

## Advanced Road Design and Large Models

Advanced Road Design is very efficient design software and can model large designs. By default, the software updates every string as you make changes in the Vertical Grading Editor, and updates all linework, surface/s and model/s to keep them synchronised.

For large models, this can cause a short delay in the Vertical Grading Editor window, after you have edited a design IP/PVI.

There are tools in the software to stop automatic updating, so your vertical design updates as you make your edits. Automatic updates can be suppressed just while you have a Vertical Grading Editor window open, or you can opt to disable automatic model and surface updates (requiring you to trigger the update when you are ready).

Try these speed improvement methods

### Speed Improvement 1 - Vertical Grading Editor

On the bottom left side of the Vertical Grading Editor is a small tick box, as follows

- **VGE Update Control** button – tick this off to disable automatic updating of models and linework as the VGE is edited.

When ticked, a cross will display. Whenever you make edits a synchronise button will also display to enable manual updates.

Upon save and exit from the VGE window the models and surfaces update

### Speed Improvement 2 - Active Drawing Settings

The Active Drawing Settings manages the behaviour of Advanced Road Design for your current project. If you establish some behavioural controls you would like to apply to new projects, please apply the changes to the Global Drawing Settings file.

In the Active Drawing Settings Active/Global Drawing Settings form > Miscellaneous tab > Speed Options) are the following Controls

- **Existing Surface Option**
  - o When set to 'Redo' the software will read the surface information when you flick between sections
  - o When you set to 'Save', the existing surface sections will be saved to file to speed up reading of the surface data
- **Advanced Settings**  
 Users now have the ability control when ARD loads and updates certain information. Options include:
  - o **Do Not Update Kerbs Automatically**
    - If this option is turned on, then ARD will NOT re-calculate kerb returns automatically. This will increase the speed of the software, however users will need to force an update of the kerb returns when changes are made at an intersection. Auto Kerbs or Update All Roads will achieve this
  - o **Load Road data ONLY when ARD command is run**
    - If this option is turned on, ARD will only load a road design project when an ARD command is used. This means that when the DWG is loaded, no ARD road linework or ARD surfaces will be initially displayed. This will only improve drawing opening speed
  - o **Only update when VGE/Data form closes**
    - If this option is turned on, then ARD will only update road data when the VGE or the Design Data Form is closed. This means that users can make design changes without the software automatically updating data upon each change.

