BOUNDARY SURVEYS

RE-SURVEYS

One of the difficult tasks for a surveyor is the re-surveying of lands, the re-location of the boundary lines between privately-owned lands or the re-location of the boundary between two political entities. The original descriptions of boundary lines found in deeds and grants are often vague or in error.

English kings who made land grants to the original colonists often were vague in describing the boundaries. This often resulted in overlapping boundaries. Some of the original colonies claimed land to the Pacific coast. Old descriptions included reference to landmarks which disappeared many years before re-surveys were made.

Old surveyors were not equipped with sophisticated instruments, and units of measurements used were not the same as those of today. All these things have presented the surveyor with problems which, in many cases, have solutions only in the Courts. Court decisions, in many boundary disputes over many years, have made a pattern which has established general rules for the location of boundaries.

RETRACEMENT

In locating lost or disputed boundaries, the surveyor's job is to determine where the boundaries were actually located, not where they should have been located. The primary objective in locating a survey is to "follow the footsteps of the surveyor". In a suit involving boundary question, search must be made for the footsteps of the original surveyor, and when found, the case is solved.

After boundaries have once been fixed by monuments, they cannot be changed because of errors of distance or direction unless fraud is involved.

METES AND BOUNDS DESCRIPTIONS

Metes and bounds refer to the measurements of the limits or boundaries of a tract. This type of description identifies a beginning point and then describes each course of the tract in sequence in either a clockwise or a counter-clockwise direction and returns to the beginning point. The description includes not only the direction and length of each course, but includes calls for monuments and adjoiners.

RULES FOR LOCATING BOUNDARIES

When a new tract of land is established from an old tract of land by subdivision, the boundaries of the subdivision become, in part, old boundaries and new boundaries. New boundaries are dependent on old boundaries. Since property laws are state laws, the rules for locating boundaries may differ from state to state.
INTENT

Of first importance in boundary location is the intent of the parties to the deed. What did the grantor intend to grant to the grantee? This intent must be determined from the wording of the deed and the description of the land contained therein. In court cases involving boundary disputes, decisions of the court have repeatedly upheld the principle that the written intentions of the parties to the original transaction are of first importance.

CALLS

A call, sometimes referred to as a deed call, is a phrase in the written description of the location of a parcel of land contained in the body of a conveyance.

Calls usually start with the word BEGINNING, for the first call, or THENCE for each succeeding call, written in capital letters with each call separated from another as a paragraph. Calls may refer to the direction and distance of a side of the perimeter of a tract of land, to an adjoining tract of land, to a monument at a corner, to the area contained in a tract of land, or to natural objects along the way which a surveyor may use to better identify the location of the land.

LOCATIVE CALLS

Calls which give the exact location of a point or line are known as locative calls. A call for a monument referenced to witness trees or other objects is a locative call.

PASSING CALL

A call which refers to a creek, highway, fence, tree, or other object which is crossed or passed in a survey is called a passing call. It does not serve as a locative call but better identifies the location of the land.

CALL FOR A MONUMENT

A call for a monument describes a natural or artificial object at the corner of a survey or describes a course of the survey as being along a natural or artificial monument such as a stream or highway.

MONUMENTS

Monuments may be natural or artificial. Natural monuments include rivers, lakes, oceans, gulfs, bays, trees, and large boulders. Artificial monuments include stakes, fences, concrete markers, etc.

CALL FOR ADJOINER

Calls for the lines and corners of an adjacent or adjoining survey are known as calls for adjoiner.
CALL FOR DIRECTION AND DISTANCE

A call giving the bearing and distance of a line in a survey is known as a call for direction and distance.

CALL FOR AREA

A call for area gives the area contained in the survey.

RULES OF COMPARATIVE DIGNITY

As mentioned previously, the intent of the parties to a deed or other instrument must be determined from the wording of the deed. The description of the location of the land is contained in the various calls. These calls are often in conflict. The decisions of courts over many years have established an order of precedence for the various types of calls in a description of the location of a tract of land. This order of importance is expressed as "rules of comparative dignity." These rules are the rules of logic because the courts have carefully weighed the possibility of error in various types of calls and have given a value of reliability to each type of call. The order of importance of calls, where there is conflict between them, is given here in order of decreasing importance.

- Call for natural monument.
- Call for artificial monument.
- Call for adjoiner.
- Call for direction.
- Call for distance.
- Call for area.

The courts found it logical to assume that the most important call is the call for a natural object because of the permanence of the object. The next most important call is the artificial object because it can be identified by the description in the call. Courts are aware that errors can be made in determining direction and distance. If a description gives a bearing and distance which should bring the surveyor to a river which is called for as the boundary, but in fact does not bring the surveyor to the river, it is logical to assume that the call for direction and distance is incorrect if the intent of the parties was to make the river the boundary.

Courts also have found that it is logical to assume that a call for direction is of higher importance than a call for distance because direction is determined by the surveyor, whereas distance is determined by his chair-persons who may not be of the same competence.
A call for adjoiner is usually given more importance than a call for direction and distance because where an adjoining line is well established, it can be considered to be a monument.

Area is of least importance, but where a call for area brings other calls into harmony, it may be considered of higher importance.

Where no calls for monuments exist or where monuments cannot be found, a call for direction and distance may control.

A call for a monument does not always control if there are two monuments in conflict. The monument which is in harmony with direction, distance, and the calls will control.

**MAP OR PLAT AS A REFERENCE**

A map or plat referred to in a deed becomes a part of the description of the land conveyed as if it were a part of the deed. Monuments, bearings, and distances shown on the map become a part of the description.

**PRORATION IN SUBDIVISION**

A legal subdivision is any partition of land into two or more parcels with the following conditions fulfilled:

1. A map or plat is made showing all of the divisions of land.

2. The map or plat is filed with or by the governing agency in compliance with its subdivision laws.

3. Parcels of land are sold by reference to the map or plat, and no parcel is sold prior to the filing of the map.

If lots are sold in accordance with a plan or map, and no reference to the lot exists other than the map, no one lot can be said to be senior to any other lot. All lots are created at the same moment of time. That is, at the moment of filing the map or at the moment of the first transfer of title, and are of equal standing. A deficiency in a block found to exist within a platted subdivision is divided among the several lots in proportion to frontages as indicated on the plat, without regard to the sequence of their sale by the proprietor. However, if lots are sold in sequence and the lots are added on the map after they are sold, senior rights may exist.
Excess and Deficiency

Where a tract of land is subdivided and platted, any excess or deficiency is to be apportioned among the several parcels. It can not be presumed that the variance arose from the defective survey of any part, but it must be concluded in the absence of evidence that it arose from imperfect measurement of the whole line. The excess or deficiency, determined by actual measurement between recognized monuments as compared with the plat dimensions, must be apportioned between the subdivisions of the whole line in proportion to their respective lengths. If there is an excess the title does not remain in the original owner of the tract.

Where the excess or deficiency is due to the original chain or tape being too long or too short, rigid mathematics dictates that the error be distributed proportionally among the subdivisions of the line. Where a small discrepancy is due to careless surveying, and there are no circumstances suggesting that there is a gross blunder in any part of the survey, the law of probability supports proportioning. Where it can be proved that the error is caused by an erroneous assumption in regard to one of the lines or sides, then the rule has no rational basis. An error which is located and explained should not, from a mathematical standpoint, be distributed.

The rule of apportionment of excess or deficiency applies:

1. Where the tract is divided into lots by a plan, and conveyance is made solely by lot number with reference to the plat.

2. Where the tract is divided by partition.

3. Where the tract is divided into two or more parts of designated area.

4. Where the whole tract is intended to be conveyed by two or more deeds executed at the same time, and no lines are laid down on the ground, but it is the intention that the tracts shall adjoin.

5. Where the tract consists of a number of surveys lying between lines fixed by the adjoining tracts.

6. Where the tract consists of two or more surveys made into one inclusive survey or made at or about the same time by the same surveyor.

7. Where the lots conveyed are intended to adjoin, but it appears when laid down as described in the conveyances there is a space between them.
Limitations on Proportioning

While certain circumstances raise a presumption that an excess or deficiency is to be apportioned, the facts in any particular case may establish that the intention is otherwise, the presumption is overcome, and the rule does not apply:

1. Where the plat referred to shows all lots but one dimensioned. It is the clear intent of the grantor that this lot be regarded as a remnant to take the excess or deficiency.

2. Where a street or other recognized and acknowledged monument shown on the plat and found on the ground limits the distribution of the excess or deficiency. The best evidence of the location of a line is the stakes or monuments set by the surveyor.

3. Where the land is platted into blocks with intervening streets, each block should be treated as distinct. The shortage or excess should be distributed among the lot owners, except where possession prevails.

4. Where improvements have been made on the original lines, the grantee has been put in possession to certain definite lines whose identity and position can be unquestionably established. The superior rule in regard to lines marked and surveyed prevails.

5. Where the footsteps of the surveyor in setting out the plat can be followed, and the location of the excess or deficiency established, the lines as originally run in the field govern and the excess and deficiency is not apportioned.

6. Where there is no connection between the deeds of the various grantees in both time and circumstances. Each grant is distinct and separate and they take precedence in order of seniority, and the junior grant must bear the excess and deficiency.

7. Where the tracts of land are conveyed separately and simultaneously by a common grantor, but one is based on a prior survey (this is in effect a senior grant).

8. Where an attempt to apportion the excess or deficiency would cause the boundary lines to pass through houses and improvements.

Streets

Streets, that have been opened in conformity to a plat and have been long acquiesced, should be accepted as fixed monuments in locating lots or blocks contiguous to or fronting on them.

Streets limit the apportionment of excess and deficiency because it is essential that their location be undisturbed, but where they themselves are not fixed, the reason for their control ceases, and cases may arise where apportionment should be extended over more than one block.
It is questionable whether the shortage should be prorated in a street. Street widths are usually first determined before the actual platting is begun, and several widths accepted as representing the requirements for the various classes of streets. The general tendency is to keep the street area down to a minimum, and it is usually a reasonable presumption to assume that the platter gave careful thought to his street dimensions and intended them as shown. Had he known of a deficiency he would have taken a little off the lots on either side or rearranged his street plan to give a more satisfactory layout. When the width of a street is changed, the public is very much interested, and a court which protects public rights from private encroachments should not, in the apportionment of a deficiency, assign any land within the stated width of a street to the abutting lot owners.

**Improvements**

"In resurveying a tract of land according to a former plat or survey, the surveyor's only function is to relocate, upon the best evidence obtainable, the corners and lines at the same places where originally located by the first surveyor on the ground." Where existing improvements were erected soon after the plat had been staked and the improvements were in conformity with the original lines and stakes, these structures preclude the apportionment of an excess or deficiency since they are controlling evidence of the platter's intention. Practical location or use and occupation. Must be referenced to the original survey lines or markings to be evidence of original locations. Significant structures, built according to lot lines and upon the probability that their builders, at the time of construction, had knowledge of the location of the original lines of the plat.

**Plat Irregularity**

Lot Not Dimensioned. To apportion a discrepancy among the several lots of a block, it is necessary to know the frontage of each lot. Where all lots but one are fully dimensioned, it is impossible from a mathematical standpoint to apply the rule of proportion. The dimension can not be scaled from the plat because of the impossibility of platting to a small scale. More accurate field measurements and office calculations can be made. Furthermore, when the impracticability of scaling an undimensioned detail of a plat is acknowledged, there no longer exists a surplus or deficiency. The survey must be made in compliance with the dimensions of the plat, and the undimensioned lot, must take what is unassigned, be it more or less than the scaled dimension.

Lots Dimensioned But Irregular. Where all the lots of a plan are definitely dimensioned, but one is irregular in shape or proportions, there is some authority for placing an existing surplus or deficiency in the irregular lot.

**Proportioning as Last Resort**

Before prorating an excess or a deficiency an investigation of the possible causes of the excess or deficiency should always be made. In a Washington case, the Supreme Court observed that the shortage, 15 feet probably did belong to the western lots and suggested that:

1. The eastern lots in question, although included in the subdivision, were sold by metes and bounds prior to the filing of the subdivision and thus had senior rights.
2. The street west of the western lots was on the centerline of a section, and at the time the city improved the street it probably included part of the western lots.

In other words, the upper court ordered a new trial for the purpose of discovering where the shortage occurred. Proration was not to be applied if the cause of the shortage could be discovered.

**Summary of Proration Rules**

From these situations and from others, the following general principles have evolved.

Proportionate measurement is used to distribute discovered excess or deficiency as compared to the record where:

1. A whole is simultaneously divided into dimensioned parts by protraction; that is, the parts platted are not monumented on the ground, and no part is designated to receive a remainder.

2. Equal parts are created by a will or partition; that is, each child receives a proportion of a whole.

3. Proportionate parts are created by the conveyance; that is, the west one-half and the east one-half of Lot 12, Map 1313.

4. To restore a lost monument position, as nearly as may be, to its original position where there are references from several directions, all of equal value (not applicable in sequence conveyances).

Proportionate measurement cannot be used:

1. To alter senior rights or in sectionalized lands to alter the superiority of one line over another.

2. To distribute a mistake that can be proved to exist in one place; that is, the rule of a blunder.

3. To alter legal rights obtained by possession.

4. To alter an acceptable original monument position.

**Proportionate measurement:**

1. Begins and ends at the nearest original monument position on each side of the area of excess or deficiency.

2. Is a rule of last resort.

3. Varies in interpretation in different jurisdictions.