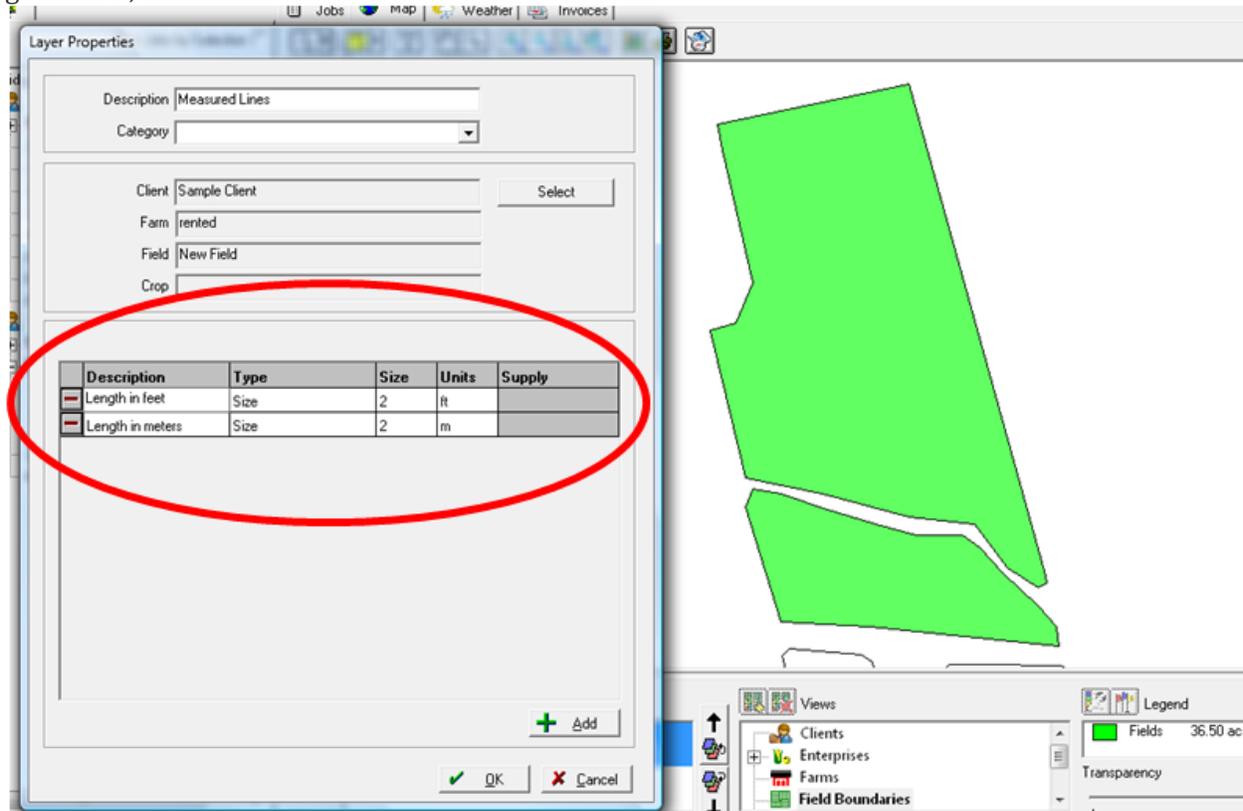# Calculating Line Length in Farm Works

Size does indeed matter! Geographically speaking that is one of the main functions of an agricultural GIS; to calculate how much! How many acres and what is the distance from point A to point B? While there are excellent draw to measure tools in Farm Works where you can draw a line or region and see the size displayed in the lower right corner as you go, if you have declared the measurement system to be imperial (so area is in acres) you will be stuck with feet for the distance measurement. So how do you calculate in metric too?

To create a layer that will allow you to draw features, such as lines and have the program display in both feet and meters, use the following steps:
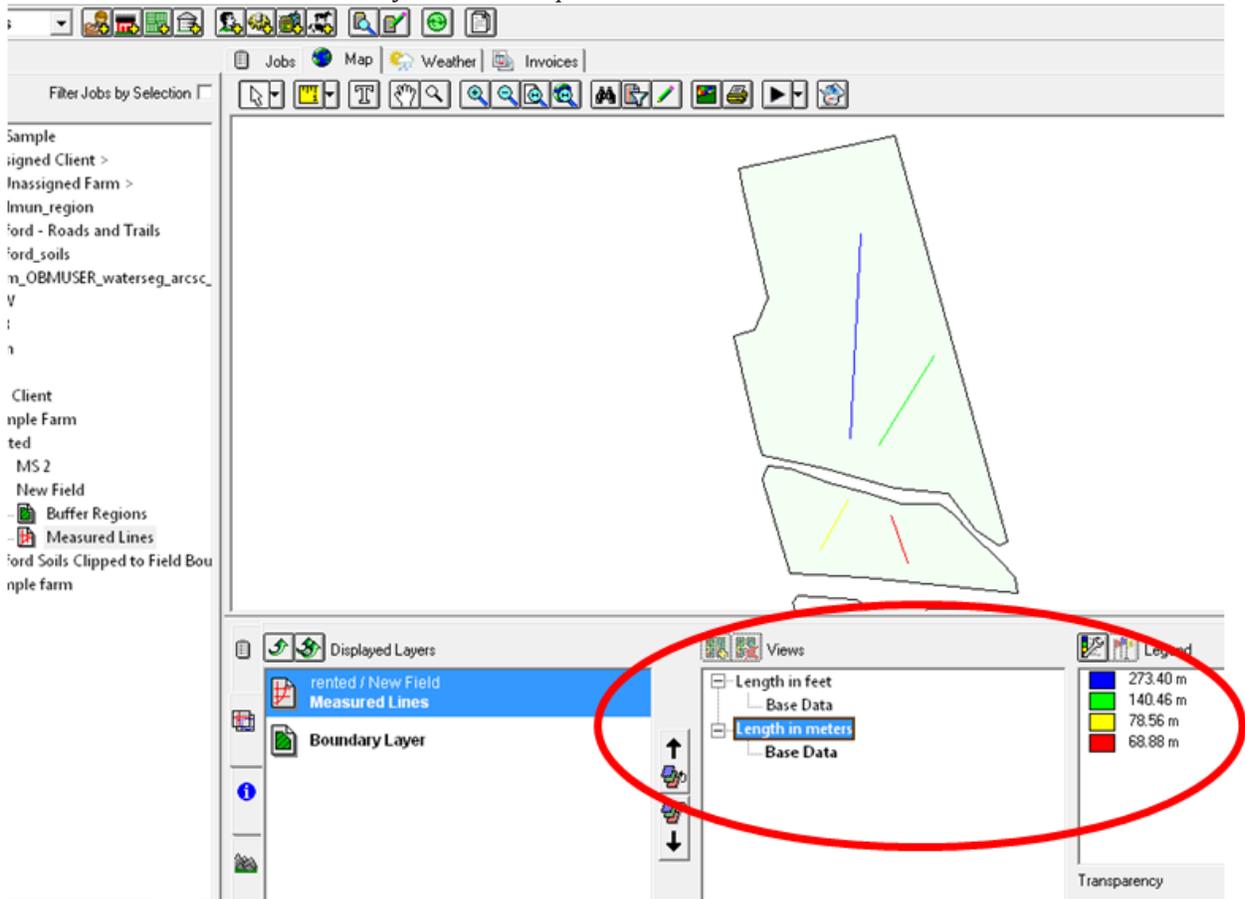
1. With field name highlighted, right click to select ADD layer, choose a line or path layer.

2. You will be presented with a Layer Properties box. Give this layer a descriptive name, then add TWO attributes.

3. First enter LENGTH in FT for the the description, Data type is SIZE (which will prompt FW to calculate the length), select number of decimal points under size column, then very importantly, select your units of measurement (ft).

4. ADD your second attribute, call it LENGTH inMETERS, data type is size, enter decimals then, you guessed it, choose meters for the measurement unit.

5. Save these changes and move this new layername into your displayed layers.

6. Start Editing: select your draw line tool and create your first line. Upon completion a box will pop up for you to enter any attributes you might have made other than the calculated lengths. Continue creating your desired lines.

7. Save and close the editing session and your newly drawn layer will display your length attributes in the Views window. Select Feet or Meters and the legend changes too. This method allows you to

draw a feature once and then let the program and the legend do the work. You can switch back and forth between measurements systems as required.

This method works for polygons too!
Karon