

# progeEARTH: Survey and Cogo

Unleash the power of or progeCAD Professional with this Affordable Survey & Cogo software! Traverse and Label, Closure Reporting and our Utilities are included in the Survey and Cogo package. Other optional modules include DTM, and Simple Road Design. Survey and Cogo is an add-on program for progeCAD Professional. You will need progeCAD to run this program.

## **Set Points**

Set points by entering Northing & Eastings or pick a point. (if you pick a point on a 3D object, the elevation will be used for the point). You may also set points by entering a station and offset.

## **Automatic Symbols**

Whenever you add points to the drawing a user definable block can also be placed there automatically, such as an iron pipe or a power pole etc. Linework may also be imported from field codes.

## **Point Protection**

Complete point protection gives you the choice of overwriting existing points or renumbering points as they are imported.

## **Boundary Traverse and Sideshot**

Set points using a boundary traverse or sideshot with turned angle, North azimuth or South azimuth (use vertical angle or difference in elevation).

## **Radial Stakeout**

Select the points you need for a radial stakeout. Create a radial stakeout report using Turned Angle or North or South Azimuth.

## **Inverse Points**

Inverse points by entering the point number.

## **Intersections**

Find intersections by Bearing – Bearing, Bearing – Distance, Az – Az, Az – Distance, Distance – Distance, Line – Arc, and Point offset to a line.

## **Import/Export**

Import points from an ascii file or export points to an ascii file. A file is created with Point Number, Northing, Easting, Elevation and Description. You may also create a Point List for viewing in the same format.

## **Manipulate Points**

You may manipulate points in the drawing by moving or rotating them, you may change the elevation of a group of points, you may resize existing points in the drawing and you may also pivot the points about their placement point.

## **Labels**

You may label the bearing (or North or South Azimuth) and distance of a line by selecting it or by picking points.

You may:

- Label a curve (radius, length) or (delta, radius, tangent, length and chord bearing & length) by selecting it or by picking points.
- Label coordinates by picking a point.
- Label areas by selecting a closed polyline.
- Label station and offset from an alignment (line, polyline or arc).

### **Bearing and Distance Listing**

You may list the bearing and distance of a line by selecting it.

You may list a curve (delta, radius, tangent, length and chord bearing & length) by selecting it.

### **Compute Areas**

You may let the program automatically compute lot areas by Slide Bearing or Radial methods.

### **Draw Traverse**

Draw by entering bearings and distances and curves. Good for inputting an existing boundary.

### **Closure Reports**

Print a detailed traverse and closure report using Bearings or Azimuths describing each leg of the traverse along with the area and error of closure.