

ROWCheck

The RowCheck MDL application is used to verify integrity of design file elements representing Right Of Ways and easements. It should be used prior to submitting project files to the Right of Way Unit.

The program scans the ROW file for elements using the standard line-styles as follows:

- Rdy ROW Prp
- Rdy ROW Prp CA
- Rdy PDE
- Rdy TCE
- Rdy TDE

Standard line styles not addressed are

- Rdy CA Prp
- Rdy PUE

All ROW and easement elements are checked for the following :

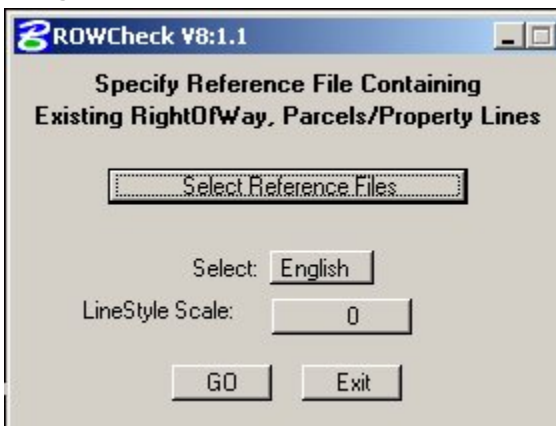
1. All ROW and easement element endpoints must tie to other elements of proper types.
2. No gaps or overlaps are present at vertices
3. All elements are of the proper line style scale
4. No line strings have been used.

Preparations

The program must be run within the ROW file. All property line, parcel and existing ROW files must be attached as reference.

It is highly recommended that you turn off display of all other reference files before running RowCheck.

Using RowCheck

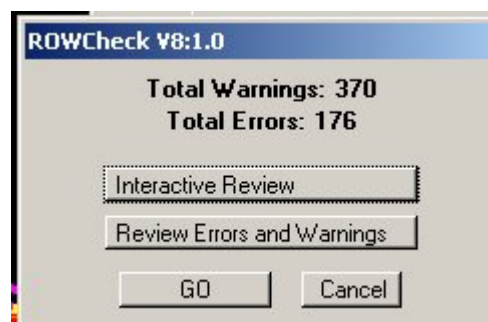


The front-end window (or main dialog) requires your input for three things.

1. Select Reference Files. This push-button opens a dialog that lists all the current reference files. You must select all reference files from the list that contain information relating to property lines, parcels and existing right of way.
2. Select English or Metric
3. Select the proper line style scale for the project.

Click the GO button. The program scans the file and compiles a list of errors and warnings, unattended. Be patient, it could take a minute or two to complete.

When the program is finished scanning for errors, it will present a dialog window reporting the number of errors and warnings and options for reviewing them.



The first option button allows selection of your

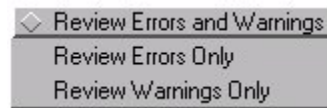
preferred method of error/warning review.



1. The default method, Interactive Review, frames each error element one at a time. The element is hilited and an error description is given.

2. The second method, Mark and Write To Log File, writes an ASCII text file report of the errors and warnings. Each error is listed with a description that includes north-east coordinates to help you find the element in question. A reference number is also provided that corresponds to numbered markers that are placed at each error on level 63 in the ROW file.

The second option button offers several choices for the type of problems to review.



Interactive Review

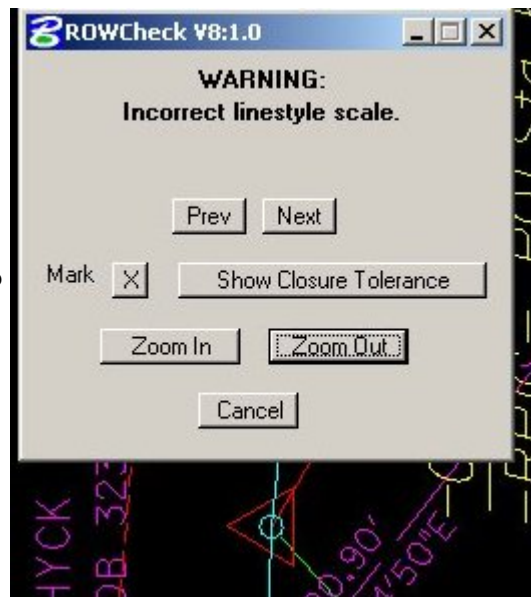
The review feature serves only to report errors and point them out. The program makes no attempt to correct errors.

For each error, the program will fit the view to the area in question and hilite the element in error. It also places a circle around the point where the error was detected. You have the option of correcting each error before proceeding to the next error (by clicking on the Next Button).

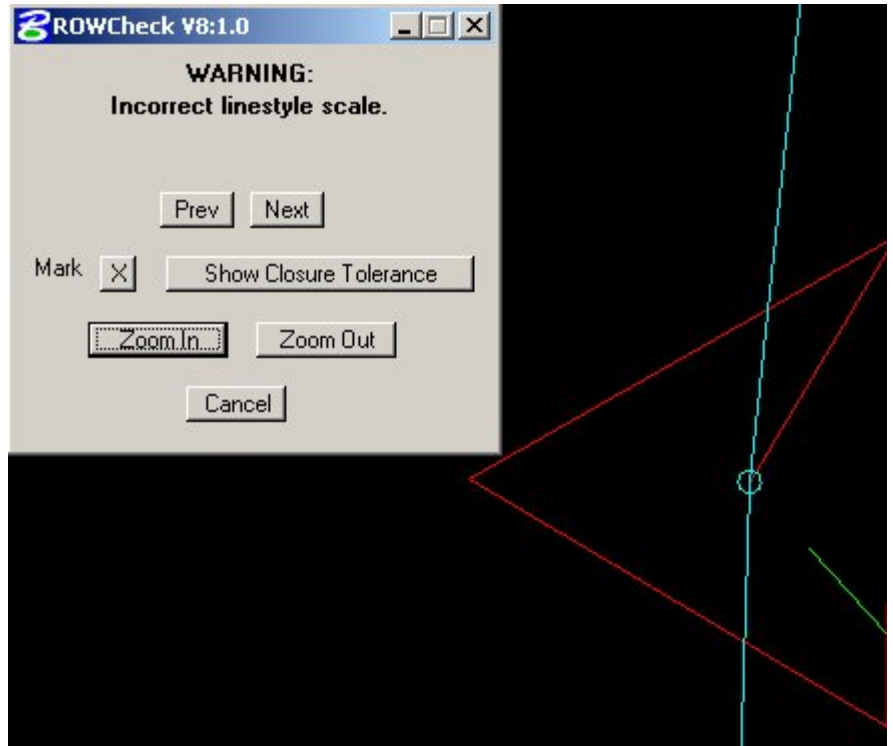
Several features are available to assist in identifying the errors.

Since most ROW drafting errors are hard to see at the usual viewing scales, the ZoomIn and ZoomOut buttons allow you to view the exact location of the error at very small scales.

In this illustration, the program is pointing out an gap in a ROW element that is not evident upon casual observance.

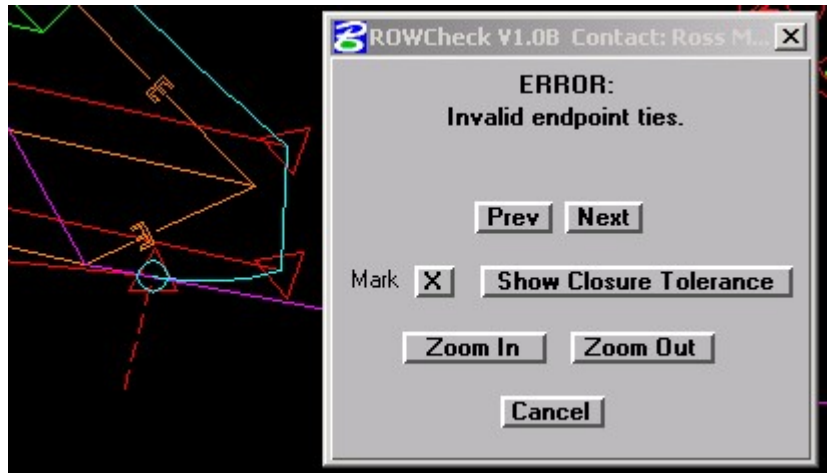


However, after having zoomed in - the gap is readily visible.

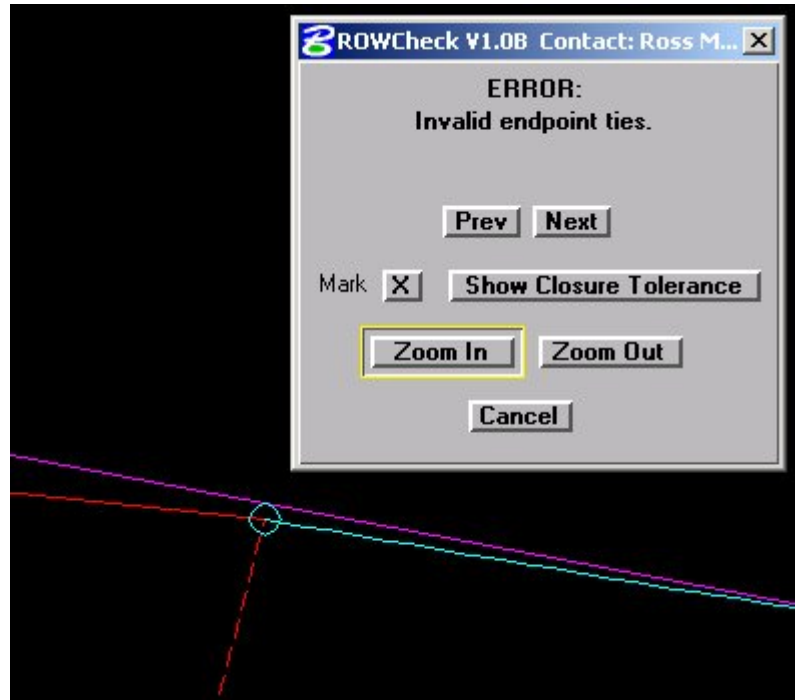


In another example ...

This right of way element is not properly tied into the property line.



The error, not evident at normal scale, is easily identified after zooming in.



Due to the nature of Microstation and variable working unit setups, it may be impossible to successfully connect two elements any closer than 5 to 7 units of resolution (UORs). This is a situation seen most often when connecting two ARC elements. The RowCheck program allows for a 7 UOR margin of error, but sometimes may report an error at the junction of two elements that cannot be brought any closer together.

The "Show Closure Tolerance" button on the review dialog can be useful in these situations by displaying a dotted circle that represents that 7 UOR "buffer". If portions of the two elements are within this circle, then the error is probably due to another cause.

In some cases, the error may not be evident even after zooming in to the absolutely minimum view. When this happens, take into consideration the level/symbology of the element to which the error element supposedly ties.

For example, if the program highlights a PDE line with the error message "Invalid endpoint ties" but the PDE line ties perfectly to a ROW line; perhaps the real problem is the ROW line. Remembering that the program selects elements primarily by their linestyle, if the ROW was not drawn with the proper linestyle the program does not even "see" it. Therefore, the PDE endpoint is left hanging.

Another tricky situation is incorrect correlation of ROW and CA linework. If a ROW line is drawn using a CA linestyle, it may appear to be correct to you - but not to the program.

Finally, the review dialog features a button labeled Mark. For those situations when the error cannot be determined, you can "mark" the error point to make it easier to come back to.