Building a Castle – Terrain and Basic Layout
Design and Production

These instructions will give techniques to make the terrain layout for a basic castle.

You can modify these directions if you wish to make a more customized castle. Important things to remember are to make objects into components and groups. Use GROUPS for sets of objects that won't be copied around much – the terrain, the wall layout, etc. Use COMPONENTS for sets of objects that are copied often so you only have to edit them once, for example the towers.

1. Open a new file and save it as "Firstname Lastname Castle.skp". You can alternatively download the file at http://aecidesign.com/castleterrain.skp and choose one of these pieces of terrain to use for your model. Delete the terrain you do not like from the file and move on to the castle building portion of this document.

2. First select the Freehand tool from the Large Toolset (it is the squiggly line. If you can't see the large toolsest go to View Menu > Tool Palettes > Large Toolset). Draw out a shape that you like. Then pull it up some distance – it doesn't have to be too far. You can make a steep hill, short hill, very flat terrain, etc. The size doesn't matter right now; we will check the size shortly and then if necessary we can scale the terrain as large as we need it to be.
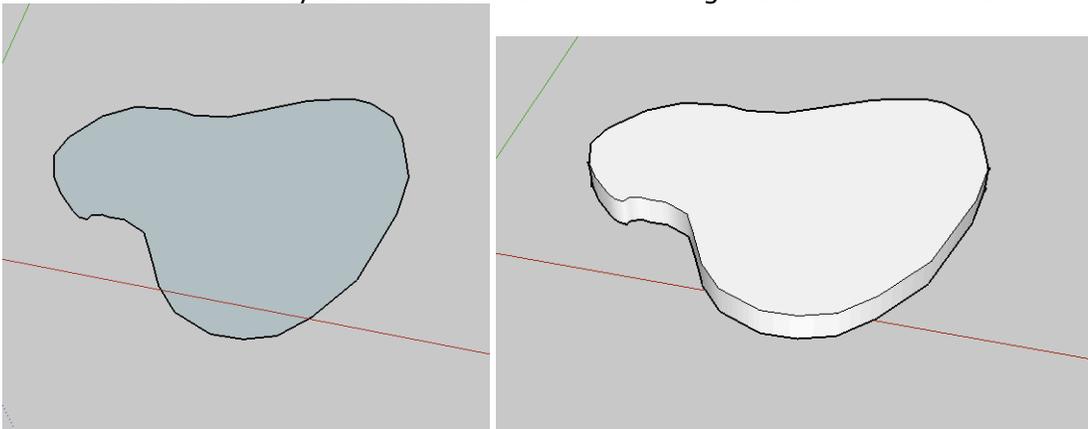

3. Use Scale on the top face, selecting one of the corner boxes to make it a Uniform Scale, and hold down option so the scale goes around the center of the object. Drag it in a little and you'll start to see the shape of a hill form.
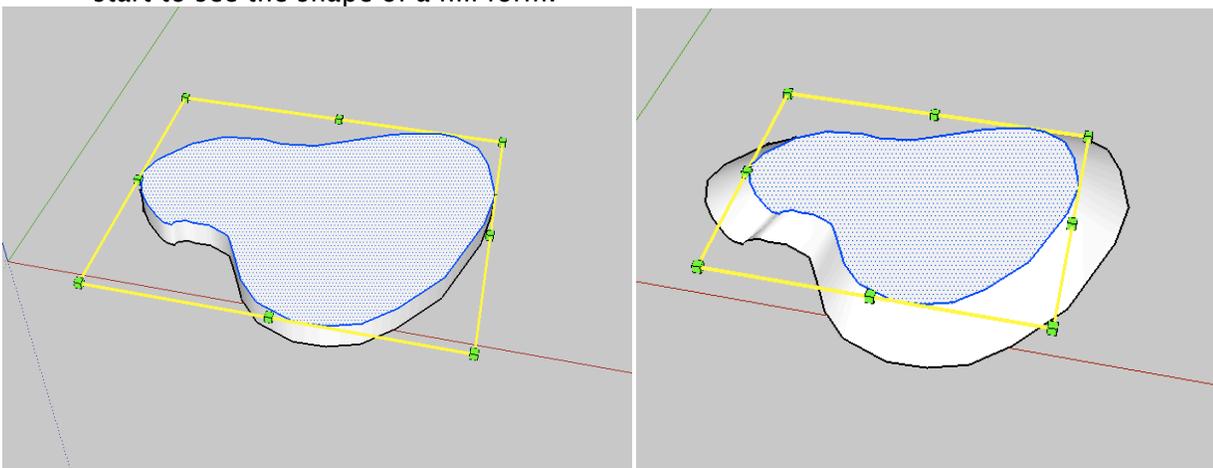
4. You can now pull this new top face upward and repeat to form a smooth hill shape. Each level can be short - the hill doesn't need to be very tall.
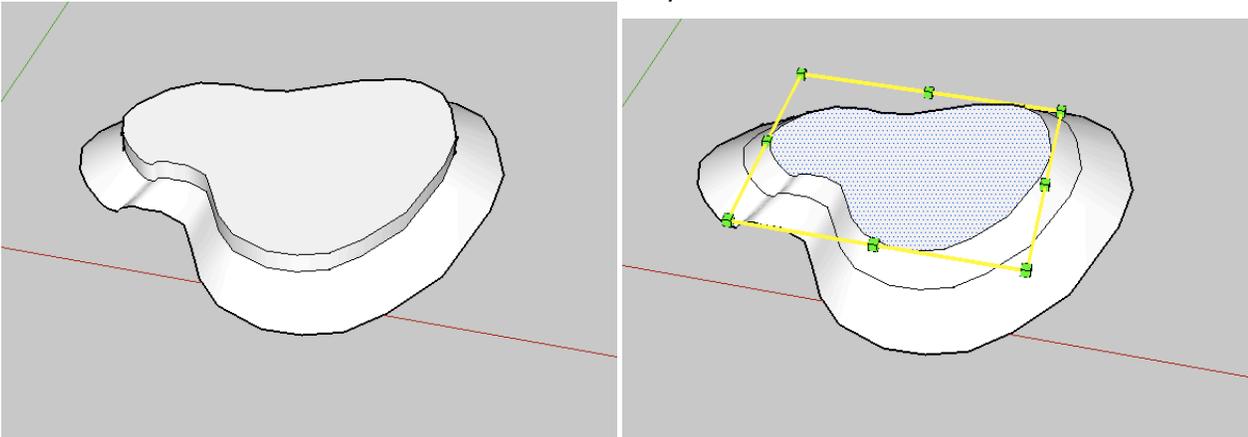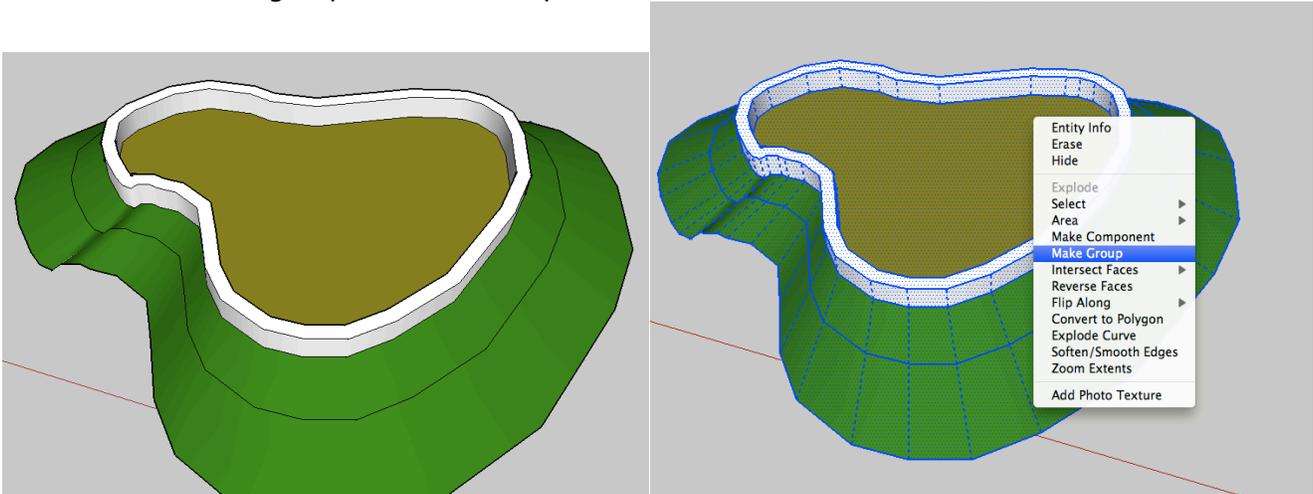

5. Using the tape measure, check the size of the flat area of your terrain. If it is around about 300' by 300' (doesn't have to be square), then you are probably large enough. You can select the whole object and use a corner box to scale it up or down accordingly. Make sure you aren't too much larger than about 500'-600' in either direction otherwise your castle will end up really large.
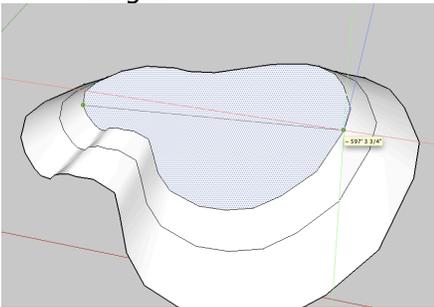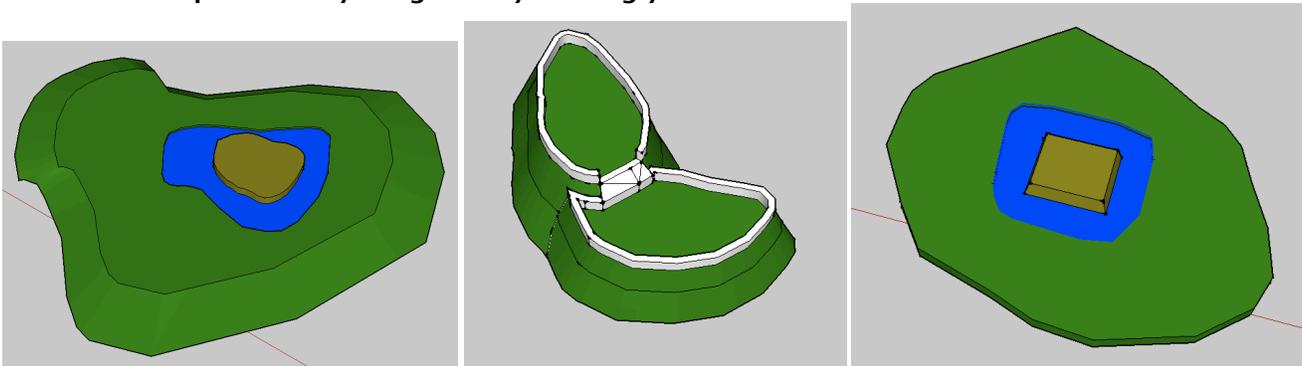

6. Once you have a good size, you can offset the top face inwards some distance to create outer walls, try 20' at first but you may want to make wider or thinner walls, but keep them between 10' and 30' wide. Depending on the shape you made you may have some parts of this offset line crossing each other, which you should take care of before pulling the walls up. Erase the crossed lines, then pull the walls up – between 30' and 50' is good.
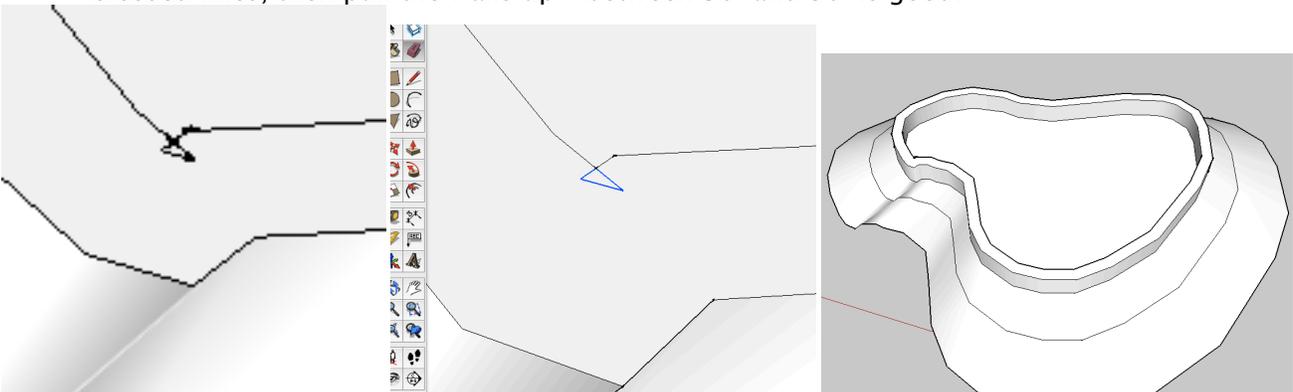
7. Now you can color in the terrain to look a little more realistic. After you do that, select the whole object and right click. On the menu that pops up, select "MAKE GROUP". This turns the terrain into a group (but not a component – remember the difference).

The right-click menu shows:

Entity Info
Erase
Hide

Explode
Select ▶
Area ▶
Make Component
Make Group
Intersect Faces ▶
Reverse Faces
Flip Along ▶
Convert to Polygon
Explode Curve
Soften/Smooth Edges
Zoom Extents

Add Photo Texture

8. Here are some other examples of terrain that work – these are from the castleterrain.skp which you can choose from – but try to make your own design! **You will get 20% extra credit on the terrain portion of your grade by making your own.**

Move on to http://aecidesign.com/buildingacastle1.pdf