JOHNSON MAPPING SOFTWARE & PLOTTING SEMINARS

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Deed Plotter+for Windows (by Greenbrier Graphics) & the All Topo Maps (by iGage Mapping Co.)
"Computer Plotting of Legal Descriptions for the Layman©" Seminar
"Real Estate Mapping Computer Tools©" Seminar

Showing Metes & Bounds descriptions over Texas - Version 7 Pro All Topo Maps

Shown on the right is the file (from the Deed Plotter software) showing the inputs and parcel shape of a metes and bounds descriptions that stated it was a 217.71 acre parcel, which was part of the Wilson Reavis Survey A-736, in Leon County, Texas.

Now to show this parcel over the digital All Topo Maps software, it needs to be first "Saved" inside the Deed Plotter as a DES file, then "Saved As" with a DXF format. This new DXF formatted file can be used in GIS, CAD or with the All Topo Maps.

An important point we need to know is, where is the beginning point for this description? This is easily done several ways.

```
s54.1613w 285.51
s58.3319w 198.49
s61.2708w 280.12
s70.33w 100.67
s59.1644w 959.84
s61.2909w 689.49
n22.3129w 272.92
n22.1802w 683.81
n26.3021w 912.82
n22.3934w 484.80
n13.3621w 270.56
n7.5537w 701.78
n11.5028w 42.17
n12.0652w 109.69
n21.4257w 151.69
n15.0942w 102.64
n13.4250w 168.79
n6.2058w 111.86
n8.3823w 77.33
n18.1054w 150.63
n20.2836w 31.07
n21.4221w 294.06
n59.4014e 885.54
n60.1949e 672.08
s40.2746e 132.53
s30.1630e 752.91
s28.4421e 364.39
s27.2330e 294.64
s20.2223e 330.58
s51.3658e 103.37
s42.5623e 278.39
s30.3545e 2213.41
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First would be to simply look at the printout and see which direction the call are going and follow it backwards to the beginning point. If the line segment is too short to display the call, then an input line number is printed on the map. Look at the map and see that the along the bottom of the parcel starting from the SE corner, the number 1, 2, 3, and 4 are printed, then s59°16'44"w 959.84 shows. We can see that this call is the on the 5th input line above, in the Deed Plotter abbreviated syntax s59.1644w 959.84.

Or, you can move the mouse on screen along the line and when it senses a corner, it will report the corner number (1) and tract number (1) to you.
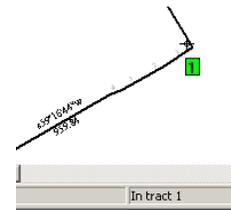
Or, if you put in a new temporary call at the beginning like "n90e 1000" (which is straight East for 1,000 feet), then look and see where it is pointing. Obviously, after looking to see the corner, you MUST remove the temporary call BEFORE saving as both DES and DXF.
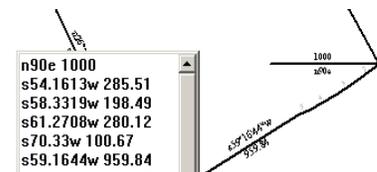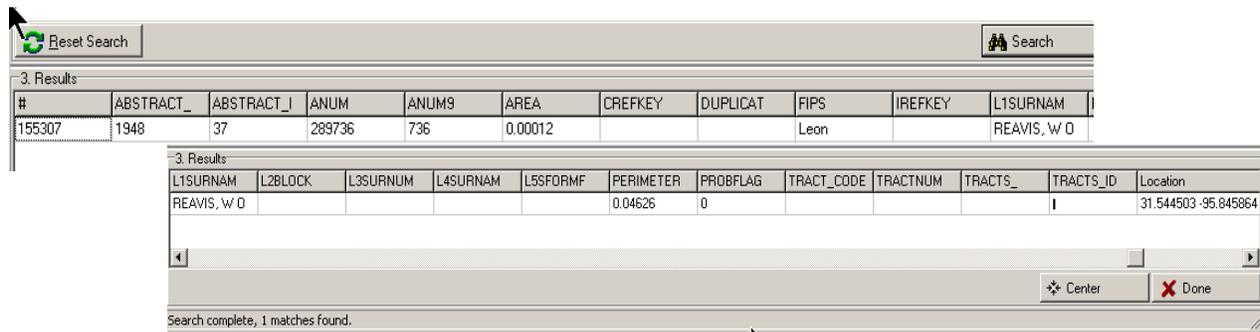
(To learn more about the Deed Plotter and All Topo Maps software applications, go to   www.JohnsonMapping.com).

Now to find the Wilson Reavis A-736 survey, you open the All Topo Maps - Texas V7 Pro set and click on the "Bino" QS. (This is the tool to search for the land grants in place at Texas statehood, in a "Shape File", acquired from the Texas Railroad Commission).

When you click on the "Bino" QS button a search window opens, part of which is shown on the right. Here, you can enter the search elements, such as "736" (Grant number) in the ANUM9 slot, "Leon" in the FIPS (for the county name), and "Reavis" in the L1SURNAM(e).
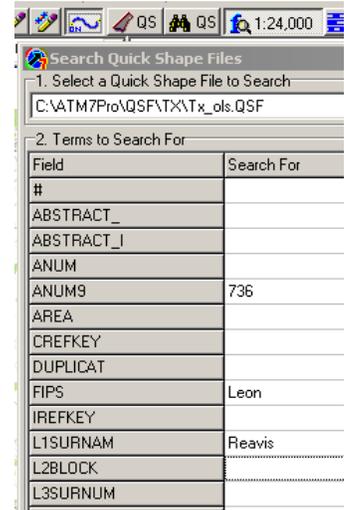
Now click the "Bino" Search button seen below. When the search of over 300,000 grants is done and it finds anything, the following info comes up on one bar, that I've visually split up into two parts.

#	ABSTRACT_	ABSTRACT_I	ANUM	ANUM9	AREA	CREFKEY	DUPLICAT	FIPS	IREFKEY	L1SURNAM
155307	1948	37	289736	736	0.00012			Leon		REAVIS, W O

L1SURNAM	L2BLOCK	L3SURNUM	L4SURNAM	L5SFORMF	PERIMETER	PROBFLAG	TRACT_CODE	TRACTNUM	TRACTS_	TRACTS_ID	Location
REAVIS, W O					0.04626	0				I	31.544503 -95.845864

Search complete, 1 matches found.

This search data indicates that it found 1 match for the inputted data. I don't know what all of the numbers mean, but important to me is the fact it found something. Two of the "found" items are interesting to me. The last one under "Location" shows the Latitude/Longitude of the center of the Grant, and the Area shown as 0.00012 means that this parcel is 00.012% of the acreage in this particular 1° Lat. by 1° Lon. block of land that contains this Grant.

Now when you click on the "Center" button, the next window pops up to tell you the names of the maps at the three different scales that contains the center on this Grant. When you click on the OK, the next window opens to tell you that those maps are located on CD #18 of the Texas R4-V7 Pro set.
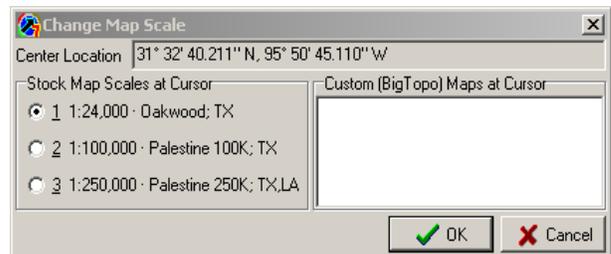
If you look at the CD, it shows you which part of the state maps are on it.

You can copy the maps from any CD to the hard drive to have access to the maps without CD. Copy in the whole state if you like, probably be about 15 gigs of maps.
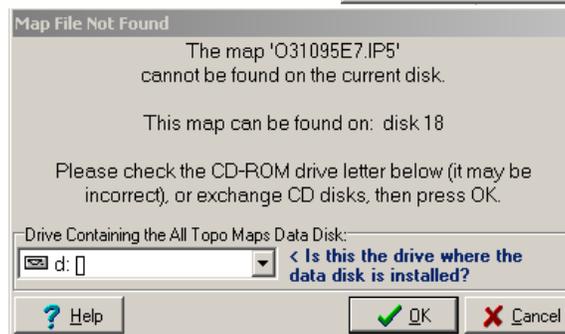
You can see the program opened the Oakwood topo and placed the small blue & yellow circle in the middle of the Grant, shown by the blue arrow.

Now when you click on the other QS button left of the outlined parcel, the outside edges of the Grant are now outlined, as shown below. The other small window that is open is the GeoLink/Attribute Viewer. It is displaying the info for the parcel or Grant where the "drag hand" (white glove and 4 headed arrow) is located.
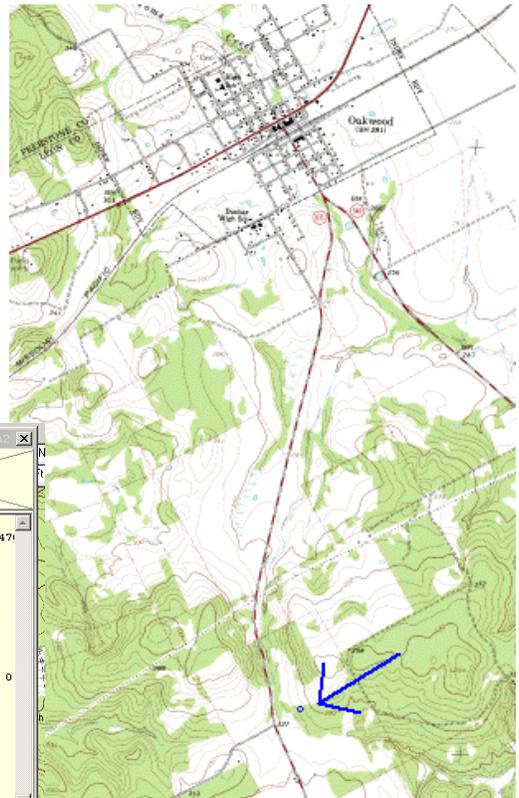

Note that the displayed data is the same as we saw before in the search results graphic.
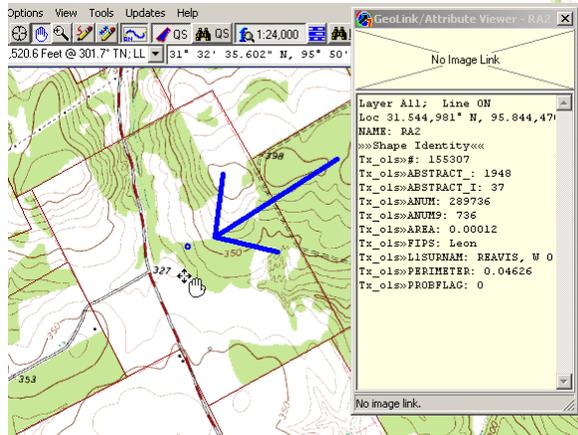
Now reviewing the shape of the parcel described by the metes and bounds description at the beginning of this exercise, compared to the outline of the Grant lands, it becomes quite apparent that it is probably the lands on the east side of the road.
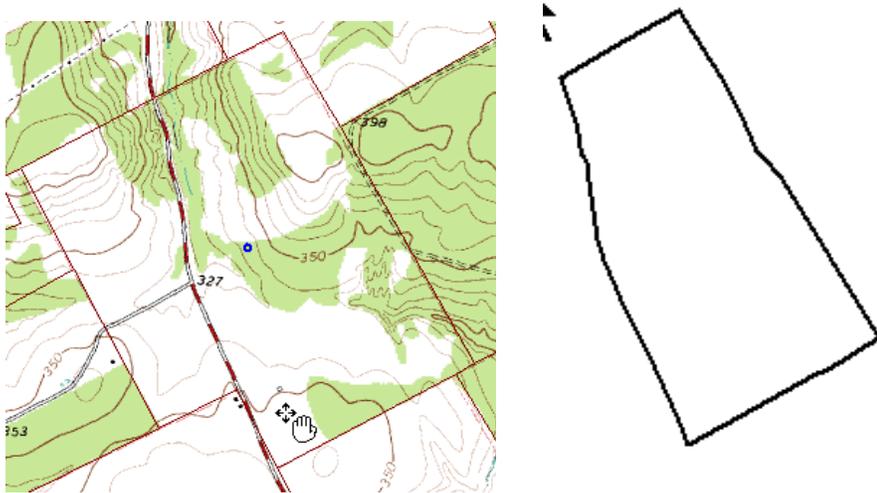
Now of import the Deed Plotter file (in a DXF format), you need to select the entry point. Remembering that the metes and bounds description started in the SE corner of the calls, you would then move the drag hang cursor to the SE corner of the Grant as shown and probably "zoom in", then right click the mouse. The box shown at the right will appear and you would select the first one to "Add a New Annotation".
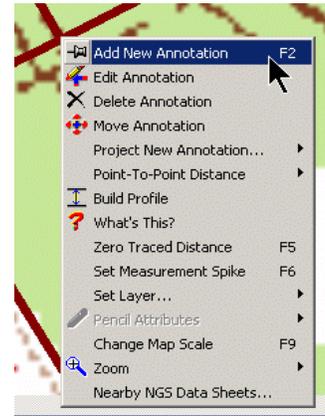
Then the "Edit New Annotation" box would appear. At this point the DXF Filename window would be blank, until you clicked on the 3 dots in the box on the right side (the Browse button), then Browse to where ever you had save that DXF file. When found, click on it to "open" it and the file name would now come into the DXF Filename window as shown.
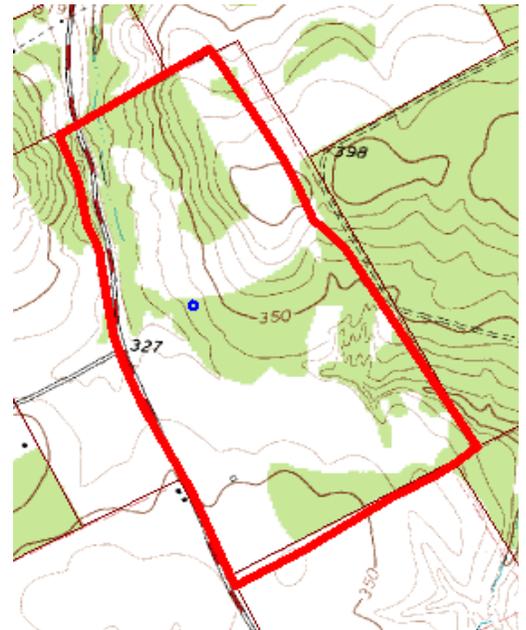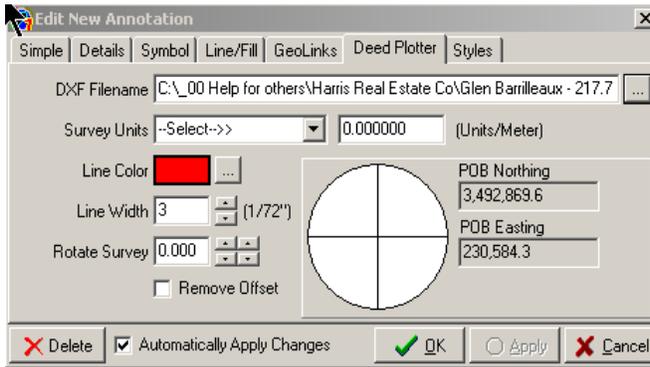
Now, when you clicked on Apply and OK, (or have the check in the Automatically Apply Changes) and zoomed out a ways, you would see the parcel as shown on the right

As you can see, there is a small rotation problem, which is corrected by right clicking on the entry corner and reopening the "Edit Annotation" box. Now Click on the Deed Plotter tab, then click on the up or down arrows in the "Rotate Survey" part of the box. About 3 degrees clockwise appears to bring this right in line.
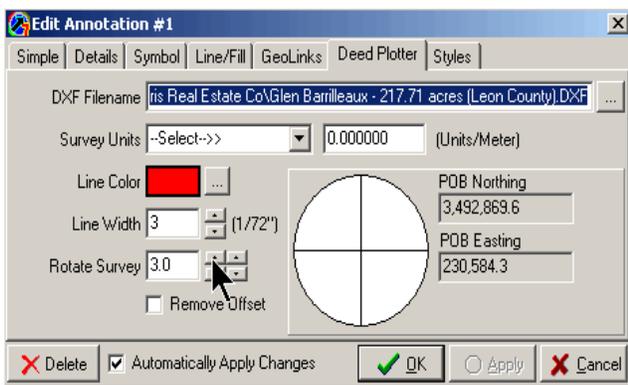
You will also note that the parcel lines do not exactly match with the lines of the Grant, but can certainly see that the intent was there to describe everything east of the road.
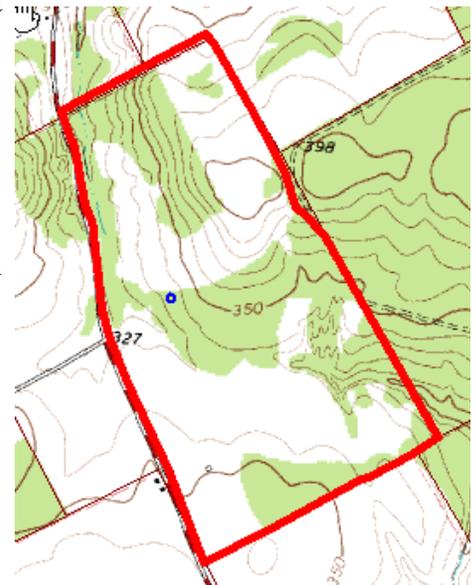
At this point, I would be confident to either leave the Deed Plotter parcel on the map, or maybe delete (or hide) it and use the "Point to Point" cursor to "snap" around the parcel, being the lands east of the road in this Grant.

In the graphic below, I did hide the Deed Plotter file and "snapped" around the parcel then gave the program the command (%area%) to calculate the area, which it did at 217.62 acres and automatically crosshatched the parcel. This is very near the acreage on the metes and bounds description, so I could have NOT ask the program to calculate the area, BUT to only cross hatch instead. Undoubtedly, my "freehand" snapping was near the other Deed Plotter lines and in fact I could have traced over the other lines before hiding them.

By "snapping" around the parcel, the program has generated the coordinates at each point and those coordinates have been displayed three ways: 1). Decimal Degree" format, 2). Degree, Decimal Minute format; and 3). Degree, Minute and Decimal Seconds.
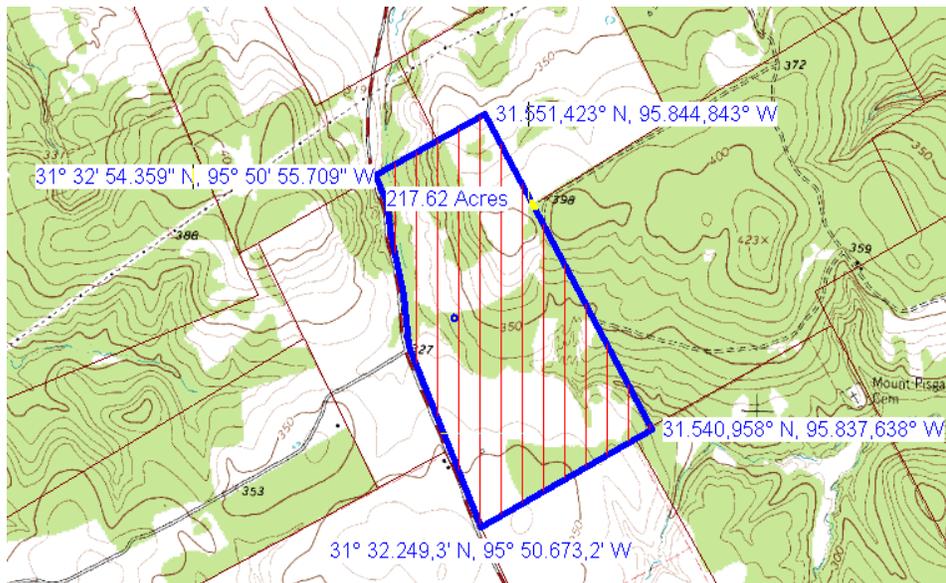
This combination of the Deed Plotter and the All Topo Maps, is great for drawing and displaying metes and bounds descriptions over a digital topo map.   You can now take your GPS and approximately find the corners.

Truth be told the All Topo Maps can draw straight line metes and bounds calls, but does NOT do curves.   Drawing curves is where the Deed Plotter really shines.

Hope this helps, let me know if you need any other information.