

PROCEDURE FOR CREATING COMBINED SURFACE MODELS TINS (From Cross Sections)

Files needed:

Proposed cross section, gpk file, Existing L&S tin, dsn.dgn (for viewing finished product)

STEP 1

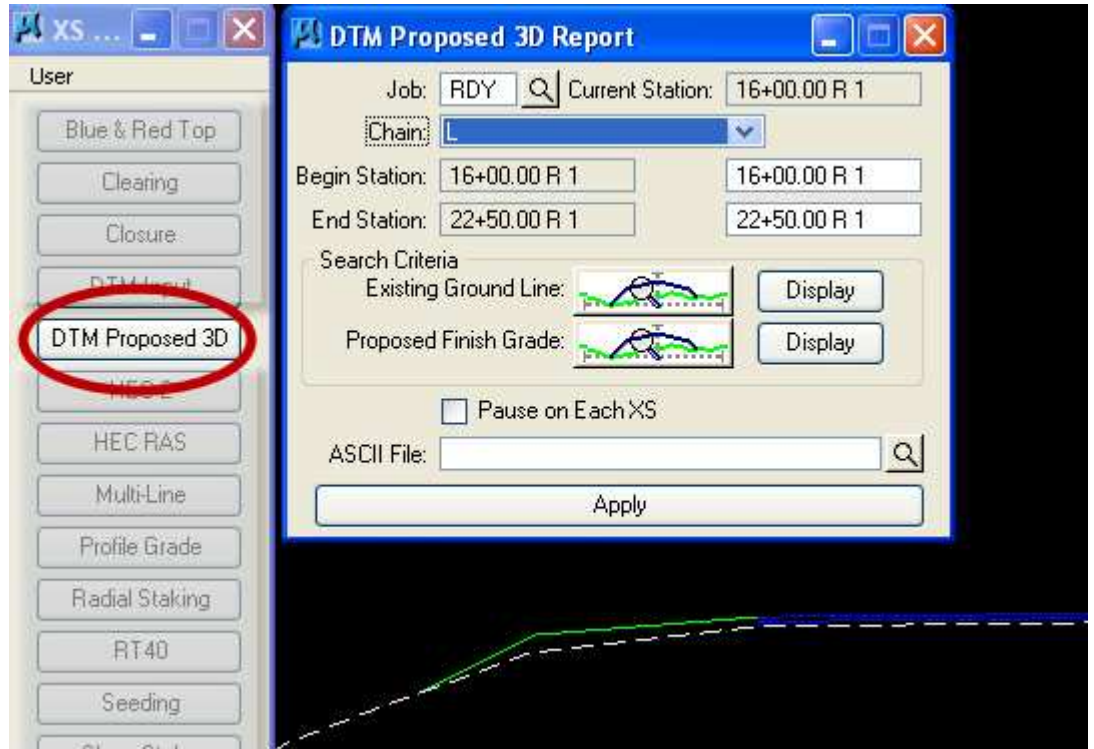
In the proposed cross section file turn off all levels except those representing the prop finished grade.

On the cross sections tool palette, open the cross section reports tool.

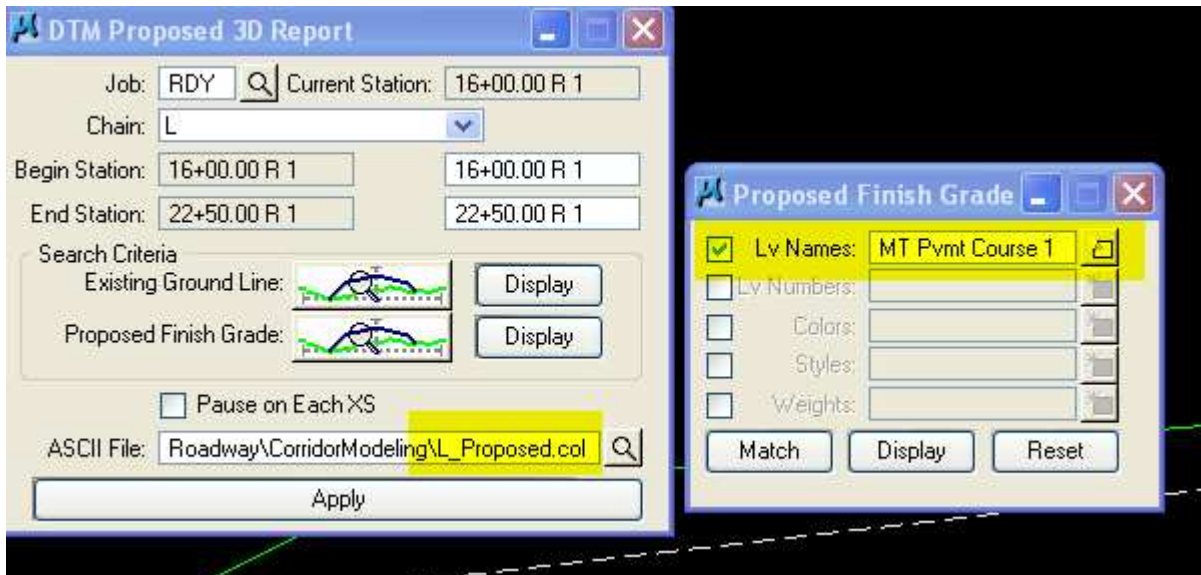
Choose the “DTM PROP 3D” tool.

Enter the GPK job name, the chain and station range to be processed.

DTM Proposed 3D report only reads chain for that x-section file that you are in.



Use the icon to the left of the “Display” button to Set or match the appropriate levels that represent the proposed finish grade. The existing ground it is not needed for this process. Enter a name for the output file (. col). This is where coordinate data will be collected for later use. Hit the apply button to process.

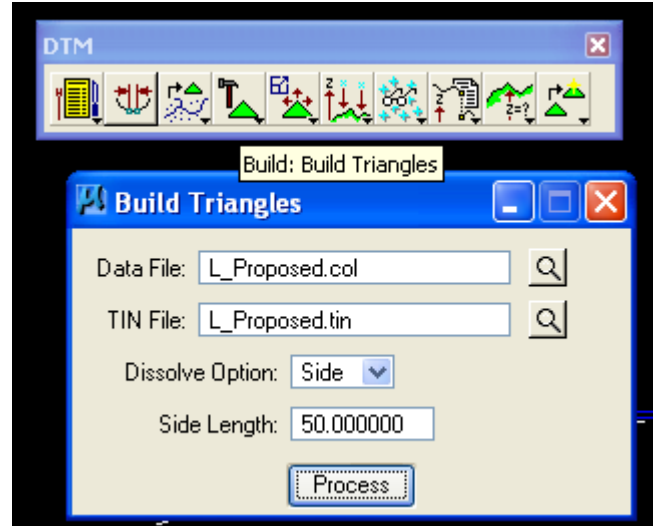


STEP 2

Go to the DTM tool palette and choose build then triangles. From here load in your DAT file, created earlier, and enter a name for the tin file that will be created. Select process.

(You may want to use your newly created tin file to run existing ground templates to verify that the proposed template elevations were extracted properly. Your new existing ground should now resemble your proposed templates.)

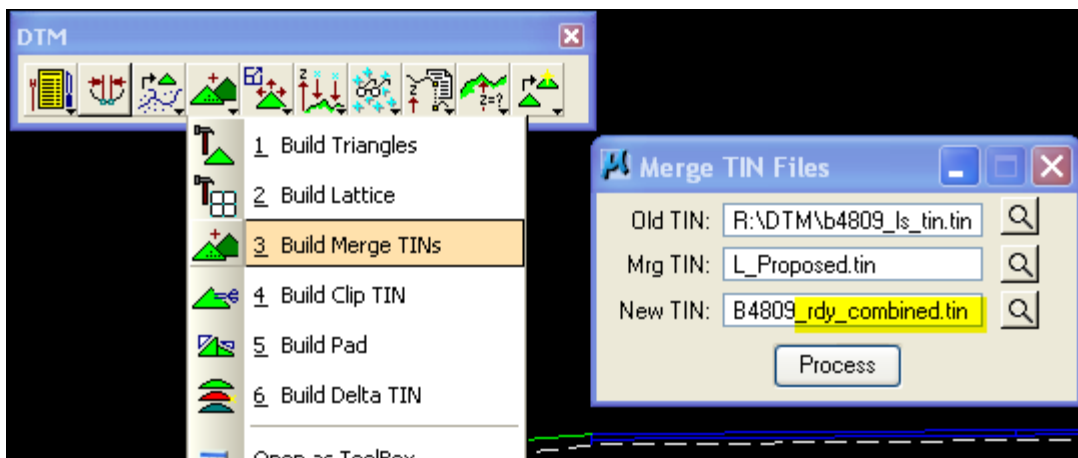
Repeat this process for all proposed cross section templates (i.e. y lines, ramps, loops, etc.).



STEP 3

Once complete, use the DTM “Build Merge TINs” tool to get a composite tin file comprised of the existing ground tin and newly created proposed tin. The OLD TIN should always be the model into which the MRG TIN will be merged. Repeat this process until all proposed tins have been merged into one file. The file naming convention for the new combined tin file is:

TIP#_rdy_combined.tin



STEP 4

Once all necessary files have been merged, the end result is a proposed surface model of your project. In your DSN file, your proposed tin may be viewed using the DTM tool “Load DTM Features”. Load in your proposed tin file and turn on triangles. Remember to select “Display Only and Graphic Group” if you only want to view your tin and not actually draw it into your dsn. (See below)

