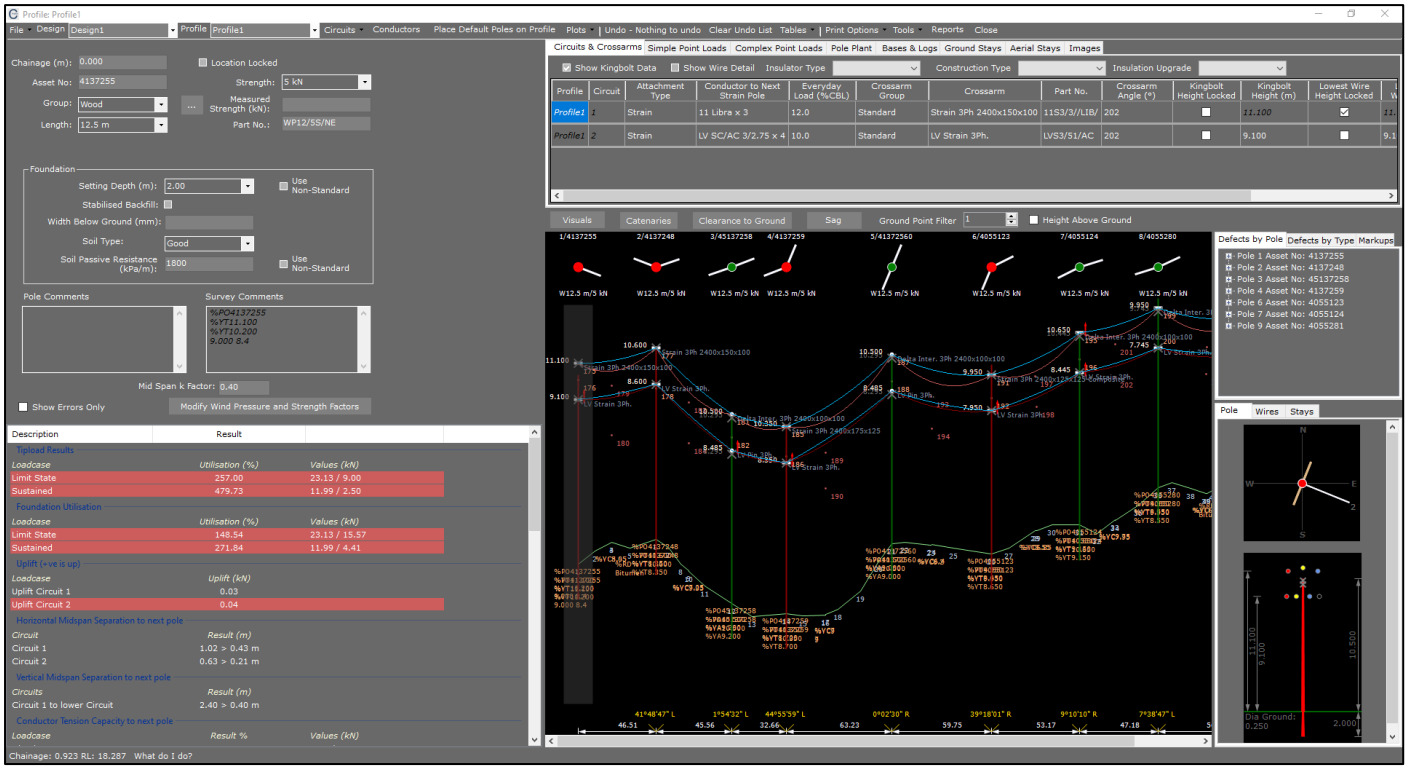
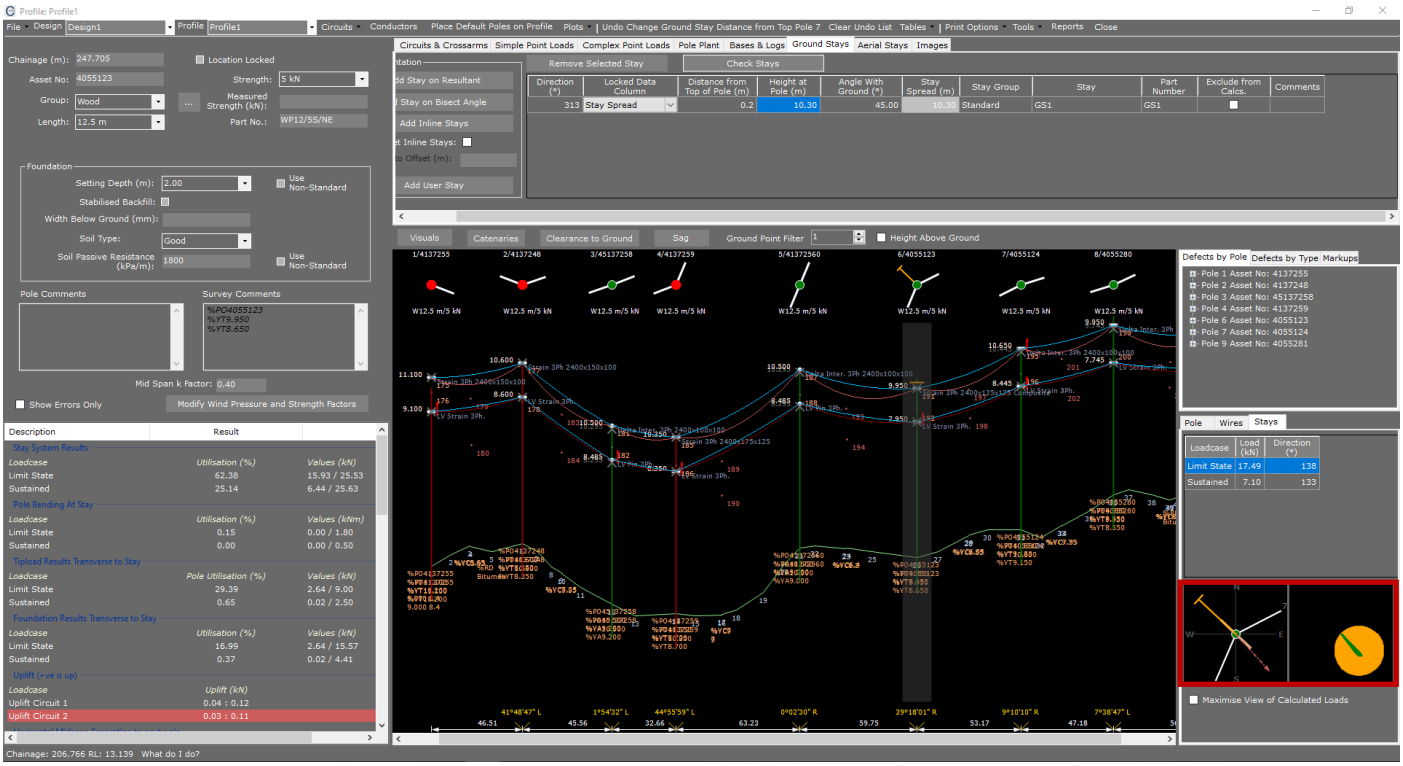
COLDNet Profile – Adding Ground Stay

1. Open the earlier project that we created called **WalkthroughCSVImport**
2. Select **File>Save As** and give the new project the name **AddingGroundStays**
3. Once returned to the main form select the **Profiles** option from the top toolbar menu. A new window will open



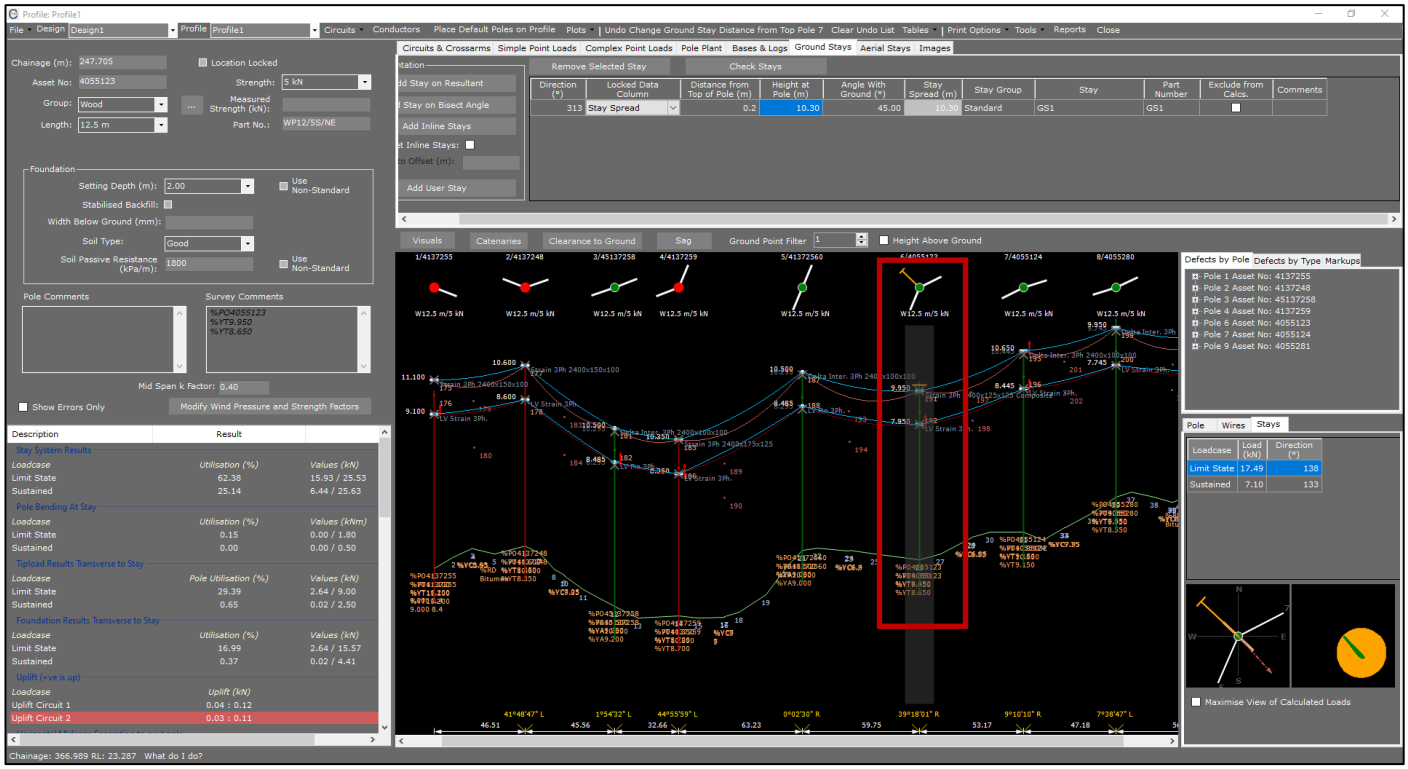
4. Select **Visuals>Point Nos.>Update View**
5. Select the 6th Pole in the profile (Point No. 25). Make sure this pole is highlighted with a transparent grey background. Select the **Stays** Tab

6. In the bottom right-hand corner of the window under the stays tab is a plan view diagram and load case table. This displays the resultant load and direction on the pole. The red arrow shows the maximum resultant load direction
7. Select **Add Stay on Bisect Angle**. A new row in the grid will appear with the calculated stay direction
8. Check that the **Direction** is **'315'**. The orientation of the Stay (indicated by the yellow dotted line) can be seen visually along with the maximum load direction (indicated by the maroon dotted line) in the Plan View provided. By default, the previous stay properties that were used will be added to the stay grid.
9. Next to the plan view of the pole is another diagram that shows the resultant maximum stay load (calculated for every 1deg of wind) at its current orientation (indicated by a green or red polygon) that overlays the capacity of the stay for each direction (indicated by the yellow polygon). If the top overlayed polygon sits inside the yellow polygon than the stay capacity is greater than the resultant maximum stay load at that configuration and will be highlighted green. If the top polygon however extends outside the yellow polygon at any point, it indicates that the stay capacity at that direction is insufficient to support the resultant maximum stay load and will be highlighted red.

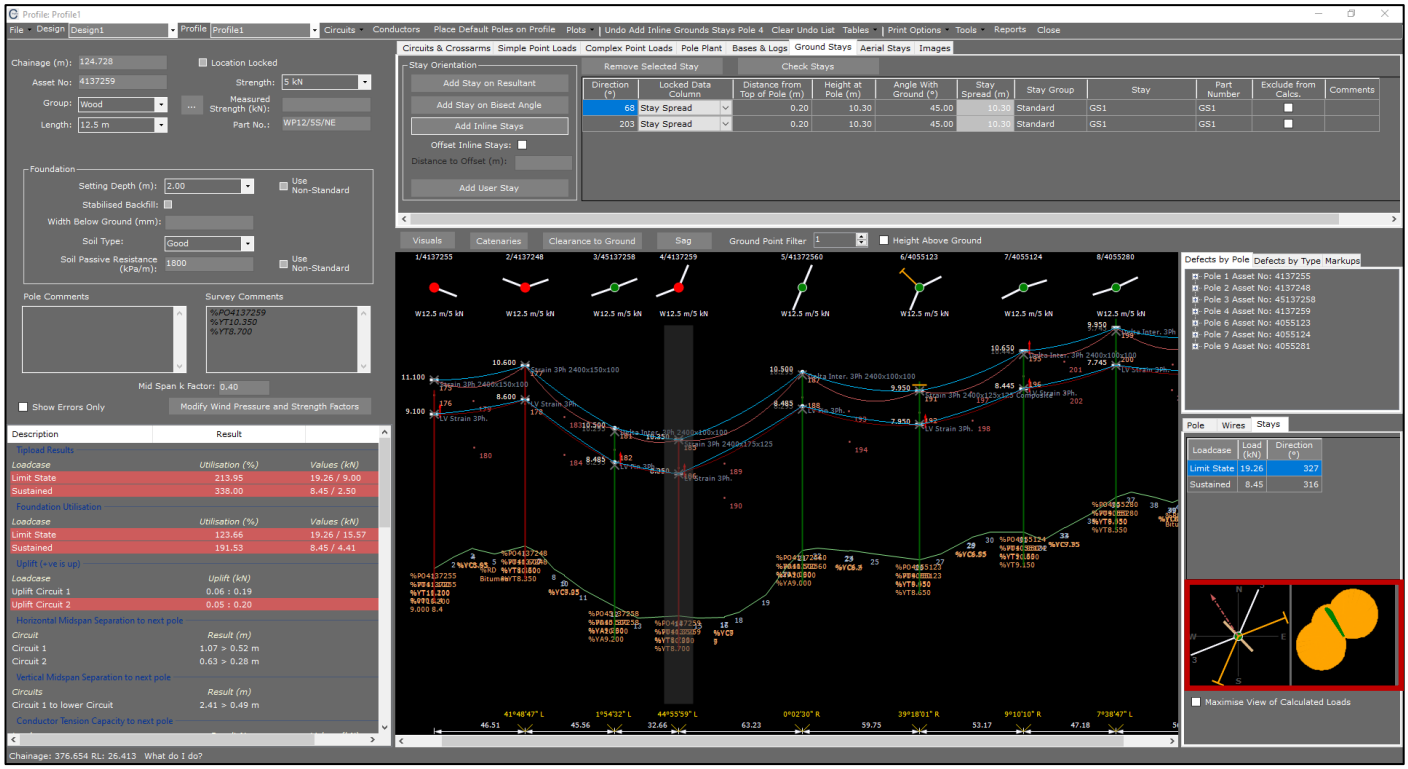


10. Leave the **Locked Data Column** set to **'Stay Spread'**
11. Enter in a **Distance from Top of Pole** of **'0.2'**
12. The **Height at Pole** will automatically be calculated after a **Distance from Top of Pole** has been entered. Check the value of **'10.3'** has been populated
13. Enter an **Angle with Ground** of **'45'**
14. The **Stay Spread** will automatically be populated with **'10.3'** because it is the **Locked Data Column**. This field cannot be changed
15. Select the **Stay Group 'Standard'**
16. Select the **Stay 'GS1'**
17. The **Part Number** field will automatically be populated after a **Stay** has been selected. Check the **Part Number** is **'GS1'**
18. Check that the **Exclude from Calculations** checkbox is un-ticked
19. Leave the **Comments** field empty
20. Select **Check Stays** to add the new stay configuration to the pole and update the calculations. The background colour of the row will turn white from yellow

21. The stay will be added to the pole and displayed in both the elevation and plan view as shown below

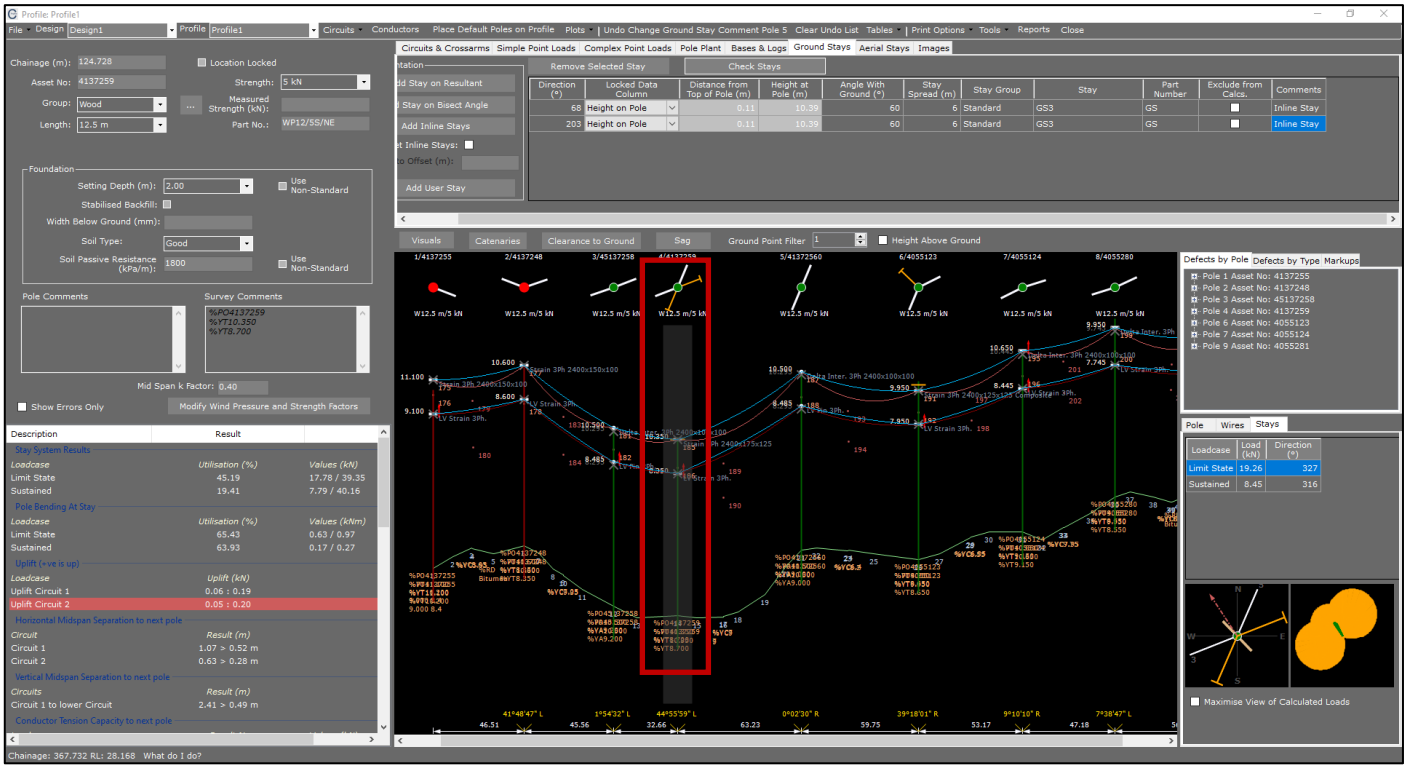


22. Now select the 4th Pole in the profile (Point No. 14). Make sure this pole is highlighted with a transparent grey background and the **Stays** Tab
23. Select **Add Inline Stays**. Two new rows will appear in the grid with each of the directions being behind the each of the spans. By default, the previous stay properties that were used will be added to each of the inline stays.
24. Check that the **Direction** of the first stay is **'68'** and the **Direction** of the second stay is **'203'**. The orientation of the inline stays can be seen in the Plan View below
25. Now that we have multiple stays on a pole the diagram next to the plan view of the pole shows the resultant maximum load of the stay system at its current configuration (indicated by a green or red polygon) that overlays the combined capacity of stays (indicated by the yellow polygon). If the top overlayed polygon sits inside the yellow polygon than the combined stay capacity is greater than the resultant maximum load of the stay system and will be highlighted green. If the top polygon however extends outside the yellow polygon at any point, it indicates that the combined stay capacity at this configuration is insufficient to support the resultant maximum load in the stay system and will be highlighted red. Also note that the program checks to see if the pole was passing before the stays are added. If the pole passes before the stays are added, then the stay system is passed. Therefore, poles with stays that are placed to stop cascade failure will not be failed if the pole was already passing.



For each of the stays:

26. Change the **Locked Data Column** to **'Height on Pole'**
27. Both the **Distance from Top of Pole** and **Height at Pole** columns should be greyed out and cannot be edited. These columns will automatically be populated once the **Stay Spread** and **Angle with Ground** has been entered
28. Enter an **Angle with Ground** of **'60'**
29. Enter a **Stay Spread** of **'6'**
30. Select the **Stay Group 'Standard'**
31. Select the **Stay 'GS3'**
32. The **Part Number** field will automatically be populated after the **Stay** has been selected. Check the **Part Number** is **'GS3'**
33. Check that the **Exclude from Calculations** checkbox is un-ticked
34. Add the **Comment 'Inline Stay'**
35. Select **Check Stays** to add the two new inline says to Pole 4. The background colour of rows will turn white from yellow
36. The inline stays will be added to the pole and displayed in both the elevation and plan view as show below



37. Select **File>Save**