Plateia

by CGS Labs

Create a Macro

Tutorial

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Create a Macro

Title: **Create a Macro**

Document date: 03. 12. 2021

Version: 2.0.

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INTRODUCTION

In this tutorial, you will learn how to create a macro, which helps you speed up the drawing of cross-sections. Based on the rules in your country, you can create a library of typical cross-sections, which you can then reuse in a new project.

In the beginning, the user must draw the alignment with sample lines and profile. If you don't know how to do this, see the Getting Started Tutorial. Once, you have all this ready in your drawing, you can continue with these instructions.

1. Draw cross-section view

At the beginning insert the Cross-section table view with the Draw CS View command.

1. Click on the Draw CS View icon.

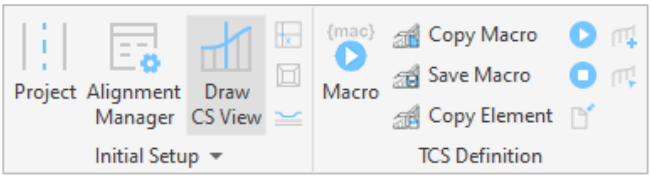
2. Choose *Plateia table* type, for source data use **Current drawing**, or select another drawing if you started to draw cross-section views in a new drawing.

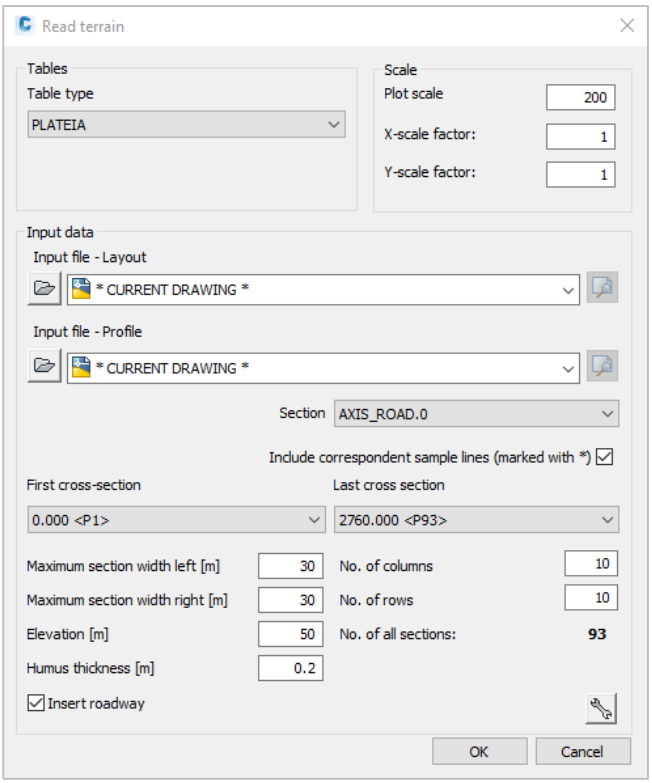
3. Define the horizontal and vertical scale.

4. Select the *first* and the *last cross-section* in selected sections/segments.

5. If the button *Insert roadway* is checked, the railway will be inserted automatically in the cross-sections.

6. Confirm with OK and define the location of Cross-sections view in the drawing.





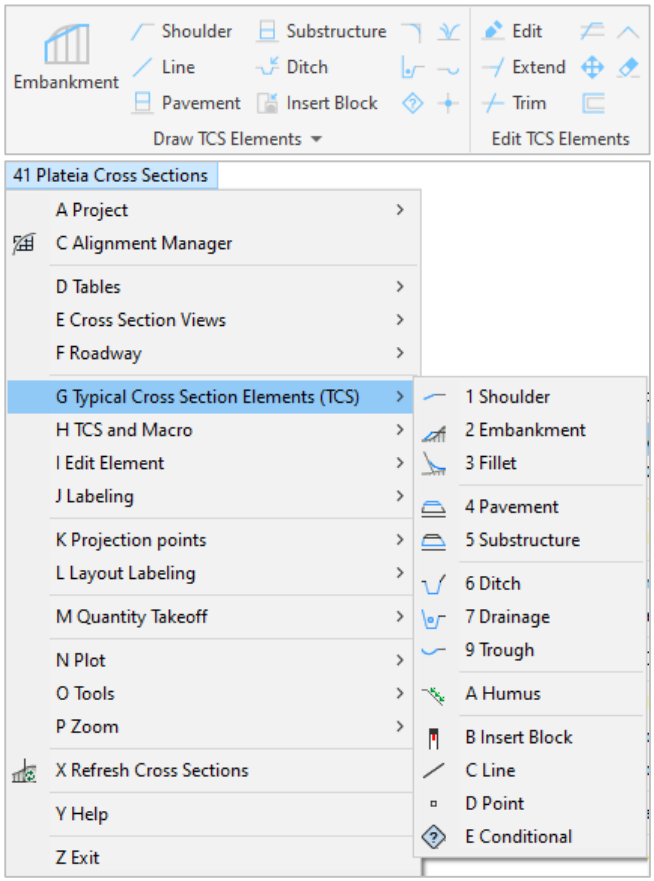
2. Prepare one cross-section

Construct only one roadway cross-section geometry with Draw TCS Elements commands.

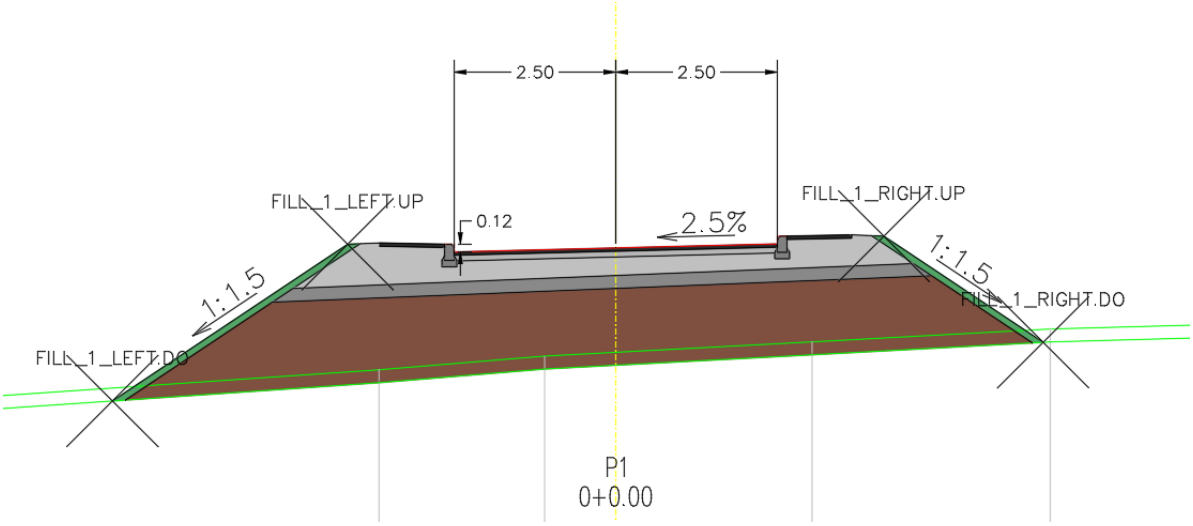
In addition to the geometry of the TCS elements, the macro can also remember:

- planimetry,
- blocks,
- labelling,
- projection points.

In the Plateia Cross Sections menu, there is a bunch of commands for designing roadway cross-section geometry.



An example of a prepared cross-section:

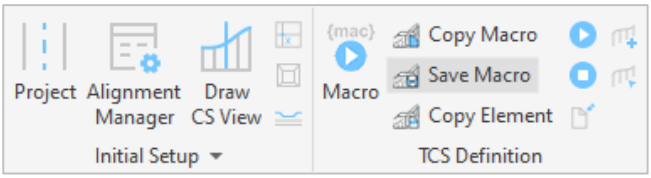


3. Save macro

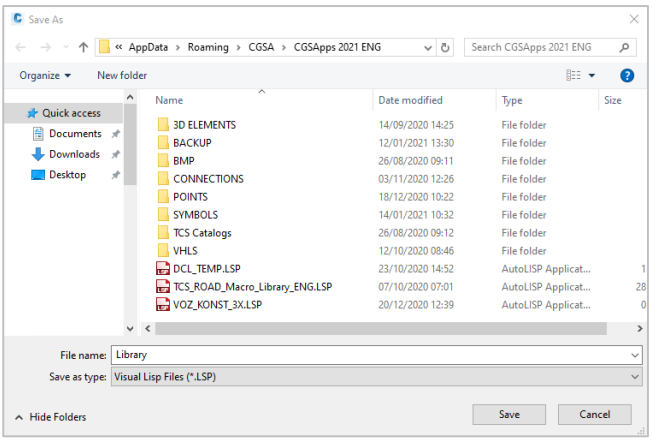
After you complete one cross-section you have to save it.

1. Run Save Macro (41H5).

2. In the drawing, click on the cross-section you prepared earlier.



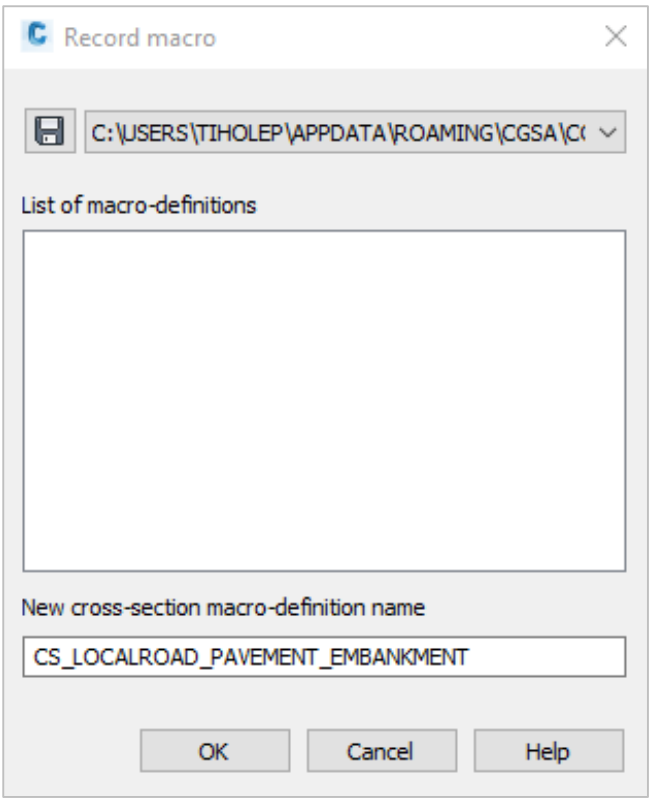
3. In the Record macro dialog click the button and select an existing LPS file or define a new one.



The list of macro-definitions includes a list of all macros that are recorded in the LSP file.

4. Type the name of the current macro in the »New cross-section macro - definition name« edit field.

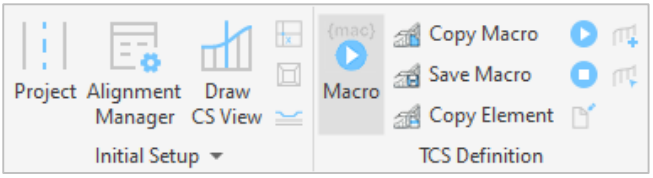
5. Confirm by pressing the OK button.



4. Run Macro

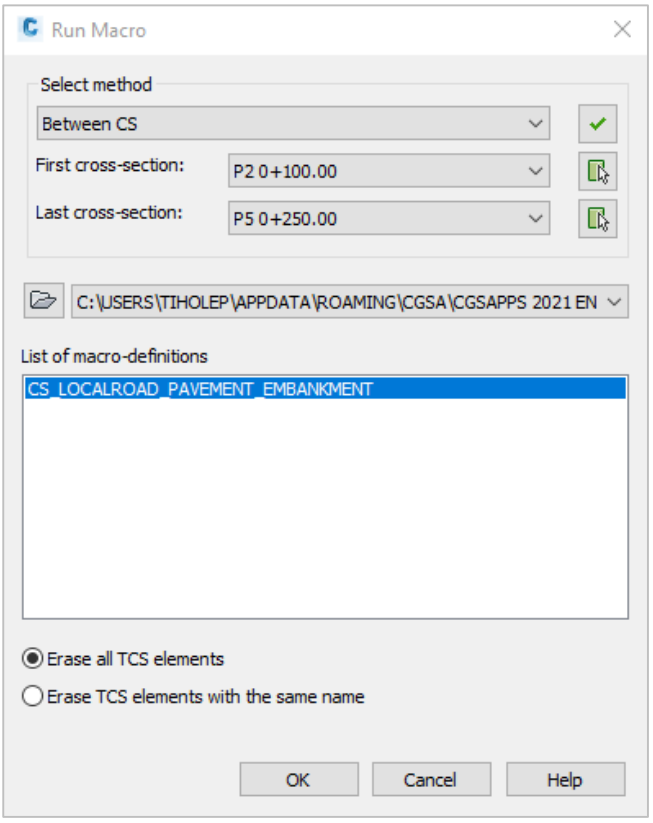
The created macro can now be played on the remaining cross-sections.

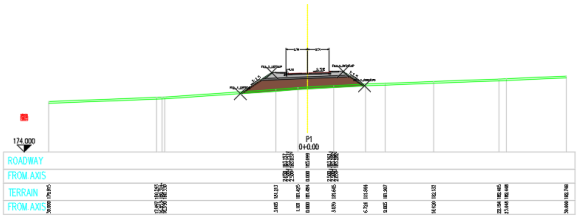
1. Run Macro (51H3).

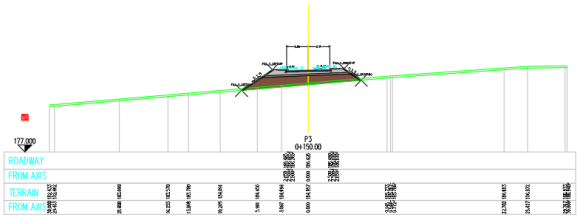


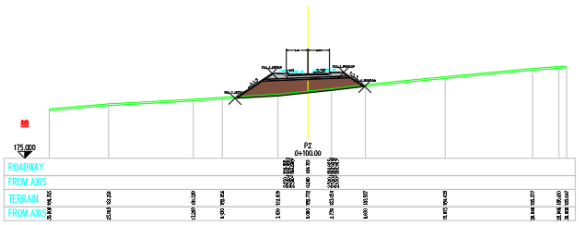
2. Select the area where the macro should run. In this case, from the second to the last cross-section.

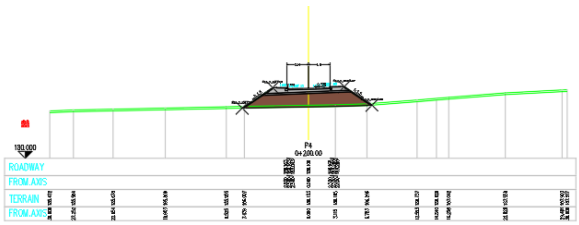
3. Confirm by pressing OK.











5. Recreate Macro into the new one

In this case, we are going to change the slope of the embankments. After that, we are going to save it as a new macro in the LSP file.

1. Run the Edit (41I8) command and select the embankment.

2. Change the slope of the embankment. In our case, we changed from 1:1.5 to 1:3.0.

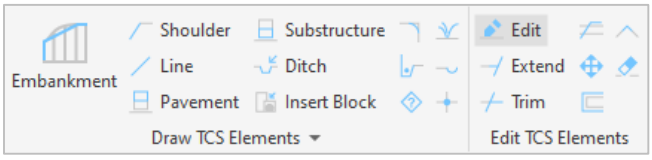
3. Do the same with the embankment on the other side.

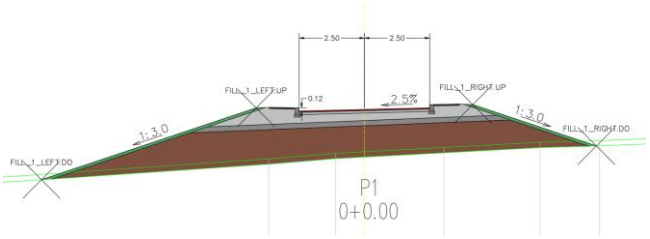
4. Run Save Macro (41H5).

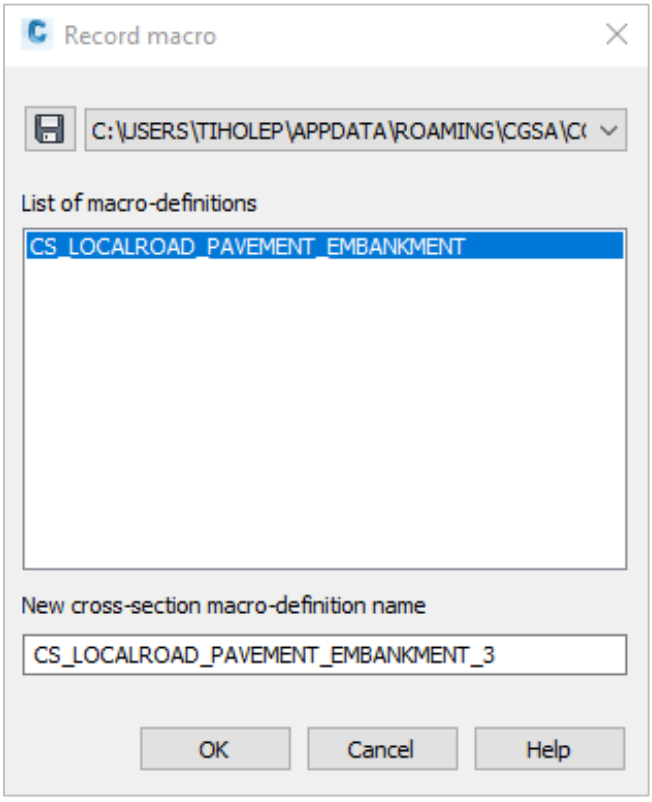
5. In the drawing, select the cross-section you edited.

6. Save a new macro with a different name than before.

7. Confirm by pressing the OK button.







6. Pre-prepared Macros

The Plateia software also offers a library of pre-defined macros. With the help of these macros, the user can quickly draw cross-sections. In addition, you can also modify, save and reuse these macros.

If you followed this tutorial you must first delete all existing TCS elements with the Erase Elements (41I6) command.

1. Run the Macro command.

2. Click on the tick button to select all the cross-sections.

3. Press on the folder button to find pre-prepared macros. They are saved in the following folder: **C:\Users**\%USERNAME%**\AppData\Roaming\CGSA**CGSApps202X%lang%

4. Select pre-prepared macro.

5. Confirm by pressing OK.