

West Virginia Board of Professional Surveyors
Minimum Standards for Boundary Surveys – 23CSR5
Effective: May 1, 2008

§23-5-7. Minimum Standards for Surveys.

7.1. The purpose of these standards is to establish minimum technical criteria to govern the practice of surveying when more stringent specifications are not required. Further, the purpose is to protect the inhabitants of this state from dishonest or incompetent surveying and generally to protect the public health, safety and welfare.

7.2. General Standards applicable to all surveys and inspections.

7.2.a. The licensee in professional charge, or a designated representative, shall discuss with the client the purpose of the survey, scope of services to be provided, time frames, fees and all pertinent details of the contract prior to performing the work.

7.2.b. A licensee, endorsee, an exempt person under §30-13A-1 et seq. or persons under the direct supervision or special supervision of a licensee, endorsee or exempt person shall physically go to the site and perform a field survey.

7.2.c. The surveyor shall use methods and equipment suitable for the purpose of the survey.

7.2.d. The field notes shall be retained as a permanent record and may be handwritten or by electronic data collection or a combination thereof. When electronic data collection is used in conjunction with handwritten notes, the electronic files and the written notes constitute the entirety of the field notes.

7.2.e. The observations shall be measured to a precision that will produce the desired level of accuracy:

7.2.e.1. Angles or directions shall be reported in degrees, or parts thereof, except for the arc element of a curve which should be reported as a general direction, such as westerly or southwesterly.

7.2.e.2. Distances shall be reported on a horizontal plane in feet, based on the United States standard, or meters, or parts thereof, unless required otherwise by law, rule or regulation.

7.2.e.3. Areas shall be reported on a horizontal plane in acres, based on the United States standard, or hectares, or parts thereof, unless required otherwise by law, rule or regulation.

7.2.e.4. All curved segments or lines shall be reported with the following minimum curve elements: arc length and general direction; and the long chord direction and distance.

7.2.f. Centerline and baseline alignments shall use the standard method of stationing to reference significant points along the alignment.

7.2.f.1. Points offset from an alignment shall be referenced by the station and offset distance left or right of the alignment.

7.2.f.2. Offset distances shall be normal to the alignment, right angle to straight segments or radial to curved segments.

7.2.g. All measuring devices shall be checked periodically for accuracy and condition.

7.3. Minimum Standards for Boundary Surveys.

7.3.a. In addition to the general standards in subsection 7.2. of this rule, the discussion prior to the survey shall also cover disputes with adjoining, claim or possession areas, encroachments and other relevant information that will affect the final location of the boundary.

7.3.b. The record search shall be retained as a permanent record and shall include the record description based on current and prior deeds, conveyance from common grantor, or if necessary, the original survey or grant. It shall also include descriptions of adjoining properties, other sources of information or resolution of conflicts in descriptions.

7.3.c. A reasonable attempt shall be made to notify the adjoining during the course of the survey and gather information from those individuals having knowledge of the boundaries. The surveyor may use his or her professional discretion when deciding which individuals have vital knowledge that will aid in determining boundary locations.

7.3.d. The field survey shall consist of the following:

7.3.d.1. A field search for controlling evidence.

7.3.d.2. The location of evidence by appropriate methods and procedures.

7.3.d.3. A reasonable attempt to discuss the evidence with the owner or client, if deemed necessary by the surveyor.

7.3.e. Monumentation is required for all new or reestablished corners, or reference monuments for inaccessible corners, and is encouraged but not required at intervisible points between corners.

7.3.e.1. Natural objects chosen for monuments shall be durable, unique and easily identifiable.

7.3.e.2. Set monuments shall be durable, reasonably stable and firmly placed, able to maintain its position when subjected to extreme temperature changes and other severe weather conditions, able to be located with current or future technology and have the following dimensions:

7.3.e.2.A. Iron or steel pipes shall have a minimum inside diameter of one (1") inch and a minimum length of thirty (30") inches, when feasible;

7.3.e.2.B. Reinforcing rods (rebars) shall have a minimum outside diameter of five-eighths (5/8") inch and a minimum length of thirty (30") inches, when feasible;

7.3.e.2.C. Other artificial markers shall have a minimum cross-sectional area of one-half (1/2) square inch and shall be made of durable material, identifiable and unique and be of sufficient length to maintain its position as set forth in paragraph 7.3.e.2.

7.3.e.3. All monuments, except for natural objects, shall have caps or some other means to identify the surveyor in professional change or surveying firm responsible for setting the monument.

7.3.f. The area of the tract being surveyed shall be measured and reported to a precision consistent with the needs of the client and accepted standards of practice.

7.3.g. A plat shall be prepared for all boundary or partition surveys and subdivisions and be to a scale large enough to show significant details. The plat shall show the results of the field survey and be provided to the client. The client may prohibit a plat in the contract unless a plat is required by law, rule or regulation. The following information shall be shown on the plats, when applicable:

7.3.g.1. A north arrow and the meridian used as the basis of directions (bearings);

7.3.g.2. The outlined area of the property and all significant parts, including streets, alleys and nonlotted areas of a subdivision;

7.3.g.3. The name and location of any significant creeks, rivers or roads within the scope of the survey;

7.3.g.4. The measured length and direction of each straight boundary line by distance, bearing and quadrant or the arc length and general direction of each curved boundary, along with the long chord direction and distance and at least two (2) other curve elements: Provided, that in the case of a strip survey the station and offset method may be utilized to describe the strip. When the station and offset method is used, the alignment geometry and the control point monumentation shall also be shown on the plat.

7.3.g.5. Reference or tie lines by direction and distance to significant monuments and objects;

7.3.g.6. The description of all corners or reference monuments, including whether the monuments were found or set;

7.3.g.7. The evidence of any possession and claim areas and potential encroachments, including any overlaps or gaps, compared to the location of the record boundary line;

7.3.g.8. The tax map and parcel number, if available, of all the tracts or parcels shown on the plat;

7.3.g.9. The names of the current or past owners of the subject property, or both, and the adjoining landowners;

7.3.g.10. The current conveyance references for the subject property and the adjoining landowners;

7.3.g.11. The area, acreage or square footage, of the property;

7.3.g.12. The title of the plat for reference when recording;

7.3.g.13. General location information including the municipality, district, county, state, watershed and other information that will aid in locating the subject property. Subdivisions will include the name, lot, block and plat reference;

7.3.g.14. A written or graphical scale, or both;

7.3.g.15. The date of the survey;

7.3.g.16. The name, address, license number, signature and seal of the surveyor in professional charge.

7.3.h. A description of survey shall be prepared for all boundary surveys and be provided to the client. Descriptions shall be written using either the perimeter method or the strip method and a reference to a simultaneously or previously recorded plat or report attaching them to and making them a part of the description. The following shall be included in a description of survey, when applicable:

7.3.h.1. Descriptions referenced to a centerline or baseline alignment shall include:

7.3.h.1.A. The basis of the centerline or baseline geometry.

7.3.h.1.B. The alignment geometry and control point monumentation shall be described in a manner that another licensee will be able to retrace the alignment at a later date.

7.3.h.1.C. The beginning and ending point of the alignment shall be tied to at least one (1)

property corner in the vicinity of each intersection of the alignment and the boundary line. An alignment that passes through multiple tracts shall be required to tie to at least one (1) property corner in the vicinity of each intersection of the alignment and the boundary line.

7.3.h.1.D. The federal, state or local project numbers or references, if applicable.

7.3.h.1.E. Multiple alignments may be used in a description provided the required geometric information is included or referenced for all alignments.

7.3.h.2. Perimeter Description Method

7.3.h.2.A. A perimeter description shall be described using metes and bounds and may be used for tracts of land or easements having any shape or strip length.

7.3.h.2.B. The preamble of a perimeter description shall include the general location information, which may include the watershed, topographic location or similar information that provides a general location of the tract or easement being described; the lot and block numbers of existing subdivision; district or municipality; county and state where the property is located; and the statement, "more particularly described as follows:"

7.3.h.2.C. The body of a perimeter description shall include the point of beginning; the length and direction of each straight and curved line, including the required curve elements; the description of monumentation at each corner and relevant objects encountered along the line; the call for the adjoining landowners; the area by survey; the term "as surveyed by" followed by the name of the licensee or firm and survey dates. Strip perimeter descriptions shall include the alignment station reference and offset distance for any change in direction, significant point or event along the perimeter.

7.3.h.3. Strip Description Method.

7.3.h.3.A. A strip description may be used for strips with a uniform or variable width when a centerline or baseline alignment is being used as the control.

7.3.h.3.B. The preamble of a strip description shall include the same requirements as a perimeter method preamble as set forth in subparagraph 7.3.h.2.B. of this subdivision, if applicable.

7.3.h.3.C. The body of a uniform strip description shall include the same requirements as the perimeter method as set forth in subparagraph 7.3.h.2.C. of this subdivision, if applicable, except the calls shall describe the centerline or baseline alignment rather than the perimeter and shall include: the overall width of the strip; the offset distances left and right of the alignment; and the length and direction of each straight and curved segment.

7.3.h.3.D. The body of a variable strip description shall include the same requirements as the perimeter method as set forth in subparagraph 7.3.h.2.C. of this subdivision, if applicable, and the calls shall describe the centerline or baseline alignment as set forth in subparagraph 7.3.h.3.C. of this subdivision, except any change in direction, significant point or event along either side of the strip shall be referenced by a station and offset distance along the alignment.

7.3.h.4. The perimeter or strip method being clause shall include whether it is the same as or part of an existing tract or the lot and block numbers for newly platted partitions or subdivisions; the reference to the document by which the current owner claims title, including the grantor and grantee or deviser and devisee, date and recording reference.

7.3.h.5. The being clause shall be followed by the name, license number, signature, date of signature and seal of the licensee in professional charge. The name of a Surveyor Intern preparing the description should be shown, if applicable. In cases where the description is shown on the plat a single certification will cover both the description and the plat.

7.3.i. The report of survey shall be used when the plat and the description of survey do not adequately address all matters considered by the surveyor in performing the survey and shall be attached to and made a part of the plat and description of survey and provided to the client. The report of survey shall include:

7.3.i.1. A summary of the research and the weight given to the significant documents;

7.3.i.2. The names of persons contacted and the information they supplied.

7.3.i.3. All unusual circumstances surrounding the survey, with weight being given to conflicting evidence and encroachments, overlaps or gaps and how they were resolved.

7.3.i.4. The name of the individual preparing the report and the name, address, license number, signature and seal of the surveyor in professional charge.

7.4. Minimum Standards for Mortgage or Loan Inspections.

7.4.a. Mortgage inspections or loan inspections are subject to the general standards applicable to all surveys as set forth in subsection 7.2. of this rule, unless specified otherwise, but do not meet the definition or standards of a boundary survey and are exempt from the minimum standards for boundary survey as set forth in subsection 7.3. of this rule.

7.4.b. The licensee in professional charge, or designated representative, shall obtain recorded documentation that is sufficient to demonstrate a general knowledge of the subject property.

7.4.c. The field crew shall be provided with current information necessary to determine the property dimensions in the field and shall perform a search for existing property evidence and shall locate the property evidence, improvements, utilities and encroachments that fall within the definition of an inspection as set forth in section 2 of this rule as set forth by the Board.

7.4.d. A plat of the inspection shall be prepared and used in support of the certificate of mortgage inspection. The following items shall be shown and identified on the inspection plat:

7.4.d.1. A north arrow showing the meridian to be based on record or deed north;

7.4.d.2. A graphic scale shall be shown;

7.4.d.3. The evidence of property corners and lines found during the field survey and the property lines and the dimensions (directions and distances) shall be based on the description or plat on record and shall use the units of measurement specified therein;

7.4.d.4. Major improvements such as, but not limited to: residences, garages, outbuildings, barns, driveways, pools, porches and patios;

7.4.d.5. Location dimensions of the major improvements as they relate to the approximate location of the property lines shall be shown using: direction and distance to purported property corners; or by offset perpendicular to straight property lines; or by offset radial to curved property lines;

7.4.d.6. Apparent encroachments shall be noted, described and clearly shown;

7.4.d.7. Means of access shall be shown clearly and graphically, including shared access and shared driveways;

7.4.d.8. Platted and apparent easements shall be clearly identified, including the source of record information;

7.4.d.9. Platted setback lines shall be shown graphically;

7.4.d.10. Adjacent owner and record source shall be noted;

7.4.d.11. Physical address of the subject property, if available;

7.4.d.12. The statement "this is a mortgage inspection only, not a boundary survey" shall be clearly shown on the plat;

7.4.d.13. The name of the individual preparing the plat and the name, address, license number, signature and seal of the licensee in professional charge.

7.4.e. Flood plain certification, if required, is restricted to a review of the Flood Insurance Rate Map (FIRM) and shall not be construed as a confirmation or denial of flooding potential.

7.4.f. The surveyor must supply written notice to the landowner or other person commissioning his/her services that an inspection was performed and not a boundary survey.

7.4.g. Written legal descriptions shall not be prepared based on a mortgage inspection.

7.5. ALTA/ACSM Land Title Surveys, which are based on standards set by the American Land Title Association (ALTA) and the American Congress of Surveying and Mapping (ACSM), shall at a minimum comply with the minimum standards for a boundary survey as set forth in subsection 7.3. of this rule.