



PLS-CADD/Lite - New Graphical Commands

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Move Span End Attachment ✕

Move Mode:

Freehand

Horizontal

Vertical

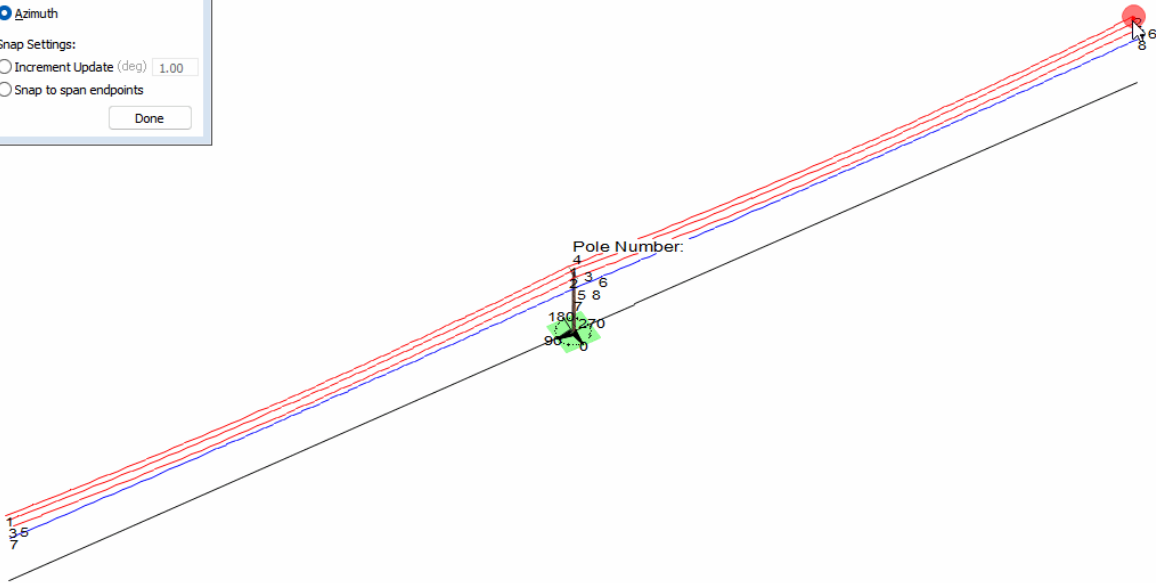
Azimuth

Snap Settings:

Increment Update (deg) 1.00

Snap to span endpoints

Done



Agenda

- PLS-CADD/Lite refresher
- Move Wire Span End Attachment Point
- Structure Rotation
- Export to full PLS-CADD project
still under development

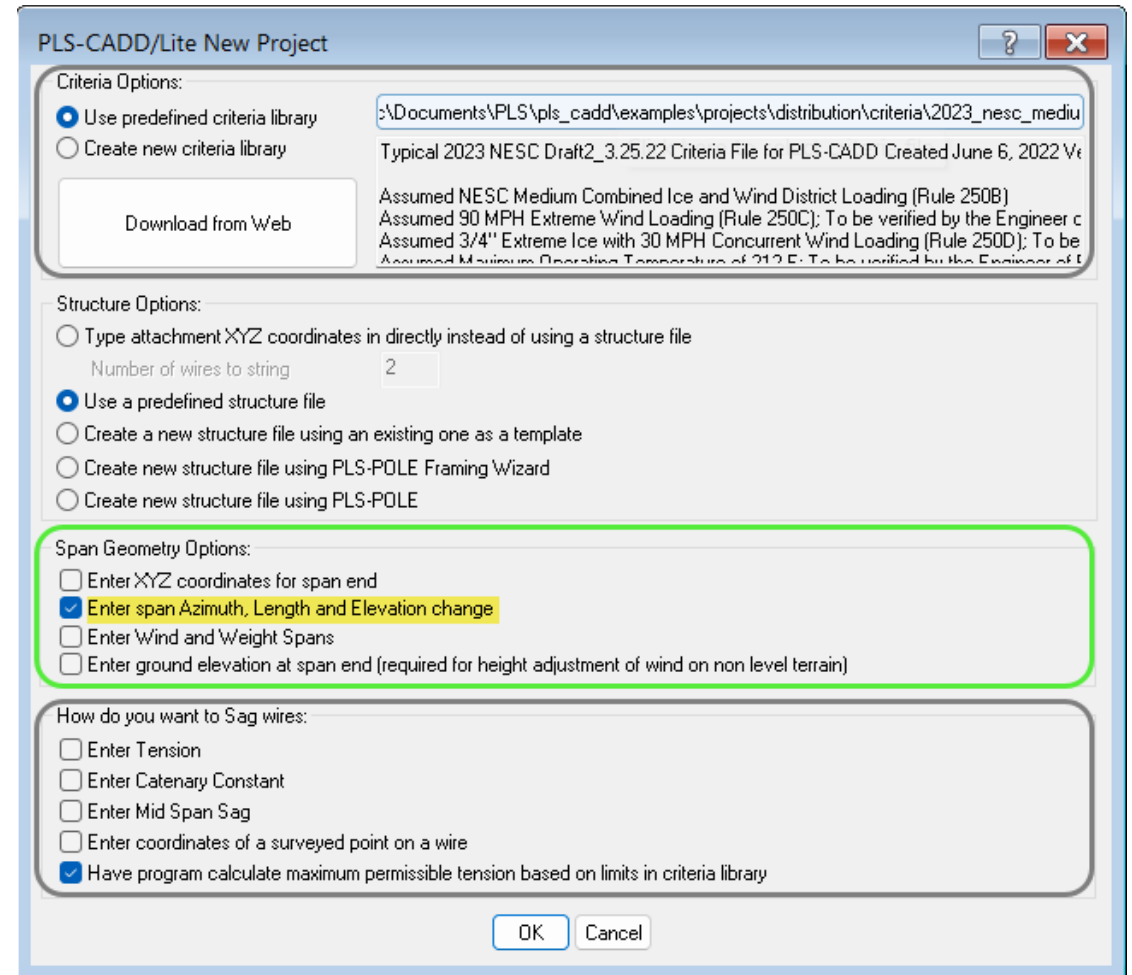
PLS-CADD/Lite refresher

- From PLS-POLE or TOWER use the:



button

- This will automatically string wires on all *linked* Insulator Sets: Phases
- The *PLS-CADD/Lite New Project Wizard* will launch allowing you to select:
 - CRI file
 - **Span Geometry options**
 - How to Sag your wires

A screenshot of the "PLS-CADD/Lite New Project" dialog box. The dialog is titled "PLS-CADD/Lite New Project" and has a blue header bar with a question mark and a close button. It is divided into several sections: "Criteria Options" with radio buttons for "Use predefined criteria library" (selected) and "Create new criteria library", a text field with a file path, and a "Download from Web" button; "Structure Options" with radio buttons for "Type attachment XYZ coordinates in directly instead of using a structure file", "Use a predefined structure file" (selected), "Create a new structure file using an existing one as a template", "Create new structure file using PLS-POLE Framing Wizard", and "Create new structure file using PLS-POLE"; "Span Geometry Options" with radio buttons for "Enter XYZ coordinates for span end", "Enter span Azimuth, Length and Elevation change" (selected and highlighted in yellow), "Enter Wind and Weight Spans", and "Enter ground elevation at span end (required for height adjustment of wind on non level terrain)"; and "How do you want to Sag wires:" with radio buttons for "Enter Tension", "Enter Catenary Constant", "Enter Mid Span Sag", "Enter coordinates of a surveyed point on a wire", and "Have program calculate maximum permissible tension based on limits in criteria library" (selected). At the bottom right are "OK" and "Cancel" buttons.

Model Setup

Select the options you want to use to define the span. The table below will only include those columns needed for the options you select.

Structure Settings
 Use Existing Structure File
 New Structure
 Edit Structure
 Groups

Span End Attachment Point
 XYZ Coordinates
 Azimuth and Span Length
 Wind and Weight Span
 Ground elevation
 (for height adjustment of wind on non level terrain)

Sagging Options
 Tension
 Catenary Constant
 Mid Span Sag
 Surveyed Point on Cable
 Tension from Automatic Sagging Criteria
 Load Cable File Default Tension

Overview Report
 Picture: Structure Picture File
 Line Notes
 Structure
 Location Notes
 Comments

Cable Color

Base X (ft) _____
 Base Y (ft) _____
 Base Z (ft) _____
 Base Long (deg) _____
 Base Lat. (deg) _____
 Bearing of Transverse Axis (deg) 180
 Coord Sys: (Unknown or Unavailable)

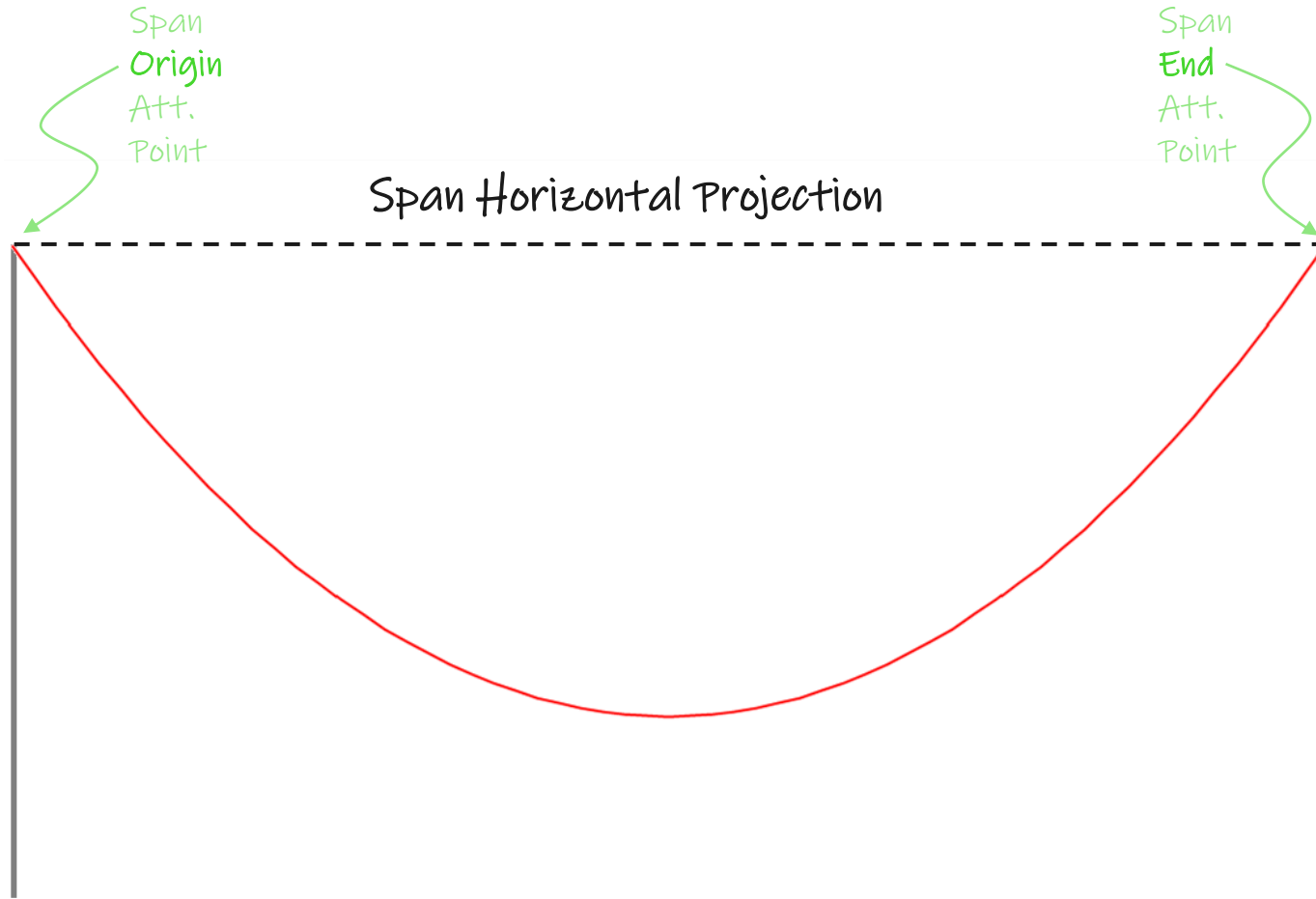
	Description	Cable File Name	Orig. Label	Span Horiz. Proj. (ft)	Span Vert. Proj. (ft)	Span Azimuth (deg)	Wires in Bundle	Ruling Span (ft)	Sagging Condition
1	5:1:Back	drake	5:1	250		90.00	1		Initial RS
2	5:1:Ahead	drake	5:1	250		270.00	1		Initial RS
3	5:2:Back	drake	5:2	250		90.00	1		Initial RS
4	5:2:Ahead	drake	5:2	250		270.00	1		Initial RS
5	5:3:Back	drake	5:3	250		90.00	1		Initial RS
6	5:3:Ahead	drake	5:3	250		270.00	1		Initial RS
7	6:1:Back	drake	6:1	250		90.00	1		Initial RS
8	6:1:Ahead	drake	6:1	250		270.00	1		Initial RS
9	7:1:Back	drake	7:1	250		90.00	1		Initial RS
10	7:1:Ahead	drake	7:1	250		270.00	1		Initial RS
11									
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Required clearance to ground (ft) _____

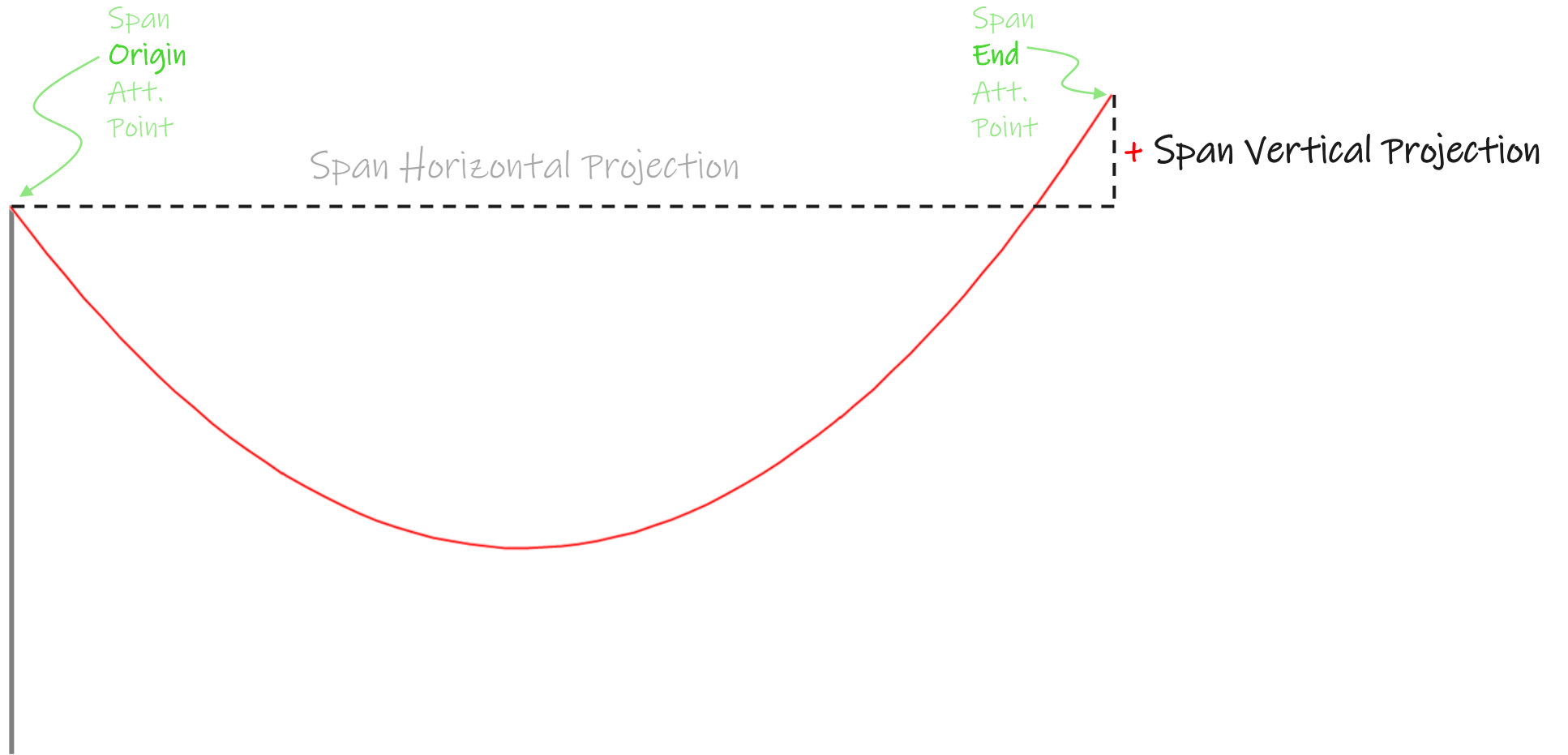
PLS-CADD/Lite refresher

- You will then be taken to the *Model Setup* dialog.
- You should update the cable sizes.
- Sagging conditions and Display options for your cables.
- The new features focus on graphically updating these highlighted fields

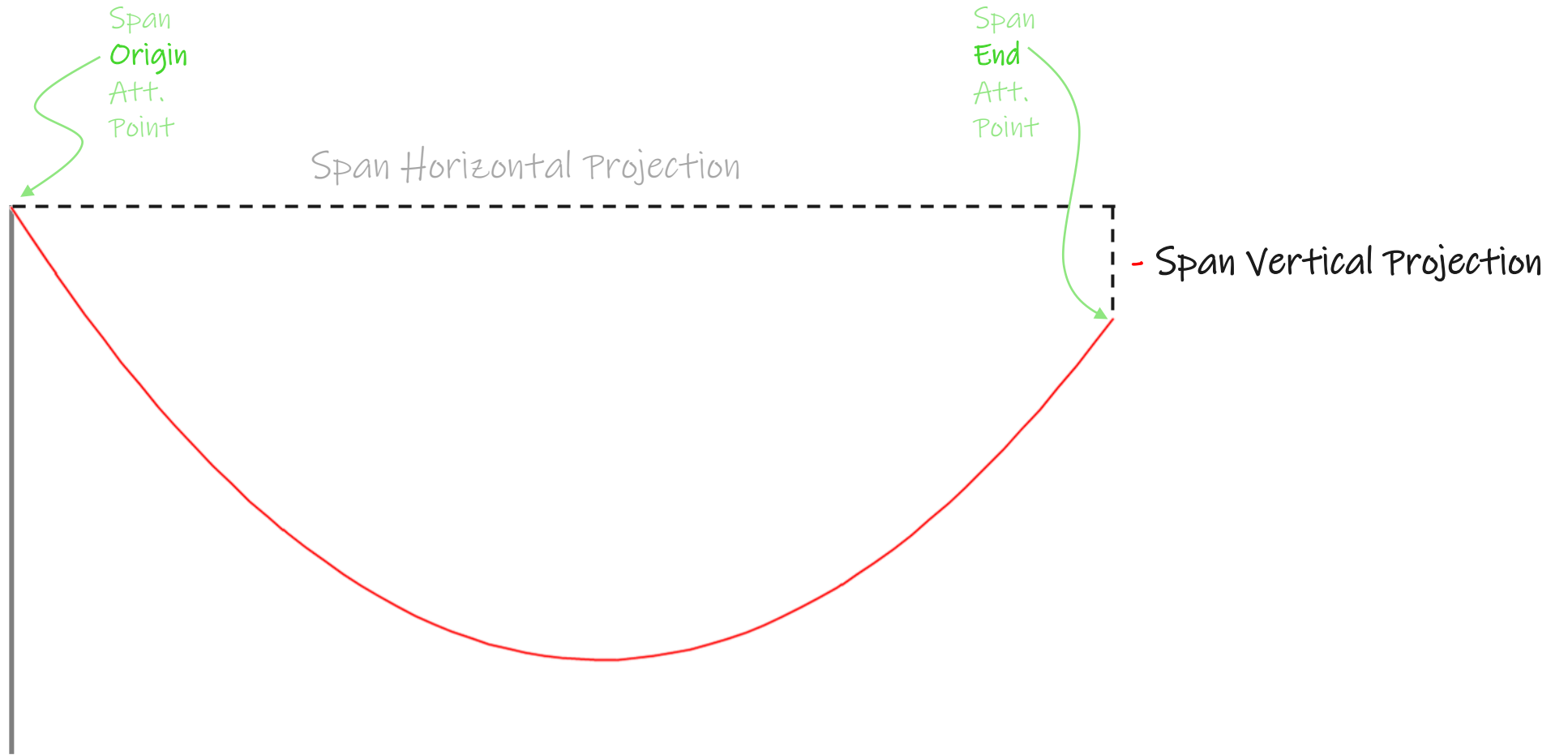
Definitions | Span Horizontal Projection



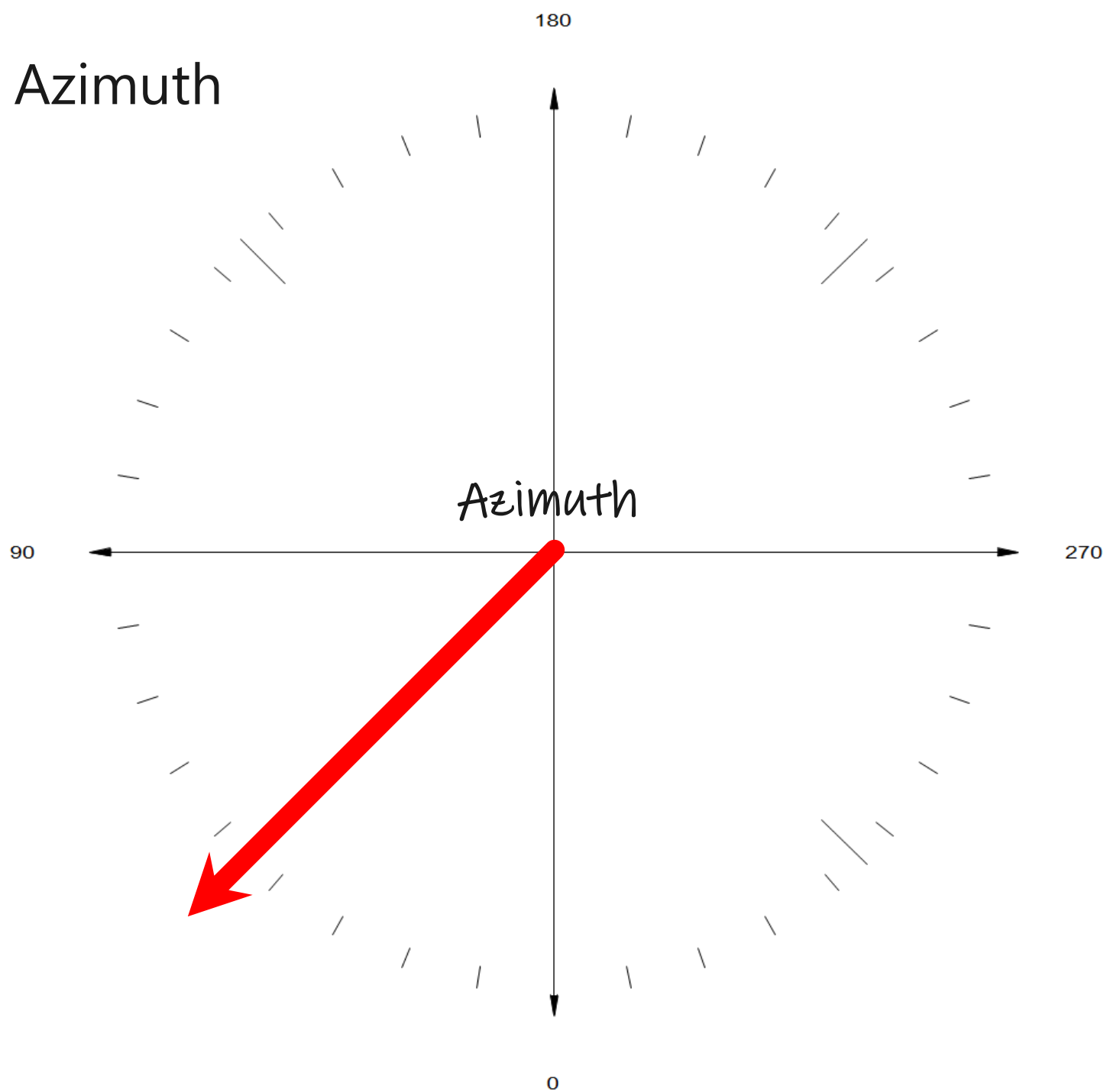
Definitions | Span Vertical Projection



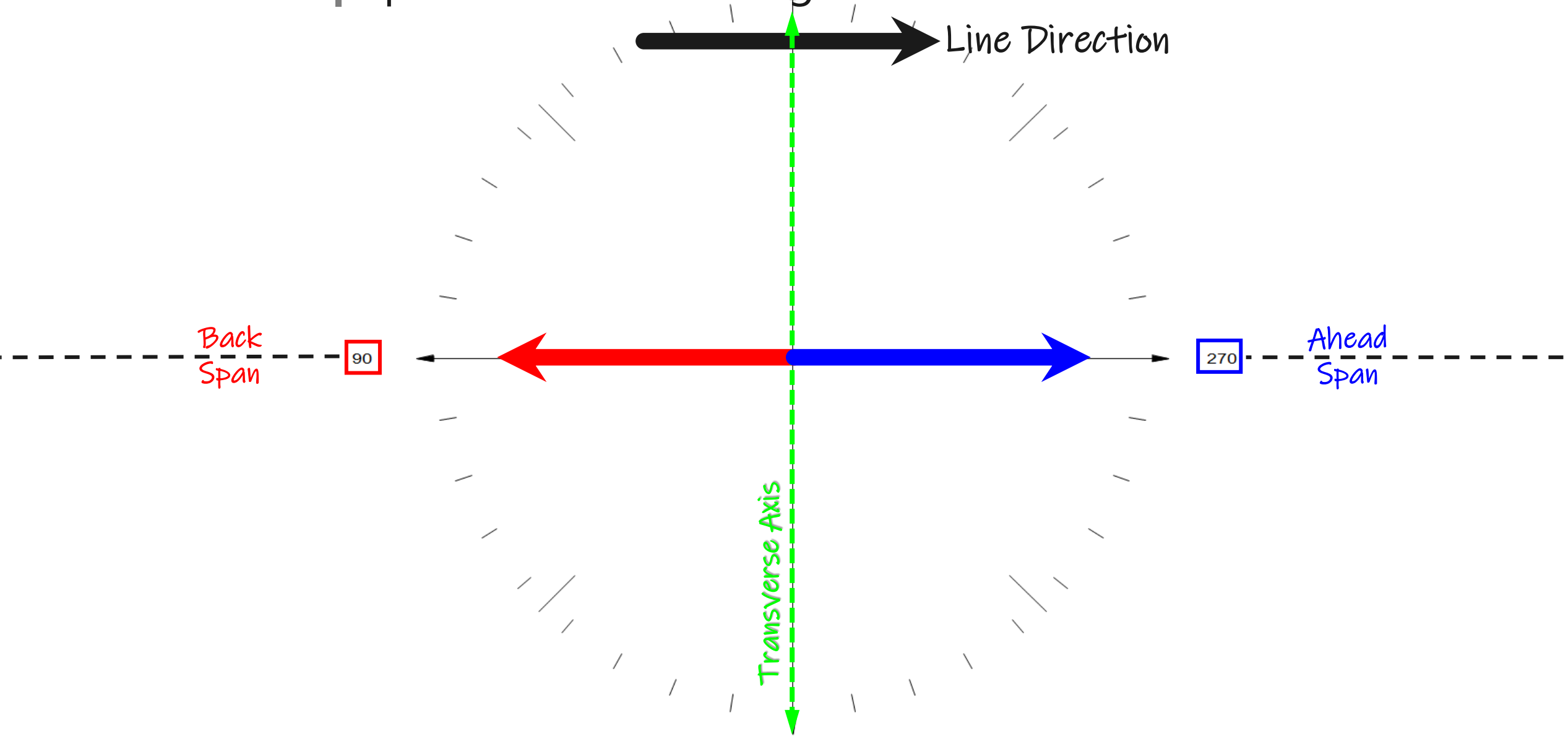
Definitions | Span Vertical Projection



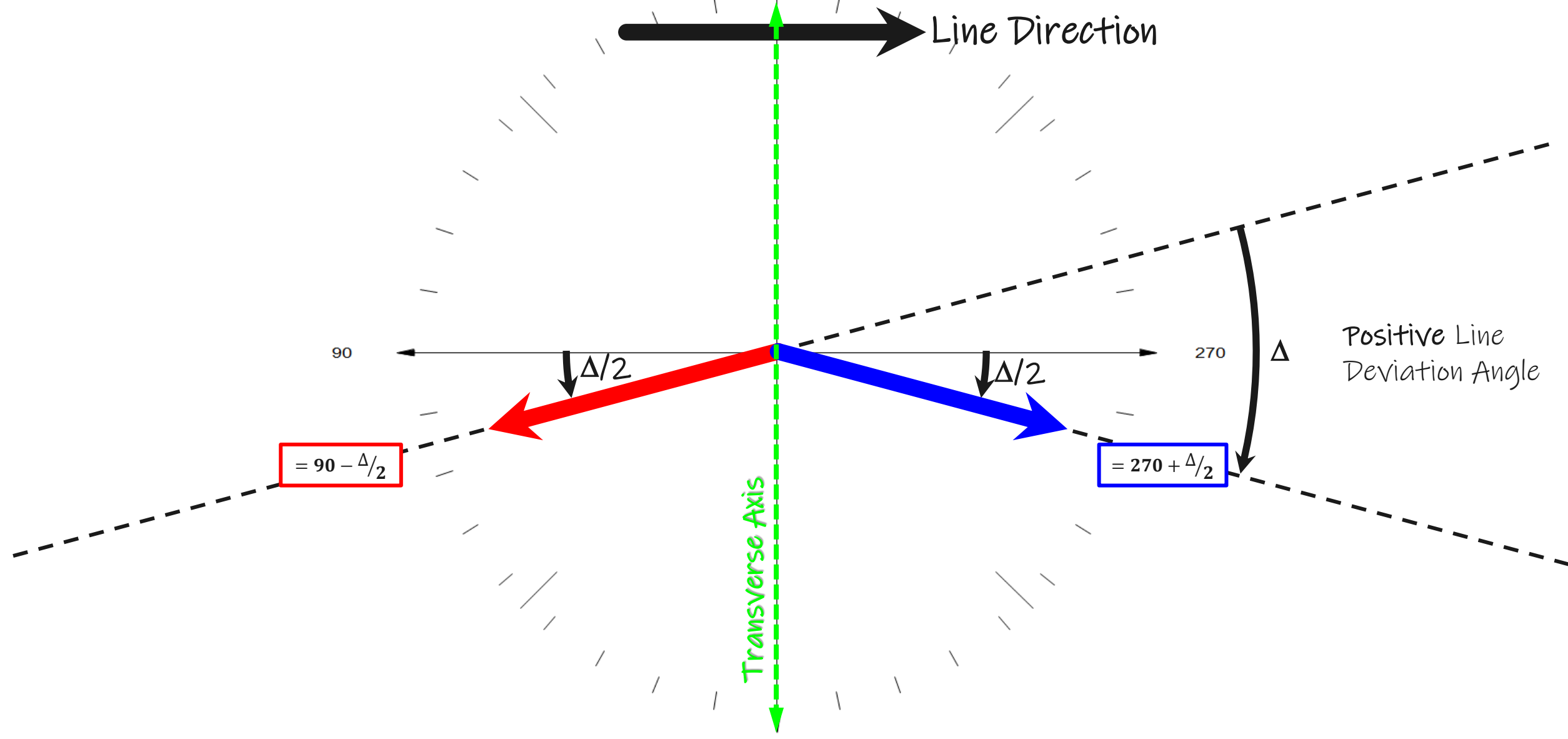
Definitions | Azimuth



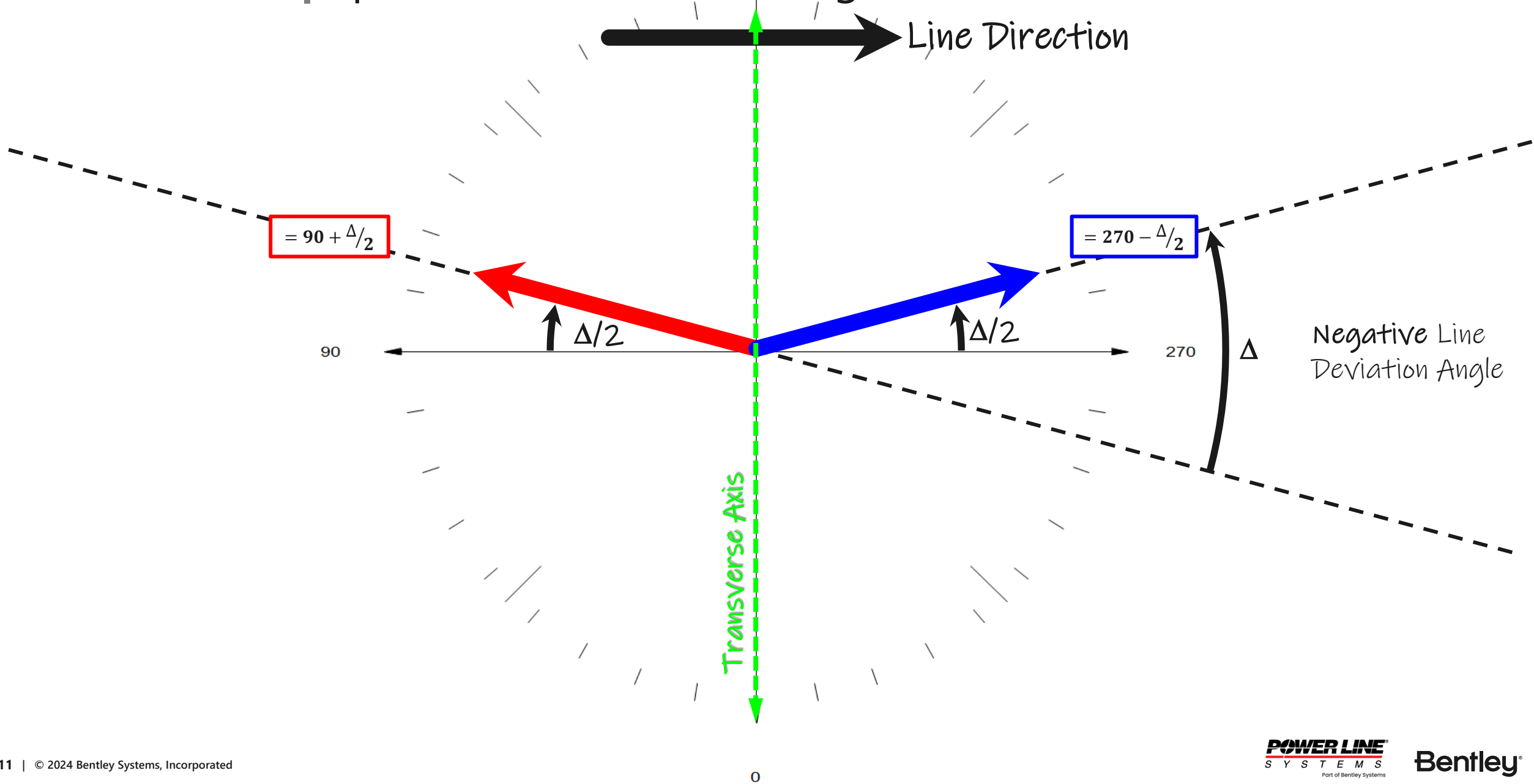
Definitions | Span directions – Tangent



Definitions | Span directions – Line Angle

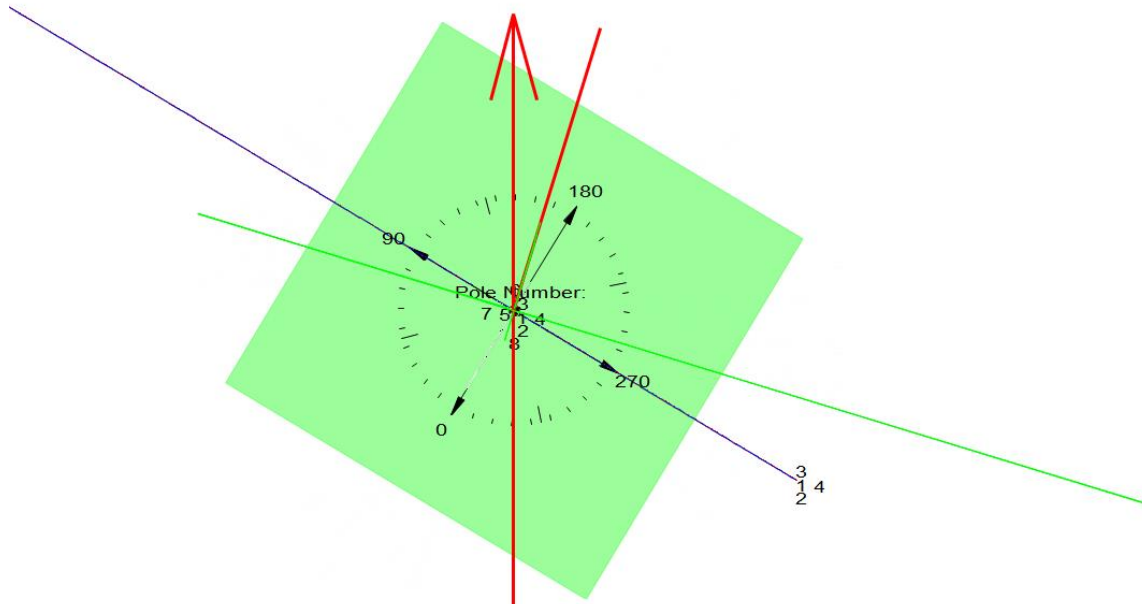
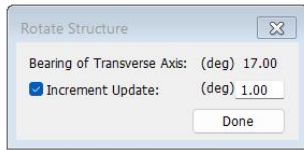


Definitions | Span directions – Line Angle



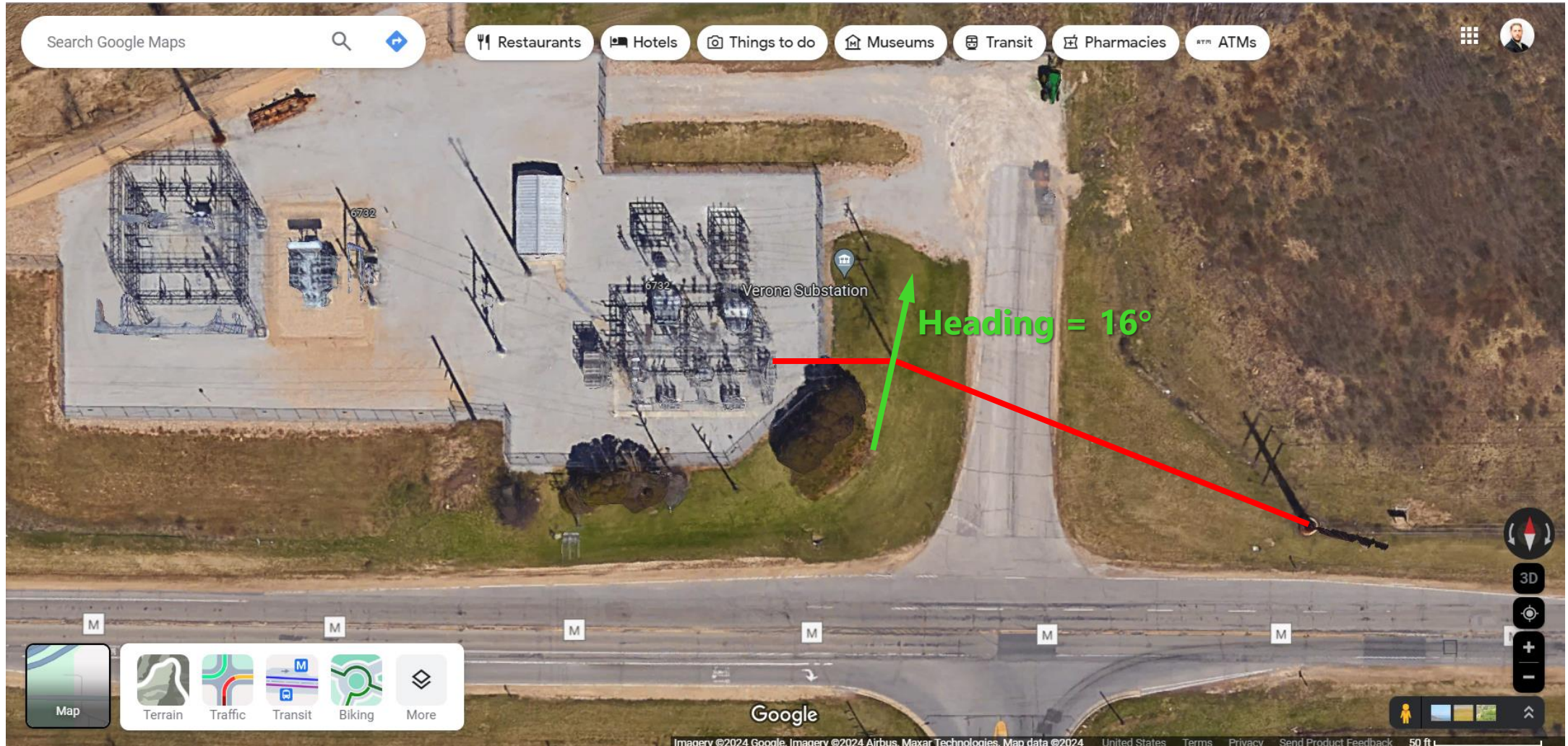
- Live demo of new features

Rotate Structure



- Useful to make sure the structure transverse axis aligns with the actual structure orientation in the field.
- Can be accessed through:
 - the menu command - **Structures/ Rotate Structure**
 - **Context/ Entity Info/ Rotate Structure**
- This can be used freehand or using increments.

Sample model location



Export from PLS-CADD/Lite to full PLS-CADD

- ***F1/ Custom/ Under Development/ Convert Lite Model to PLS-CADD XYZ Project...***
- This will now export this Lite model to a full PLS-CADD model.
- And since it's geolocated, we can:
 - Bring in Survey data... ***Terrain/ Edit/ Merge Points from External File/ Merge Points from Internet...***
 - Create a ground TIN surface... ***Terrain/ TIN/ Create Ground TIN...***, and
 - Bring in aerial imagery... ***Drafting/ Attachments (Raster and Vector)/ WMS***
- We now have a full 3D model, which we can perform clearance calculations to ground, other lines, etc. and even update the model to make use of SAPS FE cable modelling.
- All with simple built-in tools.