Application Name:	ODOT_IntersectionDetail.mvba
Current version:	V11.07.15
Required MicroStation Version:	MicroStation XM or V8i
Required GEOPAK Version:	GEOPAK XM or V8i
Video Documentation	http://www.dot.state.oh.us/

This application is used to annotate the elevations along the centerline, offset from the centerline, or along the radius return at intersections as shown in the example below.
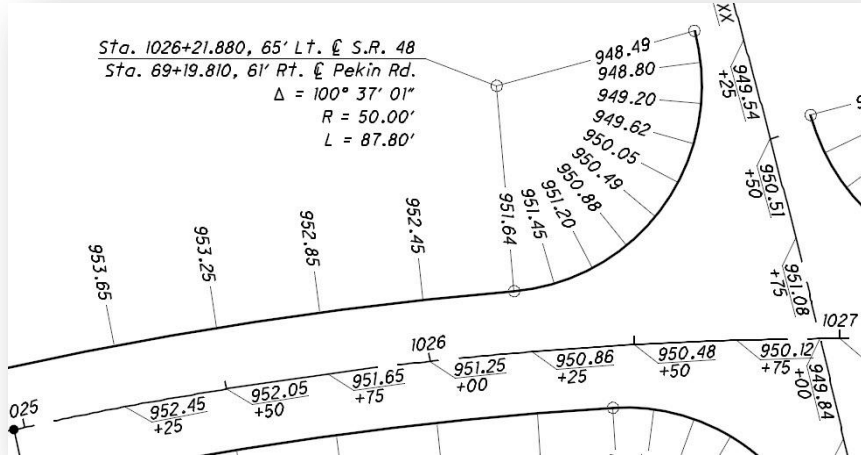
The application can be accessed from the ODOT pull-down menu by selecting **ODOT > GEOPAK Apps > Intersection Detail**, or by the following key-in command:

vba load ODOT_IntersectionDetails.mvba; vba run IntersectionDetailMain

When the application is loaded, the dialog shown at right is opened.

Job Number

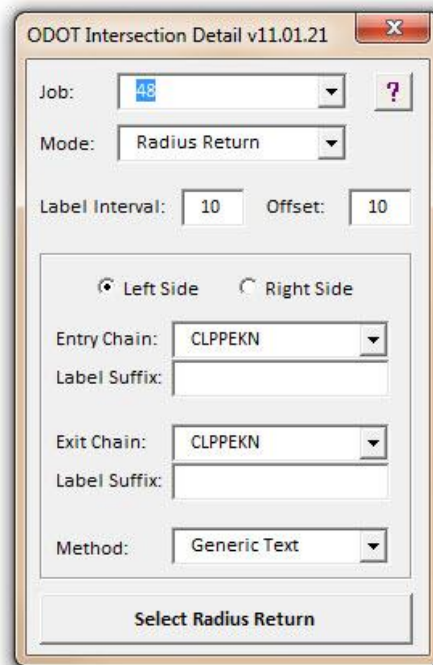> Select the desired GEOPAK GPK file from the drop-down menu.

Mode

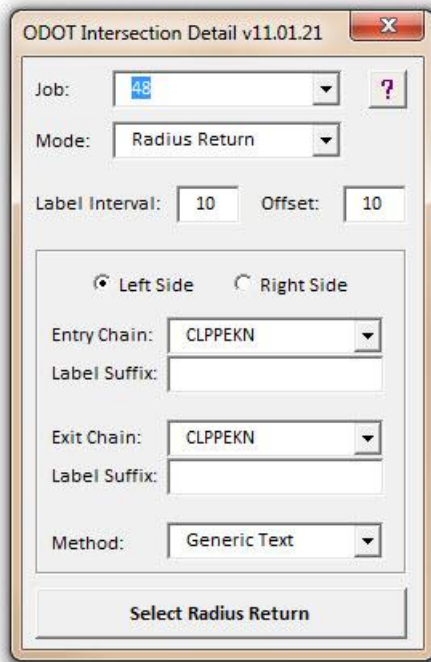> Two modes of operation are supported:

> **Radius Return**
> Select this option to annotate the elevations along the radius return of the intersection.

> **Centerline**
> Select this option to annotate the elevations along the centerline, or offset from the centerline.

When **Radius Return** is selected, the dialog appears as shown below.

Label Interval
This option is used to specify the distance along the Radius Return for the elevation text. The interval is measured along the radius return, starting from the end of the radius nearest to the **Entry Chain**. The last elevation is placed at the end of the radius return. **Note:** The spacing at the end of the radius return will not be at an even interval unless the length of the radius return is evenly divisible by the interval value specified by the user.

Offset
This option is used to specify the perpendicular offset from the radius element to the text origin.

Left Side/Right Side
These options are used to control the orientation of the text.

Entry Chain
Select the Chain that is used as the entrance for the radius.

Exit Chain
Select the Chain that is used for the exit of the radius.

Label Suffix
Text entered in these fields is appended to the station and offset annotation for the curve center.

Method
In **Radius Return** mode, three methods are available to establish the source for the elevation data:
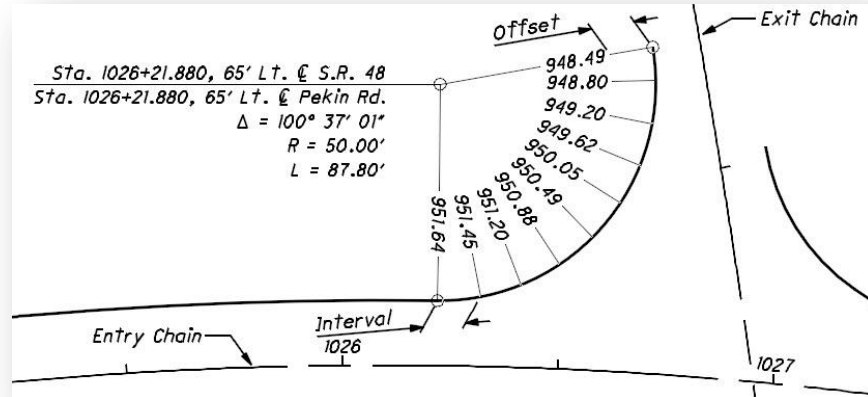
Generic Text
Select the option to place generic text along the radius return as shown below. The text values can be edited using the MicroStation Edit Text command. With this option, the user must select the graphic representing the radius return that will be used to place the elevation text at the specified **Interval**.

Read TIN File
Elevations are read from the selected TIN model. With this option, the user must select the graphic element representing the radius return and the elevations are read from the TIN model at the **Interval** specified.

Chain and Profile
Elevations are read from the selected chain and profile at the specified **Interval**. This option is useful if you use the GEOPAK Multi-Center Curve tool to create a chain and profile for each radius return. An example of the elevations placed using the **Chain and Profile** option is shown below.


Annotating multicenter curves
Multicenter curves are supported by the application.

- When using the **Generic Text** or the **Read From TIN** options, each curve element must be selected individually. Each curve element is annotated individually.

- When using the **From Chain and Profile** option, only chains consisting of 1, 2, or 3 arc elements are supported. When the multicenter curve is annotated, the application will cycle through each curve in the chain to allow the user to specify the annotation location.

Regardless of the method selected, the Interval starts over for each curve element in a multicenter solution and is not continuous throughout the length of the combined curves. An example of the annotation placed for a three center curve is shown below.
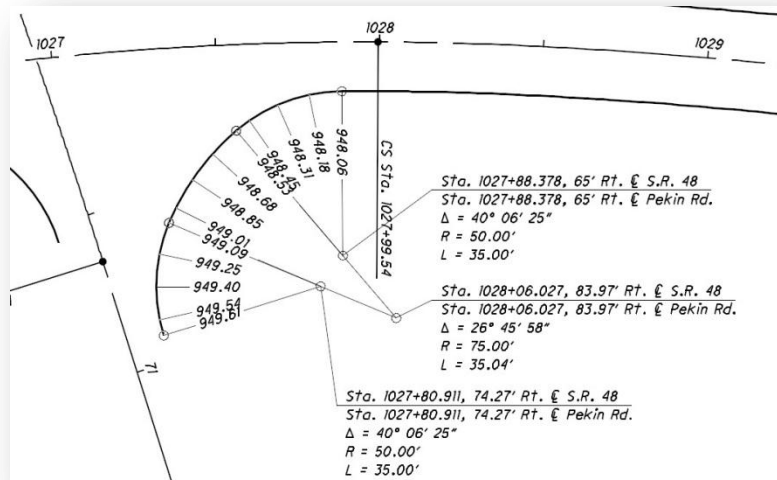
When **Centerline** is selected, the dialog appears as shown below.
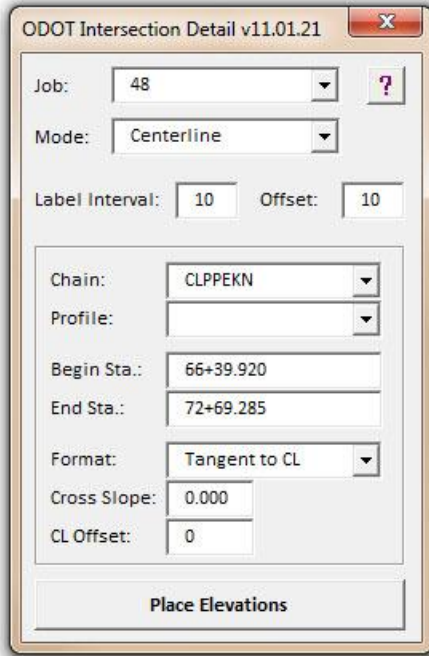
Label Interval
This option is used to specify the distance along the selected **Chain** for the elevation text.

Offset
This option is used to specify the perpendicular offset from the radius element to the text origin. This parameter is only used if the **Format** parameter is set to **Radial to CL**.

Chain
Select the COGO chain to be annotated.

Profile
Select the COGO profile to be used to annotate the elevations along the selected **Chain**.

Begin Sta.
Define the beginning station for the start of the elevation text to be placed along the **Chain**.
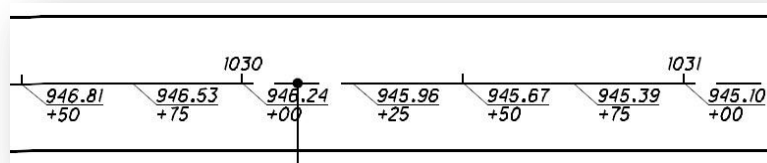
End Sta.
Define the ending station for the start of the elevation text to be placed along the **Chain**.
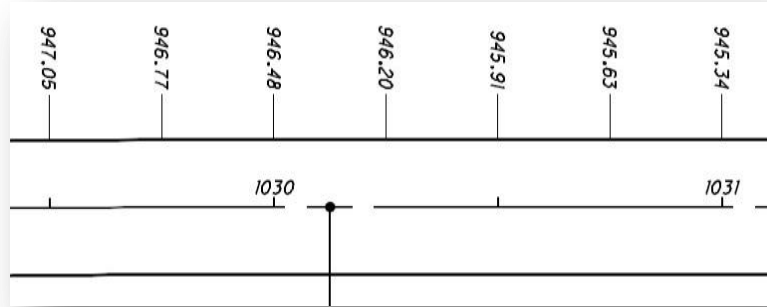
Format
Two options are supported:

> **Tangent to CL**
> The elevation text is placed tangent to the centerline with the partial station annotated as shown below.

Radial to CL
The elevation text is placed perpendicular to the centerline as shown below.

Cross Slope
If you are labeling elevations offset from the centerline, the **Cross Slope** parameter is used to specify the pavement cross slope.

CL Offset
This parameter is used to specify an offset from the centerline for the elevations. The Cross Slope is used to determine the elevation value at each station.

In the example below, the elevations at the edge of pavement from stations 1025+25.00 to 1026+25.00 were placed using a superelevated **Cross Slope** value of 0.08 with a **CL Offset** value of -15 on the left side, and a **Cross Slope** value of -0.08 with a **CL Offset** value of 15 on the right side.
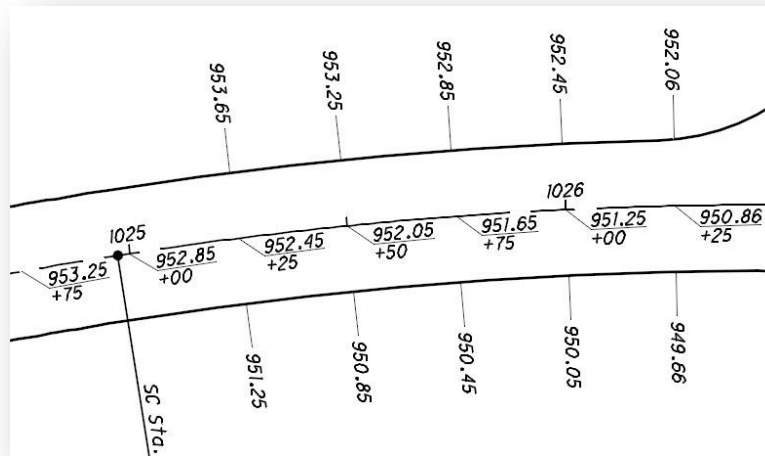
Important Note: The **Cross Slope** and **CL Offset** options can only be used on cases where there is a constant pavement cross slope. The transition areas entering into and exiting from superelevation must be computed individually for each station.

Contacts

If you have any questions, suggestions, or problems please contact the ODOT Office of CADD and Mapping Services CADD Support team or use the following form on the ODOT web site at:

http://www.dot.state.oh.us/Divisions/Engineering/CADDMapping/CADD/Pages/suggestions.aspx