

BUREAU OF LAND MANAGEMENT

Closing Corners

With Jim Claflin

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CADASTRAL SURVEY

Closing Corners

Closing corners have been an area of confusion in the past. Here to talk about how this edition of the Manual addresses closing corners, is Jim Claflin.

Hello, my name is Jim Claflin. I am a BLM Cadastral Surveyor with the Montana State Office. My survey career expands approximately thirty years, ten of which was in the Private practice, and twenty in Cadastral Survey. I am a licensed land surveyor in Wisconsin, Wyoming, and Idaho. I have had the pleasure to work in many Western United States in Cadastral offices in various positions.

Today, we are going to talk a little bit about closing corners and what they are, and what they were, and we will get into what they were in a few minutes. As you know under the original survey plan for the Public Land Survey System, there were guide meridians, and standard parallels, and large blocks of 24 miles square. Areas laid out and then later on contracts were let to do the Township boundaries and subdivide the Townships into sections. As meridians converged, we had to deal with closing corners. Closing corners intersected the existing lines that were previously surveyed.

Chapter 7 of the Manual goes into closing corners and what they are and what they were. Our first slide talks about what a closing corner is and it is a corner established where a survey line intersects a previously fixed boundary at a point between corners. The closing corner is located by law at the actual point of intersection without regard to its monumented location. I think that is important to stress here.

Chapter 3 of this edition of the Manual talks about what has changed with closing corners. It is no longer our policy to call them closing corners. We will establish corners where they intersect previously surveyed boundaries and refer to them as corners of minimum control or intersecting points. Also in this edition of the Manual in Chapter 3 we talk about the determination of the point of intersection by calculation not being permissible.

The point I want to make here is once the corner is monumented at the point of intersection without gross error, it will be adopted as a point on line. For years, there has been this repositioning and moving of closing corners to the previous surveyed line.

Sometimes for as little as a tenth or two in feet and this practice has to stop. We have to recognize those closing corners as corners on line and we will report the bearings as we resurvey and retrace these lines. People have to be able to rely on these positions without this constant moving of corners.

As you can see on this slide, it shows a typical dependent resurvey and you can see the section lines to the township to the south are closing into a standard parallel. A basic closing corner situation where we tie into the standard parallel and still show the tie to the nearest adjoining corner.

There are a lot of closing corners still out there and there is still quite a bit of resurveying that has to be done. You need to be aware that these closing corners are out there, they still need to be searched for and the old practice of amending the corners and monumenting the true intersection is still going to continue and into the next century.

In this next slide, we show a typical situation where a resurvey or a survey ties into an Indian reservation boundary. As you can see, the closing corner here ties into the boundary. We have a tie one way into a milepost. In this set of notes, it talks about intersecting the east boundary of the Indian reservation at a point of 19.95 chains North 18 minutes west of the 33 1/2 mile corner. As you can see, that was the old practice and that is how we have had to deal with closing corners up till now.

In summary, in this edition of the Manual, we will not be creating closing corners under the expired policy. But, as land surveyors we need to be aware that there are many closing corners that were established under these expired policies. We need to deal with them and we will need to review chapters 3 and 7 for guidance



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