



Plateia

by **CGS Labs**



Generate stake-out points along the axis

Tutorial





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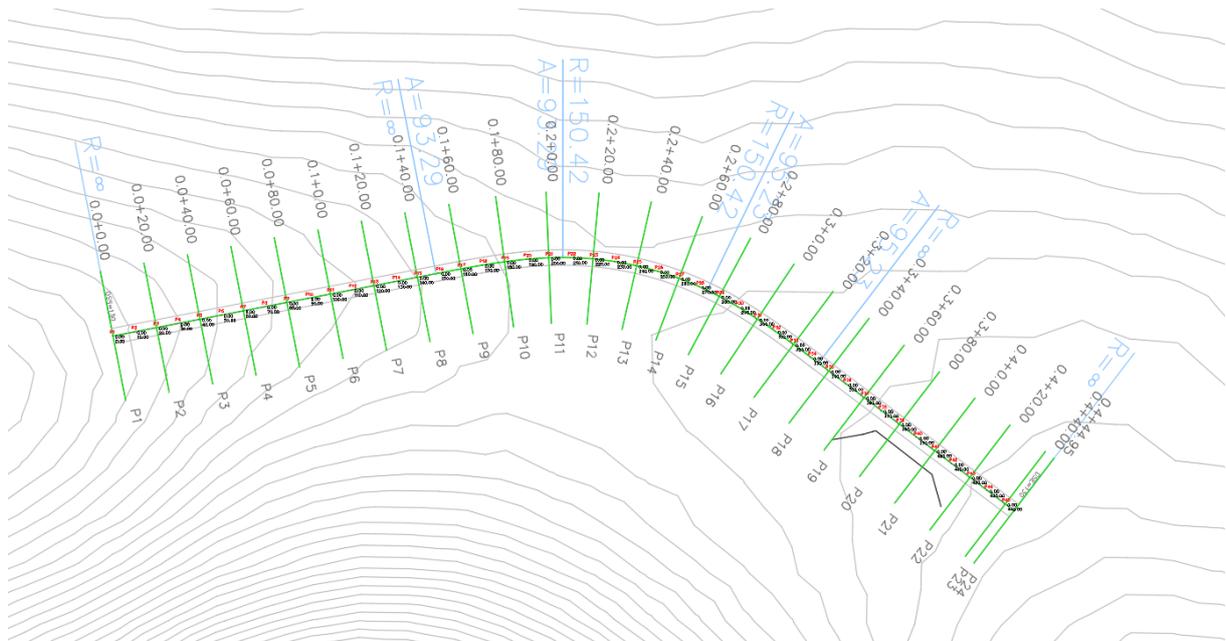
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INTRODUCTION

This command enables you to generate stake-out points along the axis. In addition, points can be generated at any distance from the longitudinal axis or on lanes. Elevations can be automatically assigned to each inserted point. Elevation can be calculated from DTM in the drawing or from the roadway profile if the profile exists in the same drawing.

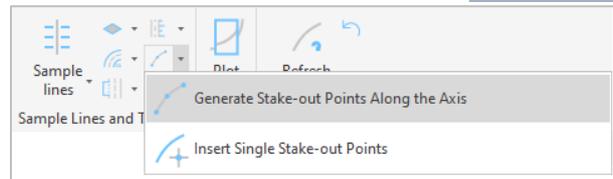


1. Generate stake-out points along the axis

In this chapter, it will be shown how points are generated along the axis (centreline).

1. Run the Generate stake-out points along the axis (21N5) command.

2. Then press Enter to select complete area.

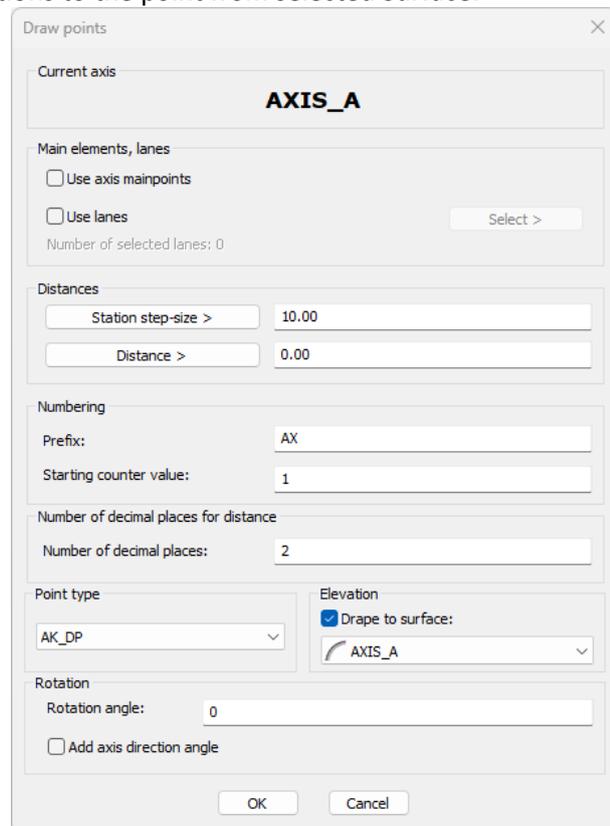


3. In the dialogue box you can specify the following parameters:

- **Use axis main points:** switch on/off axis main points.
- **Use lanes:** If the Use lanes option is activated, points are generated also on lanes. By pressing Select, select lanes on which you want to generate points. For multiple lane selection use CTRL + click.
- **Station step-size:** Point generation step in m. By pressing Station step-size, you can select the step interactively in drawing.
- **Distance:** Point distance from longitudinal axis (perpendicularly). Positive values stand for an offset on the right side of the longitudinal axis if looked in station direction while negative values generate points on the left side.
- **Prefix:** Prefix used when labeling the point.
- **Starting counter value:** Set starting counter value. At each new entered point counter value changes for 1.
- **Point type:** Select a point type.
- **Drape to Surface:** Enables to assign elevations to the point from selected Surface.

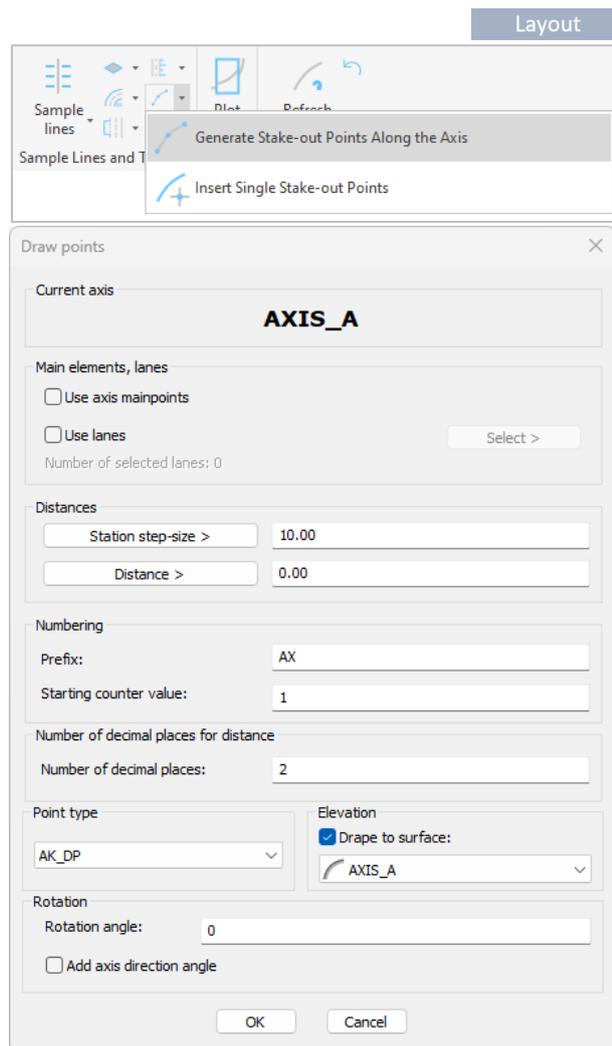
4. After specifying the parameters in the dialog box, as shown in the image on the right, click OK.

NOTE: Every time you run this command, points are added to the drawing. It is recommended to immediately select these points (select one point and use the CAD command "Select Similar") and assign them to a separate drawing layer. This way, you can have a more organized drawing and easily hide/isolate/export/delete individual groups of points.

A screenshot of the 'Draw points' dialog box. The 'Current axis' is 'AXIS_A'. Under 'Main elements, lanes', 'Use axis mainpoints' and 'Use lanes' are unchecked. 'Station step-size' is 10.00 and 'Distance' is 0.00. Under 'Numbering', 'Prefix' is 'AX' and 'Starting counter value' is 1. 'Number of decimal places for distance' is 2. Under 'Point type', 'AK_DP' is selected. Under 'Elevation', 'Drape to surface' is checked and 'AXIS_A' is selected. Under 'Rotation', 'Rotation angle' is 0 and 'Add axis direction angle' is unchecked. 'OK' and 'Cancel' buttons are at the bottom.

2. Generate stake-out points along the left and right lanes

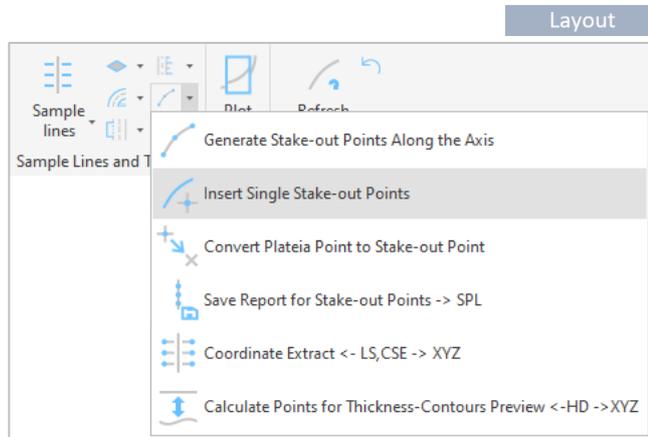
1. Run the Generate stake-out points along the axis (21N5) command.
2. Then press Enter to select complete area.
3. Define the area with two points.
4. Check the box at the Use lanes option.
5. Then click Select button and select lanes along which points will be generated.
6. Define new prefix.
7. Then select point type and elevation from the drop-down menu.
8. After specifying the parameters in the dialog box, as shown in the image on the right, click OK.



3. Insert single stake-out points

If you wish, you can add a custom point anywhere. The point will be projected onto the selected surface.

1. Run the Insert single stake-out points (21N6) command.



2. Check the box for the "Insert point" option.

3. Define a prefix.

4. After that, define the starting counter value.

5. Check the box next to the "Scrape to surface" option and select a surface from the drop-down menu.

6. Confirm the parameters by pressing the OK button.

