

COLDNet Profile – Import Survey Data CSV (Laser Range Finder)



Laser Range Finder CSV Template

Below is an example of a CSV import of survey data using a laser range finder

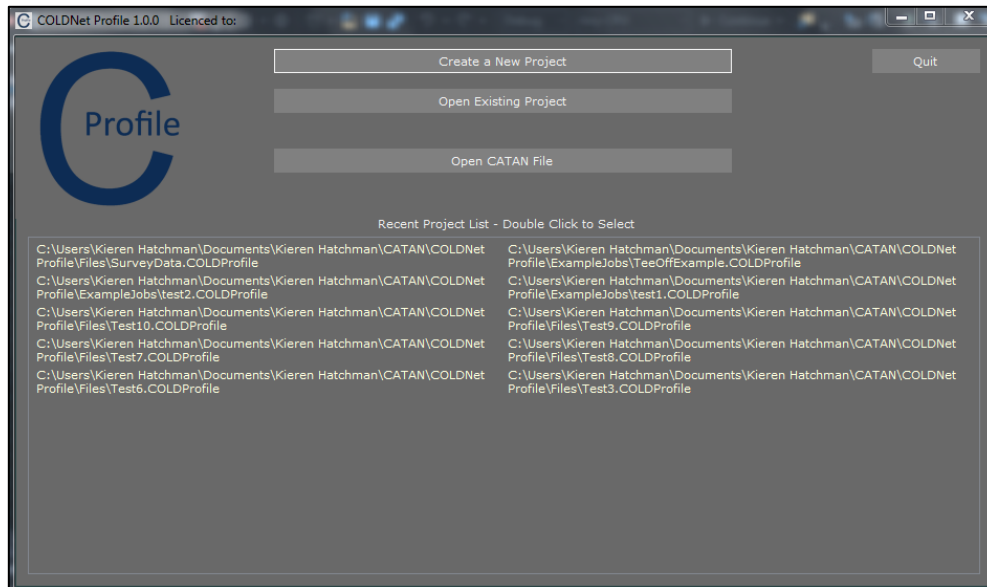
Data collection using Range Finder							
#SAVE#	Project No.	6669437_6669610_2417_2419					
#SAVE#	Temp on Day C	34					
#SAVE#	Field Data collected by:	T Mill, S Macdonald					
#SAVE#	Date:	Thursday, 21 February 2019					
	Point Number	Instrument Height	Bearing to nearest (°)	Horizontal Distance (m)	Vertical Distance (m)	Target Height	Comment
#OCCUPY#	1	1.5	142.5			1.5	%PO4209116,%PL10.5,%PA8.9
				73.5	0.3	1.5	%YC7.3
				134	0.4		%YC6.0
				149.2	0.4		%YC6.2
				217.8	0.5		%YC7.0
	2			293.4	0.3		
#OCCUPY#	2	1.5	142.5			1.5	%PO4217274,5PL8.9,%pa9.2
				74.6	-0.3		%YC6.3
				121.9	-0.5		%YC5.6
				139.3	-0.6		%YC5.4
				181.1	-0.1		%YC5.1
				218.8	-1		%YC6.5
	3			293.5	-0.8		
#OCCUPY#	2	1.5	346.5			1.5	
				66.1	-0.4		%YC6.9
				165.3	-0.9		%YC6.3
				233.3	-1.6		%YC7.3
				336.4	-2.4		%PO4217275,%PL10.5,%PA10.8
#OCCUPY#	3	1.5	142.5			1.5	%PO4217273,%PL9.1,%PA9.4
				141.6	-0.8		%YC5.8
				285.6	-2.1		%PO4217272,%PL10.2,%PA10.0

CSV Template Steps:

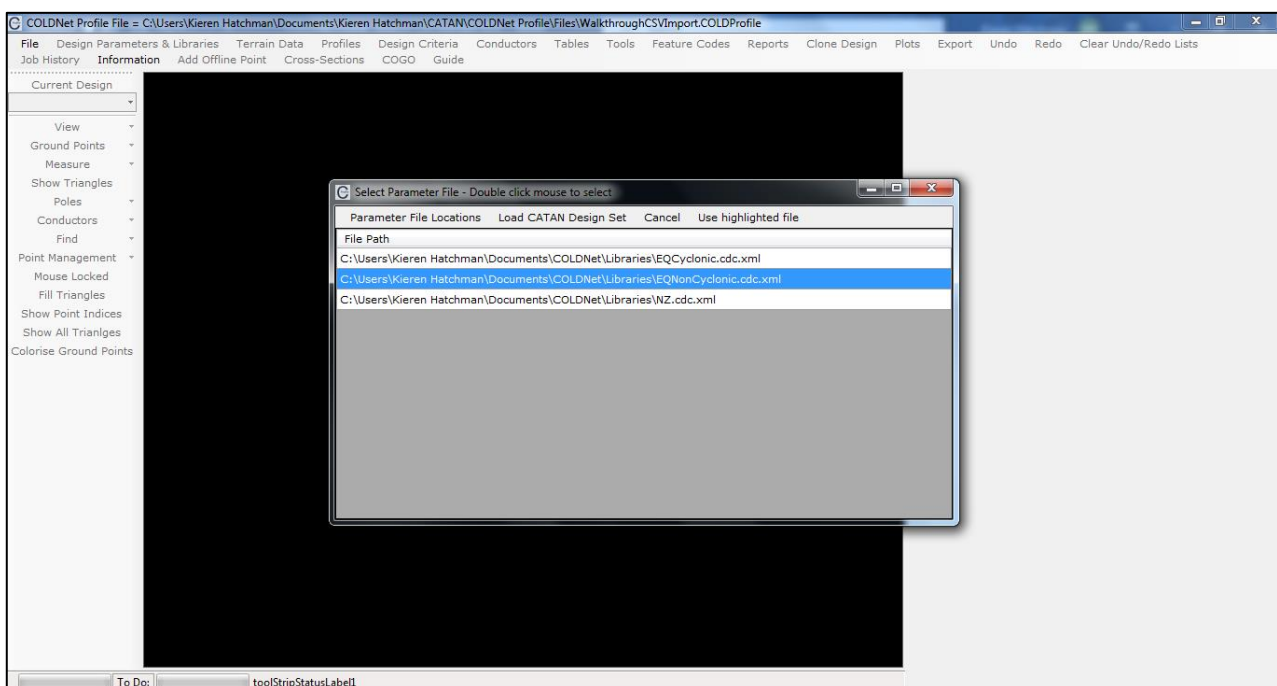
1. Enter a **Project No.** for the job
2. Enter the **Temperature on the Day of Capture**
3. Enter who the **Field Data was Collected by** in the format shown above
4. Enter the **Date** of capture in the format shown above
5. Next, start entering in the survey data. A new **Point Number** only needs to be entered when changing bearing
6. The **Instrument Height**, **Bearing to Nearest Degree** and **Target Height** are also only required to be entered once until the bearing path changes
7. Enter the **Comment** code for the first pole (starting point for the bearing) in the format shown (%PO followed by the Asset No.)
8. Next, begin adding the survey points by entering a **Horizontal Distance** and **Vertical Distance** and any required **Comments** (field codes) until a change of bearing is required
9. For the last survey point on a heading, you must enter either the **Point Number** of the next starting point or a pole comment if it is the end of the route
10. Repeat steps 5-9 until all the survey data has been entered

Importing Laser Range Finder CSV

1. Install COLDNet Profile and open application
2. The following screen will appear. Select **Create a New Project**



3. Give the file a name, e.g. **ImportCSVLaserRangeFinder**.
4. The following screen below will appear. Select **Parameter File Locations>Add Directory** to navigate to the location where the Design Parameters/Libraries have been stored locally on the machine. Once selected **Close** Manage Directories window and double click on the desired parameter file from the list. For this example, select the Design Parameter file called **EQNonCyclonic**.



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- After selecting and importing a Parameter File select **Import Simple CSV File (Laser Range Finder Format)**, then navigate to where the file **DataCollectionExampleVer2.csv** has been saved and open (make sure the file isn't already open on your system). The window below will open

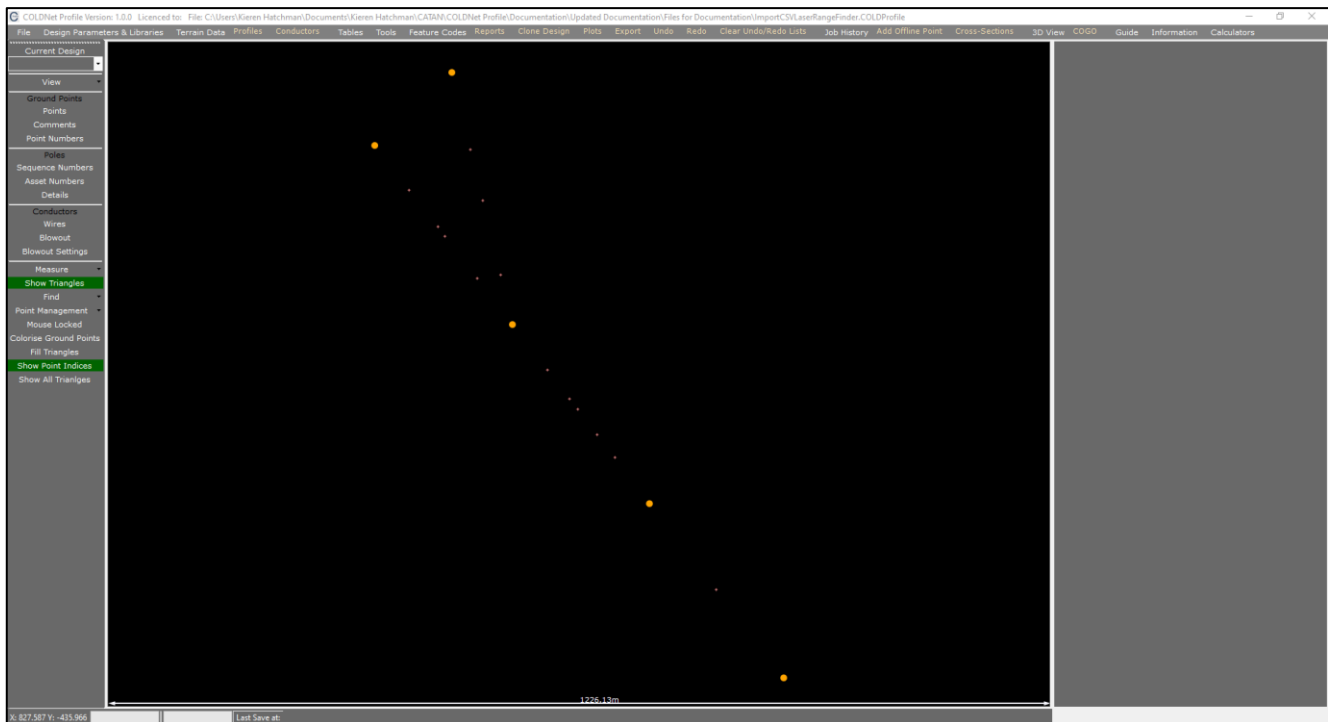
Line No.	Occupied Point No.	Eye Height (m)	Point No.	Bearing (°)	Horizontal Distance (m)	Vertical Distance (m)	Target Height (m)	Comment
1	1	1.500	1	142.5000	0.000	0.000	1.500	%PO4209116,%PL10.5,%PA8.9
2	1	1.500	1.1	142.5000	73.500	0.300	1.500	%VC7.3
3	1	1.500	1.2	142.5000	134.000	0.400	1.500	%VC6.0
4	1	1.500	1.3	142.5000	149.200	0.400	1.500	%VC6.2
5	1	1.500	1.4	142.5000	217.800	0.500	1.500	%VC7.0
6	1	1.500	2	142.5000	293.400	0.300	1.500	
7	2	1.500		142.5000	0.000	0.000	1.500	%PO4217274,%PL8.9,%pa9.2
8	2	1.500	2.5	142.5000	74.600	-0.300	1.500	%VC6.3
9	2	1.500	2.6	142.5000	121.900	-0.500	1.500	%VC5.6
10	2	1.500	2.7	142.5000	139.300	-0.600	1.500	%VC5.4
11	2	1.500	2.8	142.5000	181.100	-0.100	1.500	%VC5.1
12	2	1.500	2.9	142.5000	218.800	-1.000	1.500	%VC6.5
13	2	1.500	3	142.5000	293.500	-0.800	1.500	
14	2	1.500		346.5000	0.000	0.000	1.500	
15	2	1.500	2.10	346.5000	66.100	-0.400	1.500	%VC6.9
16	2	1.500	2.11	346.5000	165.300	-0.900	1.500	%VC6.3
17	2	1.500	2.12	346.5000	233.300	-1.600	1.500	%VC7.3
18	2	1.500	2.13	346.5000	336.400	-2.400	1.500	%PO4217275,%PL10.5,%PA10.8
19	3	1.500		142.5000	0.000	0.000	1.500	%PO4217273,%PL9.1,%PA9.4
20	3	1.500	3.14	142.5000	141.600	-0.800	1.500	%VC5.8
21	3	1.500	3.15	142.5000	285.600	-2.100	1.500	%PO4217272,%PL10.2,%PA10.0

- Check to ensure all the data has imported correctly
- Ensure that the **Angle Data Type** selected is **Decimal Degrees**
- Change the entry format from **Point to Point** to **Multiple Shots**
- Ensure that the **Measurement Data** type selected is **Horizontal & Vertical Distance**

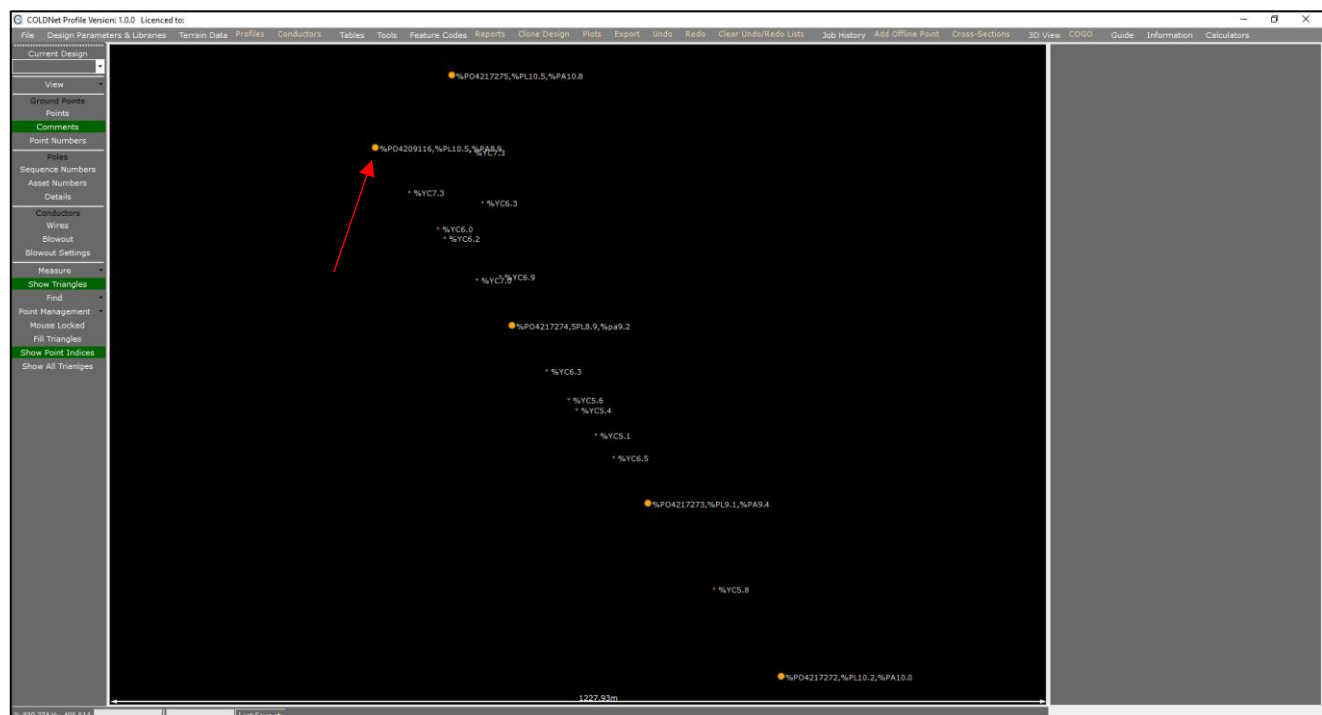
Line No.	Occupied Point No.	Eye Height (m)	Point No.	Bearing (°)	Horizontal Distance (m)	Vertical Distance (m)	Target Height (m)	Comment
1	1	1.500	1	142.5000	0.000	0.000	1.500	%PO4209116,%PL10.5,%PA8.9
2	1	1.500	1.1	142.5000	73.500	0.300	1.500	%VC7.3
3	1	1.500	1.2	142.5000	134.000	0.400	1.500	%VC6.0
4	1	1.500	1.3	142.5000	149.200	0.400	1.500	%VC6.2
5	1	1.500	1.4	142.5000	217.800	0.500	1.500	%VC7.0
6	1	1.500	2	142.5000	293.400	0.300	1.500	
7	2	1.500		142.5000	0.000	0.000	1.500	%PO4217274,%PL8.9,%pa9.2
8	2	1.500	2.5	142.5000	74.600	-0.300	1.500	%VC6.3
9	2	1.500	2.6	142.5000	121.900	-0.500	1.500	%VC5.6
10	2	1.500	2.7	142.5000	139.300	-0.600	1.500	%VC5.4
11	2	1.500	2.8	142.5000	181.100	-0.100	1.500	%VC5.1
12	2	1.500	2.9	142.5000	218.800	-1.000	1.500	%VC6.5
13	2	1.500	3	142.5000	293.500	-0.800	1.500	
14	2	1.500		346.5000	0.000	0.000	1.500	
15	2	1.500	2.10	346.5000	66.100	-0.400	1.500	%VC6.9
16	2	1.500	2.11	346.5000	165.300	-0.900	1.500	%VC6.3
17	2	1.500	2.12	346.5000	233.300	-1.600	1.500	%VC7.3
18	2	1.500	2.13	346.5000	336.400	-2.400	1.500	%PO4217275,%PL10.5,%PA10.8
19	3	1.500		142.5000	0.000	0.000	1.500	%PO4217273,%PL9.1,%PA9.4
20	3	1.500	3.14	142.5000	141.600	-0.800	1.500	%VC5.8
21	3	1.500	3.15	142.5000	285.600	-2.100	1.500	%PO4217272,%PL10.2,%PA10.0

10. Select Reduce Data

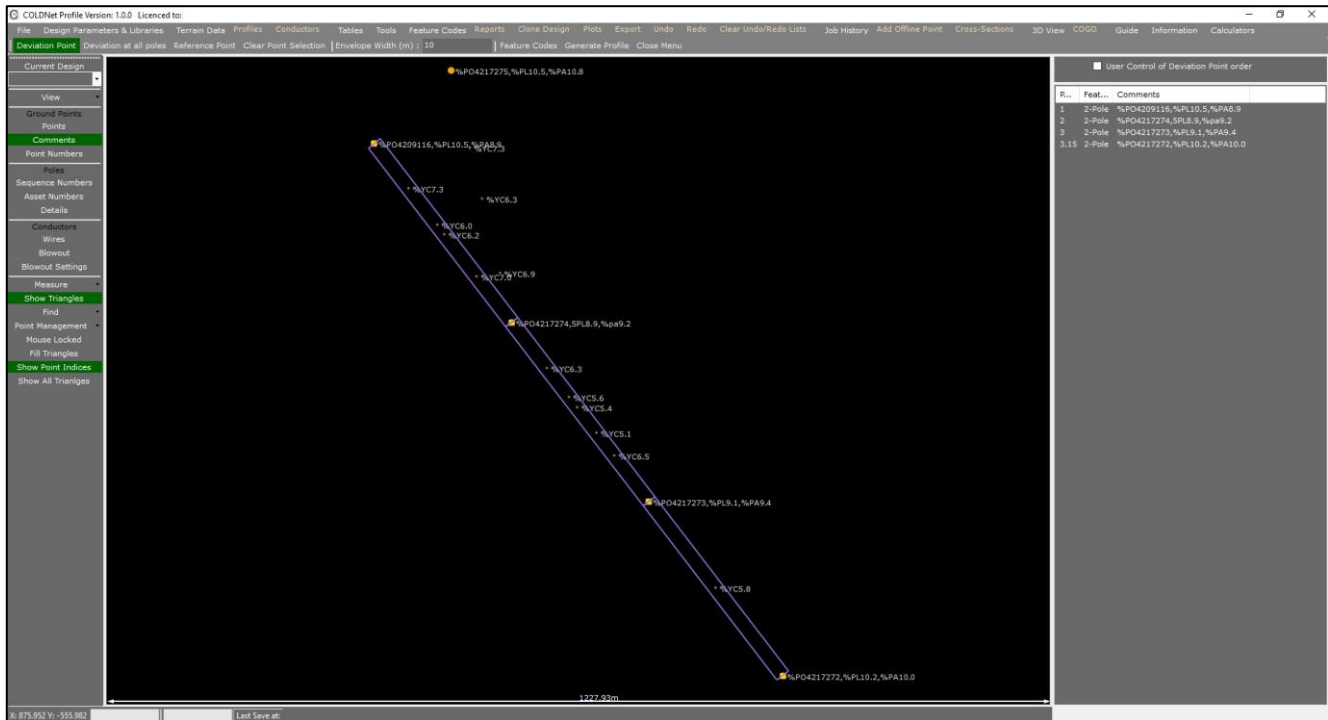
11. Once data has been reduced select **OK** and you will then be taken to the main plan view screen as shown below



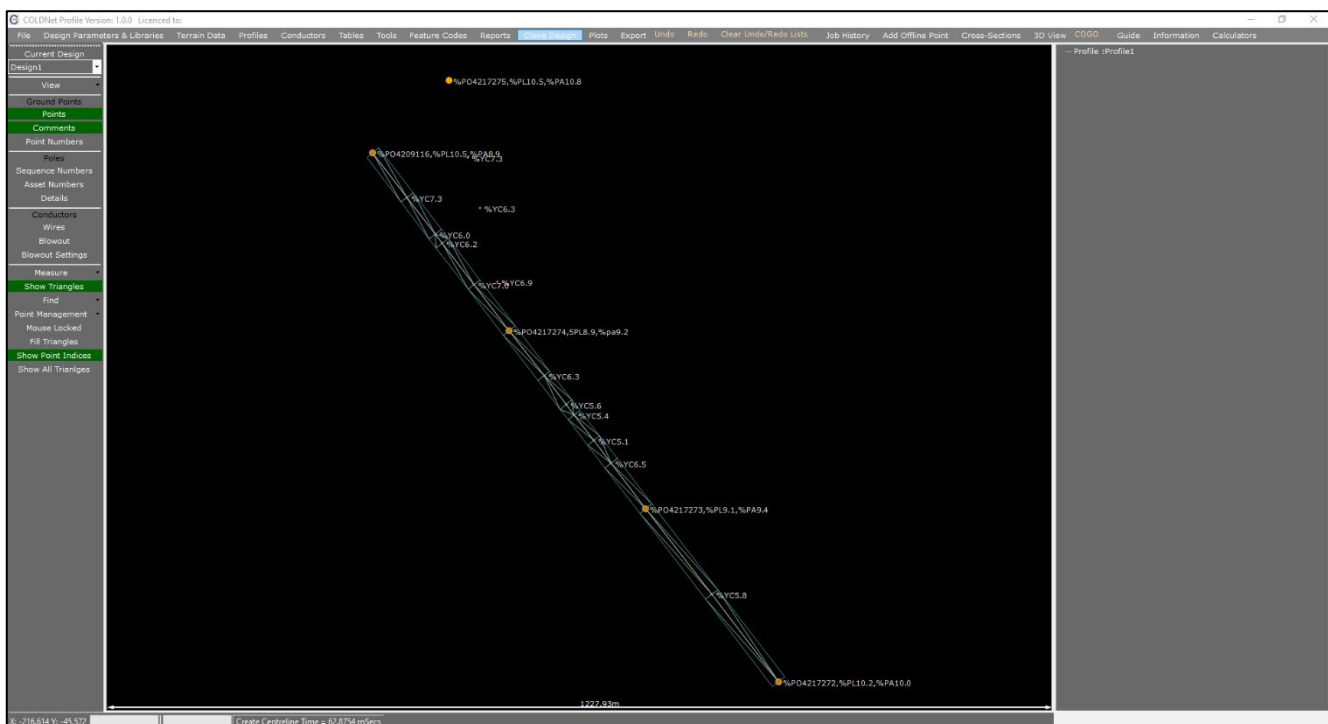
12. Next we want to create a profile by first selecting **Tools>Show Create Profile Menu**. An additional menu bar should appear
13. Select **Ground Points>Show Comments** from left tool-bar menu
14. Select the option that says **Deviation Point** before selecting the first pole (Asset No. 4209116) for the profile as shown below (marked by a yellow cross)



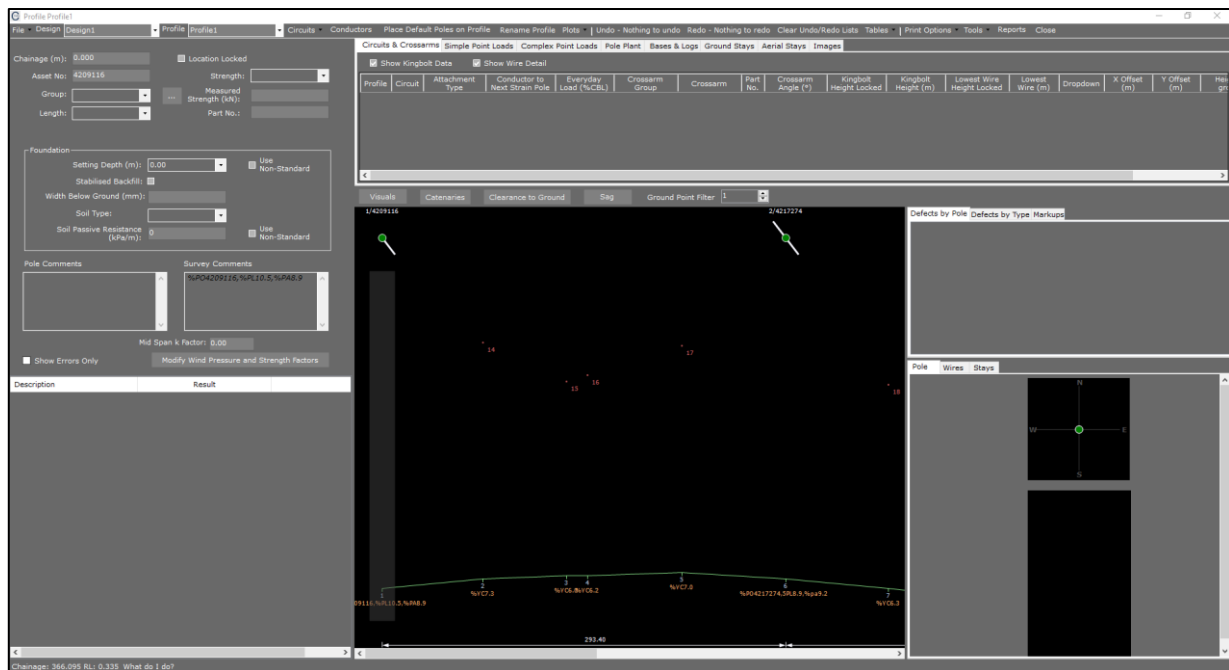
15. Next, select the deviation points (where the route changes direction) along the profile as shown below for Asset No.'s 4217274, 4217273 & 4217272



16. Select **Generate Profile** from the tool menu
17. A new window will open with a default **Design Name** called "Design1" and **Profile Name** called "Profile1". Click **Create Profile**
18. The profile centreline and triangulated terrain model will be generated as shown below



19. Select the option labelled **Profiles** in the top toolbar menu. A new window will open as shown below



20. Now we are going to add a conductor to our design by selecting the option labelled **Conductors**. A new window will open

21. Select the **Voltage '11'**

22. Select the **Conductor Group 'Standard'**

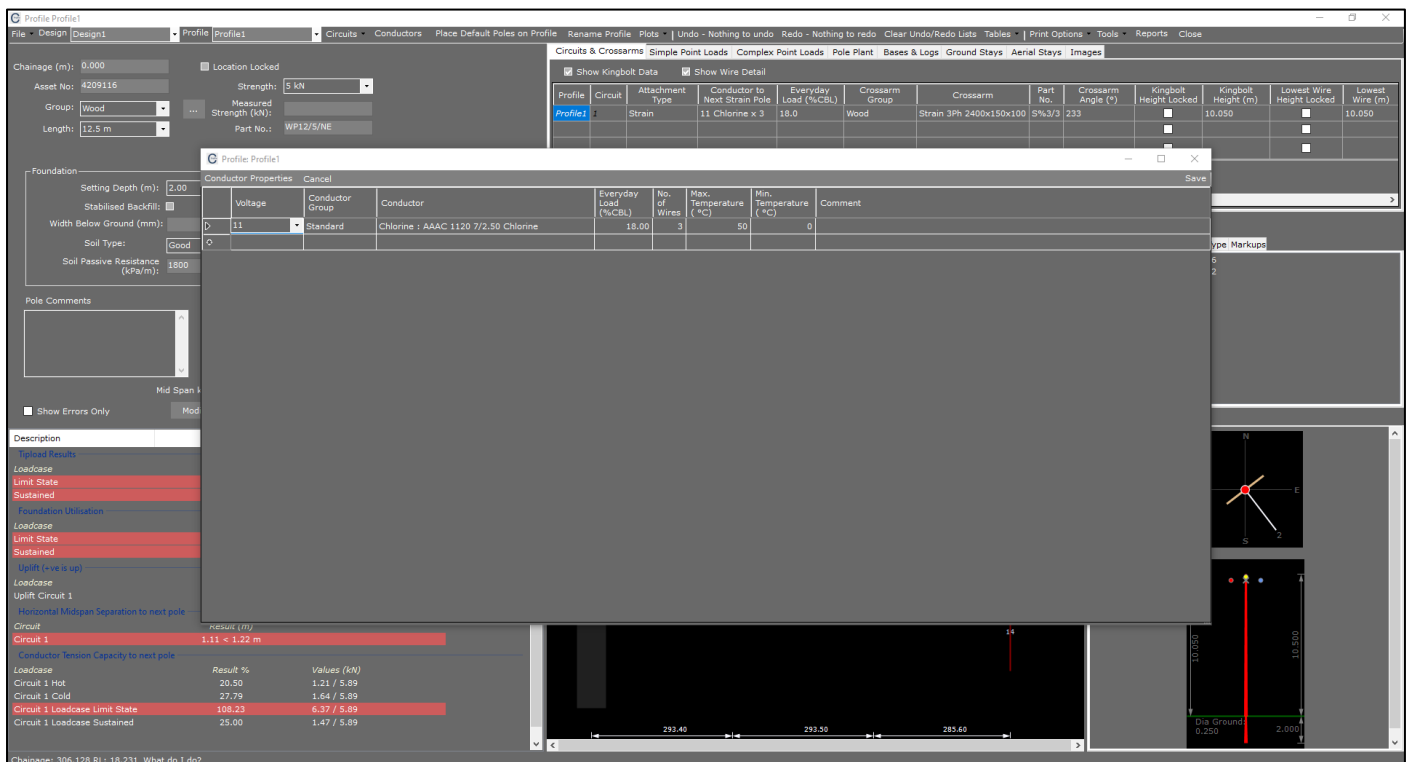
23. Select the **Conductor 'Chlorine: AAAC 1120 7/2.50 Chlorine'**

24. Enter an **Everyday Load (%CBL)** of '18'

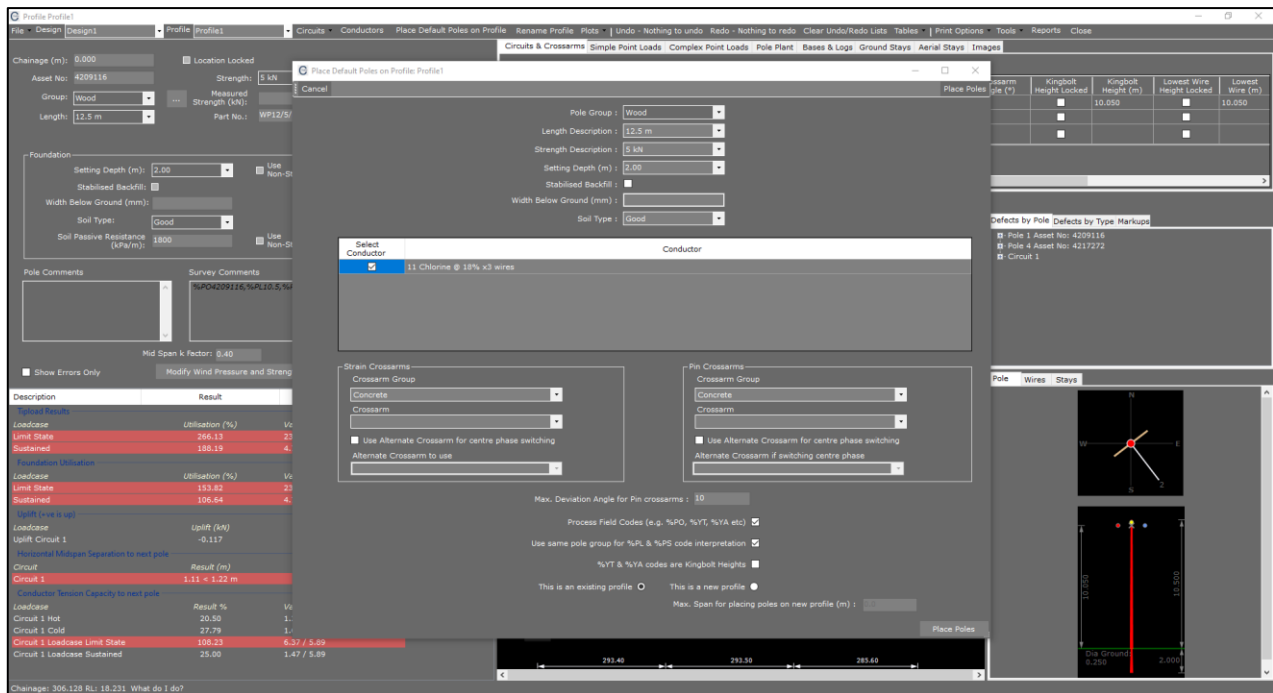
25. Enter the **No. of Wires** as '3'

26. Enter the **Max Temperature (°C)** of '50'

27. Enter the **Min Temperature (°C)** of '0'

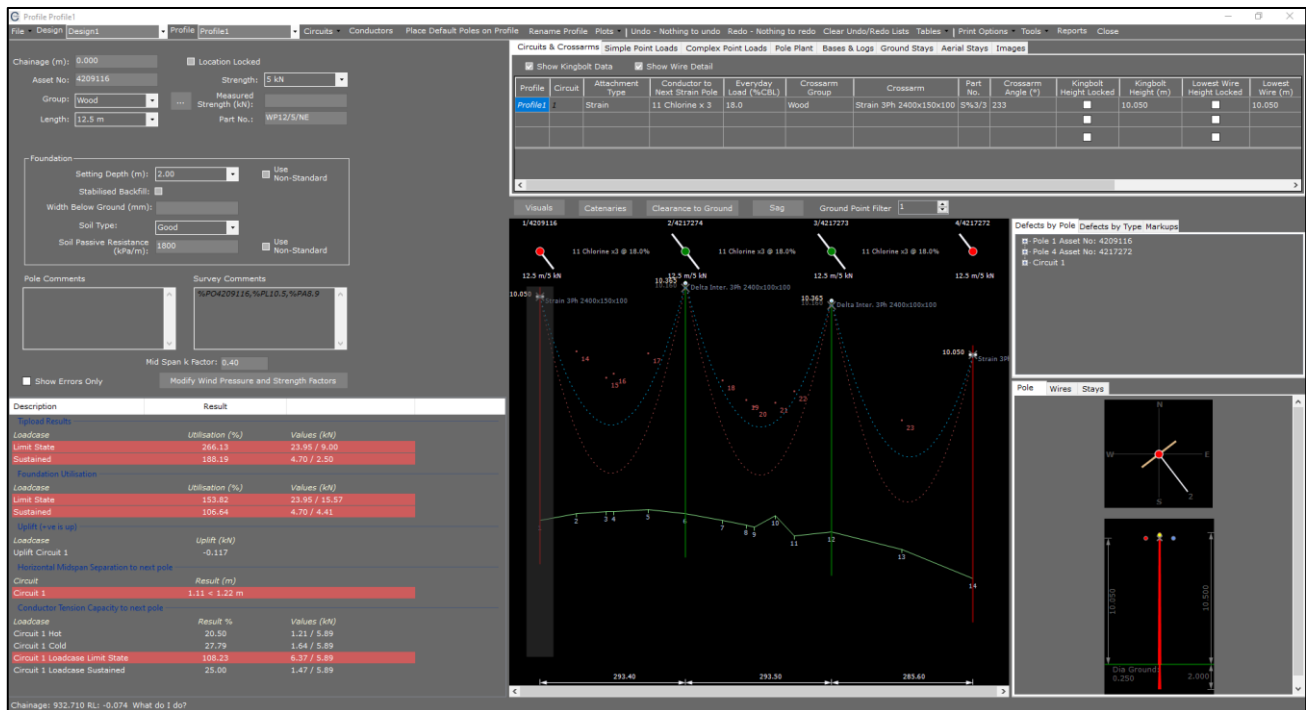


28. Select **Save** in the top right-hand corner of the window
29. We are now going to place poles at those locations where poles have been indicated in the survey data using the field code %PO. Do this by first selecting the option **Place Default Poles on Profile**, as shown below

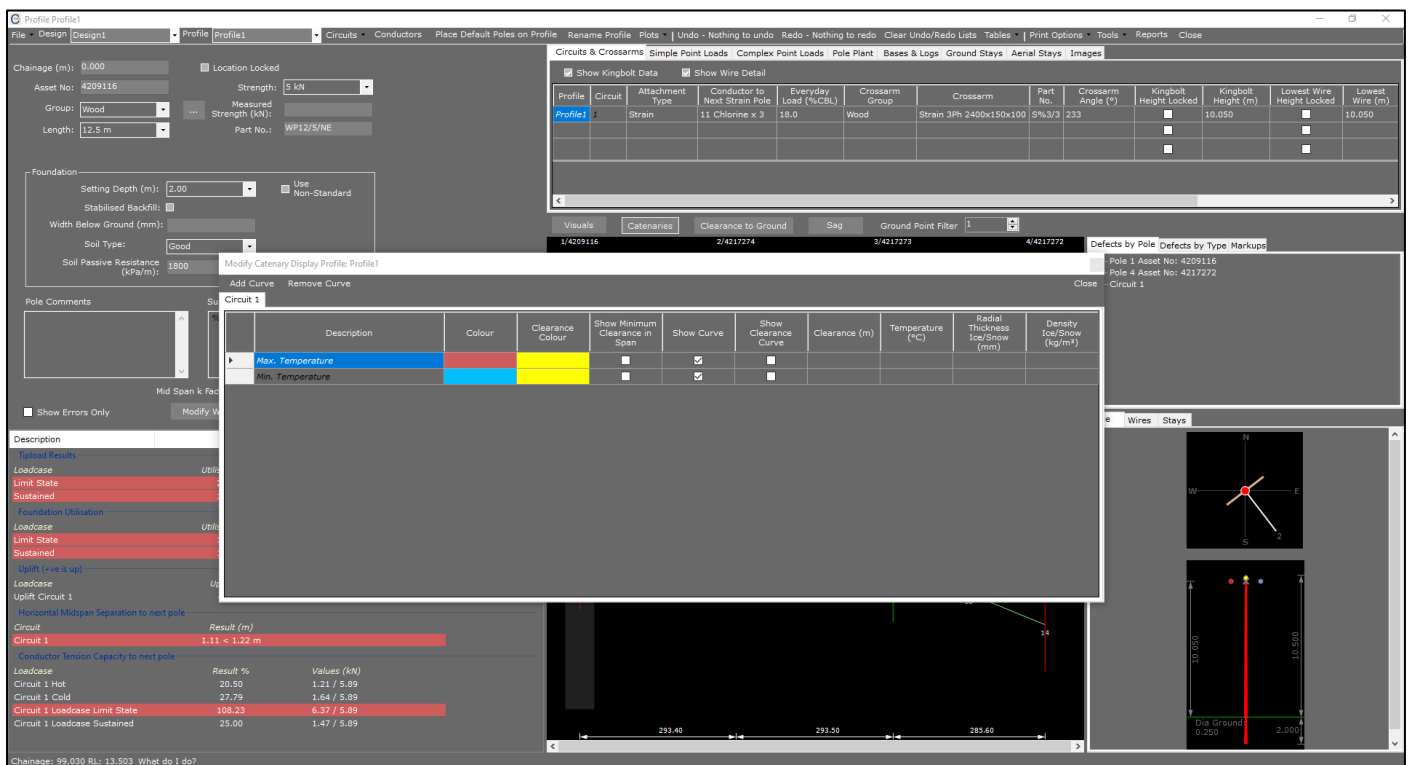


30. Change the **Pole Group** to 'Wood'
31. Change the **Length Description** to '12.5m'
32. Change the **Strength Description** to '5kn'
33. Change the **Setting Depth** to '2m'
34. Leave the default **Soil Type** as 'Good'
35. Select the Chlorine Conductor we added earlier by clicking the check-box provided
36. Change the **Strain Crossarm Group** to 'Wood'
37. Leave the default **Crossarm** as 'Strain 3Ph 2700x150x100'
38. Change the **Pin Crossarm Group** to 'Wood'
39. Leave the default **Crossarm** as 'Delta Inter. 3Ph 2700x100x100'
40. Enter a **Max Deviation Angle** for Pin Crossarms of '10'
41. Click the option that says **Process Field Codes** (e.g. %PO, %YT, %YA etc)
42. Select the option **This is an Existing Profile**
43. Click **Place Poles** to finalise. Profile 1 should now look like the figure below.

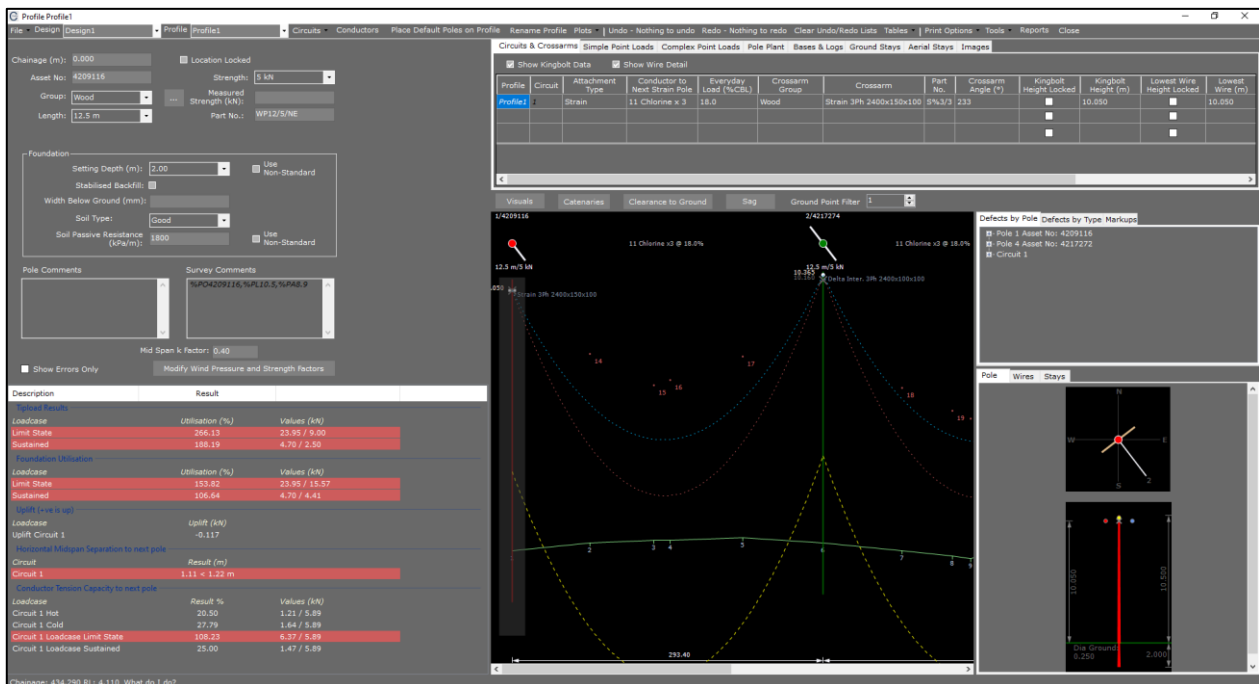
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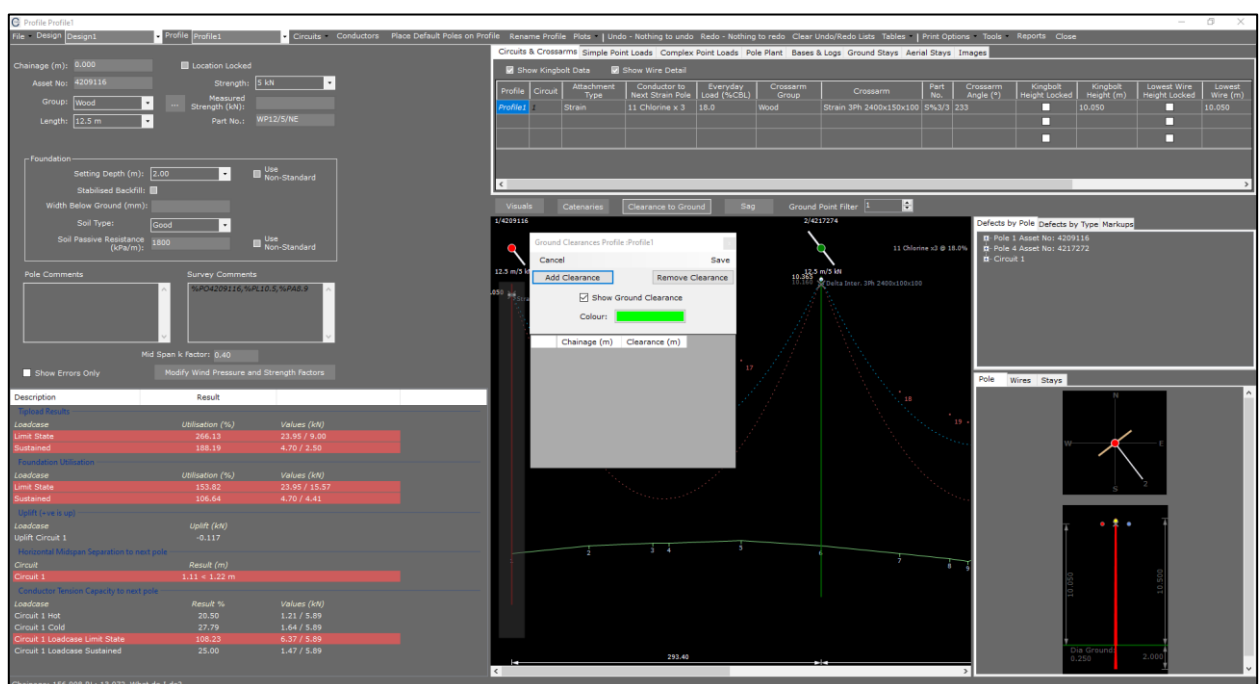
44. We are now going to add in a clearance curve by first selecting the button **Catenaries** above the elevation view drawing. A new window will open



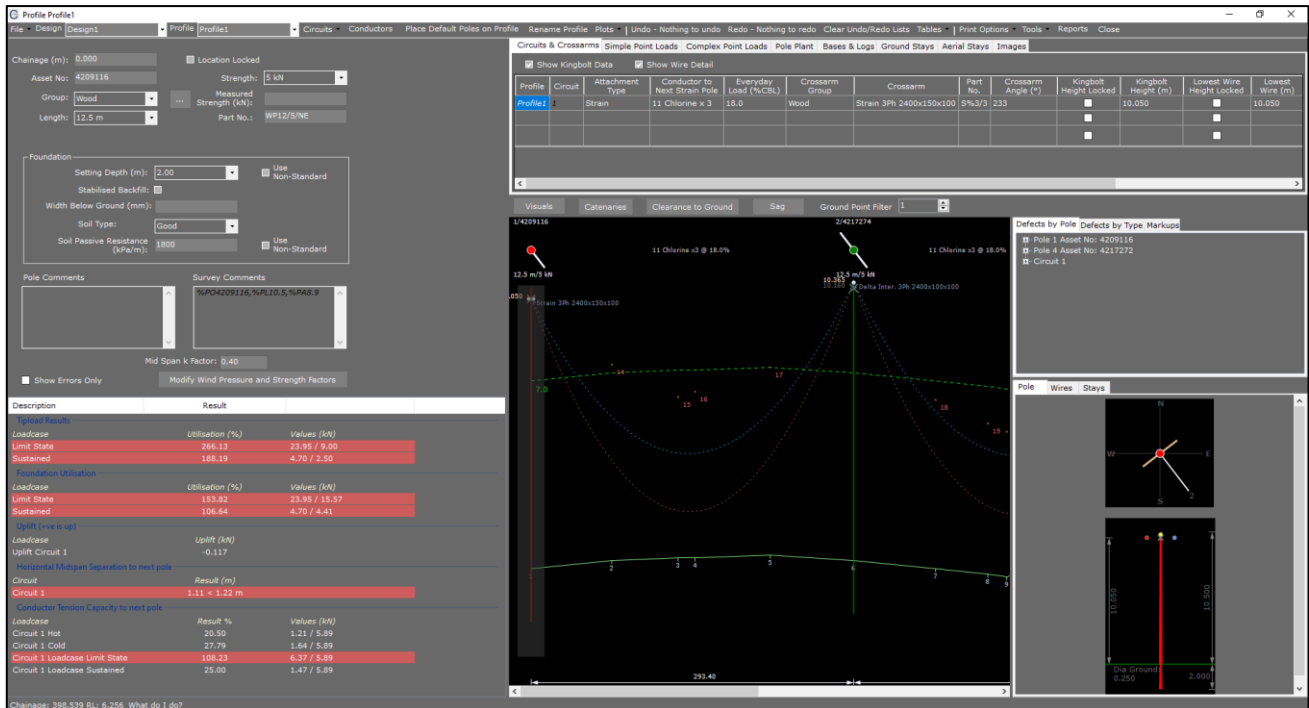
45. Under the **Max Temperature** curve for **Circuit 1 11kV Chlorine** we are going to select the option **Show Curve**
46. Enter in a **Clearance** value of '**7**'
47. Select **Close** at the top right-hand corner of the window. The elevation view will now have a 7m clearance curve for the conductor on circuit 1 operating at the maximum temperature. This is indicated by the yellow curve below. If the groundline crosses the yellow clearance curve then the required clearance has not been achieved.



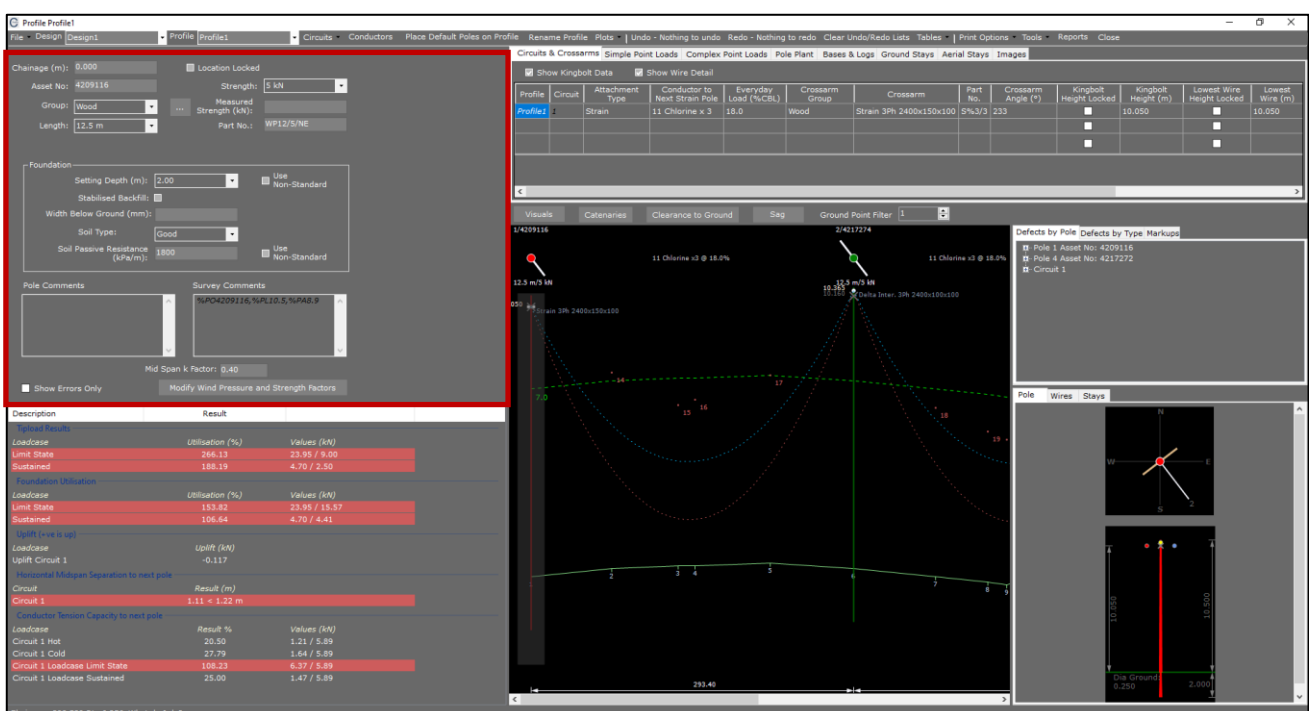
48. You may prefer to show the to show the clearance as an offset from the ground. To do this first go back into **Catenaries** and un-select **Show Curve** followed by **Close**
49. Next select the option **Clearance to Ground** and a new window will open



50. Select **Add Clearance**. A new row in the grid will appear at a **Chainage** of 0m
51. Enter a **Clearance** of **'7'** and select **Save**. The elevation view will still have a 7m clearance curve for the conductor on circuit 1 operating at the maximum temperature. This is indicated by the yellow curve below. If the maximum temperature circuit curve crosses the yellow off-set groundline clearance curve, the required clearance has not been achieved.



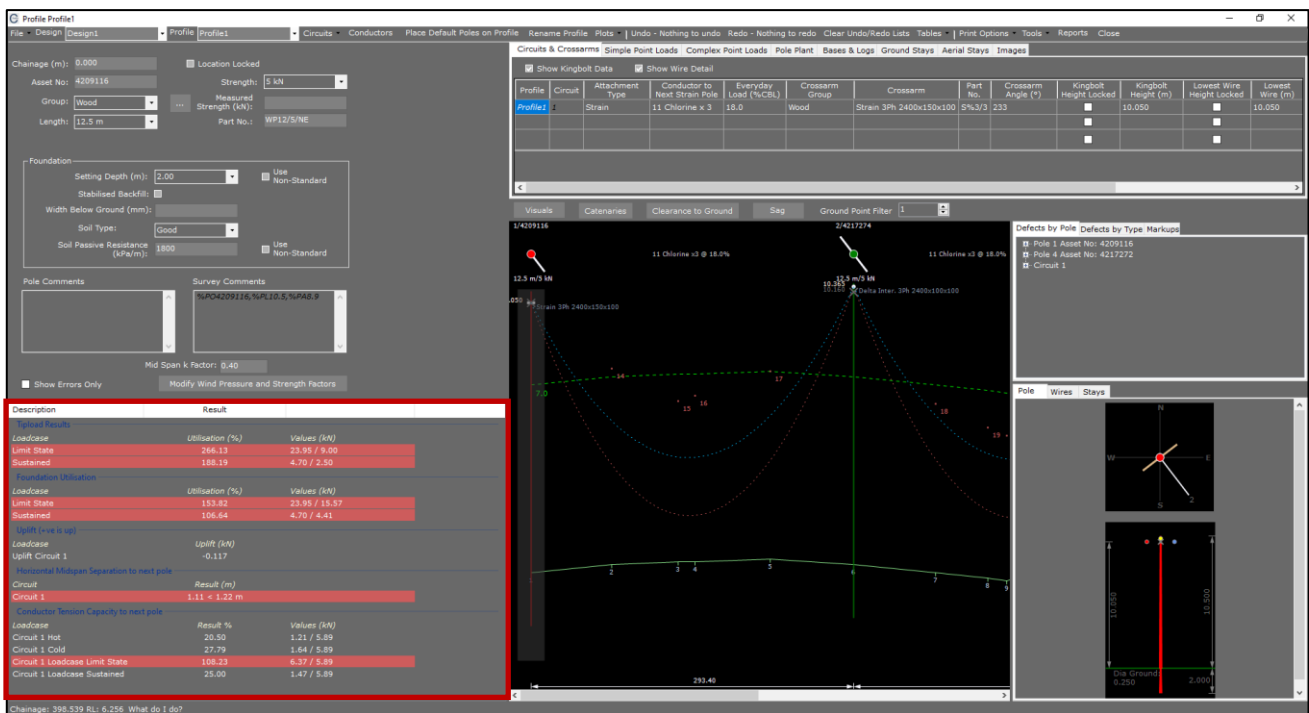
52. The pole attributes (**Group, Length, Strength, Setting Depth, Soil Type** etc) can be changed on each pole by clicking the pole of interest in the profile view (indicated by the grey transparent highlighting) and selecting from the dropdown menus provided which will be prepopulated from the user libraries.



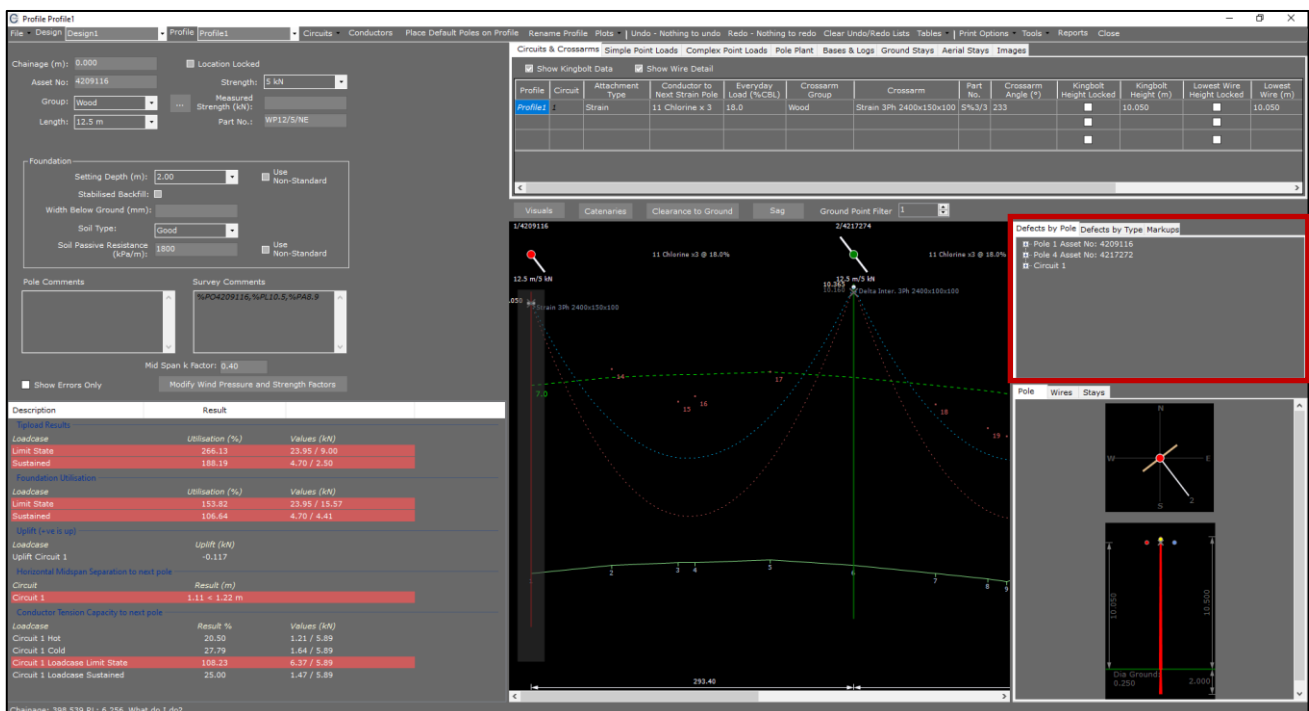
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53. A summary of the results on each pole can be viewed by clicking the pole of interest in the profile view (indicated by the grey transparent highlighting). The results are then listed on the left-hand side under the pole attributes



54. A list of **Defects** on the profile are also provided on the right-hand side of the elevation view



55. If the Pole or other attributes are highlighted red then the allowable limits have been exceeded

56. Select **File>Save**