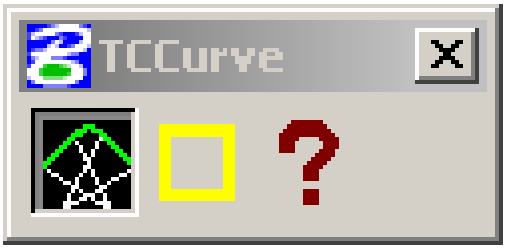
NC Department of Transportation

Roadway Design Unit



Three Centered Curve User Guide

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Abstract

This MDL Application computes and draws a two centered or a three centered curve at the intersection of two existing elements in a MicroStation design file.

The three centered curves can be symmetrical or asymmetrical. This program has been adapted to include both lines arcs and any combination thereof.

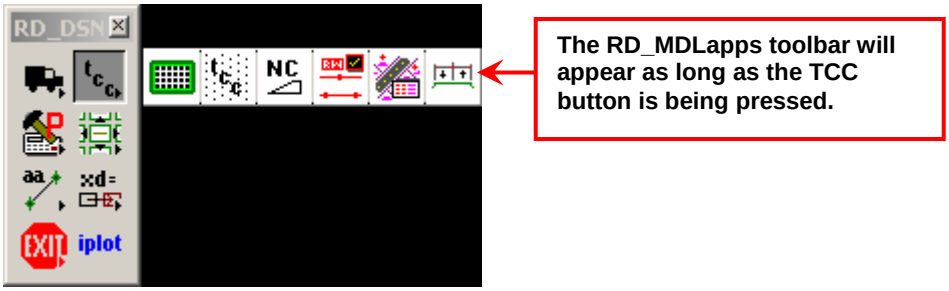
Using TCCurve

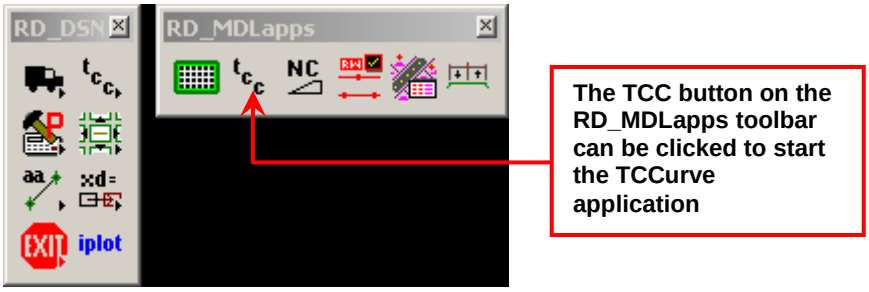
Step	Action	Result
1	Open the design (DGN) file in MicroStation.	N/A

There are two ways to launch the **TCCurve** application.

From the RD_MDLapps Toolbar

2	Click the **TCC** button on the **RD_DSN** Toolbar.	The **RD_MDLAPPS** pull-off toolbar will appear.





3	Click the **TCC** button on the **RD_MDLAPPS** Toolbar.	The **TCCurve** toolbar will appear.

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Using TCCurve

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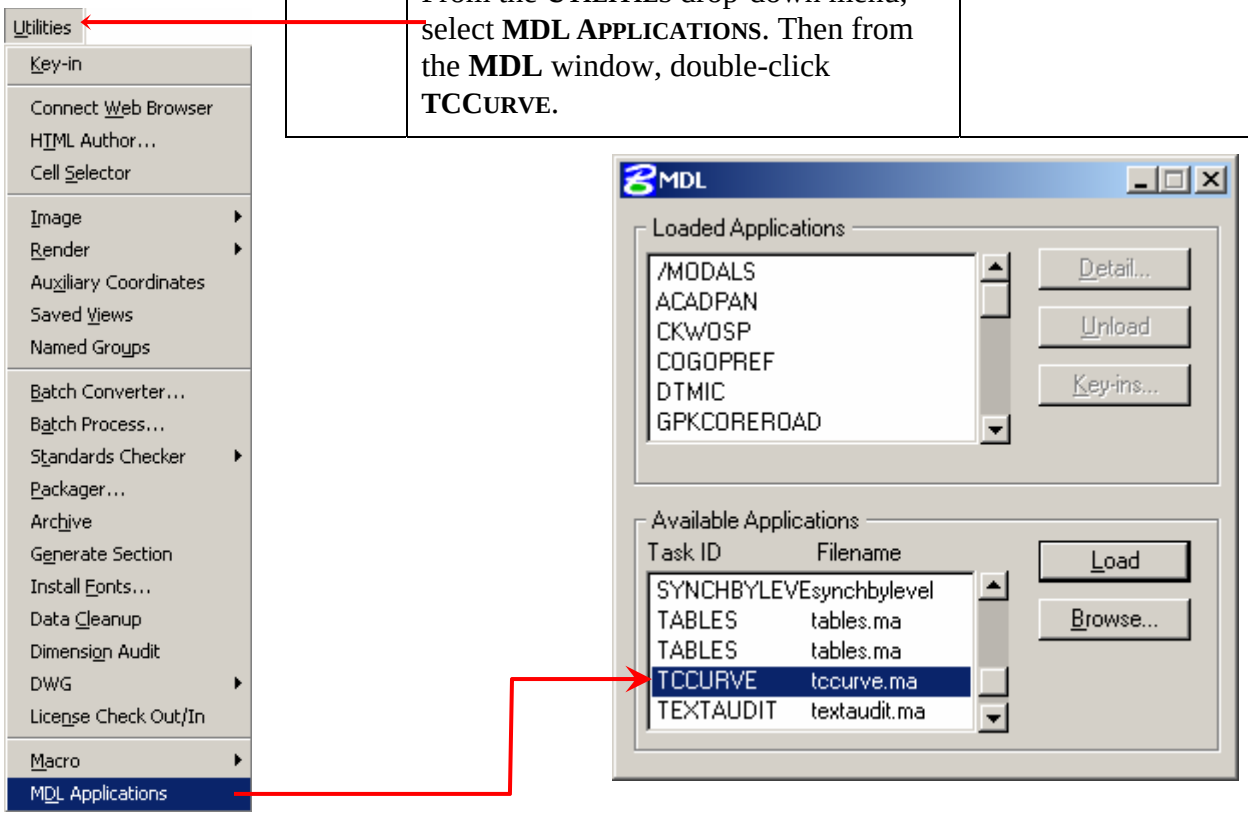
From the Main MicroStation Window	In the **Key In** window, type **MDL Load TCCurve** OR From the **UTILITIES** drop-down menu, select **MDL APPLICATIONS**. Then from the **MDL** window, double-click **TCCURVE**.	The **TCCurve** toolbar will appear.



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Using TCCurve

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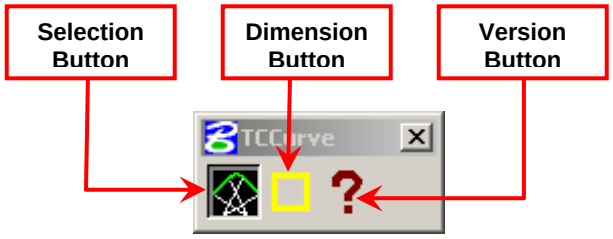
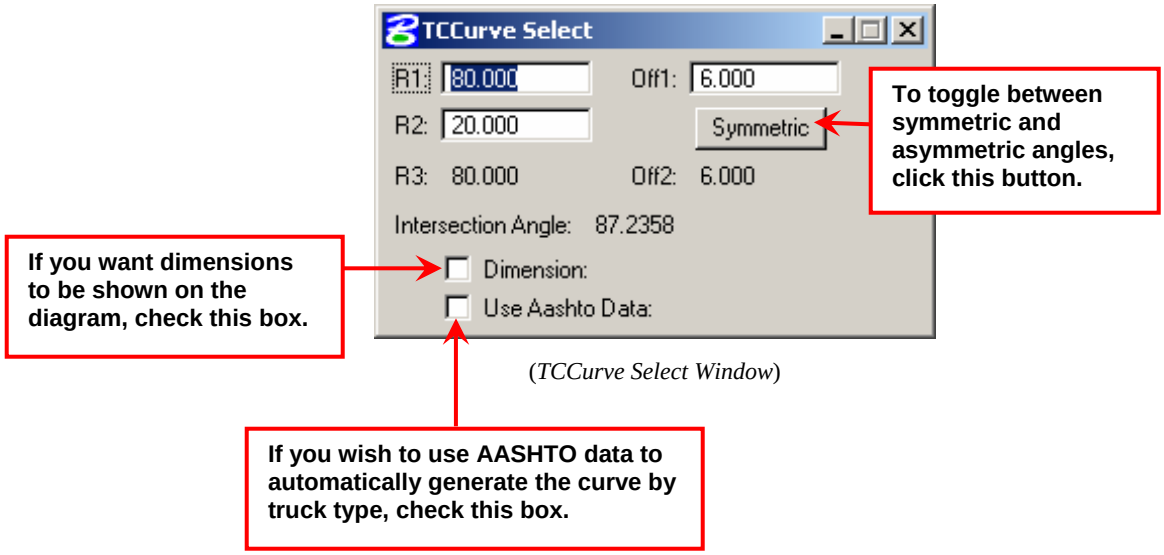
The TCCurve Toolbar contains 3 buttons:

- Selection Button
- Dimension Button
- Version Button



(*TCCurve Toolbar*)

4	Click the **SELECTION** button on the TCCurve window.	The TCCurve Select Window will appear.



(*TCCurve Select Window*)

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Using TCCurve

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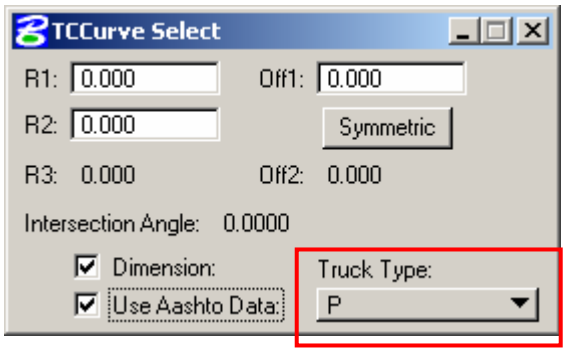
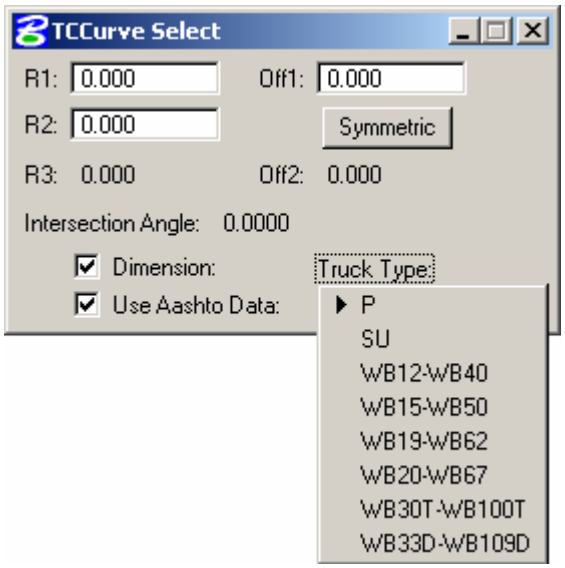
If wish to use AASHTO data to plot your curve, the **TRUCK TYPE** field will appear when you check the **USE AASHTO DATA** check box.



A drop-down list of truck types will appear. Select a truck type to preview the curve dimensions.



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Using TCCurve

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5	Select the **intersection** for your three centered curve. 🗁**NOTE:** Once you have selected the two elements that intersect, you will be able to view the intersection angle based on the intersection and cursor position relative to it.	N/A

(*Selected Intersection*)

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Using TCCurve

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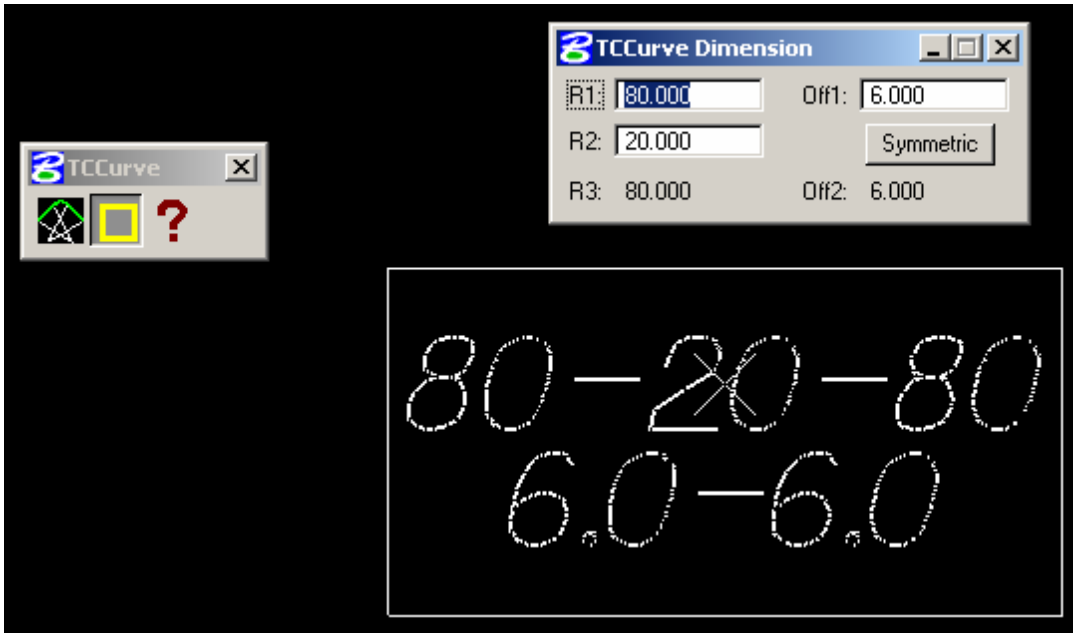
6	To view the dimensions in a separate measurement grid, click the **DIMENSION** button in the **TCCurve** toolbar.	The TCCurve Dimension Window will appear. **NOTE:** You will be able to edit the radiuses & offsets in this dialog box.



(*Dimension Grid*)

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Using TCCurve

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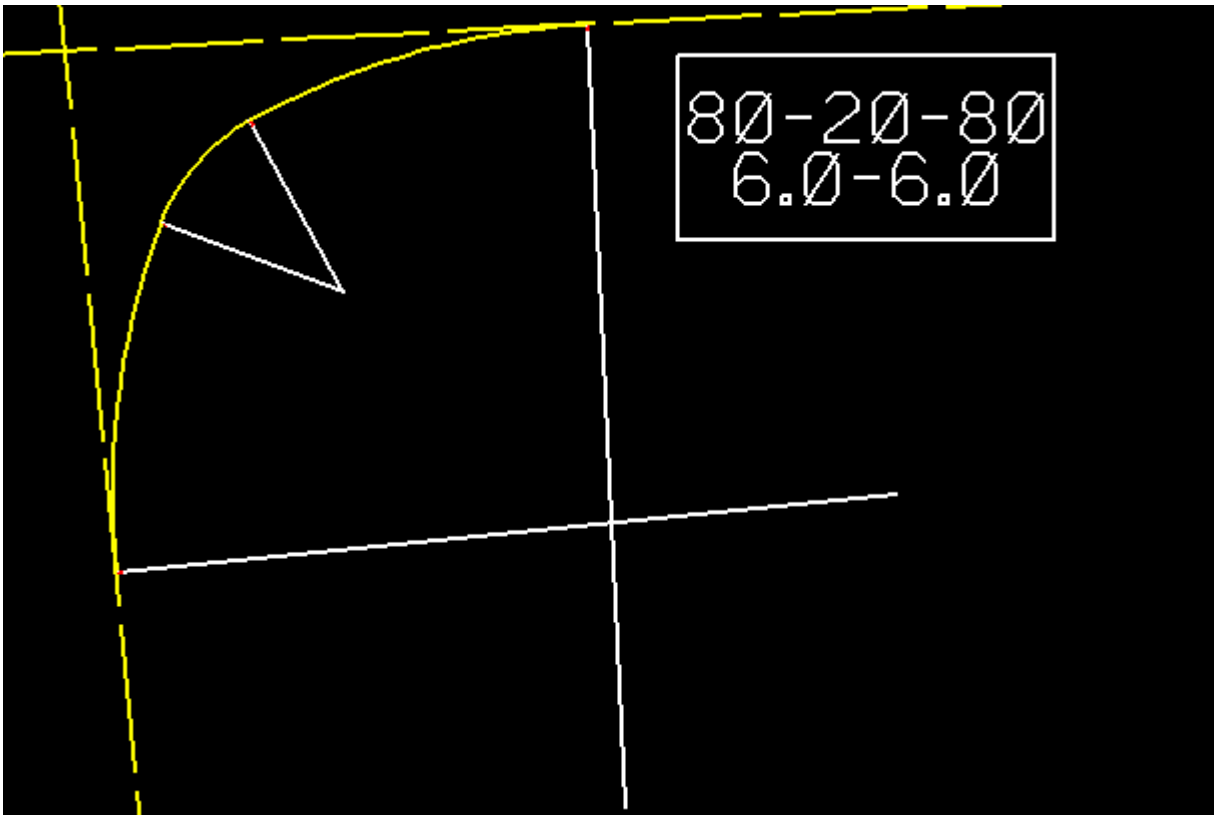
If you use the dimension grid option, your curve will appear like this:



(*Three Centered Curve with Dimension Grid*)