

QUANTITIES AND SUMMARY SHEET PRODUCTION

Florida Department of Transportation
State Kit for Civil 3D 2012



Contact Information:

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Phone:

850-245-1623 W-F



Essentials

1. Assign Pay Items with FDOT Entity Manager
2. Open Autodesk QTO Manager and verify Pay Item database is loaded.
3. Launch QTO Takeoff Reports



QTO pay item rules:

QTO Takeoffs can read the following pay items:

- Pay Items in the active file assigned to AutoCAD entities and Civil 3D objects
- Pay Items assigned to AutoCAD and C3D entities in a XREF.

NOTES:

- Data References with Pay Items assigned to source geometry will only list the type. (no quantity)
- **Data References cannot be assigned directly pay items**



WORKING WITH FILES

- Use External References
- Data reference in Alignment



Pay item summary from Trns*port

1. Create CESSFile
2. Launch FDOT TRNS*port Utility from Ribbon
3. Browse to Folder containing sample
4. Choose Layout Tab
5. Delete Extra Layout Tabs
6. Save Drawing
7. Open FDOT.DST
8. Import Summary Sheet Layout





FDOT Quantity Takeoff

FDOT State Kit for AutoCAD Civil 3D 2012

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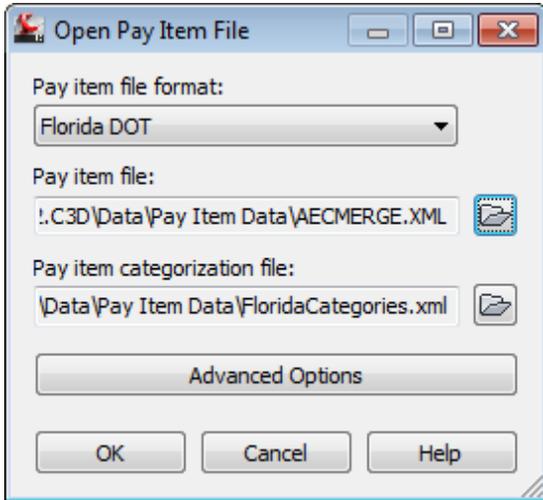


Workflow:

Step 1: Assign Pay Items with Entity Manager

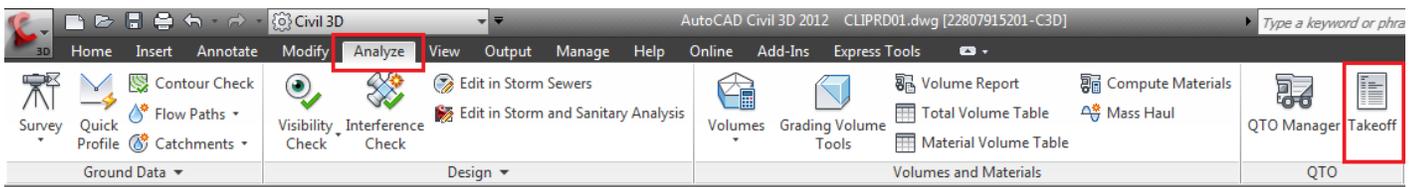
Step 2: Launch QTO Manager

Load FDOT Pay Item database and categorization file.



Step 3: Run Quantity Take Off Report

Ribbon Analyze tab > QTO panel > Takeoff

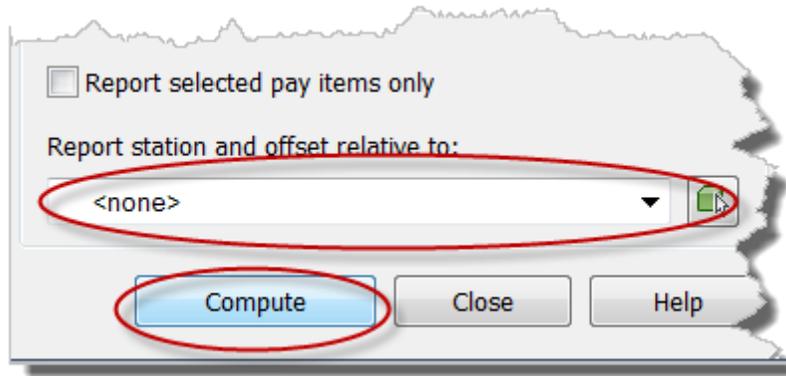


The Compute Takeoff Dialog is used to define the report type, extents, and output content to be included in the quantity takeoff report.

- The Report Type needs to be set to *Detailed*.
- The Report Extents will be set to *Drawing* so that all the information in the drawing is included.
- *Limit extents to alignment station range* needs to be checked. This will allow the user to limit the area that Takeoff will be evaluating.
- Select the Alignment used for the Takeoff process. This is typically the Main alignment of the drawing.
- The Beginning and Ending stationing can be typed in or can be selected using the button on the right.

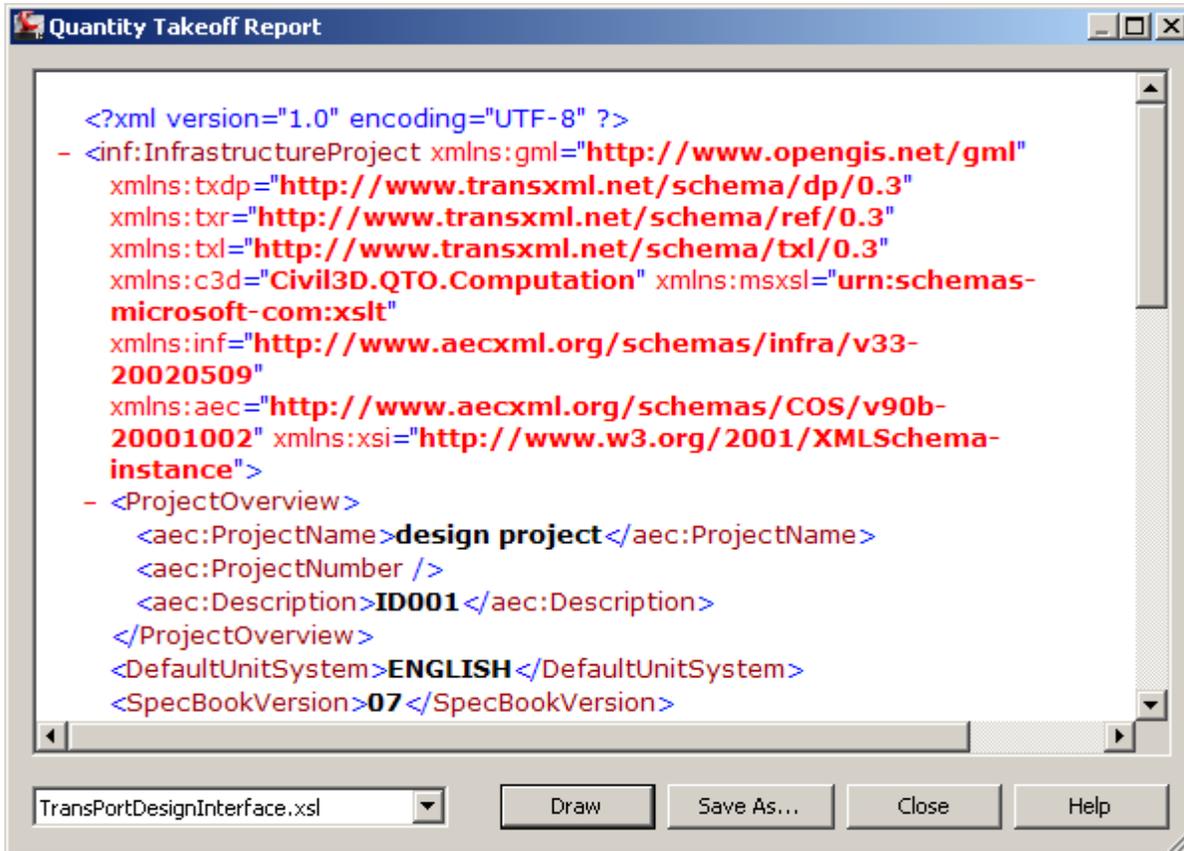
- The Report Output will need to **select the Alignment** so that the information is relative to that alignment. The station and offset will be included in the report.

Select the *Compute* button to create the report.



Step 4: Format FDOT Style Sheet

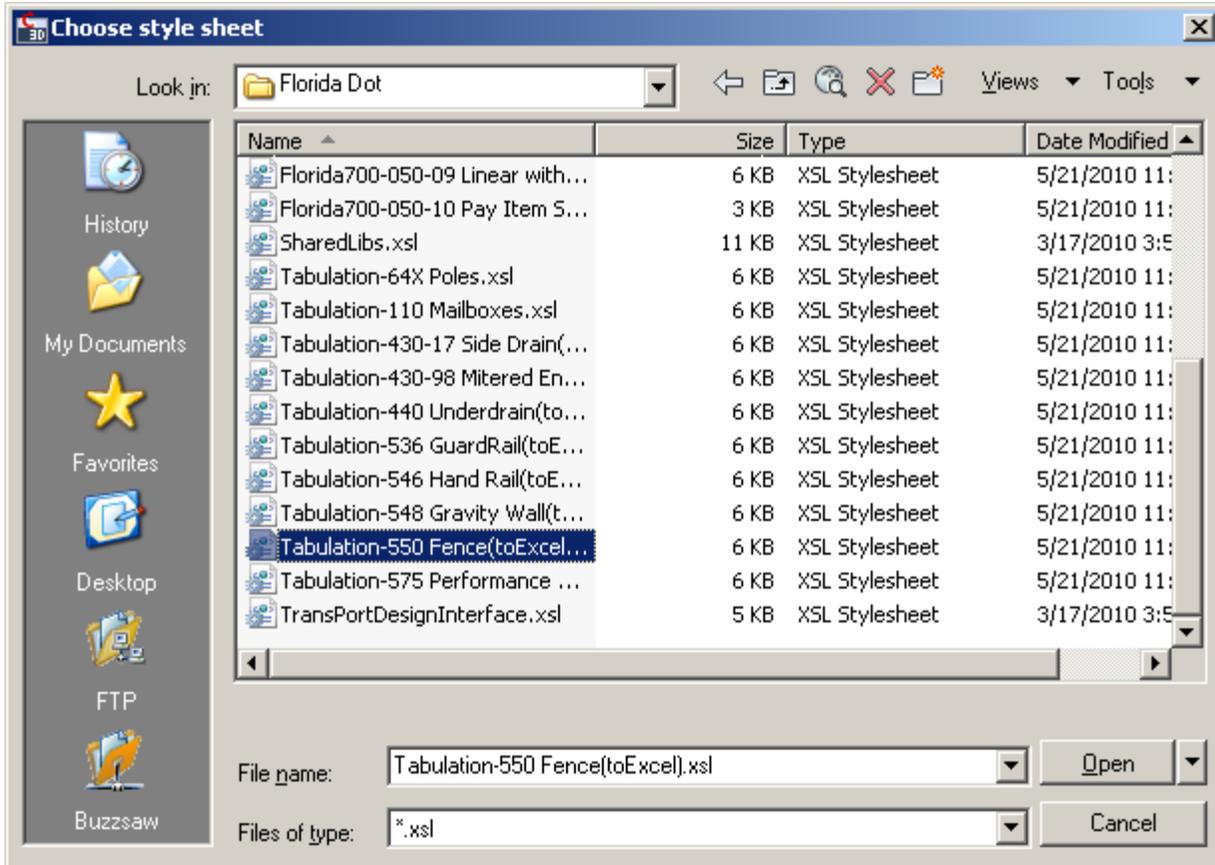
The quantity takeoff report is displayed in a default XML format and needs to be styled using an FDOT style sheet.



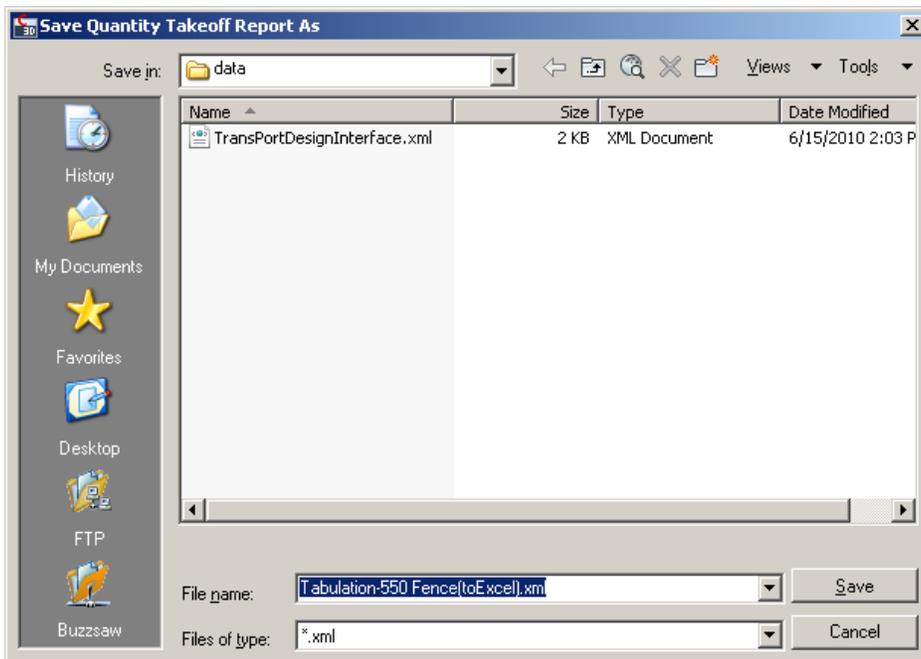
Navigate to the folder with all the FDOT style sheets and select the appropriate tabulation style sheet.

Tabulation Spread sheets are found in the **FDOT2012.C3D\Data\QTO Reports\Style Sheets.**

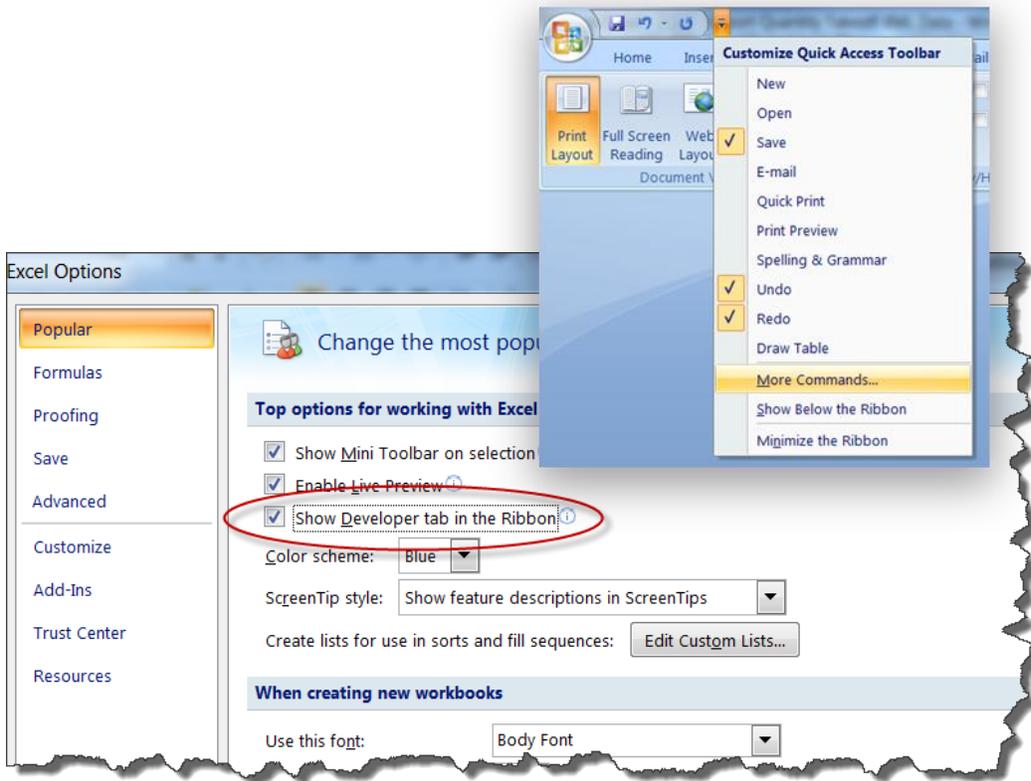
Select the style sheet that corresponds to the Pay Items that you selected previously.



The tabulation style sheet will create a different XML file which will need to be saved into the project folder structure.

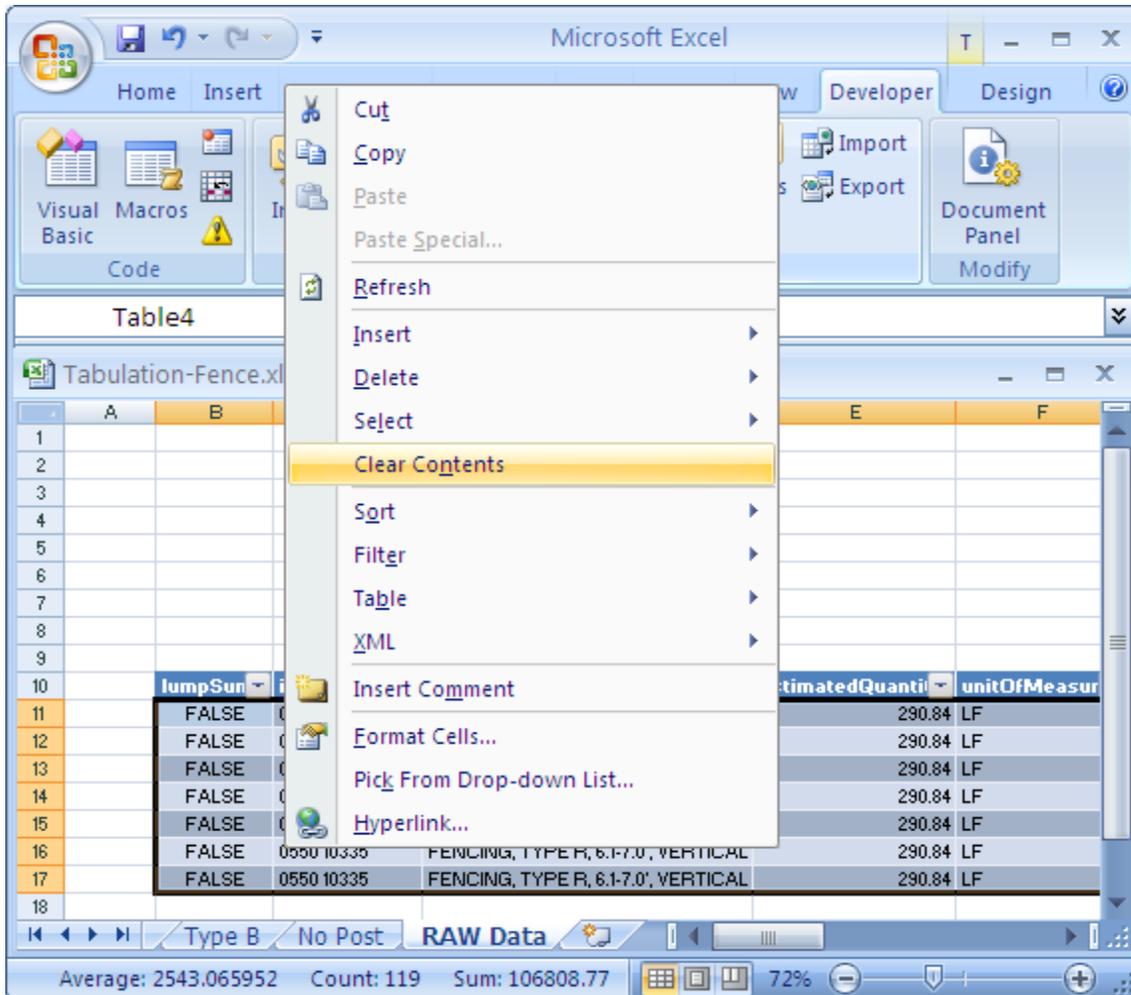


Make sure the Developer Tab is Displayed.



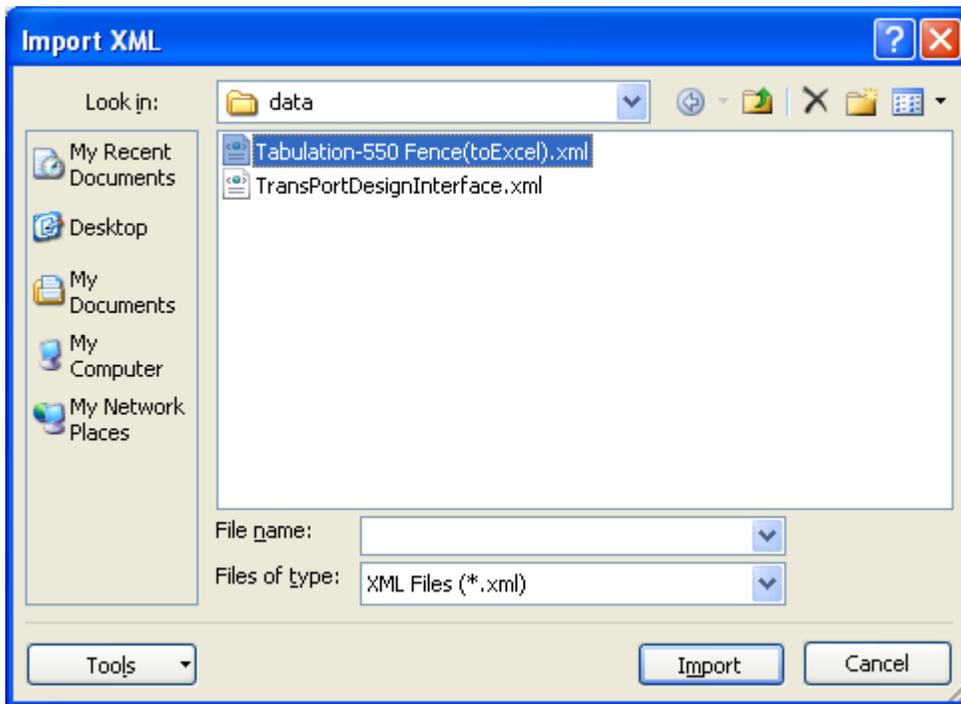
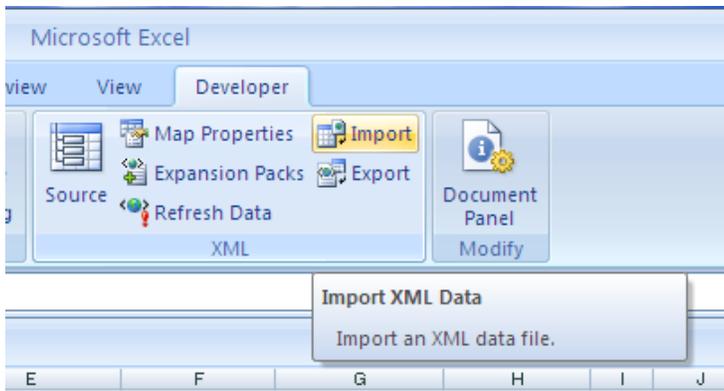
Step 6: Import Quantity Takeoff XML Data

Go to the Raw Data tab and clear any data from the form so that the XML file can be imported into the new file.



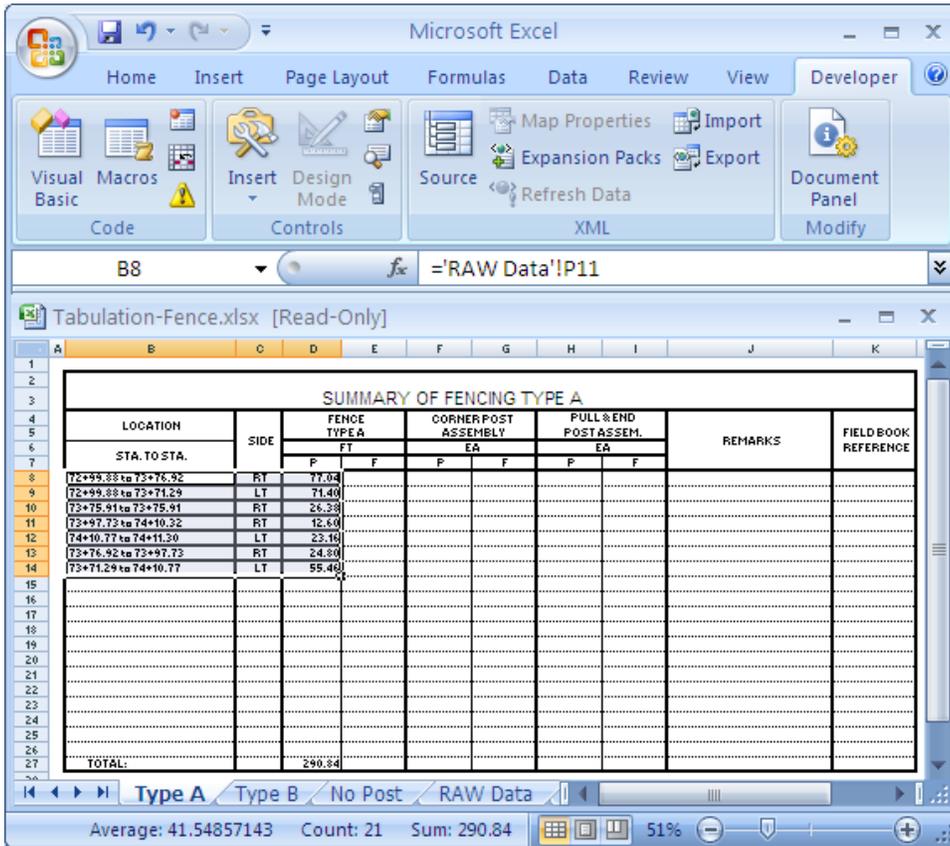
Next, Import XML file by going to the *Developer* tab in Microsoft Excel 2007, then select Import.

Navigate to the XML file created earlier. This will Import all the data from the XML file into the spreadsheet with the correct headings for the data.



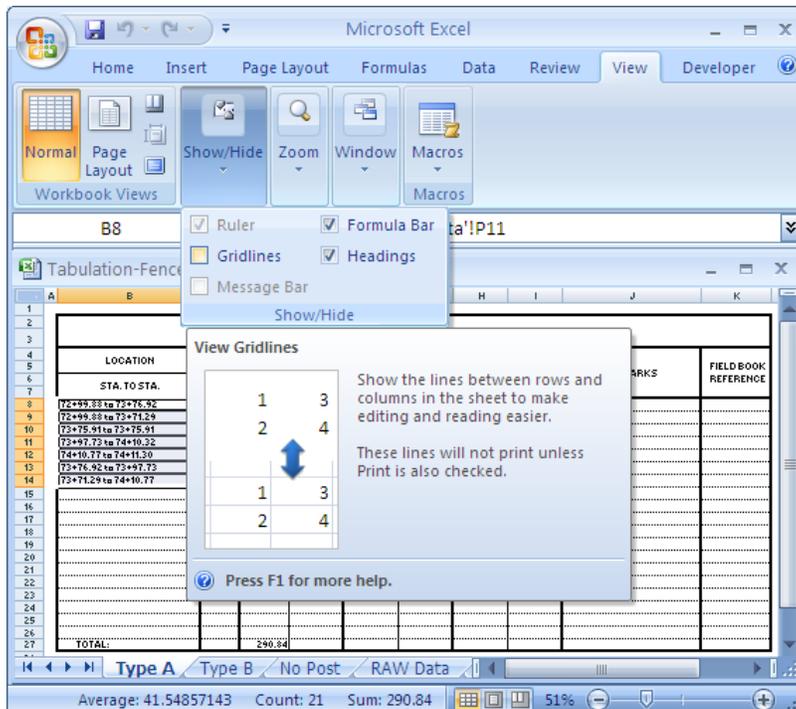
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Click Save to save Excel data file at the top of Excel.



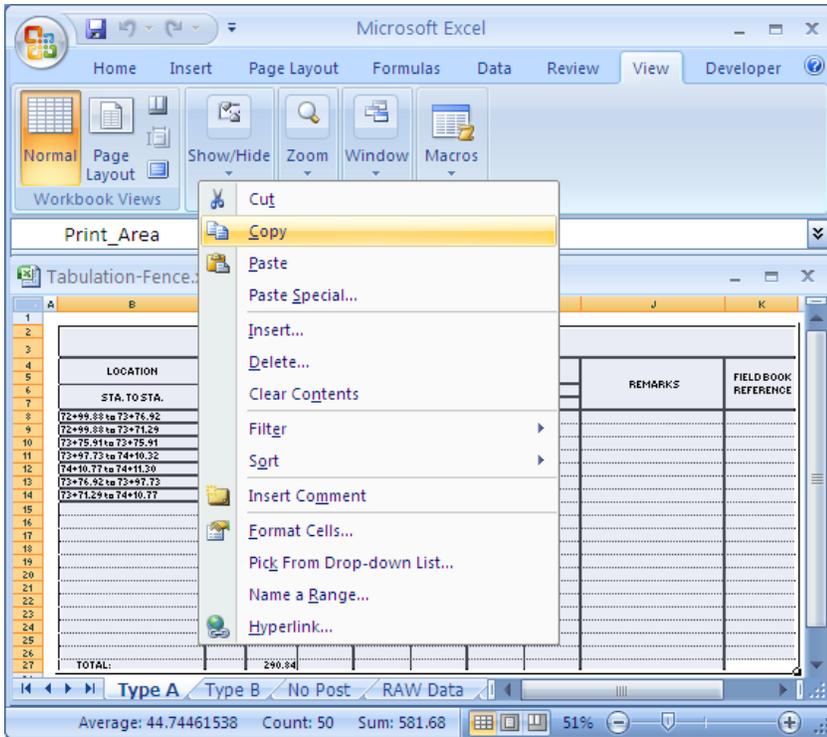
Step 7: - Excel file Configuration

Make sure in the View tab that you uncheck Grid Lines.



Step 8: Copy Table

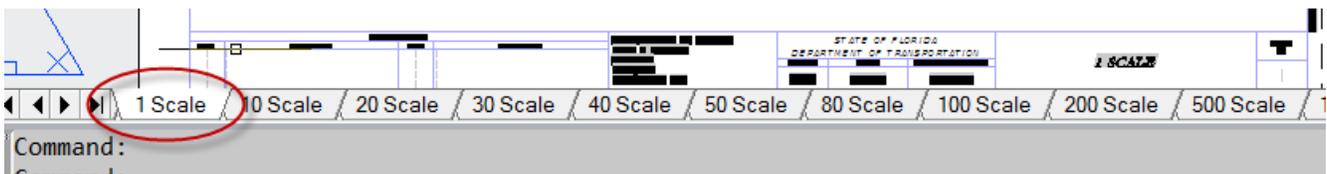
Now highlight the table then right-click and select *Copy*.



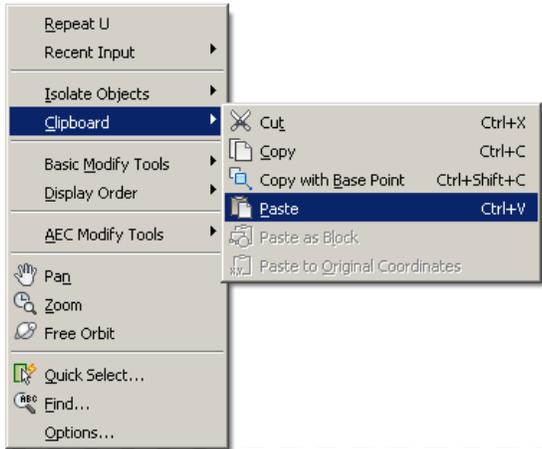
Step 10: Paste Table in Paperspace

Open up Civil 3D. Create Summary of Quantities Drawing.

Select 1:1 Scale Layout Tab



Right-click in Paperspace and Paste into Paper space by selecting *Clipboard* and then *Paste*.



Command: _u PasteCtrl+V GROUP

Command:

Command:

A line where the bottom of the table will be displayed so make sure you place it near the bottom of the page so that it will fit correctly. The Font, Point Size and actual Text Height can be changed in the display before it is pasted in the file. The default is preferred.

LOCATION STA. TO STA.	SIDE	FENCE TYPE A		CORNER POST ASSEMBLY		PULL & END POST ASSEM.		REMARKS	FIELD BOOK REFERENCE
		P	F	P	EA	P	EA		
72+99.88 to 73+76.92	RT		77.04						
72+99.88 to 73+71.29	LT		71.48						
73+75.91 to 73+75.91	RT		26.30						
73+97.73 to 74+10.32	RT		12.60						
74+10.77 to 74+11.30	LT		23.16						
73+76.92 to 73+97.73	RT		24.88						
73+71.29 to 74+10.77	LT		55.48						
TOTAL			290.84						

Command: _pasteclip
Specify insertion point:
Command:

14.2258, 2.3061, 0.0000



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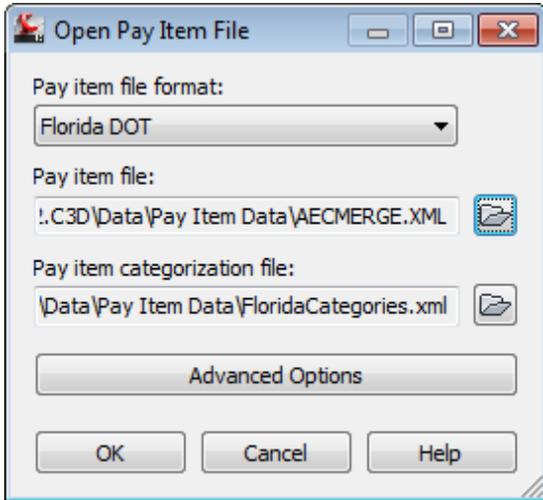


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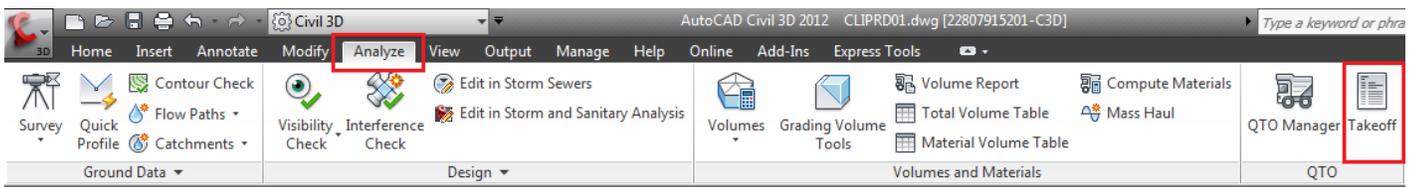
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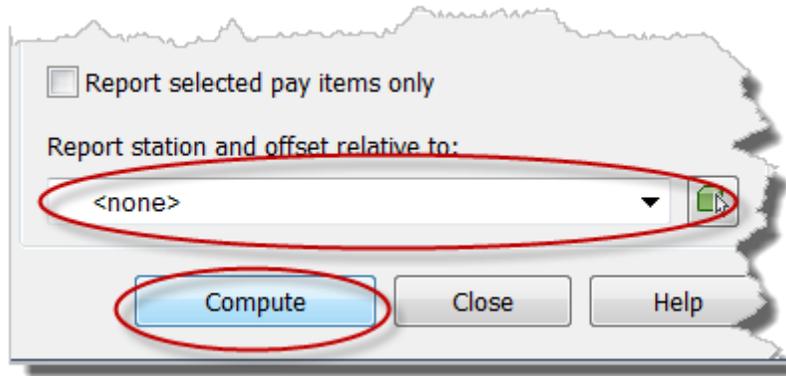


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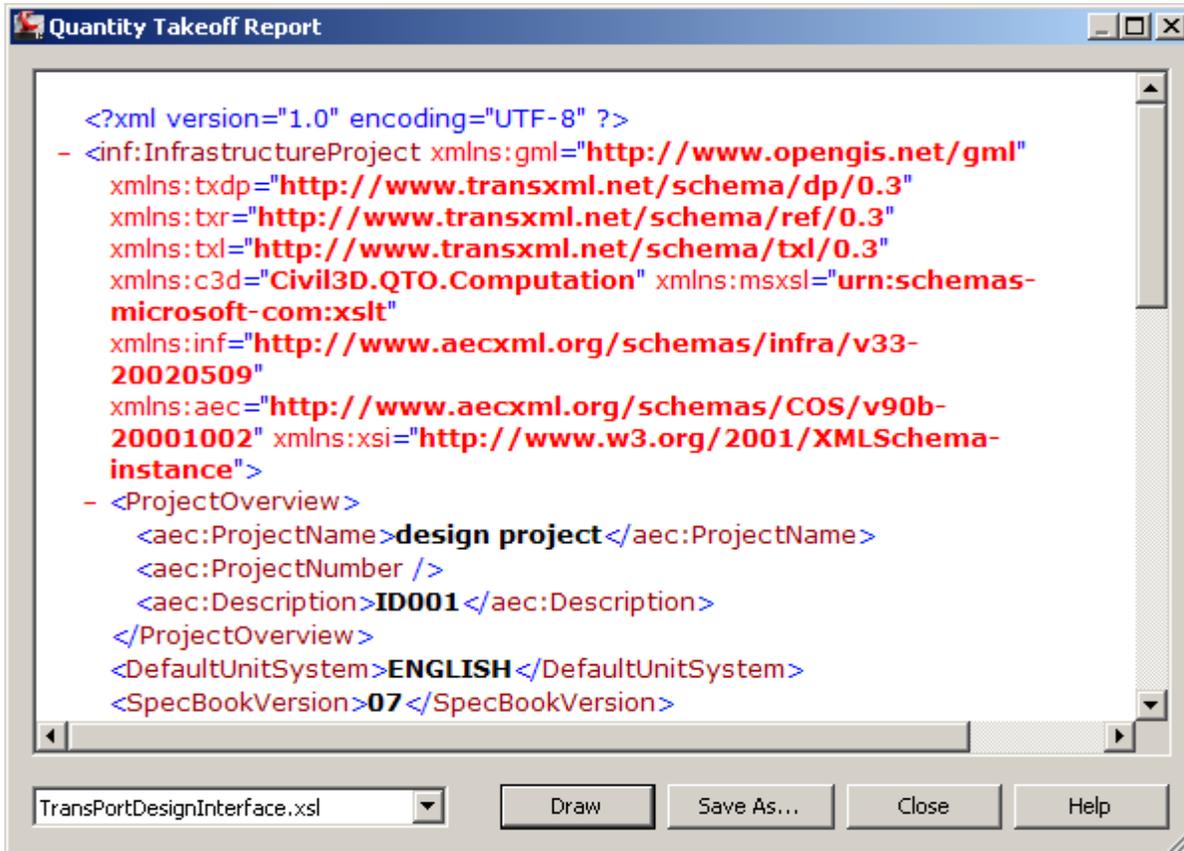
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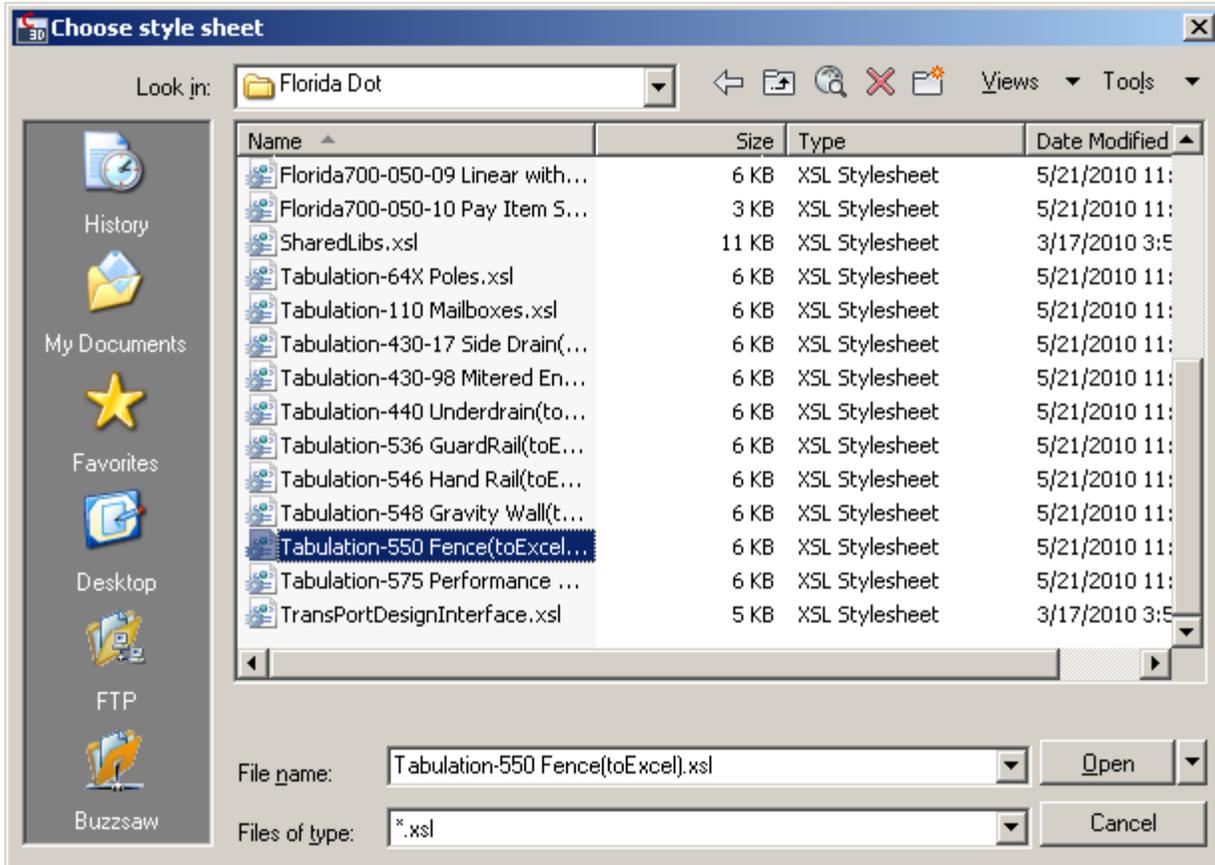
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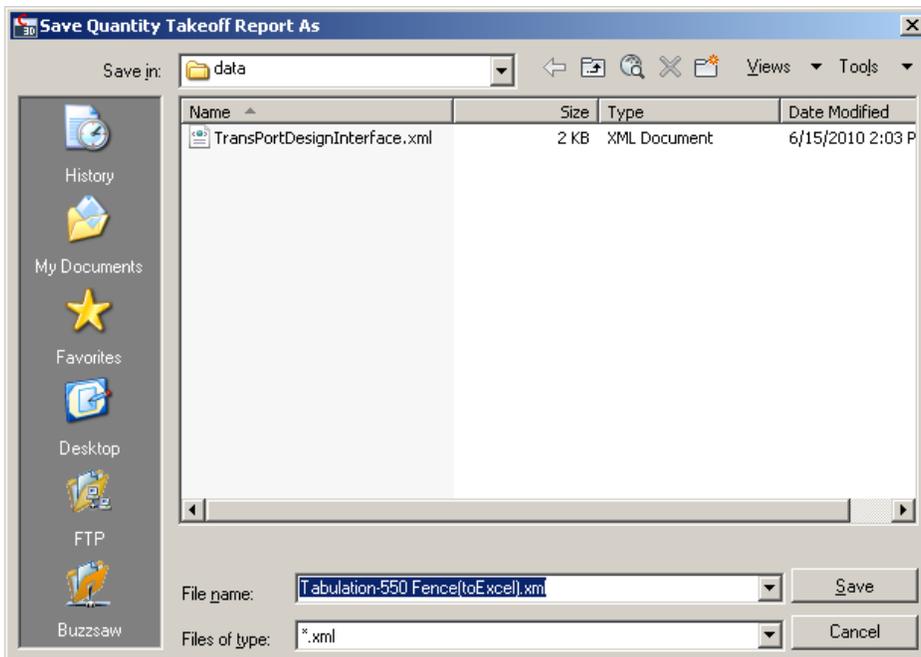
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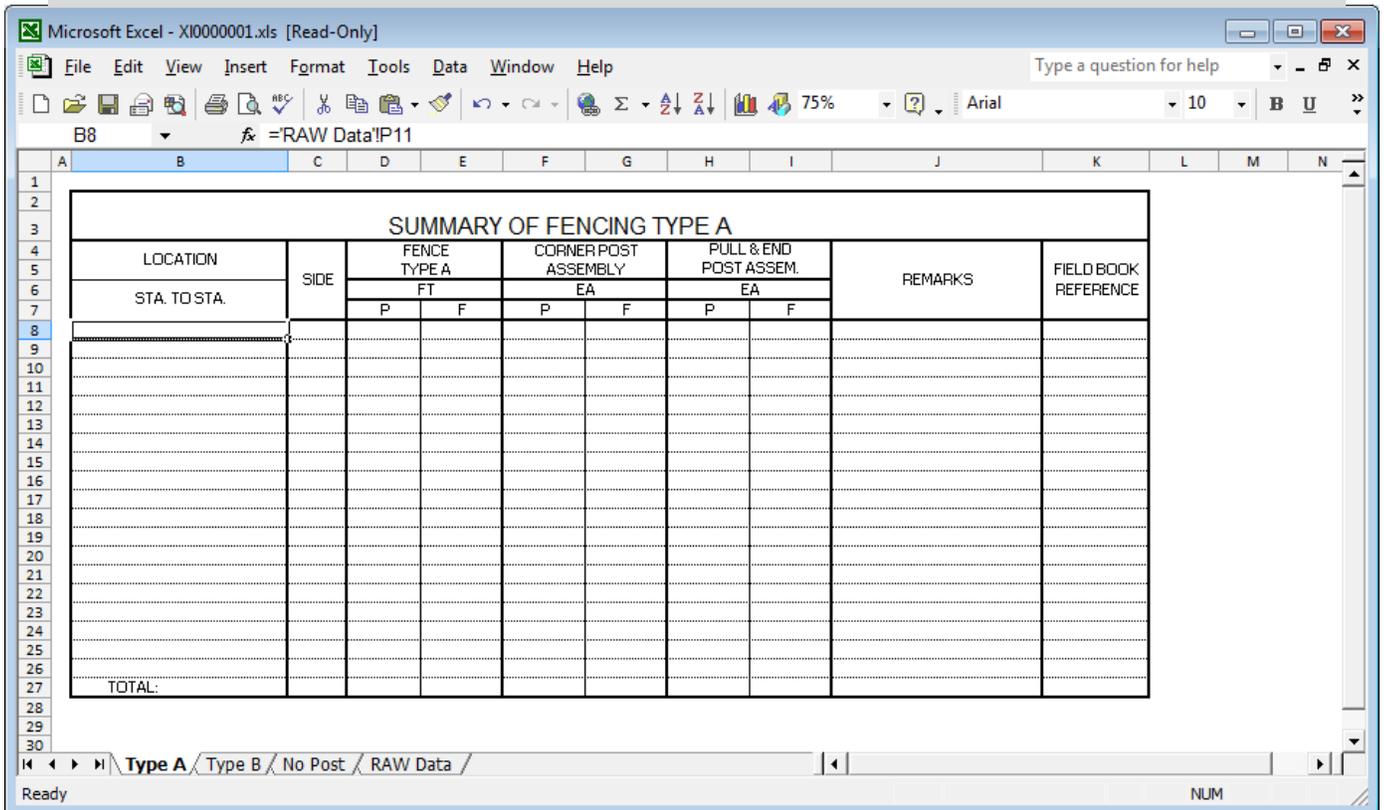
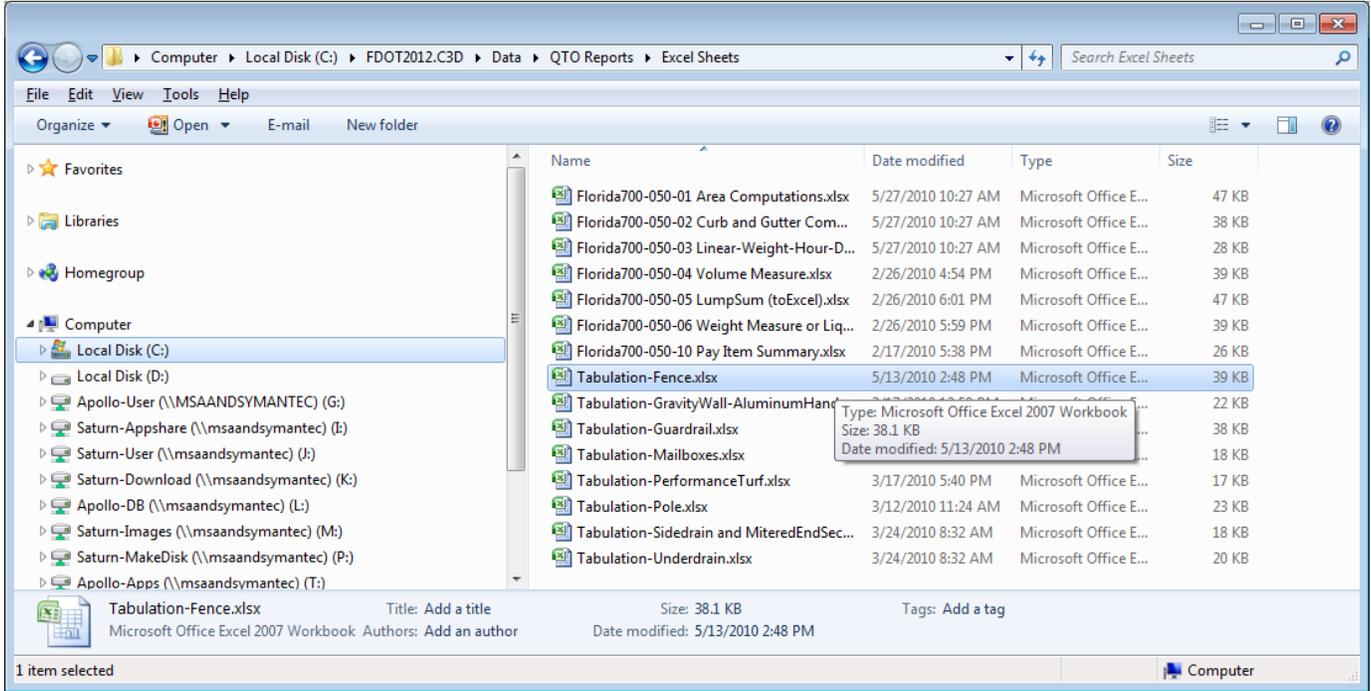
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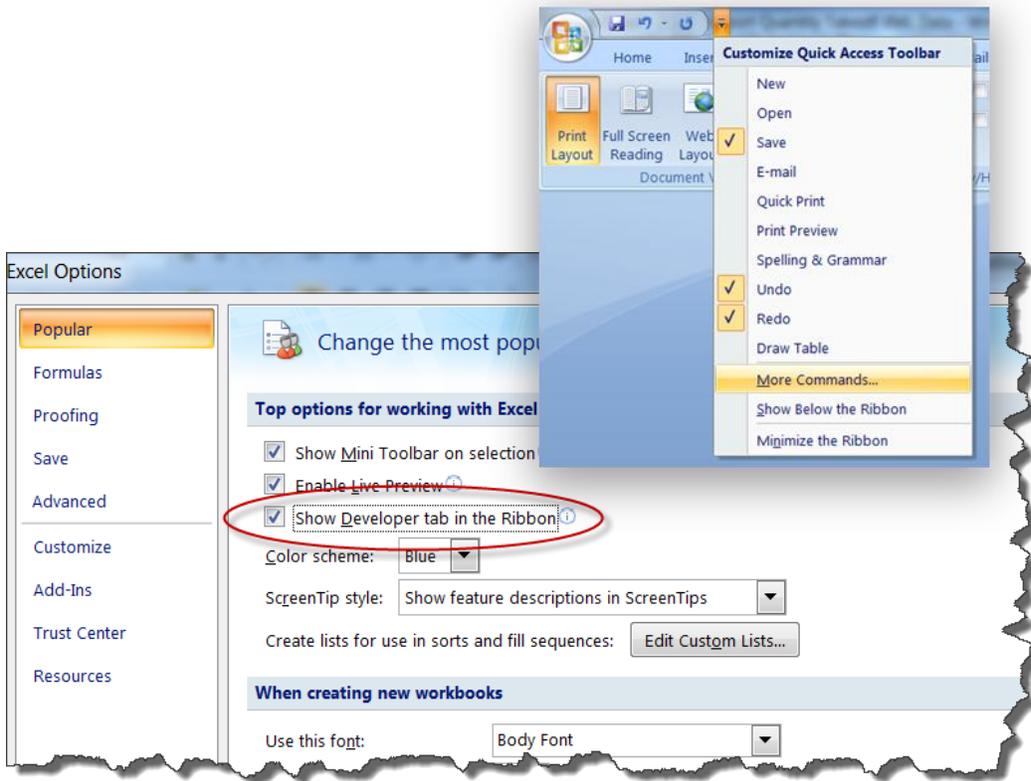
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Load Excel, and open the FDOT Excel template file that corresponds to the previously created tabulation style sheet.

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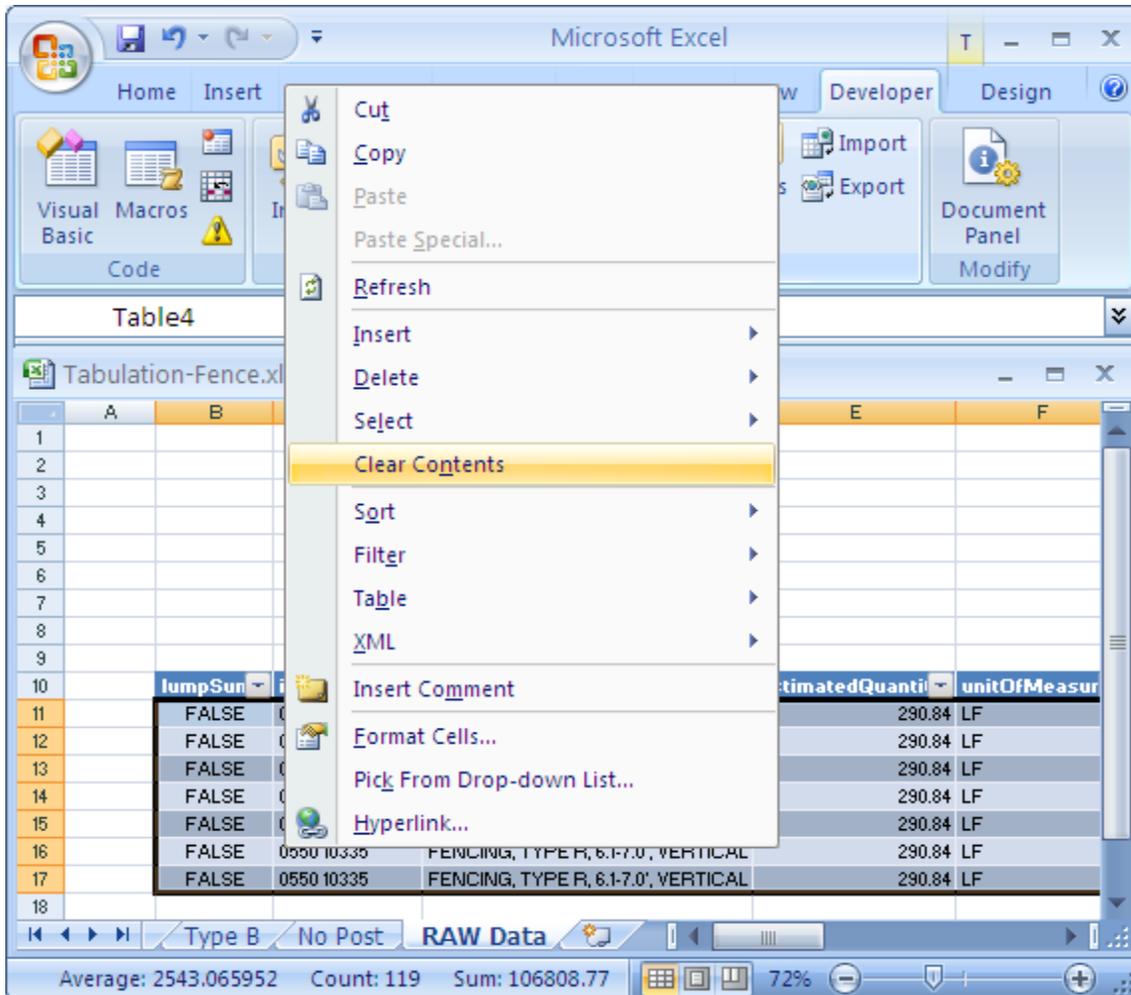


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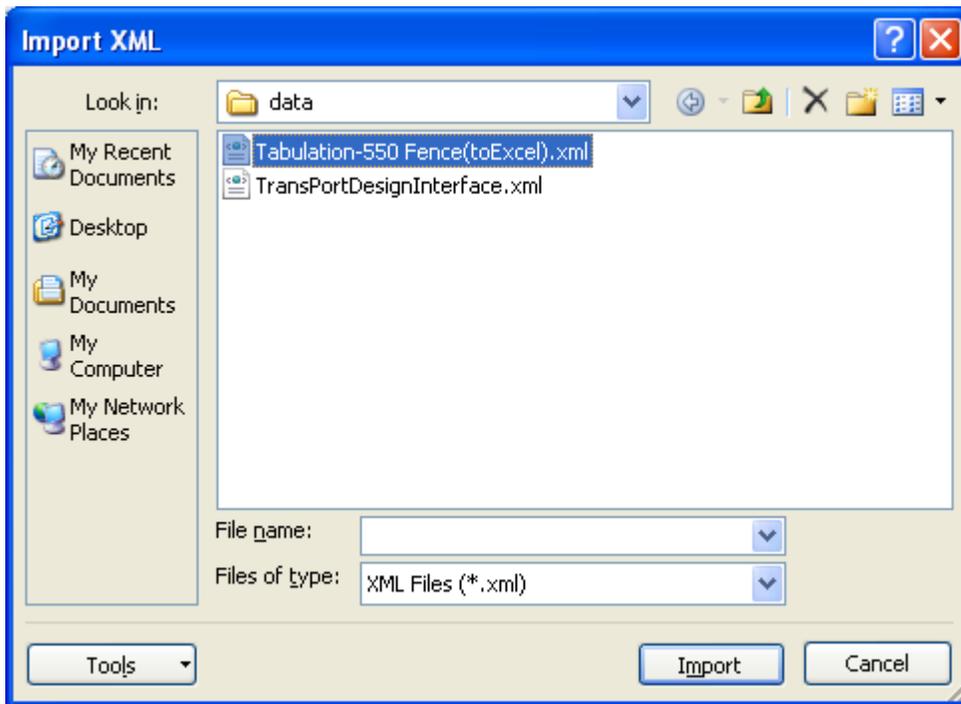
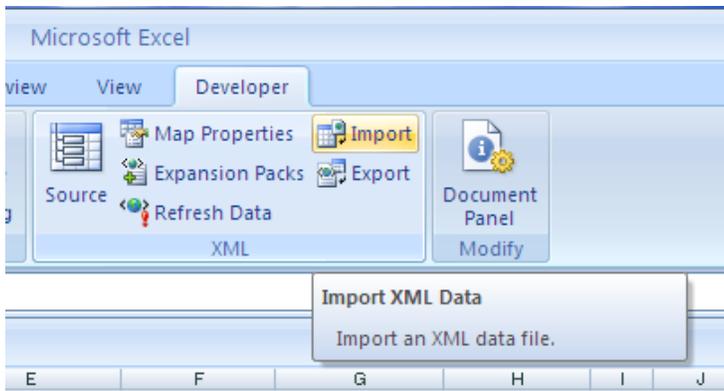
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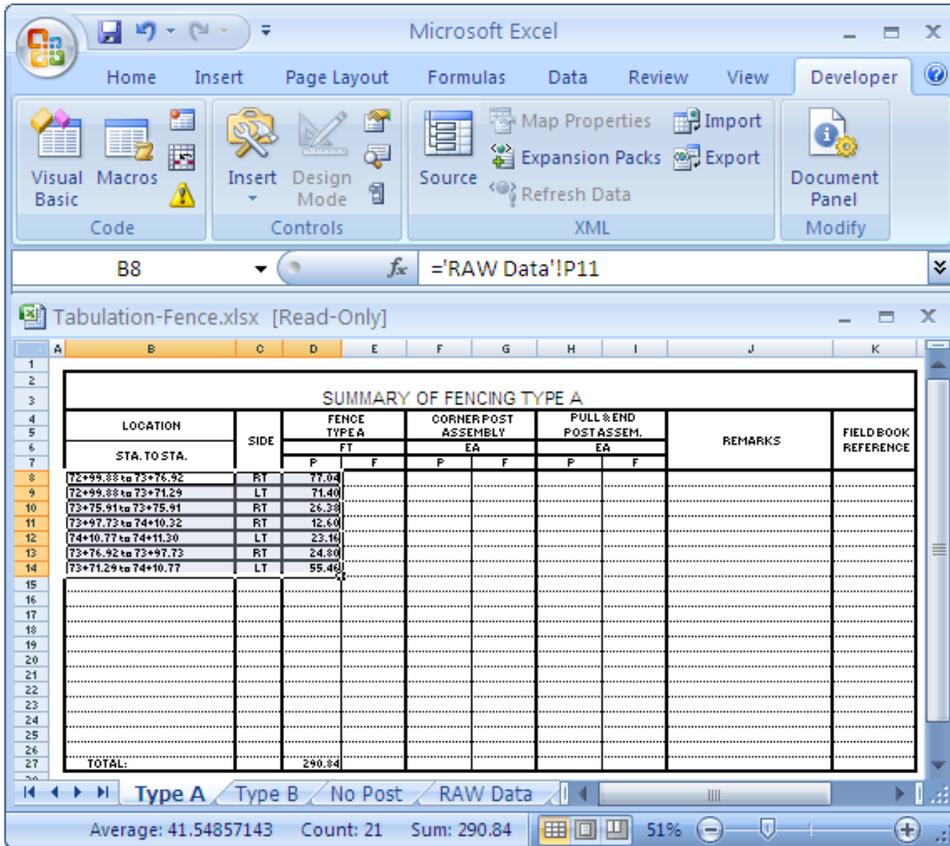
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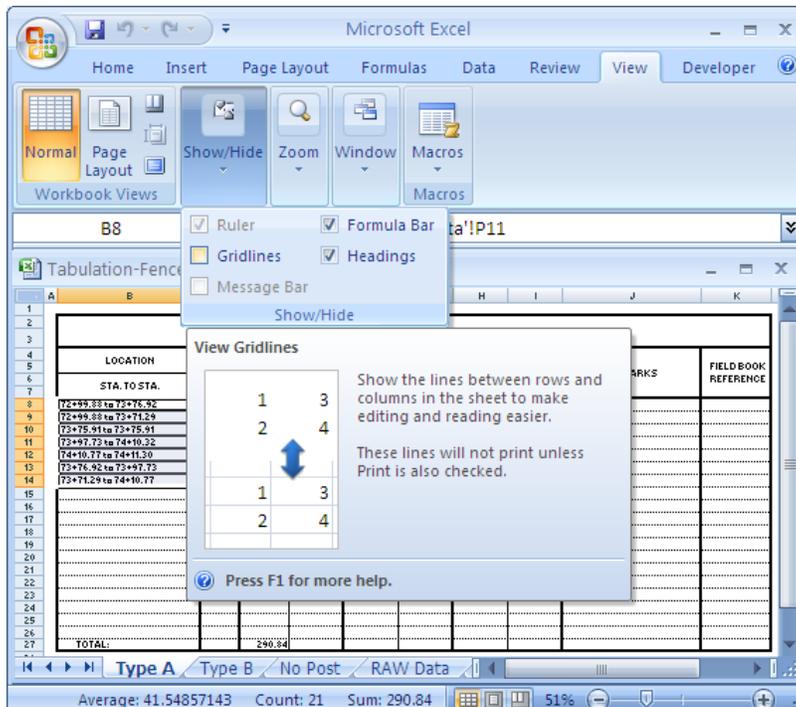
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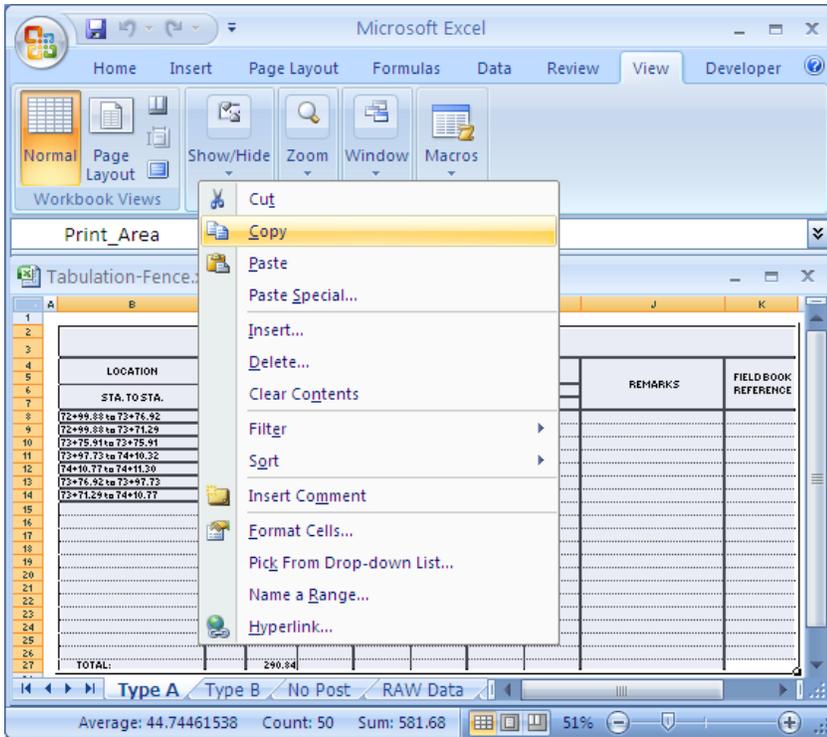
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