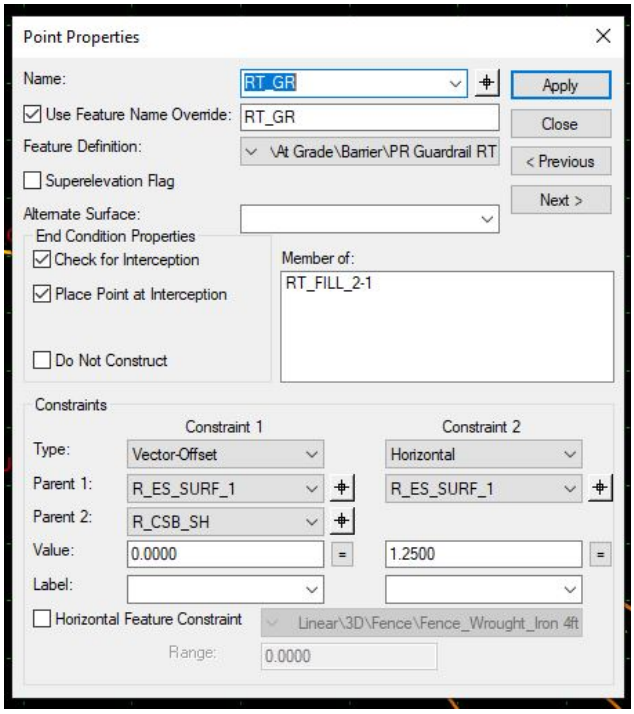
Guardrail in ORD

Along with many other things, guardrail works a bit different in ORD. We no longer use a component to place guardrail on the plans and cross sections. The following will walk you through the process.

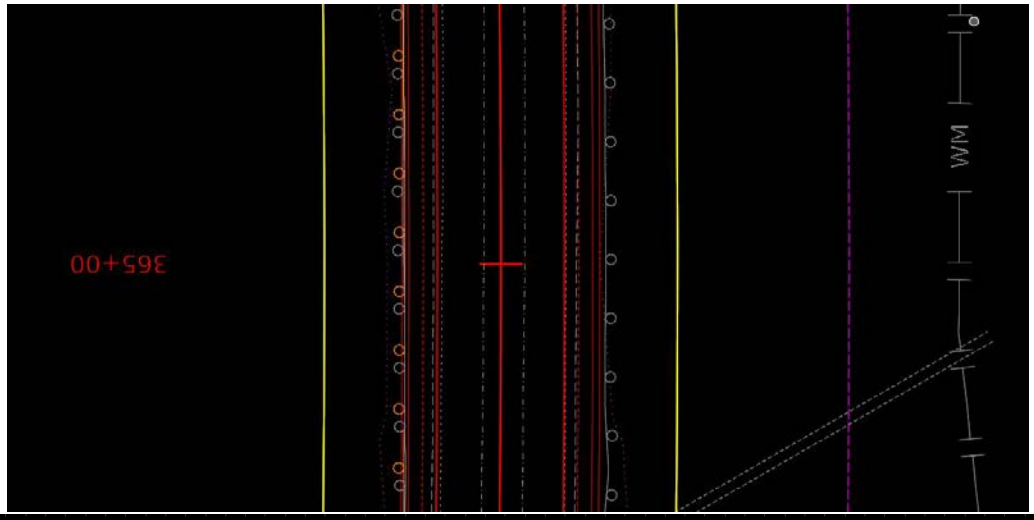
1. Begin by placing a point in the template that is vector offset between the shoulder shoulder breakover point and edge of pavement. This point should be placed at 1.25' right of the edge of pavement to place the face of the rail roughly at the edge pavement.

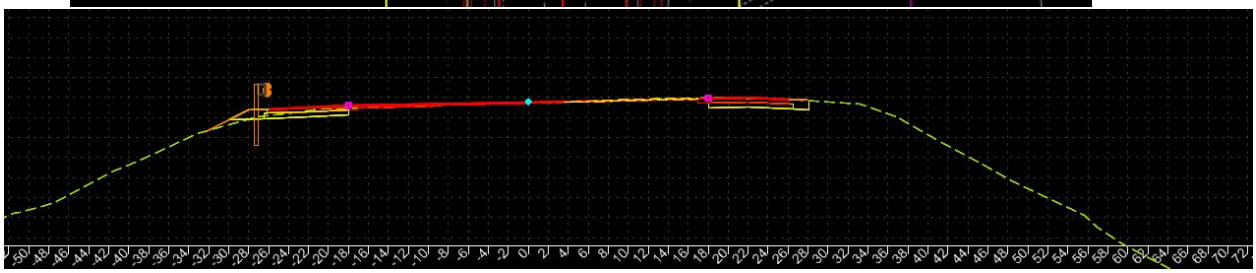
2. The feature definition must be set correctly for the GR to be placed and show up correctly. Go to point properties. The path to the correct FD for the RT GR is Linear>At Grade>Barrier>PR Guardrail RT.



This is all that is required to get the GR to show up correctly for the right side of the template. Repeat the same for the left side, choosing the LT FD.

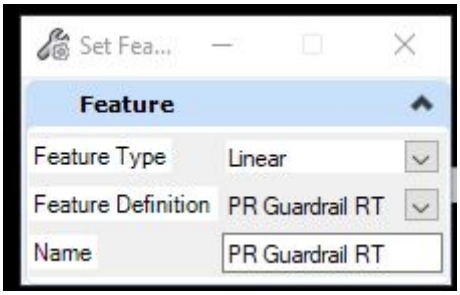
Many of our projects include widening where the proposed template may tie down prior to reaching the existing slope, that does require GR. In this case, the following will step you through placing GR on the plans and cross sections through these existing GR sections. The screenshot below shows the situation on the RT GR.





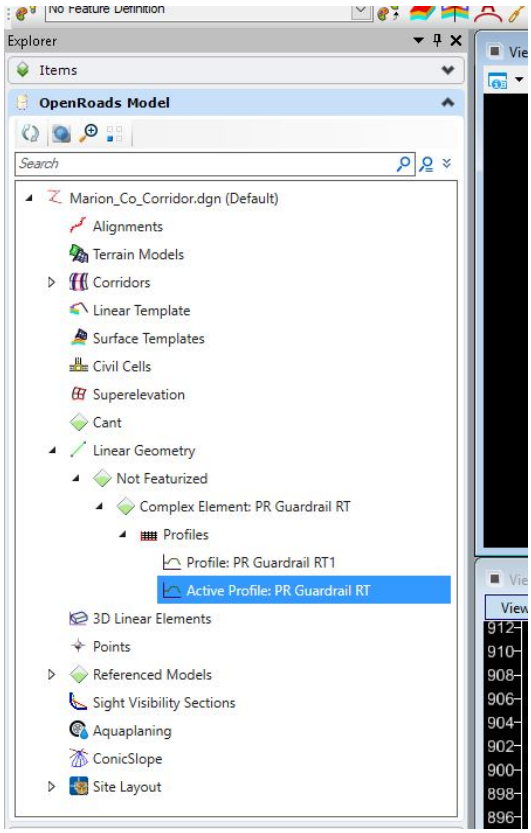
3. To correct this and place the required GR on the right, begin by placing a line (Neon Green Below) 1.25’ off the right edge of paved shoulder in this case.

4. Go to OpenRoads Modeling>Geometry>Standards Dropdown (Under General Tools Catergory)>Set Feature Definition – Set the Feature Type and Feature Definition as shown below.



When on screen prompts indicate to Locate Elements, select the line you drew for GR. The line will now show up on the plan view as the proposed orange linestyle for GR.

5. This line must have a Profile to show up on the dynamic cross sections. To do this, go to OpenRoads Modeling>Geometry>Profile Creation Dropdown (in the Vertical tools)>Quick Profile from Surface
   Set the Feature Definition the same as above when the Quick Profile Dialog appears. Name it whatever you choose. Click the new GR line you just created, then when prompted, select the Existing Terrain boundary as the Reference Surface. Reset to end the process.
6. Hover over the new GR line and see if it has an active profile. If not, open OpenRoads Modeling>Home>Explorer (In the Primary category). Drill down as shown to get to the profile you just created.



Right click on the profile, and Set as active profile. To get the GR to appear on the dynamic sections, click the corridor handle and hover over it, then select Process

Corridor. If it does not show up on the dynamic sections, close the window and re-open the file.