





The OpenRoads Designer Plans and Profiles File (OPNP)

Displaying a design in drawing and sheet models in an OpenRoads Designer Plans and Profiles (OPNP) file is the only method that OpenRoads Designer provides for expressing the horizontal and vertical design with **permanent** graphics that can be used to produce contract plans.

The OPNP file is a type of Container File and whatever is displayed in the Default model of the OPNP file will be displayed in the drawing and sheet models that are generated. Models that are created in the OPNP file may be attached as references to other files in order to assemble plans.

Steps to Create the OPNP File

To save steps and time, these steps will create alternating plan and profile sheets using a profile method of “From Plan Group”.

1. Create a new DGN file from Seed2D.dgn in the 2_Plan_Sheets folder.
2. Working in the Default model, attach references to terrains, geometries (alignments), corridors, etc. This data is typically found in the 6_Civil_Data folder. Use live nesting, depth=1, if attaching a container file as a reference.
3. Optional - If you will want to create 3D cuts to show additional items on profiles, select the terrain element and “Set as Active Terrain Model”; this will create the Default-3D model and automatic references.
4. Optional – Plan text may be annotated in the drawing- or design-types models to place the horizontal alignment (stationing and curve data).
5. Adjust the initial level display to what you would normally see in the plan sheets. For example if the intended scale is 1”=100’, toggle off P_RDWY_ALIGN_MainTicSmScl. Save settings.
6. Use Place Named Boundary Civil Plan , select the appropriate drawing boundary seed scale, and place the boundaries in the Default model. The plan group should get its name from the name of the alignment, for example, L. Do not create drawings at this time. Place the boundaries.
7. Open a profile window for the horizontal alignment and display the vertical alignment and ground profile. Adjust the level display of the profile view. Save settings to preserve the Multi-Model Views.
8. Use Place Named Boundary Civil Profile , select a profile drawing boundary seed with a matching scale, and place the boundaries using From Plan Group (L) method in the profile view. Do not create drawings at this time.
9. Open the Named Boundaries dialog.
10. Right-click on Plan Group L and choose “Create alternate plan profile drawing” to generate the drawing- and sheet-type models.
11. Using the View Group Manager, return to the Multi-Model Views. Click the mouse in the Default model (2D Plan) in View 1 to make it active.
12. Use Place Named Boundary Civil Plan , and select the “Plan Long Inch 100” drawing boundary seed. Increase the number of chords if the alignment has a lot of curves. The plan group should get its name from the name of the alignment and increment, for example, L - 1. Do not create drawings at this time. Place the boundary.
13. Click the mouse in the profile view to make it active.
14. Use Place Named Boundary Civil Profile , and select the “Profile Long Inch 100” drawing boundary seed, and place the boundary using From Plan Group (L - 1) method in the profile view. Do not create drawings at this time.
15. Open the Named Boundaries dialog.
16. Right-click on Plan Group L - 1 and choose “Create alternate plan profile drawing” to generate the uncut, long drawing- and sheet-type models.