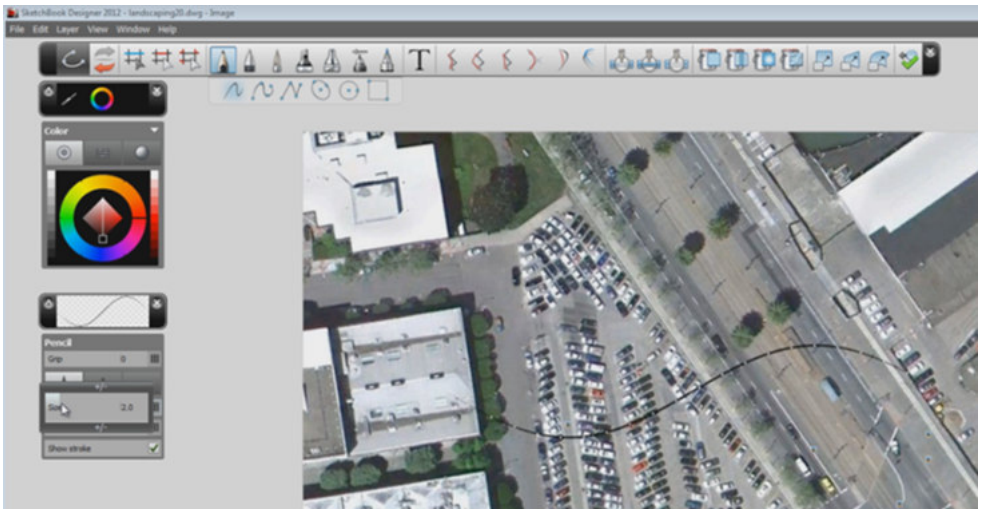
Autodesk® Design Suite 2012

Autodesk® SketchBook® Designer 2012– Tip Guides

Creating a Sketchbook in Sketchbook Designer based on a photo and Reusing it in AutoCAD



In this section you will learn the following:

- How to send a photo from AutoCAD's model space into Sketchbook Designer
- Some fundamentals for Vector layer creation in Sketchbook Designer
- Some fundamentals of sketching and combining curves in Sketchbook Designer
- Replication and editing of curves back in AutoCAD

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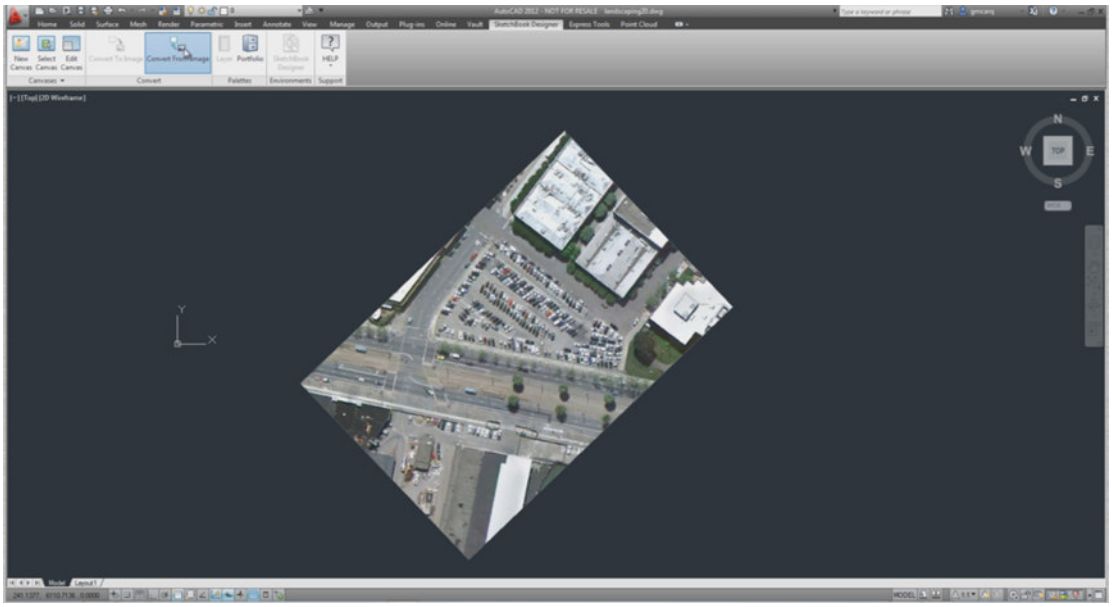
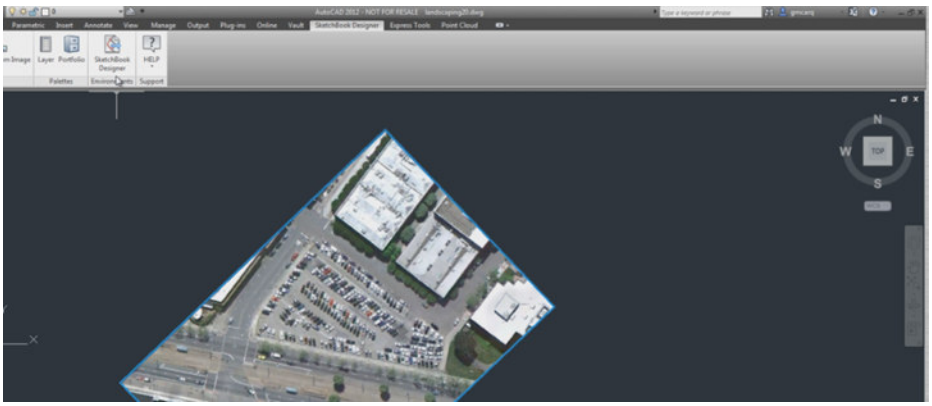
1. Insert an aerial photograph in AutoCAD using Attach. Scale the photo (if necessary) to the right size. If you have never done this, you may want to draw a line in the photo of an element with a known size. Then draw a line along the same direction with the real size. Then scale the photo with the help of the current and desired size of the line using Scale with Reference.

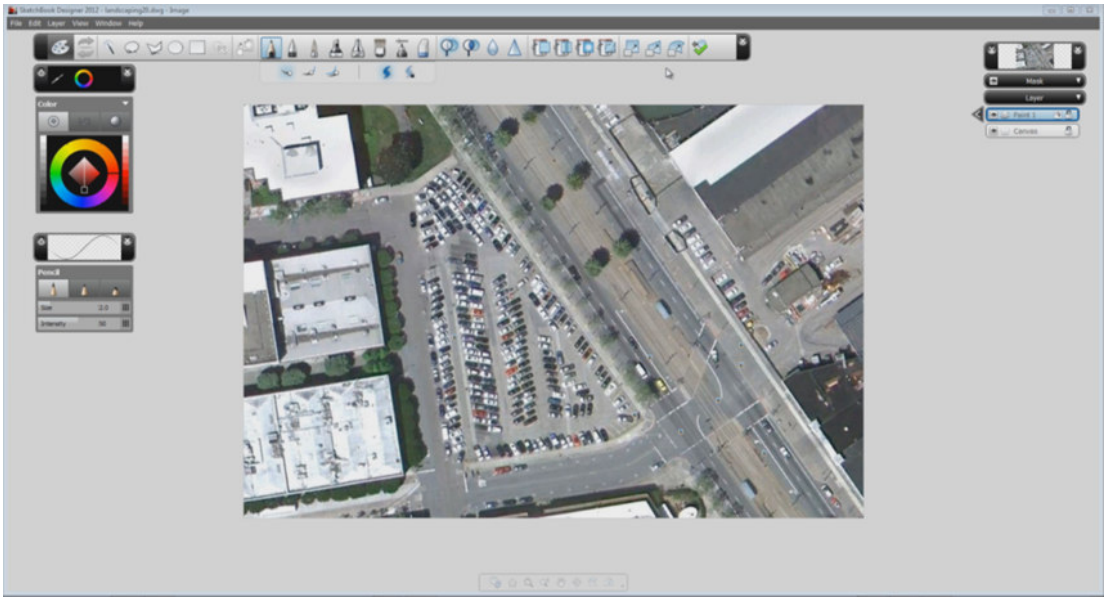
2. Go to the Sketchbook Designer tab in the Ribbon, and click on Convert to Image. Select the photo. You will notice that once you click on the image, it has a blue outline. This means that the image is now a canvas. You can only send a canvas into Sketchbook Designer, so this step is extremely important.



3. Now it's time to send to Sketchbook Designer using the button in the Ribbon. This is a one-click workflow, which will send any canvas defined in AutoCAD into Sketchbook Designer. AutoCAD will be blocked for editing while the system opens Sketchbook Designer and you do the work there.

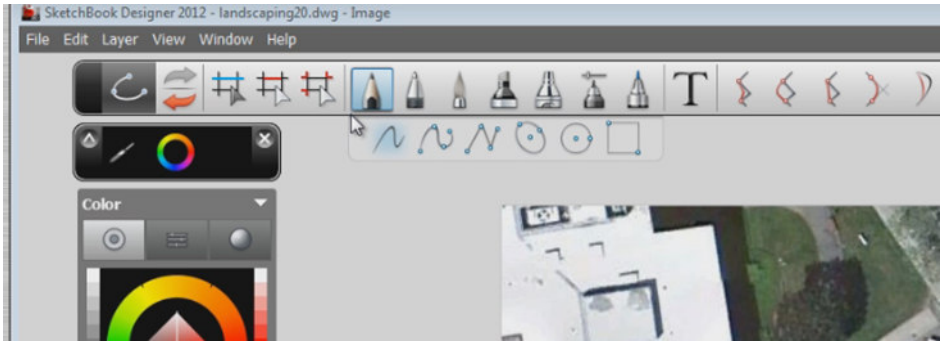


4. Once Sketchbook Designer opens, you will see the canvas you just exported.

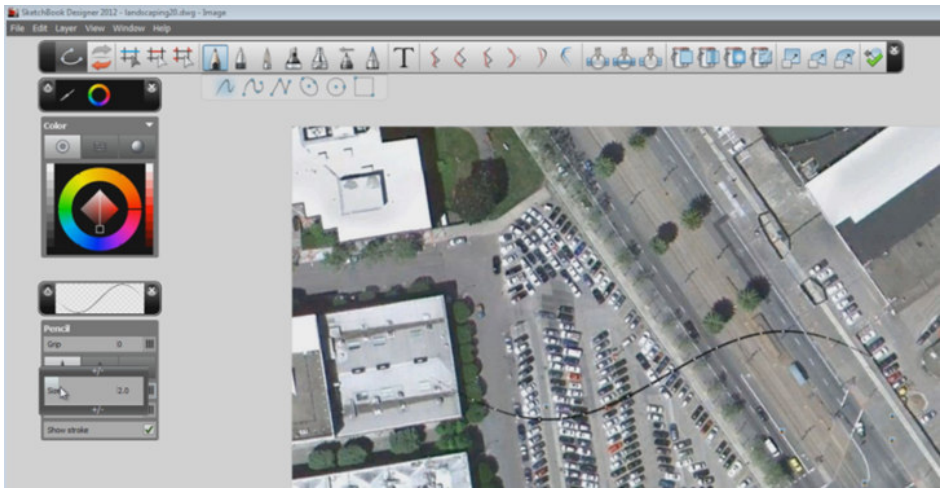


5. Let's do a long left-click on top of the layers, and we'll get a Marking menu with different options. We now need to create a vector layer, so we'll select New Vector Layer. Once you know the location of the commands, you'll simply do a stroke with your stylus or mouse and you'll get the desired command.

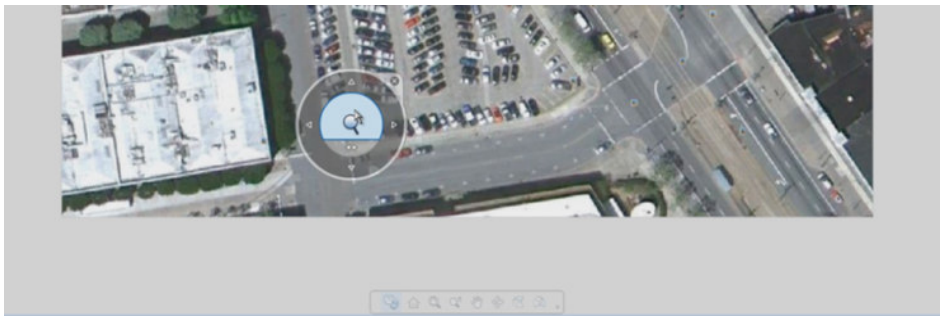
6. Let's click on the vector layer and make it current (it will highlight in blue). Now we'll select a pencil for sketching.



7. You can modify size and intensity, and get a preview in the middle of the screen. This can be valuable, since you have direct feedback with a similar stroke to the one you will be able to do.

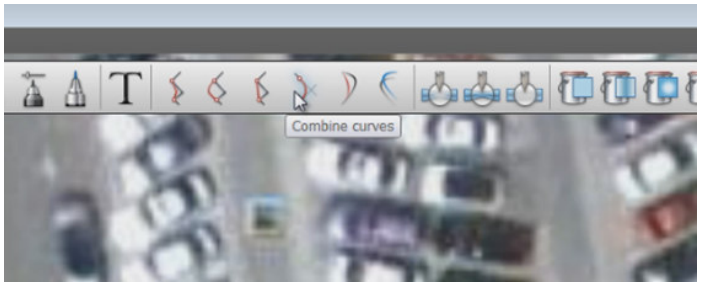


8. Let's zoom into the photo. Zooming and panning in Sketchbook Designer can be done with the Navigation Bar on the bottom, or by pressing the spacebar and using the manipulator seen in the image below.



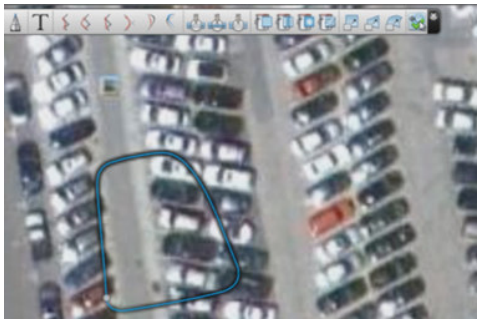
9. Create four strokes similar to the ones on the screen below.

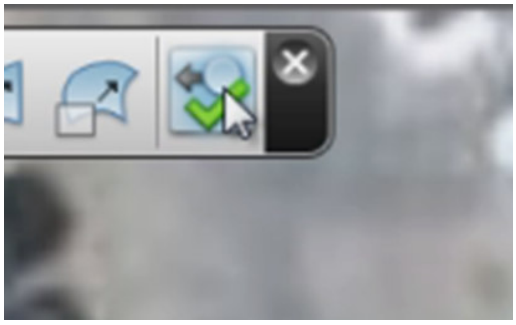
10. We'll now use Combine Curves as a way of creating a blend between the four vectors. Combine Curves will provide smooth continuity between the points of the curve you choose.



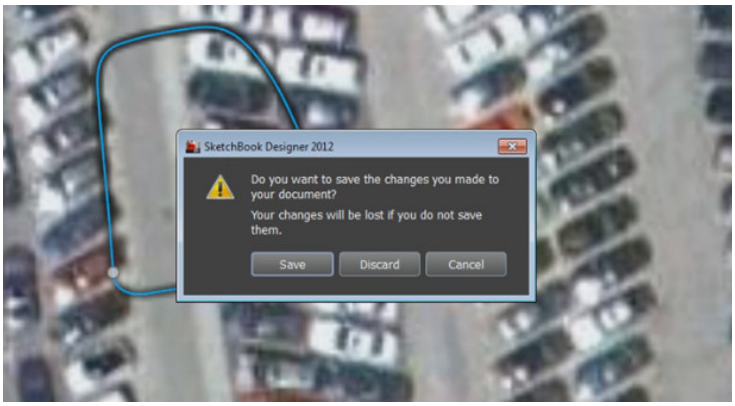
11. Once you preview the blend between the curves, please note that you need to click the button next to the operation in order to accept the edit.

12. It's time to send the canvas back to AutoCAD. There is a button called Return to AutoCAD.

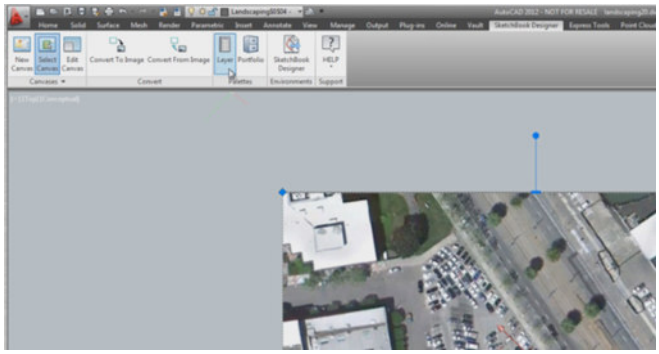




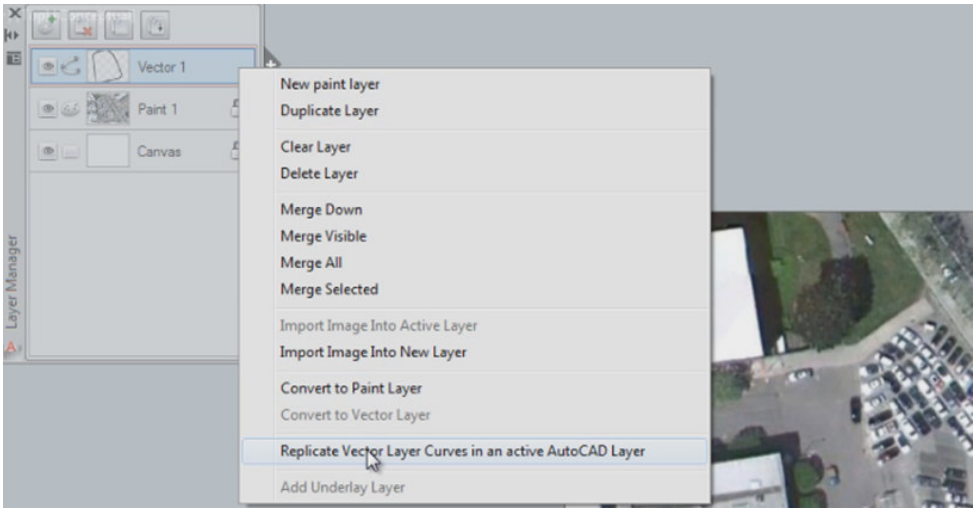
13. Once you click on Return to AutoCAD, you will be prompted to save what you just edited. Chose Save. You won't be prompted for a saving location. It's just for passing the information back to AutoCAD. Once you do so, Sketchbook Designer will close and AutoCAD will be back in fully editable mode.



14. Use Select Canvas in AutoCAD to select the canvas, so you can then have access to the Layer button in the Palettes panel.



15. Although you created vectors in Sketchbook Designer, AutoCAD is not yet aware of these. Once you see the Layer Manager palette (the Sketchbook layers), you will see a new layer called Vector, which we just created in Sketchbook Designer. If you right-click on this layer, you will get access to several options. We will now focus on the last one: Replicate Vector Layer Canvas in an Active AutoCAD Layer.



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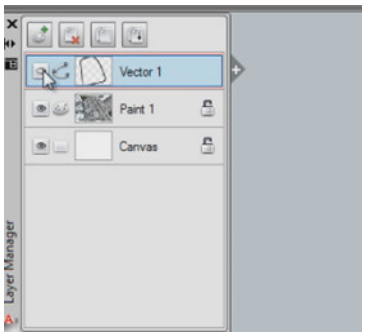
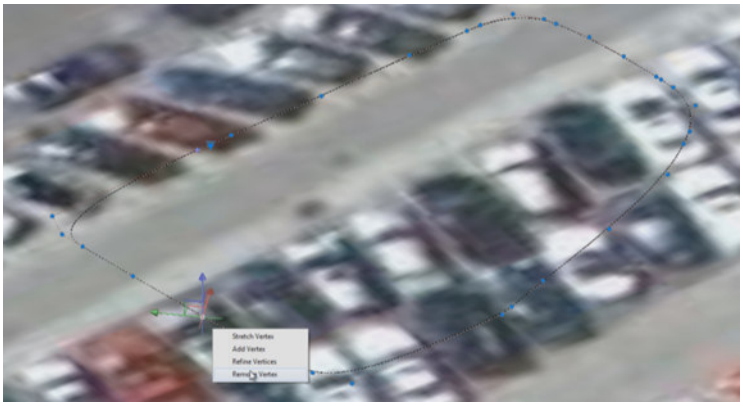
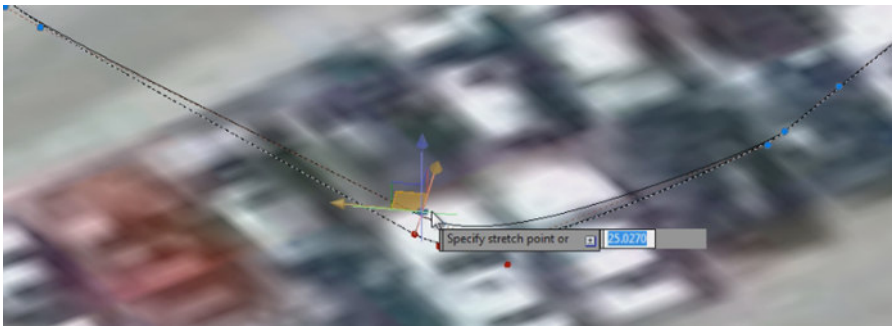
16. Now you can turn off the sketch by clicking on the eye next to Vector 1 layer. You will then see the actual AutoCAD curves created based on that stroke.



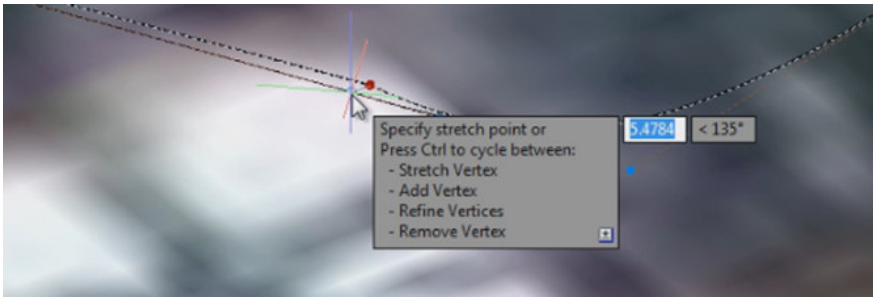
17. If you select the curve, you will notice it's just one spline. The reason for this is because we used Combine Curves in Sketchbook Designer. We can now edit the spline in AutoCAD if needed, using all the spline editing tools you're familiar with.



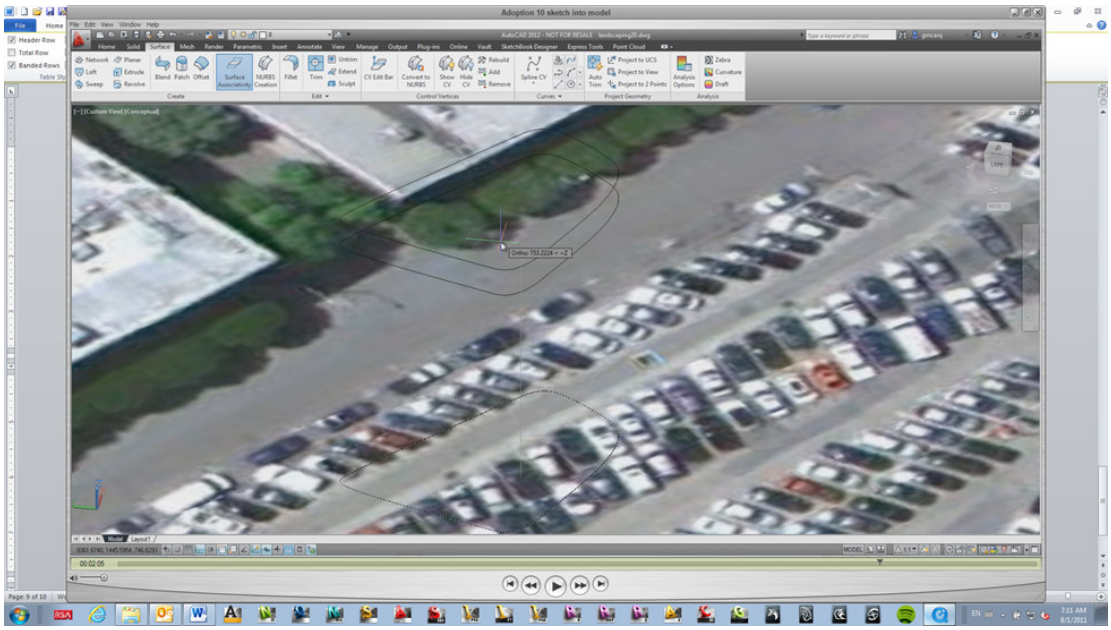
18. In this particular case, we use Shift to select three control vertices that we will move using the Gizmo. Once you have the three grips in red, simply hover the mouse over one of these grips, and you will see the Gizmo moving to that location. Now it's time to click and drag the Gizmo.



19. You may also want to stretch some points individually for some fine edits.

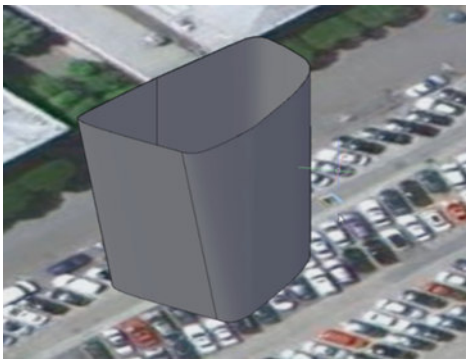


20. If you want to create a loft, you need to copy the curve along the Z axis. Use Copy, and make sure you are in Ortho mode, so you can move up.



21. Now you can edit the second curve, so the profiles are different. Our design intent here is to make the core of this building to grow in footprint as it rises, so we can stretch some control vertices. Use the same procedure as you did in step 18.

22. With both profiles ready, you can use Loft and select both profiles. You will first see a preview, which you need to accept by clicking Enter.



You can now try your own sketching over any aerial photograph, making sure you use the right scale and that your sketch is reusable. You can do all this using the one-click workflow between AutoCAD and Sketchbook Designer.

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