

CHAPTER 11
MINIMUM STANDARDS FOR PROPERTY SURVEYS
[Prior to 11/14/01, see 193C—Chapter 2]

193C—11.1(542B) Scope. Each professional land surveyor will comply with the minimum standards for property surveys described by statute or administrative rule. The minimum standards in this chapter apply to all property surveys performed in this state except those done for acquisition plats as described in Iowa Code chapter 354.

[ARC 7674C, IAB 3/6/24, effective 4/10/24]

193C—11.2(542B) Definitions. For the purposes of these rules, the following definitions apply:

“*Plat*” means both a plat of survey and a subdivision plat as those terms are defined in Iowa Code section 355.1.

“*Property survey*” means any land survey performed for the purpose of describing, monumenting, retracing and establishing boundary lines, dividing, subdividing, or platting one or more parcels of land.

“*Retrace*” means following along a previously established line to logical termini.

[ARC 7674C, IAB 3/6/24, effective 4/10/24]

193C—11.3(542B) Boundary location. Every property survey shall be made in accordance with the legal description (record title) boundaries as nearly as is practicable. The surveyor will acquire data necessary to retrace record title boundaries, centerlines, and other boundary line locations. The surveyor will analyze the data and determine the position of the boundaries of the parcel being surveyed. The surveyor will make a field survey, locating and connecting monuments necessary for location of the parcel, and coordinate the facts of such survey with the analysis. The surveyor will set monuments marking the corners of such parcel unless monuments already exist at such corners.

[ARC 7674C, IAB 3/6/24, effective 4/10/24]

193C—11.4(542B) Descriptions. Descriptions defining land boundaries written for conveyance or other purposes shall be complete, providing definite and unequivocal identification of lines or boundaries. The description must contain dimensions sufficient to enable the description to be platted and retraced and describe the land surveyed either by government lot or by quarter-quarter section or by quarter section and identify the section, township, range and county; and by metes and bounds commencing with a corner monumented 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 the lot, block or subdivision thereof that has been previously tied to a corner monumented and established by the U.S. Public Land Survey System. If the parcel is described by metes and bounds, it may be referenced to known lot or block corners in recorded subdivision or additions.

[ARC 7674C, IAB 3/6/24, effective 4/10/24]

193C—11.5(542B) Plats. A plat shall be drawn for every property survey performed showing information developed by the survey and including the following elements:

11.5(1) The plat is drawn to a convenient scale that is clearly stated and graphically illustrated by a bar scale on every plat sheet.

11.5(2) The plat shows the length and bearing of the boundaries of the parcels surveyed. Where the boundary lines show bearing, lengths or locations that vary from those recorded in deeds, abutting plats or other instruments, the following note is placed along such lines: “recorded as (show recorded bearing, length or location).”

11.5(3) The plat shows and identifies all monuments necessary for the location of the parcel and indicates whether such monuments were found or placed and includes an accurate description of each monument consisting of size, shape, and material type, capped with license number, and color as applicable.

11.5(4) The plat is captioned to identify the person for whom the survey was made and the date of the survey and describes the parcel as provided in rule 193C—11.4(542B) above.

11.5(5) The plat shows that record title boundaries, centerlines, and other boundary lines were retraced to monuments found or placed by the surveyor.

11.5(6) The plat shows that the survey is tied to a physically monumented land line that is identified by two U.S. Public Land Survey System corners or by two physically monumented corners of a recorded subdivision. The plat shows a distance relationship measured by the surveyor between the two corners on the physically monumented land line. The physically monumented land line shall be germane to the survey of the lot, parcel, or tract.

11.5(7) The plat bears the signature of the professional land surveyor, a statement certifying that the work was performed by the surveyor or under the surveyor's direct personal supervision, the date of signature, and the surveyor's Iowa license number and legible seal as provided in rule 193C—6.1(542B).

11.5(8) The surveyor shall record every plat and description, excluding subdivision plats, with the county recorder no later than 30 days after signature on the plat by the surveyor.

[ARC 7674C, IAB 3/6/24, effective 4/10/24]

193C—11.6(542B) Measurements.

11.6(1) Measurements may only be made with instruments and methods capable of attaining the required accuracy for the particular problem involved.

11.6(2) Measurements as placed on the plat shall be in conformance with the capabilities of the instruments used.

11.6(3) The unadjusted closure for all closed traverse surveys shall be not greater than 1 in 5,000 and, for subdivision boundaries, 1 in 10,000.

11.6(4) In a closed traverse, the sum of the measured angles shall agree with the theoretical sum by a difference not greater than 30 seconds times the square root of the number of angles.

11.6(5) The unadjusted error of field measurements shall not be greater than 1 in 5,000.

11.6(6) The relative positional tolerance at the 95 percent confidence level shall be as follows:

a. For subdivision boundaries: $\pm(0.13 \text{ feet} + 1:10,000)$

b. For all other land surveying: $\pm(0.26 \text{ feet} + 1:5,000)$

11.6(7) Bearings or angles on any property survey plat shall be shown to the nearest one minute; distance shall be shown to the nearest one-tenth foot.

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193C—11.7(542B) Monuments. Monuments shall adhere to Iowa Code section 355.6. More information can be found in rule 193C—11.3(542B).

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These rules are intended to implement Iowa Code sections 355.3 and 542B.2.

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