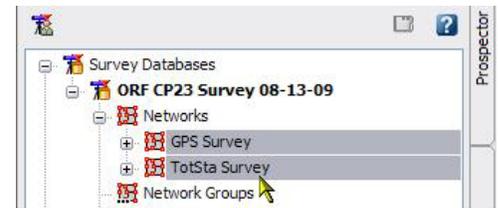


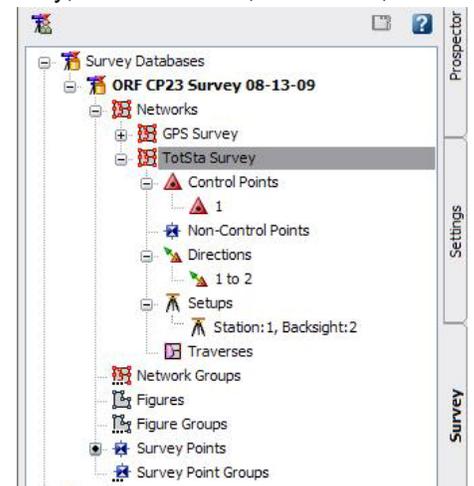
This quick reference guide covers the procedure for adjusting a total station survey performed using assumed coordinates to a survey performed with GPS coordinates.

- Under the survey databases you will see the name of the survey databases that you have created, in this example GPS Survey and Total Station Survey. For more information on creating survey databases, refer to *Quick Reference Guide 140.0 Trimble Link – Civil 3D Setup*.



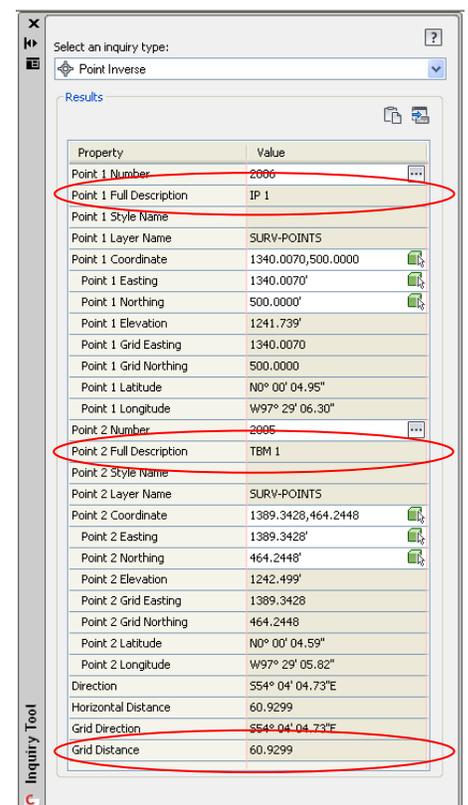
- Expand the tree by clicking the (+) next to Networks, Total Station Survey, Control Points, Directions, and Setups.

In this example, we know that point (1) in the Total station survey equals point (2006) in the GPS survey, and the backsight point (2) in the Total station survey equals point (2005) in the GPS survey.



- We need to find the inverse angle from the GPS survey in order to continue with the adjustment.
 - Select a point in the drawing. A *COGO Point* ribbon should appear at the top of the screen for the point that you selected. On this *COGO Point* ribbon, click on *Inquiry* on the *General Tools* pane.
 - In the *Inquiry Tool* window, click on the down arrow next to *Select an inquiry type:* and select *Point Inverse* from the drop-down menu.
 - For *Point 1 Number* enter 2006. Make note of the northing, easting and elevation of point 2006.
 - For *Point 2 Number* enter 2005. Make note of the northing, easting and elevation of point 2005.
 - Down toward the bottom of the list is the inverse angle between points 2006 and 2005, listed under *Grid Direction*. Make note of this angle.

Now that we have all the information we need to tie the Total Station survey to the GPS survey.



4. Apply the adjustments to the coordinates and rotation to the points in the total station survey.
 - a. Back on the *Survey* tab in *Toolspace*, right click on Point 1 and select *Edit*.
 - b. The Panorama window will open. Enter the Northing, Easting and Elevation values for Point 2006 in the appropriate fields of the table to assign these value to Point 1.
 - c. Click the  icon in the upper right to save your edit, and then click  to close the panorama.
 - d. Back on the *Survey* tab in *Toolspace*, right click on *Directions* and select *New...*
 - e. In the *New Direction* window, make the following changes:
 - From Point → 1
 - To Point → 2
 - Direction → Enter the Grid Distance angle you recorded in Step 3e.
 - Click on the *OK* button
5. Since the base point in the total station survey has been modified, a yellow shield may appear indicating you need to update the network. If this happens, right click on the name of the network and select *Update network*.