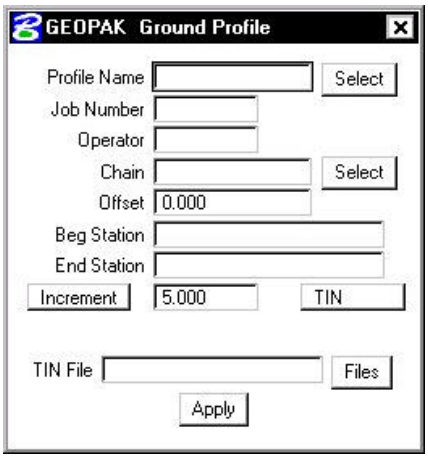
Existing Ground Profile

6.1 Extract Existing Ground Profile

Step 1. Open the MicroStation file **c:\data\geo\vdot\s1373\profile.dgn**

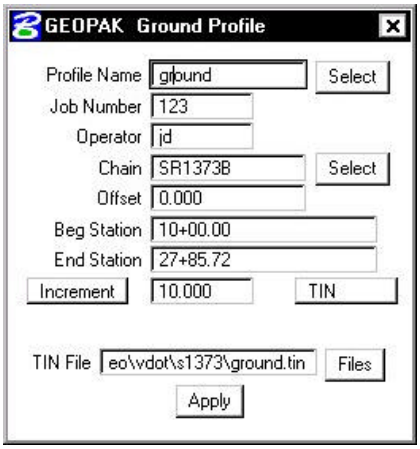
Step 2. Select the **Existing Ground Profile** button from the Road pulldown.

Applications > GEOPAK Road > Geometry > Ground Profile

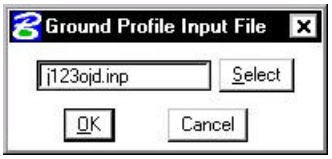


Step 3. Populate the **Ground Profile** dialog as shown and press **Apply.**

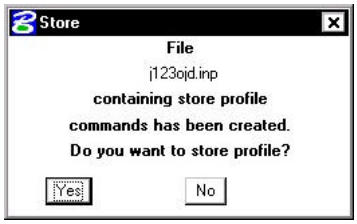
NOTE: The beginning and ending station of an alignment can be filled in automatically by placing the cursor in the **blank** field and pressing tab or enter. If they already contain a value, simply delete the value there, then press tab or enter.



Step 4. The profile is automatically stored into the coordinate geometry database (job123.GPK FILE), but save the audit trail into the file name (j123ojd.inp) as shown in the Ground Profile Input File dialog below, then press the **OK** button.

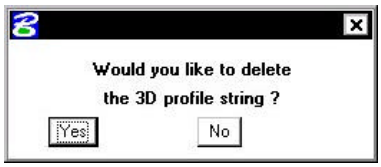


Step 5. When prompted to store the profile in the input file, press **Yes.**



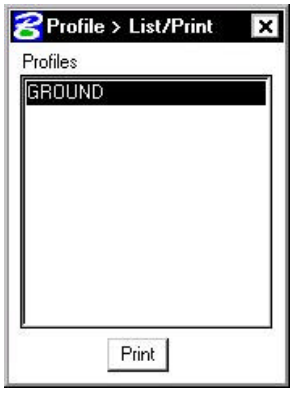
Step 6. Press **Yes** to delete the 3D line string in the design file.

Step 7. After the profile is stored, exit the **Ground Profile** dialog and Save Settings.



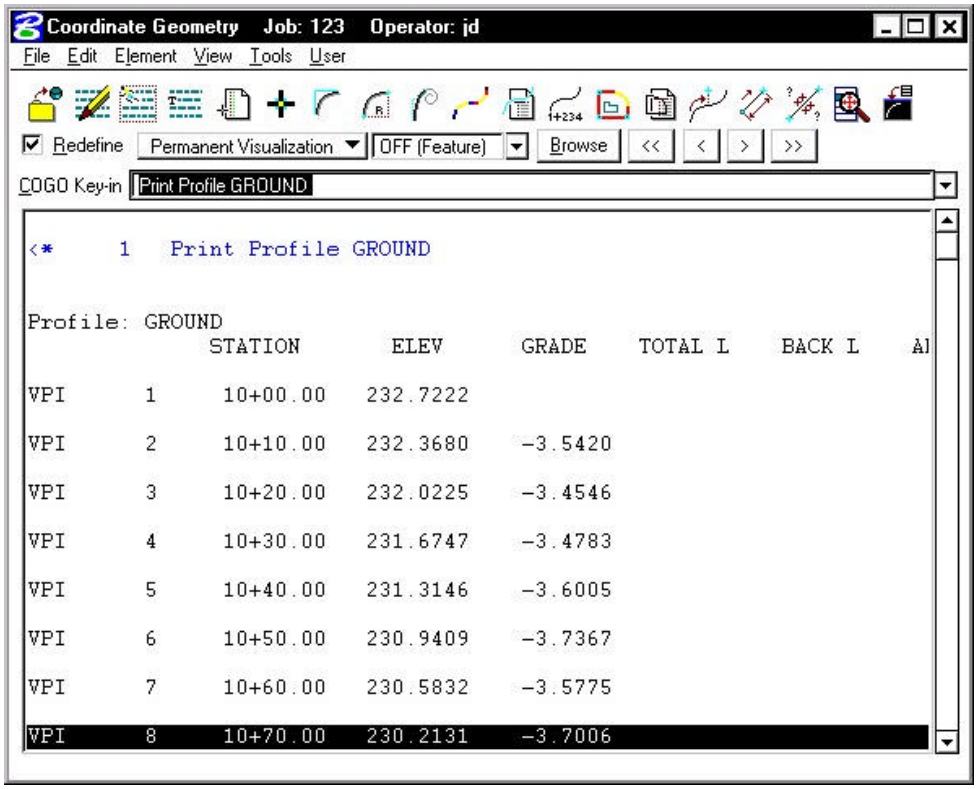
Step 8. Access the coordinate geometry tool. Press **OK** to accept your project name, etc.. This will open the Coordinate Geometry dialog.

Step 9. Select **Element > Profile > List/Print** from the COGO menu bar to invoke the List/Print dialog.



Step 10. Select the profile **'GROUND'** and press **Print**.

Step 11. Review the profile information in the COGO output display window.



Step 12. Close the Coordinate Geometry dialog (use X in upper right corner of the dialog). When prompted to save the Cogo session select NO.

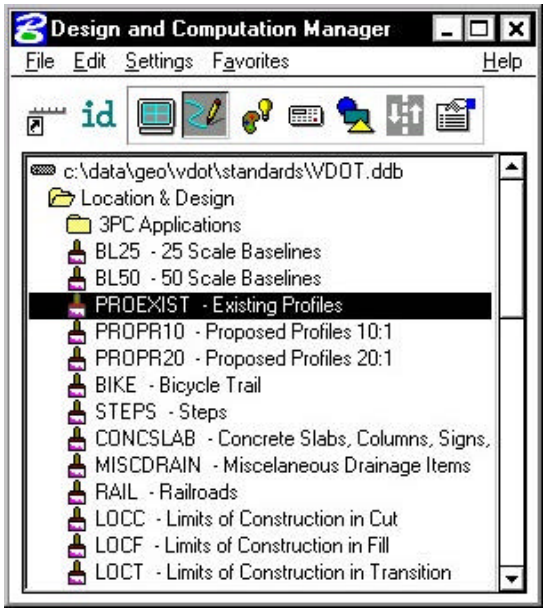
6.2 Drawing Profiles

Step 1. Open the MicroStation file **c:\data\geo\vdot\s1373\profile.dgn**

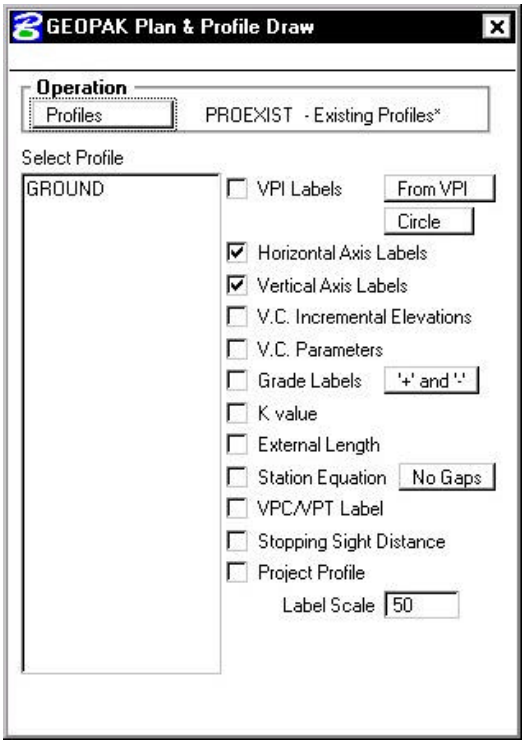
Step 2. Open Design and Computation Manager by selecting the Plan View Design option on the workflow dialog and then selecting the Design and Computation Manager icon from the tool bar .

Step 3. From the **File** pulldown in D&C Manager, select the **Open** mode and load the .ddb file from the **Standards** directory.

Step4. Select the item **Location & Design > PROEXIST.**

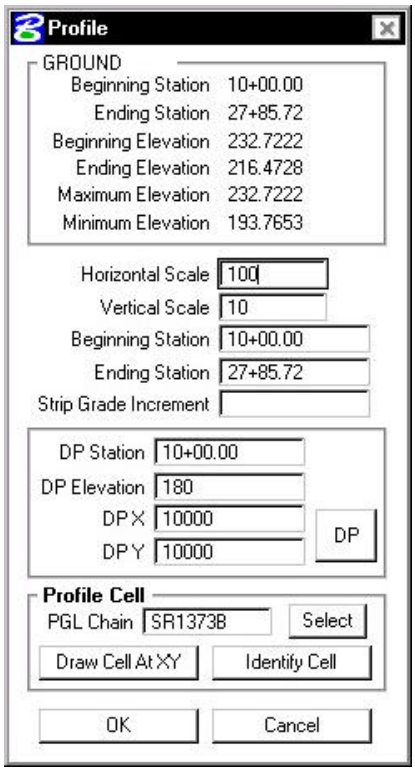


Step 5. Press the **Draw Plan & Profile** button on the **supplemental dialog** and confirm the job number. The operation is automatically set to **Profiles**. The **Label Scale** should be set to the desired scale. For this lab session set it to **50**.



Step 6. Select the existing ground profile '**GROUND'** to invoke the following profile parameter dialog. Populate it with the parameters shown.

Step 7. After setting the **DP X, DP Y** and **PGL Chain** fields as shown, click **DRAW Cell At XY** to draw a profile cell at coordinates of 10000,10000. Use the MicroStation Fit command to see the cell.

Step 8. When all required fields are populated in the dialog as shown, press **OK**. The existing profile should now be plotted in the file.

Step 9. Exit the GEOPAK Plan and Profile Draw dialog and the D&C Manager dialog; then review your profile.