DOWNLOADING & IMPORTING POINTS

Note: DC = Data Collector; PC = Personal Computer

I. DOWNLOADING POINTS

1. **On your DC:**
   a. Start "SURVEY-PRO" and open the job you want to transfer points from.
   b. DC should open up in "File" mode. Tap "D. EXPORT COORDINATES"
   c. Select the points you want to export
      i. There will be a drop-down arrow in the "Select points to export" area. Pick the arrow and click SELECT ALL POINTS.
   d. Highlight the Text (.txt) file button.
   e. Tap NEXT
   f. Indicate either a "space" or "comma" delimiter.
   g. Leave "Plane" Coordinates on. Make sure coordinate units are in "FEET"
   h. Tap NEXT.
   i. Make the data sequence:
      i. Point Name; Northing; Easting; Elev.; Description (PNEZD)
   j. Tap FINISH
   k. Give the *.txt file a name and Tap OK.
   l. Screen will go back to "File" mode.
   m. Exit the Survey Pro program by selecting "File" and Tap "I. EXIT"

2. **Connecting the DC and the PC**
   a. Connect the DC and the PC using the proper cord.
   b. Open Microsoft ActiveSync on your computer.
   c. Go To "File" "Connection Settings"
   d. You must have the following checked depending on your connection cable (USB or 9 pin) and what port you are connecting to (USB, COM1, COM2, etc):

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e. Make sure your DC is on.

f. Click the "Connect" button in ActiveSync and then Click NEXT

g. You will get a message on your DC asking if you want to "Connect to the desktop?" click YES.

h. You will hear a funny sound once your DC is connected to your PC and the "swirl" will turn green at the bottom of your screen

i. Activesync will ask if you want a "New Partnership", select "NO", then "NEXT"

3. Transferring Files

a. To find your text file you exported: On your PC, go into "My Computer" "Mobile Device" "My Computer" "Disk" "Survey Pro Jobs" and locate the *.txt* file you exported.

b. You can drag the file, or cut and paste, or copy and paste the file to the folder you want to place it in.

c. Once your files are transferred you can shut down the DC, and this will end your connection with the computer, remove your transfer cord.

You now have a *.txt file saved on your computer ready to be imported into CAD.

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II. IMPORTING POINTS into Civil 3D

This help sheet covers two methods for importing survey points into a Civil 3D drawing. The point data should be downloaded from the data collector as either a CSV or TXT file. The data in the file can be in many different formats (i.e. comma delimited, space delimited, etc.) and in different orders (PNEZD, PENZD, etc.). The format and order is shown on the data collector or you can open your downloaded file using EXCEL or NOTEPAD and view the data. **You will need to know which format and order your data is in before importing.**

*If you are using **LIDAR** points, follow the help sheet on creating a surface which utilizes the point file method with data clip. Do not attempt to import the LIDAR points using Method 2 below since the files are huge and will crash your Civil 3D.*

The following examples assume the data is in point number, northing, easting, elevation, and point description (PNEZD) and is comma separated. **The point numbers in the first column of the file must be in numeric format only, or an error will occur when you try to import into Civil 3D.**

Appearance of text file data:

```
100,745.1372,933.2802,1275.5866,SPOT
101,695.2444,926.5438,1271.9057,SPOT
102,657.1006,932.2727,1267.7108,SPOT
103,631.4184,931.3466,1257.8583,SPOT
104,602.6458,929.6008,1253.2811,SPOT
105,566.2690,925.1058,1256.1897,SPOT
106,540.3683,923.0105,1261.0048,SPOT
107,513.2654,919.3450,1268.5872,SPOT
108,522.5083,934.3847,1264.7061,FNC
```

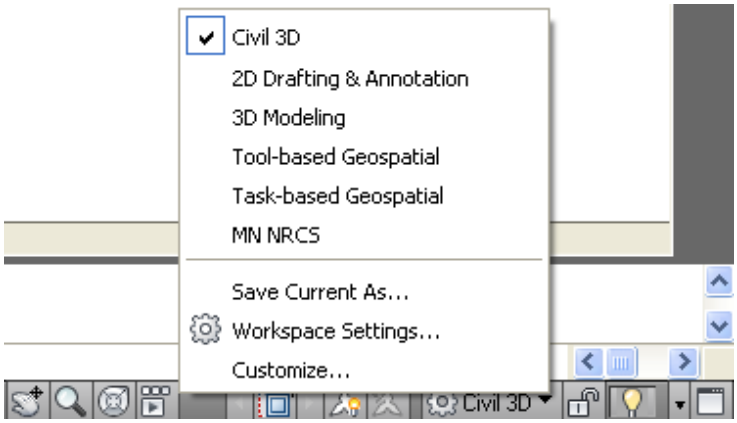
Appearance of csv file data:

	A	B	C	D	E
1	245	678004.3	847506	833.765	G
2	246	678022.1	847508.6	834.184	G
3	247	678059.1	847503.2	835.371	G
4	248	678027.8	847535.9	833.864	G
5	249	678009.4	847570	833.305	G
6	250	678026.5	847588.8	833.039	G
7	251	678061.4	847611.5	833.439	G
8	252	678065.3	847668.6	832.943	G
9	253	678038.2	847680.9	832.298	G

A. Method 1 –Reference a POINT FILE into a drawing

This method only *references* the point data into your drawing so you they are not Autocad objects that can be modified.

1. Make sure the Civil 3D workspace is loaded. To do this, check the workspace that is listed in the lower right hand corner of the window, as shown below. To switch a workspace, click on the down arrow next



to the workspace name and select the workspace from the list.

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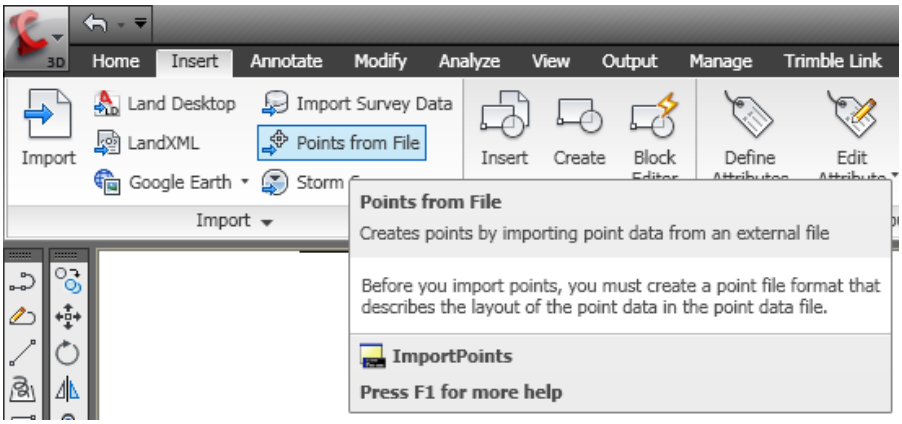
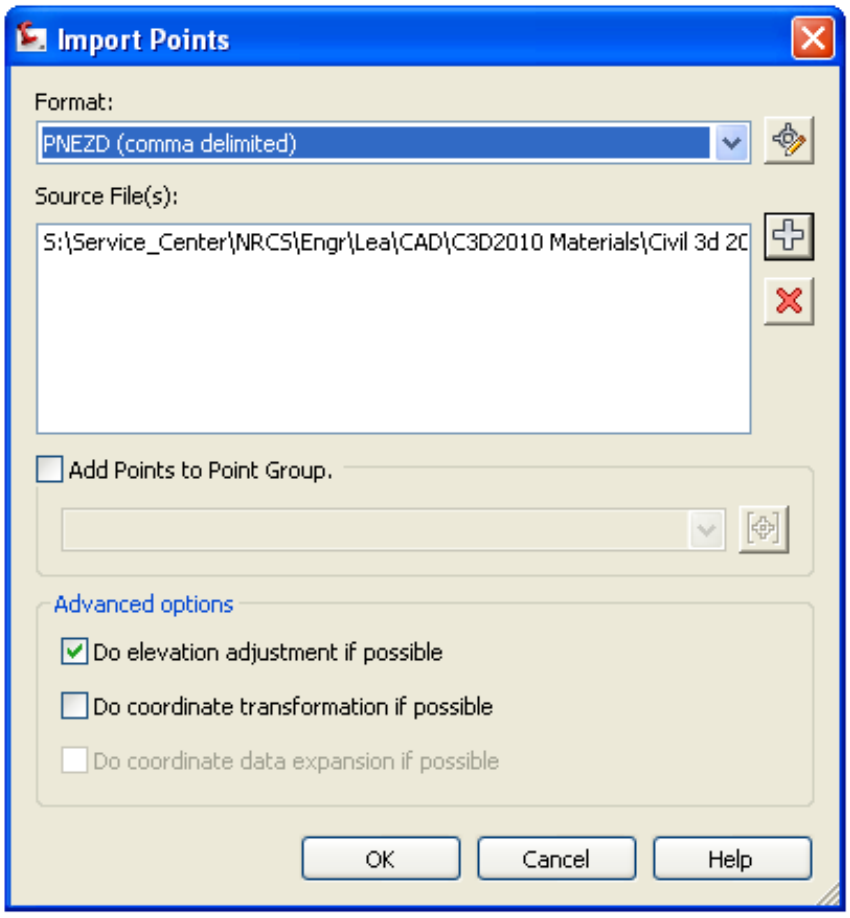
2. Go to the *Import* panel on the *Insert* ribbon and select *Points from File*



3. The *Import Points* window will appear. Verify that the format is set to PNEZD (comma delimited)

4. Click on the plus sign to the right of the *Source File(s)* pane and navigate to the file that contains the survey data that you want to import. The window should look similar to the figure below.



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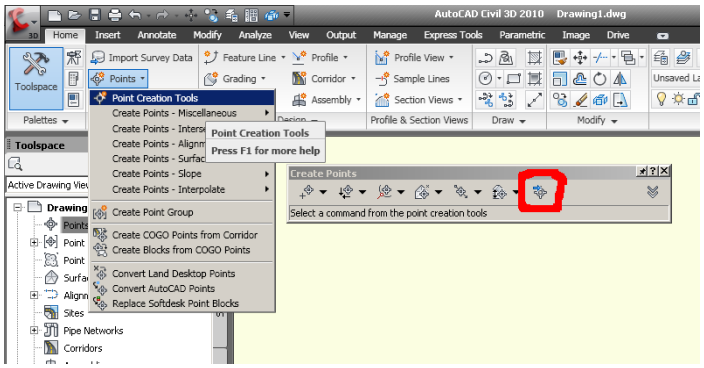
5. Click on the OK button to import the data into the drawing.
6. The point data will be imported into the drawing. Type "ZE" in the command line to execute the "zoom extents" command, then you should be able to see the point objects.

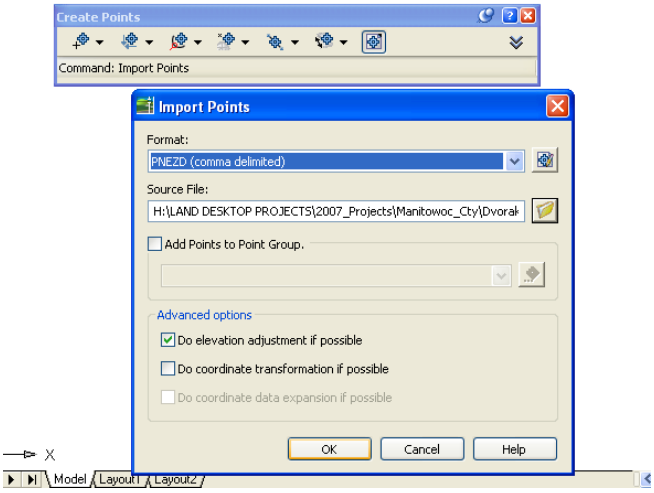
B. Method 2 –Add POINTS into a drawing

This method puts the points into your drawing as Autocad objects that can be modified.

1. Click on the Points menu on the top of your screen.
2. Pick Create Points. You'll get a Create Points tool bar.
3. On the far right of the toolbar will be a symbol with a box around it. When you let your crosshairs sit on it, it should say Import Points



4. When you pick the symbol, you'll see a dialog box with a familiar process to import points.



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5. Be sure to choose a recognizable point format (i.e. PNEZD, comma delineated) and navigate to the appropriate folder where you saved your points when downloading the data collector.

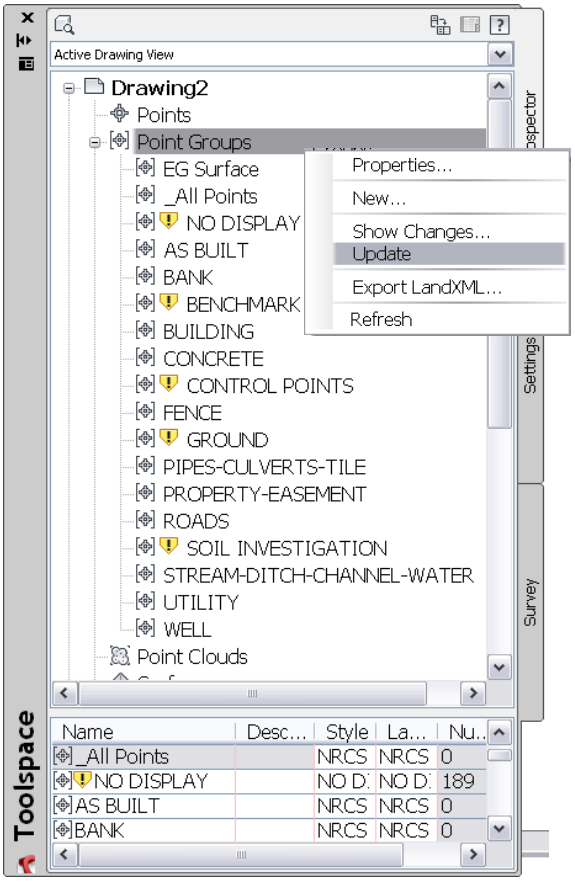
6. Type "ZE" in the command line to execute the "zoom extents" command, then you should be able to see the points.

C. Check your point groups

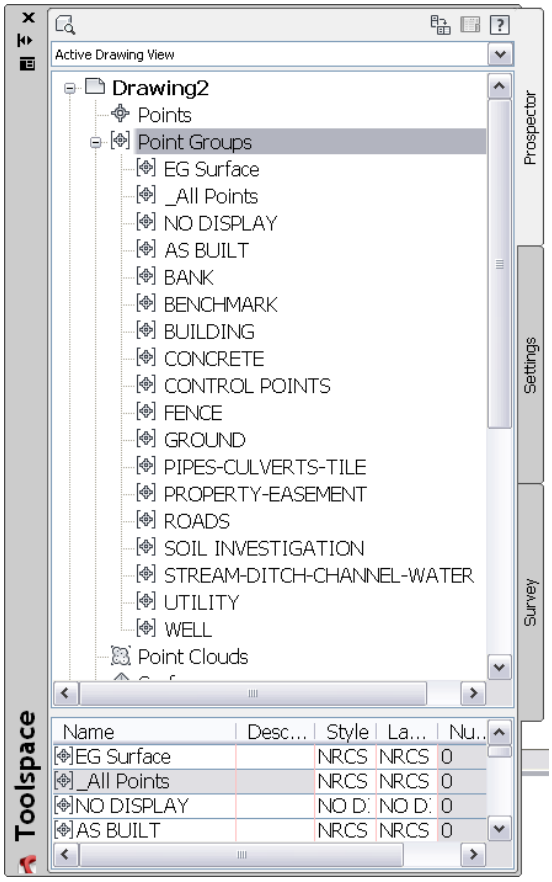
1. After the point data is imported into the drawing, you may need to update the point groups to make sure the points are properly sorted. Go to the Prospector tab on the Toolspace and expand the listing of Point Groups.

2. If you see any yellow shield icons with an exclamation point inside of it beside any of the point groups in the list, your point groups are out of date and need to be updated. See the figures below. Right click on *Point Groups* and select *Update* from the menu. The point groups will be updated and the points sorted into the groups as shown in the figure below and to the right.

Before Updating Point Groups



After Updating Point Groups



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