these services. (See the attached recommended work order.) This work order may be changed to fit the surveyor's or the client's particular needs, except that the three services shown may only be expanded to include more services and the signature statement must remain unchanged.

## FIELD PROCEDURES

Professional notes shall be taken on all MTIs and kept as part of the surveyor's permanent record.

A diligent search for existing control and/or boundary evidence shall be made by field crews. The highest order of existing control and/or boundary evidence available shall be used to perform the MTI. The surveyor must obtain sufficient evidence relating to the property boundary to demonstrate general knowledge of the given area.

# DRAFTING

A sketch or diagram of the parcel shall be used in support of the certificate, and the following minimum standards will be used:

- a) Property lines with the boundary dimensions from the deed description or plat shall be shown.
- b) Major improvements (permanent structures) shall be shown with dimensions and descriptions (e.g., residences, garages, outbuildings with foundations, in-ground pools).
- c) Major improvement locations shall be shown with dimensions to the nearest property lines with a minimum of three dimensions shown for normal lots, and shall be sufficient to locate the structure (offsets shall be shown perpendicular to straight property lines and radially to curved property lines). The level of certainty of these dimensions, based on the evidence found in the field and not as a standard note shall be shown in parenthesis after each dimension or by means of a general note. Example: 12.5' (+/- 0.5'), or Front offsets: (+/-0.3'), Side offsets: (+/-0.4').
- d) Means of access and platted setback lines shall be shown graphically and labeled.

# DRAFTING Cont...

- e) Platted and apparent easements shall be shown and labeled. State the source of record easement information, if other than platted (e.g., miscellaneous book and page of recording. If the information was obtained from a title company, state which title company and the commitment number).
- f) The posted address shall be shown, if not posted, so state.
- g) A north arrow shall be shown.
- h) Encroachments shall be noted and shown in an obvious manner. When the level of certainty of dimensions to possible encroachments are not precise enough for a positive determination, a boundary survey shall be recommended.
- i) The following caption shall appear prominently on the sketch:  
MORTGAGEE TITLE INSPECTION  
(this does not constitute a boundary survey)
- j) If the certification and the sketch are on more than one sheet of paper it shall be so indicated (e.g., Page 1 of 2, Page 2 of 2).

# CERTIFICATION

A mortgagee title inspection shall only refer to performing an inspection of the property and shall not indicate the performance of a survey in any part of the certification. The certification shall contain the name, address, and the telephone number of the surveyor responsible for the inspection, in addition to the following:

- 1) A statement that the inspection was either conducted by the land surveyor or that the inspection was made under his or her direct supervision. The date the inspection was made and the legal description of the property inspected.
- 2) A statement that the accompanying sketch is a true representation of the conditions that were found at the time of the inspection and that the inspection was prepared for mortgagee title insurance only, and that the document does not constitute a boundary survey and is subject to any inaccuracies that a subsequent boundary survey may disclose. It shall state the fact that no property corners were set, and that the information shown on the sketch should not be used to establish any fence, structure or other improvements. It shall be stated that the linear or angular values shown on the sketch, if any, are based on record or deed information and have not been verified unless noted. Include notification that the land surveyor is not extending a warranty to the present or future owners or occupants
- 3) a) All copies of the MTI delivered to the client shall be signed and dated by the surveyor in blue Ink. The signature and date shall be placed across the surveyor's seal.  
b) The surveyor shall make a reasonable effort to discourage the unauthorized copying and reuse of all MTI's.



# RECORDS

The surveyor shall perform adequate research, maintain sufficient recorded documentation, and provide the field crews with information necessary to determine the property dimensions in the field.