2_13 RAISED MEDIAN GRADE POINT AND SUPER

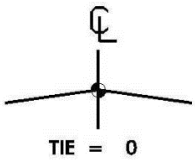
Question:

Can you explain where the grade point (GP) is located on the raised median templates and how should they be superelevated?

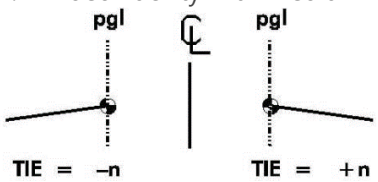
Answer:

Most raised median templates, with the exception of "roof-top" sections, have the grade point at the centerline horizontally. As compared to a divided facility with a median ditch, they are located about inside EOT. To get a better understanding on how they are traditionally superelevated, we need to look at how Geopak shapes and Shape Cluster Median Ties worked.

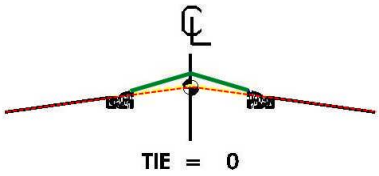
1. Dual Lane Road (Undivided)



2. Divided Facility with Median Ditch

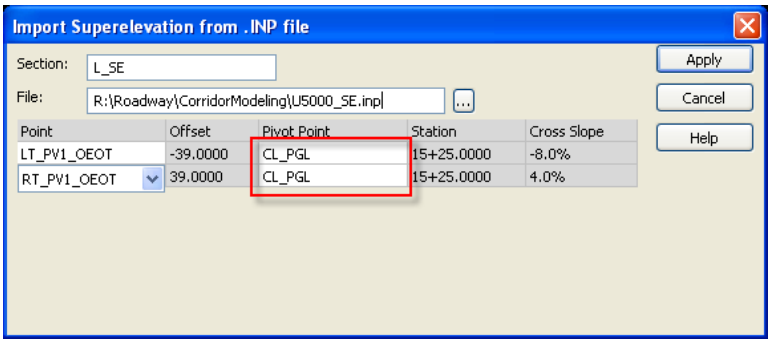


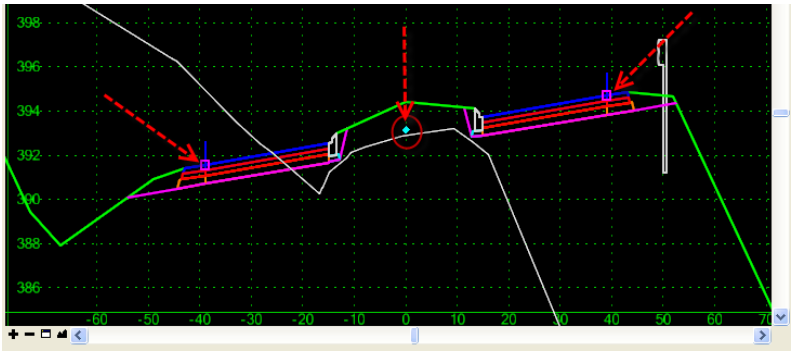
3. Raised Median



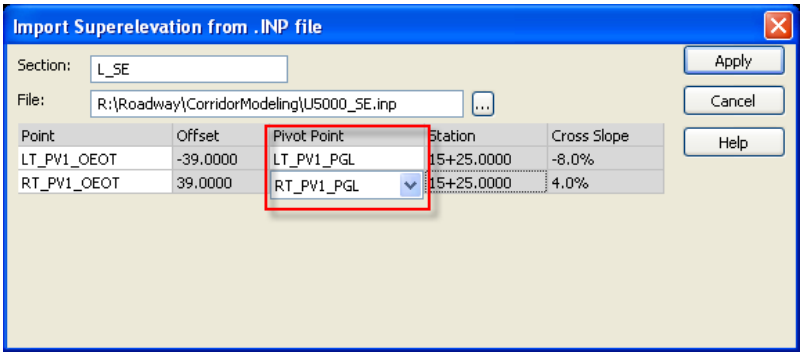
Note that since the median grade point "TIE" is set to zero on raised medians, it will behave the same as the dual-lane undivided facility. It is critical to note that the super is a PROJECTED slope from the grade point outward to the inside EOT and carried throughout the pavement to the outside EOT.

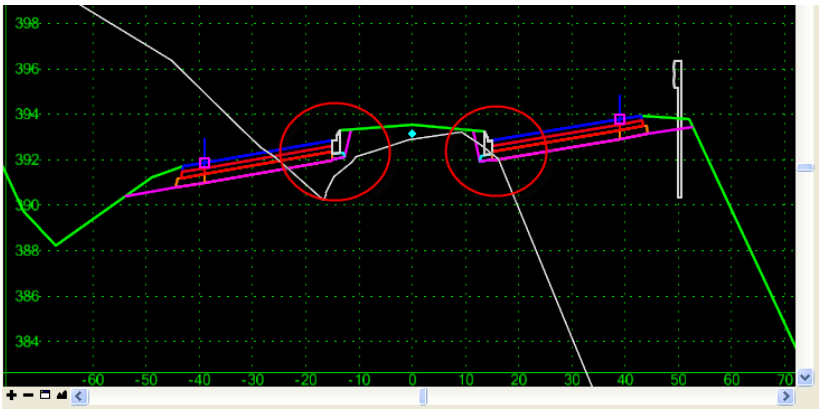
With the exception of the "roof-top" crown section, the raised median templates were designed to rotate the pavement superelevation about the centerline grade point. While rotating the outside EOT points, the pivot point must be the "CL_PGL" point.





It is not recommended that you pivot from the inside EOT points because the result can be erroneous.





Although NOT recommended, some typical sections have the GP drawn flat (0%) vertically to the inside EOT points, somewhat like the divided facility with the GP on both sides. You must manually change the inside EOT points constraints to match the CL_PGL GP for achieve the desired effect. Caveat in mind, with this method and typical section, the elevation of the gutter and superelevated pavement on each side of the road deviates widely from our normal Criteria practice and past let projects. Again, this is not recommended.