

# Road Design and Reconstruction

**Autodesk®**  
Preferred Industry Partner  
AutoCAD® Civil 3D®



# Plateia®

New features in Plateia 2010



“The new release of CGS software Plateia 2010, Aquaterra 2010, Ferrovia 2010 and CGS Civil 3D extensions 2010 represent a significant step forward comparing to the previous versions. It’s more than obvious that we invested a lot of effort in improving software functionality and user interface. Our customers will appreciate quick automatic updates of horizontal, vertical alignments and cross-sections. We made a big step forward in integration of CGS products with AutoCAD Civil 3D, where our customers are now able to utilize more benefits of Civil 3D platform. All these enhancements are the proof of our intensive investments into the development of all CGS plus products. An increasing demand for our products from all over the world encourages our team to deliver professional tools for roadway, railway and HH designers.”

Matjaž Šajn, President / CEO

A handwritten signature in blue ink, appearing to read 'Matjaz Sajin'.

Ljubljana, 17<sup>th</sup> June, 2009

# New Features in Plateia 2010

## Support for Autodesk 2010 platform

Aquaterra 2010 can be used on top of AutoCAD Civil 3D 2010, AutoCAD Map 3D 2010, AutoCAD 2010. Program code is compiled with Visual Studio 2008 to ensure compatibility with AutoCAD 2010 binaries.

## New user interface

Plateia 2010 comes with a new look. Most icons have been updated. Commands can now also be accessed through ribbon, best experienced when used on top of AutoCAD 2010, but also available on top of AutoCAD 2009. Ribbons are used in many applications and in general provide an efficient framework for fast user interaction. But the well established Plateia menus and toolbars remain a part of user interface.



## Conversion from AutoCAD Civil 3D to Plateia and vice versa



We have developed functions that convert AutoCAD Civil 3D objects to Plateia or vice versa. We have started with horizontal alignment and vertical alignment.

## License manager update



License manager now works on Vista 64bit platform. At the bottom of license manager you are now able to see when demo mode expires.

License Status: ● DEMO MODE (expires: 15. julij 2009)!

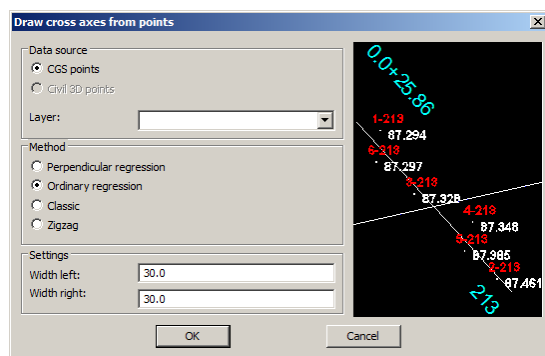
## Network diagnostic tool

We have developed new diagnostic tool that will help you find and solve possible problems at network installations.

## Create cross axes from surveyed points



With Plateia 2010 a new function is provided with several options. In addition to "classic" nearest points and zigzag methods two additional options are provided: linear regression and perpendicular regression. Axes can be further manually manipulated if necessary before the sections are created with the 21J1 command.

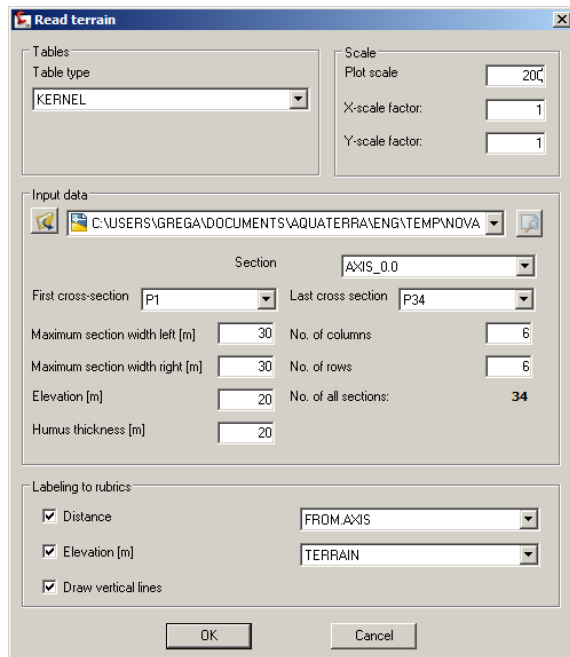


## Insert lines along axis

This command in Axes module now reads the data on lines along axes (banks, water levels etc.) directly from the same or another drawing with cross sections. Reading from files is still available.

## Insert terrain in longitudinal profiles

This command now reads the data from the draped (3D) longitudinal axis directly from the same or another drawing with cross sections. Reading from files is still available.



**Read terrain**

Tables  
Table type: KERNEL

Scale  
Plot scale: 200  
X-scale factor: 1  
Y-scale factor: 1

Input data  
C:\USERS\GREGA\DOCUMENTS\AQUATERRA\ENG\TEMP\NOVA  
Section: AXIS\_0.0  
First cross-section: P1  
Last cross section: P34  
Maximum section width left [m]: 30  
Maximum section width right [m]: 30  
Elevation [m]: 20  
Humus thickness [m]: 20  
No. of columns: 6  
No. of rows: 6  
No. of all sections: 34

Labeling to rubrics  
 Distance: FROM AXIS  
 Elevation [m]: TERRAIN  
 Draw vertical lines

OK Cancel

## Ditch saving and reading

Commands for saving and reading ditch vertical alignment (31R4 and 31R6) were removed. Ditch is now saved and read together with other border lines. Use commands Draw border lines (31V2) and Save border lines (31V3) to save and read ditch alignment.

## Insert terrain in cross sections

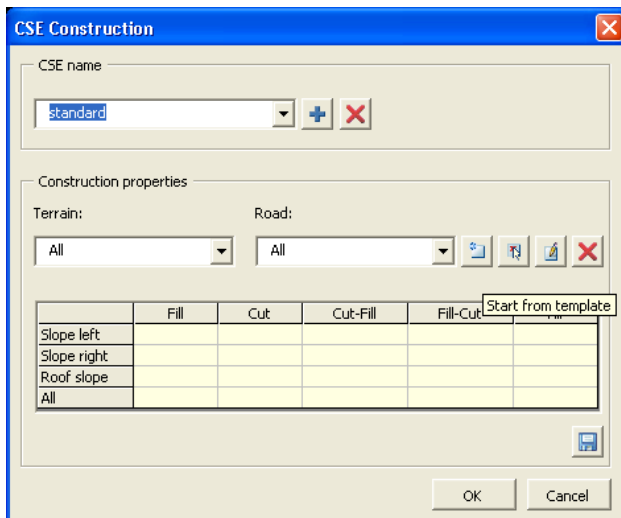
This command has been merged with the insert table command – so now one can make in one step what in previous versions required two steps. Also, the command now reads the data from the draped (3D) cross axes directly from the same or another drawing with cross sections. Reading from files is still available.

## Edit in cross sections

This is an important improvement in manipulating TCS elements. All cross sections elements created with the TCS elements group of commands have edit functionality. After selecting an element, user is able to change any parameter. For example user is able to change slope of embankment by clicking embankment element and entering new value. Additionally, all the relevant elements that are connected to the edited embankment will be automatically updated. This function is useful in cases where there are no global changes in the definition, e.g. roadway remains in cut and does not switch to fill.

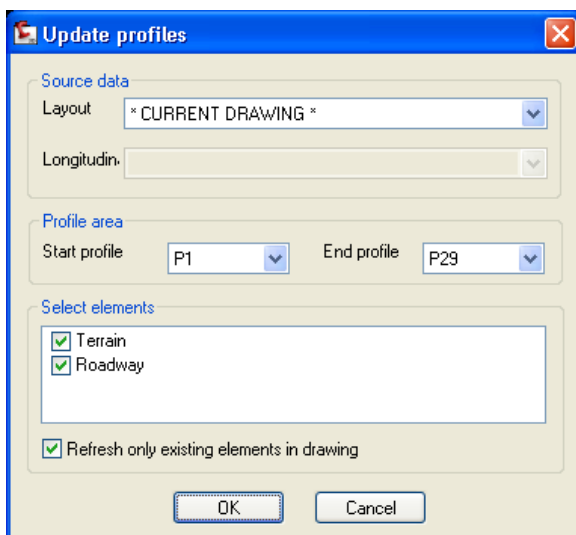
## Cross sections TCS generator

This feature is used where position of horizontal or vertical alignment changes dramatically. In this case TCS definition changes thoroughly. For example cross section that was previously in fill can now be in cut situation. For this kind of projects (preliminary projects) we have developed TCS generator. This enables user to prepare TCS for some basic situations – cut, fill, cut on left fill on right and cut on right fill on left. Function that applies prepared TCS definition is able to recognize which TCS definition should be applied in specific situation.

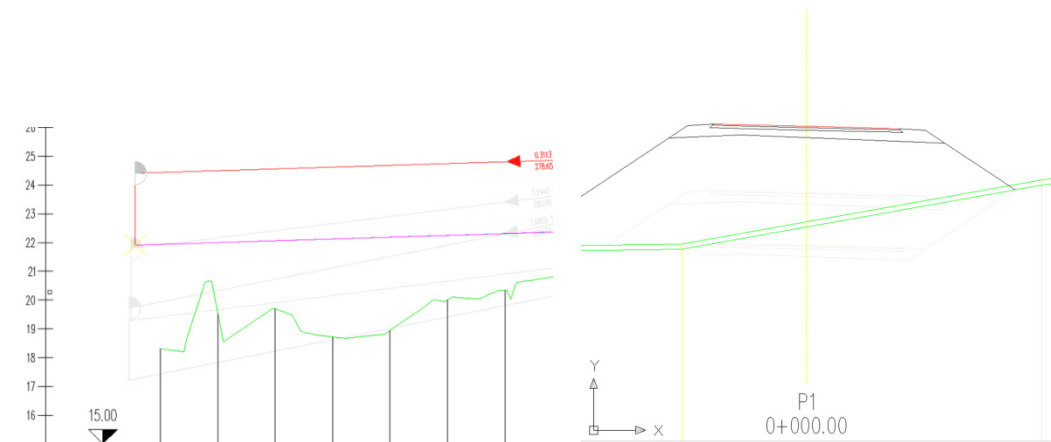


## Automatic updating of cross sections

Automatic updating of cross sections from plan view and longitudinal sections is now available. It is possible to update the terrain sections, vertical alignment, and lines along axis. Other relevant TCS elements that depend on the mentioned elements will also be updated if this option is selected. There are two ways of updating. In the first case only the existing elements will be updated (redrawn). In the second case all elements will be erased and all elements from the source will be drawn in cross sections.



Now if roadway or terrain is changed all existing TCS elements can be updated automatically.



## Roundabouts



New dynamic roundabouts are implemented. New roundabouts have possibility to edit all parameters of the roundabout. The Roundabout and roundabout approaches are connected to existing axes and are dynamically updated if any of those axes is changed. Function will also automatically create pavement markings, insert traffic signs and pedestrian crossings.

