

Exercise 13-2

1. Open the MicroStation file:

t:\de-proj\randolph\j2p0200\data\pattern_shape_j2p0200.dgn.

2. If not already done, attach **t:\de-proj\randolph\j2p0200\data\plan_j2p0200.dgn** as a reference file.

Fit the view and save the changes to the drawing.

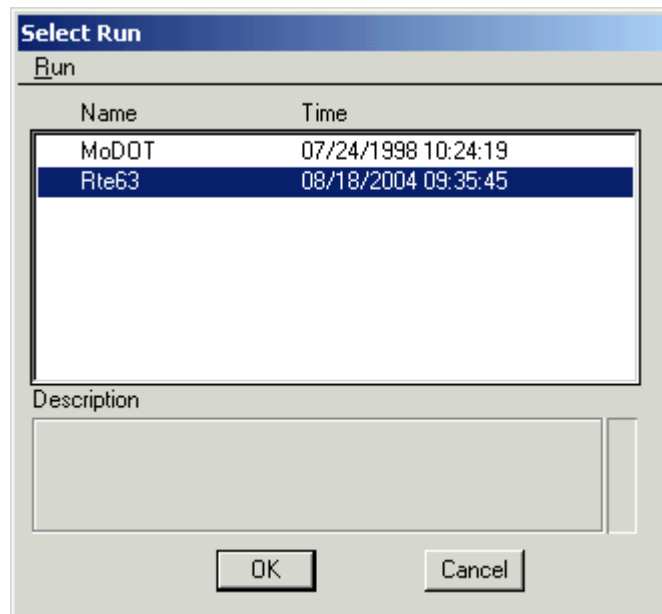
3. Select the **Rte63** working alignment in the Road Project dialog for the following project:

t:\de-proj\randolph\j2p0200\project\j2p0200.prj.

4. Choose **Draw Patterns** from the **Road Project** dialog.



Copy the **MoDOT** run to **Rte63**, and open the **Rte63** run.



5. Create pattern lines for the **Rte63** alignment.

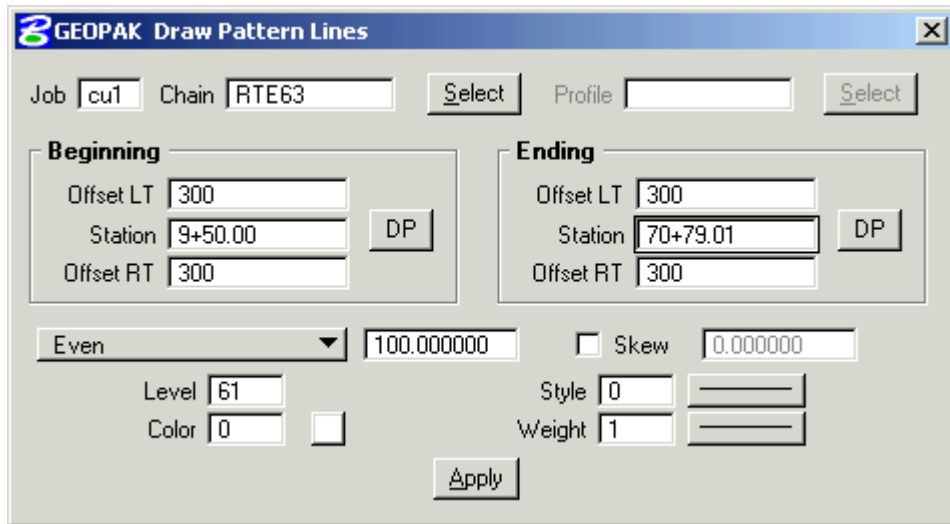
Job: **cu1**
Beginning

Offset LT: **300**
Station: *Beginning of Chain*
Offset RT: **300**

Chain: **Rte63**
Ending

Offset LT: **300**
Station: *Ending of Chain*
Offset RT: **300**

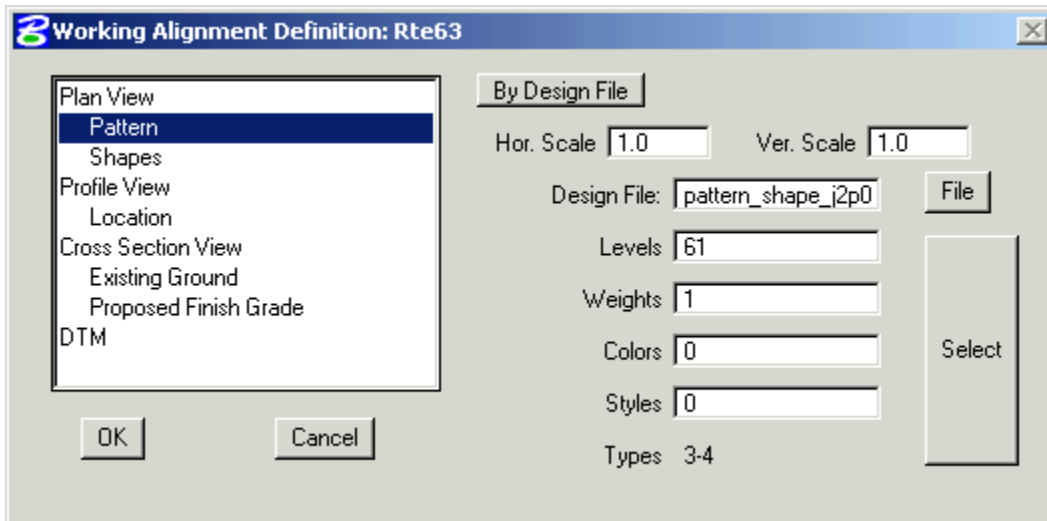
Even **100**



Exit Draw Pattern Lines and **Save** the settings.

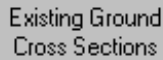
Save the changes to the MicroStation drawing.

6. In the **Pattern** section of the **Rte63 Working Alignment** verify the following settings (the **Design File** is **pattern_shape_j2p0.dgn**).



7. Open the MicroStation file **t:\de-proj\randolph\j2p0200\data\xs_j2p0200.dgn**. Save the file as file **t:\de-proj\randolph\j2p0200\data\rte63_xs_j2p0200.dgn**.

8. Choose **Existing Ground Cross Sections** from the **Project Manager** dialog.



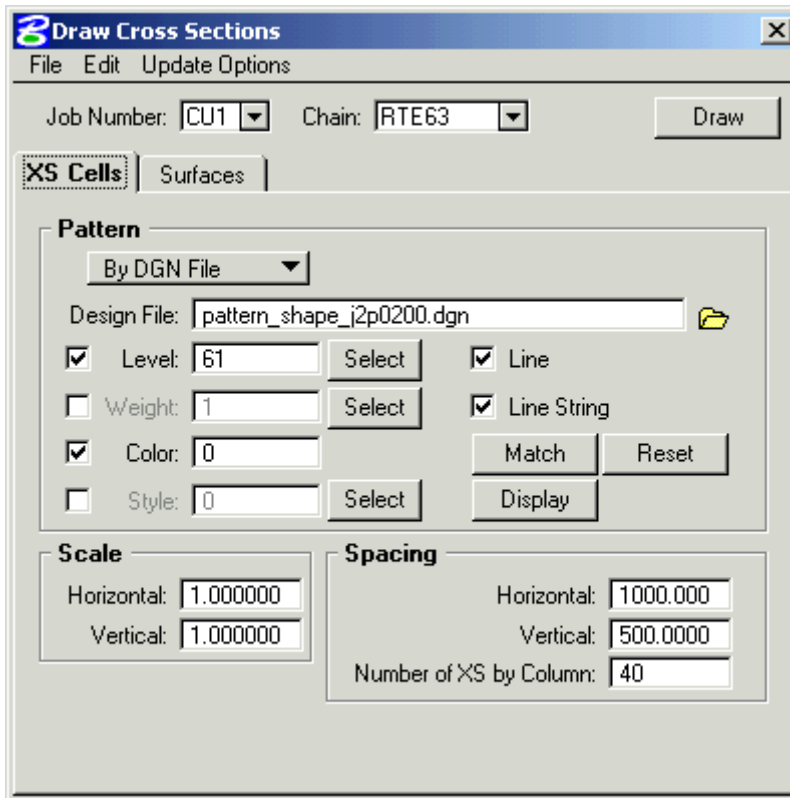
Copy the MoDOT run to **Rte63**, and open the **Rte63** run.

9. Cut the existing ground cross-sections with the following parameters.

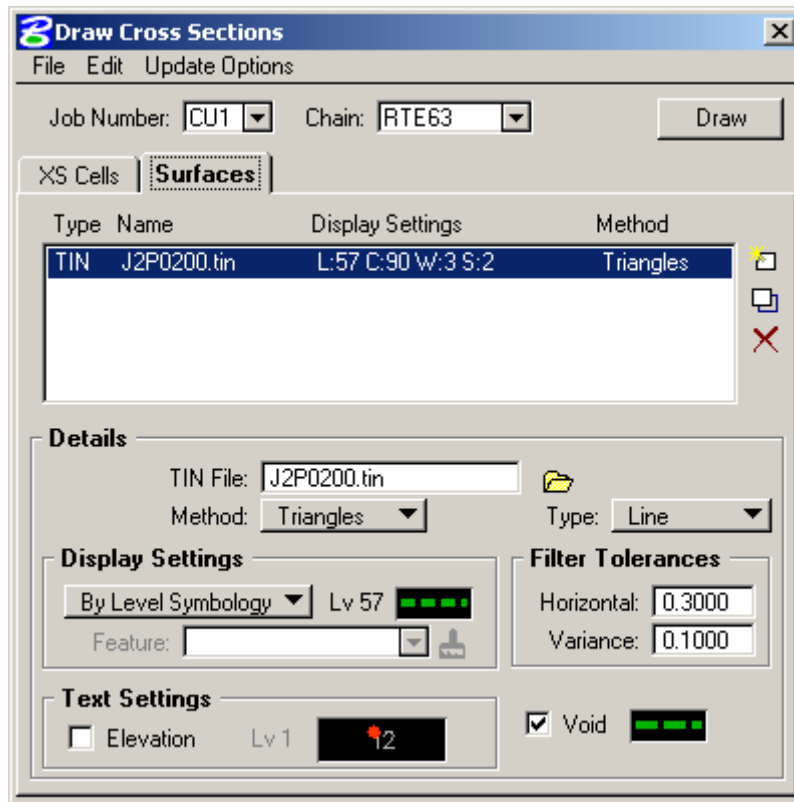
In the **XS Cells** tab:

Job Number: **cu1**
 Chain: **Rte63**
 Pattern: **By DGN File**
 Design File: **pattern_shape_j2p0200.dgn**

Toggle on **Level**, **Color**, **Line**, and **Line String**. Leave the rest of the settings as shown below.



9. (Continued) Switch to the Surfaces tab and set the list box as shown below with the tin file set to **j2p0200.tin**.

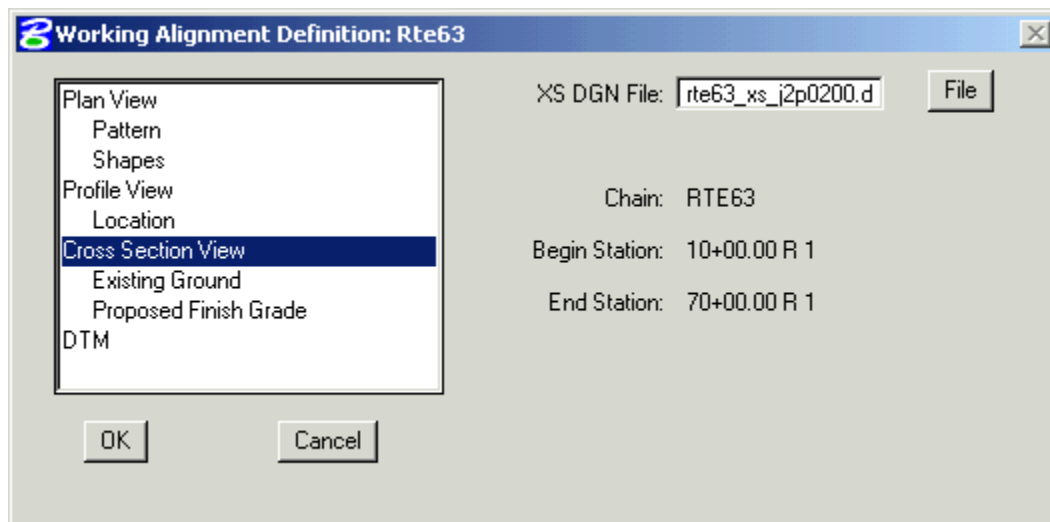


Click on **Draw** to create the cross sections.

Once the cross sections are drawn, **exit** the **Draw Cross Sections** tool and save the settings.

Save the changes to the MicroStation drawing.

10. In the **Cross Section View** portion of the **Rte63 Working Alignment** set the **XS DGN File** to **rte63_xs_j2p0200.dgn**.



11. Use the **Cross Section Navigator** to review the sections. The following icon in the lower left hand corner to the Road Tools opens the navigator, which is shown below the icon:



12. Open the MicroStation file:

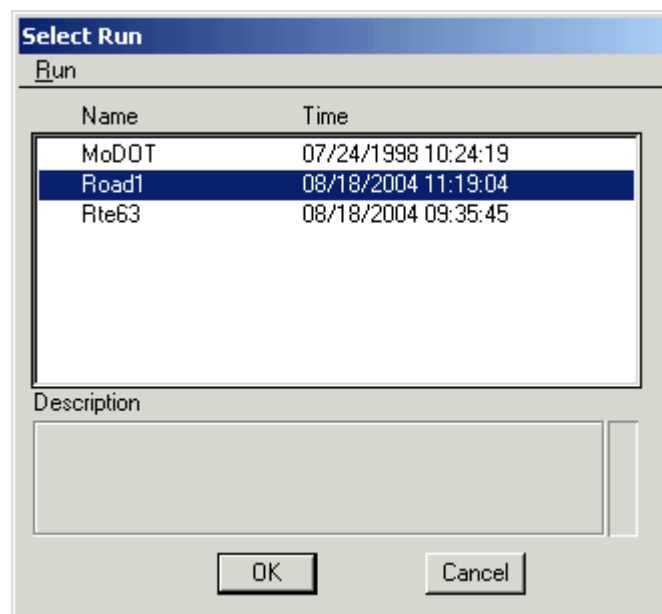
t:\de-proj\randolph\j2p0200\data\pattern_shape_j2p0200.dgn.

13. Switch to the **Road1** working alignment.

14. Choose **Draw Patterns** from the **Road Project** dialog.



Copy the **MoDOT** run to **Road1**, and open the **Road1** run.



15. Create pattern lines for the **Rte63** alignment.

Job: **cu1**

Chain: **Road1**

Beginning

Ending

Offset LT: **200**

Offset LT: **200**

Station: *Beginning of Chain*

Station: *Ending of Chain*

Offset RT: **200**

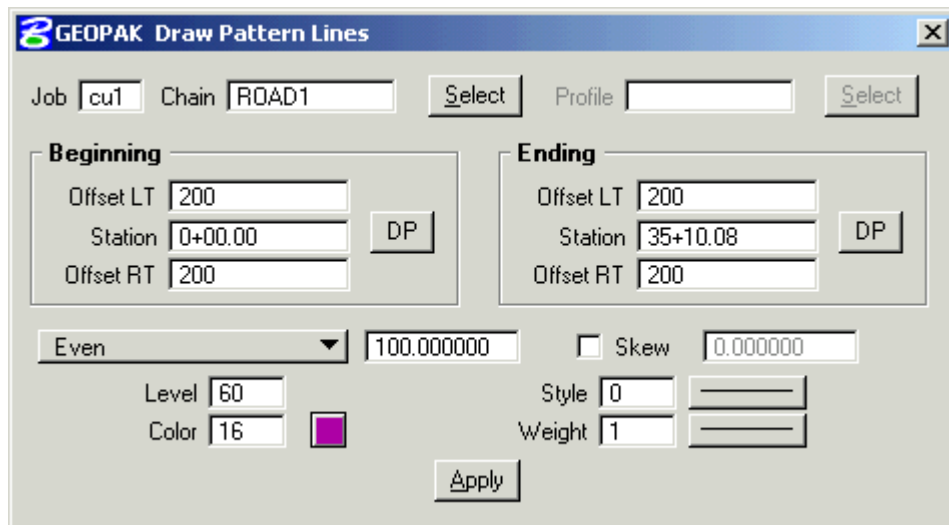
Offset RT: **200**

Even **100**

Change the pattern line symbology items to the following so they are differ from the pattern lines for the Rte63 alignment:

Level **60**

Color **16**

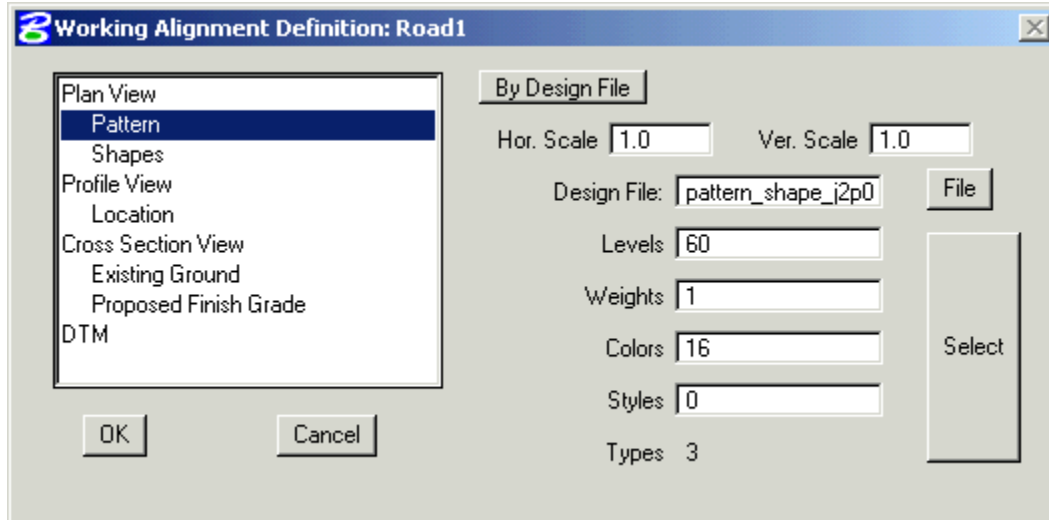


Once the dialog is set, click on **Apply** to draw the pattern lines into the drawing.

Exit Draw Pattern Lines and **Save** the settings.

Save the changes to the MicroStation drawing.

16. In the **Pattern** section of the **Road1 Working Alignment** change the Levels and Colors values to reflect the symbology used in the previous step and verify the rest of the settings (the **Design File** is **pattern_shape_j2p0200.dgn**).

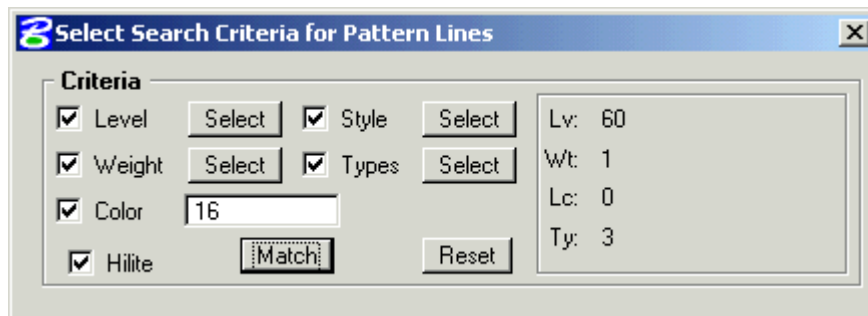


One way to set the symbology is to match the elements just drawn. To use this method, click on the **Select** button in the above dialog.

This will bring up the **Select Search Criteria for Pattern Lines** dialog shown below.

In that dialog, click on **Reset** to clear the entries.

With the entries clear, click on **Match** and **DP** on one of the pattern lines for the alignment. This will populate the symbology fields in both the Select Search Criteria for Pattern Lines dialog and the Patter section of the Working Alignment Definition dialog.



When the symbology is set, close the Select Search Criteria for Pattern Lines dialog by clicking on the **X** in upper right corner of the dialog.

Click OK in the Working Alignment Definition dialog to accept the changes and close that dialog as well.

17. Open the MicroStation file **t:\de-proj\randolph\j2p0200\data\xs_j2p0200.dgn**. Save the file as file **t:\de-proj\randolph\j2p0200\data\road1_xs_j2p0200.dgn**.

18. Choose **Existing Ground Cross Sections** from the **Project Manager** dialog.

Existing Ground
Cross Sections

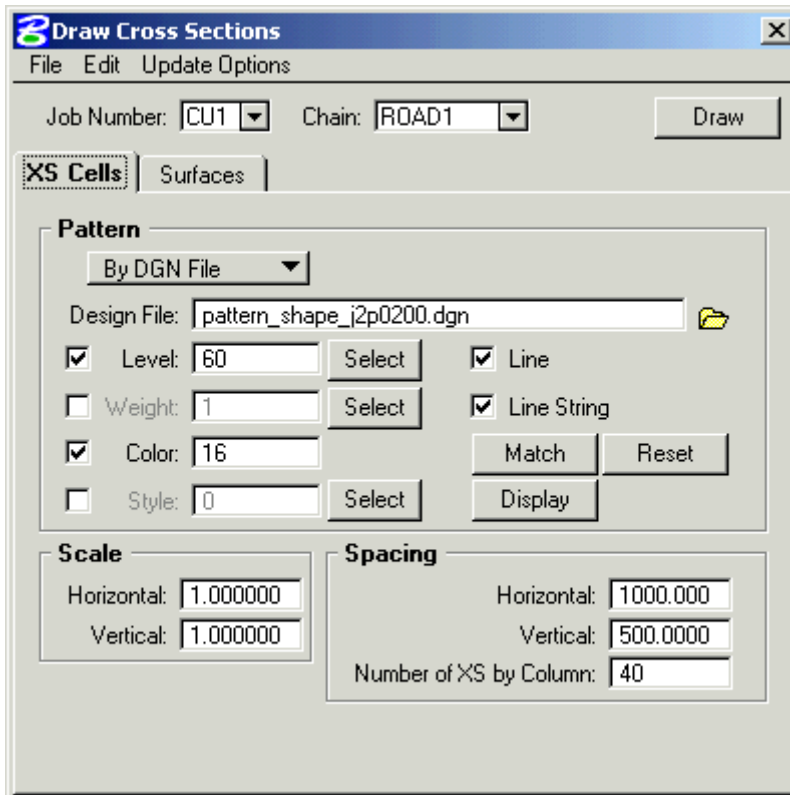
Copy the MoDOT run to **Road1**, and open the **Road1run**.

19. Cut the existing ground cross-sections with the following parameters.

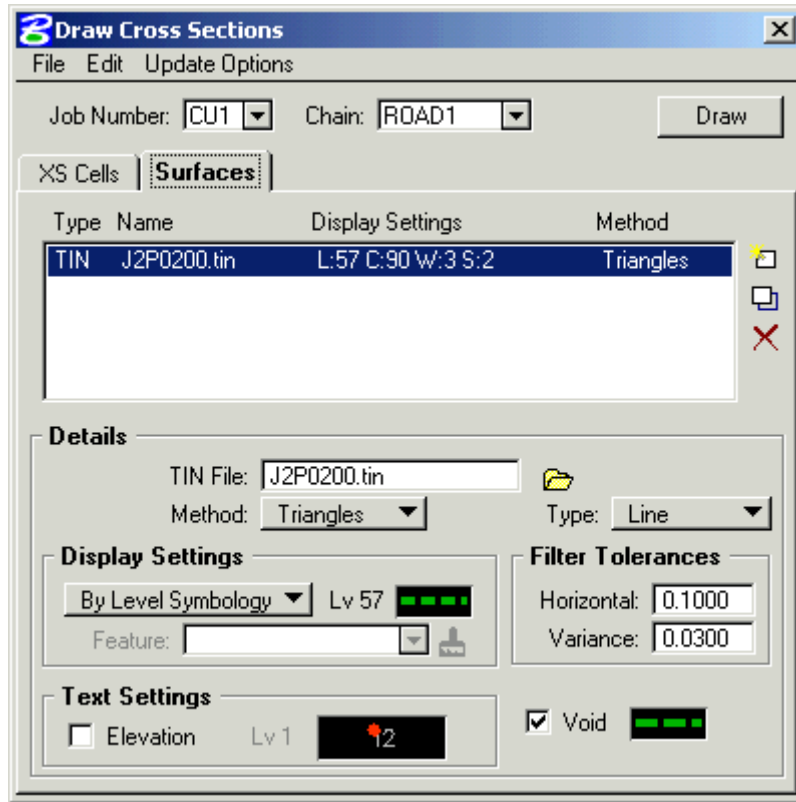
In the **XS Cells** tab:

Job Number: **cu1**
 Chain: **Road1**
 Pattern: **By DGN File**
 Design File: **pattern_shape_j2p0200.dgn**

Toggle on Level, Color, Line, and Line String. Leave the rest of the settings as shown below. (**Note:** The symbology for the pattern lines has been provided by the working alignment definition.)



9. (Continued) Switch to the Surfaces tab and set the list box as shown below with the tin file set to **j2p0200.tin**.



Click on **Draw** to create the cross sections.

Once the cross sections are drawn, **exit** the **Draw Cross Sections** tool and save the settings.

Save the changes to the MicroStation drawing.

20. In the **Cross Section View** portion of the **Road1 Working Alignment** set the **XS DGN File** to **Road1_xs_j2p0200.dgn**.

