

Distance/Offset

This calculation creates a point in relation to a baseline created from two points. When completed, you can stake the new point.

To calculate the distance/offset:

1. Tap **Data** ► **Calc wizard**. The **Calculation types** screen appears.
2. Select **Distance/Offset**.
3. Tap **Calculate**. The **Distance/Offset** screen appears (Figure 4-79).

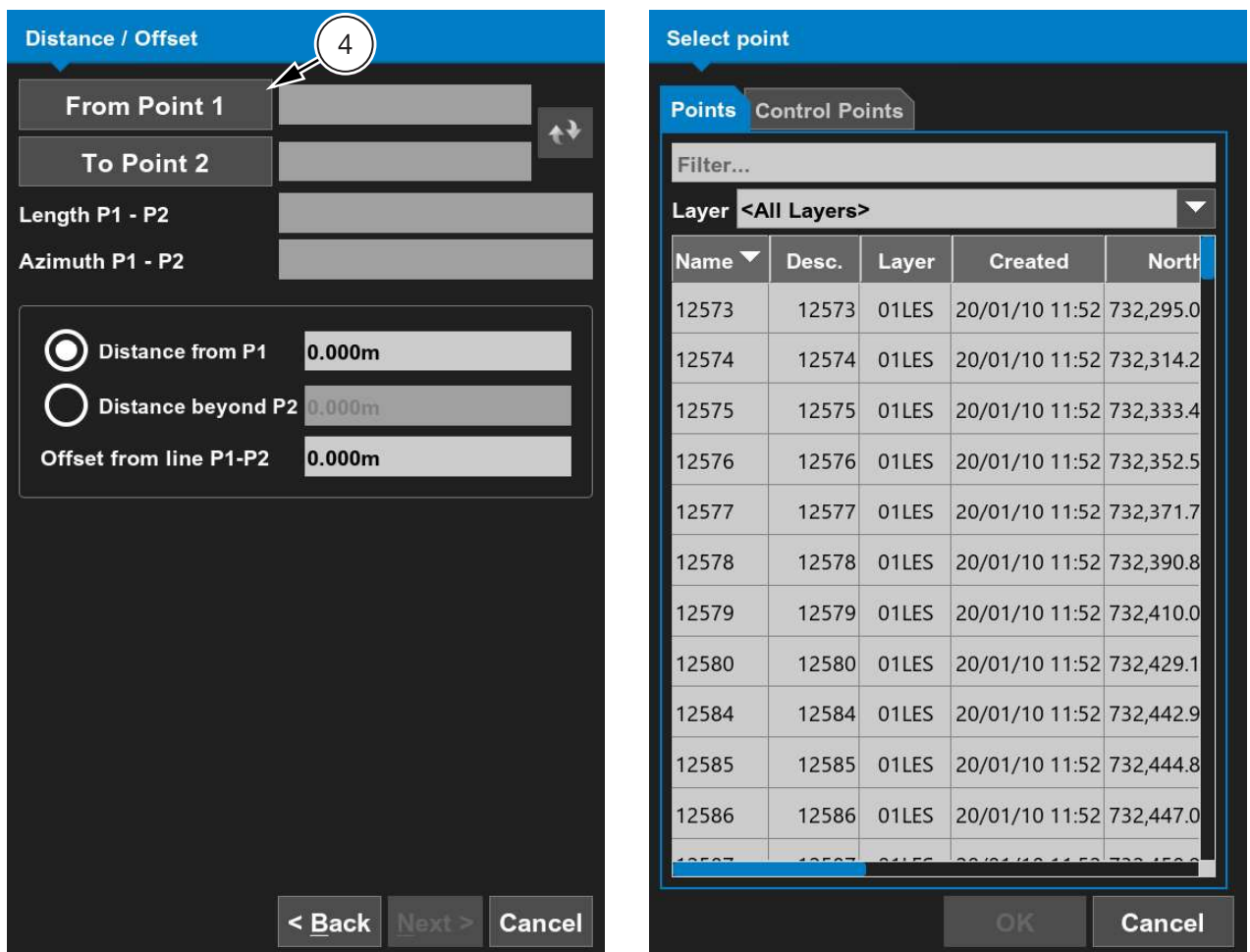



Figure 4-79: Distance/Offset (left) and Select Point (right) Screen

4. Select the following parameters (4, Figure 4-79):
 - **From Point** – tap to select the start point for the calculation. The **Select point** screen appears (Figure 4-79). From the **Points** or **Control Points** tab, select the start point and tap **OK**.
 - **To Point** – tap to select the end point for the calculation. The **Select Point** screen appears. From the **Points** or **Control Points** tab, select the end point and tap **OK**.
 - **Inverse arrow** – tap  to reverse the **From** and **To** points.

5. Once the two points have been selected, the calculated distance (Length P1 - P2) and azimuth (Azimuth P1 - P2) between the two points is displayed (Figure 4-80).

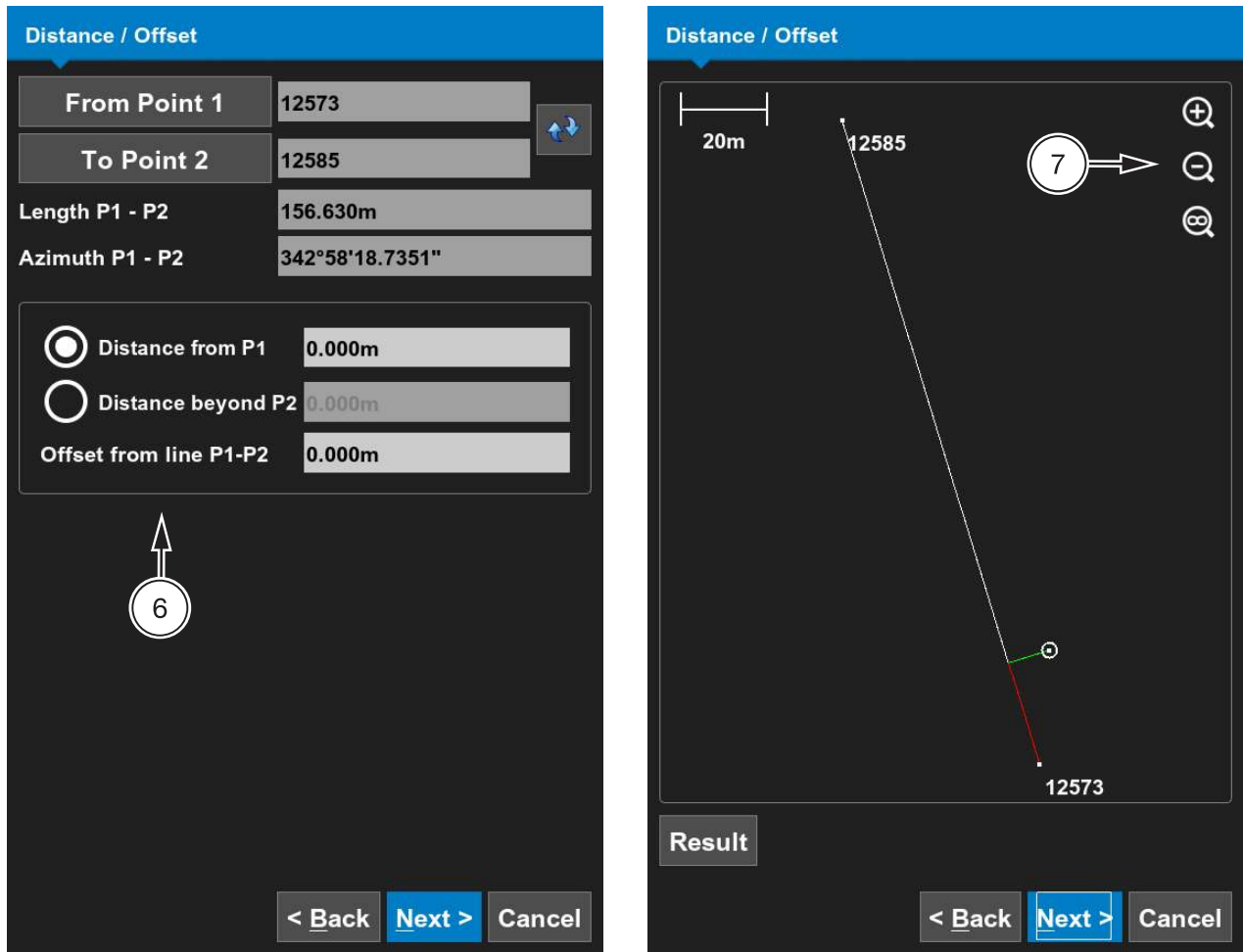


Figure 4-80: Distance/Offset Screens – Preview

6. Select the following parameters for the offset (6, Figure 4-80):
- **Distance from P1** – enter the distance for the offset from Point 1, then tap **OK**. A positive value will move the point toward P2 while a negative value will offset the point away from P2.
 - **Distance beyond P2** – enter the distance for the offset beyond Point 2, then tap **OK**.
 - **Offset from line P1-P2** – enter the offset distance desired from the line created from Point 1 to Point 2, then tap **OK**. A positive value will offset the point to the right in relation to the direction of the vector between points 1 and 2. A negative value will offset to the left.
7. Tap **Next**. The **Distance/Offset** screen displays the baseline created from the two points and the newly created point (Figure 4-80):
- Tap the **+** or **-** buttons to zoom in or out on the image, or tap and hold down on the screen and drag the image around (7, Figure 4-80).
 - Tap **Result** to display the coordinates of the new offset point (Figure 4-81 on page 4-92).

**NOTE**

If there is an elevation difference between the two selected points, and the offset point is along the vector between P1 and P2, the elevation will be interpolated from the selected point elevations.

Points

| N | E | Z |
|--------------|--------------|---------|
| 732,321.882m | 292,381.089m | 38.567m |

Close

Distance / Offset

Pt number:

Description: **Adv**

Layer:

Figure 4-81: Points (left) and Distance/Offset (right) Screens

8. Tap **Next**. The **Distance/Offset** screen appears (Figure 4-81).
9. Set the parameters to assign to the new point:
 - **Pt number** – enter a number for the new point.
 - **Description** – select or create a description for the new point from the drop-down menu. Descriptions are optional but can assist in organizing points. If required, tap **Adv** to enter attributes for the description.
 - **Layer** – select or create a layer to store the new point to.
10. Tap **Finish** to save the point and return to the main screen.

**NOTE**

You can also access this calculation from the context menu after two points have been selected on the main screen. See “Calcs” on page 5-15.