NEWSLETTER 2016 NRG

2016

Many thanks once again for all of your feedback both at the user group and throughout the year.

We hope that your additions and suggestions have made it through to this year's release, if not then rest assured they are in our 'wish list'

A major addition this year is Track monitoring where we have developed a process for producing reports of movement on railway lines within the monitoring module
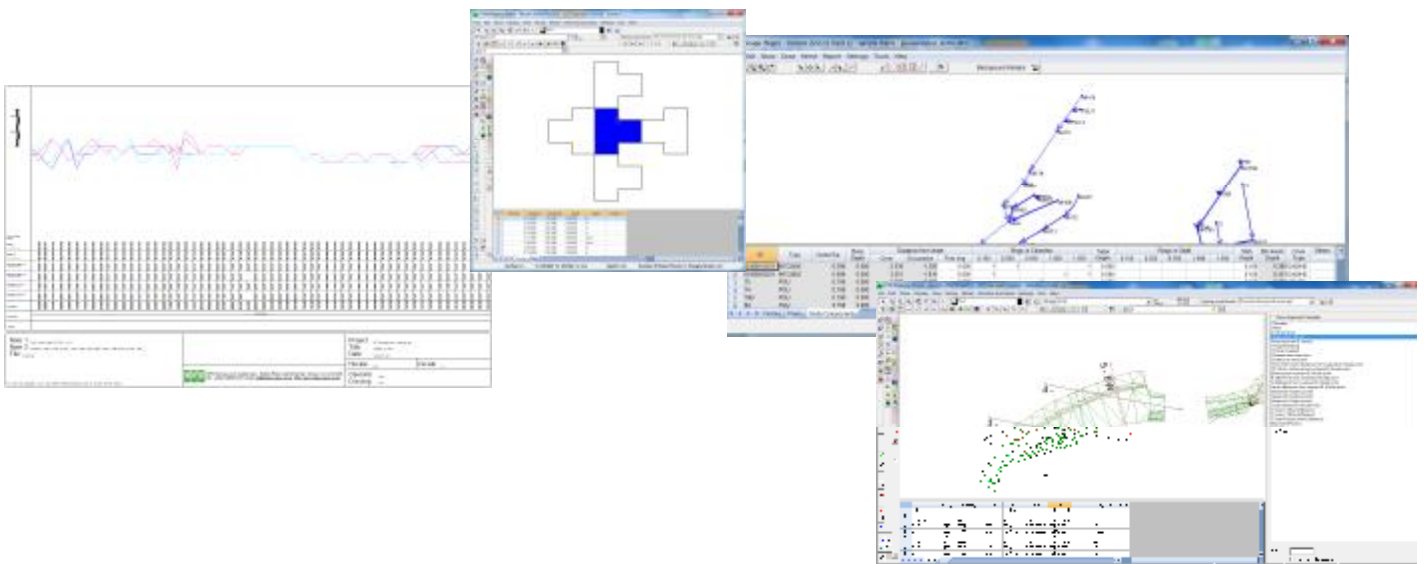
Drainage has had materials added to its functionality with the ability to attach materials to drain runs and to do a detailed take off of components for a drainage scheme.

A lot of work has gone into lifting the hatching from an Autocad drawing both by importing the hatching to our shading and also to attach triangle surfaces following the hatching

Other than that a host of minor editing additions have been made to DTM map to make survey processing and model building easier.
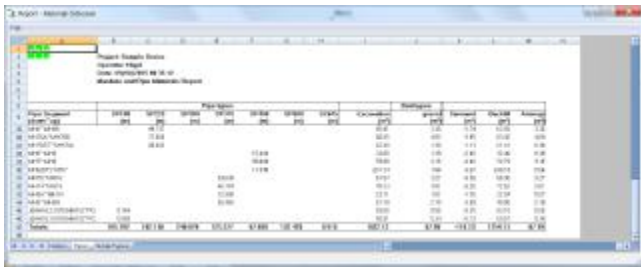
Mark cross section has been a popular request and this has made it this year
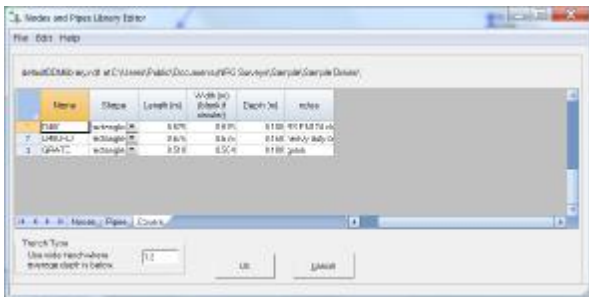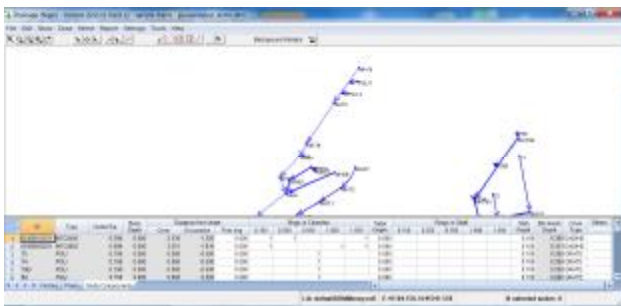
Drainage Materials

Materials are now calculated as part of the reports.

We have added a tab for covers to the pipe and nodes library so that you can detail types of covers

The main editing grid has a new tab for node components

In the nodes components tab you have groups of rings in chamber and rings in shaft where you can right click on the headings to add ring depths as appropriate.

Entering the number of rings of that depth will compute the 'brickwork' depth for that node. This takes into account all of the node details such as depth to first ring from invert and the cover depth from the cover type you enter. In this way you can attach the appropriate number of rings to each manhole.

There is an 'others' tab which allows you to enter additional details for each node which you wish to have scheduled in your materials report
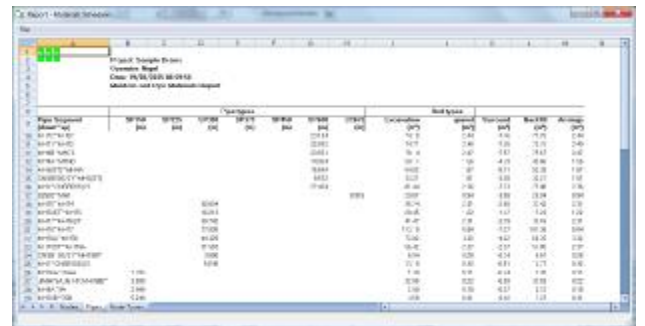
Once your node components are completed it is then possible to run the Materials report which will compute all of the materials including excavation and arising's
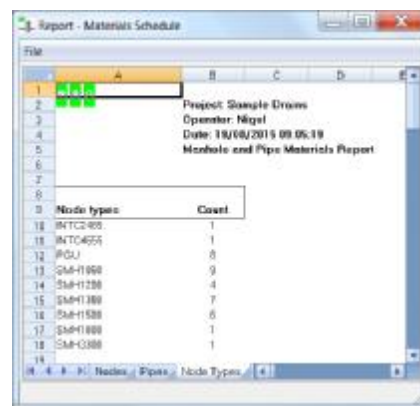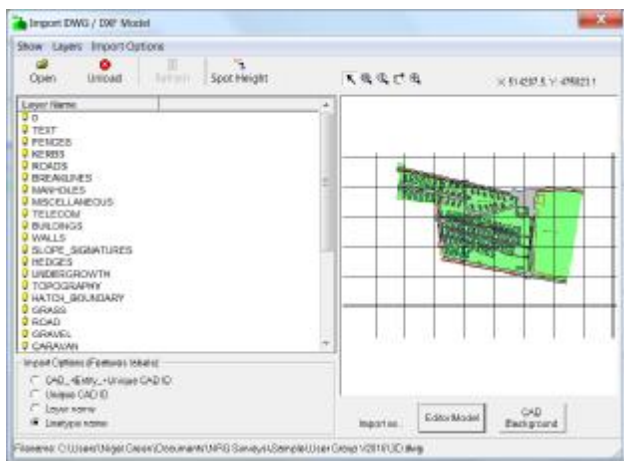
The report has three tabs

Nodes
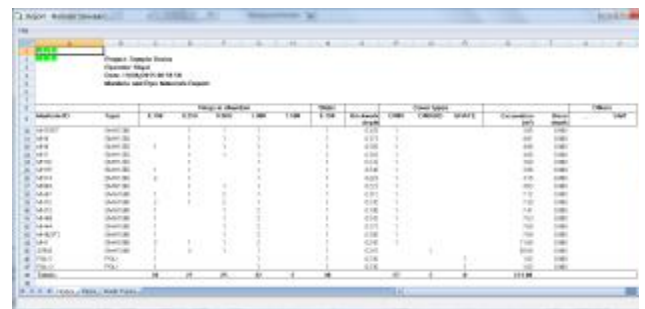
Pipes

Node types

DWG Import

We have added the ability to use layer names and linestyles for line codes from CAD files and made this a radio option at the bottom of the form

We have also made it clearer whether you are importing this file into the editor or to be used in background.

Under import options there is now an option to import hatching as shading. This will assign all of the hatch areas to our equivilant shading areas

Import Surfaces from CAD Hatching

If you have ever had to colour up a model with complex surfaces for pavement options in a road scheme then you will like this new function.

Load your Autocad DWG in backround, then select Edit, Triangles, Chamge Surfaces, Import Surfaces from CAD background

A dialogue will appear showing all of your surfaces in the 'to surface' column and it will populate the 'from layer' with the hatch layer names in your drawing.

You can then re-assign each surface to match yours, if your current model surface is blank it will automatically name your surfaces to those of the CAD layer
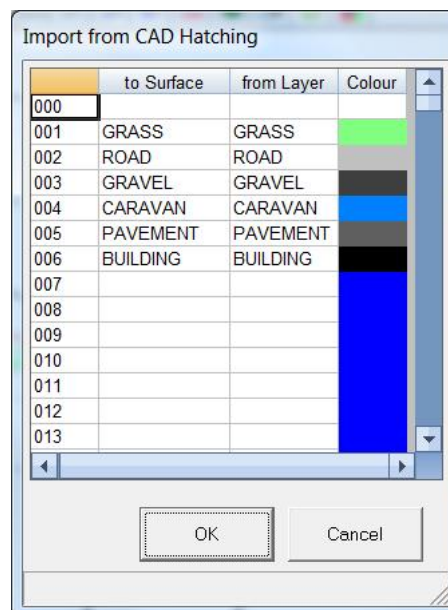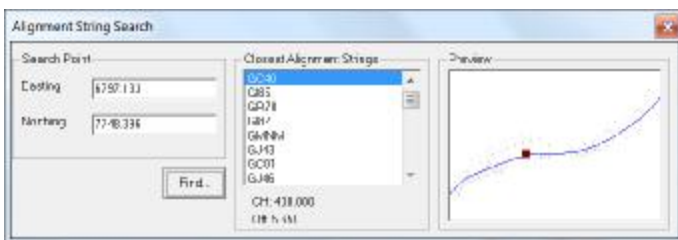

Press OK and in a few moments your triangle model will be surfaced to match the hatch surfaces on your drawing. With very large models you may want to take this opportunity to make a cup of tea

Add Line

Add line now has an option for 'free hand' as opposed to snap to point

This will add a point at the cursor position as well as add a line throught the points. You can also swap between free hand and snap whilst you add a line

View Dipped Background Model in Dynamic sections

If you have dipped model selected in your view menu in dynamic sections it will now also draw the dipped background model

Rotate Dynamic Text

- ⊡ Whilst in dynamic text edit mode pressing the Up or Down arrow keys will rotate the text 90 degrees
- ⊡ Select a new item of dynamic text with the CTRL key pressed will perform the last text edit on the new item of text

Find Nearest Alignment

A handy little tool for finding alignments

Display, Find nearest alignment

Click on the picture window to select a point and it looks through all of the alignments computing the chainage and offset of the point selected for each alignment, then displays the nearest alignment and the points position along it.

Hatch Option in Isopachs and Contours

In the Isopach and Contours settings for colours when using specified ranges it is now possible to ask it to draw hatching rather than solid fill.
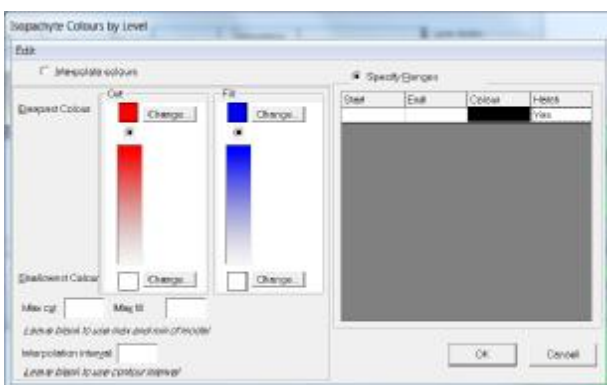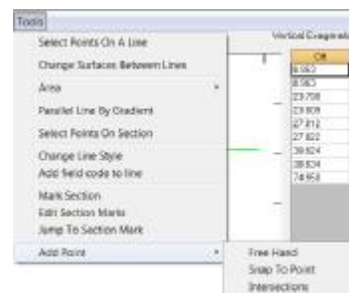
Remove Point from Model

Puts a /NL against a point and removes it from the model without having to re-triangulate

Edit, Triangles, Remove point from model

Add Point in Dynamic Sections

From the tools menu in the dynamic sections window, select Add Point to add points to your editor model from the section

Free hand – lets you add a point freehand using the mouse

Snap to point – adds the nearest point to your cursor position

Snap to section – adds a points at the offset of your cursor but at the level of the section

Intersections – adds the intersections on that section between your editor model and background model

Parallel Line in Dynamic Sections

- Parallel line options as in the lines menu but lets you select lines using the sections window
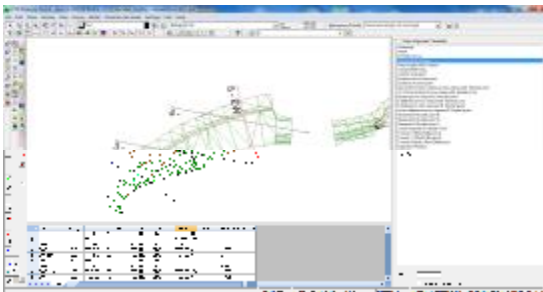
Mark Section

 From the dynamic sections window select tools, mark section or use the icon

The current section position will be stored along with attributes which you can enter on the form

If you have section markers on in your show menu then they will be displayed along with their attributes

To change attributes or delete a marker select Tools, Edit section marks.

You may also jump to a section using the jump to section mark option
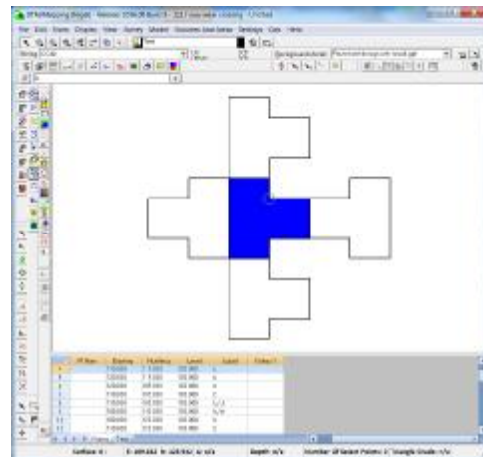

Mirror Points

Shifts or creates a new set of points in a mirror image

First select the points you want to mirror
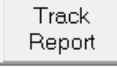
Then select Edit, Points,

 Choose which direction to mirror the points

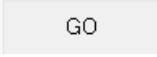The various options are displayed below
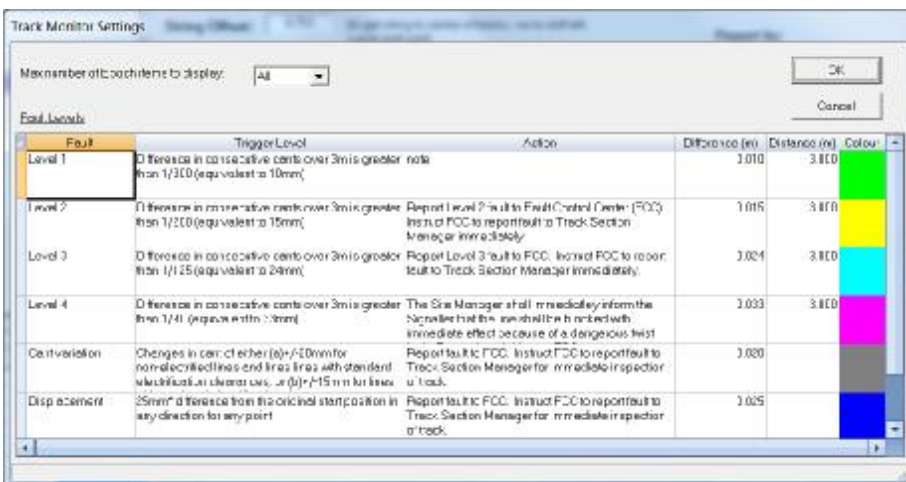
Track Monitoring

From sets of observations recorded by hand or automatically with the real time options you can generate meaningful track monitoring reports at the press of this [Track Report] button

You will need an alignment running parallel to one of the tracks, if you don't have one, DTM map will create one from a line of points
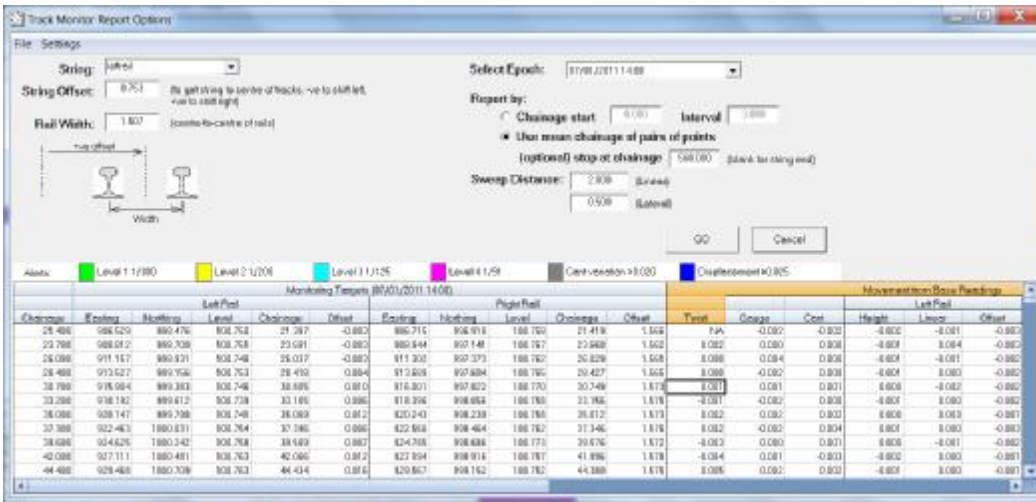
By entering the offset to the centre of the observed rails from the alignments the software will group the points regardless of the name or order they are surveyed in. It will then let you choose whether to use the mean chainage of pairs of points or to specify an interval where it will interpolate between points.

You choose an epoch from your monitoring database, press [GO] and it will populate the grid with movements from both the base readings and from the previous epoch for gauge, twist and cant.

The user has a number of trigger options which can be accessed from the settings menu and these can be altered to suit the projects criteria
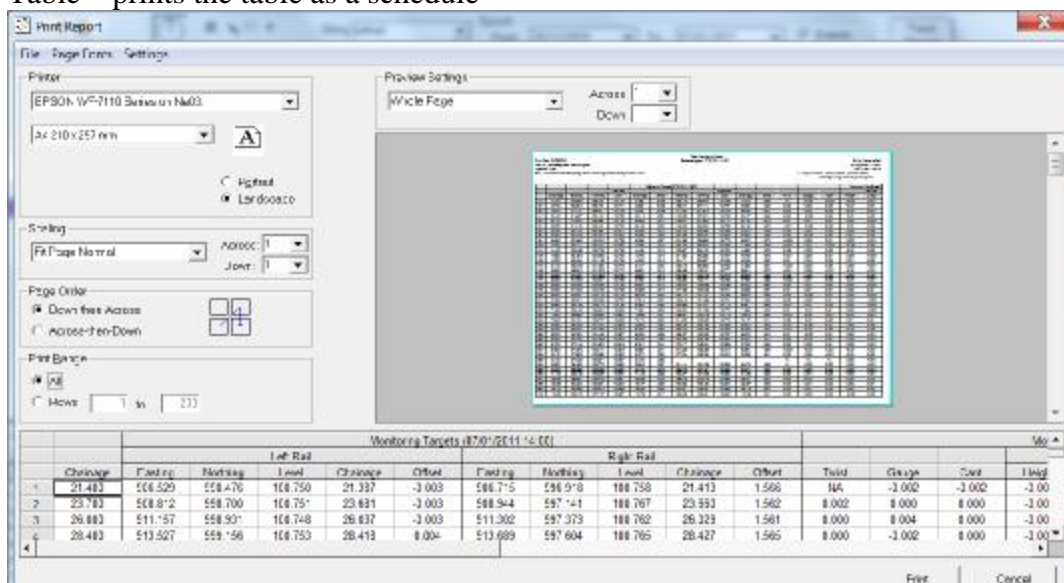
Track Monitoring Reports

Reports are accessed via the File, Print Menu
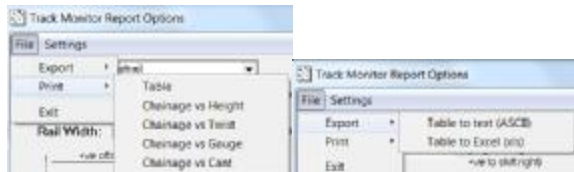
Export – exports to ASCII or Excel
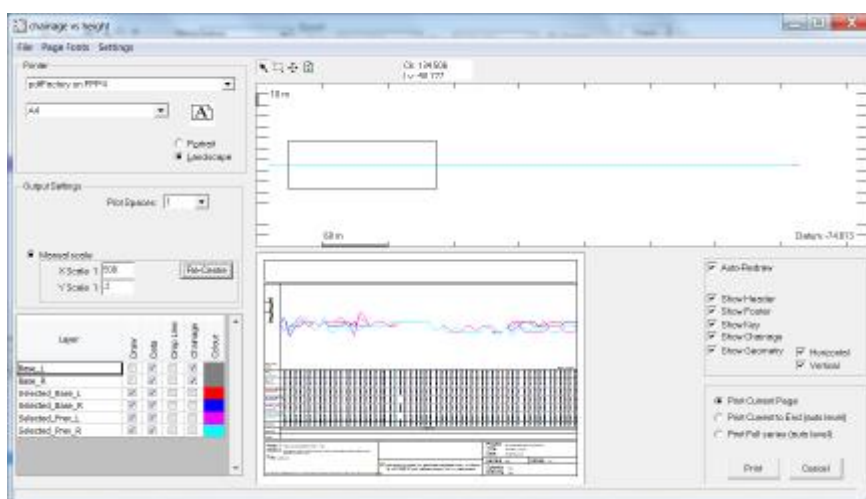
Print

Table – prints the table as a schedule

Printing the various graphs

Table
Chainage vs Height
Chainage vs Twist
Chainage vs Gauge
Chainage vs Cant

⬚ Lets you draw a box around the area to be printed

✛ Moves the box

Manual scales allows you to enter the scales to be plotted and it is usually best to set the scales manually and view the results in the preview