

# Autodesk Impression for Civil 3D Users

Autodesk Impression is a presentation tool that adds color and a hand-painted look to plans and elevations. Impression is a simple program that relies on information drafted in AutoCAD. Once you import a drawing, Impression acts like a “paint-by-numbers” kit.

This white paper is written for people who have an in-depth knowledge of Civil 3D and plotting from AutoCAD layouts. This white paper introduces users to the basics of working with Impression.

## Step 1: Tips for Drafting with Impression in Mind

Due to the complexity and size of drawings created in Civil 3D, there are a few things a user needs to know to work with Impression successfully.

- **Place objects on separate layers.** Fortunately, Civil 3D helps you work with Impression by automatically sending different types of objects to their own layers. When the DWF is created in the next step, the layers will come forward and we will be able to assign artistic touches to each layer.
- **Create closed areas.** Impression works best when there are closed areas to fill in with color. Much like an AutoCAD hatch, Impression uses color fills to add depth to the drawing.
- **Freeze unwanted layers.** Impression’s focus is creating presentation graphics. Freeze layers you wish to exclude, especially layers containing annotation, tables and section views.
- **Understand the limitations.** As of press time, Civil 3D and other vertical products are not fully supported by Impression. Some functionality such as automatic block substitutions, automatic block scaling and direct DWG import are not supported in Impression 2. When in doubt, you can always export the Civil 3D file to base AutoCAD and simplify the project as needed.

## Step 2: Plot to DWF

In Civil 3D, create a layout with a viewport. If desired, include your title block, north arrow or any other information you wish to be shown in your presentation. Your viewport scale and sheet size will carry over to Impression.

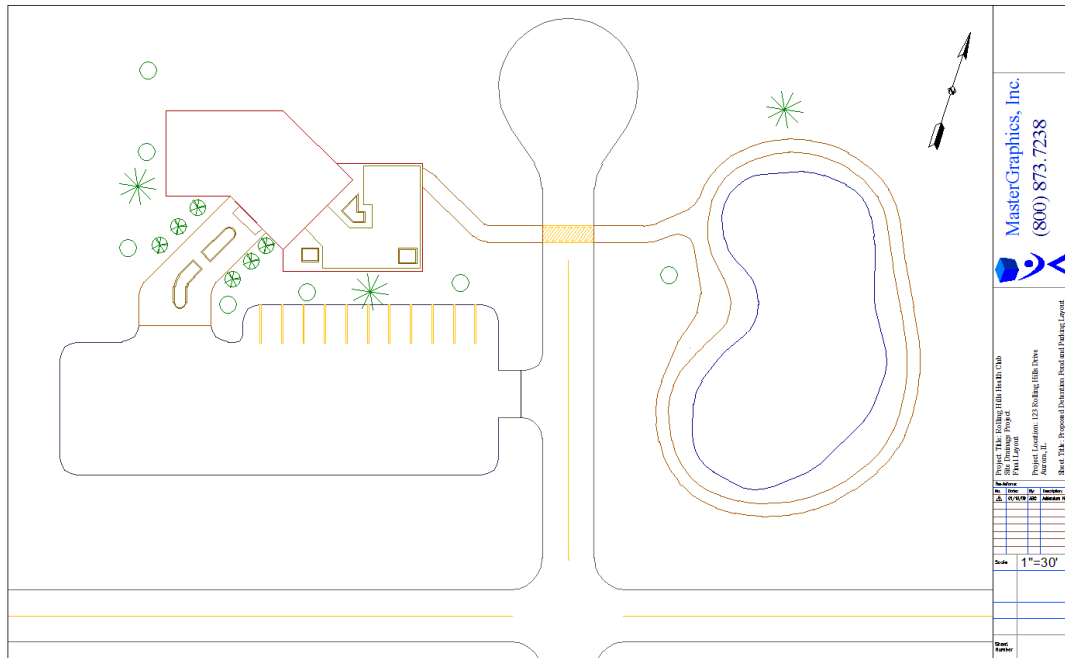


Figure 1: Example Layout with Title block

When plotting, verify that you are plotting to DWF6 (not DWFx) and that the plot scale is 1:1.

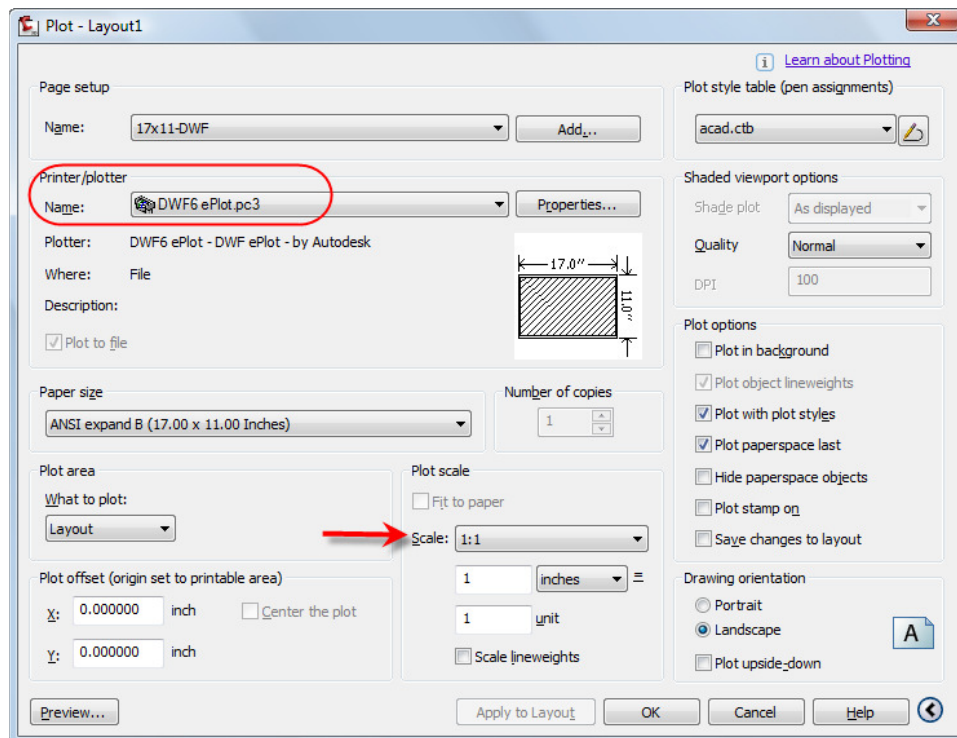


Figure 2: Recommended plot settings

### Step 3: Open DWF in Impression

In Impression, go to **File** menu and **Open**.

Change the **Files of Type:** dropdown to read **Autodesk DWF (\*.dwf)**

Browse to the file created in Step 2.

Click OK.

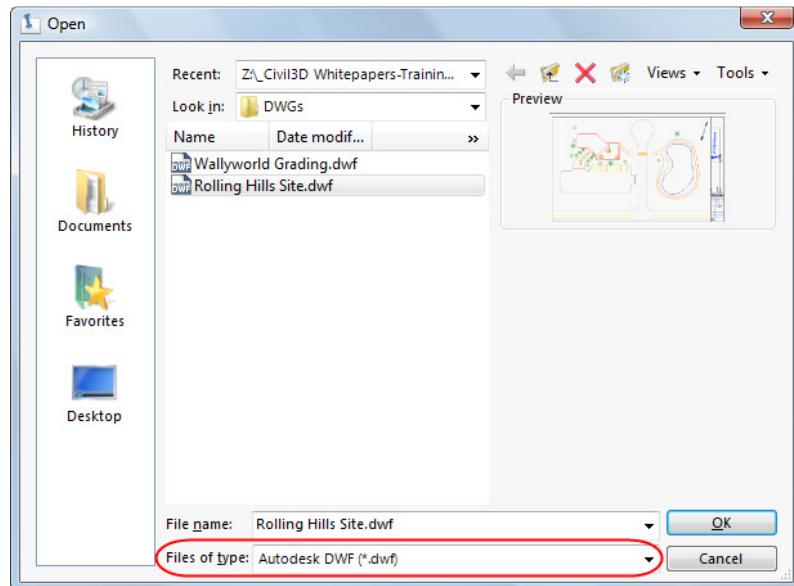


Figure 3: “Files of Type”

When the DWF is first opened it will be converted to the Impression format (\*.IRF)

Click **Finish** to import the file using the default settings.

Before proceeding, save the new \*.irf file by going to the File menu and selecting Save.

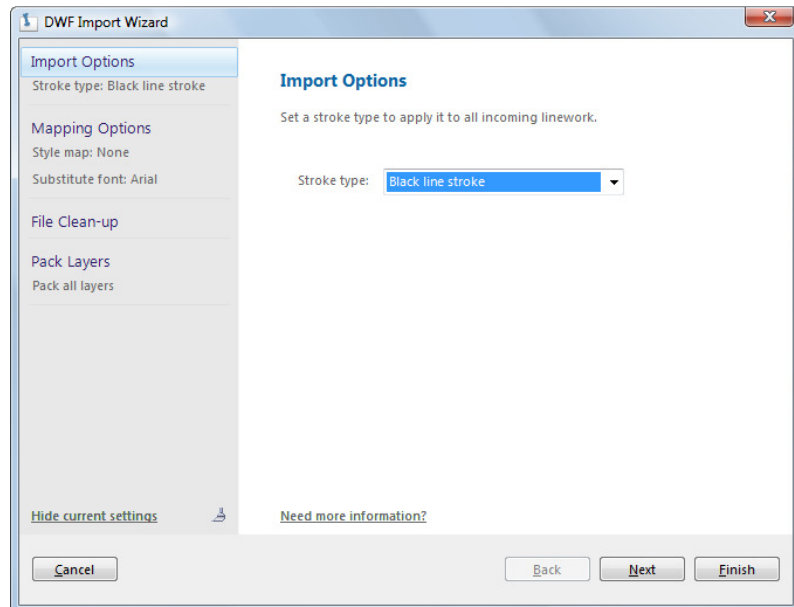


Figure 4: Import Wizard

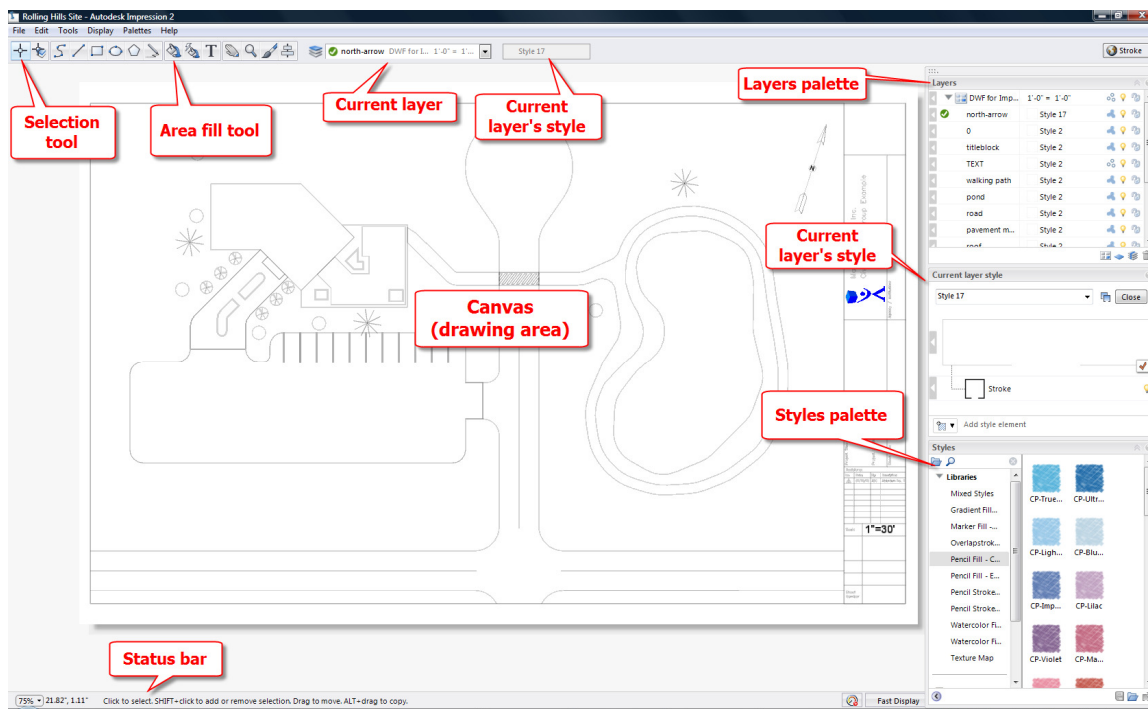
## Step 4: Work with Impression

Now that the DWF has been converted to IRF we can begin to use Impression to add color and depth to the presentation.

Each viewport that is imported into Impression is called a “sketch.” Each sketch maintains the viewport scale you assigned it in AutoCAD Civil 3D. In this example we have one sketch that has a 1”=30’ scale.

The overall page size has also carried over from AutoCAD’s page setup. In this example we have a 17x11 page. In Impression, this page is called a “canvas” and is where all of our drawing will take place.

The Impression interface has some similarities to AutoCAD. We use layers and styles to control the look of the final product.



**Figure 5: The Impression interface**

Like AutoCAD, panning and zooming occurs with the mouse. Roll forward with the middle mouse wheel to zoom in, roll backwards to zoom out and press and hold the middle mouse wheel to pan.

To add color to the different areas in your canvas, click the Area fill tool



Use the dropper to pick the desired color from the styles palette.

The drop down at the top of the palette contains several different types of coloring styles.

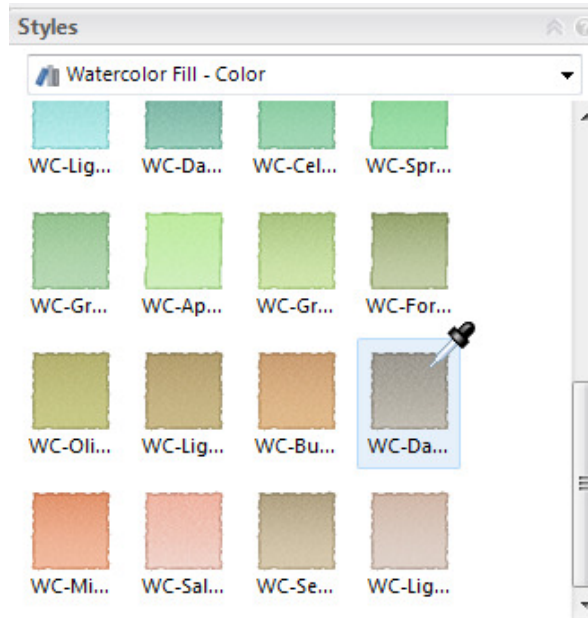


Figure 6: Pick fill color

As you hover over a closed area in the canvas, you will see a grey preview of the area Impression has found.

Click to fill that area with the selected color.

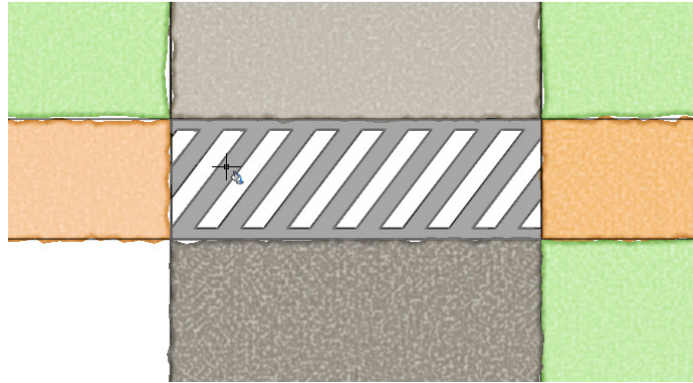


Figure 7: Highlighted object to fill

In some cases you will want to turn off layers in Impression. Much like Autocad, the light bulb icon in the layer list controls the visibility of the layer.

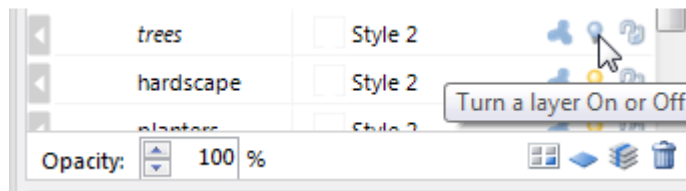


Figure 8: Turn layers on and off



## Step 5: Adding Blocks

Following a few simple steps can make adding blocks to your Impression drawing easier.

Open the block palette by going to the **Palettes** menu and selecting **Blocks**.

Find the style of block you wish to work with by selecting a category on the left side.

When you find a block you would like to work with click on it to select it.

Right-click the block and select **Add to Saved blocks**.

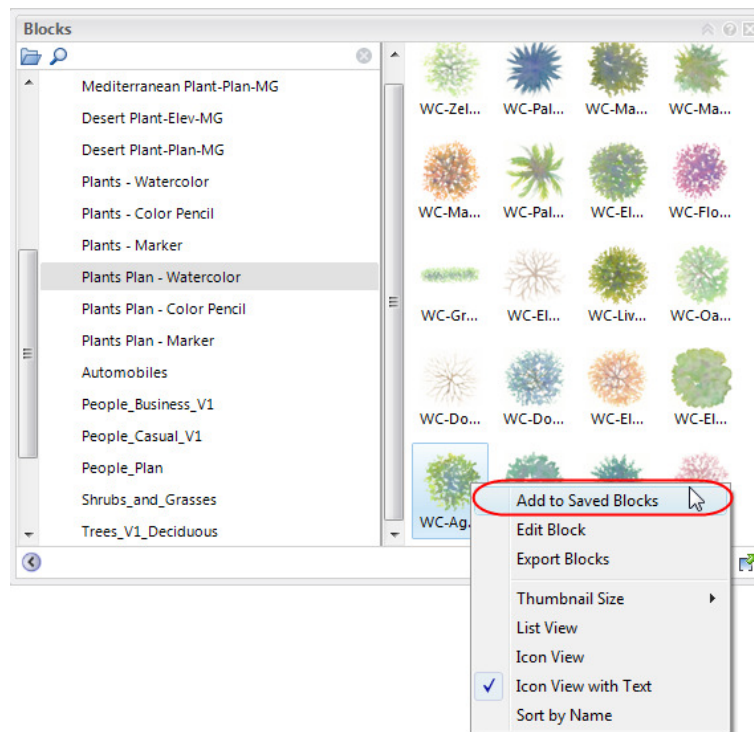


Figure 9: Add to Saved Blocks

When you have finished adding the blocks to your saved list, Scroll down on the left side and select **Saved Blocks**.

Before we insert the blocks we will need to verify that it will insert at the correct scale for our sketch.

Select a block.

Right-click the selected block and select **Properties**.

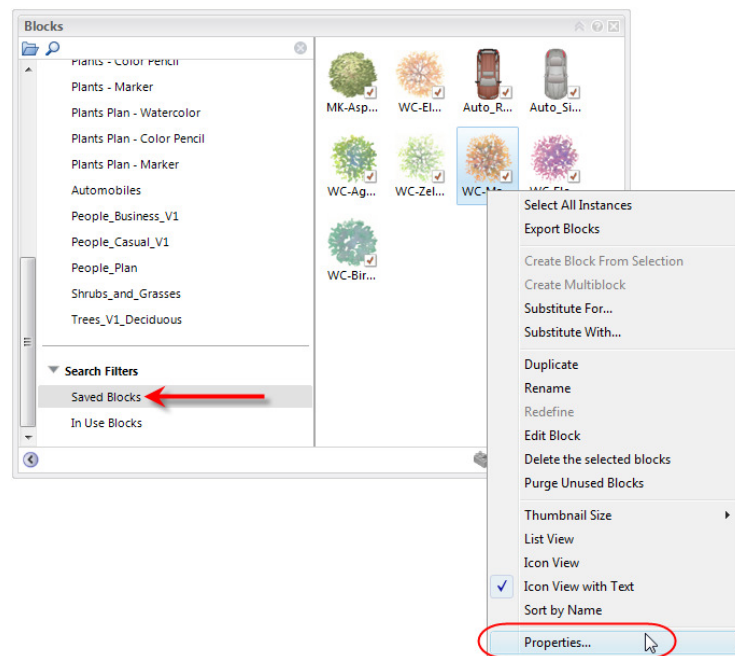


Figure 10: Block Properties

In the block properties we need to set the correct scale for our sketch.

Because automatic scaling is not currently supported, our blocks will come in 9600% too large!

Divide the default Width by 96 to get the correct sketch size for the block.

You may also want to add automatic scale and rotation variation as shown in Figure 11.

This will need to be done for all blocks you have saved.

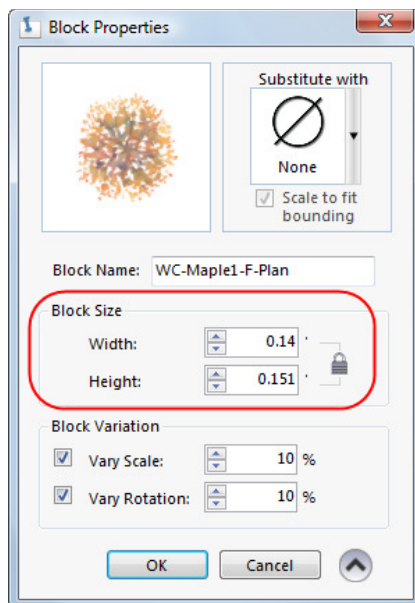


Figure 11: Corrected block size

Once your blocks are ready, click the block and drag it to the desired location in the sketch. Like AutoCAD, the block will be on whichever layer is current in your layers palette.

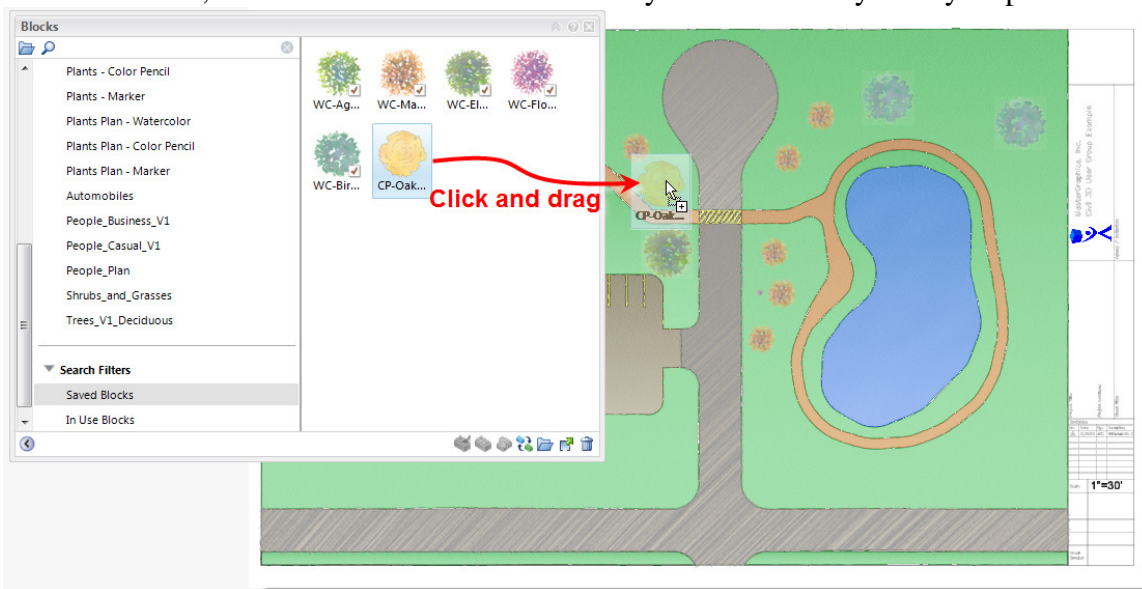


Figure 12: Click and drag to add block

If you wish to resize the block once it is in the sketch, click the block. The selection box has multiple grips that can be used to resize the object. Click and drag the grips to resize.

To move the block simply click and drag it to the new location.

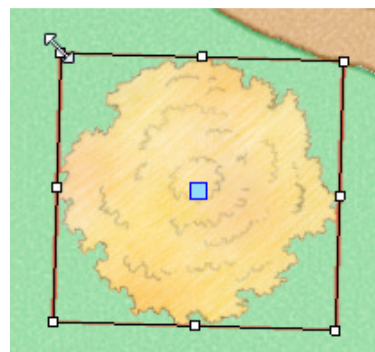
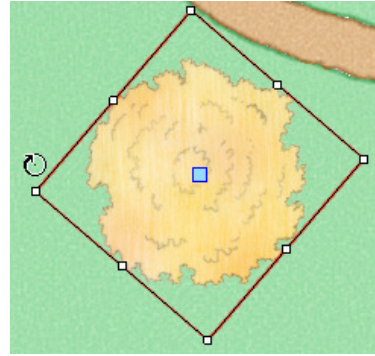


Figure 13: Resize the block.

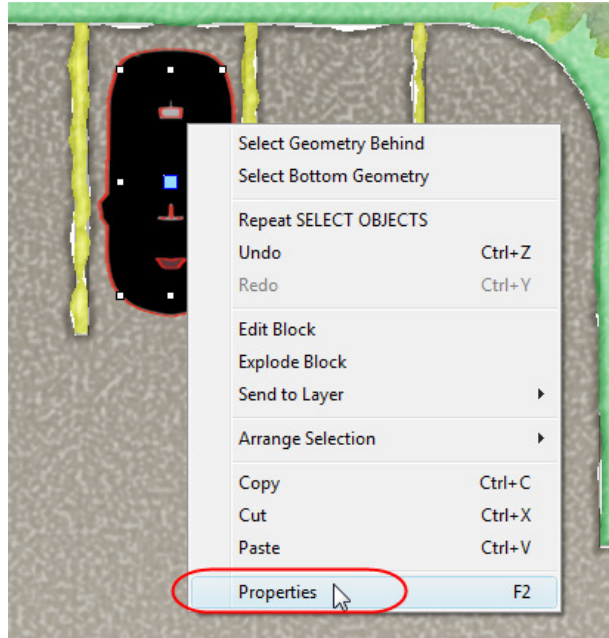
To rotate a block, select it and move the cursor outside the selection box until you see the rotation icon. Click and hold the left mouse button as you move the cursor to rotate the block.



**Figure 14: Rotate a block**

In the case of Automobile blocks, you will need to correct the insertion scale as described previously, and you will need to adjust the Style's scale.

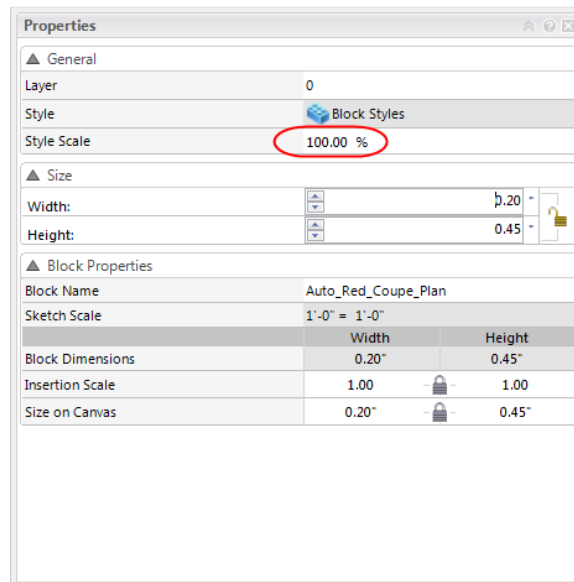
Insert the block into the drawing, then click on it to select it. Right click on the block and select Properties as show in Figure 15.



**Figure 15**

Change the style scale to 100%.

Close the properties dialog box by clicking the X in the upper right-hand corner.



**Figure 16**

Once you are comfortable with the basics, the possibilities for creativity are endless.

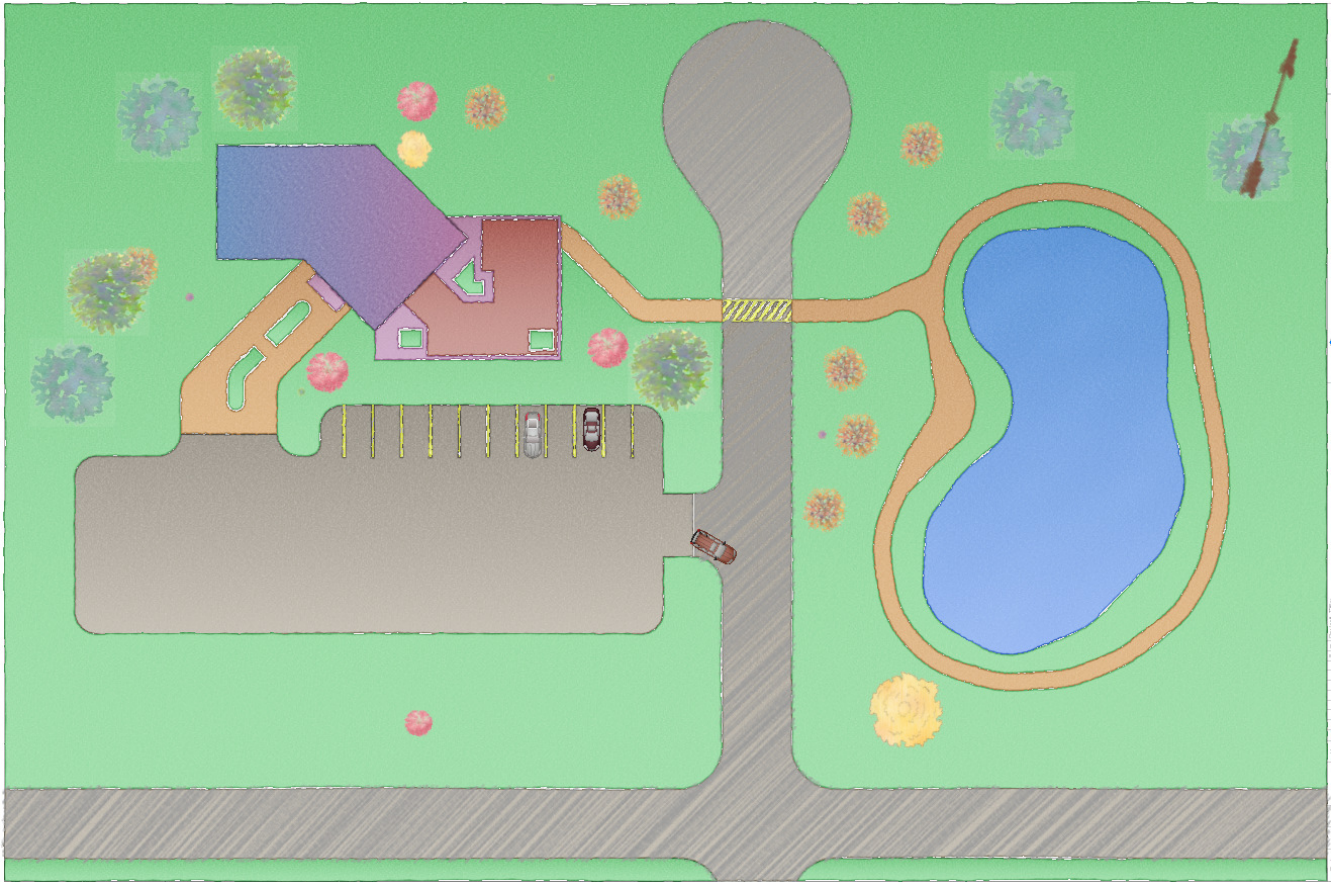


Figure 17: Ready to print