

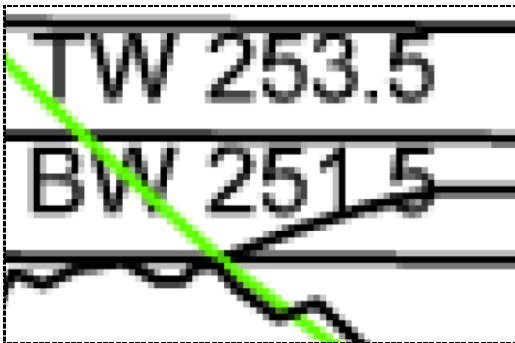
## Program Overview

### Raster PDF vs. Vector PDF

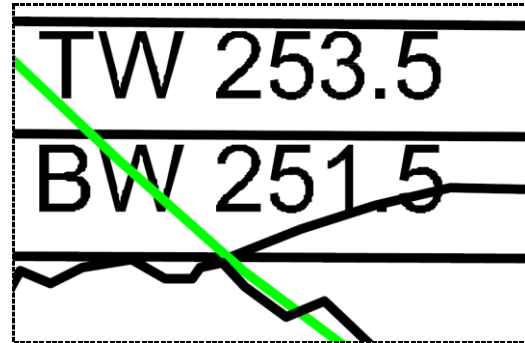
The quality and usefulness of PDF plans imported with AGTEK depends on how the imported PDF plans were produced . . .

When plan sheets are provided in a PDF file, the plan line work (contours, curbs, buildings, etc.) will be represented with either raster or vector graphics. With raster graphics, a simple “bitmap” (a pattern of small shaded pixel squares) is used to represent the line work (raster graphics result when a paper plan sheet is scanned). With vector graphics, plan line work is mathematically defined—just like in CAD (vector graphics result when vector CAD data is published or plotted to PDF directly from a CAD system). *[TIF, JPG, PNG, GIF and BMP files are raster image files.]*

When a PDF plan sheet is previewed in a PDF viewer such as Adobe Reader (free), raster graphics become “pixelated” and imprecise at higher magnifications (see left image below) but vector graphics look clean and precise regardless of the magnification level (see right image below). *[If a TIF, JPG, PNG, GIF or BMP file is previewed with a graphics program such as Microsoft Paint (Paint is included with Windows) the line work should look like that in the left image below.]*



**Raster Graphics**



**Vector Graphics**

AGTEK offers tools for working with both raster and vector PDF data. Although AGTEK includes a raster-to-vector conversion function, in many cases the best way to process a raster plan image is to manually digitize (trace) line work directly from the raster image (using the techniques detailed in this *Day 1 Handbook*, beginning on page 56). When available, vector PDF data is preferred and much easier to handle because it can be processed just like layered CAD data (using the techniques documented in the *Day 2 Handbook*). AGTEK’s video at [www.agtek.com/video.html?id=523](http://www.agtek.com/video.html?id=523) provides a good overview of the ease in working with vector PDF data.