

This document guides you through saving survey fieldbook information to separate MicroStation files for ease of referencing and level control. CDOT standards specify that in addition to planimetrics, each data file will be saved out at the scale of 1"=100' and the fieldbook information will be further stratified by feature levels.

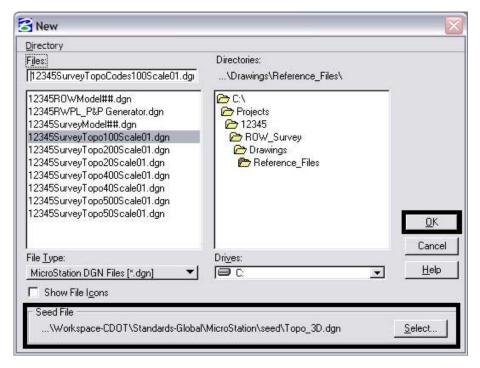
#### This information is:

- survey shot location (symbols)
- survey shot number
- survey shot code
- survey shot elevation
- survey shot notes

# **Exporting a Fieldbook File**

## Creating a new file

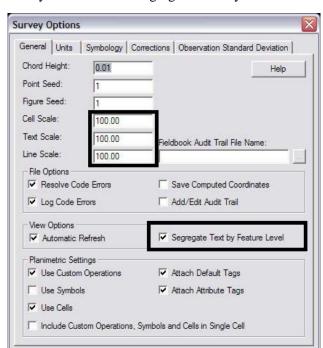
- 1. From the MicroStation pull-down menu select **File > New**. The **New** dialog will appear.
- 2. Navigate to the project directory folder *Reference\_Files* by double clicking the directory folders.
- 3. At the bottom of the dialog box verify that the seed file is set to *Topo\_3D.dgn*.



#### **Notes:**

- In this example the CDOT 5 digit Job Project Code has been replaced by 12345
- If *Topo\_3D.dgn* is not the current seed file, select the **Select** button and chose *Topo\_3D.dgn* as the seed file.
- 4. Key in the file to be created: 12345SurveyTopoCodes100scale01.dgn
- 5. Select the **OK** icon in the New dialog. The New dialog will close and the file 12345SurveyTopoCodes100scale01.dgn will open.
- 6. Disable the view display of dynamic survey graphics shown on the screen. Toggle off the View Planimetrics icon or any other symbols, names, codes, etc. that may be enabled.
- 7. Verify the correct fieldbook is active. The active fieldbook is indicated by a red box around the fieldbook icon in the InRoads workspace pane.
- 8. To modify the scale as it relates to cells, text, and linestyles select **Tools > Survey Options**. The Survey Options dialog will appear.
- 9. On the General tab verify the Scales for Cell, Text, and Line are set as shown below.

Cell Scale: 100Text Scale: 100Line Scale: 100



10. Verify the check box Segregate Text by Feature Level is ON

**Note:** Segregate Text by Feature Level – If checked, will save the symbols, point names, codes, notes, errors, and elevations to the same level as the survey feature.

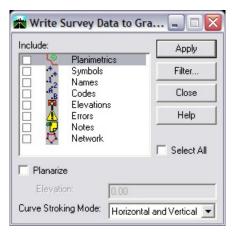
Save As.

11. Select the Save then **OK** the Survey Options dialog will close.

Save..

12. Once the settings are complete, write the survey data to graphics. Go to the Survey pull-down and select,

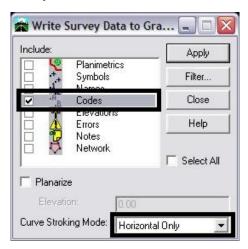
Survey > View Survey Data > Write Survey Data to Graphics... the Write Survey Data to Graphics dialog will open.



Open...

**Note:** By default, if dynamic graphics was still toggled on, those same components would be toggled on in the Write Survey Data to Graphics dialog.

13. Check only the **Codes** box.



- 14. Set Curve Stroking: Horizontal Only
- 15. Select the **Apply** icon. The graphics will be created in the design file.
- 16. Select the **Close** icon. The Survey fieldbook planimetrics have been written to the design file.
- 17. Verify all dynamic View Survey Data icons are toggled off.



- 18. Fit the design file within MicroStation.
- 19. Review the results to verify the codes have been written to the design file and are level stratified.

### Additional Fieldbook Files

CDOT requires additional MicroStation files to be generated and placed into the Reference Files directory. Cycle through previous steps 1-19 to create the additional files required for the remaining 4 survey data types.

#### **FILE NAMES**

- 12345SurveyTopoElevations100scale01.dgn
- 12345SurveyTopoNames100scale01.dgn
- 12345SurveyTopoNotes100scale01.dgn
- 12345SurveyTopoSymbols100scale01.dgn

## **Referencing Fieldbook Files**

The purpose of creating these fieldbook files is so they can be attached as a reference to the corresponding Survey Topo drawing. This setup will give the user enhanced level display when viewing the topo.

- 20. From the MicroStation pulldown menu select **File > Open**. The **Open** dialog will appear.
- 21. Navigate to the *Reference\_Files* directory and select the file 12345SurveyTopo100scale01.dgn
- 22. From the MicroStation pulldown menu select **File > Reference**. The **References** dialog will appear.
- 23. From the References dialog pulldown menu select **Tools > Attach**. The **Attach Reference** dialog will appear.
- 24. Navigate to the folder C:\Projects\TRSUR\ROW\_Survey\Drawings\Reference\_Files
- 25. From the drop down list select **Attachment Method: Coincident World**
- 26. From the list of files on the left select file name 12345SurveyTopoCodes100scale01.dgn
- 27. Using the Ctrl and/or Shift keys select additional files:
  - $\bullet \quad 12345 Survey Topo Elevations 100 scale 01.dgn$
  - 12345SurveyTopoNames100scale01.dgn
  - 12345SurveyTopoNotes100scale01.dgn
  - 12345SurveyTopoSymbols100scale01.dgn
- 28. Select the **OK** icon. The Attach Reference dialog will disappear and the 5 files will be listed in the References dialog box

### **Referencing Contour Files**

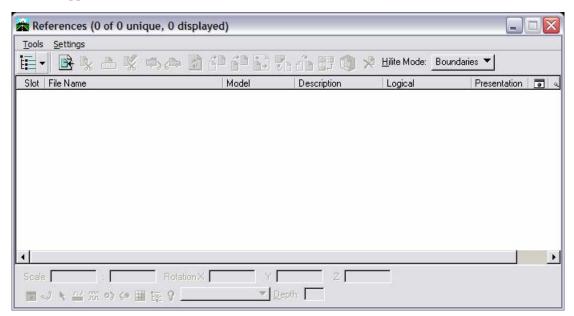
- 29. From the References dialog pulldown menu select **Tools > Attach**. The **Attach Reference** dialog will appear.
- 30. Navigate to the folder C:\Projects\TRSUR\ROW\_Survey\Drawings\Reference\_Files
- 31. From the drop down list select Attachment Method: Coincident -World
- 32. From the list of files on the left select file name 12345SurveyContour100scale2\_10.dgn
- 33. Select the OK icon. The **Attach Reference** dialog will disappear and the file will be listed in the References dialog box
- 34. From the MicroStation pulldown menu **File > Save Settings**

**Note:** If any additional files at varying scales or contour intervals are required repeat steps 1-6 with the appropriate scale and file names defined.

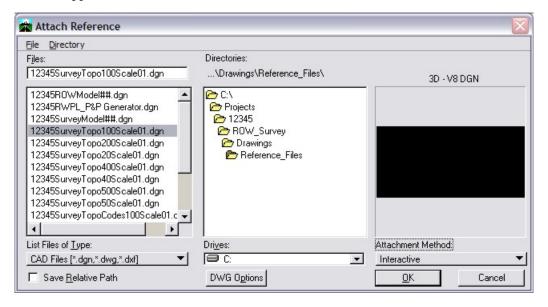
# Roadway Design referencing Survey Topo files

By using nested references the designers will be able to attach the one Survey Topo file and have all the additional references attach as well.

35. From the MicroStation pull down menu **File > Reference**. The **References** dialog will appear.

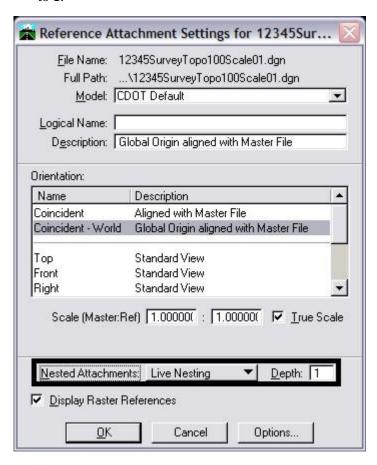


36. From the References pull down menu **Tools > Attach**. The **Attach Reference** dialog will appear.



- 37. Set the directory to C:\Projects\12345\ROW\_Survey\Drawings\Reference\_Files
- 38. Select the file **12345SurveyTopo100Scale01.dgn** and select the **OK** icon. The **Reference Attachment Settings** dialog will appear.

39. From the **Nested Attachments** drop down box select **Live Nesting** and set the **Depth** to 1



40. **Select** the **OK** icon. The Survey Topo file will be attached along with the fieldbook nested attachments.

