

## Workflow 1: Creating Plan/Profile sheets using GEOPAK

1. Open the Clip.dgn and invoke Plan and Profile Sheet Composition tool from Project Manager by selecting the button for Plan & Profile Sheets. Select a Run or create a new Run.

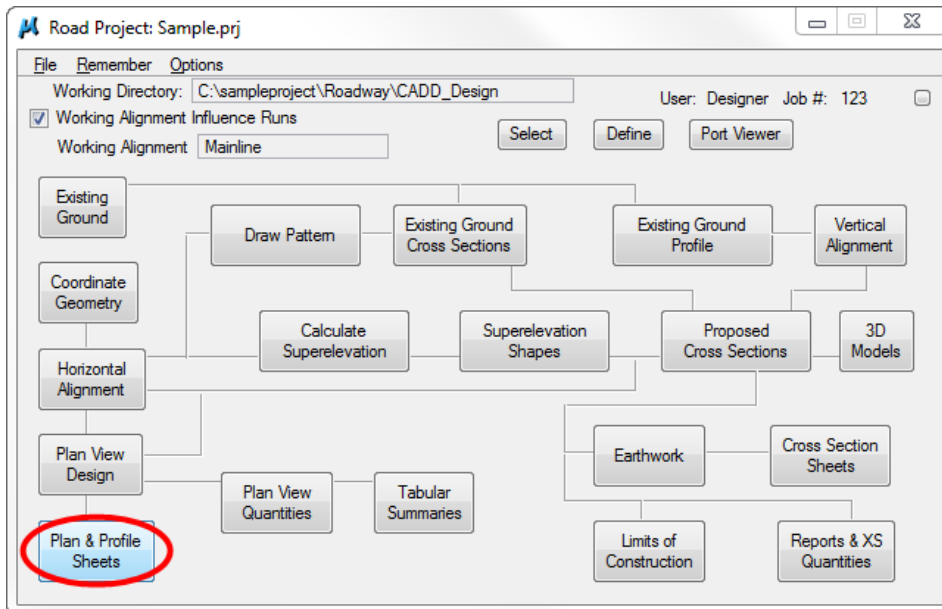


Figure 9.1-1: Project Manager

The example below is focused on clipping an English project using 100 Scale Plan/Profile sheets.

2. The following Plan Sheet Layout dialog box appears. Select **100 Scale P\_P** using the drop down arrow, and type **2.00 ft/in** in the Scale field.

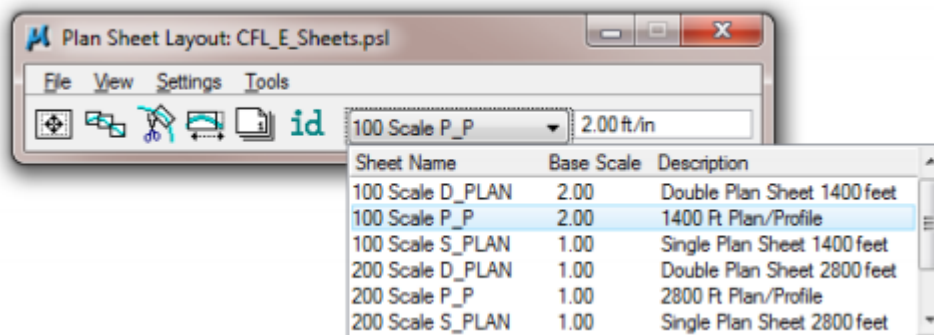


Figure 9.1-2: Plan Sheet Layout Dialog

- From the Plan Sheet Layout dialog box, select **Settings > Sheet Layout**, modify the Sheet Layout Settings and select **OK**:

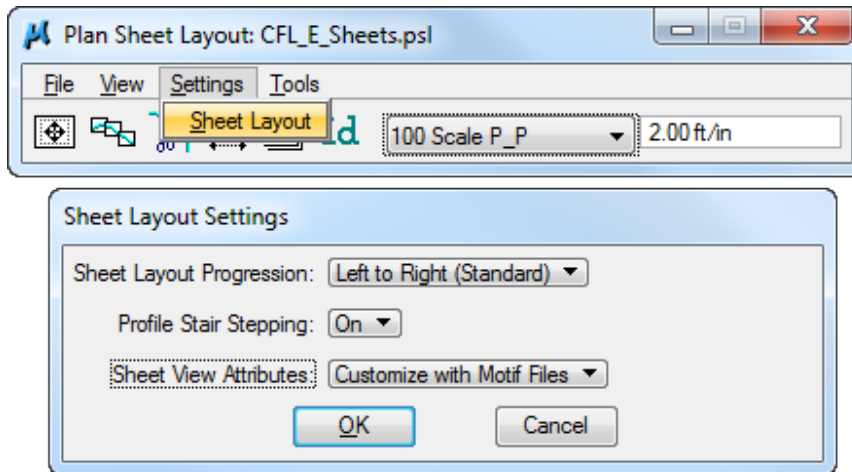


Figure 9.1-3: Sheet Layout Settings

- Invoke the Sheet Composition dialog by clicking on the Sheet Composition icon:

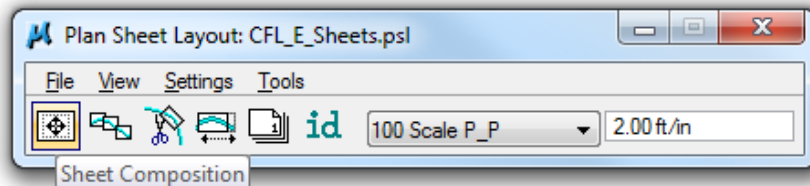


Figure 9.1-4: Plan Sheet Layout Dialog

- Modify the Sheet Composition dialog box:

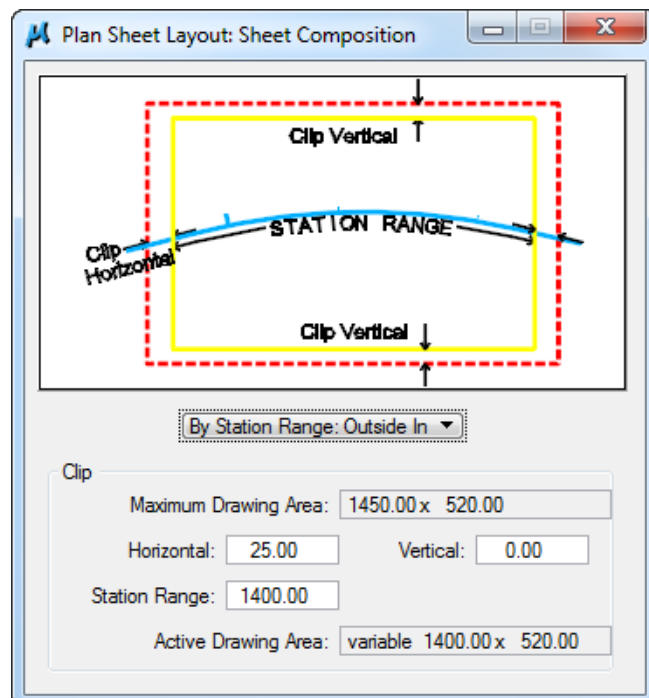


Figure 9.1-5: Sheet Composition

The above sheet composition dialog setting shows "sheet style" for 100 Scale P\_P Sheet. Sheet styles have been created for English and Metric projects. Click [HERE](#) for other sheet style settings located at the end of this documentation.

6. Invoke the *Layout Sheets* tools by selecting the *Layout Sheets* icon:

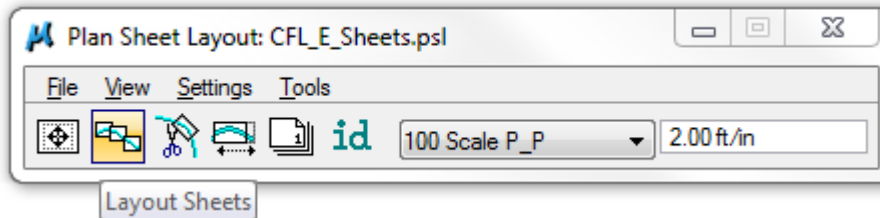


Figure 9.1-6: Plan Sheet Layout Dialog

7. Select *Multiple Sheets* from the dialog box and Select the GPK file by keying it into the "Job:" box, or by browsing using the file open icon.

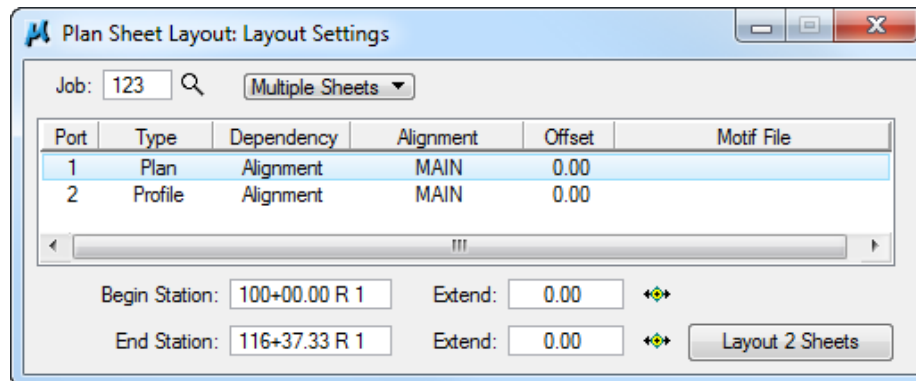


Figure 9.1-7: Layout Settings

8. To populate the *Plan Port Data* dialog box, double click along the row for Port 1 in the *Layout Settings* dialog box and the following dialog box will be invoked.

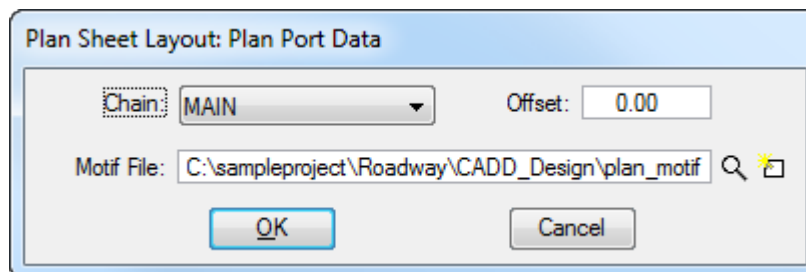


Figure 9.1-8: Plan Port Data

9. *Select the correct Chain and the appropriate Plan Motif file. Select OK. If the Motif File has not been created, create Motif files using the Create Motif File icon as shown below:*

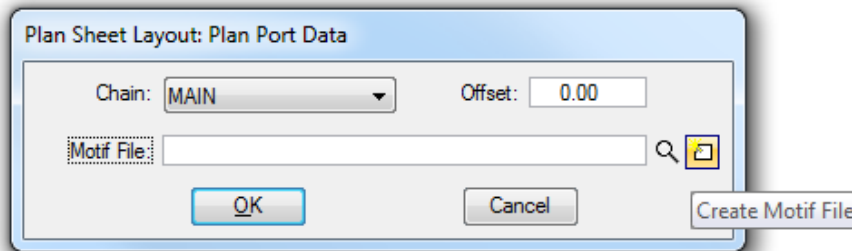


Figure 9.1-9: Plan Port Data - Create Motif File

Motif file should be created from a 2D seed file. After creating the Motif file, make sure to attach the required reference files.

To create Double Plan Sheets (plan/plan), attach Plan Motif File to Port 1 and 2.

10. *To populate the Profile Port Data dialog box, double click along the row for Port 2 in the Layout Settings dialog box and the following dialog box will be invoked.*

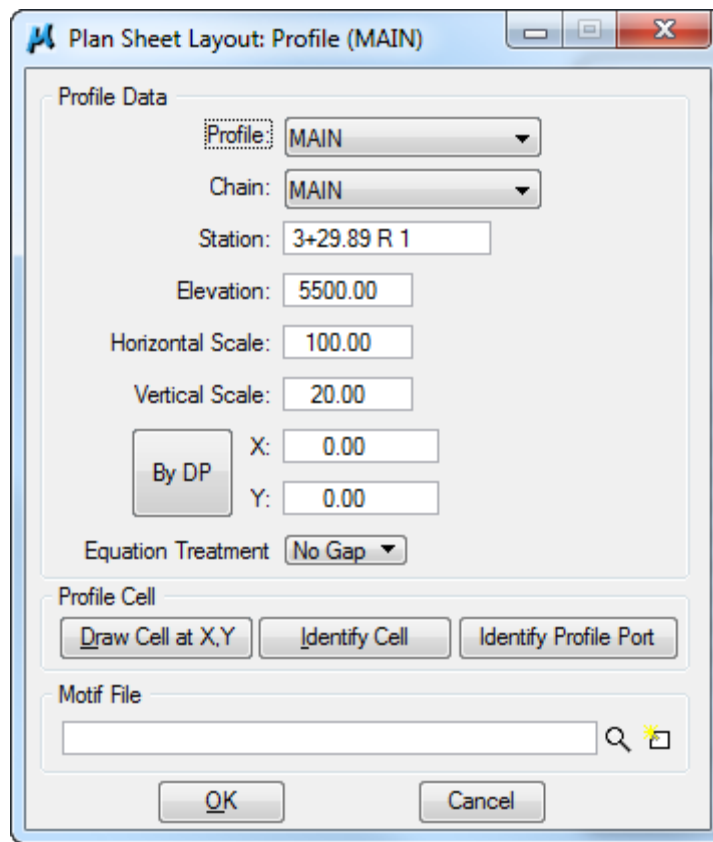


Figure 9.1-10: Profile Layout

11. If a profile cell exists for the file that is referenced to the Clip.dgn file, then select on Identify cell, place data point on the profile cell and accept. Profile Data dialog fields can be populated using this method, or manually enter in the required information.
12. Select the appropriate Profile Motif file. Select OK. If the Motif file has not been created, create Motif files using a 2D seed file as outlined in step 9.
13. GEOPAK will calculate the number of sheets to layout. Number of sheets calculated will be placed on the button at the bottom right of the Layout Settings dialog box. Use the "Extend" distance field to shift the clipping shapes ahead or back a given distance from begin and end stations. If the number of sheets is acceptable, press the Layout # Sheets button and GEOPAK will draw clipping shapes into the drawing.

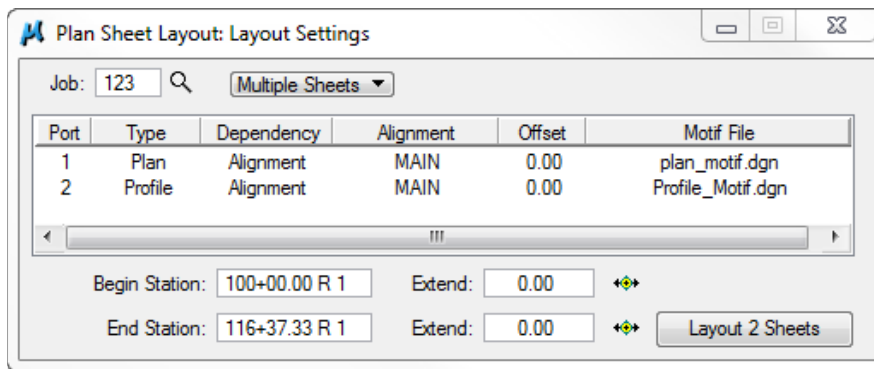


Figure 9.1-11: Layout Settings

In order for the data to be clipped correctly, use the Sheet Layout Modify Tools. Two most common types of modification supported are sliding the sheets and modifying the drawing area. The drawing area cannot be increased in Length (Horizontal) or Height (Vertical) to exceed the drawing area setup in the sheet library.

14. For extremely curved chains and steep vertical curves it may be necessary to modify the clipping shapes. To invoke the Modify tools, use the Modify Sheets icon from the Plan Sheet Layout dialog:

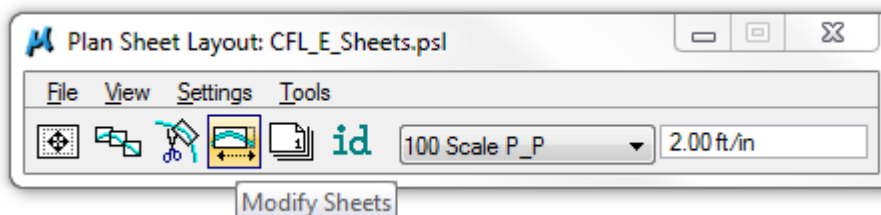


Figure 9.1-12: Plan Sheet Layout Dialog

15. Use the drop down arrow to select the clipping shape to be modified from the list or Identify the clipping shape by clicking on the ID button and then data pointing the clipping shape.

Figure 9.1-13: Modify Sheet Layout-Plan

Figure 9.1-14: Modify Sheet Layout-Profile



NOTE: The application is intelligent enough to know whether a Plan clipping shape or Profile clipping shape has been identified. When a Profile clipping shape is identified, the "**Sheet Chord Offset**" field changes to "**Bottom Elevation**", (as shown above). When modifying the vertical position of a Profile clipping shape, toggle "**Bottom Elevation**" **ON**, type in the desired "bottom of the shape" elevation, or press **Dynamic** and move the shape up or down.

Drawing area cannot be increased horizontally or vertically to exceed the drawing area setup in the Sheet Library.



16. Use the Sheet Number Manager tool to number sheet to CFL standards. To invoke the Sheet Number Manager tool, use the Sheet Number Manager icon from the Plan Sheet Layout dialog:

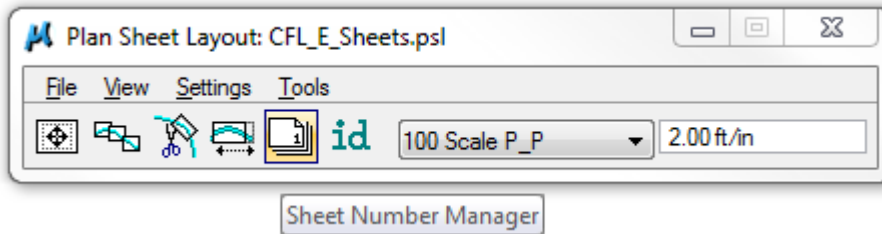


Figure 9-15: Plan Sheet Layout Dialog

17. To select all rows, click anywhere on row one, hold down the shift key and click a second time anywhere on the last row. Once rows are selected, select the Edit Sheet Number icon.

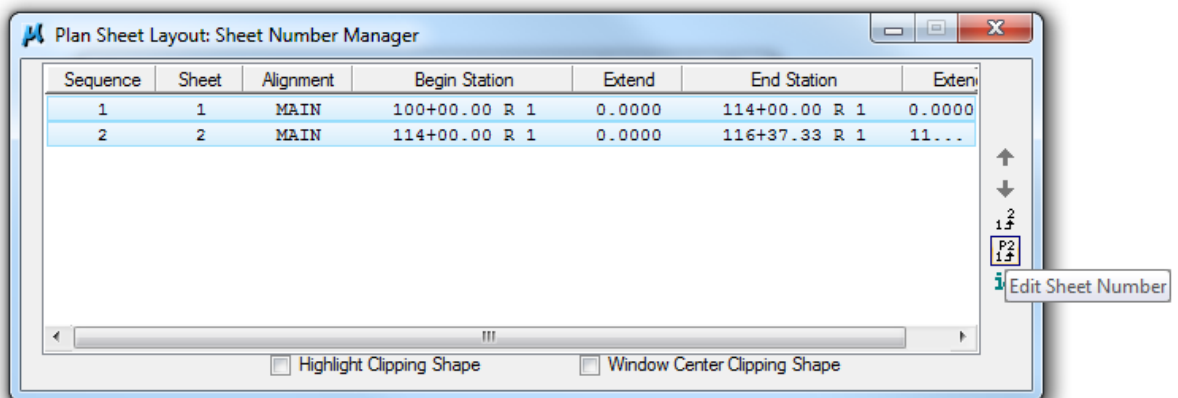


Figure 9.1-16: Sheet Number Manager

18. Complete the edit sheet number dialog and select OK. The dialog box values correspond to CFL specific sheet numbering schemes. Use "C" for main plan and profile sheets or "D" for minor roads.

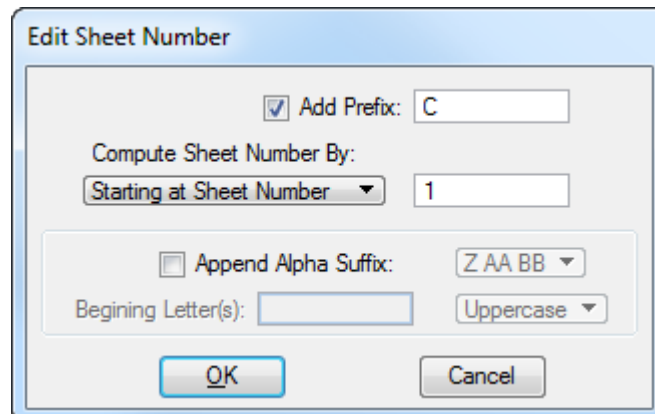


Figure 9.1-17: Edit Sheet Number

19. Upon Selecting OK, Sheet numbers will change from 1 to C1 in the Sheet Number Manager dialog box.

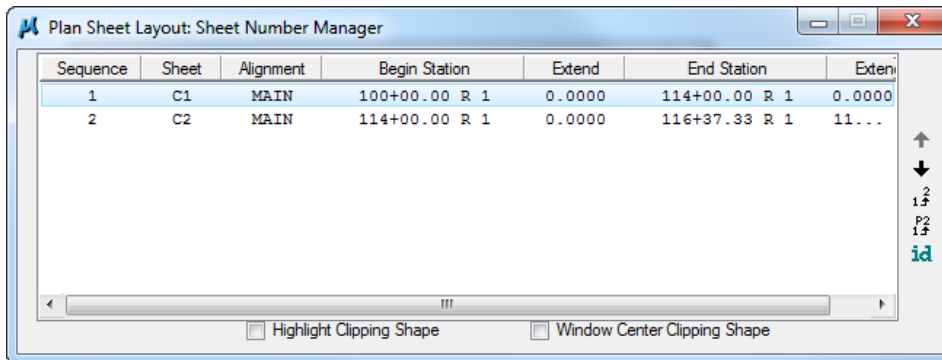


Figure 9.1-18: Sheet Number Manager

20. To Invoke the Clip Sheets tool, Select the Clip Sheets icon:

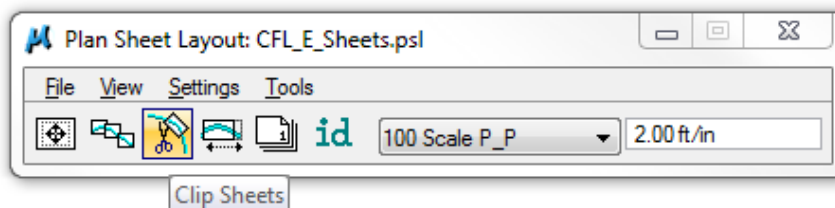


Figure 9.1-19: Plan Sheet Layout Dialog

21. Select the directory for the output file and type in the Sheet Name Prefix. Sheet name prefix should follow the naming convention set in Chapter 3 of the CFL CADD standards Manual.

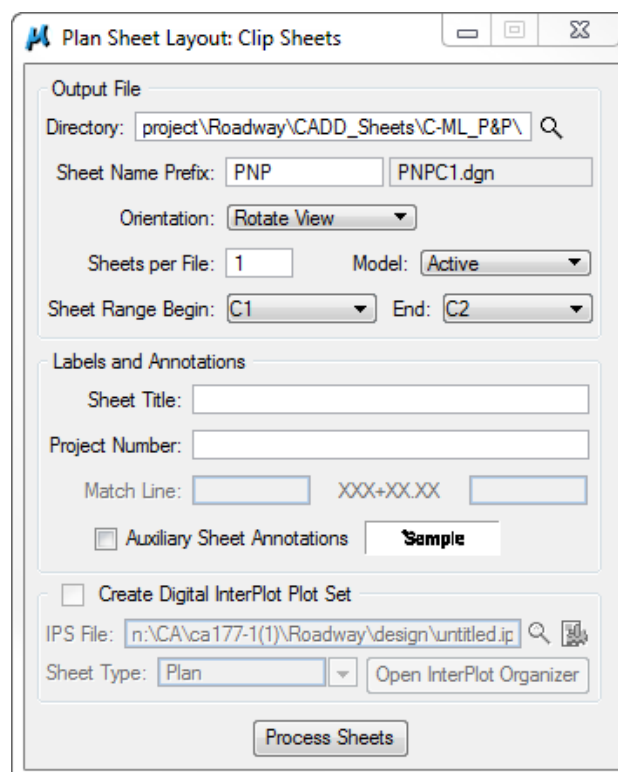


Figure 9.1-20: Clip Sheets





**NOTE:** The software **appends** the **beginning sheet number** to the "**Sheet Name Prefix**". You most likely will have to rename this (or these) file(s) later.

22. *Select Orientation to Rotate View for Plan & Profile sheets and Single Plan sheets. Select Orientation to Rotate Reference for Double Plans sheets and Profile sheets. Sheet Cell is rotated and moved into correct position with plan reference file data when orientation is set to Rotate View. Reference file data is rotated and moved into correct position with each of the sheet cells when orientation is set to Rotate Reference.*

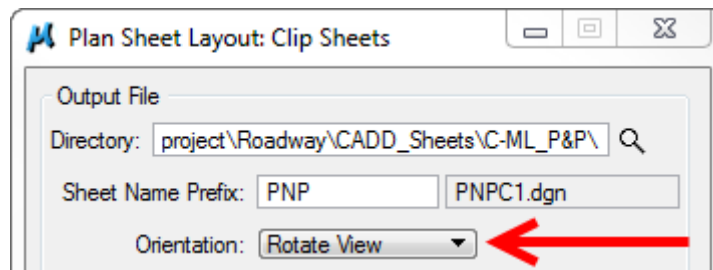


Figure 9.1-21: Orientation

23. *Select Sheet per File to 1. CFLHD policy is to create one sheet per file. Select the Sheet Range required from the pick list using the drop down arrows.*

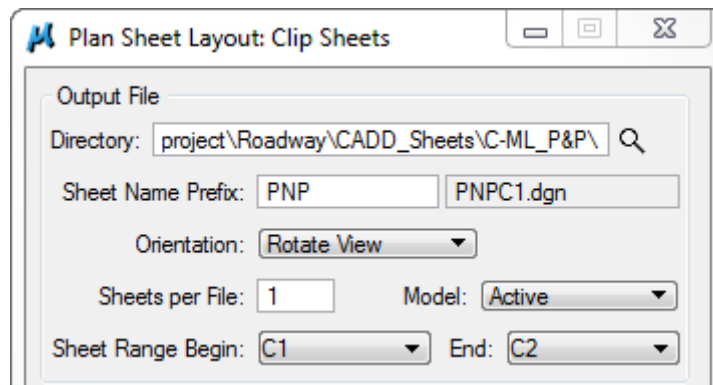


Figure 9.1-22: Sheets per File and Sheet Range

24. Enter Labels and Annotation and select Process Sheets.

Plan Sheet Layout: Clip Sheets

Output File  
Directory: .\Your\_Project\Roadway\Sheets\C\_Sheets\

Sheet Name Prefix: pnp pnpC1.dgn

Orientation: Rotate View

Sheets per File: 1 Model: Active

Sheet Range Begin: C1 End: C2

Labels and Annotations  
Sheet Title: FNTF SAMP 101(1)  
Project Number: SAMPLE PROJECT  
Match Line: XXX+XX.XX

☐ Auxiliary Sheet Annotations Sample

☐ Create Digital InterPlot Plot Set

IPS File: C:\Your\_Project\Roadway\CADD\_Design\unt

Sheet Type: Plan Open InterPlot Organizer

Process Sheets

REG	STATE	PROJECT	SHEET NO.	TOTAL SHEETS
16	ST	FNTF SAMP 101(1) SAMPLE PROJECT	C1	

Figure 9.1-23: Clip Sheets

Since the CFL reference sheet cell drawing is write protected. The following dialog box below will appear. Just click **OK**.

