Civil 3D Quantities using QTO, Excel, and FDOT Tables within the State Kit

2013 Design Training Expo

All Presentations and Downloads will be available online
A link will be emailed to all class registrants

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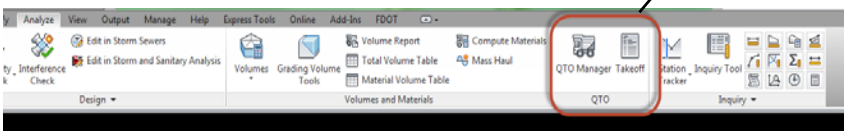
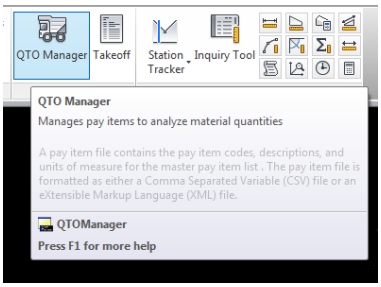
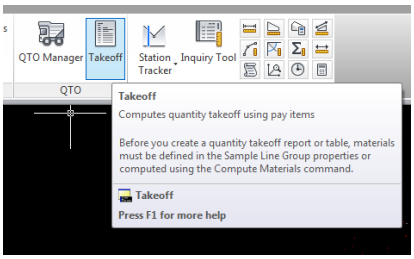
STATE OF FLORIDA • DEPARTMENT OF TRANSPORTATION

"Analyze" Ribbon

QTO Manager & Takeoff

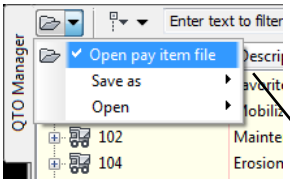






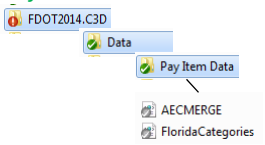
2013 Design Training Expo

Setting up your Pay item file



Open Pay item file to set the criteria to FDOT data files

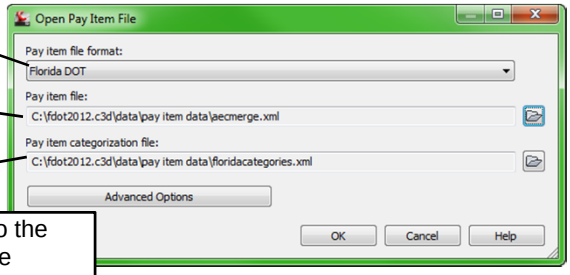
*Tip – You only have to set up your Pay Item File Once.



Set Pay Item file format to Florida DOT

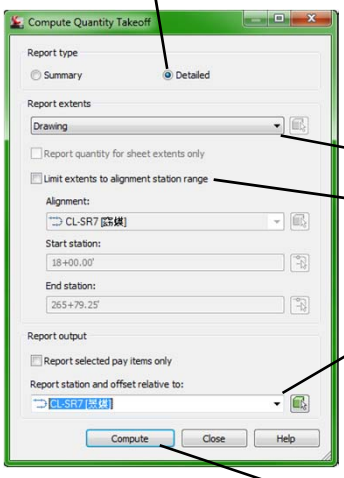
Point to the aecmerge.xml file located in your root folder

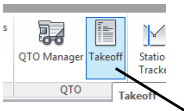
Categorization file points to the floridacategories.xml file



Generating a Report

Summary or Detailed





Click Takeoff in the Ribbon to Launch the Report Dialog Box

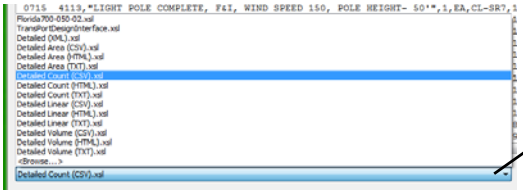
You can report drawing wide or per individual sheets

You can create a report for a station range. The default is the entire alignment

For generating station/offset information select the alignment.

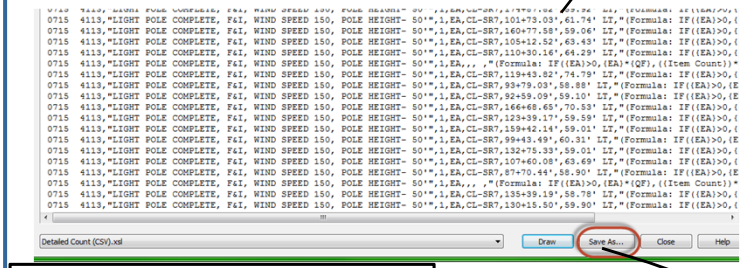
Click compute to generate a report.

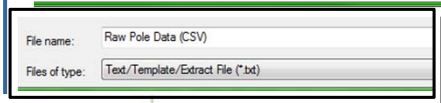
Adjusting the look of the report



Click the pull down to pick the desired type of .xsl report

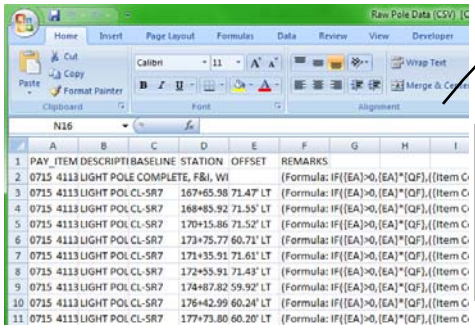
A (csv) comma separated value file is perfect for excel





Click the Save As button to save the report that will be imported into Microsoft Excel for additional formatting

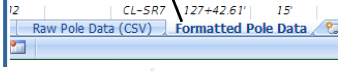
Excel Magic

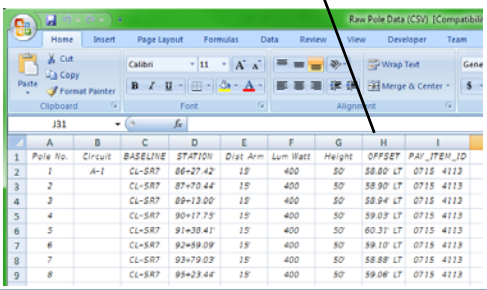


The “Before” unformatted look of the raw csv file.

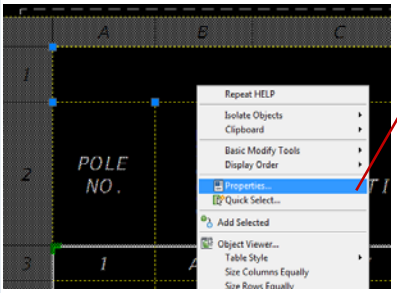
The “After” formatting. The columns are formatted to mimic the AutoCAD table that it will be linked to.

Create a duplicate sheet tab to create your formatted sheet





Setting up the Table to accept Data



Select the table then right click and go to properties

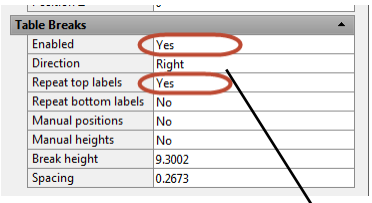
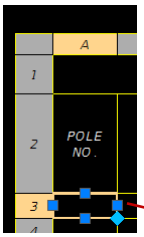
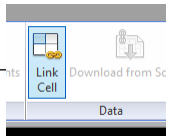


Table Breaks	
Enabled	Yes
Direction	Right
Repeat top labels	Yes
Repeat bottom labels	No
Manual positions	No
Manual heights	No
Break height	9.3002
Spacing	0.2673

Make the following changes; Table breaks will allow the table to duplicate itself to the right as data increases and repeating top labels does as it says

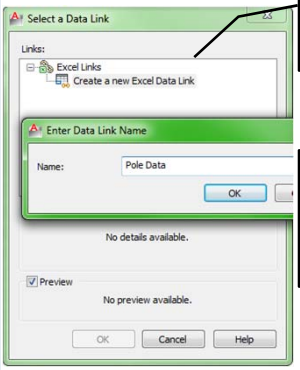


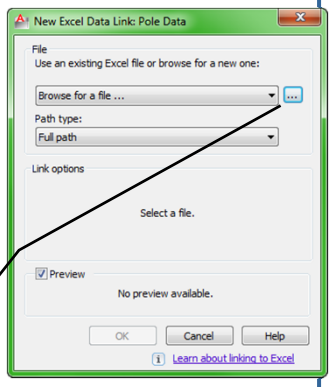
Select the first cell in which data will reside in then click on the Link Cell along the top of the ribbon



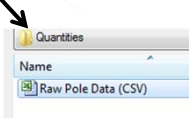
Creating a New data link and selecting Excel file

Create a new Excel link in this case we name it Pole Data

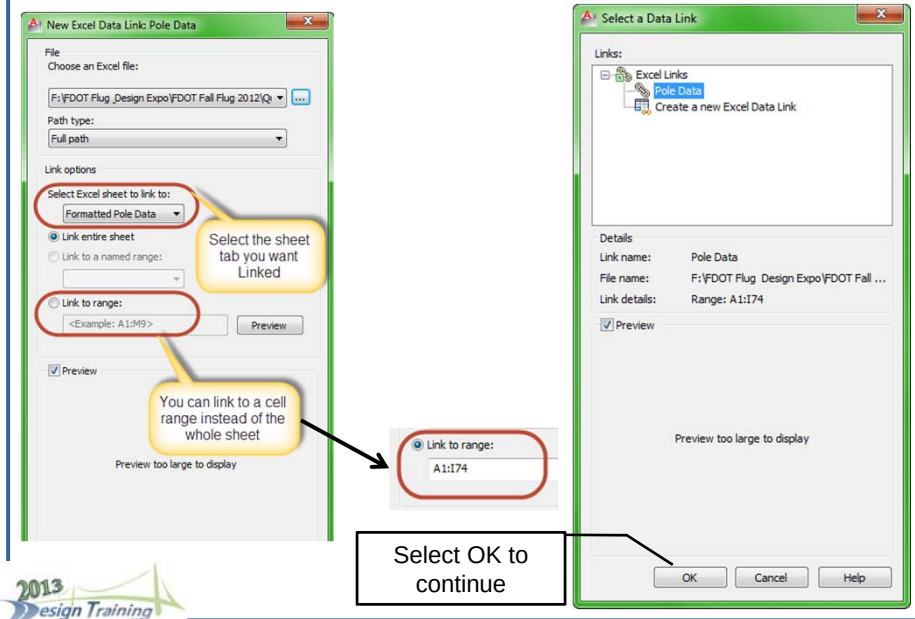




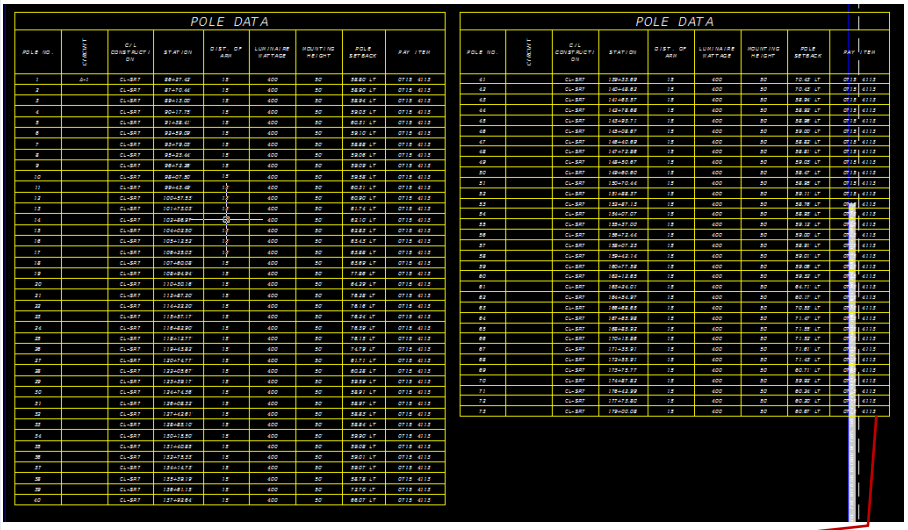
Browse for the Excel file that contains the formatted Pole Data



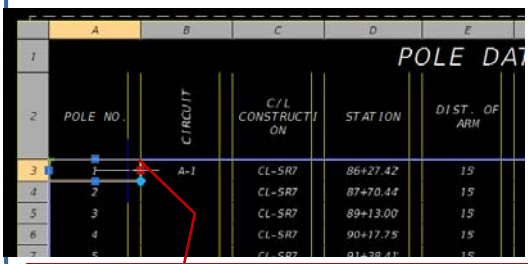
Setting the options for the Data Link



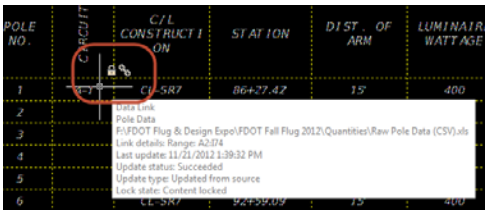
The data as it first looks in the Table



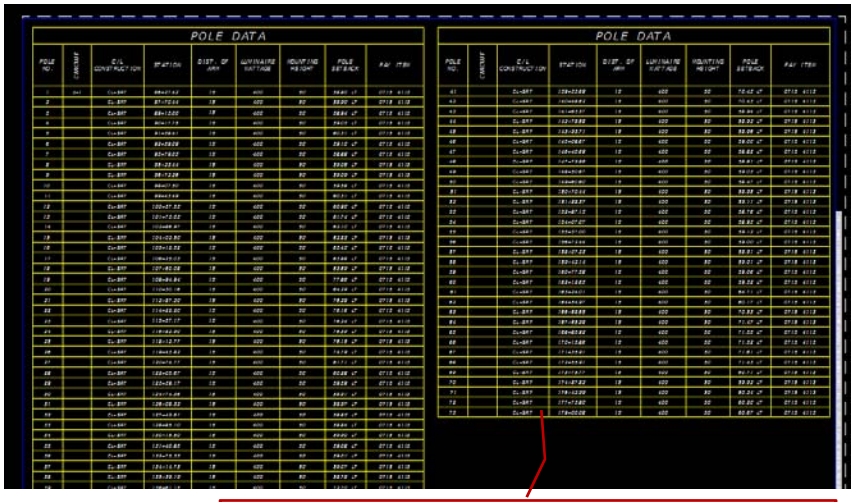
Adjusting the Locked Cells



You can still adjust the column width without compromising the Link. As you adjust the column widths it also adjusts the expanded tables to the right to bring the table borders within the sheet border.

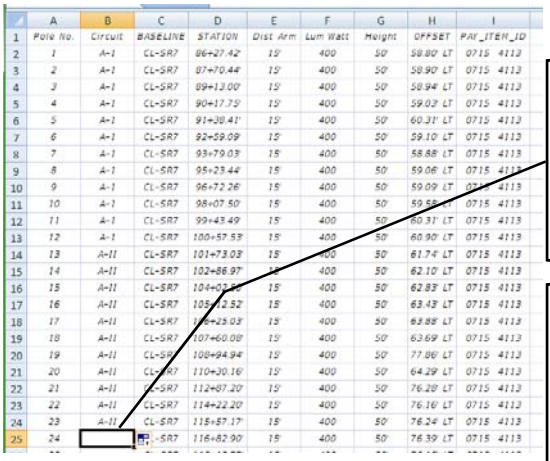


Adjusting the Locked Cells



The finished Table within the Sheet Border. Remember any adjustment you make on the Table on the Left (Parent) will adjust the one on the Right (Child)

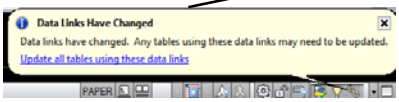
Adding data manually to the excel file



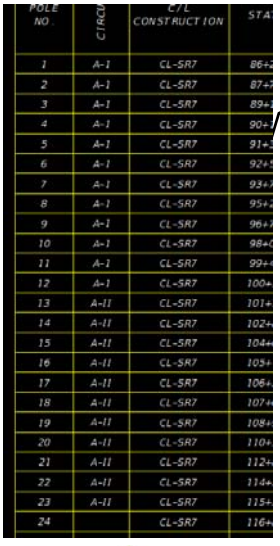
	A	B	C	D	E	F	G	H	I
1	Pole No.	Circuit	BASELINE	STATION	Dist Arm	Lum Watt	Height	OFFSET	PAT_ITEM_ID
2	1	A-1	CL-SR7	86+27.42'	15'	400	50'	58.80' LT	0715 4113
3	2	A-1	CL-SR7	87+70.44'	15'	400	50'	58.90' LT	0715 4113
4	3	A-1	CL-SR7	89+13.00'	15'	400	50'	58.94' LT	0715 4113
5	4	A-1	CL-SR7	90+17.75'	15'	400	50'	59.03' LT	0715 4113
6	5	A-1	CL-SR7	91+38.41'	15'	400	50'	60.31' LT	0715 4113
7	6	A-1	CL-SR7	92+59.09'	15'	400	50'	59.10' LT	0715 4113
8	7	A-1	CL-SR7	93+79.03'	15'	400	50'	58.88' LT	0715 4113
9	8	A-1	CL-SR7	95+23.44'	15'	400	50'	59.06' LT	0715 4113
10	9	A-1	CL-SR7	96+72.26'	15'	400	50'	59.09' LT	0715 4113
11	10	A-1	CL-SR7	98+07.50'	15'	400	50'	59.55' LT	0715 4113
12	11	A-1	CL-SR7	99+43.49'	15'	400	50'	60.31' LT	0715 4113
13	12	A-1	CL-SR7	100+57.53'	15'	400	50'	60.90' LT	0715 4113
14	13	A-11	CL-SR7	101+73.03'	15'	400	50'	61.74' LT	0715 4113
15	14	A-11	CL-SR7	102+86.97'	15'	400	50'	62.10' LT	0715 4113
16	15	A-11	CL-SR7	104+03.50'	15'	400	50'	62.83' LT	0715 4113
17	16	A-11	CL-SR7	105+12.52'	15'	400	50'	63.43' LT	0715 4113
18	17	A-11	CL-SR7	106+25.03'	15'	400	50'	63.88' LT	0715 4113
19	18	A-11	CL-SR7	107+60.08'	15'	400	50'	63.69' LT	0715 4113
20	19	A-11	CL-SR7	108+94.94'	15'	400	50'	77.86' LT	0715 4113
21	20	A-11	CL-SR7	110+30.16'	15'	400	50'	64.29' LT	0715 4113
22	21	A-11	CL-SR7	112+87.20'	15'	400	50'	76.20' LT	0715 4113
23	22	A-11	CL-SR7	114+22.20'	15'	400	50'	76.16' LT	0715 4113
24	23	A-11	CL-SR7	115+57.17'	15'	400	50'	76.24' LT	0715 4113
25	24		CL-SR7	116+82.90'	15'	400	50'	76.39' LT	0715 4113

You can add data manually to the columns that will automatically get added to the AutoCAD Table. Just Save the file and switch over to your AutoCAD Drawing

Once you switch to your drawing a pop up box will notify you that your Data Links have changed and need to be updated. Click the Blue Link to update your table



Viewing the updated Table



POLE NO.	CIRCUIT	C/L CONSTRUCTION	STA
1	A-1	CL-SR7	86+
2	A-1	CL-SR7	87+
3	A-1	CL-SR7	89+
4	A-1	CL-SR7	90+
5	A-1	CL-SR7	91+
6	A-1	CL-SR7	92+
7	A-1	CL-SR7	93+
8	A-1	CL-SR7	95+
9	A-1	CL-SR7	96+
10	A-1	CL-SR7	98+
11	A-1	CL-SR7	99+
12	A-1	CL-SR7	100+
13	A-11	CL-SR7	101+
14	A-11	CL-SR7	102+
15	A-11	CL-SR7	104+
16	A-11	CL-SR7	105+
17	A-11	CL-SR7	106+
18	A-11	CL-SR7	107+
19	A-11	CL-SR7	108+
20	A-11	CL-SR7	110+
21	A-11	CL-SR7	112+
22	A-11	CL-SR7	114+
23	A-11	CL-SR7	115+
24		CL-SR7	116+

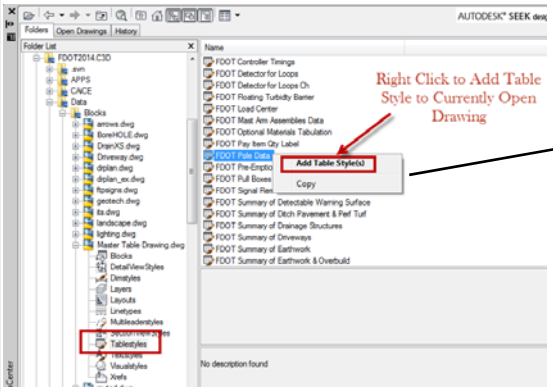
The updated table displays the newly added data that was added to the Excel File

Advantages of AutoCAD Tables

- Add Formulas within AutoCAD
- Add Columns & Rows
- Edit the Table Size

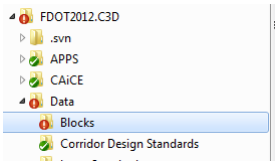
Adding FDOT Tables to your Drawing

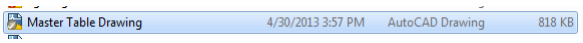
Adding Tablestyles to your Drawing



Using Design Center, Add the Desired Table.

All of the Tables reside in the "Master Table Drawing" located in the Blocks Folder





Inserting a Table in your Drawing

On the Command Line Type “Table” and under the Table Style Pull-down select the Desired Table to insert it in the Drawing

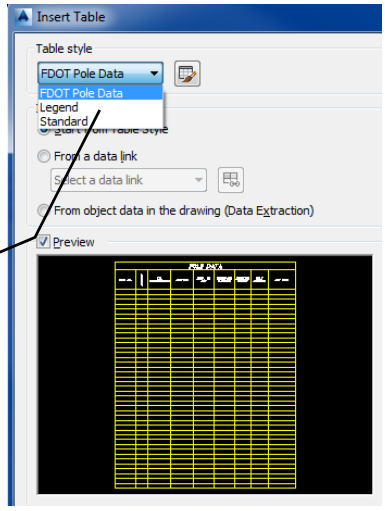
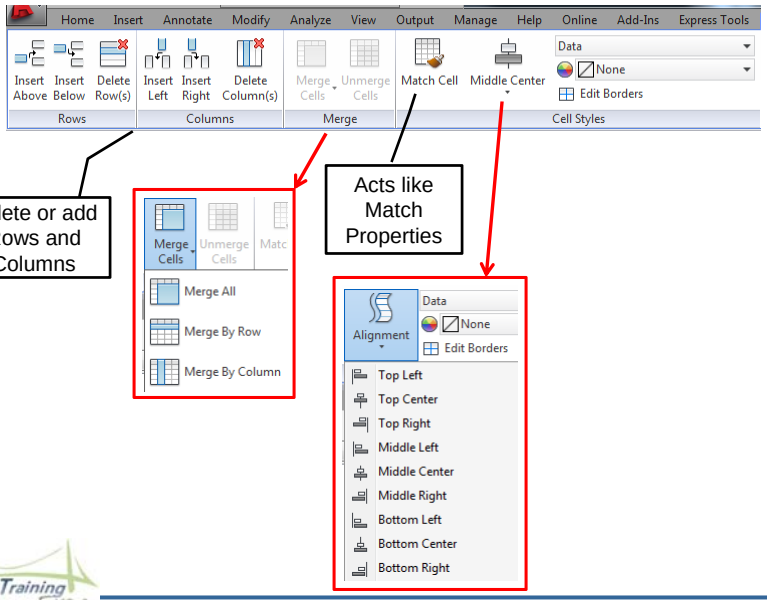


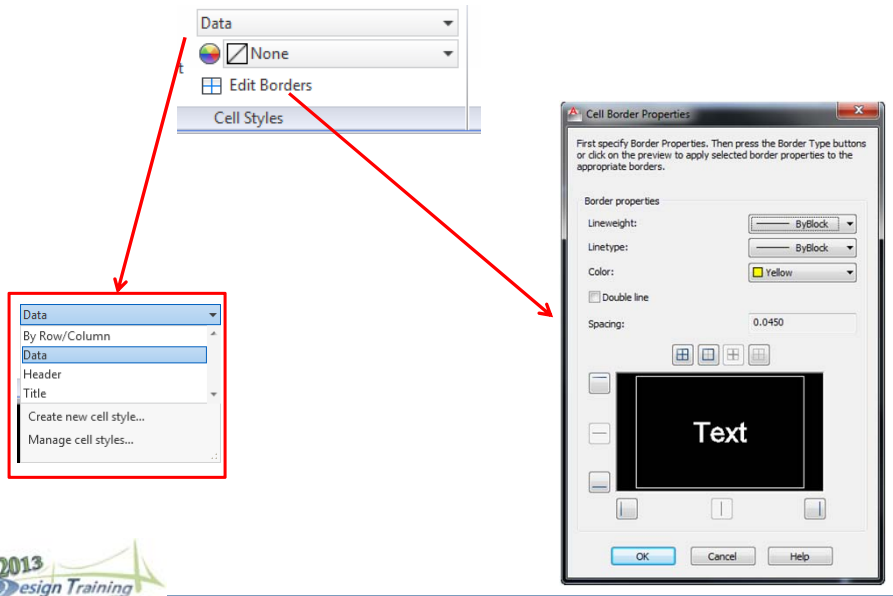
Table Cell Ribbon



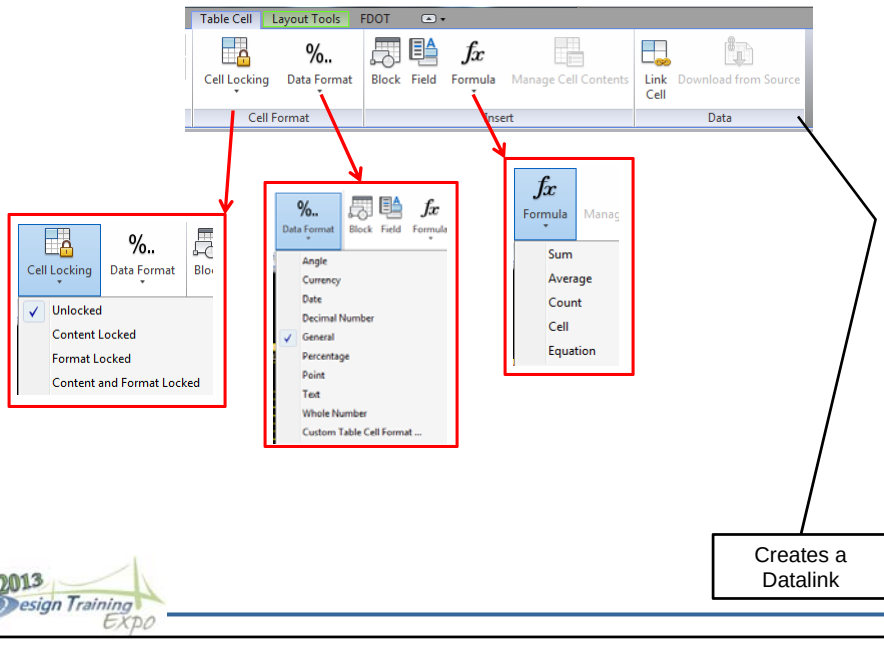
Delete or add Rows and Columns

Acts like Match Properties

Table Cell Ribbon



Modifying a Table in your Drawing



Modifying a Table in your Drawing

Right Click Options