



Site Localization Using Topcon V15 Pocket 3D

1. Make sure your Base & Rover are set.



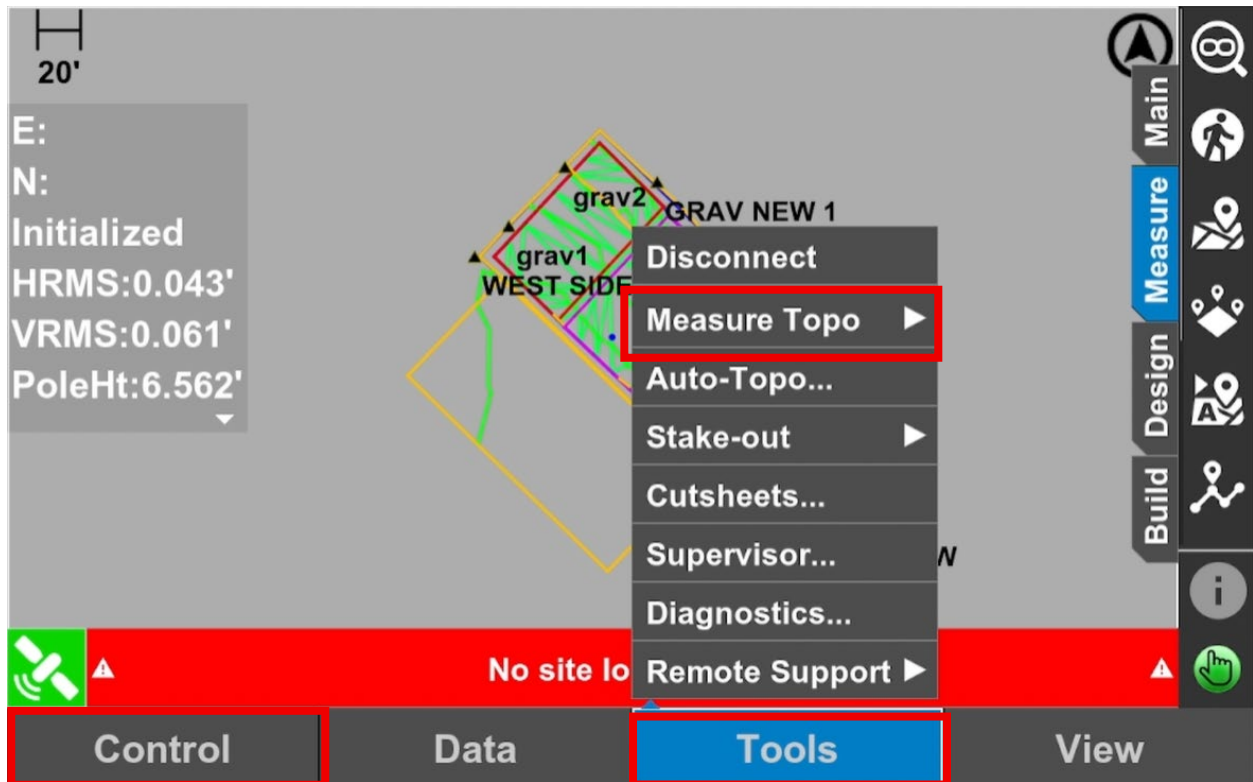
2. Walk towards the First control point. Make sure that the Divot is in the point marker.



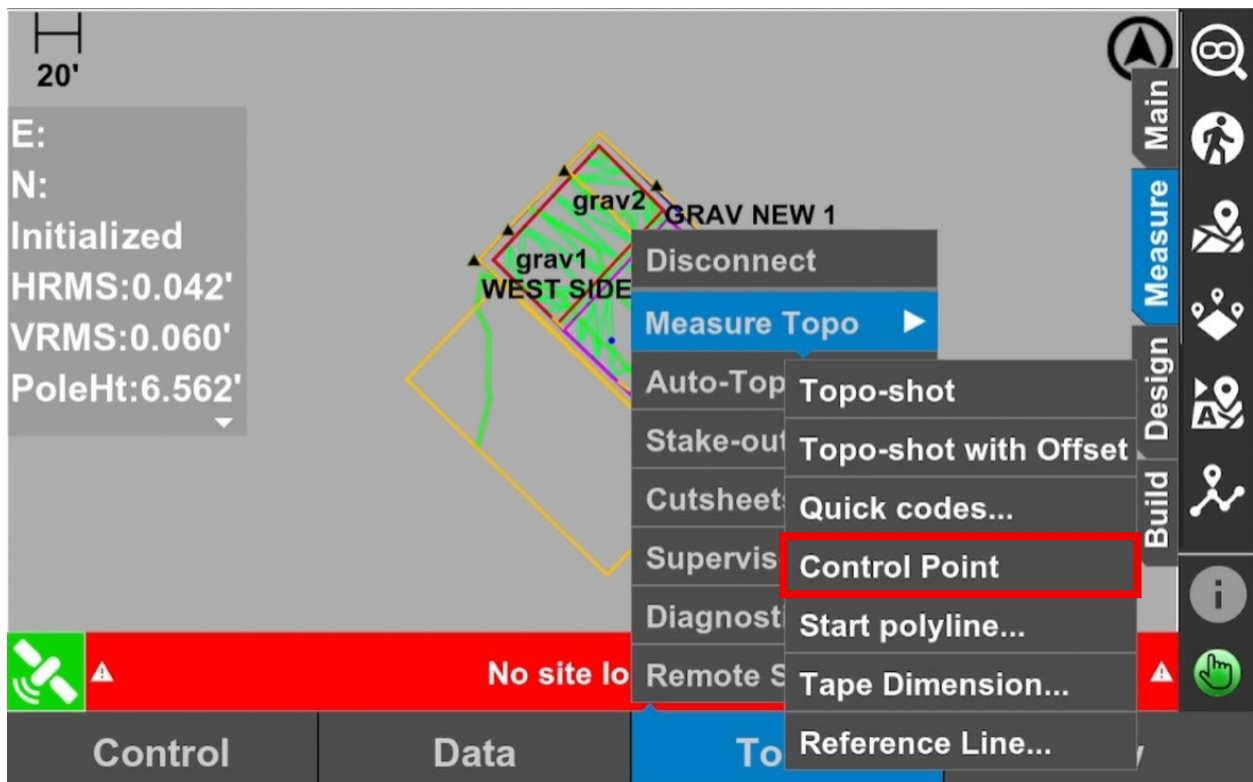
3. Center the Bubble of the rod.



4. Click **"Tools"** then click **"Measure Topo"**



5. Click **"Control Point"**



6. Click **“Options”** and set the **Sample Count** to a minimum of **“60”** then click **“Apply”**.
(Note: Longer count means more accurate. Set it however you like, but minimum is 60 seconds)

The screenshot shows the 'Control Point' dialog box with the 'Options' tab selected. The 'Sample Count' is currently set to 10. The 'H. Precision' is 0.100' and the 'V. Precision' is 0.150'. The 'Apply' button is highlighted with a red box.

Minimum requirements	H. Precision:	V. Precision:
Sample Count: 10	0.100'	0.150'

Buttons: Apply, OK, Cancel

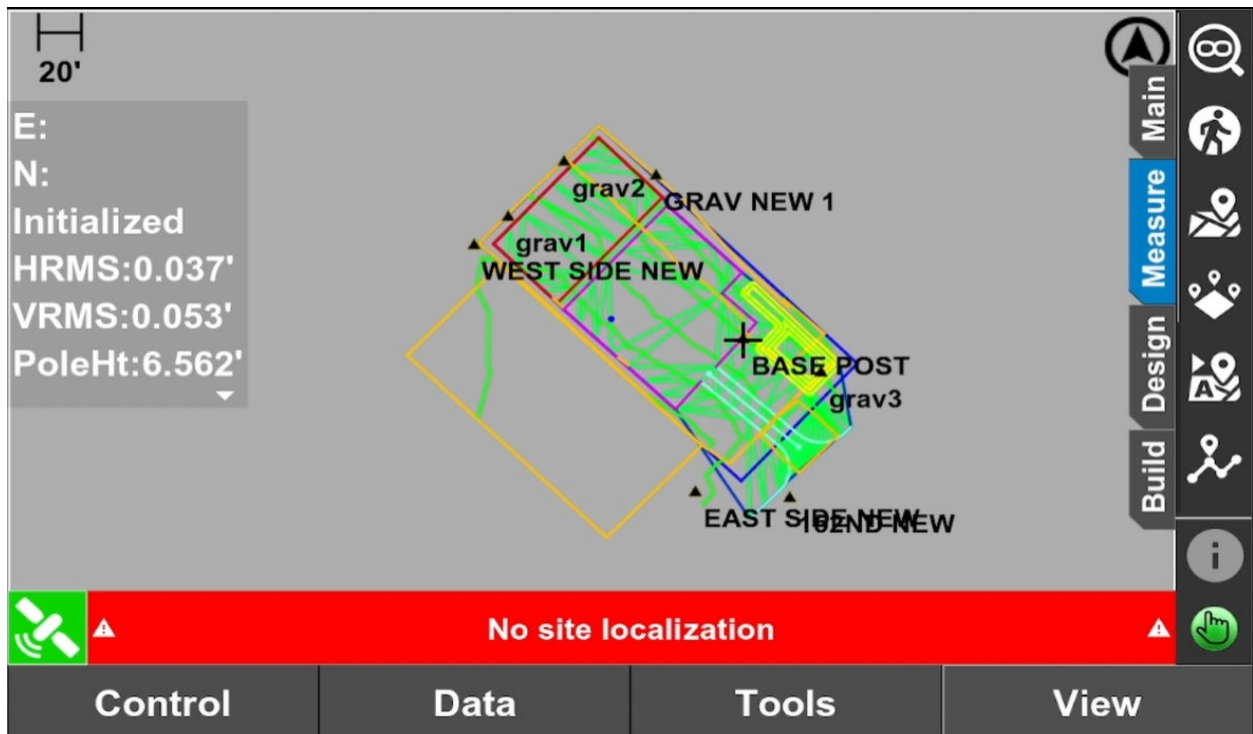
7. Click **“OK”**

The screenshot shows the 'Control Point' dialog box with the 'Options' tab selected. A message box is displayed in the center with the text 'Options applied successfully.' The 'OK' button in the message box is highlighted with a red box. The 'Sample Count' is still 10, and the 'H. Precision' and 'V. Precision' are still 0.100' and 0.150' respectively. The 'Apply' button is still visible.

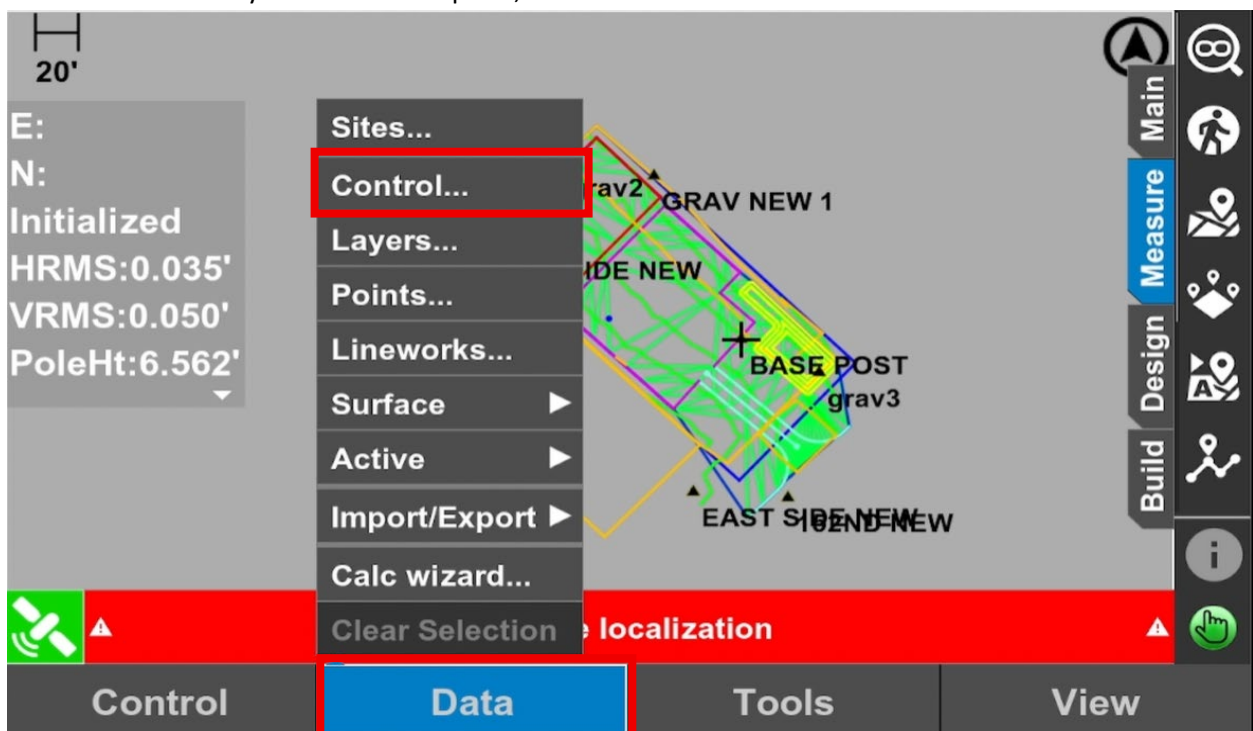
Options applied successfully.

Buttons: OK, Apply, OK, Cancel

8. Now your measuring time is set to a minimum of 60, depending on your preference.
(Note: Always make sure that you have a minimum of 4 Control points per project)



9. To measure your first control point, click “Data” then hit “Control”



10. Highlight the first control point where your Rod is located then tap “Edit”.

Control Points ?

Control points | Coord. system | Projection

Name	H.Error	V.Error
grav1		
grav2		
grav3		
GRAV NEW 1		
152ND NEW		
EAST SIDE NEW		
WEST SIDE NEW		

Add... Edit OK Cancel Delete

11. Click “WGS84”.

Control Point ?

Name: grav1

Description: ctrl

Local WGS84

North: 5049.985'

East: 9953.987'

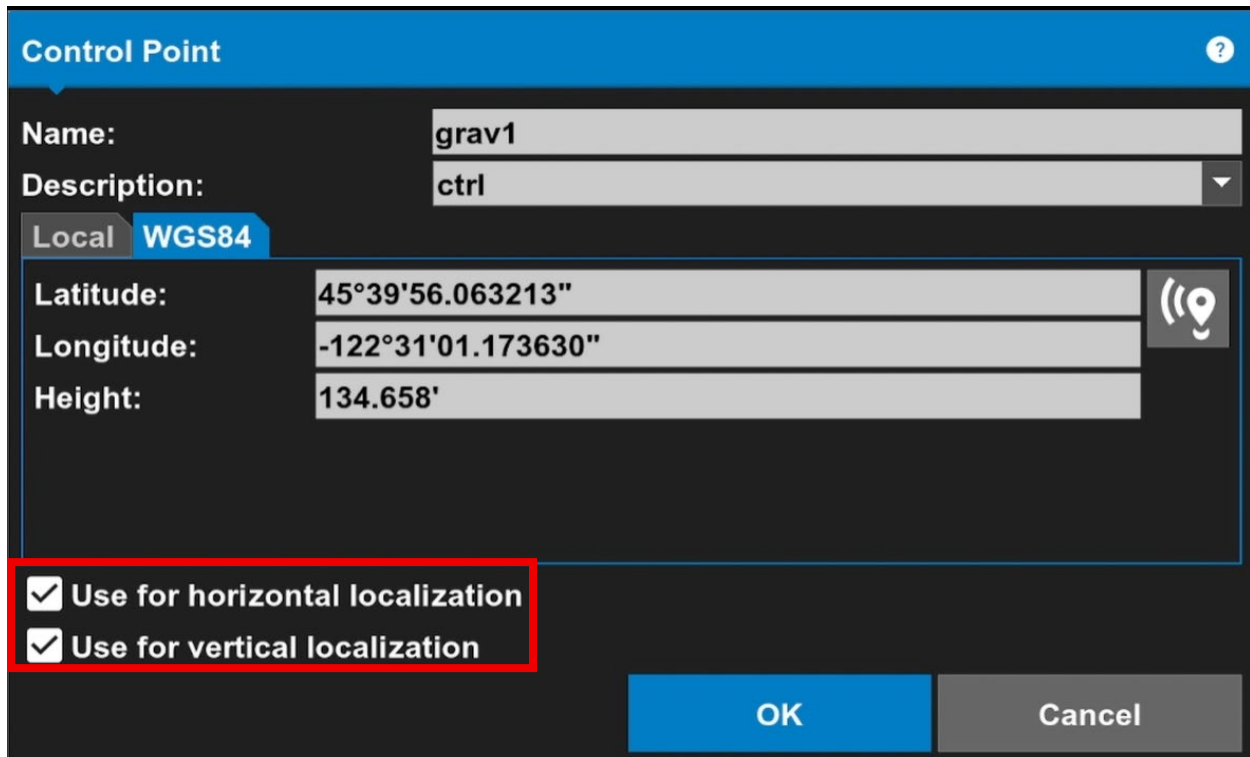
Elev: 99.339'

☐ Use for horizontal localization

☐ Use for vertical localization

OK Cancel

12. Check the “Use for horizontal localization” and “Use for vertical localization”.



The screenshot shows the 'Control Point' dialog box. The 'Name' field is 'grav1' and the 'Description' is 'ctrl'. The 'Local' tab is selected, and the 'WGS84' coordinate system is chosen. The 'Latitude' is '45°39'56.063213"', 'Longitude' is '-122°31'01.173630"', and 'Height' is '134.658''. A red rectangle highlights the two checkboxes at the bottom: 'Use for horizontal localization' and 'Use for vertical localization', both of which are checked. The 'OK' and 'Cancel' buttons are at the bottom right.

Control Point

Name: grav1

Description: ctrl

Local WGS84

Latitude: 45°39'56.063213"

Longitude: -122°31'01.173630"

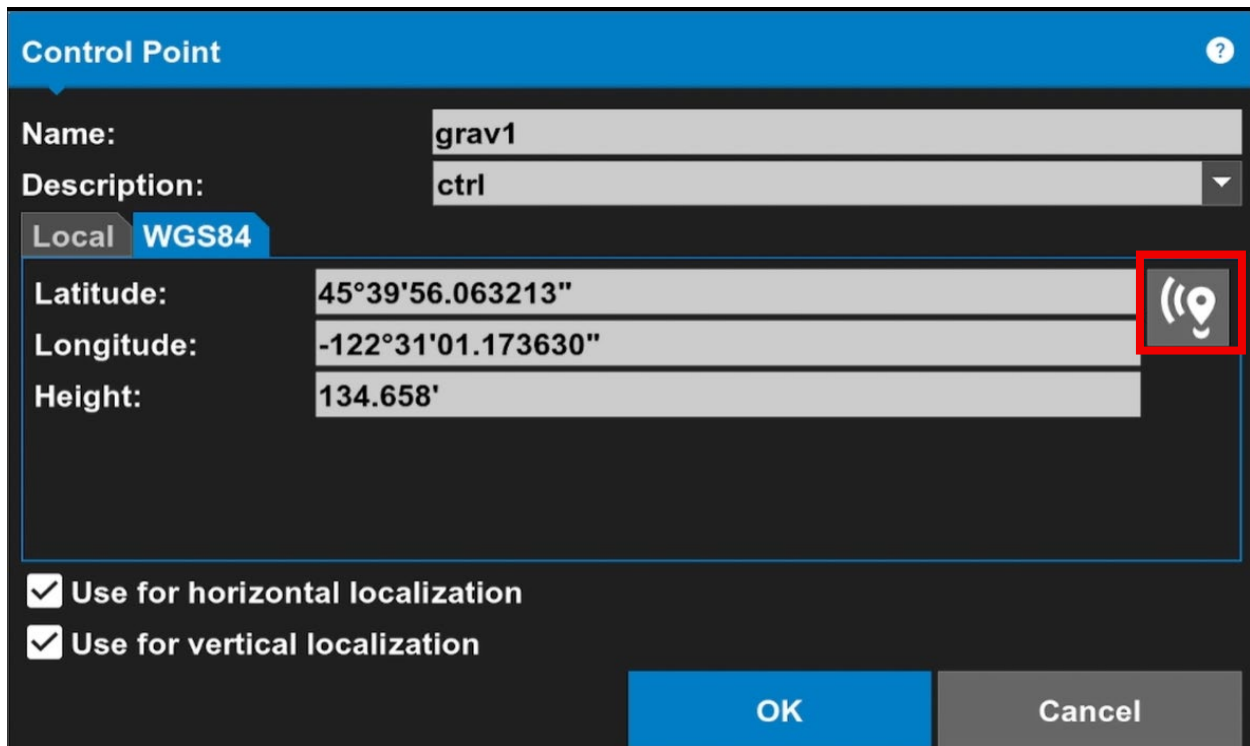
Height: 134.658'

☒ Use for horizontal localization

☒ Use for vertical localization

OK Cancel

13. Tap the “Location icon” beside the latitude and longitude values to start measuring in the control point.



This screenshot is identical to the previous one, but with a red rectangle highlighting the location icon (a circle with a dot and radiating lines) to the right of the latitude and longitude input fields. The checkboxes and buttons remain the same.

Control Point

Name: grav1

Description: ctrl

Local WGS84

Latitude: 45°39'56.063213"

Longitude: -122°31'01.173630"

Height: 134.658'

☒ Use for horizontal localization

☒ Use for vertical localization

OK Cancel

14. Wait for the loading screen to finish. *(Important: Make sure your Rod stays still during this process. Otherwise, you will need to measure it again)*

The screenshot shows the 'Control Point' dialog box with a loading screen overlay. The loading screen displays the following information:

- Number of sats used: 12
- H.Precision: 0.026'
- V.Precision: 0.040'
- Duration (secs): 10
- Measurements: 10
- Initialized
- 100% (indicated by a full blue progress bar)

The dialog box also includes fields for Name, Description, Local/WGS84, Latitude, Longitude, and Height. At the bottom, there are checkboxes for 'Use for horizontal localization' and 'Use for vertical localization', and buttons for 'OK' and 'Cancel'.

15. Click "OK"

The screenshot shows the 'Control Point' dialog box after clicking 'OK'. The fields are populated with the following values:

- Name: grav1
- Description: ctrl
- Local/WGS84: WGS84
- Latitude: 45°39'56.128814"
- Longitude: -122°31'01.135677"
- Height: 126.481'

The checkboxes for 'Use for horizontal localization' and 'Use for vertical localization' are checked. The 'OK' button is highlighted with a red box.

16. Control point is measured successfully. To measure other control points, repeat steps #11 to #17.

Control Points

Control points

Coord. system

Projection

Name	H.Error	V.Error
grav1	0.000'	0.000'
grav2	29.188'	-8.145'
grav3	115.964'	-8.238'
GRAV NEW 1	51.328'	-0.975'
152ND NEW	135.428'	-8.274'
EAST SIDE NEW	115.247'	-1.075'
WEST SIDE NEW	16.785'	-1.020'

Add...

Edit

Delete

OK

Cancel

17. If do not know which control point to choose, click “OK” to go back to the main screen.

Control Points

Control points

Coord. system

Projection

Name	H.Error	V.Error
grav1	0.000'	0.000'
grav2	29.188'	-8.145'
grav3	115.964'	-8.238'
GRAV NEW 1	51.328'	-0.975'
152ND NEW	135.428'	-8.274'
EAST SIDE NEW	115.247'	-1.075'
WEST SIDE NEW	16.785'	-1.020'

Add...

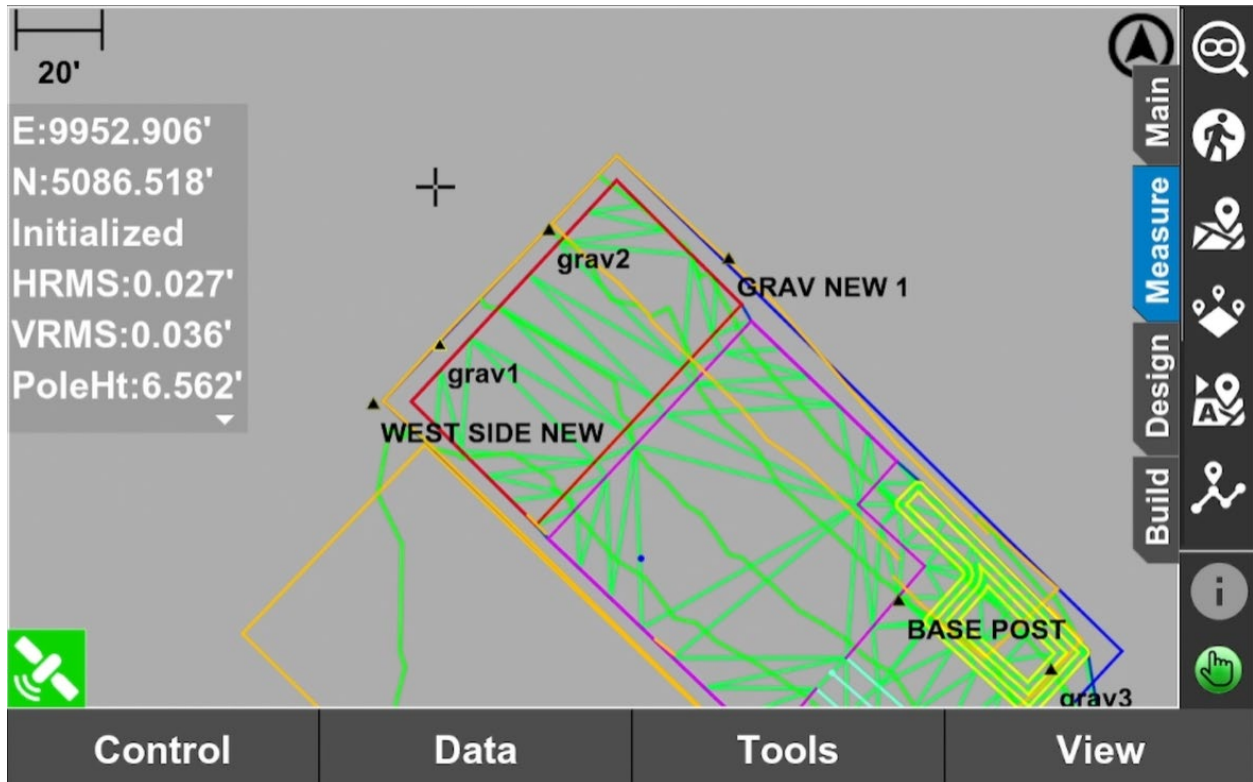
Edit

Delete

OK

Cancel

18. You can zoom in and take a look at which control point to do localization next then repeat steps #10 to #17. **(Note: Each control point measured makes your site measurements more accurate each time. Also, make sure the tolerance values are minimal, if it is more than a foot long, you might need to repeat measuring all your control points.)**



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