Users' Guide for

BidPoint XL

By Vertigraph, Inc.

12959 Jupiter Road, Suite 252
Dallas, TX 75238

Tel: (877) 902-2979

Fax: (877) 329-4324

Web: www.interworldna.com

Email: sales@interworldna.com

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Introduction

We Thank You

Vertigraph seeks to provide takeoff and estimating tools that increase your profits and productivity. In addition to **BidPoint XL**, our other software solutions include:

- **BidScreen XL** - eTakeoff of ePlans in Excel
- **BidData XL** - an open, database add-in for MS Excel
- **SiteWorx** – calculates cut and fill quantities for site excavation
- **BidWorx** – our high level assembly, relational database estimating software

We also supply hardware such as scanners, printers and digitizer tablets.

Our guiding principles are:

- Quality, integrity and value are our highest concerns.
- Customers are the reason we exist.

Minimum System Requirements

BidPoint XL requires:

- Windows 2000, XP or Vista operating system.
- Microsoft Excel version 97 or later.
- A digitizer tablet.

The digitizer tablet requires:

- An available serial port or USB port on your computer. If you look on the back of your computer, the serial port is usually a 9 pin male connection. If you have an older GTCO/CalComp brand digitizer that doesn't have a USB cable, an optional USB to serial port converter is available.
- The appropriate 32-bit Wintab driver (GTCO/CalComp TabletWorks or Numonic's Virtual Tablet driver) for your Windows operating system. The digitizer manufacturer supplies the Wintab driver.

BidPoint XL License Agreement

Vertigraph, Inc. Program License 12959 Jupiter Road, Suite 252 Dallas, TX 75238

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Installing BidPoint XL and the Digitizer Toolbar

BidPoint XL Version 4 enables you to digitize quantities from paper plans into any MS Excel workbook. The quantity along with the digitized drawing is saved with the Excel cell and file. Each workbook cell may contain a different takeoff quantity and digitized drawing. A selection of digitized drawings may be included on one, scaled printout.

To operate BidPoint XL properly please note:

1. The digitizer driver must be installed. This digitizer driver is available from the digitizer tablet manufacturer. If installed properly, you will be able to control the mouse pointer with the digitizer pointing device. See Hooking up your Digitizer for additional information about the digitizer driver software.
2. Add BidPoint XL to your Microsoft Excel application. To add BidPoint XL the pre Excel 2007 version, open Excel and click on the **Tools | Add-Ins** menu and press the **Browse** button to select the **BidPointXL.xla** add-in file. If you installed BidPoint XL to the default directory, this BidPointXL.xla file will be found in the C:\Program Files\Vertigraph\BidPoint XL folder. After installing you'll have a digitizer menu and toolbar added to the Excel application. Under MS Excel version 2007 or later, you'll click on the **Add-Ins** menu and then **right click** on the **Office Button** in the top left corner of the window. Next you'll select the **Customize Quick Access Toolbar** and then select the **Add-ins** option. At the Add-ins window, click the **Go…** button at the bottom of the window to browse for the BidScreenXL.xla add-in file. This BidScreenXL.xla will be located at C:\Program Files\Vertigraph\BidPoint XL folder.
3. Prior to digitizing in Excel, you must define the actions associated with the buttons on your digitizer pointing device. Open the Digitizer Setup dialog by clicking on the **Digitizer | Setup** menu on the Excel menu bar or Add-ins menu. Then select **Setup**. Select the **Cursor Style** tab and select your cursor type from the list. Press the "**Set button actions to recommended values**" button, then press "**OK**." You are now ready to digitize.

Sample Excel estimating files can be found at C:\Documents and Settings\All Users\Documents\Vertigraph\BidPoint XL\examples if you installed BidPoint XL under the Windows XP operating system. If you installed BidPoint under Windows Vista these sample Excel files are found at C:\Users\Public\Public Documents\Vertigraph\BidPoint XL\examples. Please use and modify these Excel files in any way you desire.

PDF documents of the recommended button setup and other information are found at C:\Program Files\Vertigraph\BidPoint XL\PDF.

Note: Menu and button commands are listed in bold throughout this guide. Sub-menus are displayed after a vertical line. For example, the **Area** command under the **Digitizer** menu is shown as **Digitizer | Area**.

To install the files from the compact disc to your hard drive, select BidPoint XL from the Vertigraph install menu or perform the following:

1. Click the Windows **Start** button.
2. Select **Run**.
3. Enter or browse for **D:\BIDPOINT XL\BidPoint_Setup.exe** or **D:\AUTORUN.EXE**. The above command assumes the compact disc drive is your D drive; change the drive letter to the appropriate drive if this is not the case.
4. The Setup program will now start. Just follow the on-screen instructions to install.

Note: If you downloaded the BidPoint evaluation file from www.vertigraph.com simply run the BidPoint_Setup.exe file to install the BidPoint XL application to your hard drive.

To add BidPoint XL to Microsoft Excel perform the following:

a) After installing the software to your hard drive, open Microsoft Excel (pre Excel 2007 version) and click on the **Tools** menu. Next select **Add-Ins** and click on the **Browse** button to find the BidPointXL.xla file. If you installed BidPoint XL to the default directory, this BidPointXL.xla file will be located at the C:\Program Files\Vertigraph\BidPoint XL folder. After finding the BidPointXL.xla file at the browse window, highlight the file name and select the **OK** button. This will add BidPointXL to the list of Add-Ins. Make sure BidPointXL is checked on the Add-Ins list and click the **OK** button. You'll know BidPoint XL is added correctly if the **Digitizer** menu option is added to the Excel menu bar. The installation is a little different when adding BidPoint XL to Excel version 2007 or later. Under Excel 2007 or later, click on the **Add-Ins** menu and then right click on the **Office button** found on the top left corner of the window. After right clicking on the Office button, select the **Customize Quick Access Toolbar** and then select the **Add-ins** option. At the Add-in window, click the **Go…** button at the bottom of the page to **Browse** for the BidPoint XL.xla file. This BidPointXL.xla file is located at C:\Program Files\Vertigraph\BidScreen XL folder.

b) If the Digitizer toolbar is not displayed, add the Digitizer toolbar to Excel by clicking on **View | Toolbars** and check **Digitizer**.

To uninstall BidPoint XL perform the following in Excel:

- Click on **Tools | Add-Ins** – uncheck BidPointXL.
- After removing BidPoint from Excel, remove the BidPoint XL software by selecting Uninstall BidPoint XL from BidPoint XL on the All Programs Listing.

Hooking up your Digitizer

BidPoint XL requires a digitizer tablet with the appropriate Wintab driver installed on the computer. The Wintab driver is software supplied by the digitizer

manufacturer. The digitizer pointer will move the mouse pointer and operate like a mouse when the Wintab driver is installed properly.

GTCO/CalComp calls their Wintab driver the TabletWorks driver. The Numonic's Wintab driver is called the Virtual Tablet Driver. Different operating systems require different drivers. As a result, we recommend that you install the latest, most current version of the Wintab driver on your computer. The GTCO/CalComp drivers are available at http://www.gtcocalcomp.com/supportgtcosoftware.htm. Before installing the latest driver, always uninstall your current driver by removing the software through the Add/Remove Programs icon on your Control Panel.

For additional help in installing the Wintab driver, please contact Vertigraph or the digitizer manufacturer.

Please note that the Wintab driver should be configured to operate in relative (i.e. mouse) mode, rather than absolute, tracking mode. The GTCO/CalComp Wintab driver should have Mouse and Wintab checked at the top of the TabletWorks dialog box.

When the Wintab driver is installed properly, you'll be able to control all Windows programs using the digitizer-pointing device. Additionally, one of the buttons on the pointing device should operate as a left mouse click and a different button should operate as a right mouse click. If you're unable to move the mouse pointer with the digitizer-pointing device, double-check the following:

- Is the digitizer plugged in and turned on?
- Is the cable connected between the computer and the digitizer?
- Is the digitizer recognizing the pointing device? Many pointing devices have a light that stays lit when the digitizer recognizes the pointing device.
- Is the correct Wintab loaded? A different 32 bit Wintab driver may be need based on your Windows operating system.
- Is the digitizer configured with the correct Wintab "settings"? The Wintab driver requires digitizer settings of 9600 baud, 8 data bits, 1 stop bit, no parity and high-resolution binary output. You can configure the GTCO digitizer by using the superset code of S01. To set the superset code to S01, click on the S, 0 then 1 key on the digitizer surface using either the tip of the digitizer stylus pen or top left button on the sixteen button cursor.
- Is the correct serial (i.e. com) port specified? You can check the com port used by Wintab by clicking on the Windows **Start** button and then going to **Settings** | **Control Panel** and then clicking on the digitizer icon to determine the COM (i.e. serial) port setting.
- Have you uninstalled the previously installed Wintab driver, prior to installing the latest Wintab driver? Always un-install the existing Wintab driver before installing the new version.

If the above questions are answered yes, please contact Vertigraph or the digitizer manufacturer for further assistance.

For more information, see Getting Technical Support.

How to Register BidPoint XL

After purchasing the **BidPoint XL** software license, you are considered a registered user and entitled to use, rather than just evaluate, the software. Until you obtain a registration number, you agree that the BidPoint XL software is used for the purpose

of evaluating the software and not for the production of income. If your copy of BidPoint XL is not registered, a dialog box appears when starting Excel that states "Evaluation copy, would you like to register?" To register, click on **Yes** and call Vertigraph, Inc. at 800-989-4243 to obtain your registration number.

Getting Technical Support

If you need assistance, contact Vertigraph by:

- Internet address www.vertigraph.com
- Telefax at (214) 340-9437
- E-Mail addressed to technical support at info@vertigraph.com
- Mail addressed to Vertigraph Technical Support, 12959 Jupiter Road, Suite 252 Dallas, TX 75238
- Telephone (214) 340-9436 between 8:30 a.m. and 5:30 p.m., Central Time.

For your reference, telephone numbers and web addresses of the major digitizer manufacturers are:

- Numonics Corporation - 800-247-4517, www.numonics.com
- GTCO/CalComp Corporation - 800-344-4723 , www.gtcocalcomp.com

BidPoint XL, the Digitizer and Microsoft Excel together

BidPoint XL provides estimators and quantity surveyors with an easy to use tool that measures items from construction drawings and places the measurement and the associated digitized drawing into a Microsoft Excel spreadsheet cell. The estimator will develop the takeoff in Microsoft Excel and use BidPoint XL with a digitizer tablet to quickly measure areas, lengths and counts from the drawings. You'll need Microsoft Excel and a digitizer tablet with the correct Wintab driver loaded to operate BidPoint XL.

BidPoint XL enables you to:

- Electronically measure areas, lengths, and counts.
- Accumulate areas and continuous lines.
- Subtract islands from digitized areas.
- Automatically calculate the drawing scale.
- Calculate perimeter lengths as you measure areas.
- Set line styles, line widths, count symbols and area fill patterns.
- Assign a variety of colors to the digitized drawing lines.
- Edit and save the digitized drawing.
- Select which combination of digitized drawings to include on a printout.
- Set the digitizer cursor/stylus buttons to perform various digitizing actions.
- Associate a unique sound to the digitizing action.
- Select English or Metric scale units.

- Measure the area and circumference of a circle by clicking on three points along the perimeter.
- Measure the area and perimeter length of a rectangle by clicking on three points clockwise or counterclockwise.
- Draw arcs by clicking on two points after an initial point is entered.
- Delete any selected object.
- Use the digitizer pointing device buttons to select digitizer commands and Wintab macros.

Prior to digitizing areas, lengths and counts for the first time, you'll need to install the Wintab driver and setup the digitizer buttons by going to **Digitizer | Setup**.

What is New with this Version of BidPoint XL

For current users of BidPoint XL, this latest version includes the following enhancements:

- Ability to delete selected objects.
- Digitized line characteristics may be defined through the use of Styles.
- The Style legend may be included with any printouts.
- Improved print features with the ability to rotate the image and select the desired print scale. The print title block information is now automatically saved.
- Individual area and length measurements may now be included on any printout.
- Change the drawing scale at any time.
- Ability to measure areas and perimeters of rectangles by entering three points instead of the previous required five points.
- Ability to measure the area and circumference of circles by entering three points instead of tracing.
- Ability to measure and draw arcs by entering a high and low point instead of tracing.
- Macros can be assigned to the digitizer buttons through the Wintab driver to initiate measurements under Windows XP.
- Ability to assign digitizer buttons for arc, circle and rectangle measurements.
- Ability to assign a digitizer button to activate a popup menu that allows you delete objects, measure arcs, circles and rectangles, access style settings, close areas, end lines and stop the takeoff. The popup menu can be applied to a button on the cursor or pen stylus.
- Status messages are now displayed as you digitize.

Digitizer Menu and Toolbar

Introduction

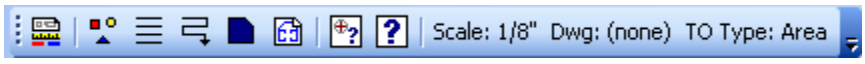
The BidPoint XL digitizer commands are performed through Microsoft Excel by making selections from either the **Digitizer** menu or by clicking on commands found on the Digitizer toolbar. Sample Excel files are included with BidPoint XL. These sample files are found at **C:\Documents and Settings\All Users\Documents\Vertigraph\BidPoint XL\examples** if you installed BidPoint XL under Windows XP. If you installed BidPoint XL under Windows Vista or later, these sample Excel files are located at C:\Users\Pubic\Public Documents\Vertigraph\BidPoint XL\examples. Please use and modify these sample Excel files as you see fit.

BidPoint XL is an Excel add-in program that must be added to Excel by opening Microsoft Excel (pre Excel 2007) and then clicking on the **Tools** menu option. Next select **Add-Ins** and press the **Browse** button to find the **BidPointXL.xla** file. If you installed BidPoint XL to the default directory, this BidPointXL.xla file will be at the C:\Program Files\Vertigraph\BidPoint XL folder.

If you are adding BidPoint XL to Excel 2007 or later, click on the **Add-ins** menu and then right click on the **Office button** found in the top left corner of the window. After right clicking on the **Office button**, select **Customize Quick Access Toolbar** and then select the **Add-ins** option. At the Add-ins window, click the **Go…** button at the bottom of the window and then browse for the BidPointXl.xla file. This BidPointXL.xla file will be at the C:\Program Files\Vertigraph\BidPoint XL folder

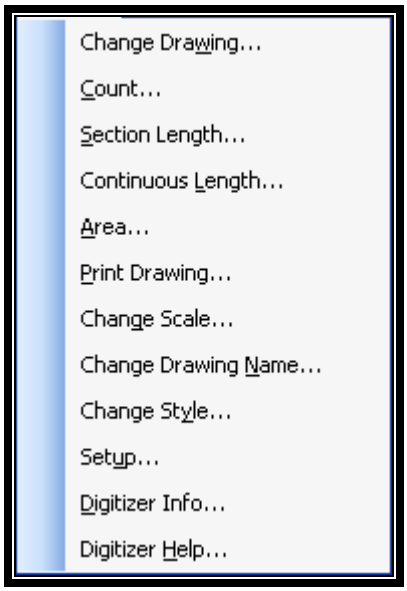
The Digitizer toolbar is displayed in Microsoft Excel by **selecting View | Toolbars** and then clicking on **Digitizer**. A check mark next to Digitizer indicates the toolbar is displayed.

The toolbar is shown below:



By placing your mouse pointer over the icon, a popup description of the icon appears.

The **Digitizer** menu has the same commands:



Before using the digitizer, you'll need to setup the digitizer buttons. For more information see

Change Drawing

Count

Section Length

Continuous Length

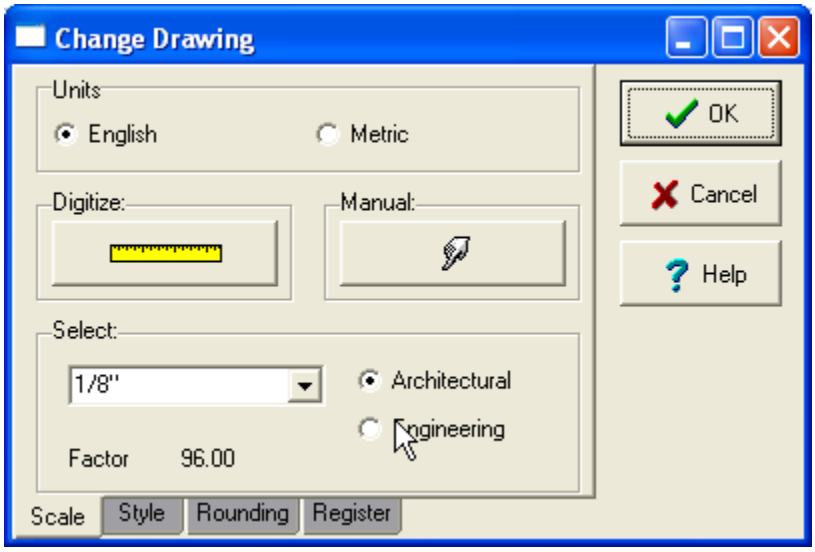
Area

Print Drawing

Setup

Change Drawing

The change drawing dialog box appears after selecting **Digitizer | Change Drawing** or by clicking on the Change Drawing tool on the toolbar.



If you are not using **Drawing Names** as noted at **Digitizer | Setup**, the Change Drawing dialog is where you set the drawing scale.

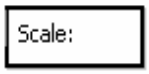
If you are using Drawing Names as noted at **Digitizer | Setup**, you'll also create new drawing names and select from the Drawing name list. Each named drawing may contain settings for default style and rounding. If you use drawing names you're also be able to register the drawing. The register drawing tab allows you to digitize two points on the drawing to set the registration. Once a drawing is registered, you're able to move the drawing on the digitizer tablet and then by re-registering the drawing, you'll line up the digitized measurements to the drawing on the digitizer.

All measurements digitized with BidPoint XL require a scale. When first setting the scale, BidPoint XL prompts you for the scale units. A workbook can use either an English or Metric scale. English returns square feet for area measurements and lineal feet for lengths. Metric returns areas in square meters and lengths in lineal meters.

The look of the scale dialog depends on whether English or Metric scale units were chosen when creating the workbook. The English scale dialog has an option for both architectural and engineering scales.

There are three ways to set the scale. You can select a scale from a drop down list box by clicking on the down arrow. Alternatively, you can automatically calculate the scale by clicking on the yellow ruler button. You'll then digitize the beginning and end points of a line and then enter the length of the line. When setting the scale with the digitizer, you should try to digitize the longest line with a known length. The third way to set the scale is by clicking on the Manual button and manually entering the drawing scale. After setting the scale, you can begin digitizing areas, lengths and counts.

The current scale used in digitizing the selected cell is displayed on the toolbar shown below.



Please note the following:

a) Although a scale is displayed, the scale factor is what is truly used in calculating measurements. The scale factor for English units is calculated as the reciprocal of the scale times 12. For example, if the scale is 1/8", the scale factor is 96 (i.e. ((8/1)*12)). The scale factor for Metric units is equal to the reciprocal of the scale.

b) If the scale factor was calculated by digitizing a line and entering a length, a scale will be displayed if the calculated scale is within 10% of one of the scales on the list. If the calculated scale is not close to one on the scales found on the list, BidPoint XL will display "Nonstandard" on the Current Scale button. As a result, if Nonstandard is displayed, you know you are using a calculated scale. If a scale is displayed, 1/8" for example, and the scale factor is 96 (reciprocal of 1/8 times 12) then the scale was most likely selected from the list and you are using a true 1/8" scale factor. If 1/8" scale is displayed but the scale factor is not 96, then the scale was calculated by entering the length of a digitized line.

c) Once a drawing has been digitized, you're unable to change the scale unless you select the **Digitizer | Change Scale** command for the select cell(s).

Count

To digitize count items, click on a spreadsheet cell and choose **Digitizer | Count** or click on the **Count** button on the toolbar.

Once you select the command, the Digitizer Control (Count) window appears.

At the Digitizer Control window, simply click either the pen tip or top-left cursor button on the plan every time that you want to record a count item. If you make a mistake, hit the **Backspace** key to delete the last item. You can also delete any item by selecting the **Delete Selected Object** command from either the popup menu set under **Digitizer | Setup Buttons** or by using the **Edit** menu of the digitizer control window. When you're done, click the button on the digitizer pen or cursor that you set as the stop digitizing action under **Digitizer | Setup Buttons**, press the **End** key on the keyboard or click the green check mark using your mouse to close the window and record the number into Excel.

You'll notice that the Digitizer Control screen has four menu options: **File**, **Edit, Options** and **Help**. To access these menu options, use the mouse, popup menu or keyboard hot keys (**Alt** + the underlined letter). You can use the digitizer to select these options if you press the button you defined as the popup menu or the button defined as suspend at **Digitizer | Setup buttons**. To turn the pointing-device back into digitizing mode after pressing the suspend button, click on the **Return to Measuring** icon (it looks like a lightning bolt) found at the **Measure** display.

To change the count symbol and color of the digitized measurement, click on the **Style** button and select a color and point symbol. You can also select the color and point style by selecting the **Options** menu.

Note: You can also change the color of the drawing lines by changing the font color in Excel.

Section Length

Section Length is used when the lengths you're taking off are not connected. Lengths of walls and roof valleys are examples of lengths you would takeoff in sections.

To digitize section lengths, click on a cell, and then choose **Digitizer | Section Length** or click on the Section Length icon on the toolbar.

When digitizing section lengths, you must click at the beginning and end of every line. Every time you press down on the digitizer you'll be recording either the beginning or end of the section line. If you have two section lines connected at a corner, you'll need to click on the corner twice in a row, once to end the first line and again to start the next line. While digitizing, you can determine if you're at the beginning or end of the section line by looking at the count value in the Digitizer Control (Section Length) window. When the value is an even number, the next point you hit is the beginning of the next section. If the count is an odd number, the next point you hit will end the section line.

Again, if you make a mistake, hit the **Backspace** key to delete the last point. You can also delete specific lines by selecting the **Delete Selected Object** command from either the popup menu set under **Digitizer | Setup Buttons** or by using the **Edit** menu of the digitizer control window. When you're done measuring the section lengths, click the button on the digitizer pen or cursor that you set as the stop digitizing action (see **Digitizer | Setup Buttons**) to record the length into the selected Excel cell.

For more information on printing the drawing, setting styles, and rounding lengths at the Digitizer Control window see About the Digitizer Control Window.

Continuous Length

The continuous length command accumulates the total length every time you click or trace along a line.

To digitize continuous lines, click on a cell, and then choose **Digitizer | Continuous Length** or click on the **Continuous Length** button on the toolbar.

To digitize continuous lengths simply click or trace along the line shown on the plan. If you are tracing, you'll need to hold down the digitizing pointing device button while you drag it along the line. If you have continuous lengths that are not connected, you can stop one line and start another by pressing the **Enter** key or by clicking the button on the pointing device you programmed under **Digitizer | Setup Buttons** to perform the close line/area action. You can also use the popup menu button defined under **Digitizer | Setup** to end the line.

To erase the last point, press the **Backspace** key. You can also delete an entire line by selecting the **Delete Selected Object** command from either the popup menu set under **Digitizer | Setup Buttons** or by using the **Edit** menu of the digitizer control

window. When you're done, click the button on the digitizer pen or cursor that you set as the stop digitizing action under **Digitizer | Setup Buttons**, press the **End** key on the keyboard or click the green check mark using your mouse to close the window and record the number into Excel.

While measuring continuous lengths you can measure the perimeter lengths of arcs, circles and rectangles by using the popup menu, digitizer control **Edit** menu or pressing the digitizer button previously defined as arc, circle or rectangle. To measure the length of arcs, click on the start and end of the arc after an initial point is entered and the Arc command is selected. To measure the circumference of circles click on three points either clockwise or counter-clockwise around the circumference of the circle after the circle command is selected. To measure perimeter lengths of rectangles clicking on three of the four corners either clockwise or counter-clockwise around the perimeter of the rectangle after the rectangle command is selected.

Please note that the perimeter of an area measurement can be obtained by the following:

a) Measure and record area measurement into an Excel cell.

b) Move to a new cell where you want the perimeter length to be recorded.

c) Click on the continuous length command and after the digitizer control window appears close it immediately by clicking on the green check mark.

For more information on printing the drawing, setting styles, and rounding lengths see About the Digitizer Control Window

Area

To digitize areas, click on a cell and then choose **Digitizer | Area** or click on the **Area** tool found on the toolbar.

Simply click or trace along the perimeter line shown on the plan. If you're tracing, you'll need to hold down the point button on the pen or cursor while you drag it. When digitizing areas, you don't need to return to the first point. By pressing the stop-digitizing button on the pen or cursor, the area is automatically closed back to the first point.

To end one area measurement in order to start a new one, press the **Enter** key on the keyboard, press the button defined under **Digitizer | Setup Buttons** as Close Line/Area or press the button previously defined as the popup menu under **Digitizer | Setup Buttons**. To close the window and record the area measurement into Excel, click the button on the digitizer pen or cursor that you configured as the stop digitizing action under **Digitizer | Setup Buttons**, press the **End** key on the keyboard or click the green check mark using your mouse.

While measuring areas, you can enter of arcs, circles and rectangles by using the popup menu, digitizer control **Edit** menu or pressing the digitizer button previously defined as arc, circle or rectangle. To draw an arc, click on the start and end of the arc after an initial point is entered and after selecting the Arc command. To measure the area of a circle click on three points either clockwise or counter-clockwise around the circumference of the circle after selecting the circle command. To

measure the area of a rectangle click on three of the four corners either clockwise or counter-clockwise around the perimeter of the rectangle after selecting the rectangle command.

You can subtract islands from digitized areas. Please note the following when subtracting island areas:

- If you are using a 16-button cursor, close the area by pressing the button defined as Close Line/Area and then press the button defined as Negative Area. Please note that the digitizer action buttons are defined at **Digitizer | Setup Buttons**. After you press the Negative Area button, you'll notice that the word Area on the digitizer control panel will be highlighted in red. The word Area highlighted in red indicates that all areas will be subtracted. When you're done digitizing the first island, press the Close Line/Area button to subtract the first island and start on the next island. To change from subtracting areas to adding areas, press the Negative Area button after you closed the negative area. The word Area will not be highlighted in red when Areas are being added.
- If you are using a pen stylus, you'll need to use the keyboard to toggle on and off negative area feature. To subtract areas, before digitizing the island press the minus sign on the keyboard or use the button defined as popup menu under the **Digitizer | Setup Buttons** command. After pressing the minus sign, you'll notice that the word Area on the digitizer control panel will be highlighted in red. To change from subtracting areas to adding areas, press the plus sign on the keyboard after you closed the negative area. The word Area will not be highlighted in red when Areas are being added.
- When subtracting islands, negative areas are deducted from the positive areas. The perimeter length however of the negative areas is added to the perimeter lengths of the positive areas to arrive at a total perimeter length for both the positive and negative areas.
- Islands will always be displayed with a contrasting clear or solid fill pattern on the digitizer control window.

The Area command calculates three numbers at the Digitizer Control window: the area, the perimeter length of the area and the number of corners or points touched. When you press the stop-digitizing button, the area number will be placed into the selected worksheet cell. To record the perimeter measurement into a different spreadsheet cell, move to the desired cell and select the **Continuous Length** command and then press the stop digitizing button on your digitizer pointing device or click on the green check mark button immediately after the Digitizer Control window opens. To record the number of points into another cell, move to a different cell and select the **Count** command followed by the stop-digitizing button.

For more information on printing the drawing, setting line styles, setting area fill patterns and colors, see About the Digitizer Control Window

Print Drawing

To print your digitized drawings:

1. Select the cells that contain digitized values. To select multiple cells, click on the first cell and then hold down the **Ctrl** key while you click on subsequent cells.
2. Select the print command by going to **Digitizer | Print Drawing** or select the **Print Drawing** button on the toolbar.
3. A Title Block Entries dialog box will open. Here, you can enter in a project name, location and measurement identifier. This information will be included on the digitized drawing printout. After entering the information, click **OK** and the BidPoint XL Print Preview window appears.
4. At the top of BidPoint XL Print Preview window several commands are found. By pointing the mouse pointer over the icon, a description of the command is displayed. Moving from left to right the following commands are available:
    - **Print** - prints the displayed drawing.
    - **Print Setup** - defines the printer and page orientation.
    - **Depress when printing to a Meta or PDF file**
    - **Select Font** – allows you to change the font of the text found on the printout.
    - **Rotate Counter Clockwise** - rotates the drawing.
    - **Rotate Clockwise** - rotates the drawing clockwise
    - **Show Border** – allows you to include an optional birder around the page.
    - **Show Measurements –** Depressing this button displays the measurements for the individual areas and lengths digitized.
    - **Show Style Legend** - If use Styles is checked under the **Digitizer | Setup** menu, depressing this button displays the style legend.
    - **Select Scale** – When the drawing prints, a scale for the printed drawing is chosen here. This may be different than the scale used when digitizing the measurements. To change the printed page scale, select the desired scale from the drop down list box.
    - **Close Preview Form** – closes the print preview window.

Change Scale

Change Scale lets you change the scale after you have digitized a measurement. You'll use this command if you digitized using the wrong scale.

To change a scale, click on the cell(s) that contain a digitized number with the wrong scale and then select this command to change the scale. If many cells were digitized using the wrong scale, select the other cells by holding down the **Ctrl** key on the keyboard while you click on the desired cells.

Change Drawing Name

If **Use Drawing Names** is checked under the **Digitizer | Setup** menu, each measurement must be assigned to a drawing name. This option lets you change between drawings.

Change Style

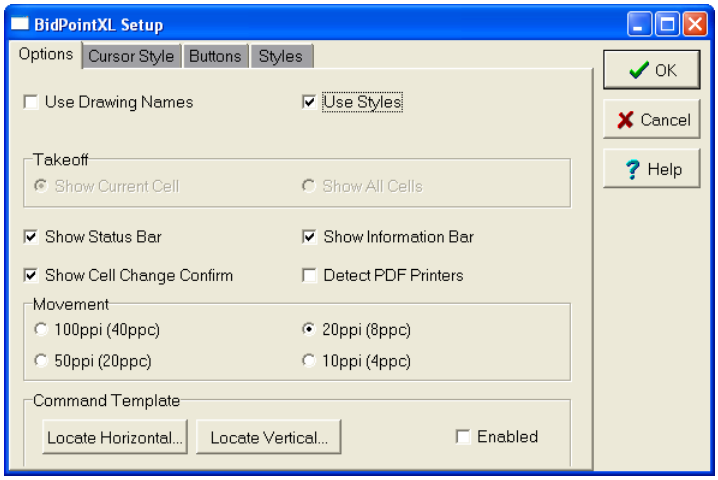
If **Use Styles** is checked under the **Digitizer | Setup** menu, each measurement is identified by a style. This command lets you change the style for any measurement.

Setup

Prior to digitizing areas, lengths and counts for the first time, you'll need to setup the digitizer pointer's buttons by selecting **Digitizer | Setup**.

Four tabs are displayed on the Setup dialog:

1. Options
2. Cursor Style
3. Buttons (or Actions)
4. Styles

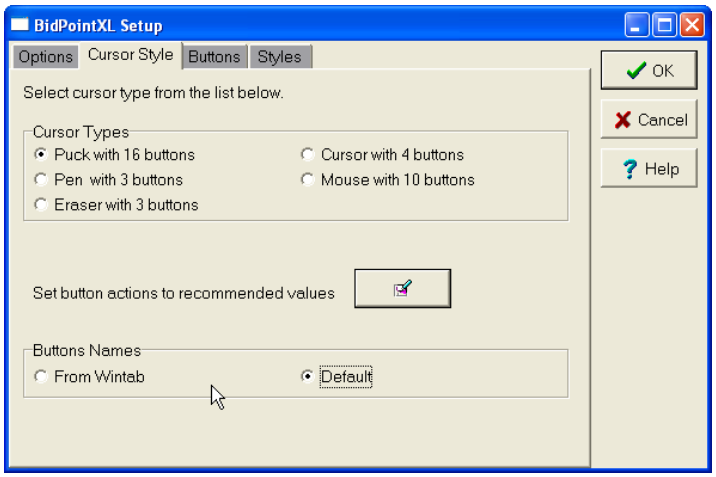


Options tab:

- If **Use Drawing Names** is checked, you'll name and identify the drawing name as you digitize measurements. When you name your drawings, you're able to show all takeoff measurements pertaining to the named drawing found in other cells as you digitize into the current cell. We suggest that you check the **Use Drawing Names** option as, and if, the need arises.
- The **Use Styles** check box enables you to create line styles, organized by group at the **Styles** tab.
- The command template option is available when using a Numonics Accugrid digitizer, virtual tablet digitizer driver or an older GTCO brand Wintab driver. The printed command template is placed on the digitizer tablet and you'll press the Locate button to instruct the software where the digitizer command template is located. You'll be able to operate the BidPoint program through the attached

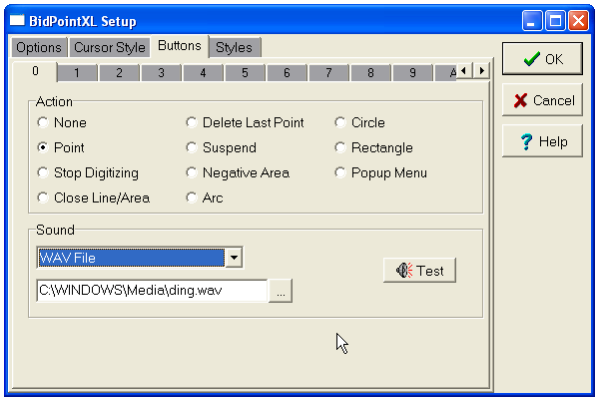
command template. The commands found on the template can be easily accessed through the 16 button cursor. As a result, the command template is usually used with the Numonics brand digitizers and the pen stylus digitizer pointer device.

Cursor Style tab:



At the Cursor Style tab, you define the type of digitizer pointer used with the digitizer tablet. You can also set the digitizer buttons by clicking on the Set button actions to recommended values.

Buttons (or Actions) tab:



Select the **Buttons** tab to set an action and sound for each button.

There are eleven different actions the digitizer pointing-device buttons can perform:

1. Do Nothing. (**None**)
2. Register points and trace lines. (**Point**)
3. Stop digitizing and record the measurement into the Excel worksheet cell. (**Stop Digitizing**). You can also use the **End** key on the keyboard or the green check mark button with your mouse to record the number into the Excel cell.

4. Close an area or end a continuous line so that you can continue with the next area or continuous length. (**Close Line/Area**). You can also press the **Enter** key on the keyboard to perform this action.
5. Delete the last point entered. (**Delete Last Point**). You can also use the **backspace** key on the keyboard to perform this action.
6. Suspend the digitizer so it will act as a mouse (**Suspend**). You'll use this button to turn your digitizer pointing device back into the mouse mode in order to select the style commands at the Digitizer Control window. Please note to resume digitizing after this button is pressed, you'll need to select the lightening bolt icon on the measure window.
7. Subtract island areas. (**Negative Area**). After closing an area, by pressing the button noted in 4 above, pressing this button will allow you to subtract island areas from gross areas. Pressing the minus sign on the keyboard can also activate this action. Please note that when you're entering negative areas, the word Area on the Digitizer Control (Area) window will be highlighted in red. To deactivate the negative area action, press this button again or press the plus (+) sign on the keyboard.
8. Measure the area and perimeters of arcs by clicking on two points after an initial point is entered. **(Arc)**.
9. Measure the area and circumference of circles by clicking on three points either clockwise or counter-clockwise around the circumference of the circle. **(Circle)**.
10. Measure areas and perimeter lengths of rectangles by clicking on three of the four corners either clockwise or counter-clockwise around the perimeter of the rectangle. **(Rectangle)**.
11. Access the BidPoint popup menu. **(Popup Menu)**.

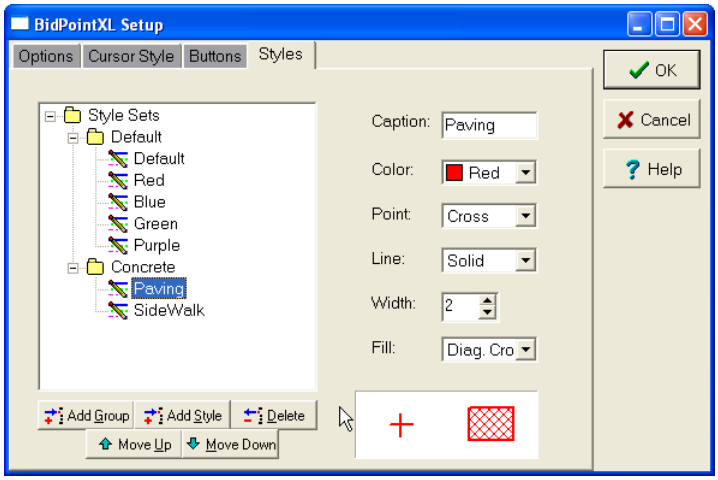
To program each button, click on the button at the top of the window and select the action you want the button to perform. If you're using a pen with only two buttons (tip and barrel), the pen tip will be used to **Point** and the side button will be set to either **Stop Digitizing** or **Popup Menu**. If you're using a pen with two-barrel buttons, set one for **Stop Digitizing** and set the other for **Popup Menu**.

If you're using a 16 button cursor, the top left button is usually set to **Point**, and the upper right button is set for **Stop Digitizing** and you can pick whatever buttons you want to perform any of the other activities.

You can also associate a sound with the button by clicking on the Sound drop down list box. If you select WAV file, you'll need to select the actual .WAV file by clicking on the three-dot lookup button located to the right of the box found above the **Test** button. Often, .WAV files are found in your Media folder under the Windows folder. Once a sound or .WAV file is selected, you can hear it by clicking the **Test** button.

Styles tab:

If **Use Styles** is checked at the **Options** tab, you're able to create a styles legend by clicking the Styles tab. The Styles are organized by Group and by using the buttons at the bottom of the Styles window; you're able to create Groups and Named Styles.



Digitizer Info

Digitizer | Digitizer Info provides you with digitizer information obtained from the **Wintab** driver. The digitizer manufacturer supplies the Wintab driver software. If you haven't loaded the Wintab driver, no information will be found here. You are unable to digitize with BidPoint XL until the Wintab driver software is properly loaded.

If you ever encounter problems with the digitizer, you should click here to verify that BidPoint XL is recognizing the Wintab driver. If no information is displayed, there is a problem with the Wintab driver software.

For more information on hooking up your digitizer see Hooking up your Digitizer

Digitizer Help

Contains the help file for the BidPoint XL software.

Digitizer Control Window

About the Digitizer Control Window

Selecting **Digitizer | Count**, **Section Length**, **Continuous Length**, or **Area** commands from the Microsoft Excel menu places you into the Digitizer Control window. As you digitize measurements, a drawing of what you're digitizing is displayed.

The Measure display of the Digitizer Control window displays the digitized drawing with measurements. It also contains:

- Green check-mark accept measurement tool – which records the measurement into Excel.
- Red X cancel changes tool – closes the window without recording the number into Excel.
- Yellow lightening bolt resume digitizing tool – is active only after the Suspend button is pressed on the 16-button cursor.

The Digitizer Control window has menu options, icons and buttons. You can use the digitizer-pointing device to select these commands by pressing the device button previously defined as suspend under **Digitizer | Setup Buttons**.

Most menu commands can also be performed by using the tools found on the **Measure**, **Print**, **Style** and **Round** buttons on the toolbar.

For more information, see:

File

Edit

Edit

Options

Using the Popup Menu

File

The **File** pull-down menu on the Digitizer Control window contains the following commands:

- **Print** command prints the displayed drawing.

- **Print Setup** is used to define the printer, paper size and page orientation.
- **Close (OK)** shuts down the Digitizer Control window and records the digitized value into the spreadsheet cell. The green check mark button on the toolbar at the **Measure** button also closes the window and records the measurement into the spreadsheet cell. Normally however, you will close the Digitizer Control window and record the measurement into the cell by pressing the stop-digitizing button on the digitizer-pointing device. The stop digitizing button is defined at **Digitizer | Setup Buttons**.
- **Exit (Cancel),** on the other hand, closes the window without changing the cell value. The red X button on the toolbar at the **Measure** button also cancels the changes.

Edit

The **Edit** pull-down menu on the Digitizer Control window has several commands. Many of these commands can also be selected by using the buttons on the 16 button cursor or by pressing the button you defined as popup menu at **Digitizer | Setup Buttons**.

- **Close Area/End Line** - If you want to takeoff multiple areas or continuous lengths and have the total measurement displayed in one worksheet cell, press the **Enter** key, or **Close Area/End Line** command to close the area or continuous line measurement and start a new measurement. After you select this command, you can begin digitizing a new area or continuous length. When you are done digitizing all areas and lengths, press the pointing device button you configured for stop digitizing to record the measurement into the worksheet cell. This command is often performed by pressing a button on your pointing device that was defined to close line/area at **Digitizer | Setup Buttons**.
- **Stop Takeoff** – Closes the window and records the measurement into the Excel worksheet cell. You can also stop the takeoff by pressing the **End** key on the keyboard or by clicking on the green check mark with the mouse.
- **Negative Area** – After digitizing a positive area, selecting this command allows you to deduct areas. When negative area is active the word Area on the digitizer control window is highlighted in red.
- **Arc** – After digitizing one point under the Area or Continuous Length command, a curved line can be entered by selecting this command and then digitizing on the start and end of the arc.
- **Circle** – When digitizing areas and continuous lengths, circles can be drawn and measured by selecting this command and entering three points along the circumference of the circle either clockwise or counter clockwise.
- **Rectangle** – When digitizing areas and continuous lengths, rectangles can be drawn and measured by selecting this command and clicking on three of the four corners either clockwise or counter clockwise.
- **Delete Last Point** - If you make a mistake while digitizing, the **Backspace** keyboard key, or **Delete Last Point** command, deletes the

last digitized point. If you press the **Backspace** key three times, the last three digitized points are deleted from the current measurement. You can also press the delete last point button on the digitizer-pointing device. The delete last point button is defined at **Digitizer | Setup Buttons**.

- **Delete All Points** - Pressing the **Home** key, or the **Delete All Points** command, deletes all points pertaining to the current measurement. You'll use the command if you want to erase the current drawing and start from the beginning.
- **Delete Selected Object –** Selecting this command lets you delete select objects using the digitizer pointing device. The digitizing pointing device must not be in mouse mode when deleting selected objects.
- **Resume Drawing - If** you have programmed one of the digitizer pointing device buttons to suspend (see **Digitizer | Setup Buttons** for more information) and you have pressed that suspend button to activate the mouse pointer, selecting this command turns the digitizer pointing device from mouse mode back to digitizing mode. The lightning bolt at the **Measure** button on the toolbar also changes the digitizing pointing device back to the digitizing mode.

Options

The **Options** pull-down menu on the Digitizer Control window is where you set line colors, area fill styles, line styles and point styles. These commands are also available to you from the **Style** button found on the toolbar.

To use the menu or toolbar with the digitizer pointing device, you must press the digitizer button that you defined as suspend at **Digitizer | Setup Buttons**. To resume digitizing after pressing the suspend button, click on the Return to Measuring (it looks like a lightning bolt) tool at the **Measure** button.

The following commands are found at the Digitizer Control window **Options** pull-down menu:

- **Color** lets you change your drawing line color. To select a color, move to the desired color, press the **spacebar** or click with the mouse and then hit the **OK** button. Whatever color you select here will cause the font color of the highlighted cell to also change. You can also change line colors by changing the Excel font color.
- **Font** is where you specify the font included on the digitized drawing printout.
- **Fill Style** allows you to select from eight different patterns for area measurements. The selected pattern will be placed inside the area drawing.
- **Line Style** lets you select from five different line styles when drawing areas and lengths.
- **Point Style** gives you six point style options to choose from when digitizing counts.
- **Rounding** lets you round up length measurements to a specified degree of precision. Rounding up length measurements eliminates long numbers to the right of the decimal. Please note that each section

length and each side of the polygon when calculating perimeter length are rounded.

- **Show Status Bar** lets you hide or display the status bar at the bottom of the digitizer control window. The status bar gives you digitizing instructions and displays the X and Y positions of the digitizer pointing device.

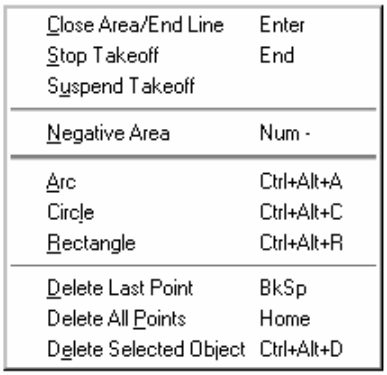
Help

The **Help** pull-down menu on the Digitizer Control window has several commands:

- **Contents** presents the on-screen help organized by chapter topics.
- **Index** displays the help topics index page.
- **Digitizer Info** displays information about the Wintab driver.
- **Register** you can register the software with Vertigraph, Inc. here.
- **About** provides information about Vertigraph, Inc.

Using the Popup Menu

At the Digitizer Control window you can press a digitizer pointing device button to access the popup menu. Which button is pressed to access the popup menu is defined at the **Digitizer | Setup Buttons** menu. When pressing the popup menu digitizer button the following menu appears:



- **Close Area/End Line** - If you want to takeoff multiple areas or continuous lengths and have the total measurement displayed in one worksheet cell, pressing this command closes the area or continuous line measurement so that you can begin a new area or line.
- **Stop Takeoff** – Closes the window and records the measurement into the Excel worksheet cell. You can also stop the takeoff by pressing the **End** key on the keyboard or by clicking on the green check mark with the mouse.
- **Negative Area** – After digitizing a positive area, selecting this command allows you to deduct areas. When negative area is active the word Area on the digitizer control window is highlighted in red.

- **Arc** – After digitizing one point under the Area or Continuous Length command, a curved line can be entered by selecting this command and then digitizing on the start and end of the arc.
- **Circle** – When digitizing areas and continuous lengths, circles can be drawn and measured by selecting this command and entering three points along the circumference of the circle either clockwise or counter clockwise.
- **Rectangle** – When digitizing areas and continuous lengths, rectangles can be drawn and measured by selecting this command and clicking on three of the four corners either clockwise or counter clockwise.
- **Delete Last Point** - If you make a mistake while digitizing, this command deletes the last digitized point. If you press the **Backspace** key three times, the last three digitized points are deleted from the current measurement.
- **Delete All Points** - Pressing this command or the **Home** key on the keyboard deletes all points pertaining to the current measurement. You'll use the command if you want to erase the current drawing and start from the beginning. Be careful – all drawing data will be lost.
- **Delete Selected Object –** Selecting this command lets you delete select objects using the digitizer pointing device.

Other Useful Information

Editing and Erasing your Digitized Drawings

To edit your drawing, click on the spreadsheet cell that contains the measurement, and then select the type of measurement (i.e. area, section length, continuous length or count) from either the **Digitizer** menu or toolbar. For example, if a number in a spreadsheet cell resulted from a digitizer area, select the **Digitizer | Area** command to view the area. Press the **Backspace** key to delete points. You can also add new measurements to the displayed drawing.

You can change colors and styles when you are at the Digitizer Control window. From the Digitizer Control window select the **Styles** button on the toolbar. You can also change digitized line/point colors by changing the font color in Excel.

To move or copy digitized drawings, use the Excel cut, copy and paste commands found on the keyboard (**Ctrl+X**, **Ctrl+C**, **Ctrl+V**), **Edit** pull-down menu or by clicking the right mouse button when clicked on a cell.

To delete digitized drawings, press the right mouse button when highlighted on the cell and select delete comment. You can also delete drawings by using the copy and paste commands. Copy a blank cell, then move to the cell containing a drawing and paste the blank cell. Pasting a blank cell will erase the cell value and drawing comments. When in the Digitizer Control window, drawings are deleted using the **Edit** menu.

Digitizer Information and Cell Comments

Digitizer info is stored as Excel cell comments. If a cell contains digitizer information (i.e. cell comments) a red dot is found in the top right hand corner of the cell. If you have digitized a drawing into a cell and do not see the comment indicator dot, turn the comment indicator on by selecting **Tools | Options | View** in Excel.

To view a cell comment in Excel, click on the cell and press either the right mouse button to select show comment, or press the **Shift+F2** keys. Deleting the cell comment in Excel erases the drawing.

Certain default digitizing information is stored in cell comment A1 of the spreadsheet. As a result, after digitizing you will see a comment indicator appear in cell A1. With BidPoint XL, you can digitize into any cell, except cell A1.

View Multiple Drawings

To view and print multiple digitized drawings:

a) Select the cells that contain digitized values. To select multiple cells, click on the first cell and then hold down the **Ctrl** key while you click on subsequent cells.

b) After the cells are chosen, select the print command by going to **Digitizer | Print Drawing** or select the **Print Drawing** button on the toolbar.

c) A Title Block Entries dialog box will open. Here, you can enter in a project name, location and measurement identifier if you like. This information will be included on the digitized drawing printout. Or just click the **OK** button.

d) To print the drawings, select the **Print** command.

Please note that the drawings are layered according to the order of selection. For example, if an area with a solid fill pattern hides your count symbols, choose the area measurement first then the count drawing.

Troubleshooting

Drawing Data is Larger than Allowed Message

Excel limits the number of points that can be recorded into any cell comment. As a result, approximately 2,000 digitizing points can be entered into one cell. It is rare that a digitized drawing will contain more than 2,000 points. However, if a drawing does contain more than 2000 points, you will need to record the measurement in two different cells and use the spreadsheet functions to add the two cells together.

At the digitizer control window, the number of points is counted while you digitize. The number of points digitized is affected by the manner in which you digitize:

- Are you clicking on the corners or are you tracing the perimeter? Tracing lines generates many more points then clicking on the corners or end points of lines.
- If tracing around a radius, the slower you trace, the more points are generated.
- To reduce the number of points, try using the arc or circle commands for curved lines.

Using Cell Protection in Excel

If you are using Excel's cell protection features, do not protect the worksheet for objects or formatting when digitizing. After selecting **Tools | Protection | Protect Sheet** make sure **Objects** is not checked. If **Objects** is checked, you'll receive a run-time error 1004 message.

Open a Workbook before Digitizing

You may receive a run-time error 91 message if you try to digitize a measurement without having an Excel workbook opened. As a result, make sure you have a workbook open before digitizing.

The Esc Key while Digitizing Causes an Error

If you press the **Esc** key on the keyboard at any time after selecting a digitizer command, you'll receive a Microsoft error message that states "code execution has been interrupted". If you click the **End** button, you'll have problems and will need to exit Excel and reopen prior to digitizing again. As a result, always select the **Continue** button when you receive this error message instead of the **End** button.

Red Comment Indicator is Not Displayed

The digitizer information is stored as cell comments. As a result, cells that contain a digitized drawing will display a red dot, comment indicator in the cell. If you do not see a small red dot in the top right-hand corner of the cell after digitizing, you'll need to turn the comment indicator on by going to **Tools** | **Options** and select the **View** tab and select **comment indicator only**.

Error Message Displayed

If you receive an error message, please save the file and **Exit** MS Excel before digitizing again. Please notify Vertigraph about the error message if it is not addressed above.