How to have different slope configurations for different slope tiers

Earthwork · https://mes100.com/docs/how-to-have-different-slope-configurations-for-different-slope-tiers/

A new feature in our latest version - ***Platform Slope Templates (PST)*** and ***Wall Slope Templates (WST) -*** provides users with unparalleled flexibility in configuring slopes. Now, the platforms or wall lines can be customized with different configurations for each tier, offering precise control and optimization for various project requirements.

Issues

You’re working on a road project where different slope ratios are needed for different tiers - for instance, you require a cut slope ratio of 1:1.80 for the bottom tiers with V-drain and 1:1.20 for the top tiers slope.

With these latest features, all you have to do is create customized templates under Platform Editor following the cut ratios.

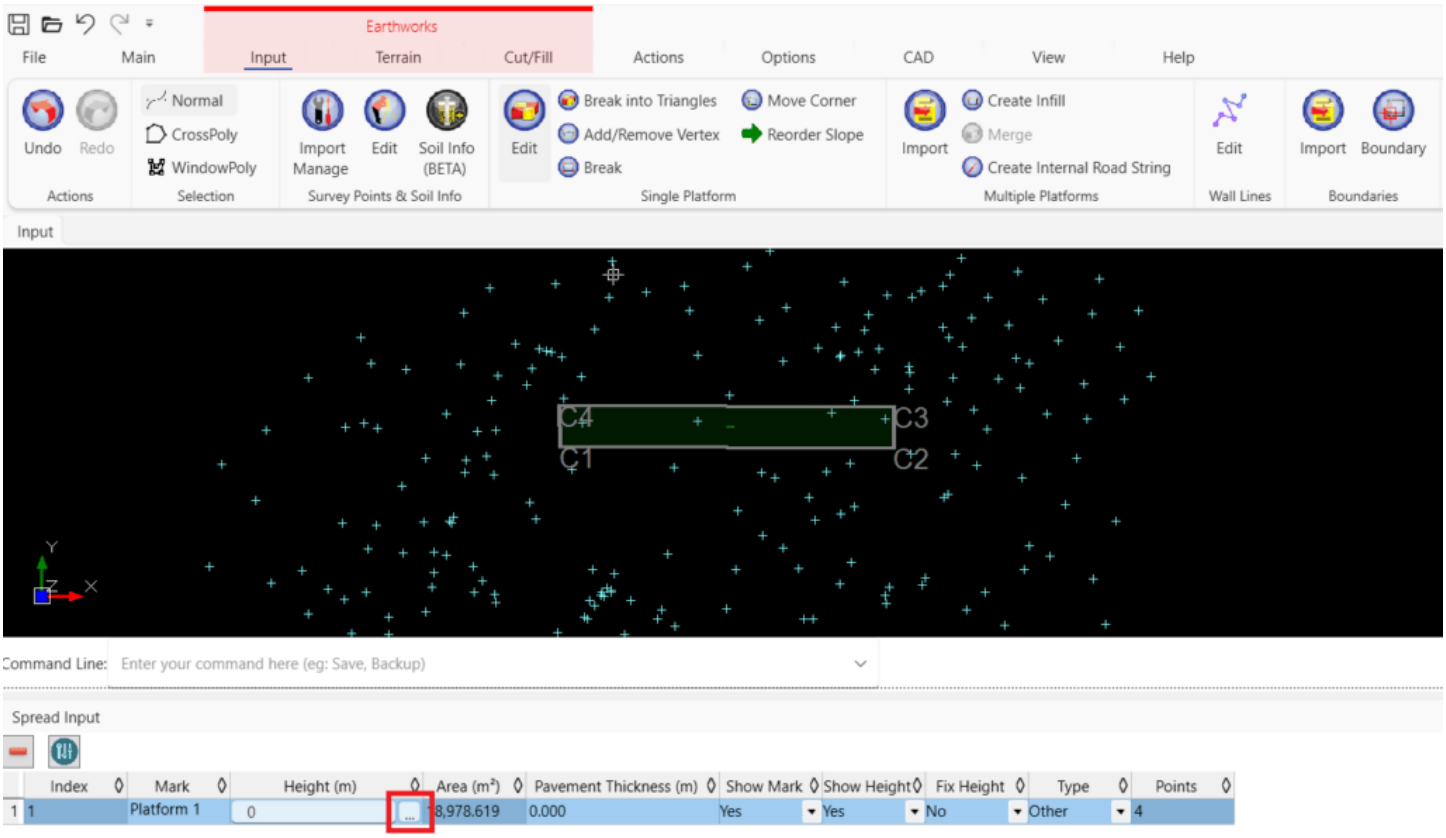
Steps for customizing slope configuration:

Go to Platform Editor

Input > Select Platform '*X*' > Double-click on the Platform '*X*' > The Platform Editor will appear

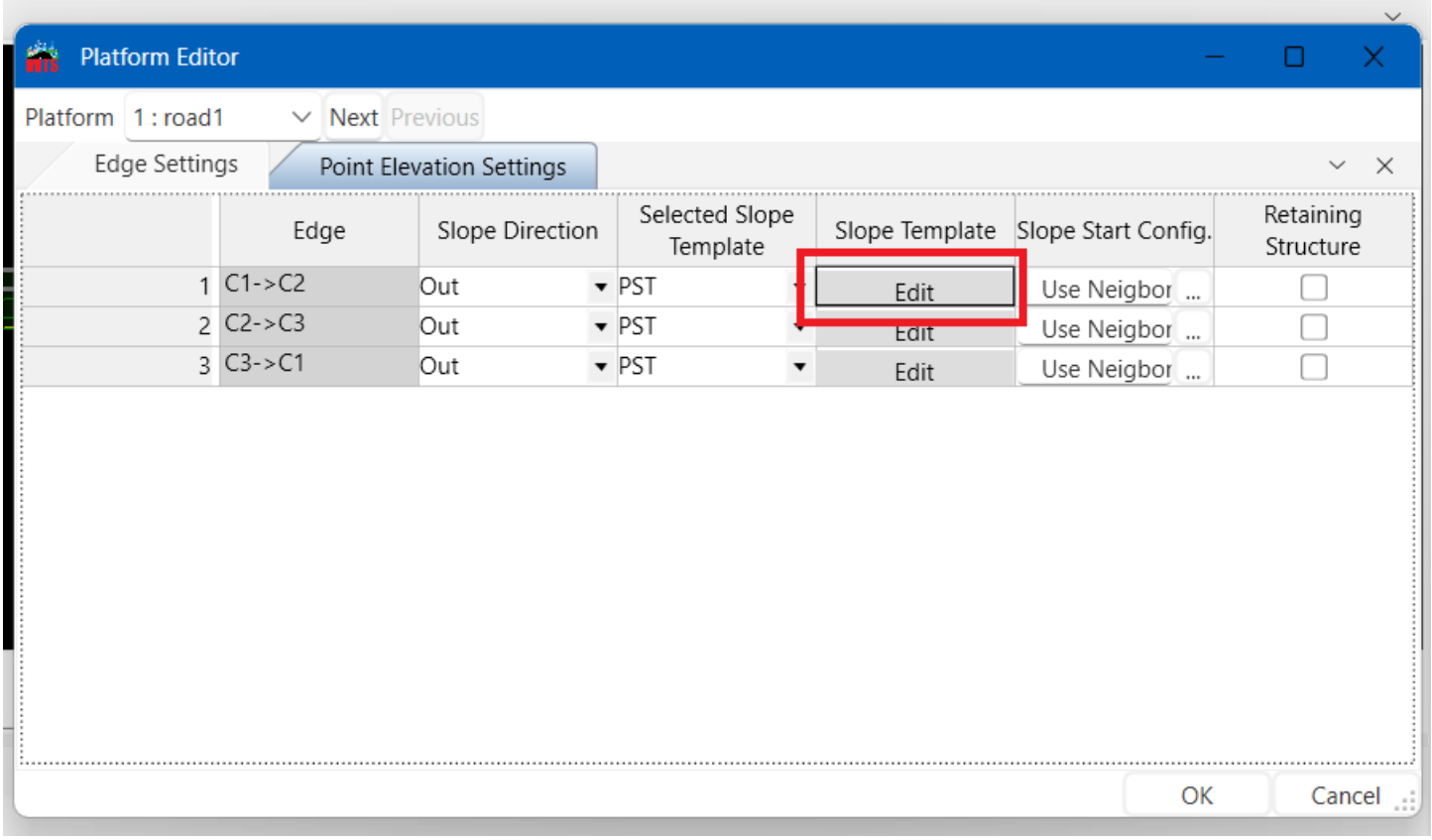
OR

Under Platform Spread Input > Scroll to Platform '*X*' > Click on the '...' button > The Platform Editor will appear



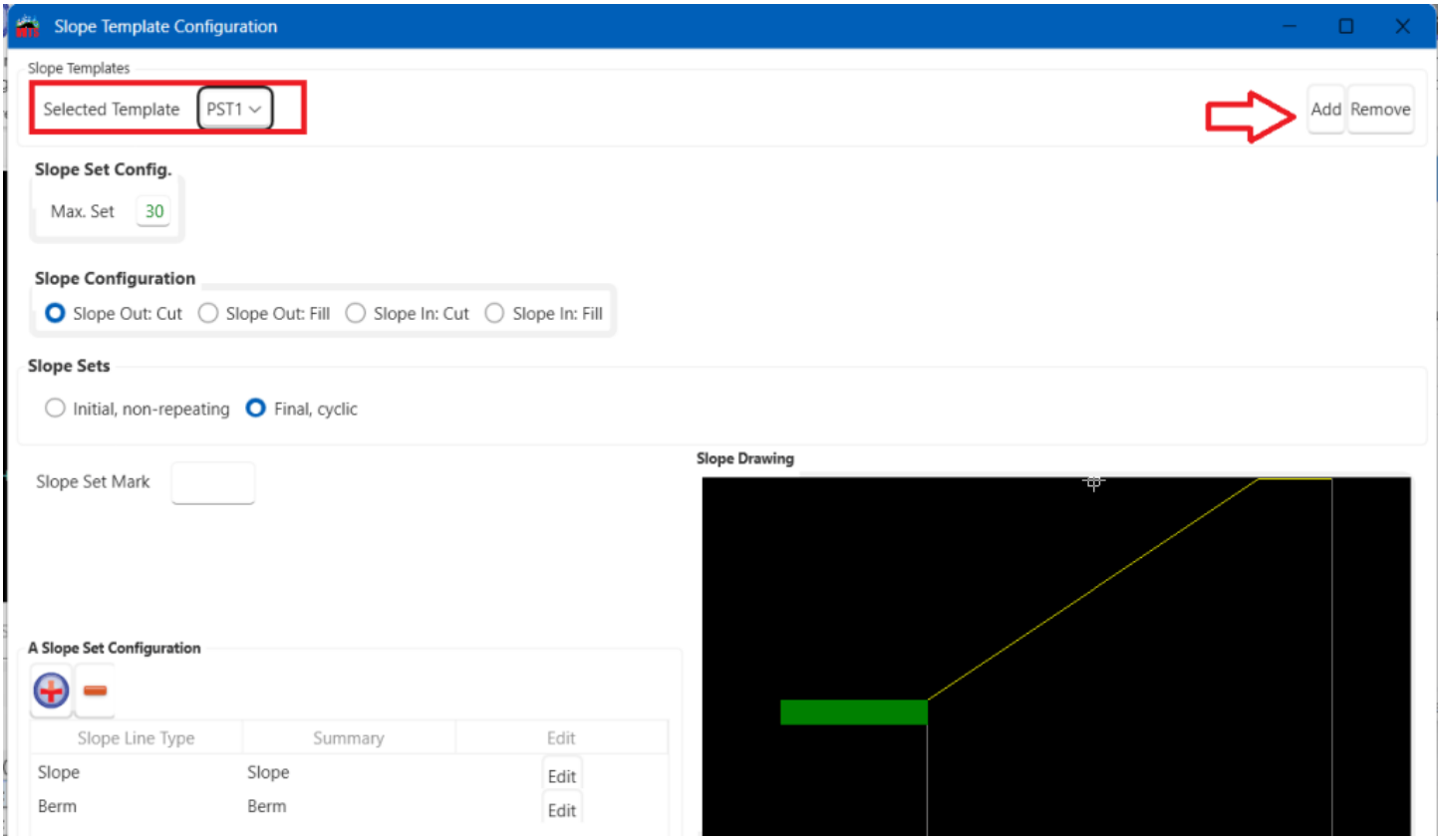
Create a new slope template

By default, the slope template will be PST as in the image below. To create a new slope template, click the 'Edit' button.



Slope Template Section

Once the Slope Template Configuration appears, go to the 'Slope Templates' section and click 'Add'. A new template will be automatically created by software named PST1.



Slope Configuration Section

Select the options based on the nature of your slopes in the project. Based on the sample project file, we will select *Slope Out: Cut*.

Slope Sets and Its Configuration

As for the slope sets, we will be using both, ***Initial, non-repeating*** for the bottom configuration and ***Final, cyclic*** for the top tier slopes.

To use which slope sets depends on the design of your slope and how you want the configuration to be, unique or repetitive. Further explanation of these options can be referred to here.

Initial, non-repeating

Click on Initial, non-repeating > Under the 'Initial Slope Sets' section, click 'Add'

- **Slope**

Go to Slope Line Type: Slope > Double-click Edit button > At the bottom section, there will data grid that can be edited > Change the ‘Slope Ratio, X/Z’ from 1.50 to 1.80

- **Berm**

Go to Slope Line Type: Berm > Double-click on Edit button > At the bottom section, there will data grid that can be edited > Change the ‘Plan Length’ from 1.50m to 2.00m

- **Drain**

To Add drain;

Click on ‘+’ sign > Select Drain > Click OK

To manipulate the drain shape or size;

Go to Slope Line Type: Berm > Double-click on Edit button > At the bottom section, select DataGrid Edit > Change the ‘Slope Angle From Plan’ for one of the sides to 135

Note: User may repeat the steps following the number of tiers that will have unique slope configurations based on your design

Embedded media: https://mes100.com/wp-content/uploads/2024/02/Initial-Non-repeating.mp4

Final, cyclic

For this slope set configuration, since it is repetitive, user will only need to set it for one single tier as per below.

- **Slope**

Go to Slope Line Type: Slope > Double-click Edit button > At the bottom section, there will data grid that can be edited > Change the ‘Slope Ratio, X/Z’ from 1.50 to 1.20

Embedded media: https://mes100.com/wp-content/uploads/2024/02/Final-Cyclic.mp4

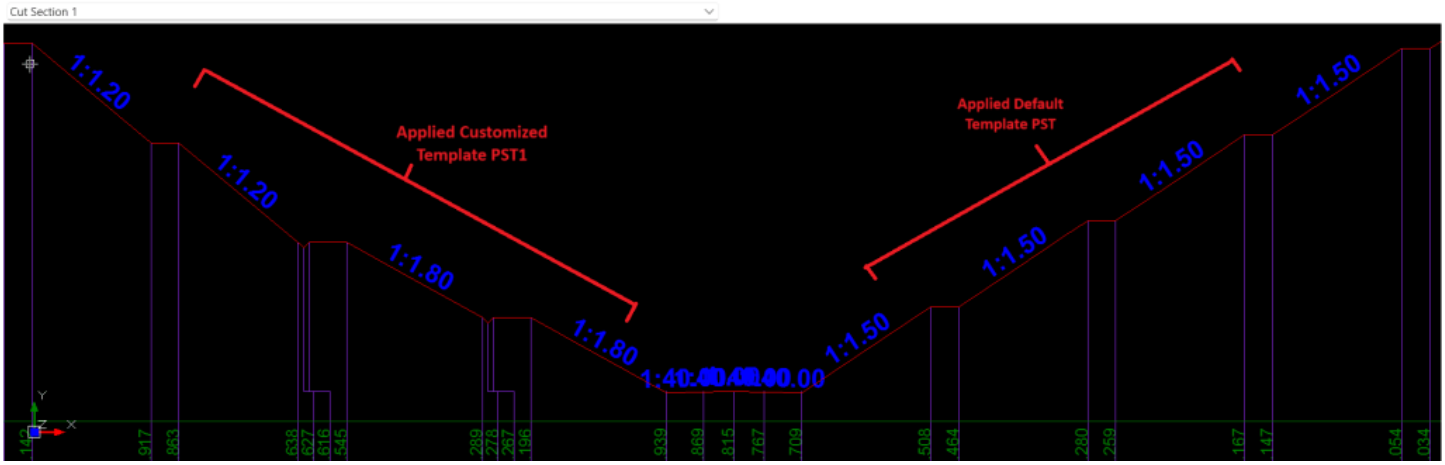
Applying Slope Templates to the Platforms

Once, the templates have been customized, user can simply close the Slope Template Configuration window and set the new templates for the edges under the Platform Editor.

Under the Platform Editor, change the ‘Selected Slope Template’ to PST1 > Click OK > Click Generate Slopes

Embedded media: https://mes100.com/wp-content/uploads/2024/02/Selected-template.mp4

Then, user may create one individual cut section across the platform and slopes generated to see the implementation visually. Shown below is the example in which one side of the edge has been applied with PST1 configurations and the opposite remained with the default PST configurations.



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I’m the Benevolent Dictator for Life for MiTS Software cum Editor of this website. Read more here.

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