



Cutting Sections in TIN MODEL for Cable Depth

By Bob Glover

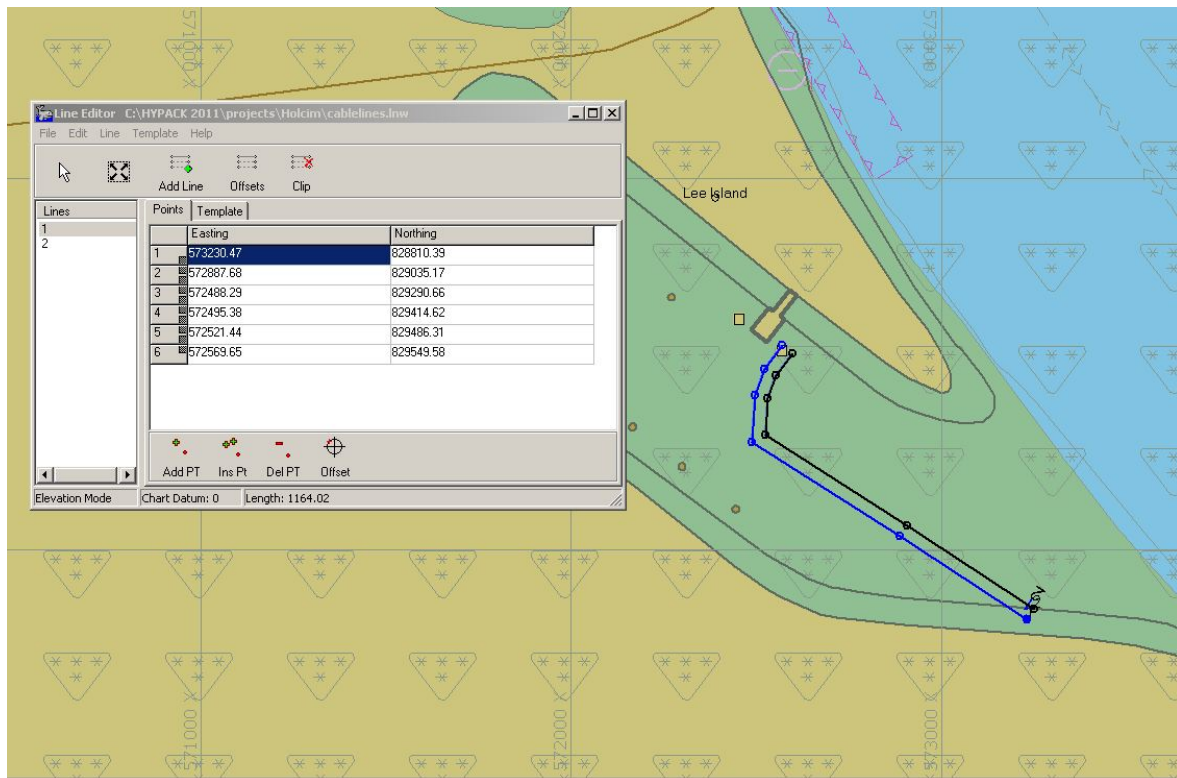
Cutting sections in TIN MODEL isn't always just for volumes. I had a client ask me how we could display soundings for a cable that runs below a harbor. They were getting ready to do some work on the bottom around the area where these cables were placed and wanted to display the location of the cables and the associated bottom depth.

They already had the two items that we would need to complete the task, an XYZ data set for the area in question along with a set of X and Y coordinates for one of the two parallel cables run. The XYZ data was ready to be imported into the TIN MODEL program, so we would only need to build a line file using the coordinates for the placement of the cables.

GENERATING PLANNED LINES AT THE CABLE LOCATIONS

Using the LINE EDITOR, we entered our coordinates for the cable placement to create a multi-segmented line and then used the offset feature to add our second line.

FIGURE 1. *Creating Planned Line Files with the Cable Coordinates*



Once we were happy with the line creation, we saved it to a line file which would be brought into the TIN MODEL and used to cut sections.

CUTTING SECTIONS IN TIN MODEL

The next step will be to open TIN MODEL and bring in our XYZ data as well as the line file that we created for the cable placement. Both files must be loaded together in order for the TIN MODEL program to cut the sections.

FIGURE 2. Building the TIN Model

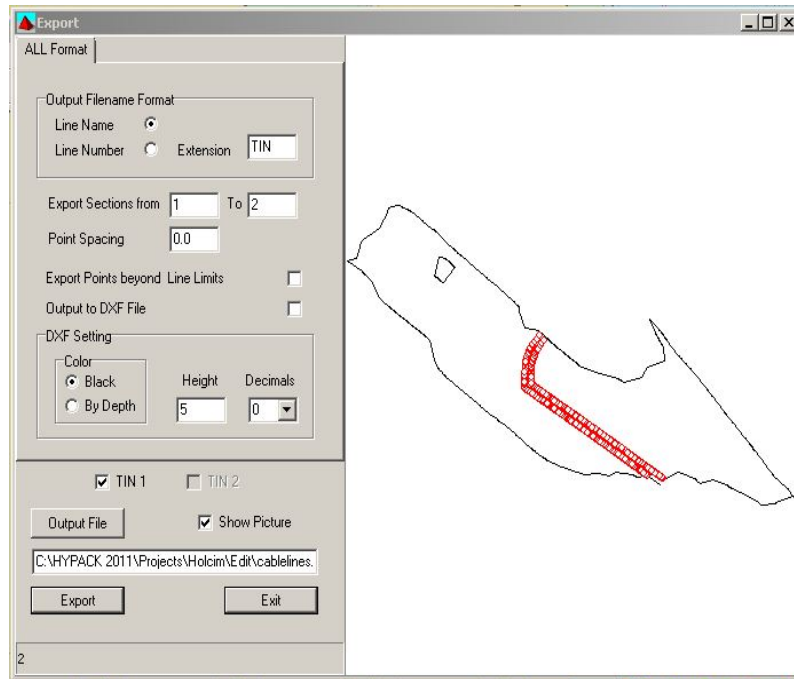
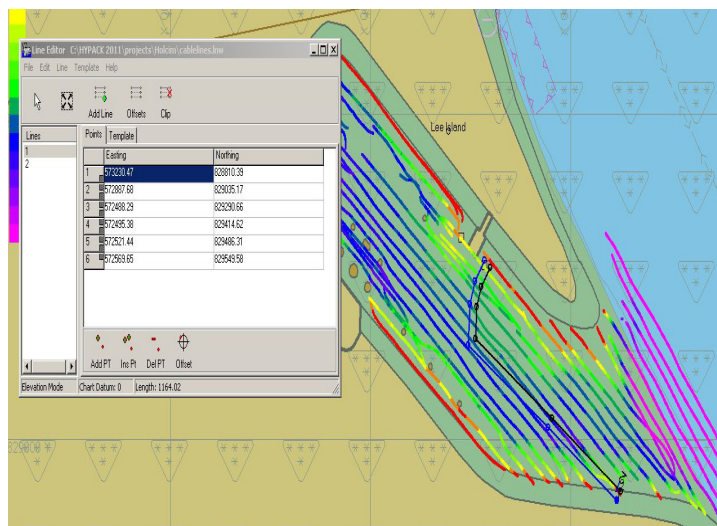


FIGURE 3. Planned Lines Displayed with the Survey Data



Once we have the files loaded, TIN MODEL will create the surface and we can view the 3D model to check that it was created without gaps. If gaps are present, TIN MODEL can be run again with an increased TIN Max Side.

