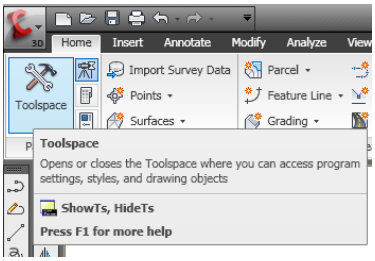
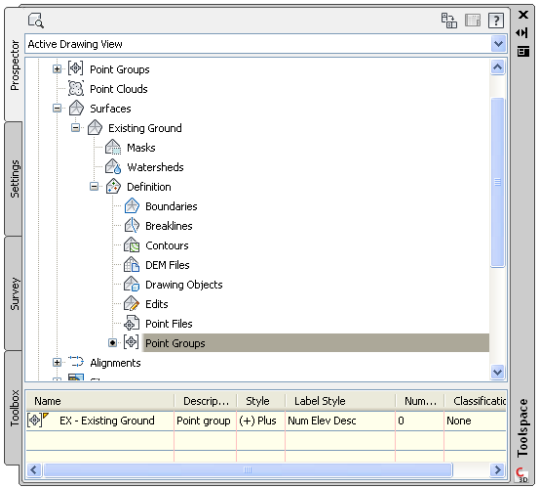
The Minnesota Civil 3D drawing template contains, by default, a terrain surface with the title *Existing Ground*. This surface is automatically created using survey points contained in the *EX – Existing Ground* point group. This point group is automatically populated with points representing the surveyed ground surface when point codes that follow the Minnesota standard survey point codes are used during the field survey. Refer to Quick Reference Guide *100.0 Minnesota Standard Survey Point Codes* for more information on the Minnesota standard survey point codes.

The points in this point group will automatically be added to a terrain surface with the title *Existing Ground* which models the topographic surface represented by the original ground survey points.

A. Defining the Surface



1. Surfaces are controlled through theToolspace window. To open the Toolspace window, click on the Toolspace icon on the Home ribbon.
2. Make sure you are on the *Prospector* tab in the *Toolspace* window.
3. Click on the plus sign next to *Surfaces* in the Prospector tab of the Toolbox to expand a listing of all of the surfaces in the drawing.
4. Find the surface with a title of *Existing Ground*.
5. Click on the plus sign next to *Existing Ground* to expand the listing of commands for the surface
6. Click on the plus sign next to *Definition* to access the list of data that you can use to define the *Existing Ground* surface.



7. If you click on the Point Groups listing under Definition, you will see in the window at the bottom of the Toolspace window that the EX – Existing Ground point group is already listed. By default, any point data in this point group will be used to define the Existing Ground surface.
8. You can always add more point groups to a surface definition by right clicking on the Point Groups listing and selecting Add… Select the point group that contains the data that you want to use to define the surface and click on the OK button.

B. Dynamic Updates

If a yellow shield with an exclamation point appears next to a surface or a component of a surface, this indicates that the surface needs to be rebuilt. To do this, right click on the surface name and select *Rebuild*.

You can also choose to automatically update a surface when it is modified by right clicking on the surface name and selecting *Rebuild – Automatic*.

C. Surface Display

The surface will be displayed in the drawing according to the surface style that is set for that surface. To change the surface style, right click on the *Existing Ground* title in the list of surfaces and select *Surface Properties…* The surface style is set on the *Information* tab of the *Surface Properties* window. The default surface style is *EX Contours (1 and 5)*, but this style can be changed by clicking on the down arrow next to the surface style and selecting a different style from the list of styles that are available.

Refer Quick Reference Guide *400.0 Styles – Surface Styles* for more information on the surface styles available in the Minnesota drawing template.