AutoCAD: plotting to pdf and importing drawings to Illustrator

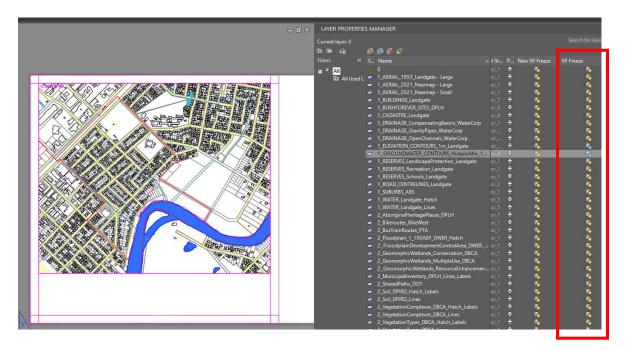
Maia Williams mw@maia.id.au

1 Plot paper space layout to pdf

1. Set up drawings

Set up one paper space layout for each drawing you want to make. Set up the title block and set which layers you want to display for each drawing.

Tip: Remember that you can freeze or unfreeze layers for each viewport. This means you don't need to set the layer visibility in model space each time you work with a particular layout.



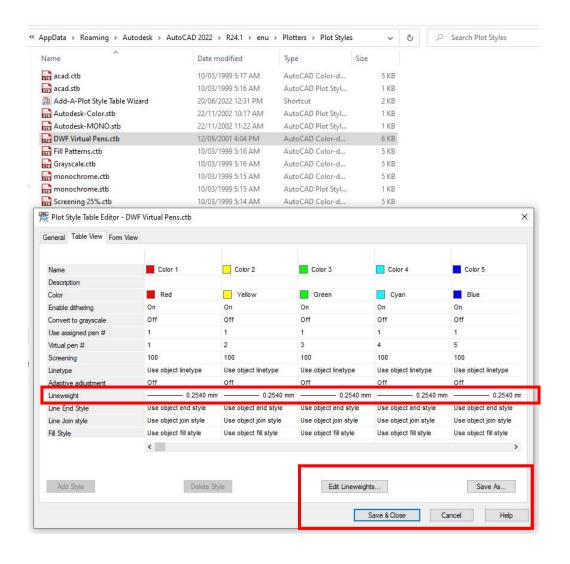
2. Set up plot style file

If you have a plot style file set up then the colour of each line layer defines the thickness of the line when the drawing is printed.

To set up a plot style file go to: Main menu > Print > Manage Plotters> Plot Styles. Here there are a number of .ctb (plot style) files. Open and modify one of these files to adjust a plot style.

Click Edit Lineweights to modify the weights for each colour then either Save and Close, or Save As.

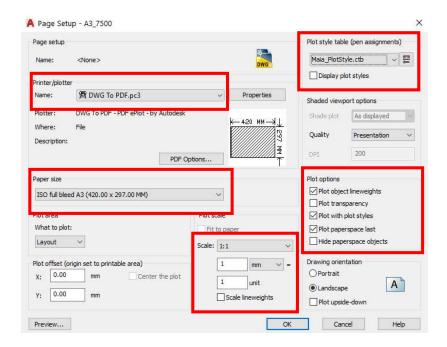




3. Layout page setup

While in paper space use the PAGESETUP command to get to the page setup options. Select the drawing you want to set up from the drawing list and click Modify.

Check all the parameters – particularly page size and the plot style file. You need to choose the same .ctb file as you edited in the last step.



4. Set the viewport zoom level

Open a particular page layout where you want to set the viewport zoom level. Click on the viewport then change from PAPER to MODEL (as below). Make sure the viewport is unlocked.



Type in ZOOM to open the zoom tool.

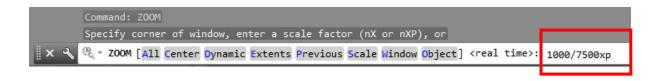
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Command: ZOOM

Specify corner of window, enter a scale factor (nX or nXP), or

X 
Q ZOOM [All Center Dynamic Extents Previous Scale Window Object] <real time>:
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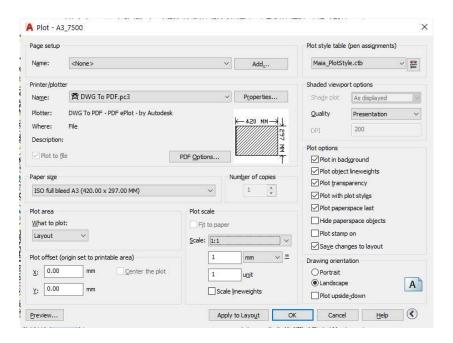
Then type in: '{conversion factor from model to paper space/desired scale at set page size} xp'.

Eg. to set the viewport to 1:7500 at A3, where the model space is in metres and the paper space page layouts are in mm, use: 1000/7500xp. The '1000' value is because 1000mm (paper space units) = 1m (model space units).

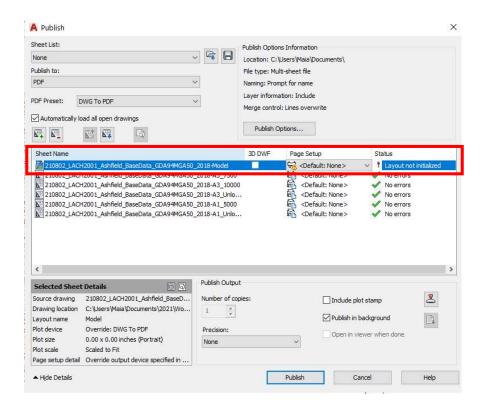


Plot the page

Use the PLOT command to get to the page plotting menu. Here you can double check the page setup parameters you set before. Make sure you have the Printer/plotter set to a pdf output option. When you click OK this will print your paper space layout to a pdf of the specified page size.



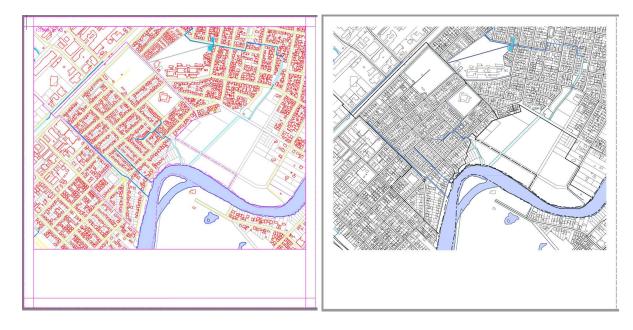
If you have all your drawings set up and ready to print you can use the BATCHPLOT command. This will plot all your layouts at once. Before you click okay in this interface remember to remove the model from the list of layouts to plot (click on it and press Delete).



The images below are the on-screen layout (left) and plotted pdf (right) versions of the same drawing. This example shows how some colours are converted into black lines of different weights (as per the plot style file) while others (without plot styles assigned) are printed in their colour as on the screen.

Tip: solid hatch colours never plot well from AutoCAD and are not recommended – see the horizontal line through the blue river area.

Tip: layers can be marked as not for printing so they do not show on the pdf output. This is useful for drawing guideline layers.



2 Open dwg in Illustrator

1. Set up drawings

Set up a paper space page layout in AutoCAD. Simplify the drawing by removing any unused layers. Use LAYDEL command to remove layers. Then save the file as a 2000 dwg file type.

AutoCAD 2000/LT2000 Drawing (*.dwg)

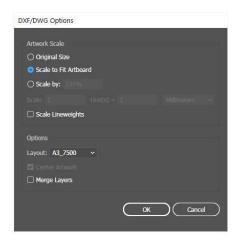
Simplified drawing and page layout:



2. Set up Illustrator artboard

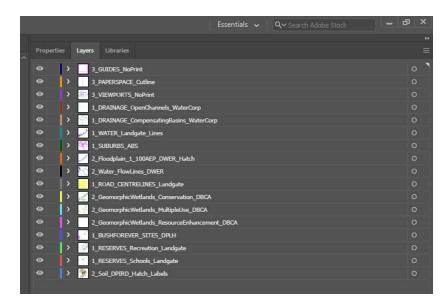
Set up a blank artboard in Illustrator with the same page dimensions as the layout you want to import from the dwg file.

Then go File > Open and find the 2000 dwg file from Step 1. Import using the settings below. Select the dwg layout with the same page size as the Illustrator artboard.

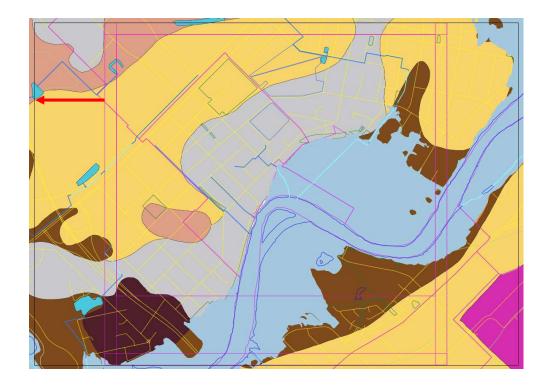


3. Move layers to match artboard

The layers from the dwg file will import as the same layers in Illustrator.



The data will import at the correct scale but not necessarily correctly placed on the artboard. See the initial placement, below.



If you want to move all the layers so that the artboard layout matches the original paper space layout then: select all the data and move it to match the artboard. Use snapping and the original guidelines.

You can then add another artboard with the same size as the original paper space viewport.

Artboard 1:



Artboard 2:



You can then rework the drawing and export to desired format.