## **Pocket 3D: Performing a Jobsite Localization**

## **Control Points**

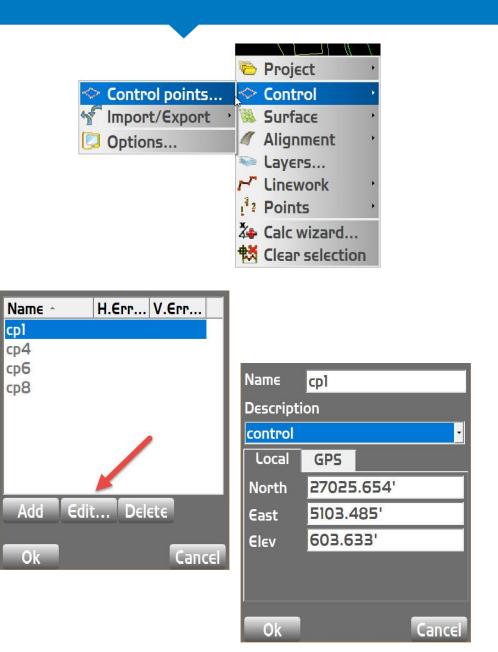
When you have received control points from a surveyor, they are most likely in local coordinates and will need to be localized with GPS measurements.

The control points used in the localization need to be placed at the corners of the job and surrounding the job. At least <u>four</u> control points are needed for a full localization.

The control point coordinates can be imported from a \*.GC3 file, a \*.TXT file, or entered manually.

Select the first control point you want to use, then click **Edit**.

The local coordinates from the surveyor will be populated for North, East, and Elev.



## **GPS Measurements**

Select the GPS tab.

Hit the **Measure** button, and measure the control point with the GPS rover for at least 120 seconds.

The GPS coordinates will populate for Lat, Lon, and Hgt.

Check the two boxes to use both the horizontal and vertical values.

Click Ok.

| Name                   | cpl    |  |  |  |  |
|------------------------|--------|--|--|--|--|
| Description            |        |  |  |  |  |
| control                | •      |  |  |  |  |
| Local                  | GPS    |  |  |  |  |
| Lat                    | N/A    |  |  |  |  |
| Lon                    | N/A    |  |  |  |  |
| Hgt                    |        |  |  |  |  |
| Use horizontal Measure |        |  |  |  |  |
| Use Vertical           |        |  |  |  |  |
| Ok                     | Cancel |  |  |  |  |

| Name  | cpl               |   |  |  |  |
|---|-------------------|---|--|--|--|
| Description   |                   |   |  |  |  |
| control   | -                 | • |  |  |  |
| Local   | GPS               |   |  |  |  |
| Lat   | N37°42'08.48626"  |   |  |  |  |
| Lon   | W121°41'52.81107" |   |  |  |  |
| Hgt   | 494.223'          |   |  |  |  |
| <ul><li>✓ Use horizontal</li><li>✓ Use Vertical</li></ul> |                   |   |  |  |  |
| Ok  | Cance             |   |  |  |  |

## **View the Errors**

Repeat the **GPS > Measure** routine for the remaining control points.

When at least four control points have been measured with GPS, return to the Control Point list.

All of the horizontal and vertical errors should be green, which means the errors are less than 0.10'.

If any residuals are red, you can try unchecking the vertical or horizontal boxes for each point one at a time.

Additional GPS measurements on the control points may be required.

| Name ^<br>cp1<br>cp4<br>cp6<br>cp8 | 0.032'<br>0.026'<br>0.017' | V.Err<br>0.014'<br>-0.013'<br>0.020'<br>-0.021' |
|------------------------------------|----------------------------|---|
| Add Edi<br>Ok                      | t Del                      | ete<br>Cancel                                   |