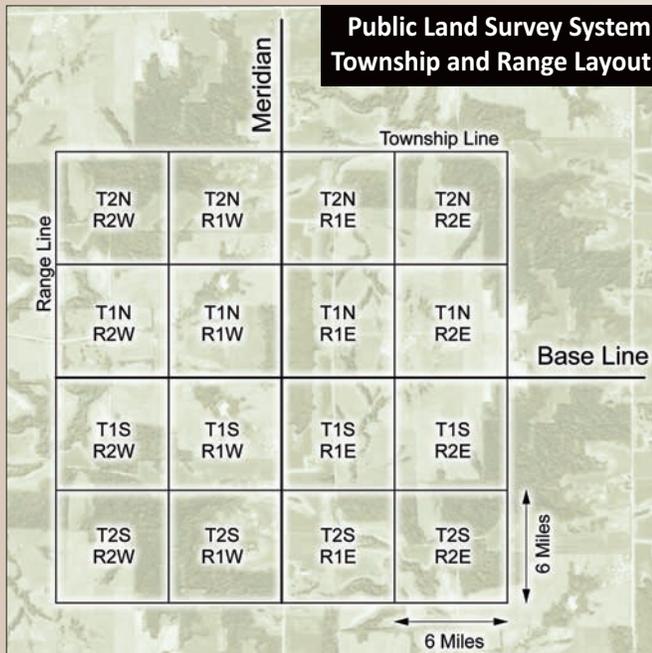


A Practical Guide to Understanding Land Descriptions

Public water supply and wastewater systems provide service to land for the use of their customers. Persons working with these systems need to understand how that land is described. But these descriptions are written in a language foreign to most people. This article will provide a basic understanding of the components of legal descriptions, what they mean, and how to become more comfortable when confronted with such descriptions. This article is written for Kansans and is specific to real estate descriptions in Kansas.

History of legal descriptions

Legal descriptions, as we know them, came about when the federal government issued the original land grants. In order for the federal government to issue the grants, there had to be a means to describe the land. Kansas is one of 30 states whose real estate description system is based on this system, called the Public Land Survey System. It is based on a series of rectangles, called Townships and Ranges.



The “Grid” – sections, townships and ranges

Townships and Ranges are located in relation to two different types of survey lines. The first of these is called a “baseline”, which runs east and west. The second type of survey line runs north and south and is called a “principal meridian”. The principal meridian running through Kansas is called the Sixth Principal Meridian. It intersects the Kansas/Nebraska border about nineteen miles west of Washington and extends south to the Oklahoma border. The diagram below shows the relationship of Townships and Ranges to baselines and principal meridians.

Diagram 1 shows that starting from the intersection of a baseline and a principal meridian, Township Lines and Range Lines lay out a grid of approximately six-mile square blocks. For example, the first line six miles south of the Base Line is named Township 1 South of the Base Line and the first line six miles east of the Principal Meridian is Range 1 East of the Principal Meridian. The block that those two lines form is called Township 1 South, Range 1 East.

Each Township and Range is further divided into approximately one-mile squares called Sections. There are thirty-six Sections in each Township and Range. It is important to understand that Sections are numbered differently than some might expect. Their numbering begins from right to left for six (6) Sections and then left to right for six (6) Sections. Then that process repeats itself. The process is illustrated in Diagram 2.

Assuming that the Township and Range shown in Diagram 2 are Township 1 South, Range 1 East, then Section 1 of that Township and Range would be described as Section 1, Township 1 South, Range 1 East. It is also important to note that legal descriptions contain references to the Principal Meridian from which the descriptions are derived. Thus, assuming that the

Diagram 1: Starting from the intersection of a baseline and a principal meridian, Township Lines and Range Lines lay out a grid of approximately six-mile square blocks.

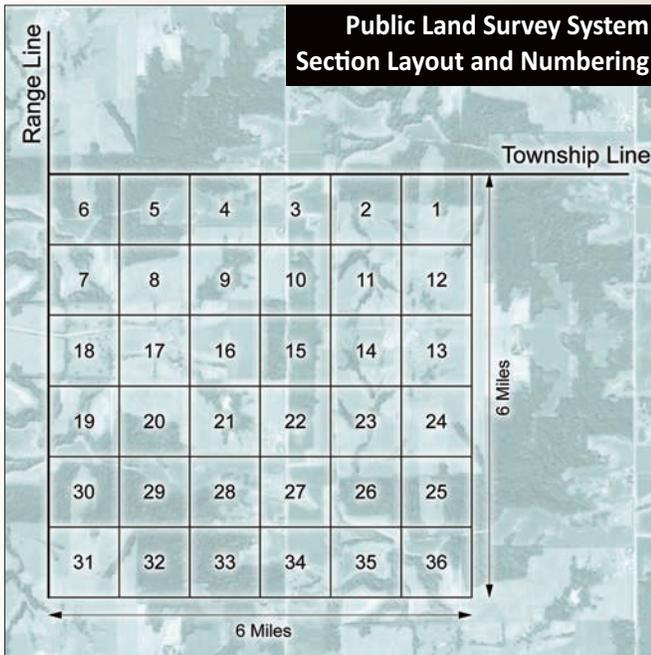


Diagram 2: Sections are numbered differently than some might expect. Their numbering begins from right to left for six (6) Sections and then left to right for six (6) Sections.

Principal Meridian shown in Diagram 1 is the Sixth Principal Meridian, (the meridian that runs through Kansas), then the legal description for Section 1, (in Diagram 2), would be Section 1, Township 1 South, Range 1 East of the Sixth Principal Meridian.

Legal descriptions often contain references to portions of a section. For example, legal descriptions frequently contain references to quarter sections and half sections. Half sections are described as the north, south, east or west half section, depending on which one is being described. Quarter sections are described as the northwest, northeast, southeast or southwest quarter section, depending on which one is being described. Diagram 3 illustrates such divisions of sections. Note that north, east, south and west are abbreviated as N, E, S and W, respectively and northwest, northeast, southeast and southwest are abbreviated as NW, NE, SE and SW, respectively. Also note that Section, Township and Range are often abbreviated as S, T and R, respectively.

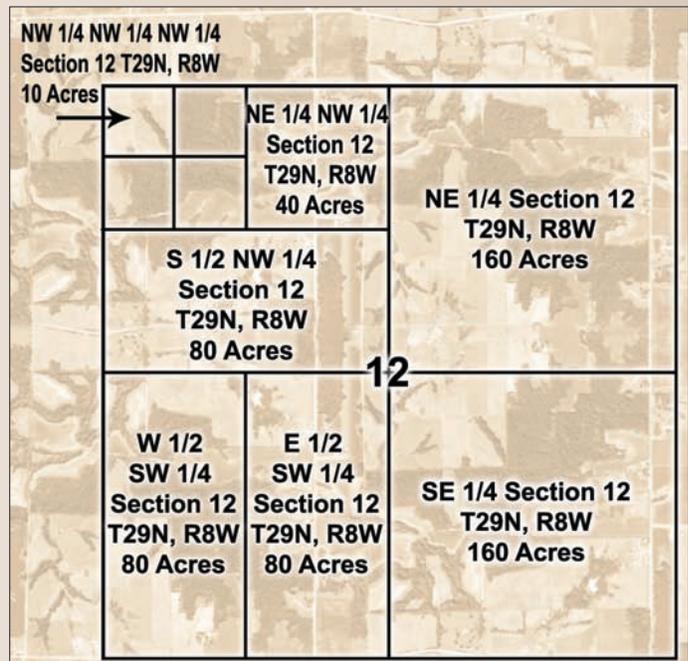
Note that Diagram 3 also illustrates that quarter sections can be subdivided into quarters and that those quarters can in turn be subdivided into quarters.

Diagram 3: Legal descriptions frequently contain references to quarter sections and half sections.

A section of land typically contains 640 acres; a half section typically contains 320 acres; a quarter section typically contains 160 acres; a quarter of a quarter section typically contains forty acres, and a quarter of a quarter of a quarter section typically contains ten acres. The word “typically” in the previous sentence is used to highlight the fact that not all sections of land contain exactly 640 acres. This is because the grid of sections, townships and ranges is rectangular and the earth is round. Thus, certain adjustments need to be made such that some sections do not contain exactly 640 acres and some townships do not contain exactly thirty-six square miles. Land where this allowance for earth curvature is made is called a “correction quarter” or “correction section” and contains “lots” where the correction is made.

Metes and bounds descriptions

Metes and Bounds descriptions provide a means of describing irregularly shaped parcels or those that do not fit the fractional section description. The basic principal is to describe a Point of Beginning (POB), typically tied to a known monument such as a section or quarter section corner. From the POB, the boundary of the parcel is described by direction and distance (or courses) until the last course of the description returns to the POB. Existing boundaries or monuments are described as they are encountered in any course of the description. Descriptions that do not return to the POB “do not close” and are



considered defective. In many cases, the area of the described parcel is included following the description.

Distance units will vary but are typically measured in feet. Direction is typically defined by a Bearing which is the angular deflection from due North or South and is designated as (N or S) DD° MM' SS" (E or W). A Bearing of N 45° 00' 00" E is a clockwise deflection from due north of 45 degrees while a Bearing of S 45° 00' 00" E is a counterclockwise deflection from due south of 45 degrees.

In the simplest form a metes and bounds description is quite easy to read. For example:

Commencing at the southwest corner of Section 18, Township 33 South, Range 12 East of the 6th P.M., said corner being the Point of Beginning, thence N 0° 00' 00" E a distance of 330.00 feet, thence N 90° 00' 00" E a distance of 200.00 feet, thence S 0° 00' 00" W a distance of 330.00 feet, thence S 90° 00' 00" W a distance of 200.00 feet to the Point of Beginning, said tract containing 1.515 acres more or less.

This description simply describes a rectangular shaped tract that is 330 feet N-S by 200 feet E-W with the southwest corner of the tract being the southwest corner of the section. Metes and Bounds descriptions become much more complicated when describing irregularly shaped tracts, especially those that are tied to meandering boundaries such as streams or rivers or the curves in roads.

The following example is an actual legal description recorded in southeast Kansas which describes a parcel completely by direction, monument, and boundary.

Beginning at the Southwest corner of the Northeast Quarter of Section 18, Township 33 South, Range 12 East of the 6th P.M., thence North to the Northwest corner of the Northeast Quarter of said Section 18, thence East to the center of the channel of the North Caney River, thence South and East along the center of the channel of the meanderings of such North Caney River to a point where the North Caney River crosses the East line of the Northeast Quarter of said Section 18, thence South to the Southeast corner of the Northeast Quarter of said Section 18, thence West to the Point of Beginning.

Re-establishing the boundary of this parcel presents many challenges and is beyond the scope of this article. Needless to say, a surveyor would need to locate or re-establish monuments and meandering boundaries to effectively identify this tract of ground. This could result in many hours of research and field work for the surveyor and significant cost to the landowner.



Example of an irregular boundary parcel.

Platted subdivisions – lots and blocks

Although much real estate in Kansas is described in reference to Sections, Townships and Ranges, most Kansas land located in and around cities is not described as such. Instead, such land is described in reference to a “plat.” A plat is a map that has been drawn to scale and that shows divisions of a piece of land, usually subdivided into blocks with streets and alleys. In many instances, the plats are further divided so that blocks are split into lots, usually for the purpose of selling the described lots. This process has become known as subdivision. (See Diagram 4). In Kansas, state law requires that the owner or owners of land located in an area within a city or county that is governed by subdivision regulations must have a plat drawn that complies with the subdivision regulations. As noted above, such plats often show lots, blocks, streets, alleys and easements, including utility easements.

Once plats have been filed, legal descriptions can refer to block and lot numbers rather than a portion of a Section in a Township and Range. So, for example, such a legal description might read in the form of: “Lot 1, Block 5, Edison Addition to the city of Anytown, Kansas.” Reference to utility easements on plats is by plat name. Details concerning the use of easements are often contained in the “notes” written along the images of the plat drawing.

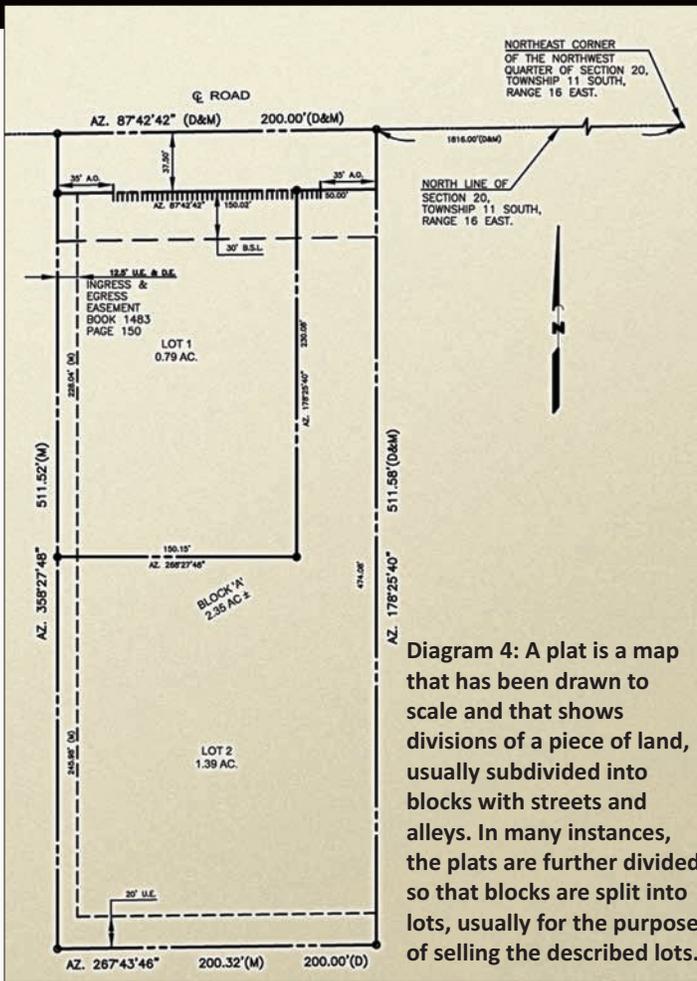


Diagram 4: A plat is a map that has been drawn to scale and that shows divisions of a piece of land, usually subdivided into blocks with streets and alleys. In many instances, the plats are further divided so that blocks are split into lots, usually for the purpose of selling the described lots.

Mistakes in legal descriptions

It is important to keep in mind that precision in legal descriptions is critical. Mistakes in legal descriptions that are contained in documents filed of record, can cause major problems for water and wastewater systems. Consider, for example, an actual case that occurred in northeast Kansas in which a rural water district purchased land on which to drill water wells. The district and the landowner reached an agreement on the land to be purchased and the documents were drafted to transfer title to the land. When the deed was prepared, though, the legal description stated that the land being purchased was in the Northwest Quarter of Section 3, Township 11, Range 13 East. In fact, however, the parties really intended for the land in question to be in the Southwest Quarter of that Section. The deed with the incorrect legal description was filed with the Register of Deeds and the rural water district drilled wells in the Southwest Quarter that it believed it had purchased. A few years later, the Southwest Quarter was sold to another party. The rural water district later discovered the error in its deed and

asked the new owner of the Southwest Quarter to sign a corrective deed that would deed to the district the land in the Southwest Quarter that the original parties intended to be sold to the district. If the new owner of the Southwest Quarter refuses to sign a corrective deed, what does the district do?

The unfortunate answer is that the rural water district's primary alternative is to file suit in county district court in an effort to prove that it is the rightful owner of the land on which it drilled its wells. The new owner of the Southwest Quarter may resist the district's claim and argue that since the public records did not indicate any ownership of land in the Southwest Quarter by the district, the new owner purchased the land free and clear of any interest of the district and that in fact the district is trespassing. The court or jury will have to decide the district's fate, but it will understandably be an expensive, and potentially risky, undertaking. This demonstrates the need for precision in legal descriptions.

Conclusion

Legal descriptions are not as confusing as they may first appear. Water and wastewater system managers, administrators and operators and certainly governing body members need to have at least a passing familiarity with how descriptions are read and what they mean. If in doubt, get help from a land surveyor as mistakes are almost always serious and sometimes difficult and expensive to correct.

Gary Hanson, Stumbo Hanson, LLP, is a 1978 graduate of Eastern New Mexico University; he then went to law school at the University of Kansas, graduating in 1982. He joined the Stumbo law firm in Topeka in 1982 and became a partner in 1986. His practice includes an emphasis on municipal law, serving as city attorney for several cities and nearly forty rural water districts, in addition to serving as general counsel for the Kansas Rural Water Association.



Alan Soelter, P.L.S., Bartlett & West, Inc., is a 1980 graduate of the University of Kansas with a Bachelors of Science degree in Civil Engineering. He has been with Bartlett & West, Inc., his entire career. Alan has been instrumental in the development, design and construction of numerous rural water systems throughout Kansas, Iowa and South Dakota.

