ArcPad 8.0
Overview of creating line features with a GPS

Creating a line feature using the incoming GPS coordinates involves the following steps:
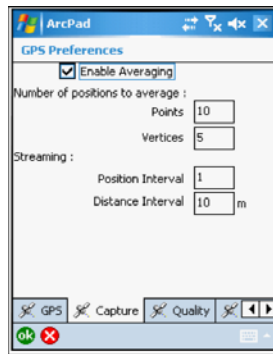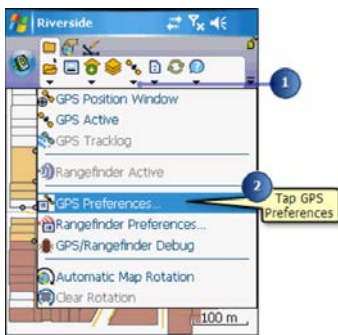1. Select a line layer for editing via the Start/Stop Editing tool or the Table of Contents.
2. Activate the GPS.
3. Tap the Polyline button to start capturing a line feature.
4. Tap the Add GPS Vertex button to capture a single vertex, or tap the Add GPS Vertices Continuously button to capture streaming vertices.
5. Tap the Proceed button on the Command bar to complete the capture of the line feature.
6. Type in attributes for the new line feature.

Tip
Enabling GPS position averaging for vertices: GPS position averaging for vertices is enabled in the capture page of the GPS Preferences dialog box. You can also specify the number of GPS positions for ArcPad to average.

Tip
Changing the streaming vertices position and distance intervals: By default, the Add GPS Vertices Continuously mode captures a vertex each time ArcPad receives a coordinate from the GPS. This maybe too frequent and result in the capture of unnecessary vertices. You can increase the streaming vertices position and distance intervals in the Capture page of the GPS Preferences dialog box.

Adjustments should be made here. The more positions that are averaged, the more accuracy you will get in the data collect.

Number of positions to average:
Points: 5-10
Vertices: 3-5
Streaming: Position Interval (how often readings are taken in seconds): 1 – 3 (based on speed)
Distance Interval: 5-10m (again, based on speed and your needs. Note setting this too low will result in a large number of vertexes in your line.)
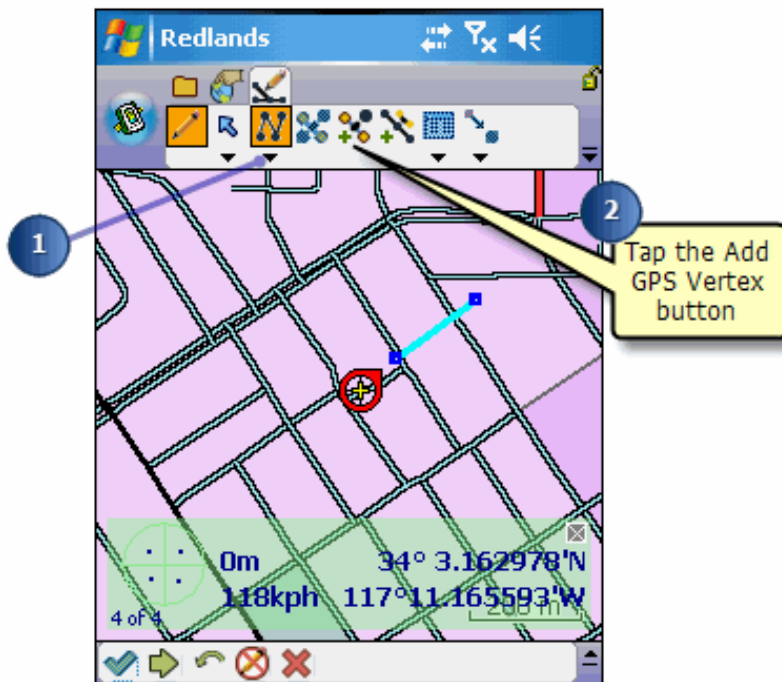
Tip
Creating GPS point features while capturing a polyline feature: The GPS Point button will be enabled—if a point layer is active for editing—even while the Polyline button is active and a line feature is in the process of being captured. While capturing a polyline, you can tap the GPS Point button to capture a point feature without having to first end the capture of the line feature. You will need to pause streaming GPS data capture if it is active.

Tip
Pausing streaming GPS data capture: ArcPad continuously captures vertices in a streaming mode when the Add GPS Vertices Continuously tool is active. Tap the Add GPS Vertices Continuously button to pause or stop capturing vertices. Tap the button again to resume capturing vertices.

Steps to create line features (with GPS Active)

STEP 1. Tap the arrow below the Feature tool to display the drop-down list. Tap the Polyline feature tool. The Add GPS Vertex and Add GPS Vertices Continuously buttons are enabled if the GPS is activated.
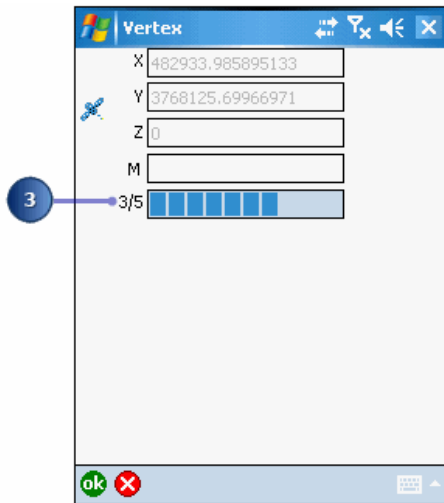

STEP 2. Tap the Add GPS Vertex button each time you want to use the current GPS position coordinates to capture a vertex. The vertices are drawn with a blue box and joined with a line using the current selection color. At any time, tap and hold anywhere on the map to display the Capture menu. Refer to the creating line features task for more information on the Capture menu. Use the Capture menu to create vertices at specified x,y coordinates or relative to the last vertex or the current GPS position. You can also delete the last vertex.

**NOTE: take care to not accidentally tap the map display. ArcPad may register the screen tap as a vertex. Vertexes should only be collected using the Add GPS Vertex button or the GPS

Streaming button. To remove an unwanted vertex, click the Undo button:

STEP 3. The Point/Vertex dialog box is automatically displayed if GPS position averaging is enabled for Vertices.
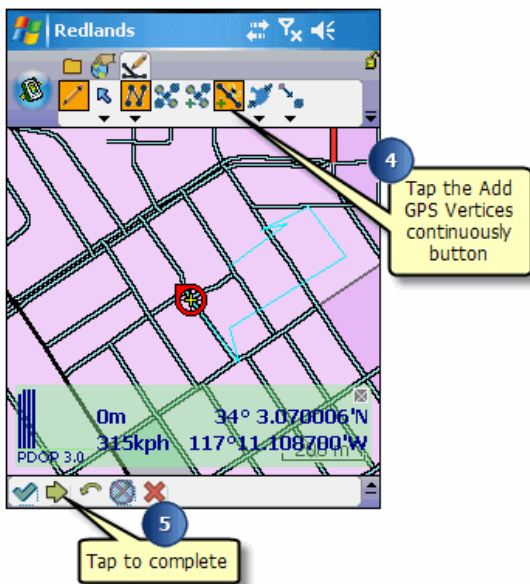

The Point/Vertex dialog box shows a progress bar, which counts down from the specified number of GPS positions to average until it reaches zero.

If you tap OK before the averaging is complete, a dialog box will display asking whether you want to terminate the GPS position averaging.

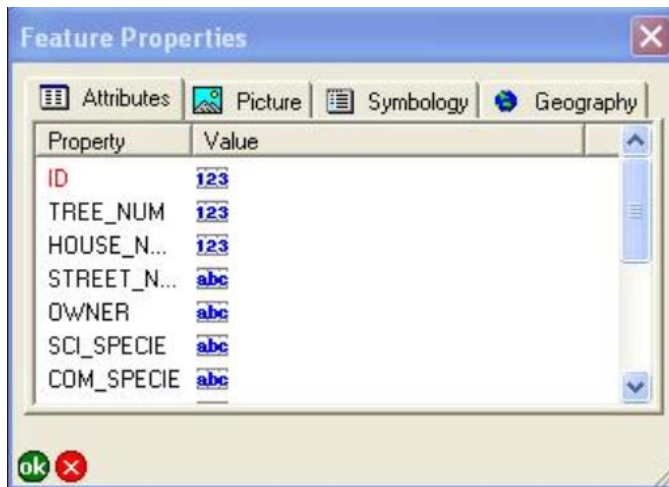Tap the X button to cancel the capture of the vertex.

STEP 4. Tap the Add GPS Vertices Continuously button to use the incoming GPS coordinates for capturing vertices in a streaming mode. A vertex will be captured each time ArcPad receives a coordinate from the GPS. Vertices are captured according to the specified streaming vertices position and distance intervals.

STEP 5. Tap the Proceed button to complete the new line feature.
The Feature Properties dialog box is automatically displayed after the new
line feature has been created.

STEP 6. On the Attributes tab, tap the Value field to open the associated Value text box for typing in attribute data.

STEP 7. Tap OK.

~END