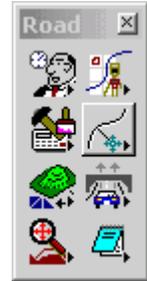


Exercise 8-2

This is a group exercise to introduce additional aspects of the GEOPAK plan view design tools.

1. Open the MicroStation file **t:\br-proj\A_geopak\d5\j5p0100\data\plan_bh_j5p0100.dgn**. Window in on the area where the ramps intersect Big Horn Drive.

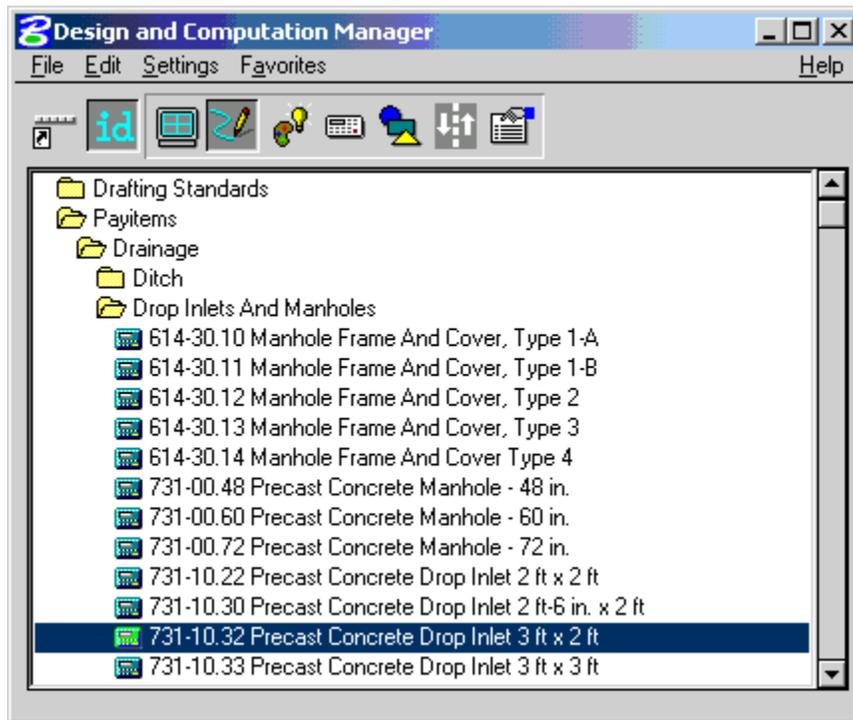
2. DP Station/Offset and Design and Computation Manager will be used to plot some drop inlets and a culvert to demonstrate the use of this tool combination. Open **DP Station/Offset** by selecting the raised icon shown to the right. It is the second icon in that tool palette.



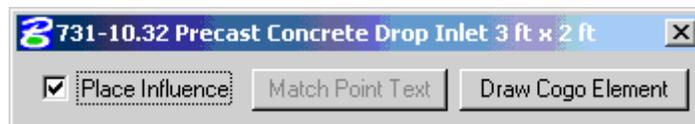
To place the correct item, open D&C Manager category:

Payitems/Drainage/Drop Inlets And Manholes.

Double click on the item: **731-10.32 Precast Concrete Drop Inlet 3 ft x 2ft**. This will activate the MicroStation Place Active Cell tool.



Be sure that **Place Influence** is checked or else the correct cell will not be placed.



3. Place the cell using **DP Station/Offset** at the following locations:

<u>Chain</u>	<u>Station</u>	<u>Offset</u>	<u>Orientation</u>	<u>Auto Angle</u>
BIGHORN	7+00	-20.5	Radial	Checked
	7+12	20.5	Radial	Checked

The dialogs for placing the cells are shown below. After entering the correct information into the dialog, click on DP to place the cell. (**Note:** Before pressing DP, make sure that Place Cell is still the active MicroStation tool since DP Station/Offset will work with and MicroStation or GEOPAK tool that requires as data point.)



The instructor will demonstrate the other orientation options.

4. Use **DP Station/Offset** or **Draw Transition** to draw the culvert between the two drop using the following beginning and ending stations and offsets.

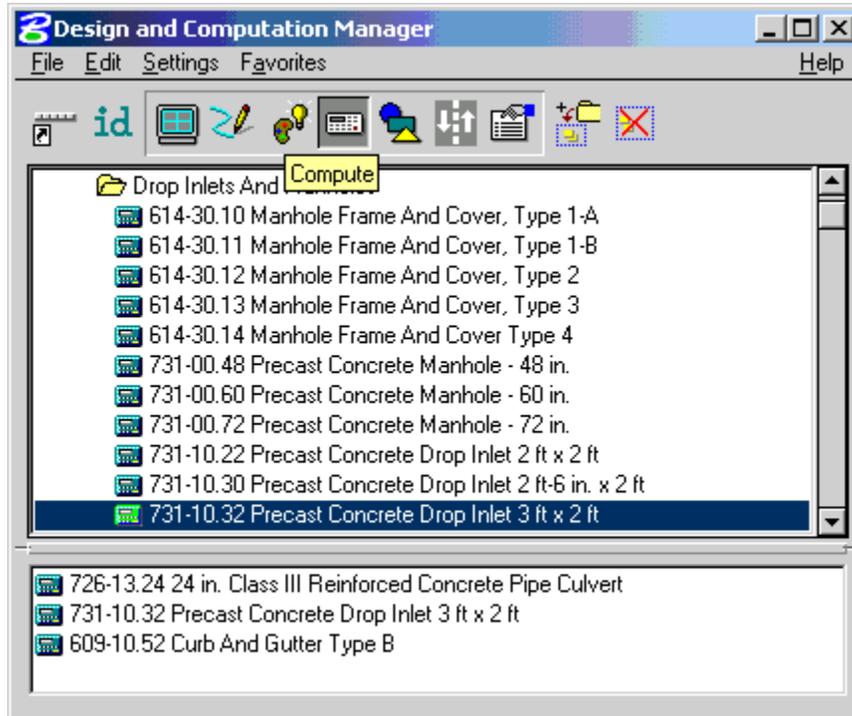
<u>Chain</u>	<u>Beginning</u>		<u>Ending</u>	
	<u>Station</u>	<u>Offset</u>	<u>Station</u>	<u>Offset</u>
BIGHORN	7+00	-19	7+12	19

Use **D & C Manager** category: **Pay Items/Pipes/RCP/** and item **726-13.24 24 in. Class III Reinforced Concrete Pipe Culvert**.

Be sure that **Place Influence** is checked to have the MicroStation symbology match the pay item. (**Note:** If you use DP Station/Offset, make sure that **Place Line** is still the active MicroStation tool.)

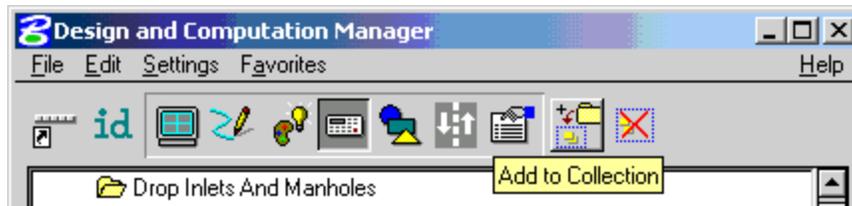


- After placing the culvert, switch the **D & C Manager Mode** to **Compute** by clicking on the shaded icon shown below. A new section, called the Collection Box, is added to the main D&C Manager dialog. This mode can be used to compute quantities for items placed using D&C Manager.



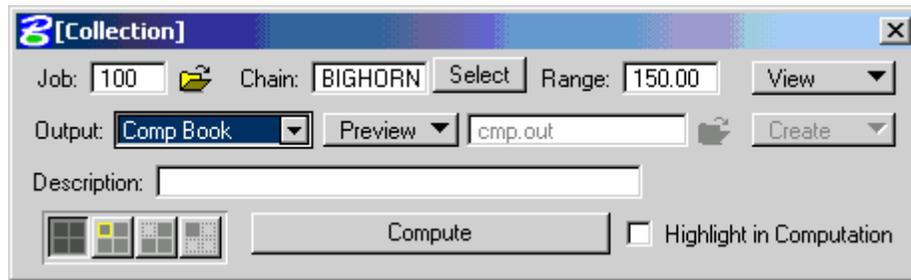
Add the items shown above to the collection box by navigating to the pay item and either double clicking on the item or clicking on the Add to Collection icon shown below.

The **id** icon in D&C can be used to aid in navigating to the items in the Payitems list. This is done by clicking on the icon and then data pointing on the plotted item in the MicroStation file. The instructor will demonstrate the use of this option.

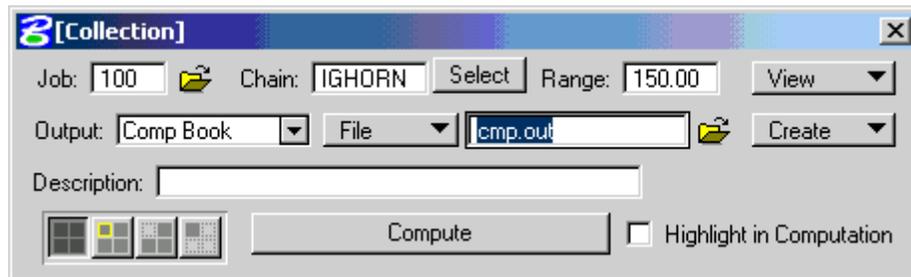


After adding the items to the collection box, zoom out in the MicroStation window until all of BIGHORN chain is visible. This needs to be done in order to compute all of the curb and gutter.

6. When D&C Manager is in Compute Mode, the Operations Box switches to the form shown below.



Set up the dialog as shown above and click compute. The results of the computation will be displayed in an output window. If you want a permanent record of the output, switch the **Preview** option shown above to **File** as shown below and type in the name of the output file you wish to use.



To see the other types of computation reports that D&C can generate, switch the **Output** to **Item Report** and **Item Table** and generate a report using these options.

The icons in the lower left hand corner of the above dialog can be used to control the display options for the items in the Collection Box. They are the same icons used in D&C's Display Mode. See the manual for an explanation of these options.