# Instant Site Grader Nui Quick Start

To use the toolbar, open the Toobars dialog and check "Instant Site Grader Nui" (This tutorial uses architectural units, but metric or any other Sketchup units may be used))

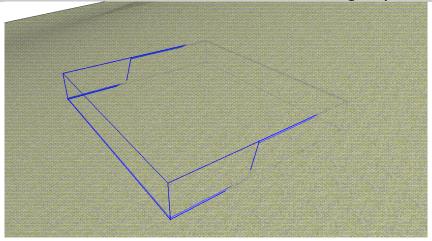
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🗹 İnstant Site Grader Nui 🛛 🥌				
Large Tool Set		Rename		
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The Instant Site Grader Nui tool bar:

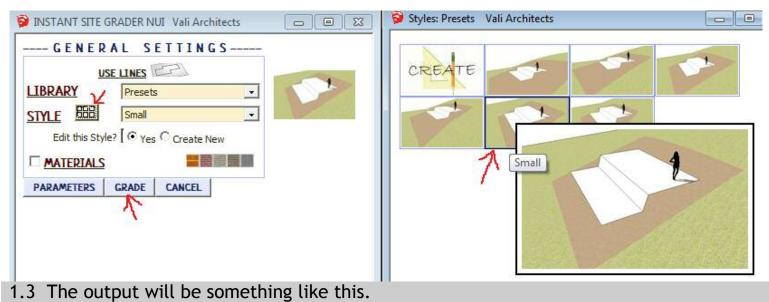


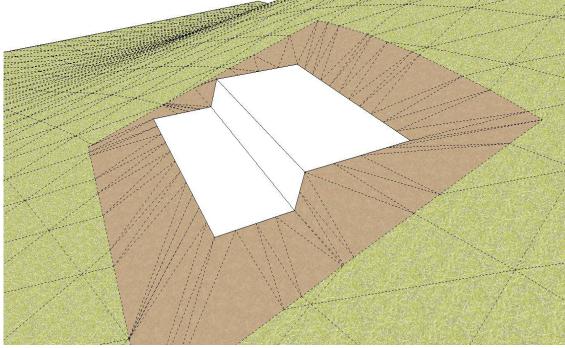
Lesson 1. Grade around Loop

1.1 Draw a terrain using the Sandbox tool or any other method. (*Terrains are simply a face or multiple connected faces with smoothed edges. The terrain must be active. Explode it or open it for editing if it is in a group.*) Create a group and draw a closed loop of lines or curves within the group. (*Try to make the loop continuous. Sloped lines are OK but not vertical. The script tries to fix small gaps and vertical lines, but it is best to avoid both*.) The loop and estimated size of the graded area must fit well within the extents of the terrain. Select the terrain and the group.



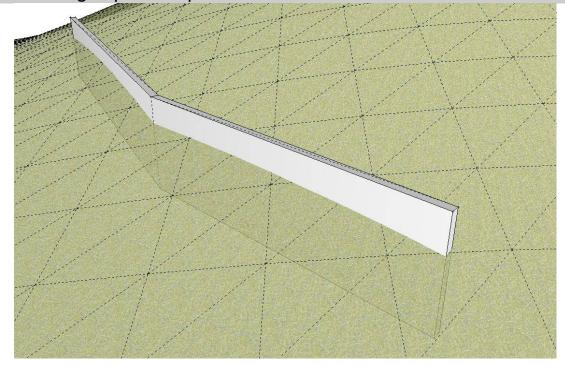
1.2 Choose "Plugins/ Vali Architects / Instant Site Grader Nui / Grade around Loop or Object" or on the Instant Site Grader Nui toolbar click the Symbol. Click the image menu button 🕮 to display preset style images and select the "Small" style. Click "Grade"



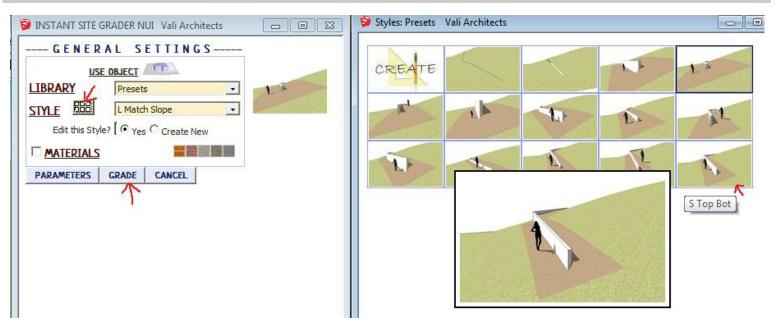


## Lesson 2. Grade around Object

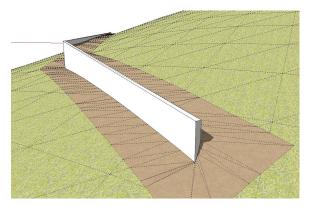
2.1 Draw a terrain using the Sandbox tool or any other method. Create a group or component including vertical faces that pass through the terrain and in a closed loop. (*I* made this method with my Instant Wall script in mind, so I just made a simple wall shape ) The object and estimated size of the graded area must fit well within the extents of the terrain. Select the terrain and the group or component.



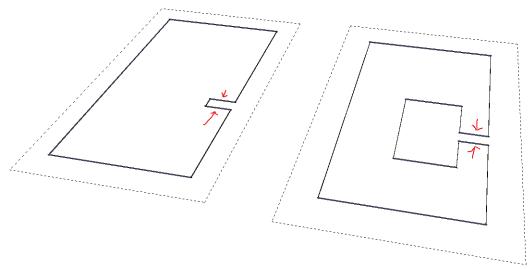
2.2 Choose "Plugins/ Vali Architects / Instant Site Grader Nui / Grade around Loop or Object" or on the Instant Site Grader Nui toolbar click the Symbol. Click the image menu button 🕮 to display preset style images and select the "S Top Bot" style. Click "Grade"



#### 2.3 The output will be something like this.



1 Avoid occlusions in the outline that are less than 2x shoulder width.



2. All of the geometry including shoulder must fit within the boundary of the terrain - If you are unsure, make your terrain larger.

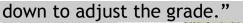
3. Input groups should be created in place and should not be copied, rotated, scaled, etc. Explode and regroup before running the script if unsure. (Exception is "Use Object" method wich can use component instances)

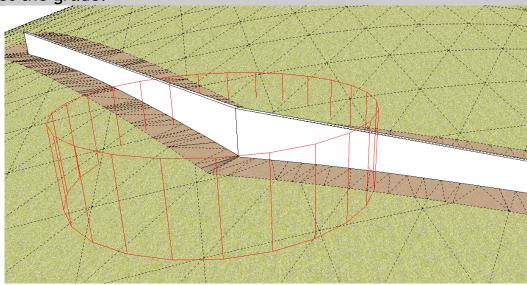
### Lesson 3. Adjust Terrain Edge Height

3.1 Using the model from lesson 2 above, Choose "Plugins/ Vali Architects / Instant Site Grader Nui / Adjust Terrain Edge Height" or on the Instant Site Grader Nui toolbar click

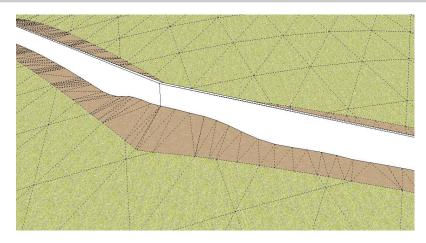
the 萫 symbol. Just click "OK" on the parameter screen.

Edit Parameters	<b>—</b> ×-			
Flatten Vertical Curves?no				
Max curve length	10'			
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3.3 The output will be something like this.

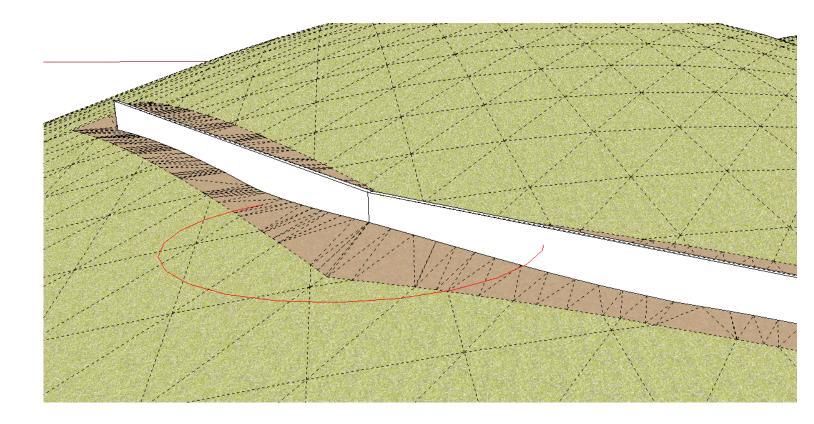


## Lesson 4. Smooth Terrain Edge

4.1 Using the model from lesson 2 above, Choose "Plugins/ Vali Architects / Instant Site Grader Nui / Smooth Terrain Edge" or on the Instant Site Grader Nui toolbar click the symbol. Just click "OK" on the parameter screen.

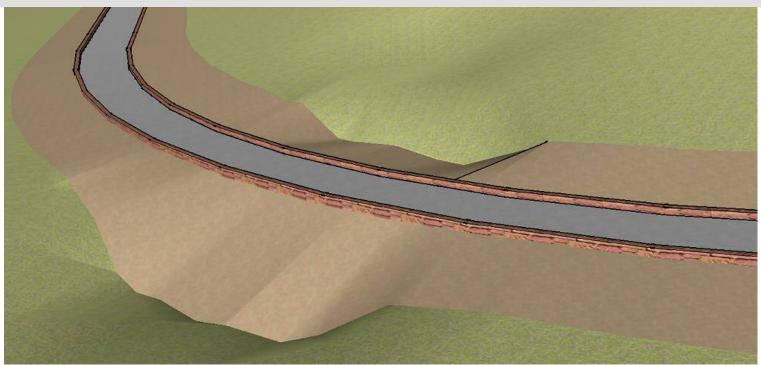
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Max curve length	10'	
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4.2 Locate the center of the circle on the side on one side of the wall and click the location. The output will be something like this.

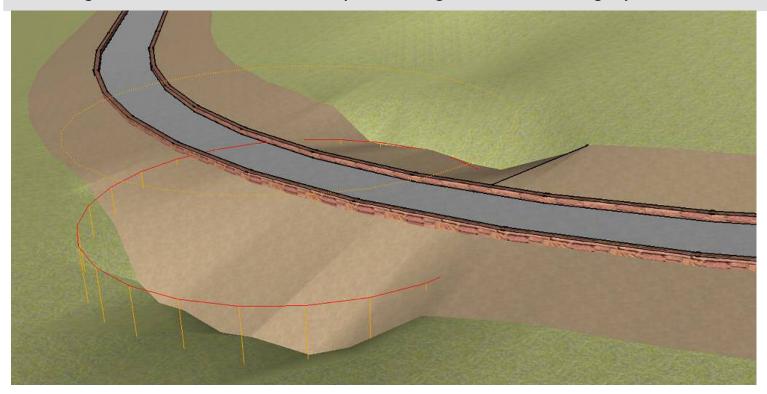


Lesson 5. Adjust Terrain Edge Height around Road I used Instant Road Nui, but a road made by any other method should be similar.

5.1 Here I made a simple road using Instant Road Nui. It runs over a gully where I want to make the curb act as a retaining wall, so I set the road parameter to extend the bottom of the curb below the terrain some distance.



5.2 Using the 📩 tool from lesson 3, I pulled the grade down at the gully.



5.3 The exposed curb now serves as a retaining wall.

