Alignment Annotations Best Practices

Automatic annotations of alignments (also called geometry) by OpenRoads and OpenSite Designer include curve data, tangent bearings, major station labels (both 100' and 500'), cardinal point stations and leaders, and beginning and ending stations and leaders. With only one exception, alignment annotations may be modified using ORD or OSD after placement and the new location/orientation will be retained - even if the underlying geometry is modified and the annotation file is reopened and updated.

The exception is the major station labels, also known as Stationing. Stationing can be modified, but any change to the geometry will cause the stationing to be redrawn according to the defined annotation group.

This document explains how to modify the placement instructions in the annotation group in the local file, to shift the major station labels further away from the centerline.

Work in an ANNO_XXX_pub file

It is a best practice to use an ANNO_XXX_pub file to create a separate annotation file to hold alignment stationing and curve data. Annotation may be split into multiple "pub" files or all contained in one. Use the "XXX" in the document name to indicate the location of the annotation. Examples include All, L, or CRs.

Work only in the Default model.

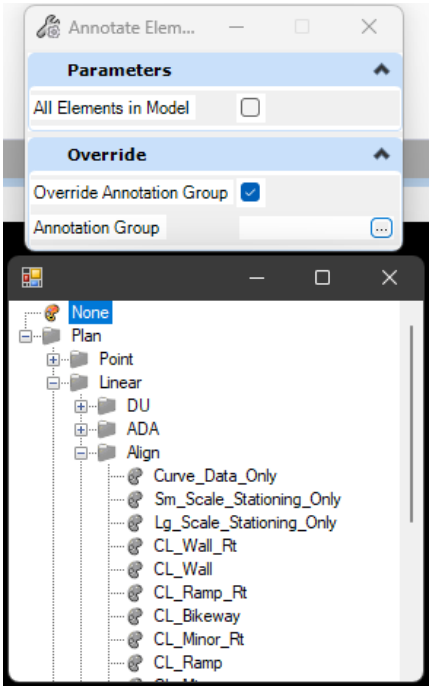
Annotation files are updated when opened for editing with a civil product like OpenRoads Designer or OpenSite Designer. A good practice to prevent inadvertent reprocessing that can affect plans, is to change the state to Read-only after creating the stationing.

Deliver Stationing in an ANNO_bas_CF file

Use an ANNO_bas_CF file to deliver alignment stationing to other disciplines and the plans production process. Like other types of civil data, a container file stored in 6_Civil_Data is used to assemble all project annotation into one file for referencing (live nesting, depth = 1) by others and for the plans production process.

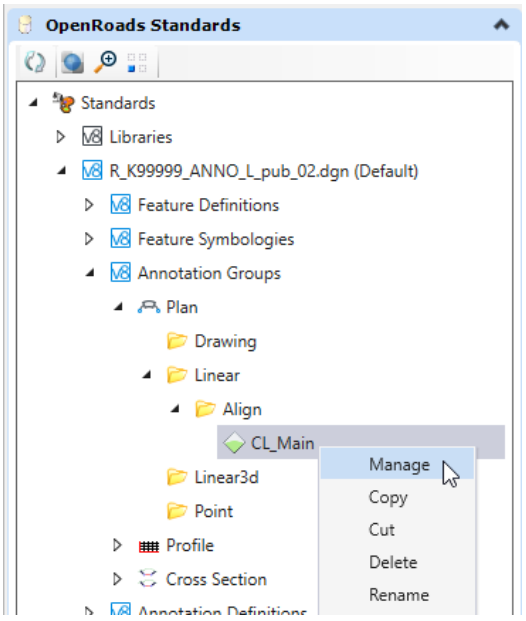
Annotate Element with Override Annotation Group

When running the Annotate Element command without overrides, the Annotation Group that is stored in the GEOM file where the alignment was created is what is used to define the stationing annotation. The trick to making the annotation group editable in an ANNO_XXX_pub file is to select "Override Annotation Group" when running Annotate Element. Select the annotation group from Plan>Linear>Align. This allows you to create stationing in an ANNO_XXX_pub file that looks different than what the geometry uses.



Increasing the Station Label Offset

The most common edit to major station labels (stationing) is to move them outward, away from overlapping other data. To increase the station label offset, edit the Perpendicular Offset in the OpenRoads Standards group in the Explorer. Ensure that you are in the Default model of the ANNO_XXX_pub file, then, expand the Standards, and expand the active file. Drill down into Annotation Groups>Plan>Linear>Align, right-click on the annotation group and choose [Manage] as shown below.



In the image below, the Manage Annotations dialog for CL_Main is open and “CL_Main Station Labels Major” group (500’ stations) in the left column is selected. The Placement group is expanded and the Perpendicular Offset value has been replaced with a larger negative number to move the stationing outward. If you will be using the 100’ station labels, also edit the “CL_Main_Station Labels Major SmScl”. The 100’ labels are placed on a different level and may be toggled off.

There is no save button. Closing the Manage Annotations dialog will cause the annotations to be redrawn in the Default model immediately for you to see the results.