

## Workflow 1: Importing Survey Data

1. Select **Applications>GEOPAK>SURVEY>Survey** from the pull down menu:

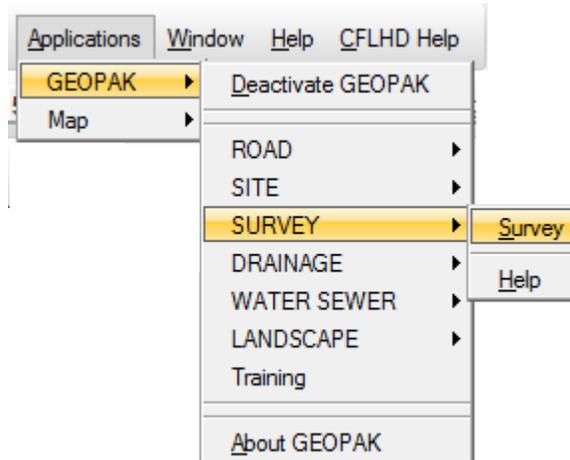


Figure 4.1-1: Geopak Survey

2. This will bring up the following dialog box:

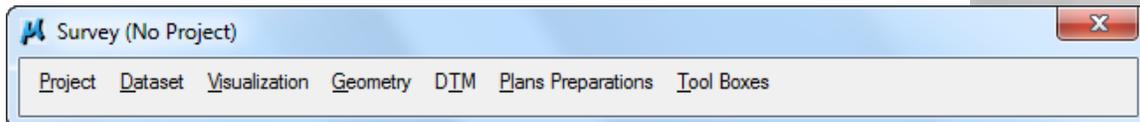


Figure 4.1-2: Geopak Survey Dialog Box

Select **Project>New** to get the following dialog box:

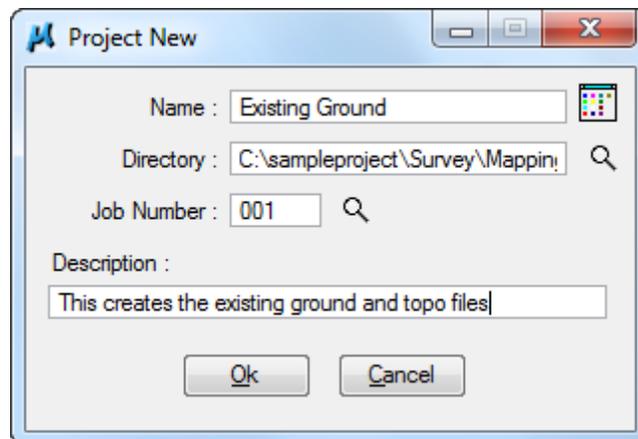


Figure 4.1-3: New Project

3. Fill in the dialog box with the required information and select **Ok**. This will change the title in the Survey dialog box to show the project name.

4. Select **Dataset>New** to get the following dialog box:

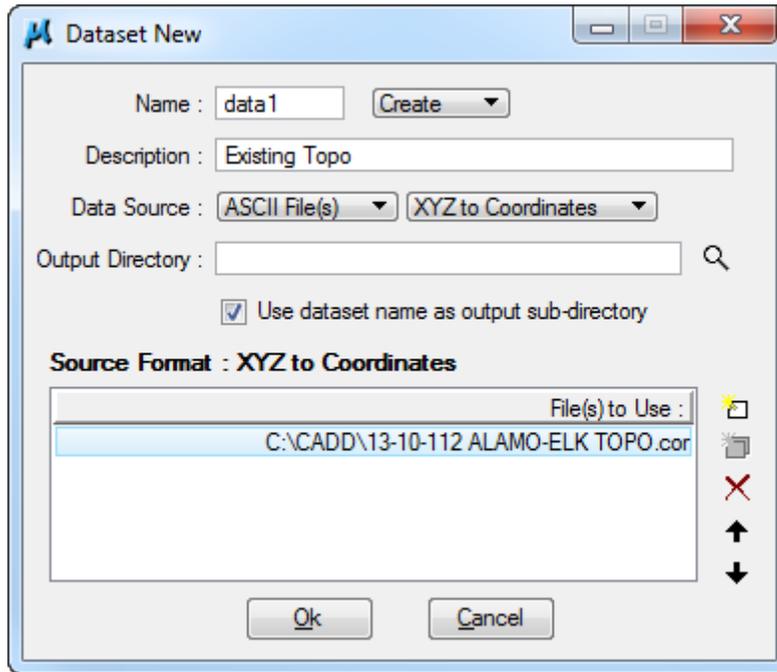


Figure 4.1-4: Select Dataset

5. Fill out the dialog box as shown, using the add file to list button  to load the desired file. Select **Ok** to get the following dialog box.

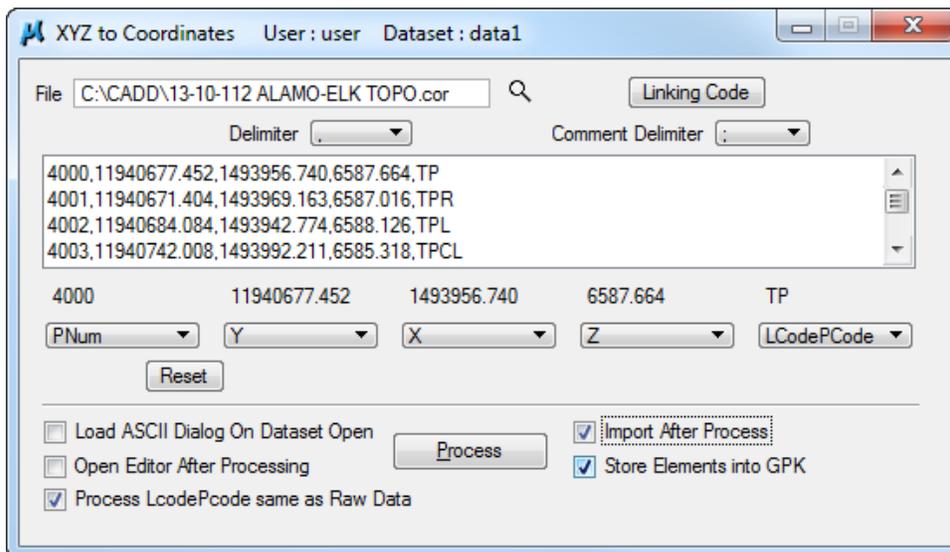
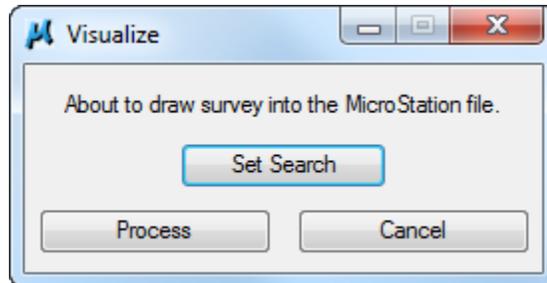


Figure 4.1-5: Process Dataset

6. The **Linking Code** button brings up dialog box in which you set the line codes read from the ASCII file. Usually "BL\*" is used for begin line and "EL\*" is used for end line.
7. Make sure the **Delimiter** is a comma and the **Comment Delimiter** is a semi-colon. Highlight any line in the data box and GEOPAK will put that information above the buttons at the bottom of the dialog box. Select

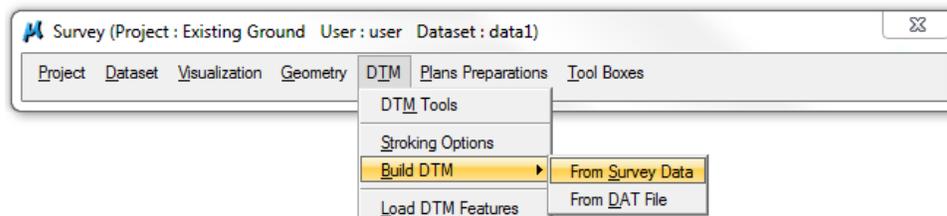
the buttons as shown in the above example. The PNum stands for Point Number, Y is the Northing, X is the Easting, Z is the Elevation, and LCodePCode is the Code that the Survey Manager uses to draw the elements properly. If there is a Next button and it is picked it will show one more column, which is the comment column. This button should be set at none. Check the Store Elements into GPK and Import After Process boxes. This will import the points into the GPK.

8. Go to the 3D MicroStation file that the survey data needs to go in and pick Visualization>Visualize the get the following dialog box:



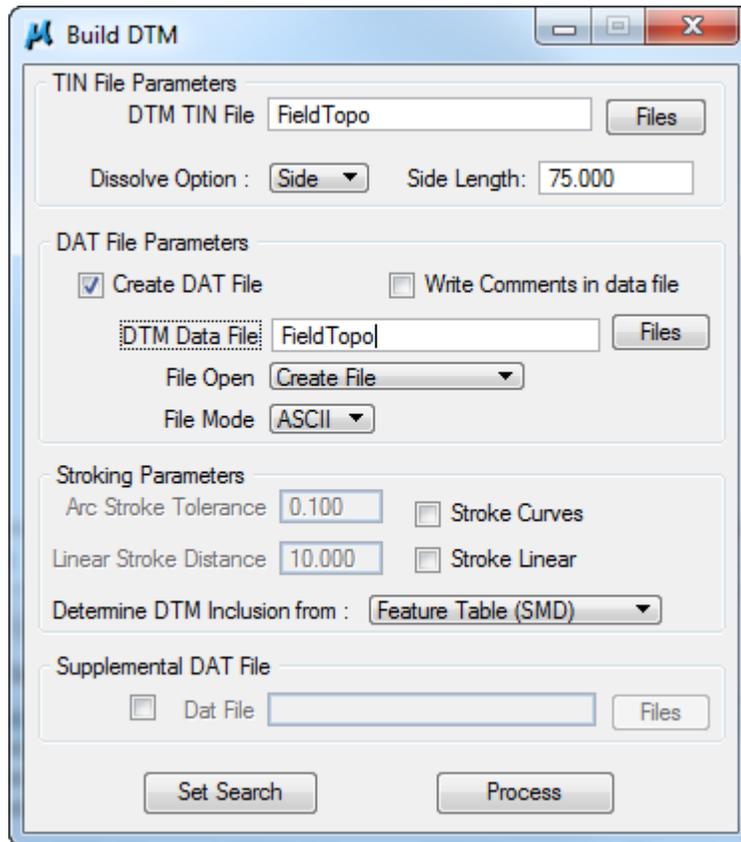
**Figure 4.1-6: Visualization**

9. Set Search allows the user to select the Data Set to import into the drawing. After the correct data set is chosen, select Process.
10. Once these values are set, select the Process Survey button on the Survey Operations dialog box.
11. GEOPAK will draw the elements into the drawing. If there are error messages during the process, pick the Dataset>Review Reports>Feature Code Error Report pull downs to find out what the error is. Go to the .cor file and modify to the correct feature code.
12. This next step will build the .tin. Select the DTM>Build DTM>From Survey Data pull downs.



**Figure 4.1-7: Select Build DTM**

It will bring up the following dialog box.



**Build DTM**

TIN File Parameters  
DTM TIN File: FieldTopo Files

Dissolve Option: Side Side Length: 75.000

DAT File Parameters  
 Create DAT File  Write Comments in data file  
DTM Data File: FieldTopo Files  
File Open: Create File  
File Mode: ASCII

Stroking Parameters  
Arc Stroke Tolerance: 0.100  Stroke Curves  
Linear Stroke Distance: 10.000  Stroke Linear  
Determine DTM Inclusion from: Feature Table (SMD)

Supplemental DAT File  
 Dat File Files

Set Search Process

Figure 4.1-8: Build DTM

13. Type in the new name for the .tin. Select dissolve option side with a side length that is long enough to avoid any voids along the outside edges of the data. The creation of a .DAT file is not necessary but can be done at this point. Select Process and the .tin will be created.