Creating a Plot Plan

A plot plan is essentially a map of a property’s legal description. Plot plans usually have a North Pointer and can also include other features such as the location of buildings and setback lines.

When a property’s shape is more complicated than a basic rectangle, you may find it easiest to draw the plot lines yourself, rather than try to edit the terrain perimeter to meet your needs.
To create a plot plan polyline


   ![New CAD Point dialog](image)

2. Select Absolute Location and define the point’s position at (0,0) and click OK. This is the current point that serves as the Start Point for the first line of the plot plan. See “Point Tools” on page 218 of the Reference Manual.

3. Select CAD> Lines> North Pointer, then click and drag to create a North Pointer. For more information on this tool, see “North Pointer” on page 808 of the Reference Manual.

4. Select CAD> Lines> Input Line to open the New CAD Line dialog. Notice that the Start Point is at (0,0): the location of the Current CAD Point. See “Input Line” on page 222 of the Reference Manual.

5. Click the Num Style button and in the Number Style/Angle Style dialog:
   - Select Decimal Feet for the Number Style;
   - Select Quadrant Bearing for the Angle Style. See “Dialog Number/Angle Style Dialog” on page 109 of the Reference Manual.

6. Click OK to return to the New CAD Line dialog

7. Select Relative to Start Point and check the box beside Polar.

8. Enter the length of the first side of your property boundary’s legal description in the Distance field, and the angle of that line in the Angle field. To enter an angle using Quadrant Bearings, type:
   - The primary direction (N or S), followed by a space; then,
   - The angle in degrees, minutes, and seconds with a space after each value; then,
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- The secondary direction (E or W).

9. Click **Next** and enter the **Distance** and **Angle** of the next property line.

10. Continue until all property lines are entered, then click **OK** to close the **New CAD Line** dialog. The resulting polyline should be closed, with the end point of the last line the same as the start point of the first.

Note: The angle of a given line can be described differently depending on which end is used as the start point. Some property descriptions proceed in the same direction around the perimeter, whereas some do not.

**To correct an error**

1. If a line is entered incorrectly, click **OK** to close the **New CAD Line** dialog.

2. Select **CAD > Lines > Disconnect Edges**, then click on the incorrect edge of the polyline to select it.

3. Click the **Delete** button or press Del key on your keyboard.

4. Place a CAD point at the end of the last correct line using the **Place Point** tool to create a new current point.

5. Select **CAD > Lines > Input Line** and continue entering data in the **New CAD Line** dialog.
To create a curved property line

1. Click on a property line to select it, then click the Change Line/Arc edit button to turn this line into an arc.
2. If necessary, use the triangular Reshape edit handle to make the arc concave or convex.
3. Click the Open Object edit button to open the Polyline Specification dialog.
4. On the SELECTED ARC panel, click the Lock Chord radio button, then specify the length of the Radius and click OK.

A curved property line can also be created by entering data in the New Arc dialog. See "Input Arc" on page 231 of the Reference Manual.

To display line length, bearing and radius

1. Select Edit> Default Settings.
2. In the Default Settings dialog, expand the CAD category, select "General CAD", and click the Edit button.
3. In the CAD Defaults dialog, check Display Line Angle as Quadrant Bearing.
4. Click OK, then click Done to close the Default Settings dialog, as well.
5. Click the plot plan polyline to select it, then click the Open Object edit button.
6. On the LINE STYLE panel of the Polyline Specification dialog, check Show Length, Show Angle, and All Angles.
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**To create setback lines**

2. In the Jump field, type in the required setback distance, such as 10’, and click OK.
3. Click the plot plan polyline to select it, then click the Copy/Paste edit button.
4. Place your cursor over a corner edit handle, then click and drag towards the center of the polyline. When a second, inner polyline appears, release the mouse.
5. Select the inner polyline and click the Open Object edit button to open the Polyline Specification dialog.
6. On the LINE STYLE panel, select a dashed line style from the drop-down list, uncheck Show Length and Show Angle, then click OK.

![Diagram of a plot plan with setback lines](image)

7. When you have finished creating your concentric copy, select Edit> Edit Behaviors> Default to restore the default edit behavior.

**To convert to a terrain perimeter**

9. In the **Convert Polyline** dialog, select **Convert To: Terrain Perimeter**, then click **OK**.

![Convert Polyline dialog](image)

If the Terrain Perimeter option is greyed out, then a Terrain Perimeter already exists in your plan. You will need to locate and delete it before you can convert the polyline.


11. To increase the size of the text displayed along the Terrain Perimeter polyline, select **Tools> Display Options**.

12. In the **Layer Display Options** dialog:
   - Scroll down to the "Terrain Perimeter" layer and click to select it.
   - Click the Text Style drop-down arrow, select "Plot Plan Text Style" from the drop-down list, and click **OK**.
To accurately position a building

1. Select CAD> Point> Place Point, and then click at a reference point along the perimeter of the building, such as at a corner.

2. Select CAD> Points> Input Point to open the New CAD Point dialog.
   - Select Relative to Current Point;
   - Using the X Position and Y Position fields, specify the distance that a known point on the property line should be from the Current CAD Point on the building perimeter. Unless you want to specify the location in distance and bearing, Polar (CCW from horz) should remain unchecked.
   - Unless you want to specify the location in distance and bearing, Polar (CCW from horz) should remain unchecked.

3. When you click OK, a point is created at the specified location. Use this point as a reference to accurately position the Terrain Perimeter polyline.