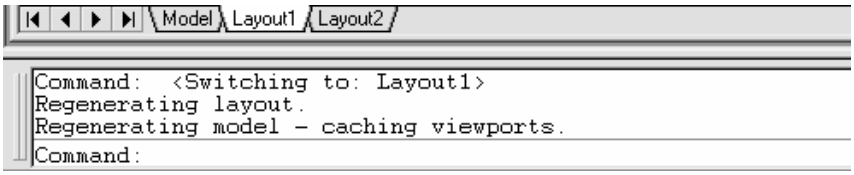
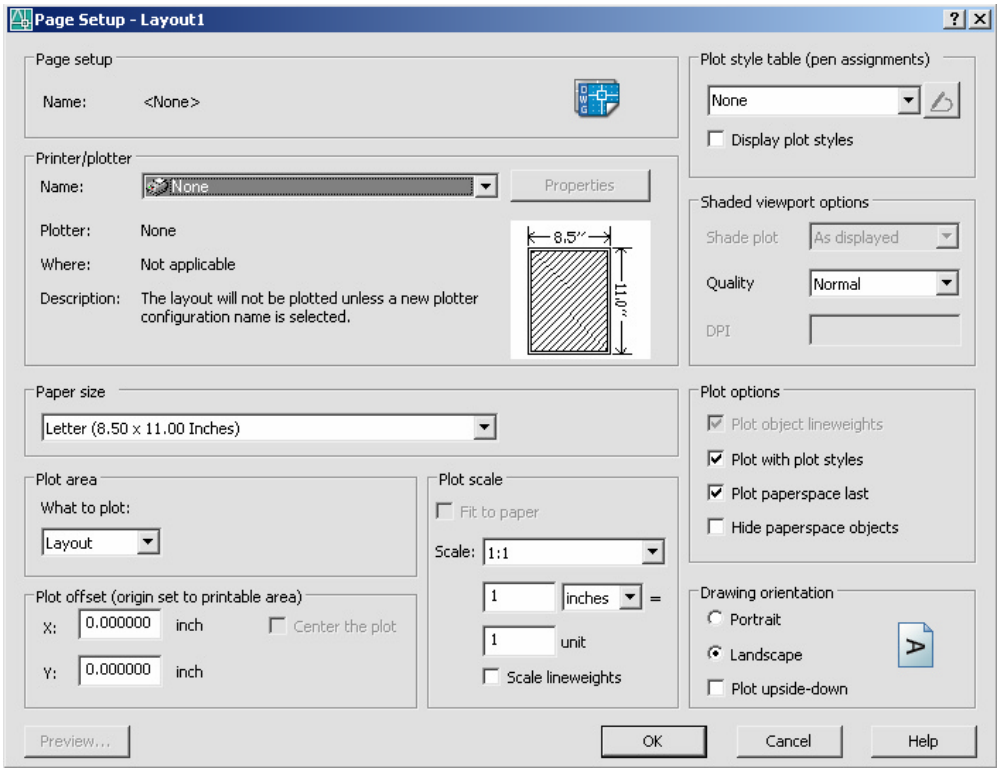
Chapter 29
Model and Paper Space Layouts

Creating Layouts 29.1

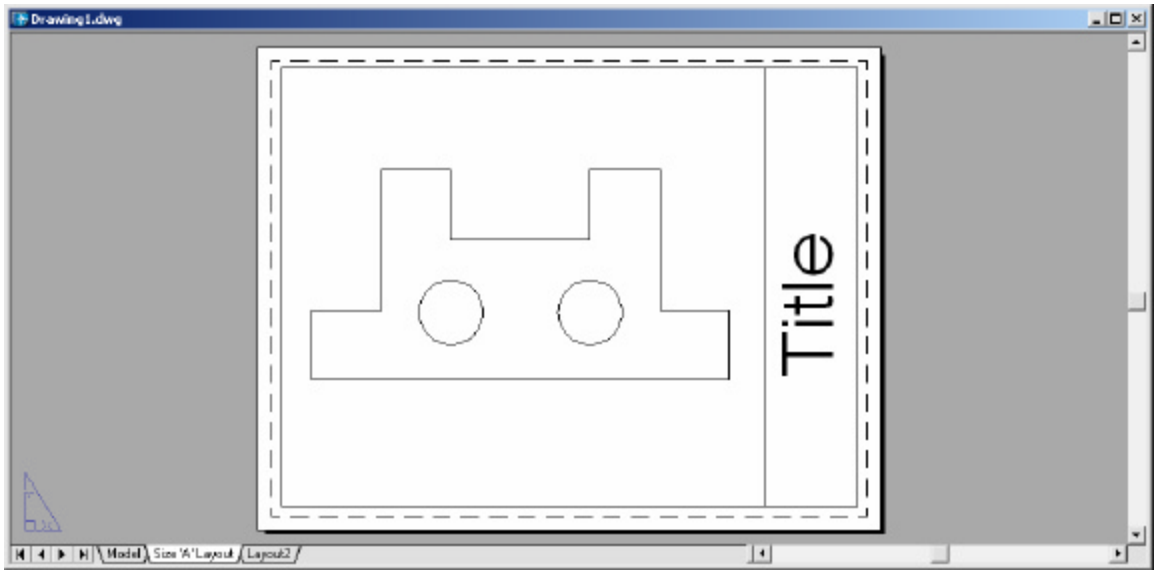
1. **Choose** the Layout1 TAB at the bottom of the screen.



2. **Change** the name of the layout using the Layout Wizard
3. **Change** the remaining Layout options for page setup and plots.

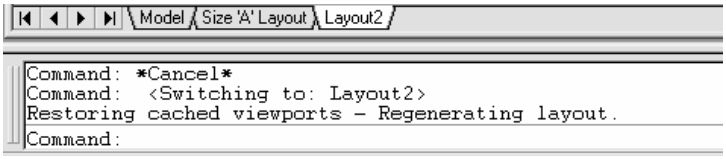


Paper Space Layout with One View and Inserted Title Block

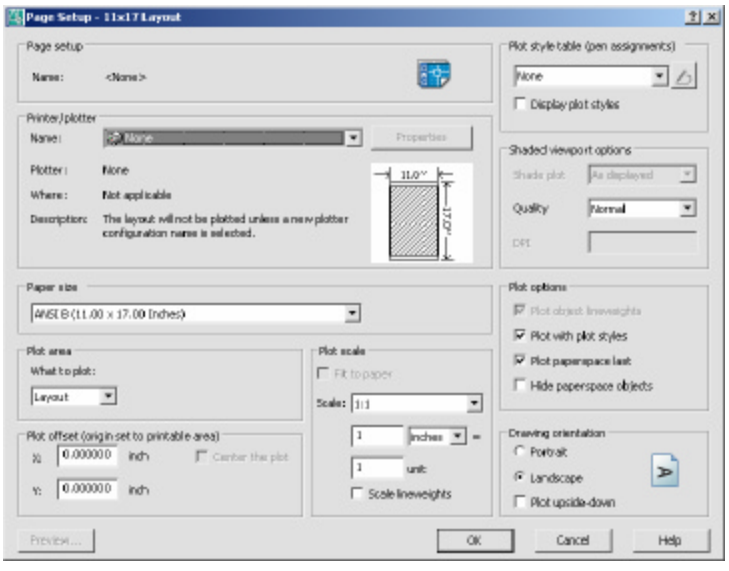


Creating Multiple Layouts

1. **Choose** the Layout2 TAB at the bottom of the screen.



2. **Change** the name of the layout.
3. **Change** the remaining Layout options for page setup and plots.



Mview Command 29.2

- The MVIEW command controls the size and position of the mview viewports (from now on called mviews). Mview is to tilemode = 0 as vports is to tilemode = 1.
- Use mview when you would like to see a view of the model.
- Pspace mode must be active to use mview. AutoCAD will automatically switch to pspace when you issue the mview command.
- The default mview option is "<<first point>>" To use this option, pick a point which represents one corner of the mview. At the "other corner" prompt, pick a point which represents the opposite corner of the mview.

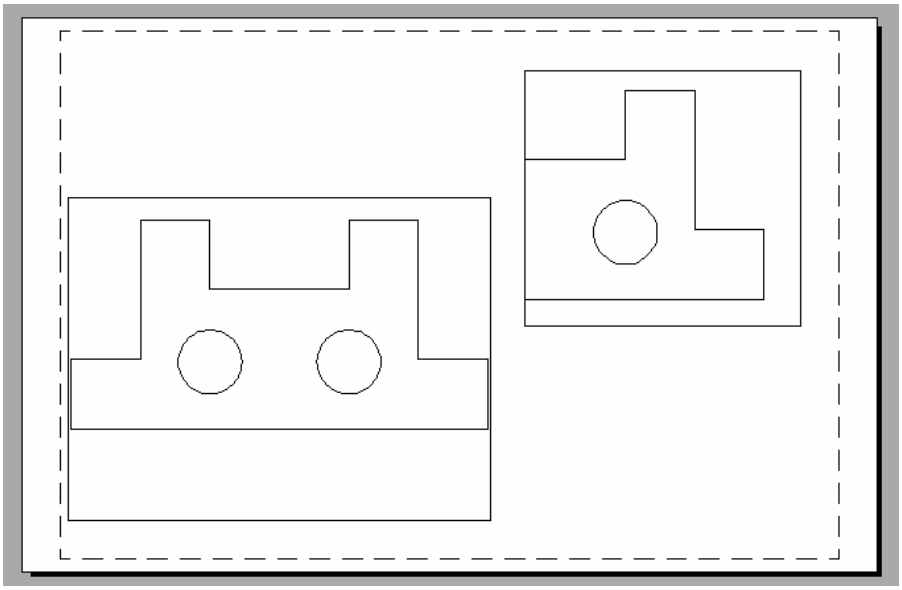
1. **Choose** View, Viewports, 1 Viewport.

   or

2. **Type** Type MVIEW at the command prompt.

   Command: **MVIEW or MV**
   ON/OFF/Hideplot/Fit/2/3/4/Restore/<<First Point>>: **P1**

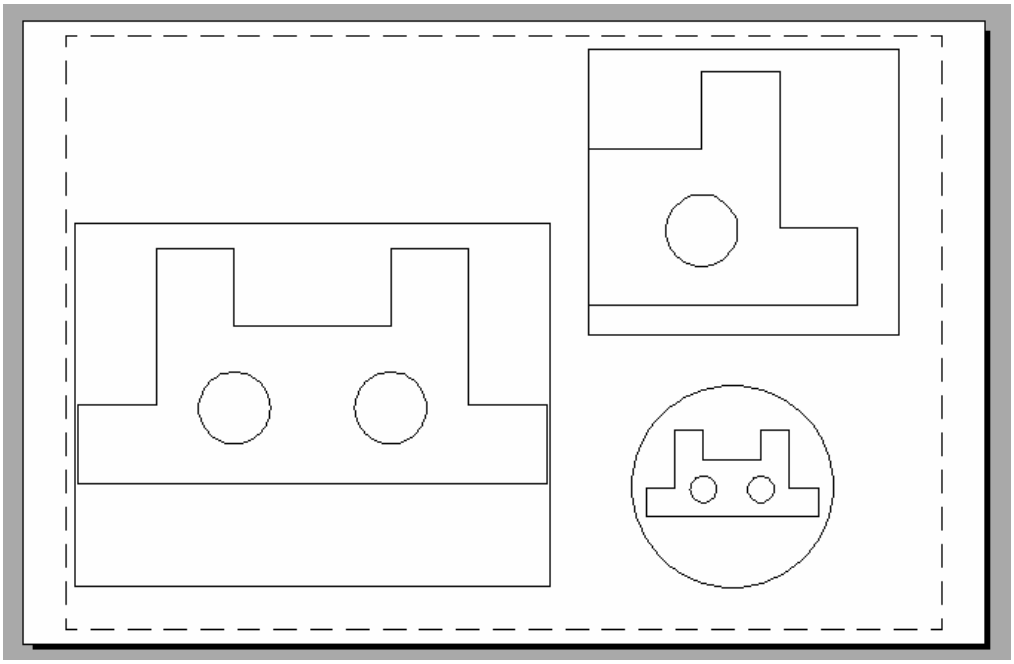
   Other corner: **P2**



TIP: Mviews should be created on their own layers in order to be turned ON/OFF.

Irregular Shaped Viewports 29.3

1. **Draw** a shape in Paper Space (e.g. circle, polygon, ellipse)
2. **Choose** View, Viewports, Object
3. **Choose** the object to make a viewport.



Model Space and Paper Space 29.4

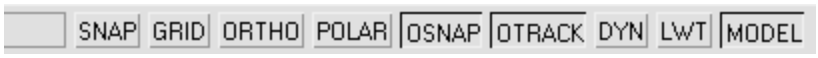
MSPACE (model space) can only be activated if there is at least one mview. To enter model space mode use "MSPACE".

1. **Type** MSPACE at the command prompt.

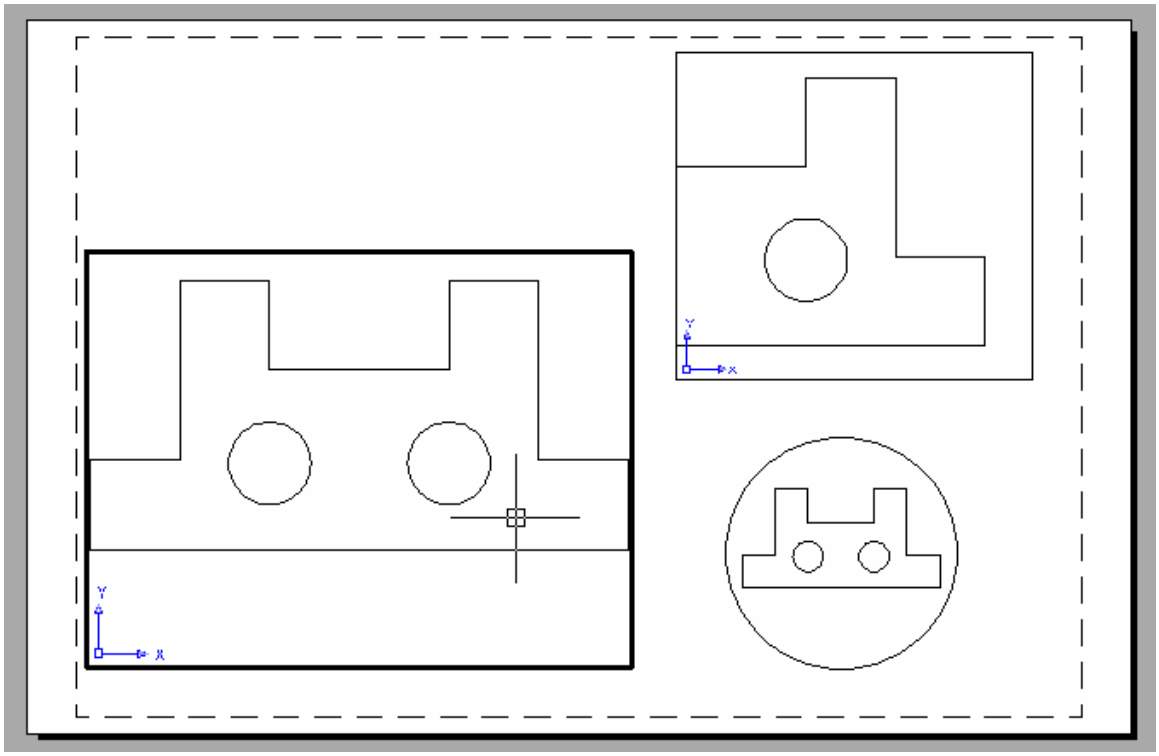
   Command: **MSPACE or MS**

   or

2. **Double-Click** the word “PAPER” on the Status Bar to toggle to model space.



Notice the ucsicon will appear in each of the mviews when you enter model space.



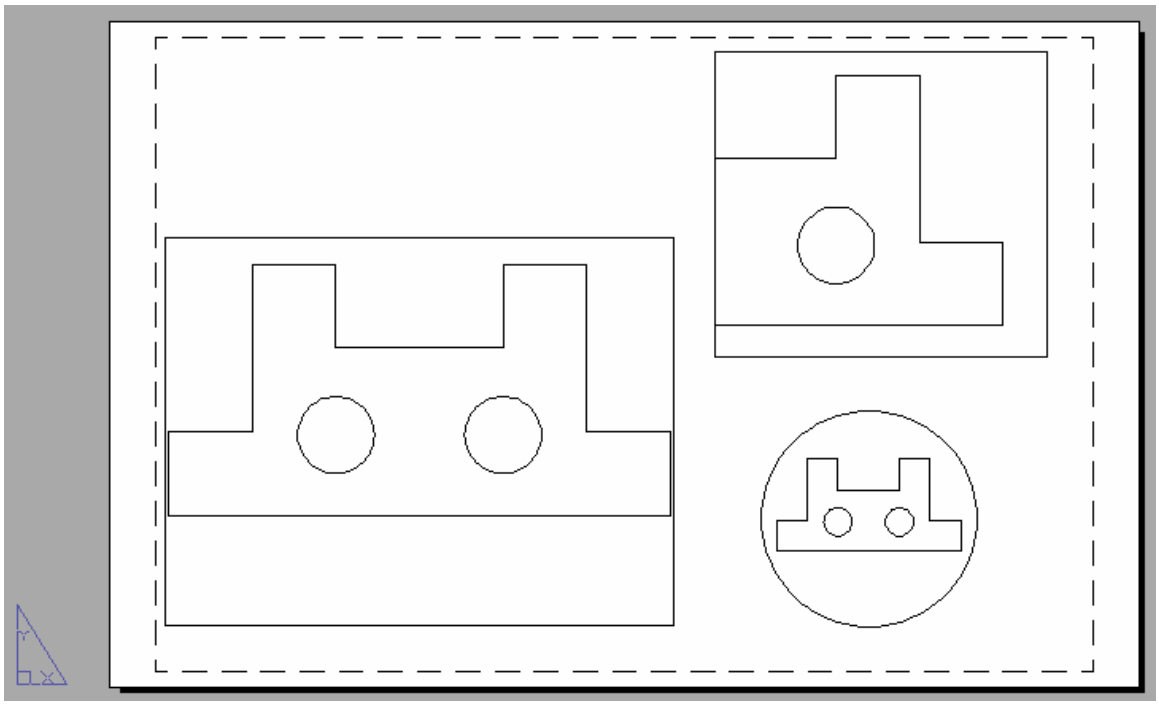
PSPACE mode should be entered to create a border, a title, mviews, and annotations only. This environment is used to lay out a 2 dimen- sional working drawing suitable for plotting. When you plot from pspace, you should plot 1=1.

1. **Type** PSPACE at the command prompt.

   Command: **PSPACE or PS**

   or

2. **Double-Click** the word “MODEL” on the Status Bar to toggle to paper space.



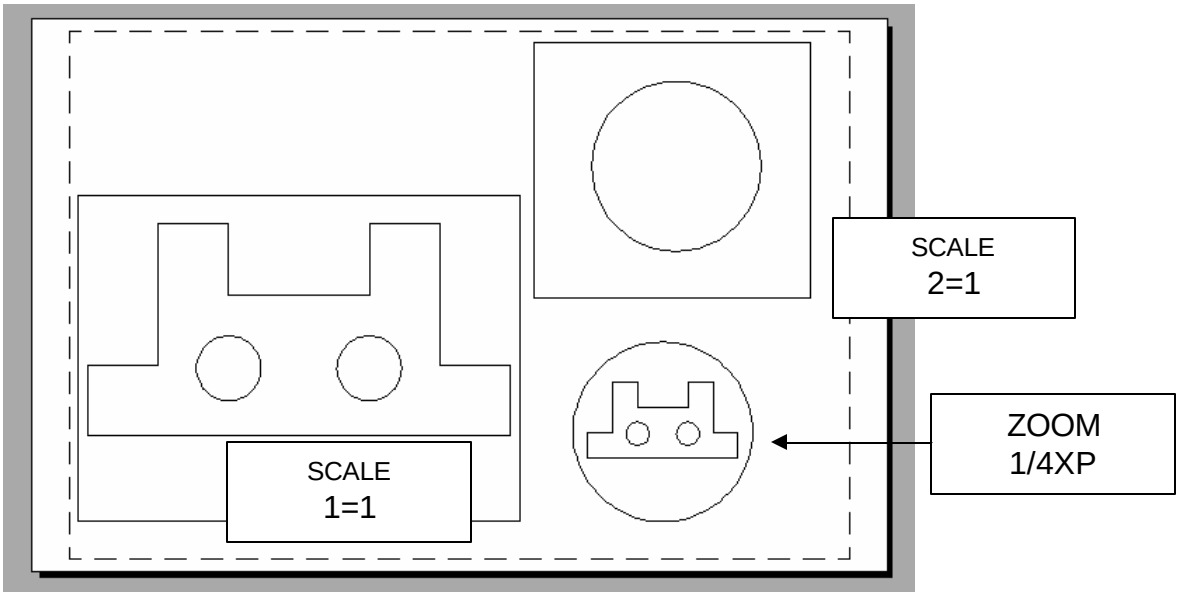
Notice the "Paper" in the status line and the pspace icon.

Scales - Zooming in Model Space 29.5

- Use ZOOM "XP" to zoom the model a certain factor of the paper.
- If you enter a value followed by xp, AutoCAD specifies the scale rela- tive to paper space units. For example, entering .5xp displays model space at half the scale of paper space units.
- If you want to plot the model at 1/4"=1', type ZOOM 1/48XP . If you want to plot a part at 3 times, type ZOOM 3XP.
- Views can also be shown in 3D by using the VPOINT command.

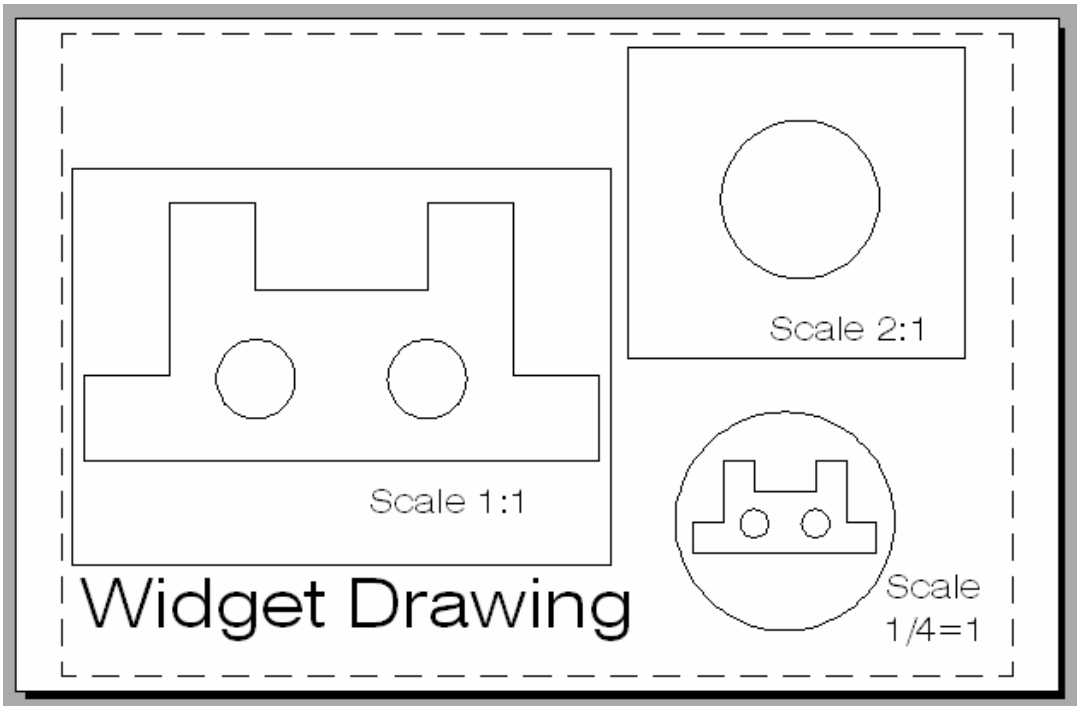
1. **Type** MS at the command prompt to enter Model Space for each individual viewport.
2. **Type** ZOOM at the command prompt. Command: ZOOM All/Center/Dynamic/Extents/Previous/ Scale(X/XP)/ Window/<Realtime>: **3XP**

You can also change the scale from the Viewports Toolbar.



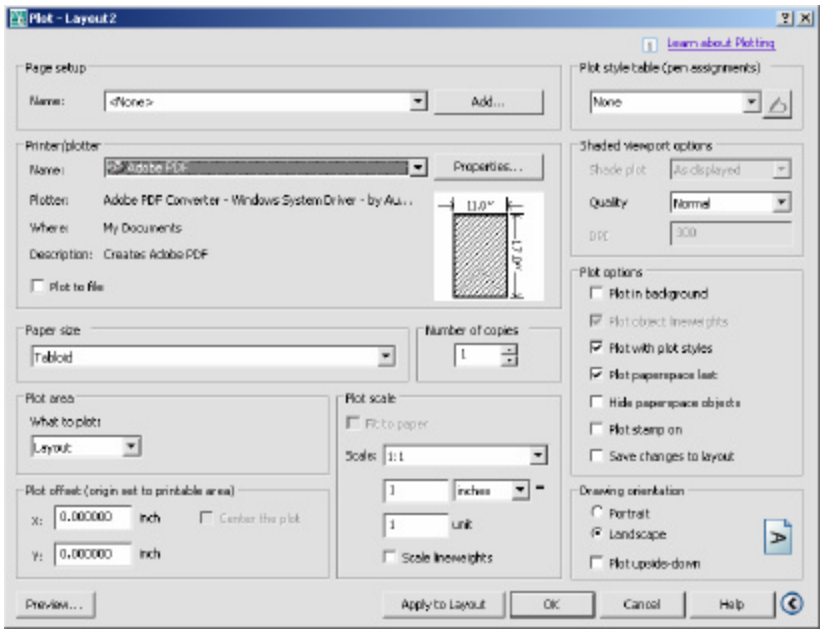
Adding Text in Paper Space 29.6

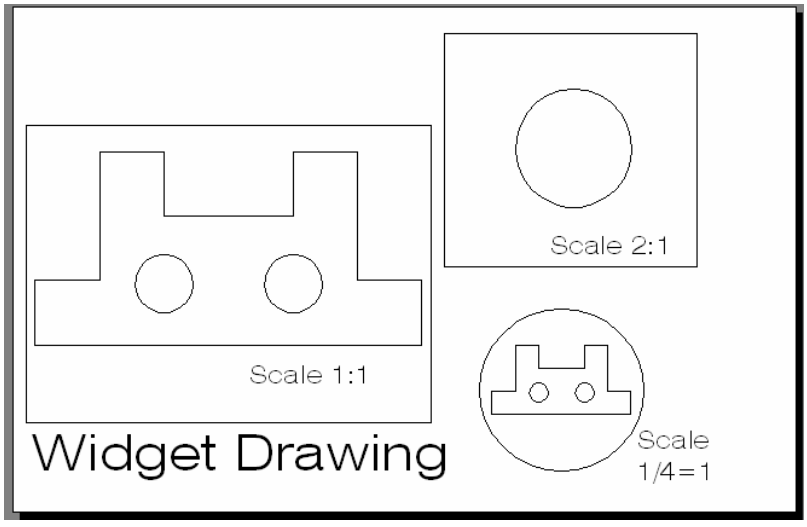
Title block text and miscellaneous text can be added in Paper Space.



Plotting in Paper Space 29.7

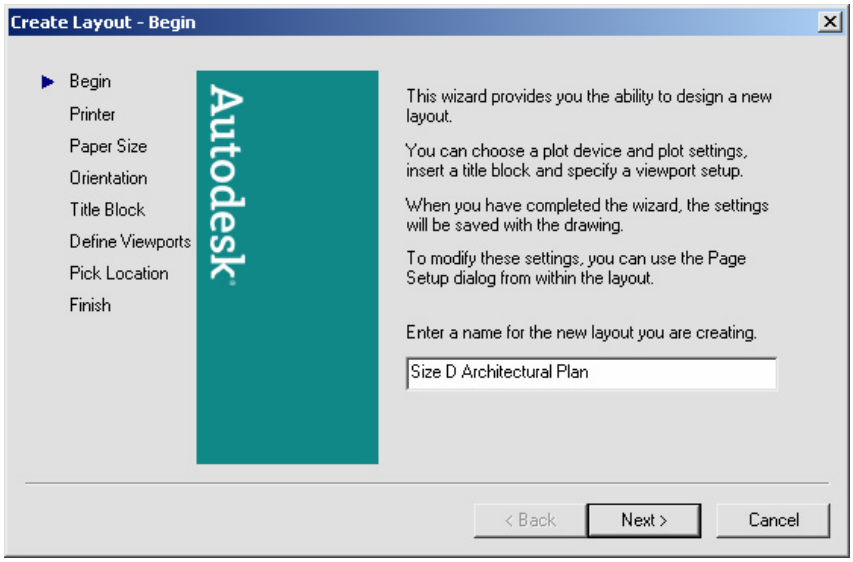
- Plotting all MVIEWS should be done from Paper Space not from Model Space.
- When you plot from pspace, you should plot1=1.
- For hidden line removals, remember to use the HIDEPLOT option in the MVIEW command.
- Once a ZOOM SCALE has been defined, do not zoom again before plotting. You can change the display with the PAN command.

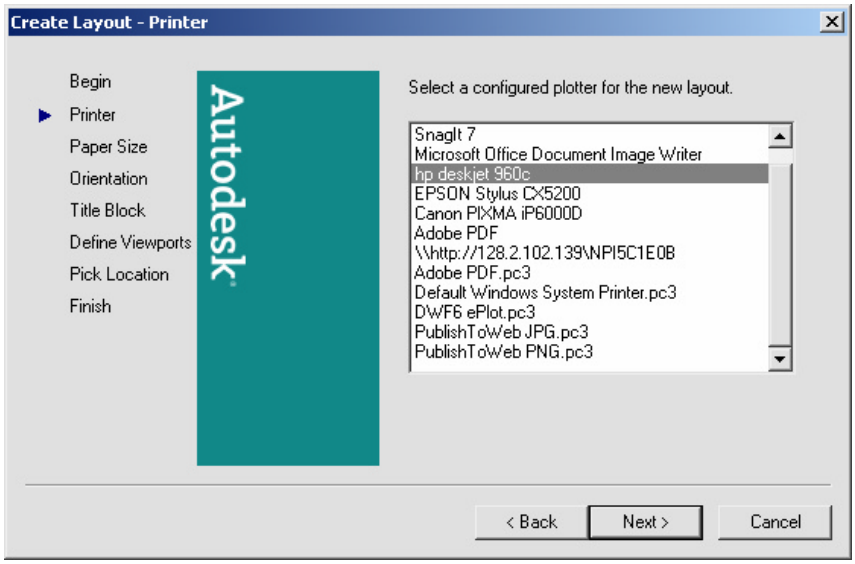


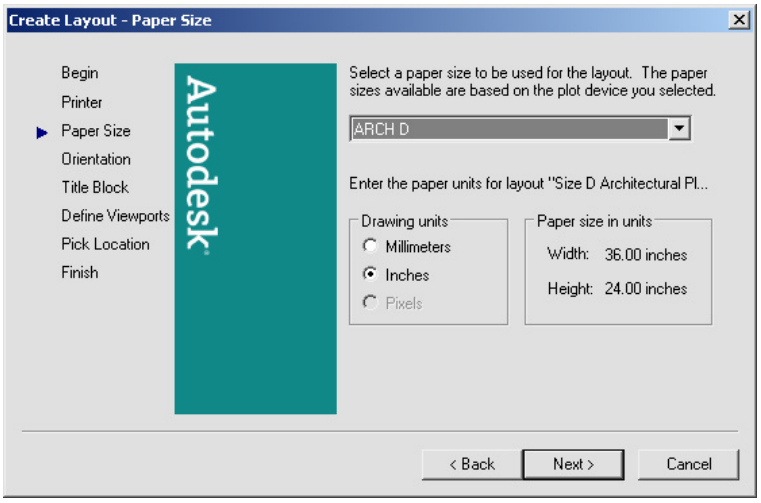


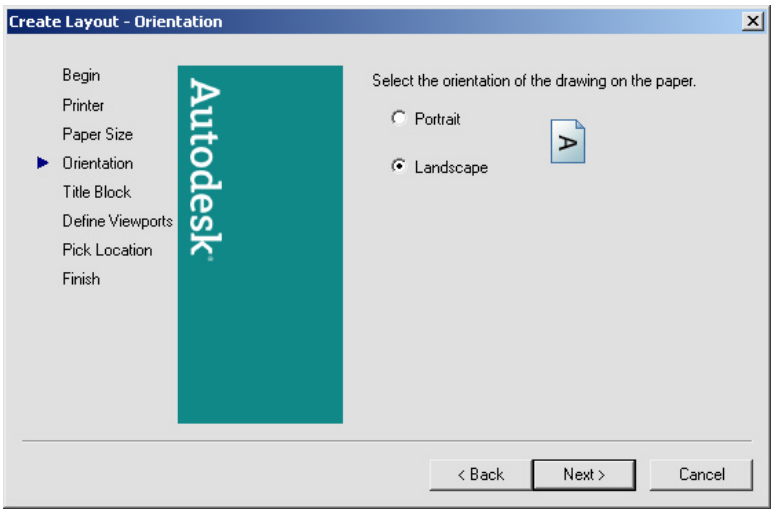
Layout Wizard 29.8

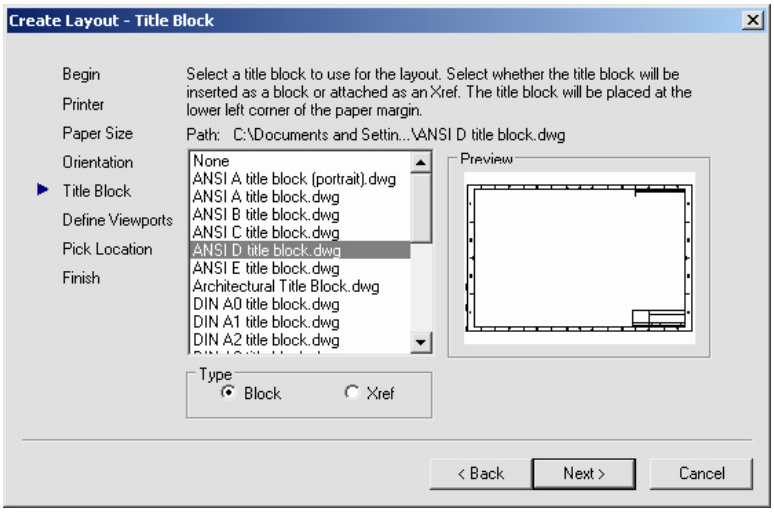
1. **Choose** Insert, Layout, Layout Wizard
2 **Change** the various options in the Layout Wizard.

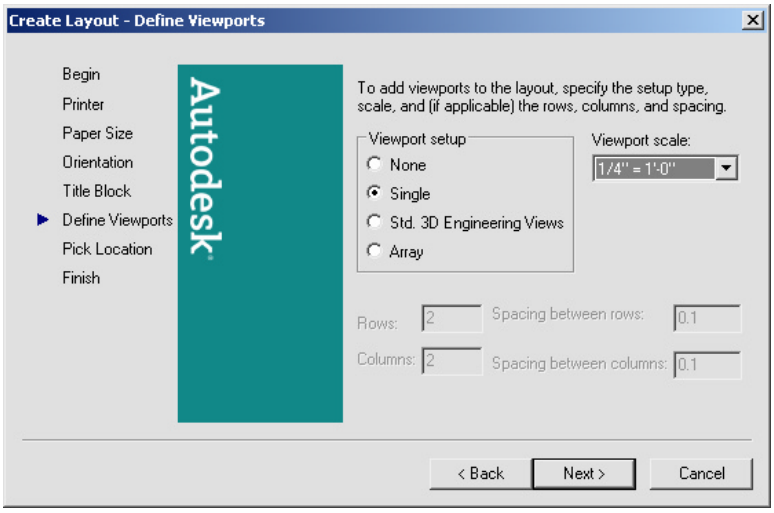


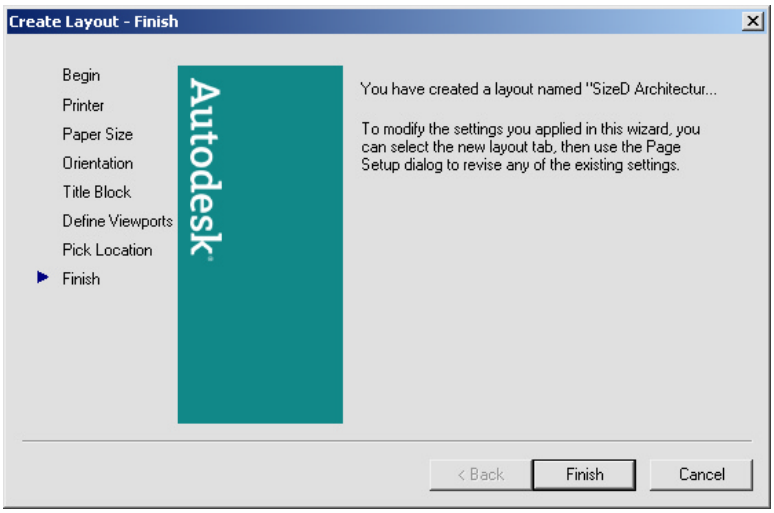


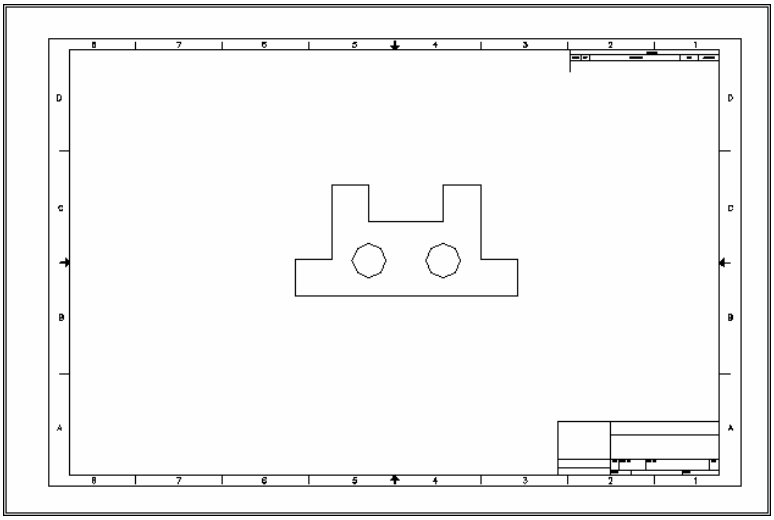

Create Layout - Paper Size
Begin
Printer
Paper Size
Orientation
Title Block
Define Viewports
Pick Location
Finish
Autodesk
Select a paper size to be used for the layout. The paper sizes available are based on the plot device you selected.
ARCH D
Enter the paper units for layout "Size D Architectural Pl...
Drawing units
Millimeters
Inches
Pixels
Paper size in units
Width: 36.00 inches
Height: 24.00 inches
< Back
Next >
Cancel


Create Layout - Orientation
Begin
Printer
Paper Size
Orientation
Title Block
Define Viewports
Pick Location
Finish
Autodesk
Select the orientation of the drawing on the paper.
Portrait
Landscape
A
< Back
Next >
Cancel


Create Layout - Title Block
Begin
Printer
Paper Size
Orientation
Title Block
Define Viewports
Pick Location
Finish
Select a title block to use for the layout. Select whether the title block will be inserted as a block or attached as an Xref. The title block will be placed at the lower left corner of the paper margin.
Path: C:\Documents and Settin...\ANSI D title block.dwg
None
ANSI A title block (portrait).dwg
ANSI A title block.dwg
ANSI B title block.dwg
ANSI C title block.dwg
ANSI D title block.dwg
ANSI E title block.dwg
Architectural Title Block.dwg
DIN A0 title block.dwg
DIN A1 title block.dwg
DIN A2 title block.dwg
Preview
Type
Block
Xref
< Back
Next >
Cancel

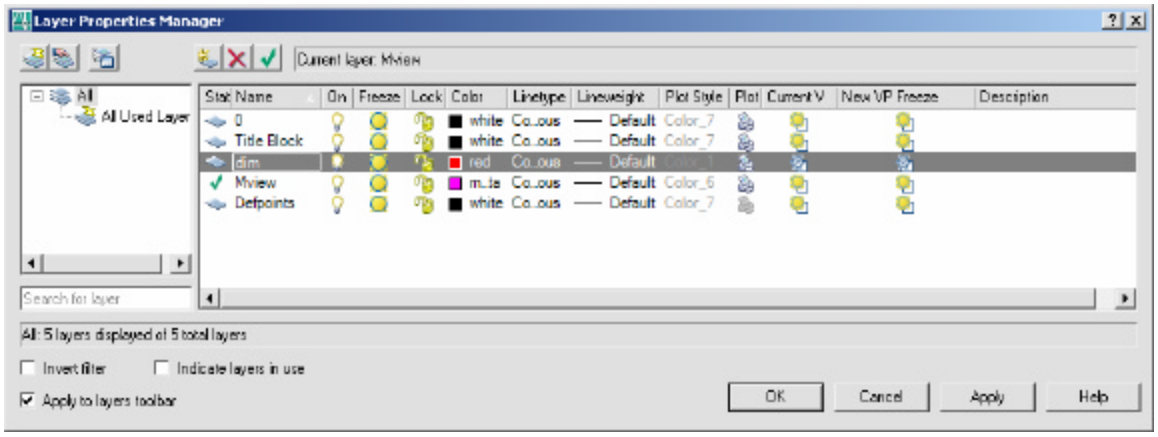
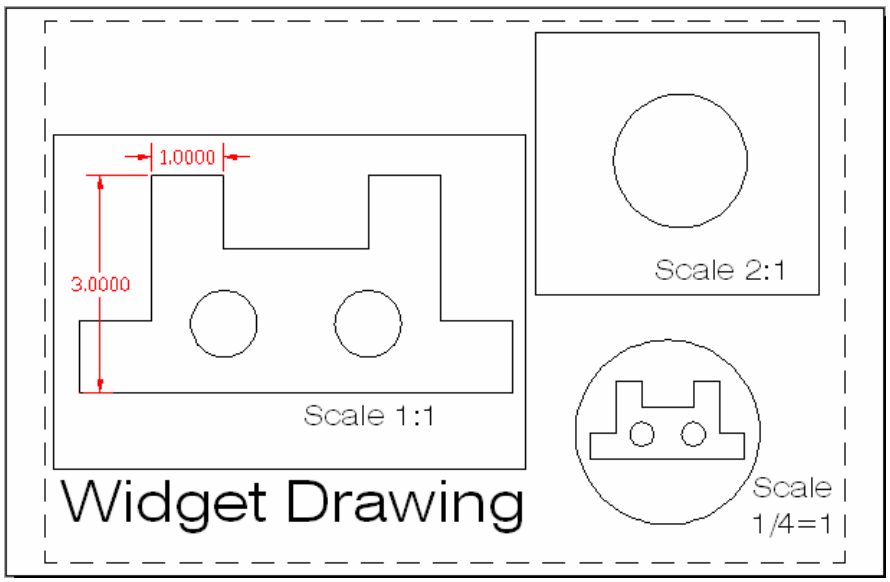

Create Layout - Define Viewports
Begin
Printer
Paper Size
Orientation
Title Block
Define Viewports
Pick Location
Finish
Autodesk
To add viewports to the layout, specify the setup type, scale, and (if applicable) the rows, columns, and spacing.
Viewport setup
None
Single
Std. 3D Engineering Views
Array
Viewport scale:
1/4" = 1'-0"
Rows:
2
Spacing between rows:
0.1
Columns:
2
Spacing between columns:
0.1
< Back
Next >
Cancel


Create Layout - Finish
Begin
Printer
Paper Size
Orientation
Title Block
Define Viewports
Pick Location
Finish
Autodesk
You have created a layout named "SizeD Architectur...
To modify the settings you applied in this wizard, you can select the new layout tab, then use the Page Setup dialog to revise any of the existing settings.
< Back
Finish
Cancel



Viewport Layers 29.9

VPLAYER (viewport layer) controls layers on and off, and freeze and thaw, for each mview. Layer controls the on and off, freeze and thaw, globally. Layers must be on and thawed globally before they can be effected per mview with vplayer.

1. **Click** in the viewport to change layer status.
2. **Choose** the layer dialog box.
3. **Highlight** the layer to freeze or thaw in the current or new viewport.

The layer dialog box also allows control of layers for each viewport.