Using Terrain Modifiers and Features

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The information in this article applies to:

PRO ARCH SUITE

QUESTION

How do I use terrain modifiers and features to create customized landscaping in my plan?

ANSWER

The Terrain Modifier and Terrain Feature tools can be used to create outdoor spaces for a wide variety of uses, from decorative plantings and improved privacy to areas for entertaining or playing games. In this article, we will use these tools to design a sloped golf hole, from tee to green.

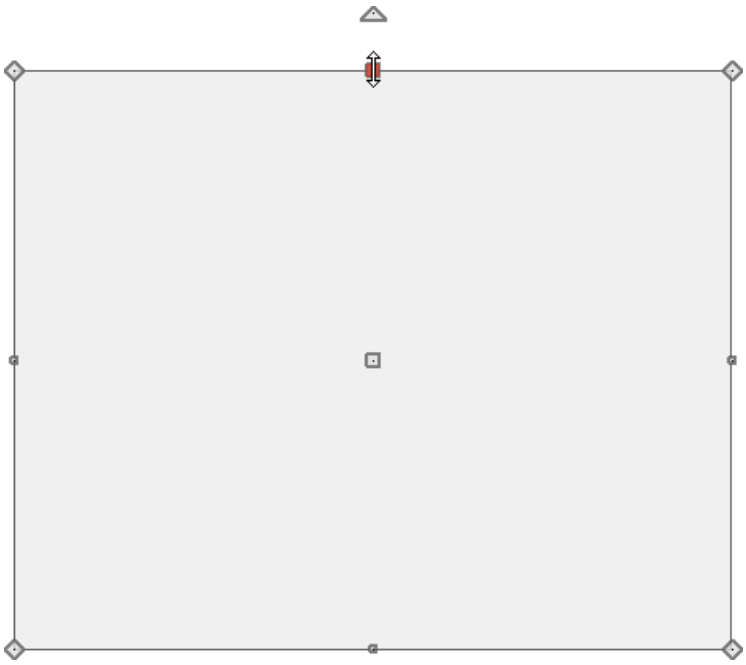
To create sloped terrain

A good starting point for any landscaping project is to first create the desired terrain contours. Once in place, level, raised, and lowered areas can be specified for plants, privacy, recreation, or other uses.

1. Select **File> New Plan** from the menu to open a new, blank plan, then select **Terrain> Create Terrain Perimeter** from the menu to create a Terrain Perimeter.

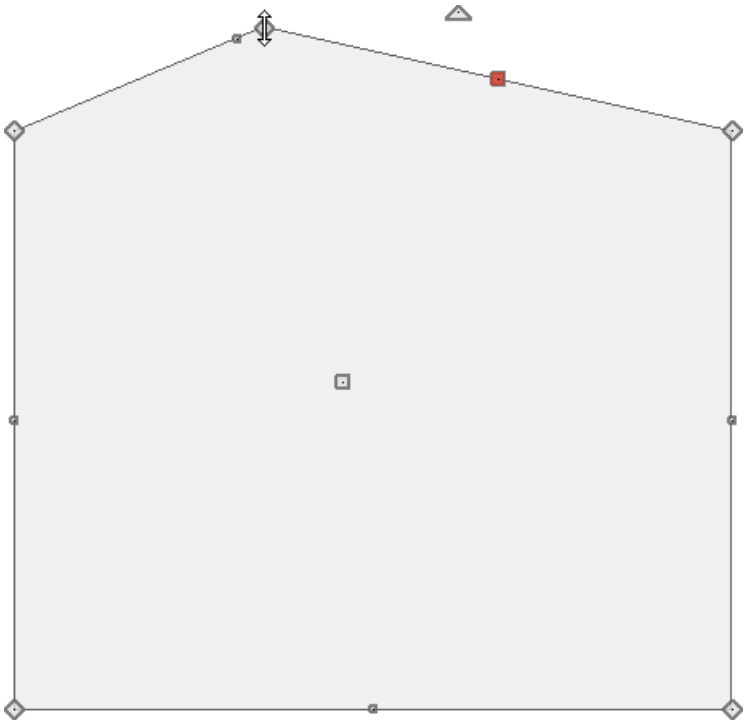
2. You can change the shape of the Terrain Perimeter by selecting it, then clicking and dragging any of the edit handles that display along its edges and at each corner.

   To move an edge, click on that edge to select it, then click the edit handle that displays at the point where you clicked.



3. If you would like to add additional edges to the Terrain Perimeter:

   - Click on an edge that you would like to break into two separate segments to select it.
   - Click the **Add Break** edit button.
   - Click along the selected edge to place a break, or new corner at that location.
   - You can now click and drag the new corner edit handle.



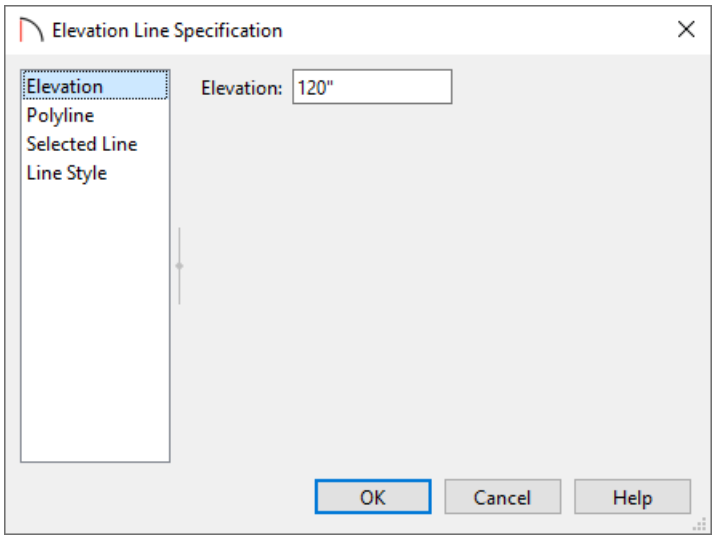
4. If you would like a perimeter edge to be curved, click on that edge and then click the**Change Line/Arc** edit button.
    - The radius of a curved edge can be adjusted by clicking and dragging the triangular edit handle that displays near where the line is clicked.
    - To change a curved edge back to a straight edge, select it and then click the **Change Line/Arc** edit button once more.

5. When the Terrain Perimeter is the desired shape and size, select **Terrain> Elevation Data> Elevation Line** from the menu, then click and drag in the drawing area to create your first elevation line.

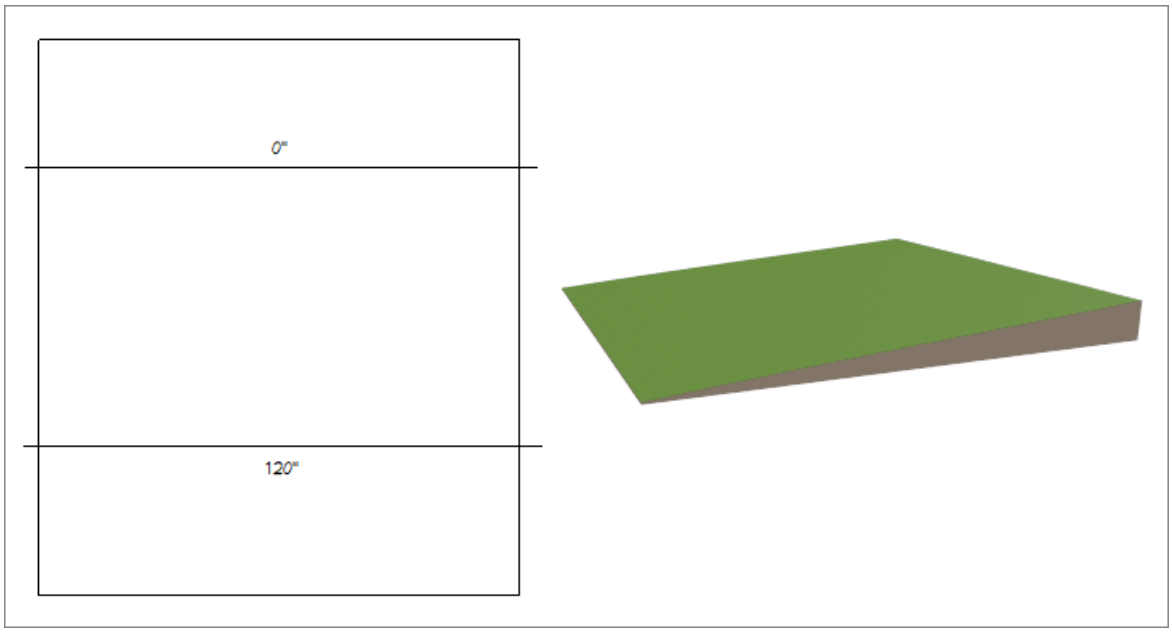
    > Only the portion of an elevation line drawn within the Terrain Perimeter will affect how your terrain is generated.

6. Once the elevation line is drawn, it can be moved and its length adjusted as needed by selecting and using the edit handles.

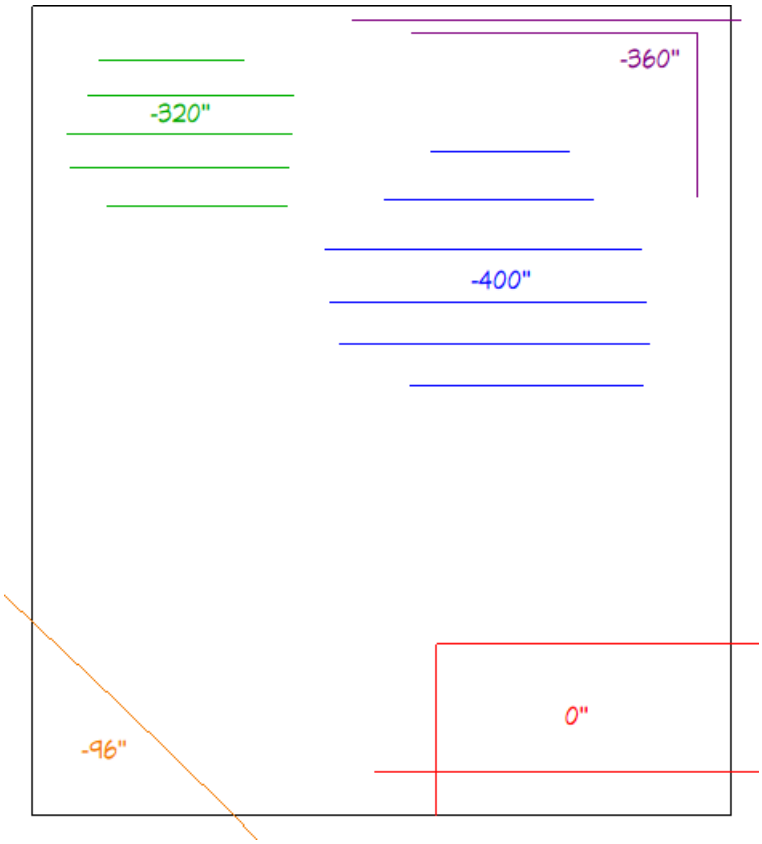
7. With the elevation line selected, click the **Open Object** edit button to open the **Elevation Line Specification** dialog and specify the desired **Elevation** on the ELEVATION panel.

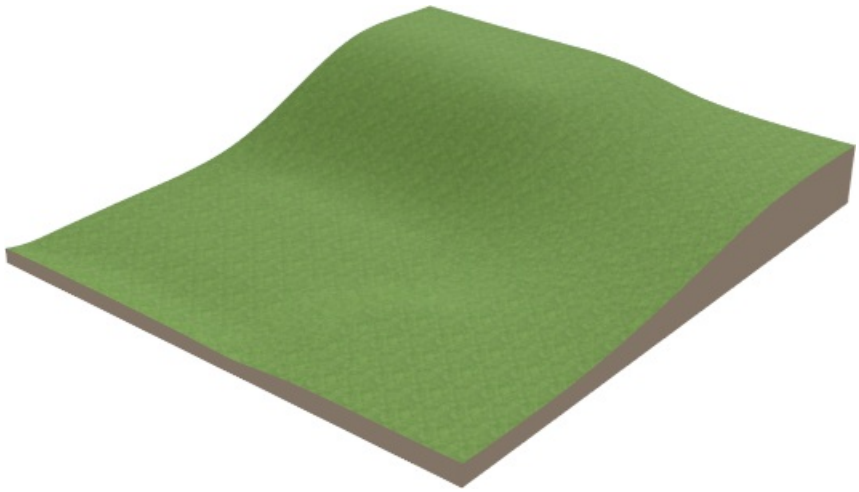


- To create a simple, continuous slope in your plan, at least two elevation lines with different Elevation values are needed, as shown in the example below:



- Additional elevation lines can be added to control slope, steepness, and direction.





When the overall contours of the terrain are in place, you can add Hills, Valleys and Flat, Raised and Lowered Regions. These terrain modifiers can be very helpful because they raise or lower only the terrain within their boundaries but have no effect on the terrain outside of them.

> Hills, Valleys, Raised and Lowered Regions are drawn and can be edited in much the same ways; however, Hills and Valleys differ from Terrain Regions in that their slopes end at points, while regions have flat areas at their tops and bottoms.

To create hills, valleys and terrain regions using modifiers

1. Under **Terrain> Modifier**, select the **Hill**, **Valley**, **Raised Region** or **Lowered Region** tool, then click and drag in your drawing area to draw a terrain object of the selected type at that location.

You can also create one of these objects by selecting the appropriate tool and simply clicking in the drawing area.

- Once created, Hills, Valleys, Raised and Lowered Regions can be edited using their edit handles that display along their edges, as well as using the **Add Break** edit tool.

- Hills, Valleys, Raised and Lowered Regions are closed splines, which means that their shapes are characterized by smoothly joined curves.

- The **Height** of each type of object can be specified in its specification dialog. This height is relative to the average elevation within the object's perimeter. Hills and Raised Regions typically use positive Height values while Valleys and Lowered Regions use negative values.

2. Select **Terrain> Elevation Data> Elevation Region** from the menu, then click and drag to draw a rectangular elevation region.

   - Elevation Regions are rectangular instead of spline-based, and can be edited much the way a Terrain Perimeter can, using the edit handles and edit toolbar buttons.

   - The program automatically assigns a single elevation value to an Elevation Region based on the average elevation at its location, however, the region can be opened to specification and this value can be altered manually.

   - Elevation Regions can be helpful for creating level areas for patios or playing outdoor games. In this example, flat regions are used to create tee boxes.

To create varying ground covers using terrain features

Terrain Features follow the contours of your terrain and allow you to apply different materials to specific areas of your plan. They can also be assigned heights relative to the terrain they are drawn on.

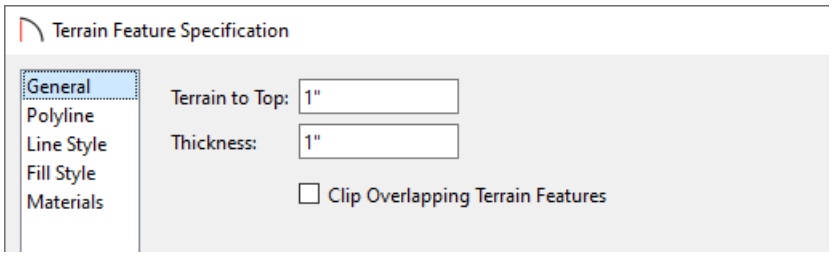
1. Select **Terrain> Feature> Rectangular Feature** from the menu, then click and drag in the drawing area to create a rectangular feature.

   - Other terrain features, such as driveways and sidewalks, garden beds, and ponds can also be created by clicking and dragging.

   - Garden beds and ponds are spline-based and can be created by clicking and dragging or by simply clicking in the drawing area.

2. Once created, terrain features can be edited the way a Terrain Perimeter or Elevation Region can using the edit handles or edit toolbar buttons.

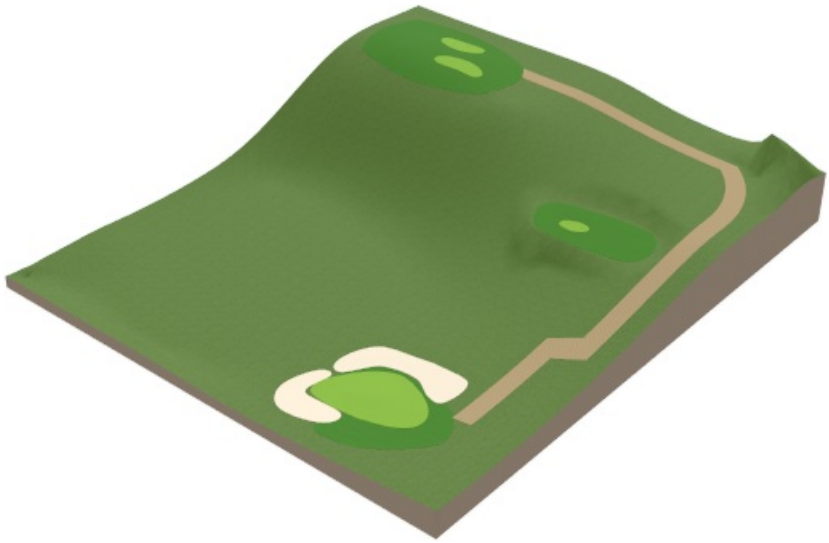
3. Terrain Features can have their **Terrain to Top** and **Thickness** specified on the GENERAL panel of the **Terrain Feature Specification** dialog.



4. Terrain Features can also be assigned various materials, such as gravel, concrete, or other ground cover.
    - In this example, the tee boxes are defined with different grass materials found in the Home Designer Core Catalogs.

      Starting in Home Designer 2024, separate grass regions are also available, which can be accessed by navigating to Terrain> Grass Region. These regions give you the ability to specify additional grass parameters, such as blade density, minimum and maximum heights, and more.

    - The bunkers are assigned a sand material to represent the light colored sand typically used on golf courses.
    - The path uses a sandstone material.



When your terrain is in place, you can complete your design by adding trees, shrubs and other plants from the Plants library, as well as furnishings, fixtures, or images of people, animals, or other objects from Bonus Catalogs.

Related Articles

- Adding a Pond and Stream to Your Terrain (/support/article/KB-00447/adding-a-pond-and-stream-to-your-terrain.html)
- Editing the Shape and Size of the Terrain Perimeter (/support/article/KB-00566/editing-the-shape-and-size-of-the-terrain-perimeter.html)
- Setting the Height of the Terrain (/support/article/KB-00322/setting-the-height-of-the-terrain.html)
- Troubleshooting Why the Terrain Tools are Greyed Out (/support/article/KB-00278/troubleshooting-why-the-terrain-tools-are-greyed-out.html)

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