Creating Offset Alignments
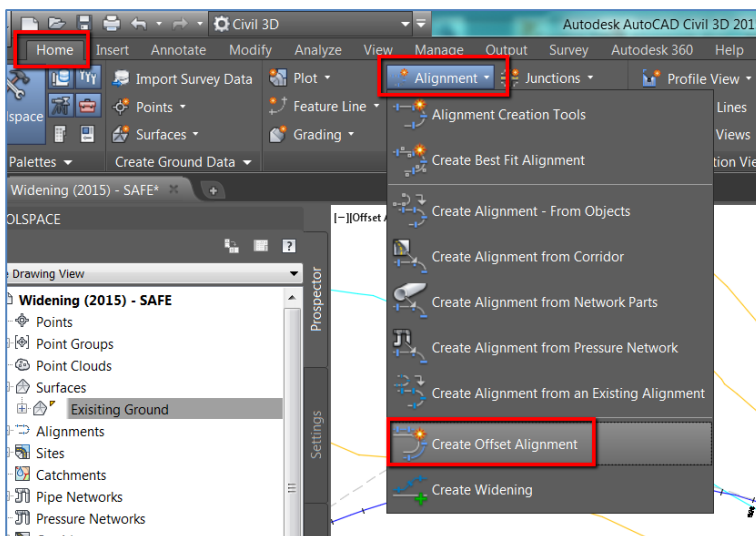
How to create alignments offset from another alignment.

Introduction

One of the most powerful features of **Civil 3D** is the ability to create offset alignments. Offset alignments contain most of the intelligence of regular alignments (e.g. profiles and corridors can be created from the) but they are permanently linked to their source alignments. This means that if the source alignment is edited, the offset alignment's relationship will be maintained. Offset alignments can also be used to create regions of widening and tapering.
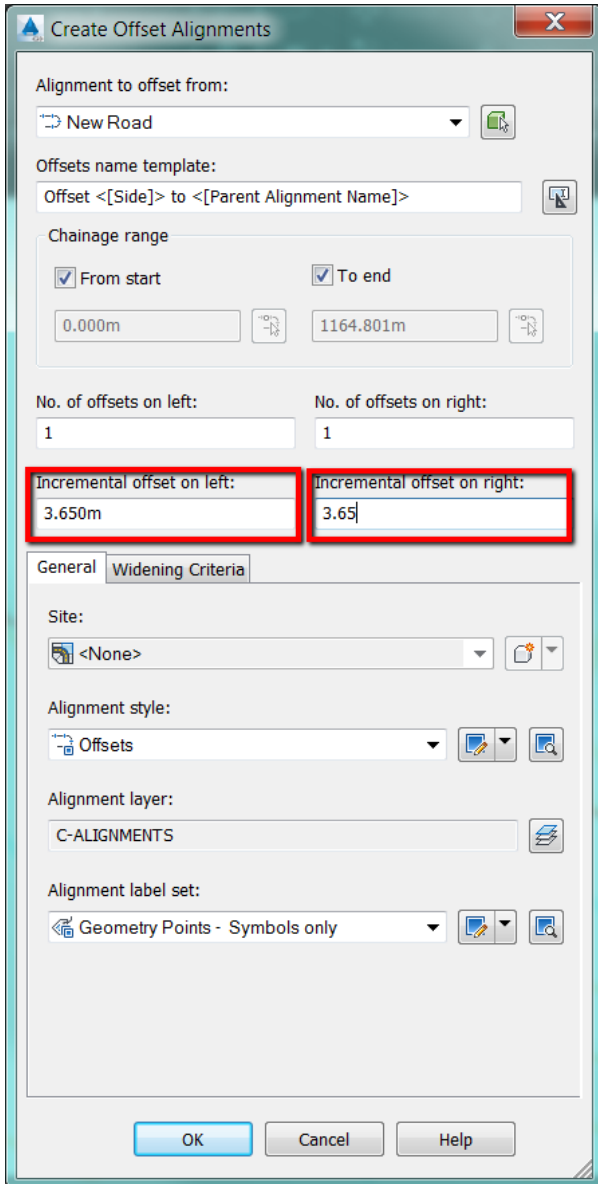
Method

From the **Home** menu select **Alignment** > **Create Offset Alignments**
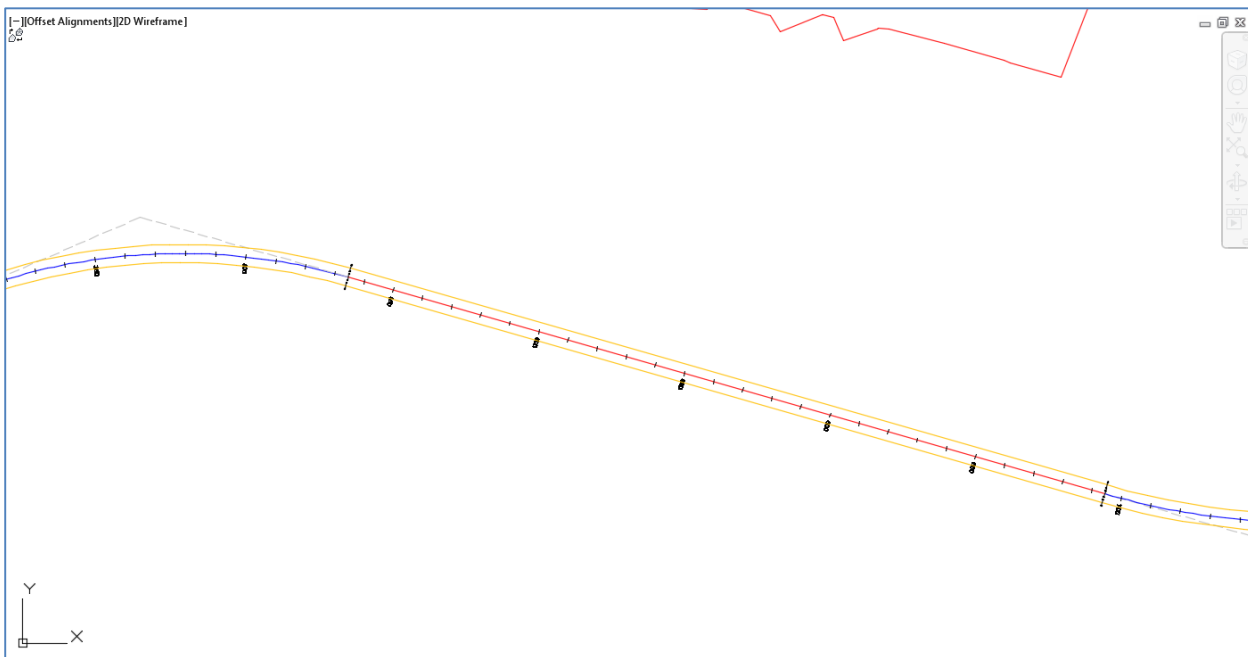

You will be prompted to select the source alignment. The following dialogue will then be displayed:

In this case all the values have been kept as default except the incremental offset left and right which have been changed to 3.65m

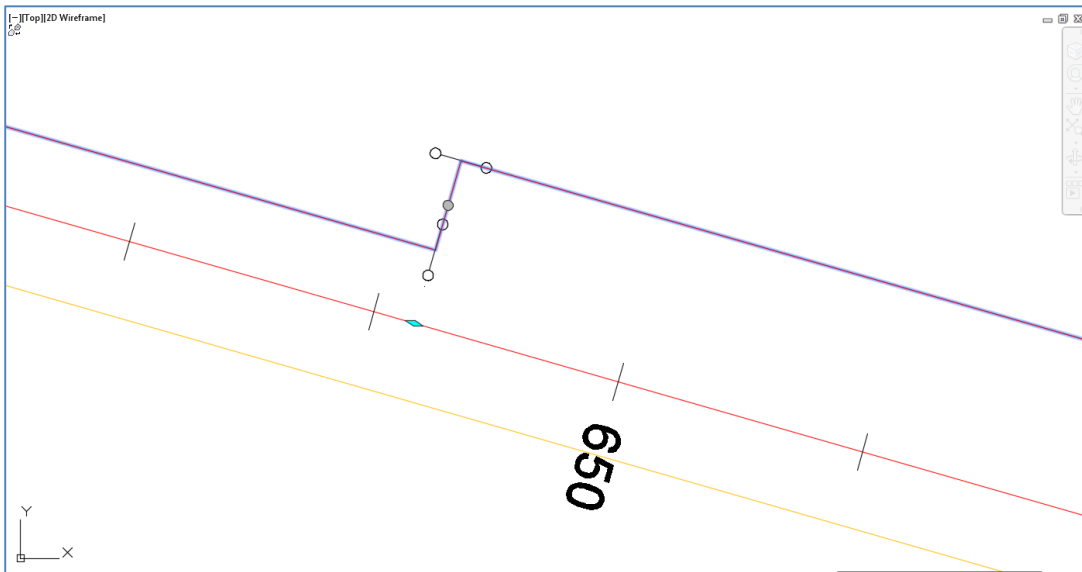Selecting OK will display the offset alignments in the graphics area as shown:

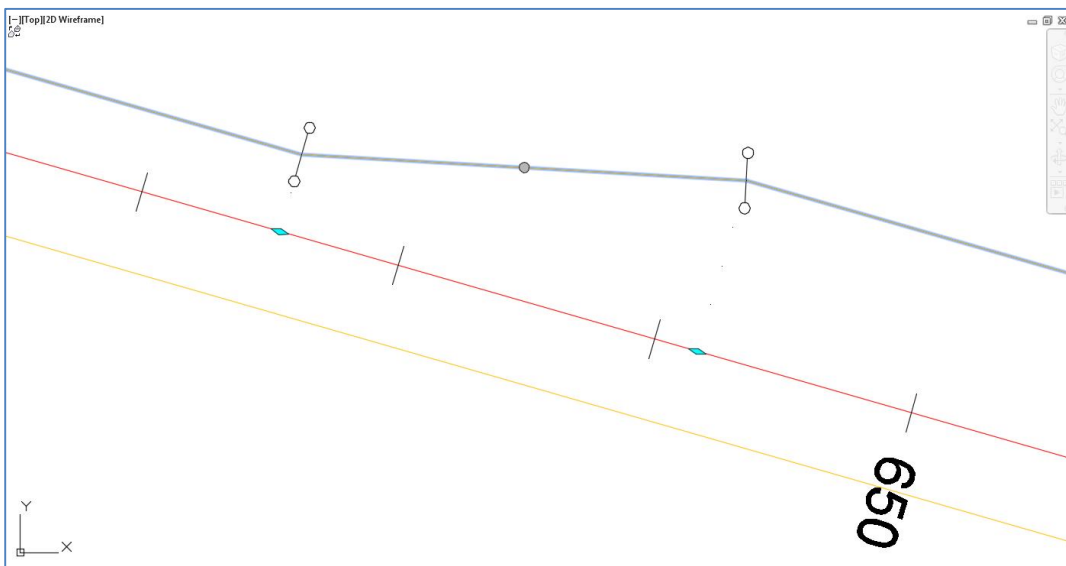If an offset alignment is selected two icons will appear:

The 'Arrow' icon allows dynamic editing of the alignment's offset by dragging the arrow towards or away from the main alignment.

The 'Plus' icon inserts a step in the alignment

Selecting the 'Grey Dot' icon in a stepped alignment activates two circular icons which are used to add tapers into the offset alignment.

The taper and offset values can be controlled more accurately by selecting an offset alignment followed by **Offset Parameters** from the **Home > Modify menu**