LAB 24 - Land Survey Control Diagram Plan Sheet

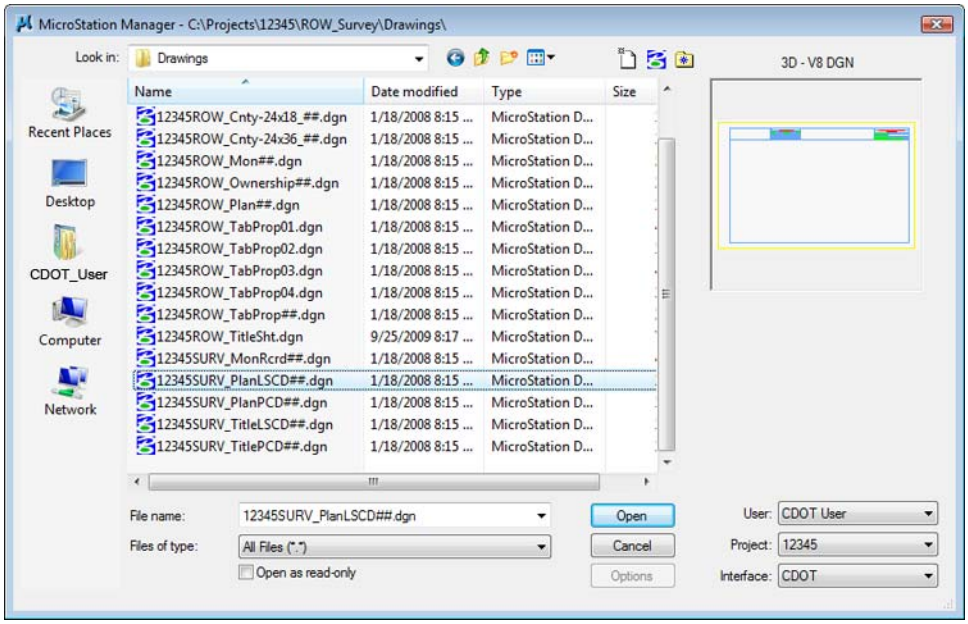
Chapter Objectives:

- Import XML data into a MicroStation file

In this sheet, coordinate information will be input in a tabular format.

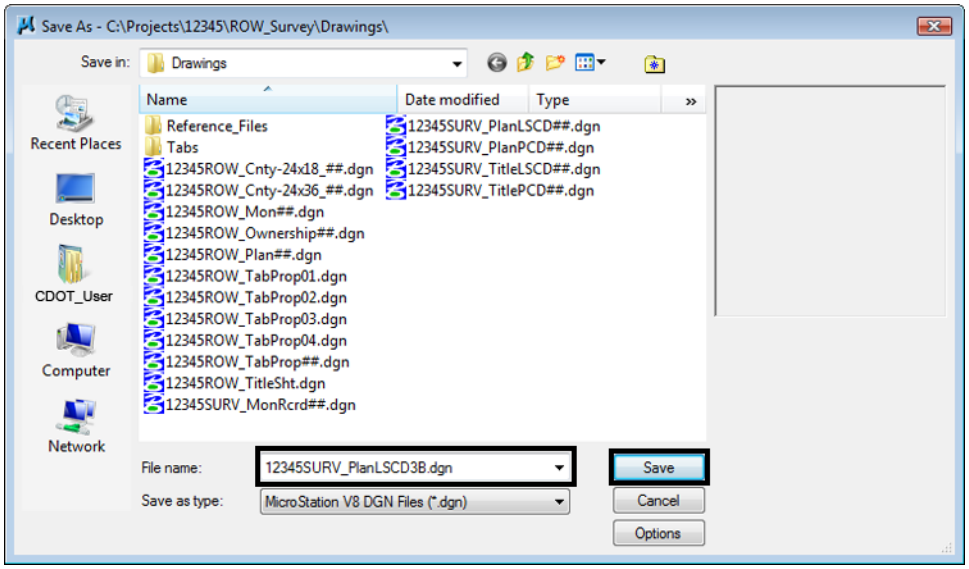
Return to the MicroStation manager dialog.

1. Select **File > Close** (if MicroStation is currently open).



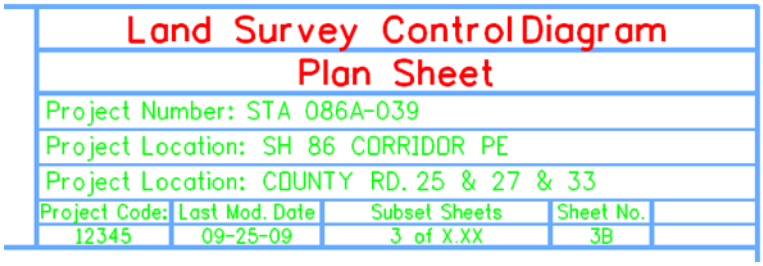
2. **<D>** the filename ***12345SURV_PlanLSCD##.dgn***
3. Select **File > Save As** from the MicroStation Manger dialog.
4. Key-in ***12345SURV_PlanLSCD3B.dgn***

5. **<D> Save**

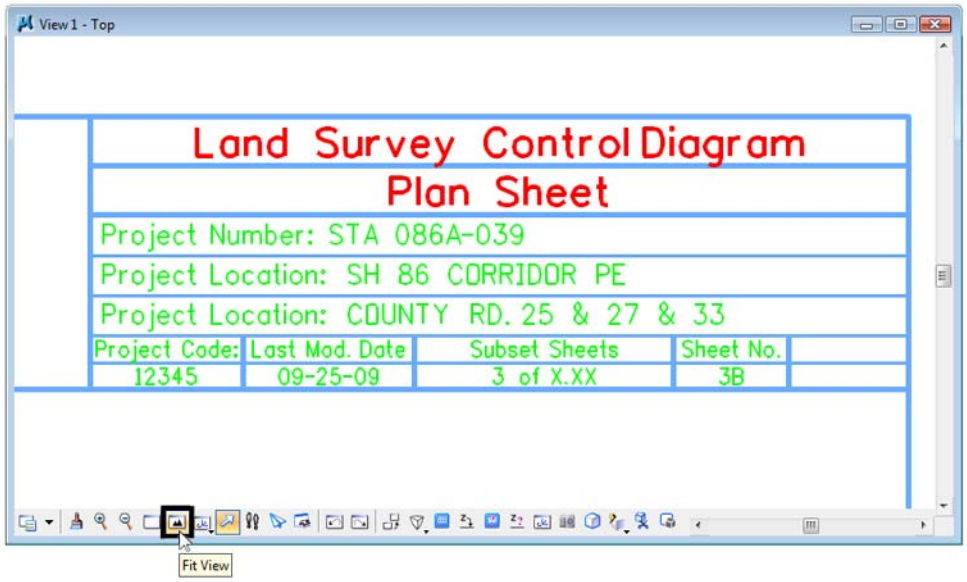


6. **Zoom/Window** into the upper-right corner of the sheet.

7. **Edit** the text as shown using **Edit Text** command.



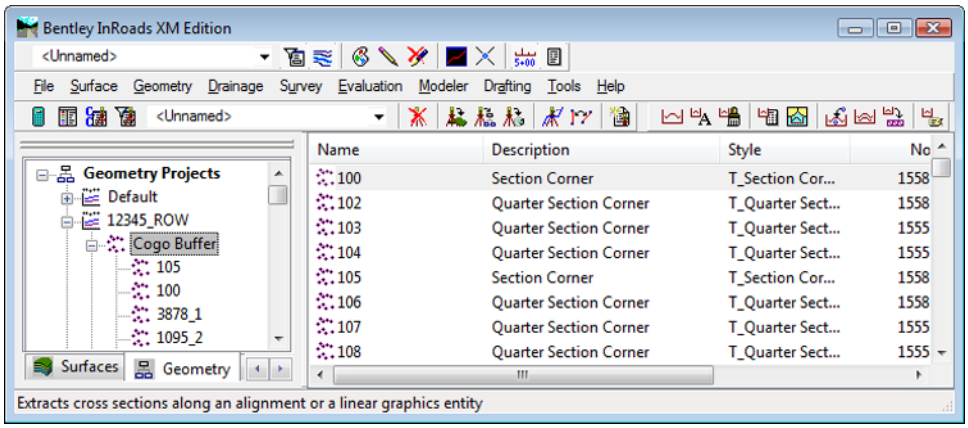
8. Use the MicroStation **Fit** command to view the entire sheet.



In this sheet, place coordinate information representing a Project Coordinate Summary Table. This coordinate information will be extracted from InRoads using the reporting utility XML.

Using XML to report on Coordinates

Use InRoads and XML reporting to insert a Project Coordinate Summary Table. Report on points 100-120.

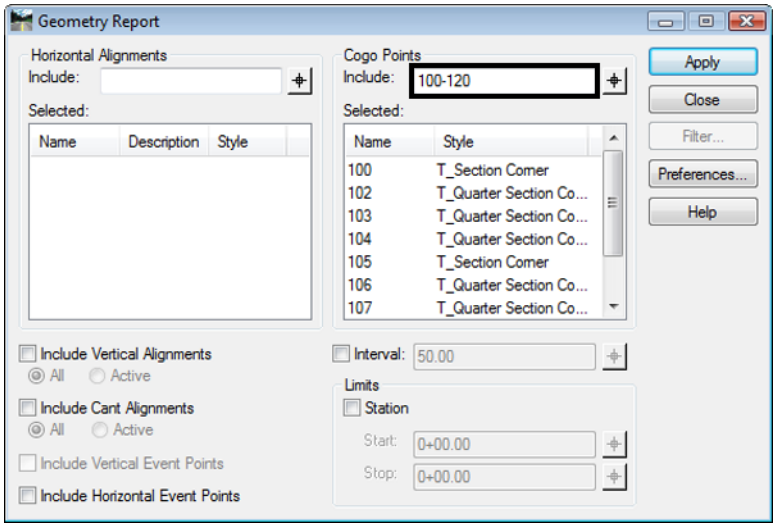


9. If not already running and loaded:

   - ***Launch*** InRoads & Load the Geometry Project **12345_ROW.alg** from ***C:\Projects\12345\ROW_Survey\InRoads\Geometry***

10. Select **Tools > XML Reports** from the InRoads interface.

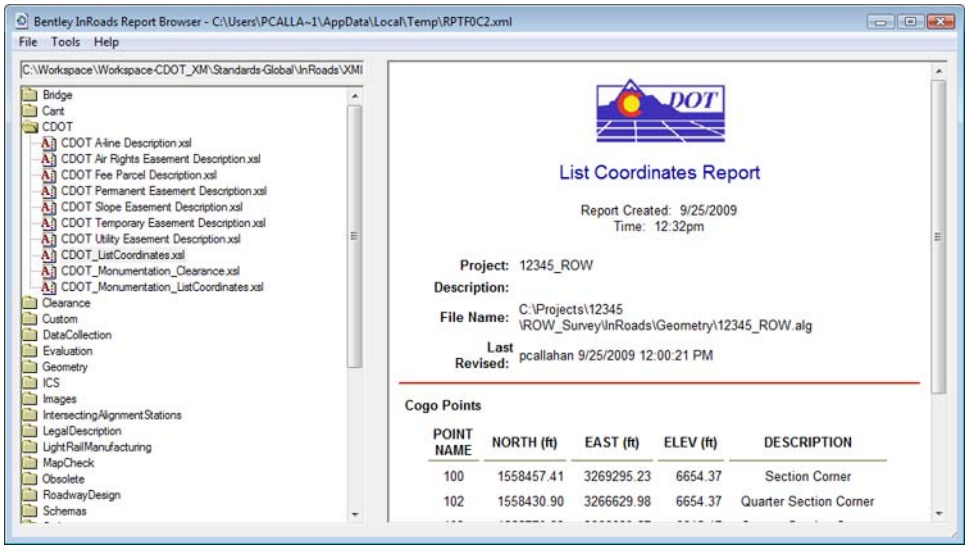
11. In the XML Reports dialog, **<D>** the Geometry folder and identify Cogo points ***100-120***



12. **<D> Apply**. The report browser will open to a default report style.

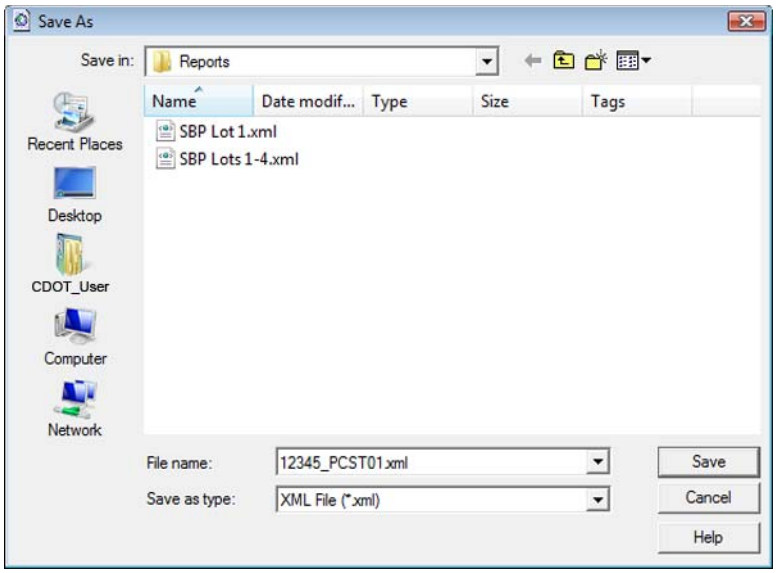
13. **<D>** the CDOT Folder.

14. **<D>** the **CDOT_ListCoordinates.xsl** style sheet.



15. Select **File > Save As**

16. Navigate to the **12345\ROW_Survey\InRoads\Reports** folder and input the file name ***12345_PCST01.xml***



17. **<D> Save** to save the file.

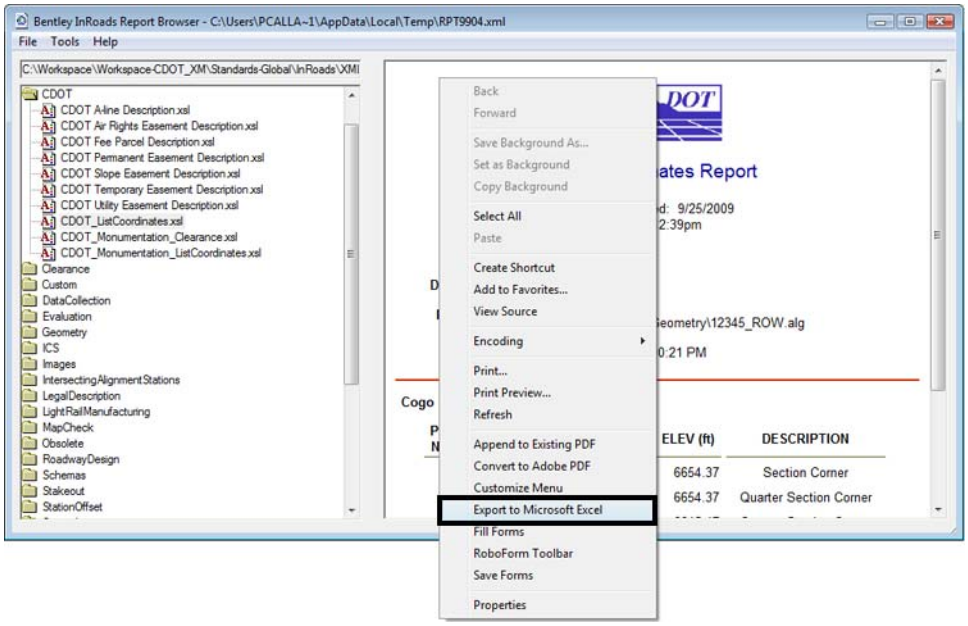
Excel in MicroStation

Tables can be created in MicroStation by linking information that is contained in an Excel spreadsheet. There are several advantages to using the linked spreadsheet method. Some of these are:

- Text formatting in the spreadsheet is retained by MicroStation
- Graphics (borders, girds, etc) are retained from the Excel file
- Updates to the Excel file are reflected in the MicroStation file

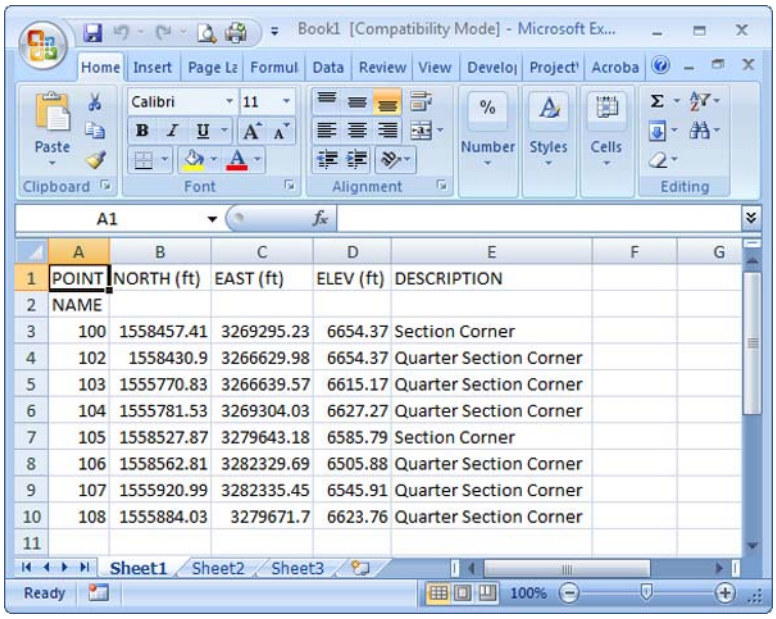
In the Bentley InRoads Report Browser:

18. **<R>** on the report in the coordinate list area as shown. A fly out menu will appear.



19. Place the cursor over the corrdinates (the bottom half of report) and select **Export to Microsoft Excel** from the fly-out menu.

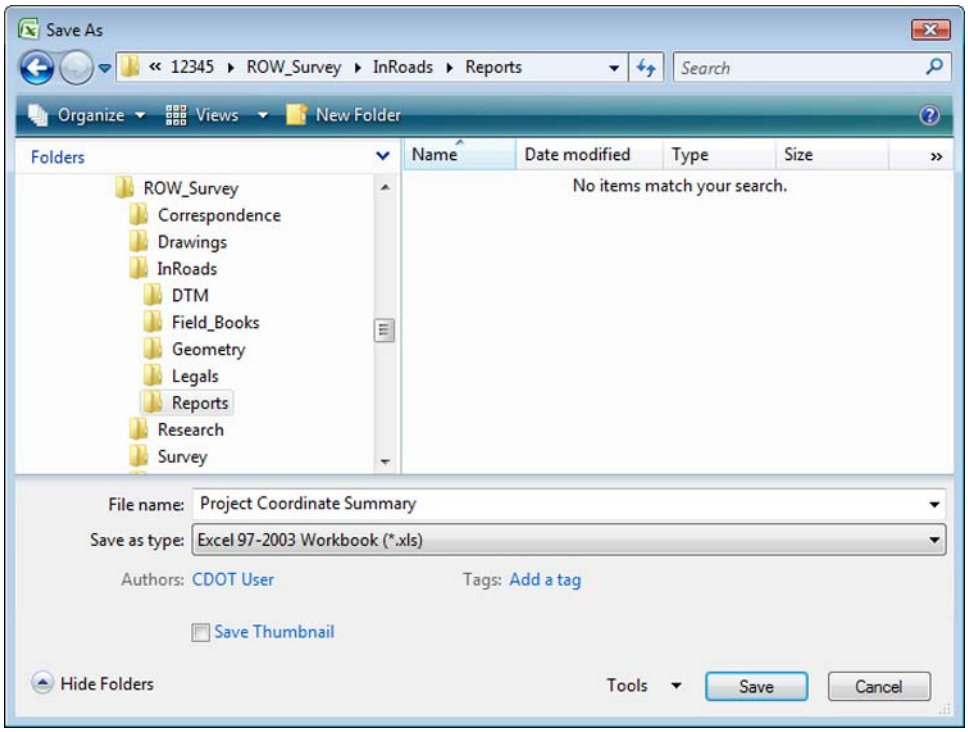
Excel should automatically launch if it is installed on the PC being used.



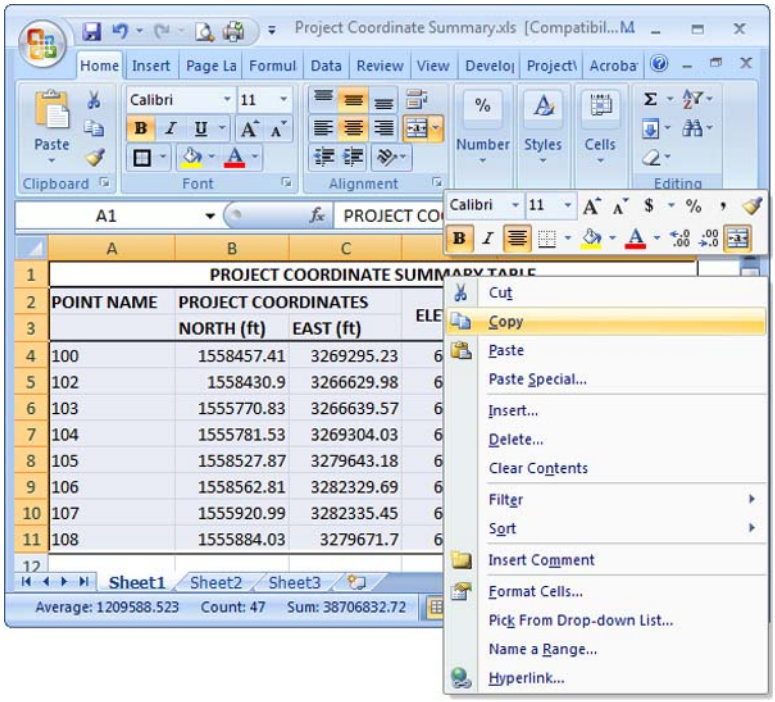
20. Make changes to the data or add formatting.

	A	B	C	D	E
1	PROJECT COORDINATE SUMMARY TABLE				
2	POINT NAME	PROJECT COORDINATES		ELEV (ft)	DESCRIPTION
3		NORTH (ft)	EAST (ft)		
4	100	1558457.41	3269295.23	6654.37	Section Corner
5	102	1558430.9	3266629.98	6654.37	Quarter Section Corner
6	103	1555770.83	3266639.57	6615.17	Quarter Section Corner
7	104	1555781.53	3269304.03	6627.27	Quarter Section Corner
8	105	1558527.87	3279643.18	6585.79	Section Corner
9	106	1558562.81	3282329.69	6505.88	Quarter Section Corner
10	107	1555920.99	3282335.45	6545.91	Quarter Section Corner
11	108	1555884.03	3279671.7	6623.76	Quarter Section Corner
12					

21. and **save** the spreadsheet to the ***…\ROW_Survey\InRoads\Reports*** directory.



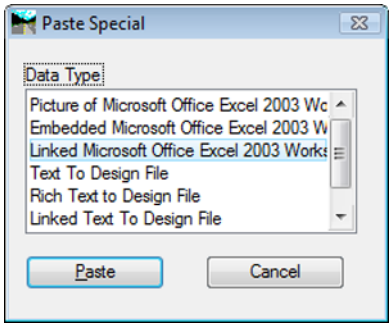
22. **Select** the range of information desired in the MicroStation file.



23. **<R>** on the spreadsheet data and select **Copy** from the fly-out menu.

RETURN TO MICROSTATION

24. Select Edit > Paste Special from the MicroStation menu bar.

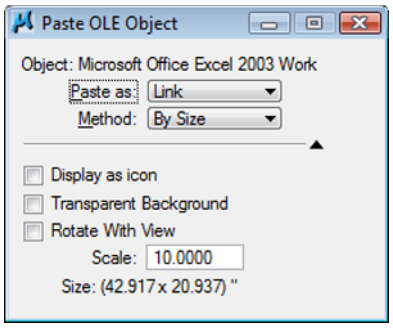


25. **<D>** the **Linked Microsoft Office Excel 2003 Worksheet** option.

26. **<D> Paste**

Note: By choosing linked, updates made to the Excel file can be passed back to the MicroStation file through updating. Selecting embedded does not provide this dynamic ability.

27. In the **Paste OLE** dialog box, set **Paste as** to ***Link***, **Method** to ***By Size***, and input a **Scale** of ***10***



Note: At this time, we do not fully understand the correlation between the scale and resulting text size. For this example, 10 seemed to produce reasonable results. Once placed, the text height can be measured and the bounding shape of the linked Excel table can be scaled up or down accordingly to achieve required text size.

$PLOT_INFO$

PROJECT COORDINATE SUMMARY TABLE				
POINT NAME	PROJECT COORDINATES		ELEV (ft)	DESCRIPTION
	NORTH (ft)	EAST (ft)		
100	1558457.41	3269295.23	6654.37	Section Corner
102	1558430.9	3266629.98	6654.37	Quarter Section Corner
103	1555770.83	3266639.57	6615.17	Quarter Section Corner
104	1555781.53	3269304.03	6627.27	Quarter Section Corner
105	1558527.87	3279643.18	6585.79	Section Corner
106	1558562.81	3282329.69	6505.88	Quarter Section Corner
107	1555920.99	3282335.45	6545.91	Quarter Section Corner
108	1555884.03	3279671.7	6623.76	Quarter Section Corner

Note: Entering a **<D><D>** on the table in MicroStation will launch the Excel application. If the Excel file is edited (either from MicroStation or outside the CAD application) select **Edit > Update Links** from the MicroStation menu bar to refresh the linked MicroStation graphics.