Import DTM to Terrain for Construction

This document will show you the few quick steps to get a terrain to work with if your dataset includes DTMs. The result will be a triangulated surface that can be used for elevation analysis and annotating, model targeting, cross sectioning, and volume calculations. The result is not considered an "intelligent" surface because it will not contain contourable features that can be edited. If your process requires an intelligent surface migrated from a DTM, see the guidance on converting an InRoads .DTM directly into an OSD Terrain or Survey Field Book to create a Terrain from the Engineering Automation Section, Geometronics Unit.

You can import a DTM into a DGN file that you are already working in, 2D or 3D – or you can create a new DGN for this purpose. You should be working in the Default model. The instructions are the same for OpenSite Designer and OpenRoads Designer.

Steps to Create a Terrain from a DTM File

1. Run the command **Home>Model Import/Export>Terrain Import>Create Terrain Model From File**.
2. Select one or more DTMs on the **Select Files To Import** dialog and click [Done].
3. On the **Import Terrain Model(s)** window, select all DTMs that will share the same feature definition and Import Options.
4. **Set only the Feature Definition** (existing or finish, material layer, color, level) **and Triangulation Options** (Import Terrain Only), then click [Import].

The Import Terrain Model(s) dialog will remain open so that you can import a loaded DTM with a different feature definition. The picture below shows two DTMs imported to create terrains and how the File Options were set for the last one imported. Both DTMs were the design finish grade in different locations. Western (left) was imported using Terrain\Finish_5_Triangles and is magenta-colored. Eastern was imported with Finish_7_Triangles and is cyan-colored. Both have Design volume options set by the feature definition.