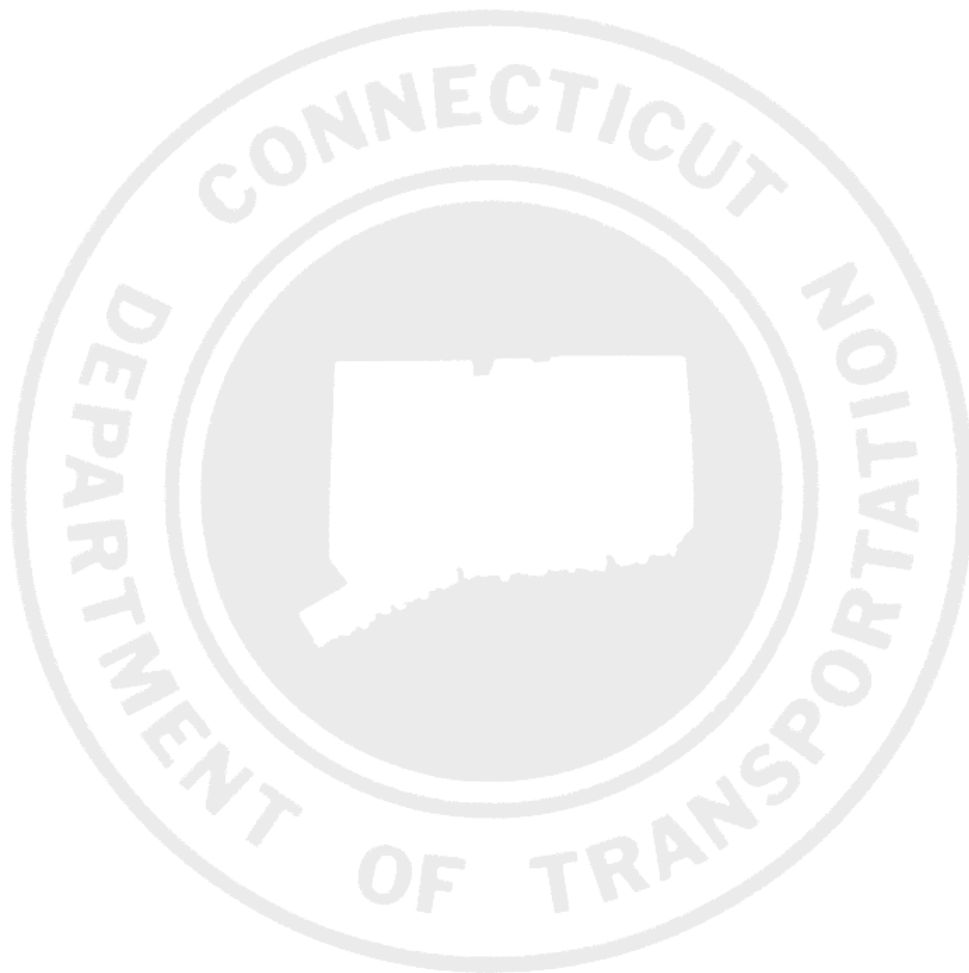


BUSINESS CENTER HEAVY CONSTRUCTION
&
SCS900 (SITE CONTROLLER SOFTWARE)
Inspector Training



By

The Office of Architectural, Engineering and Construction Applications

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Section 1 Trimble Business Center Setup

Note: This section is for primarily administrators, it is provided to inspectors as background information.

1.1 Introduction

Trimble Business Center - Heavy Construction Edition is office software that utilizes data collected in the field with SCS900 Tablet Edition site controller software (SCS). Business is used to prepare the project data for use in SCS900 and to generate reports. Today we will be using the Trimble Emulator and the data set for this training is located on your desk top in a folder called EED_Training.

1.2 Creating Trimble Business Center Project

1. **Start** by Opening Trimble Business Center by clicking the icon on your desk top

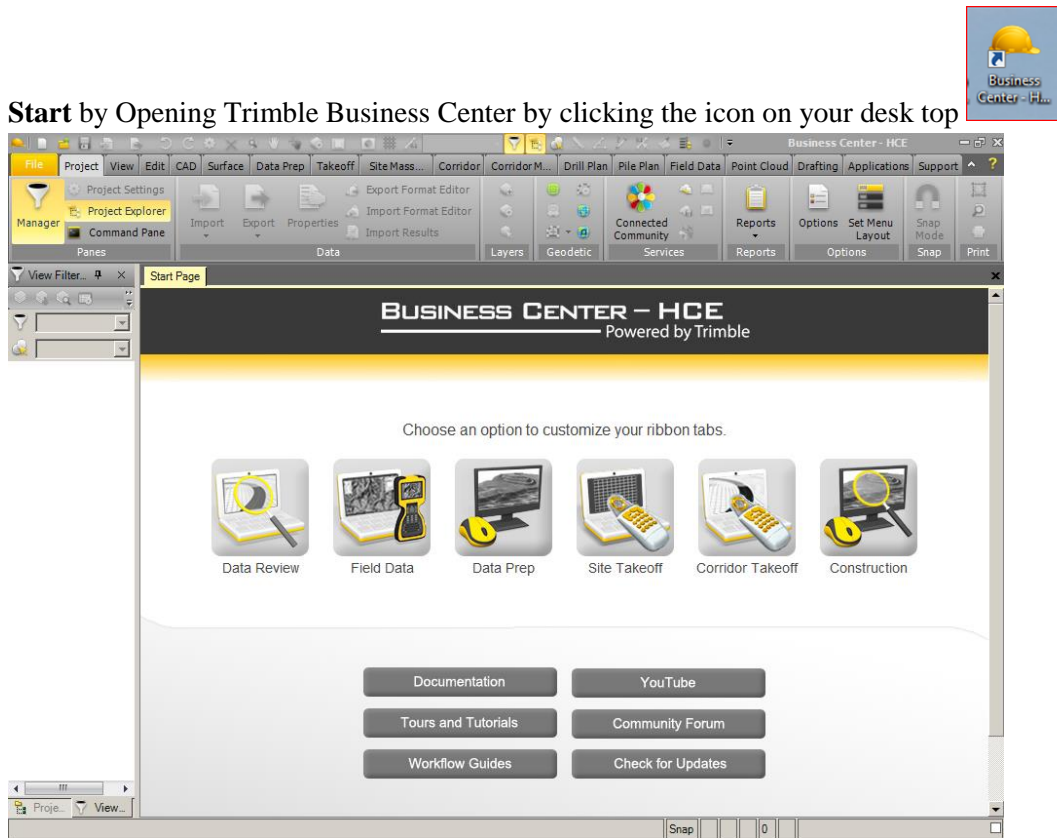
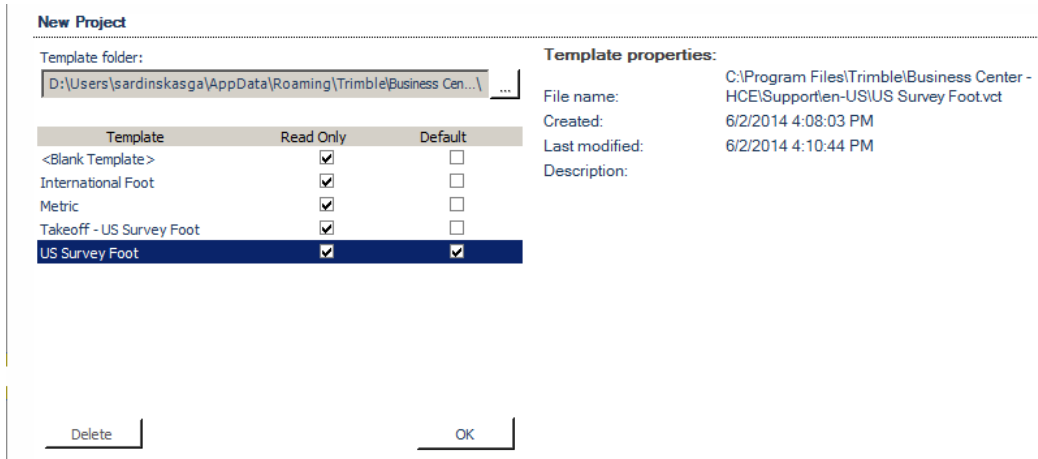


Figure 1 Trimble Business Center

2. Next Click **File > New Project** in the upper left of the screen shown above

1.3 Units

3. Select the Template with the proper units of your project data. (Select US Survey Foot for this training)



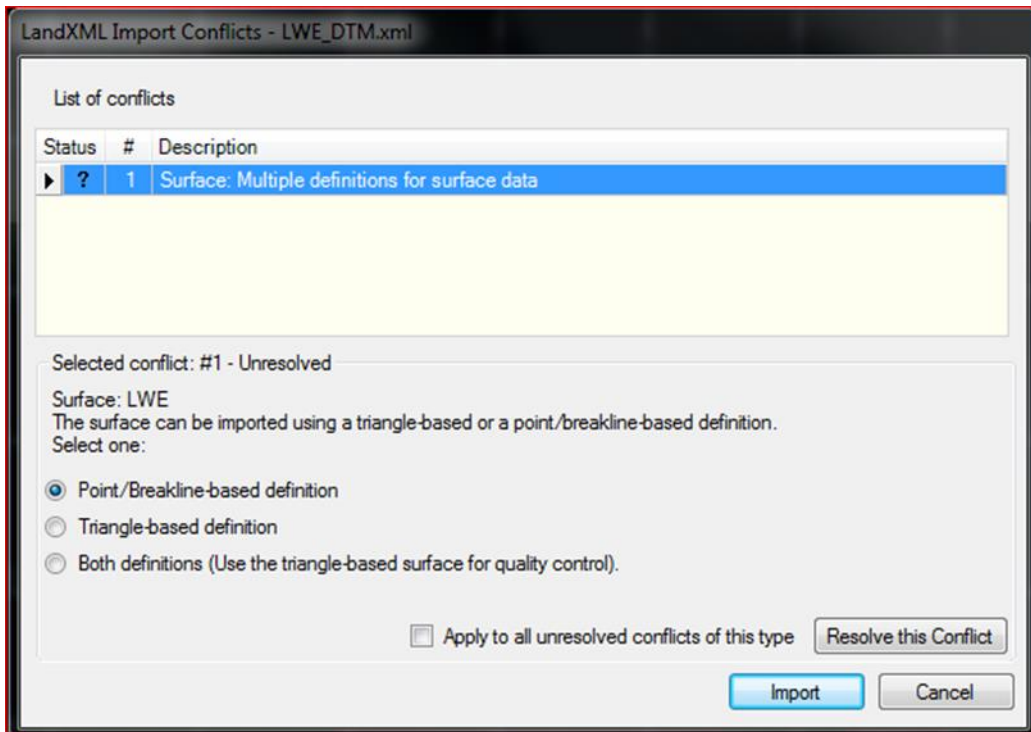
4. Click **OK**

1.4 Naming project

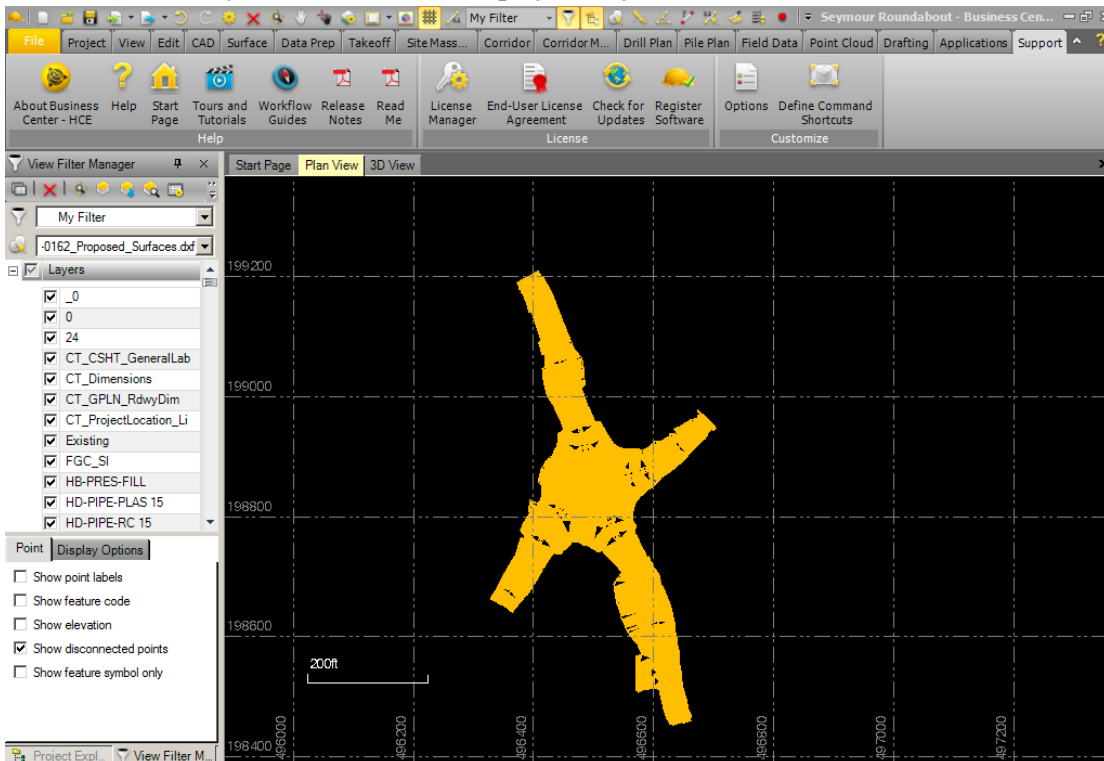
1. Click **File>Save Project As...**
2. Name the Project File Training 2015
3. Locate the Training 2015 folder on your desk top
4. Import the project data by dragging and dropping all 15 files into Business Center one at a time.
(Note: The file formats being imported into business center must be .xml or .dxf)

1.5 Displaying the EED

1. When bringing surface files into BC the software will prompt you to select a definition shown in the box below
2. Choose the first option>**Point/Breakline-based definition**

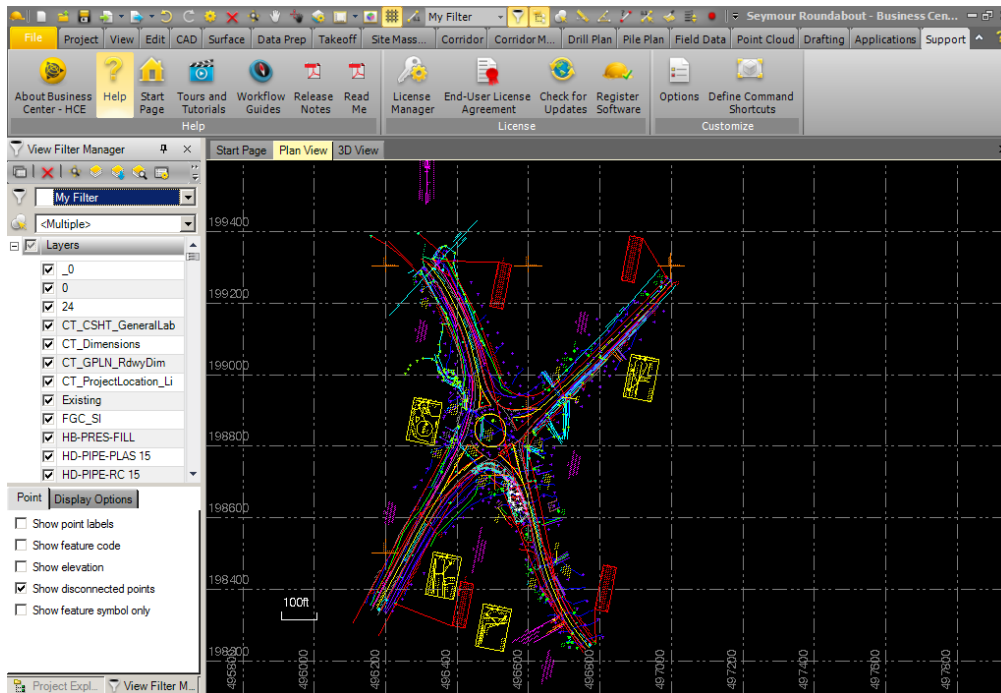


3. Click **Import** and you will see the file displayed on your screen

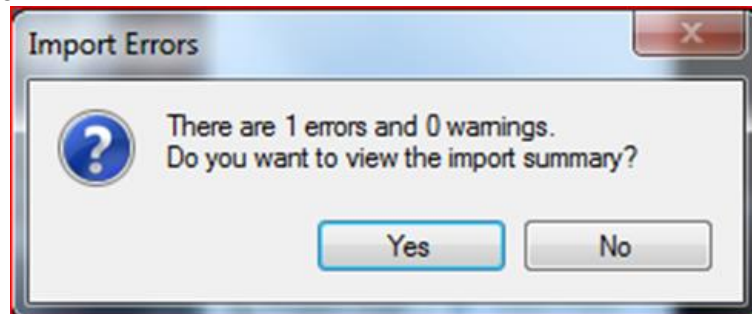


4. Next drag and drop (0124-0162_Existing)

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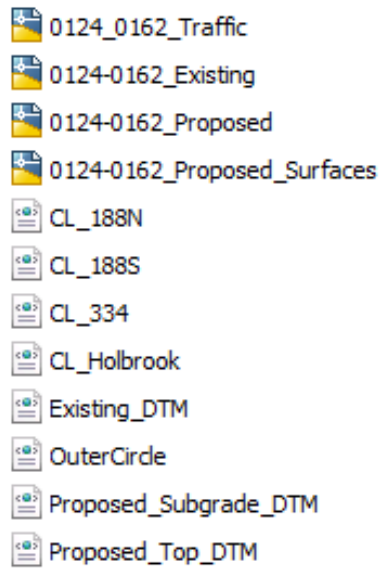


5. **Continue dragging and dropping** the project EED into Business Center and click **no** to any errors or warnings

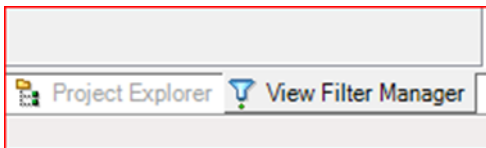


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6. Listed below is the EED for this project, **drag and drop** all the files into Business Center

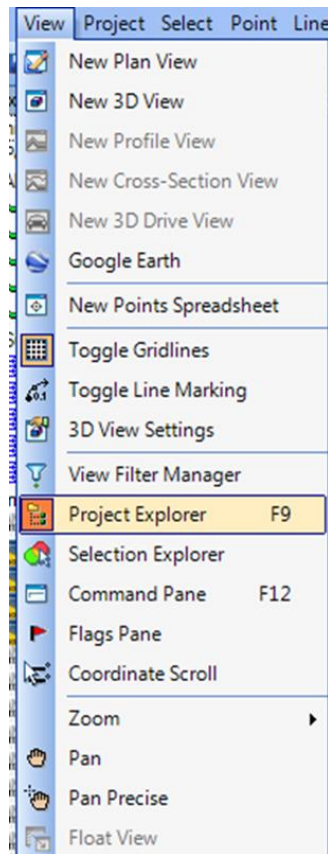


7. Next go to the **View** pull down from the top of the screen and make sure the View Filter Manager is displayed

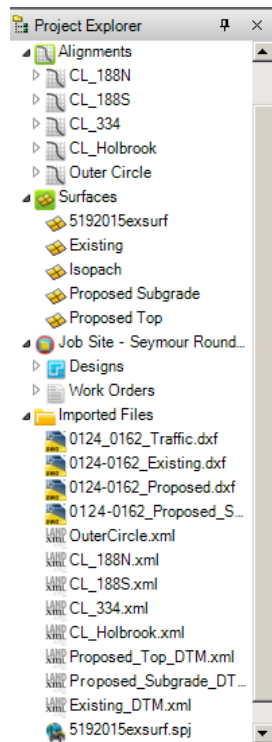


8. Next review the Layers and Surfaces within the View Filter manager
- Take time turning layers on and off
 - Turn surfaces off and on
9. Open the Project Explorer by clicking view and then Project Explorer option

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10. The Project Explorer will show you the EED that is in Business Center



Section 2 Job Site Manager

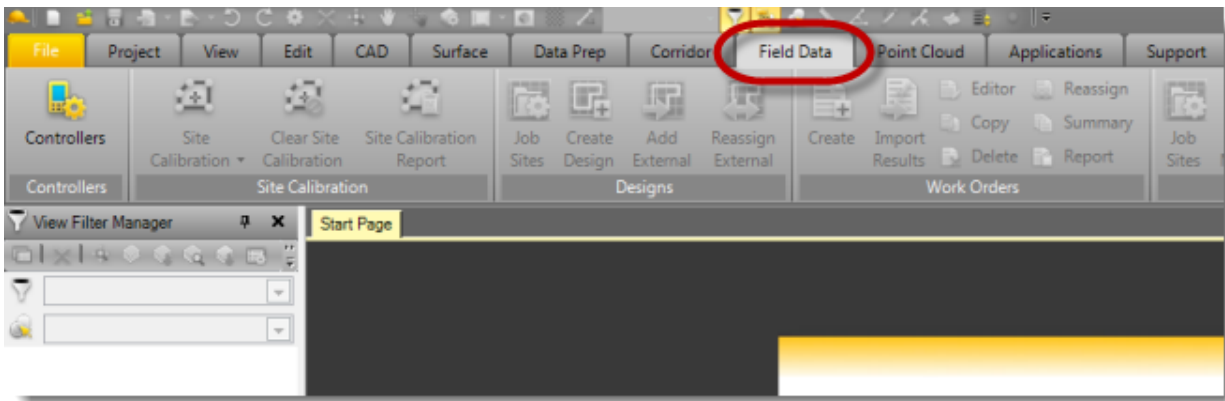
2.1 Creating Job site



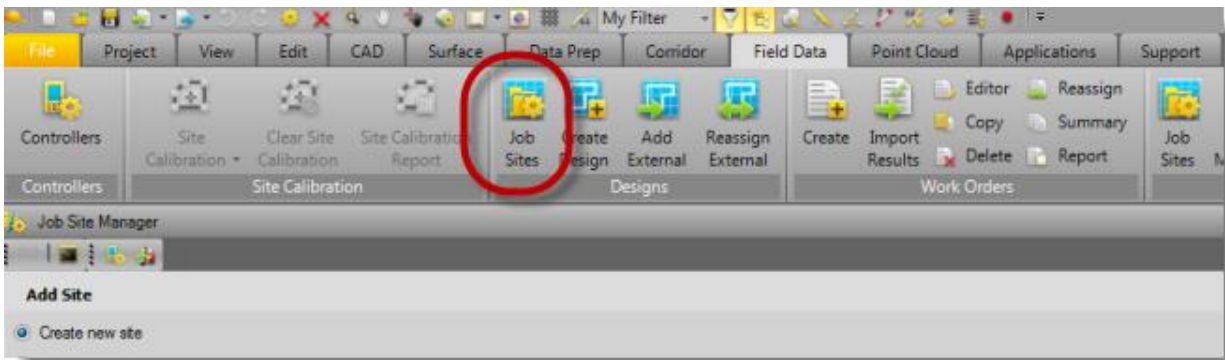
1. Start by Opening Trimble Business Center by clicking the icon on your desktop
2. Select **File>Open** and browse to the location of the Business Center project

D:\Users\username\Documents\Business Center – HCE>Training2015.vce

3. Go to the **Field Data** tab on the top of the interface window:

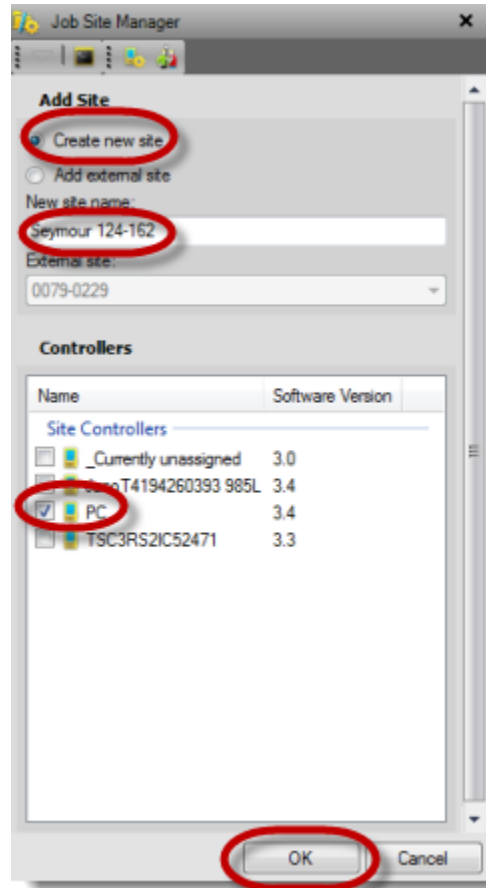


4. Select **Job Site Manager**:



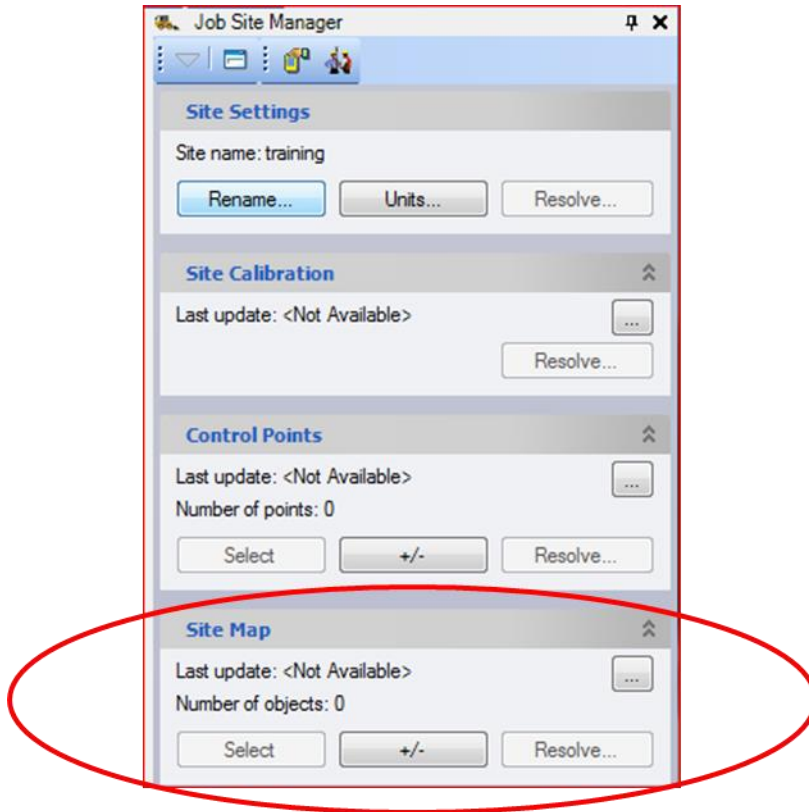
Connecticut Department of Transportation GPS Construction Inspection

5. Click on **Create new site**
6. Name the Job Site **Seymour #124-162**
7. Click on the **PC** to assign a controller to the job
8. Click OK

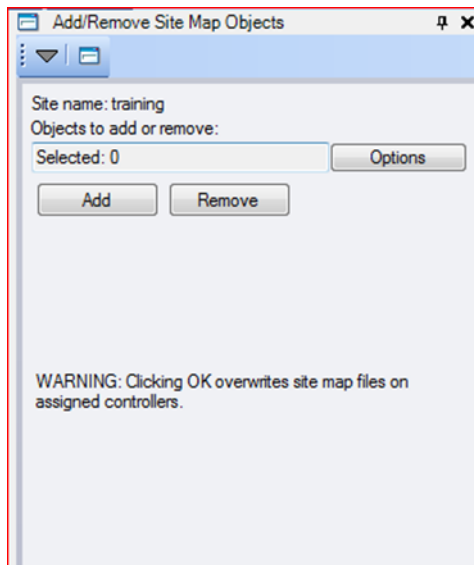


2.2 Site Map

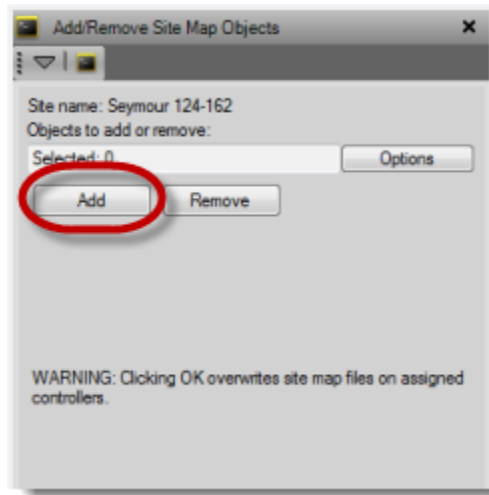
9. Next the Job Site manager will appear on your screen
10. Scroll down to the Site map



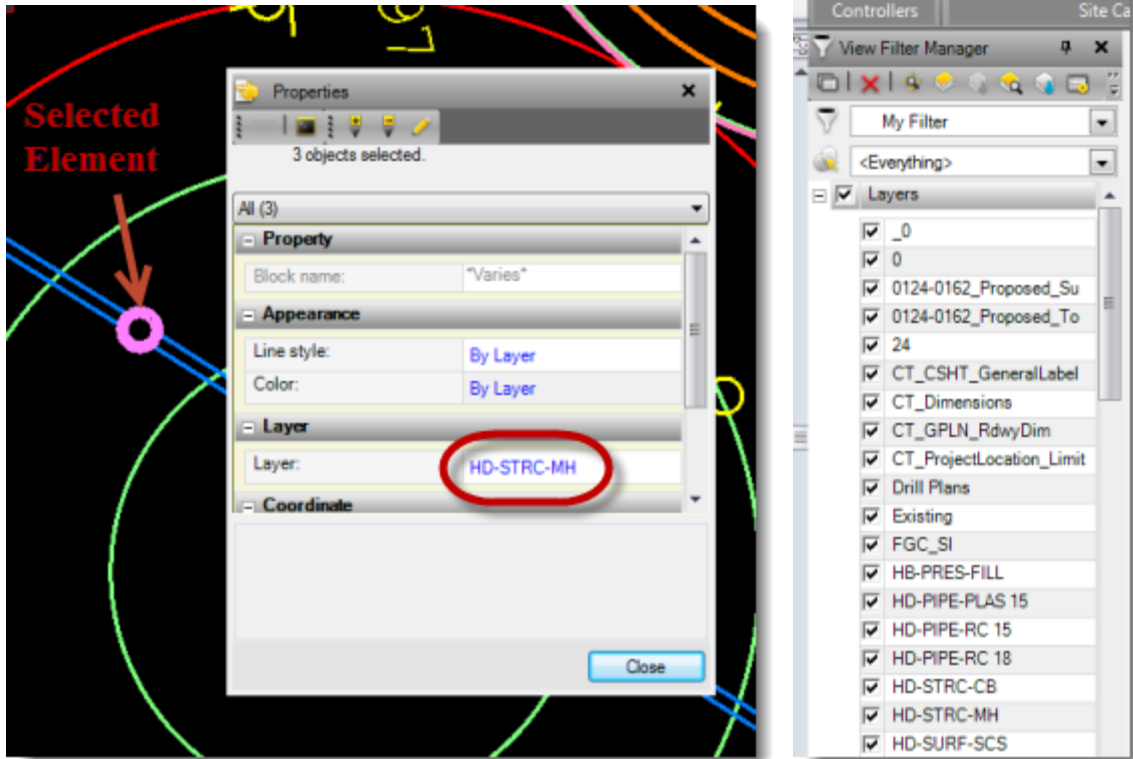
11. Click the +/- button



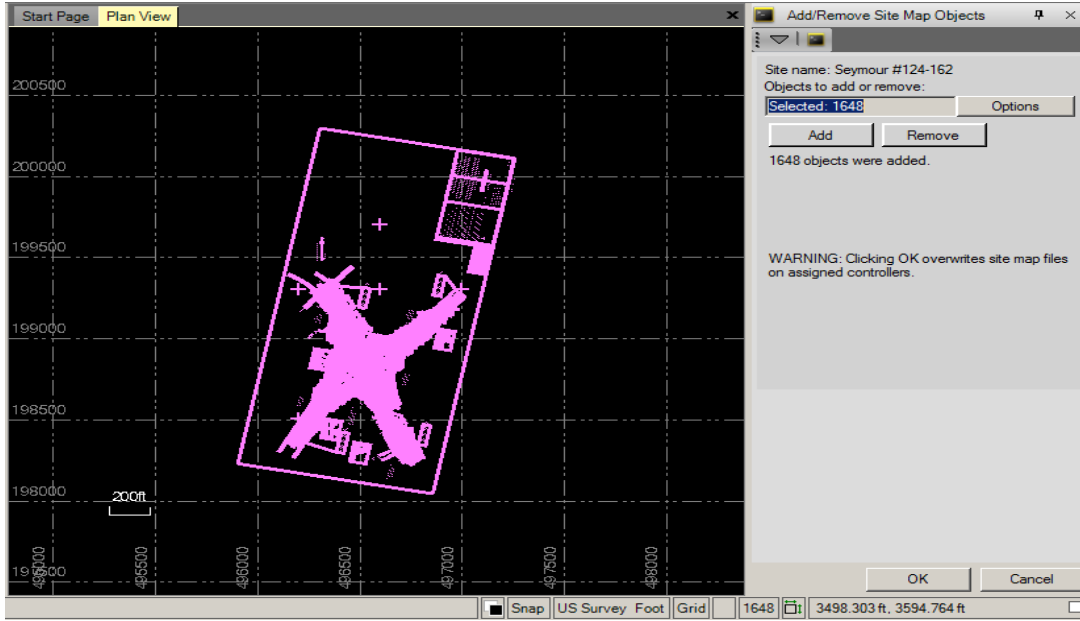
12. Click the Add button. This will let you select graphics from the site map to be displayed on the tablet in the field.



13. Click on the 0124-0162_ Existing file within your view filter and turn on the desired levels for your ground file site map. To see what level an element is on, select the element, right click and select Properties:

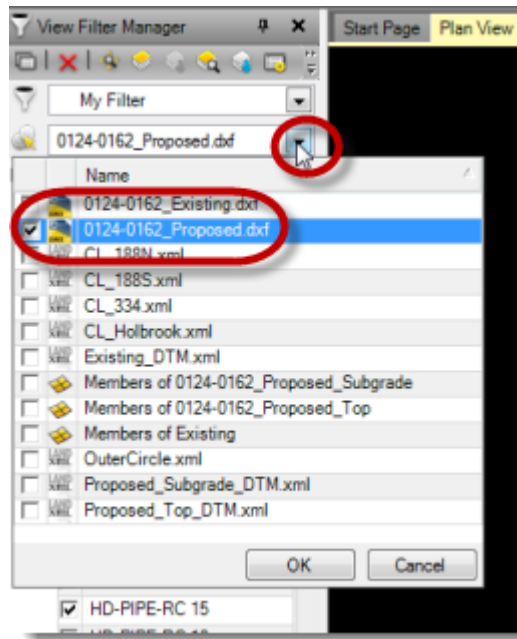


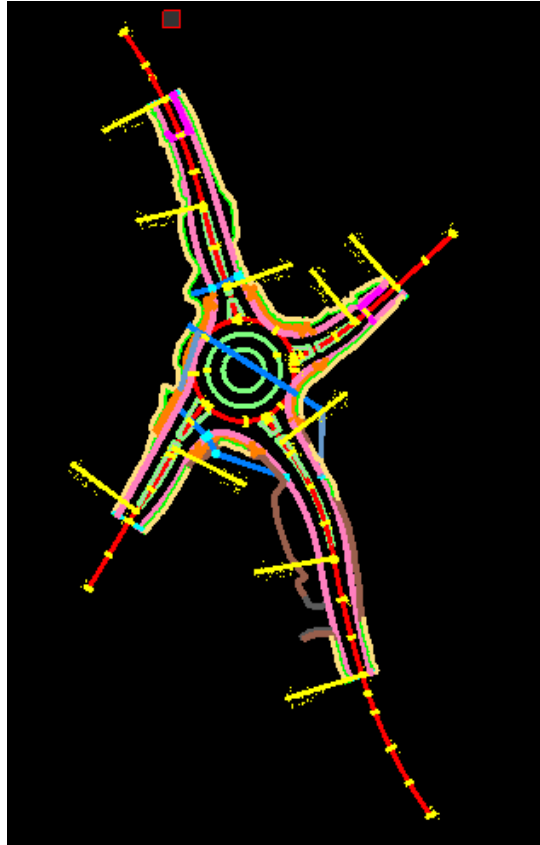
14. Next drag a window around the graphics you wish to add to your site map
15. Yours selection set should high light magenta
16. Click OK and you will see the number of objects selected



2.3 Design Models

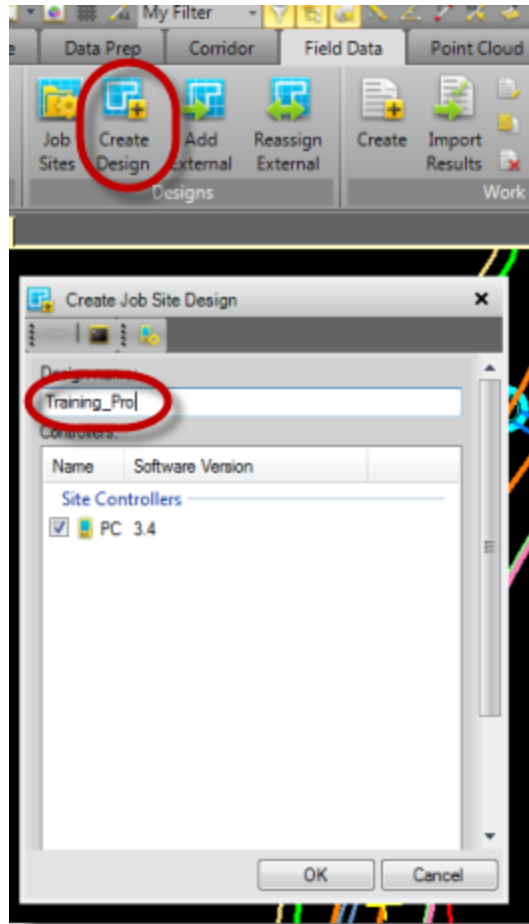
1. Next go to the View Filter manager and turn on only your proposed design work.



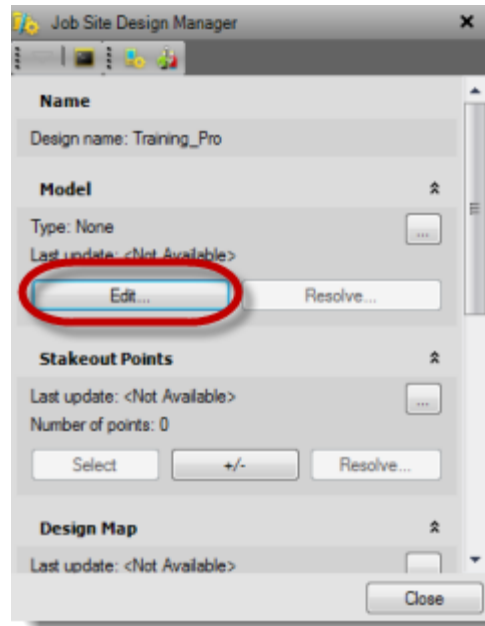


2.3.1 Design

1. Go back to the Field Data pull down and select Create Design:
2. Name the Design name: Training_PRO

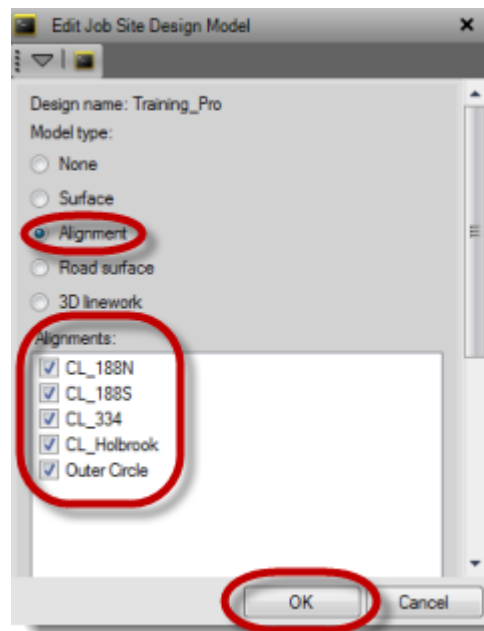


3. Click OK
4. Click Edit within the Model box shown



2.3.2 Alignments

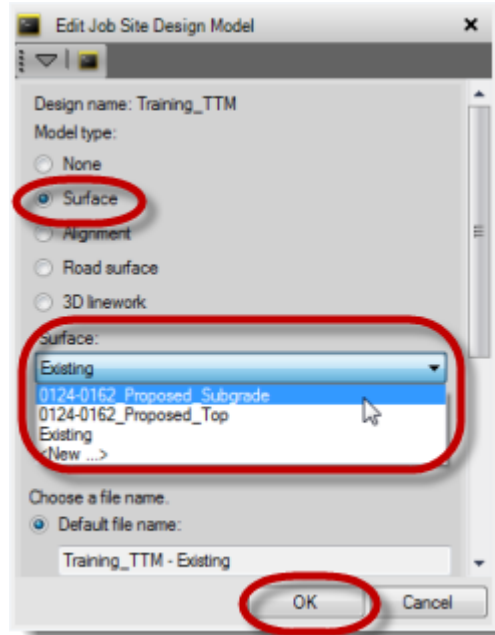
5. Next click the **Alignment** button and check all the alignments, then click OK.



6. Next go back to the **Field data** pull down and click **Create job site design**

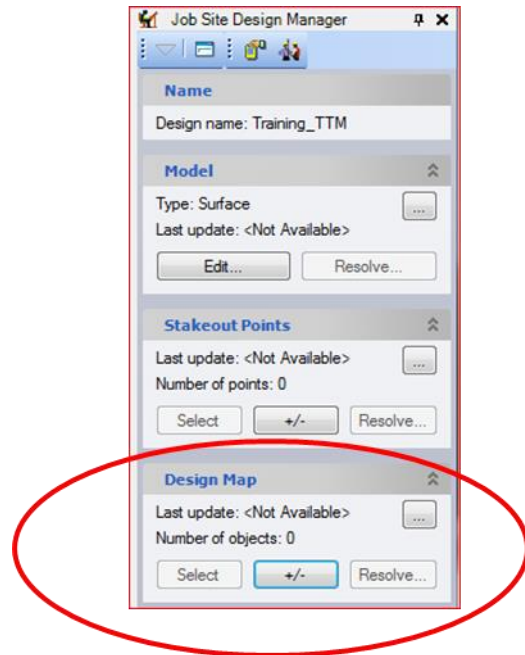
2.3.3 Surfaces

7. Name the second design **Training_TTM**
8. **Click OK**
9. Click **edit** in the model section
10. Next select the Surface button, next you will see the available surfaces to add to your design, for this training select 0124-0162_Proposed_Subgrade

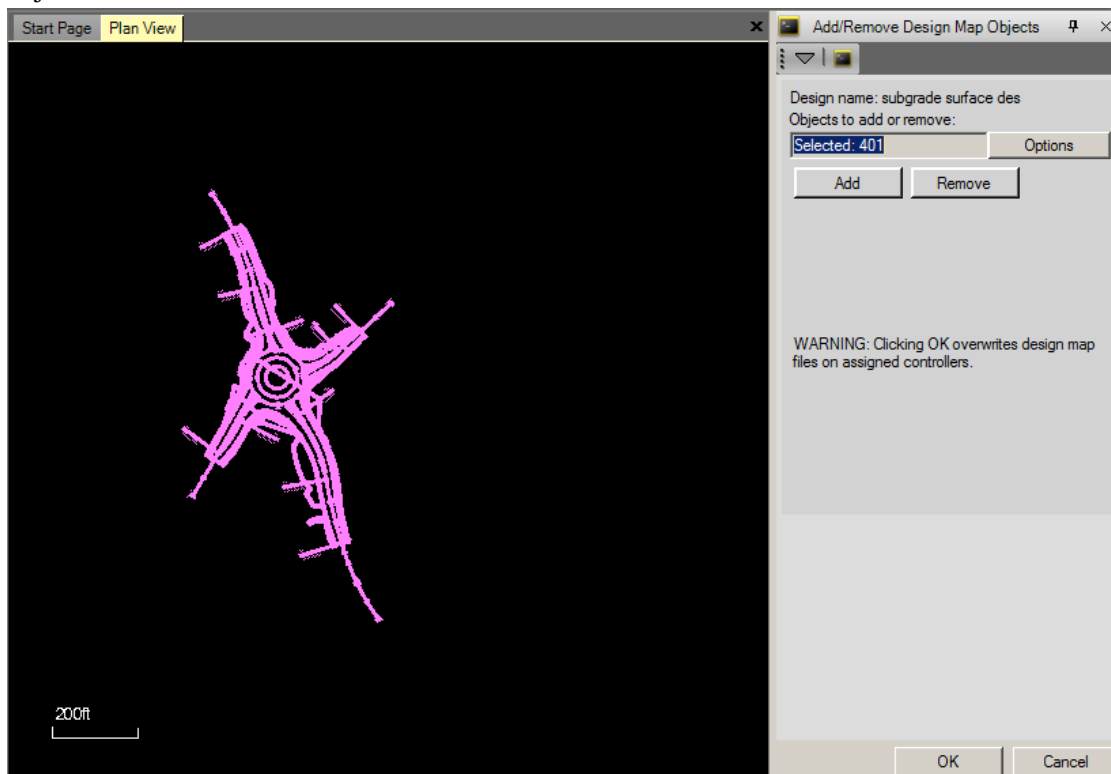


11. Click OK

12. Next click the +/- button within the Design Map



13. **Drag a box to high light the Design map content** and click add, you will see the number of object shown in the box.

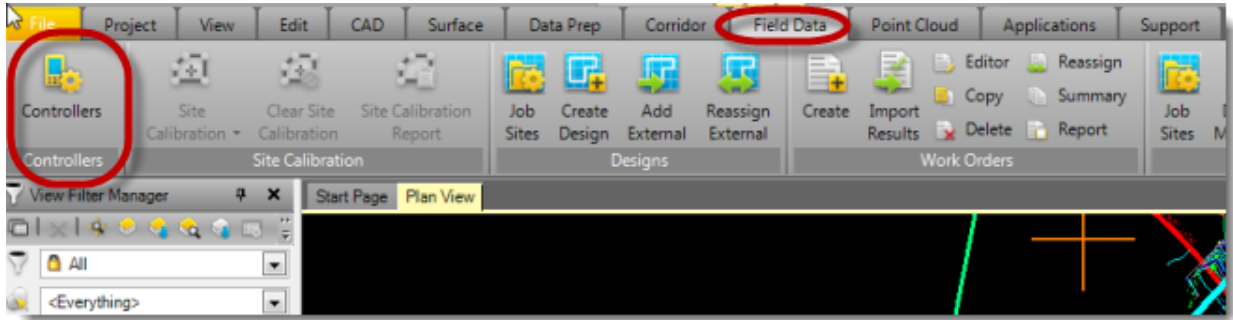


14. Click OK and you will see **the number of objects** within the Design map section

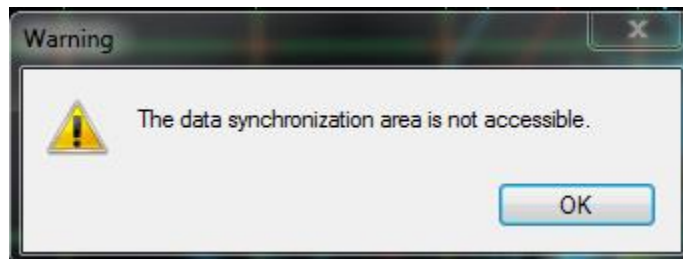
2.4 Work Orders

2.4.1 Creating Work Orders

1. Go to the **Field Data** pull down and select the **Controller Manager**:

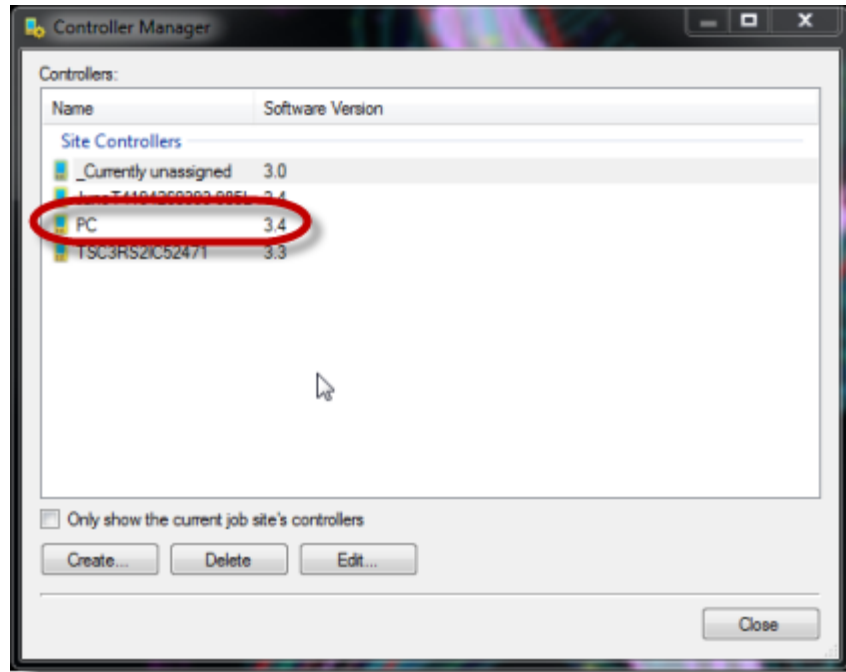


2. If there is nothing populated in the box you must refer to **Section 5 Syncing thumb drive to PC**



3. If you see the **PC 3.0** listed then you can proceed with the training

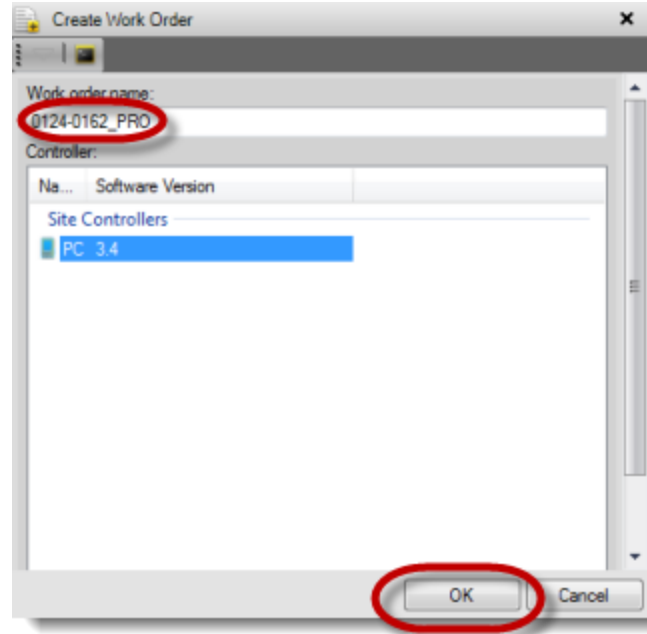
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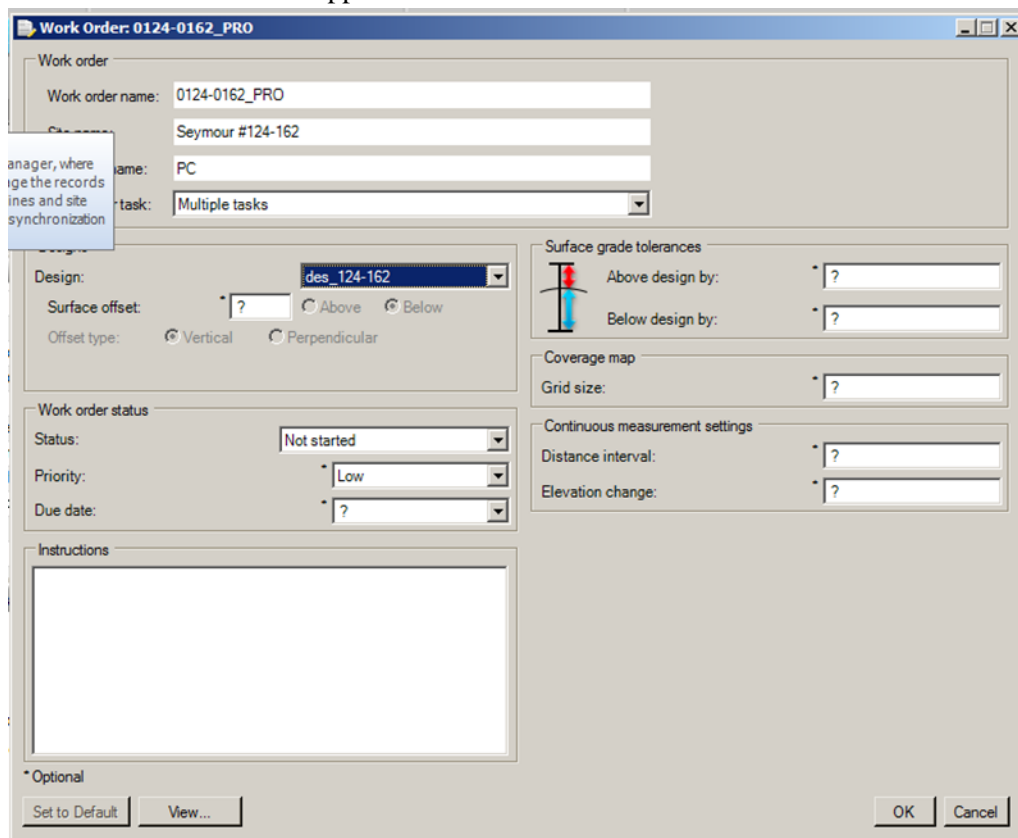
4. Go to the Field data pull down and select **Create Work Order**



5. Name the Work Order 0124-0162_PRO

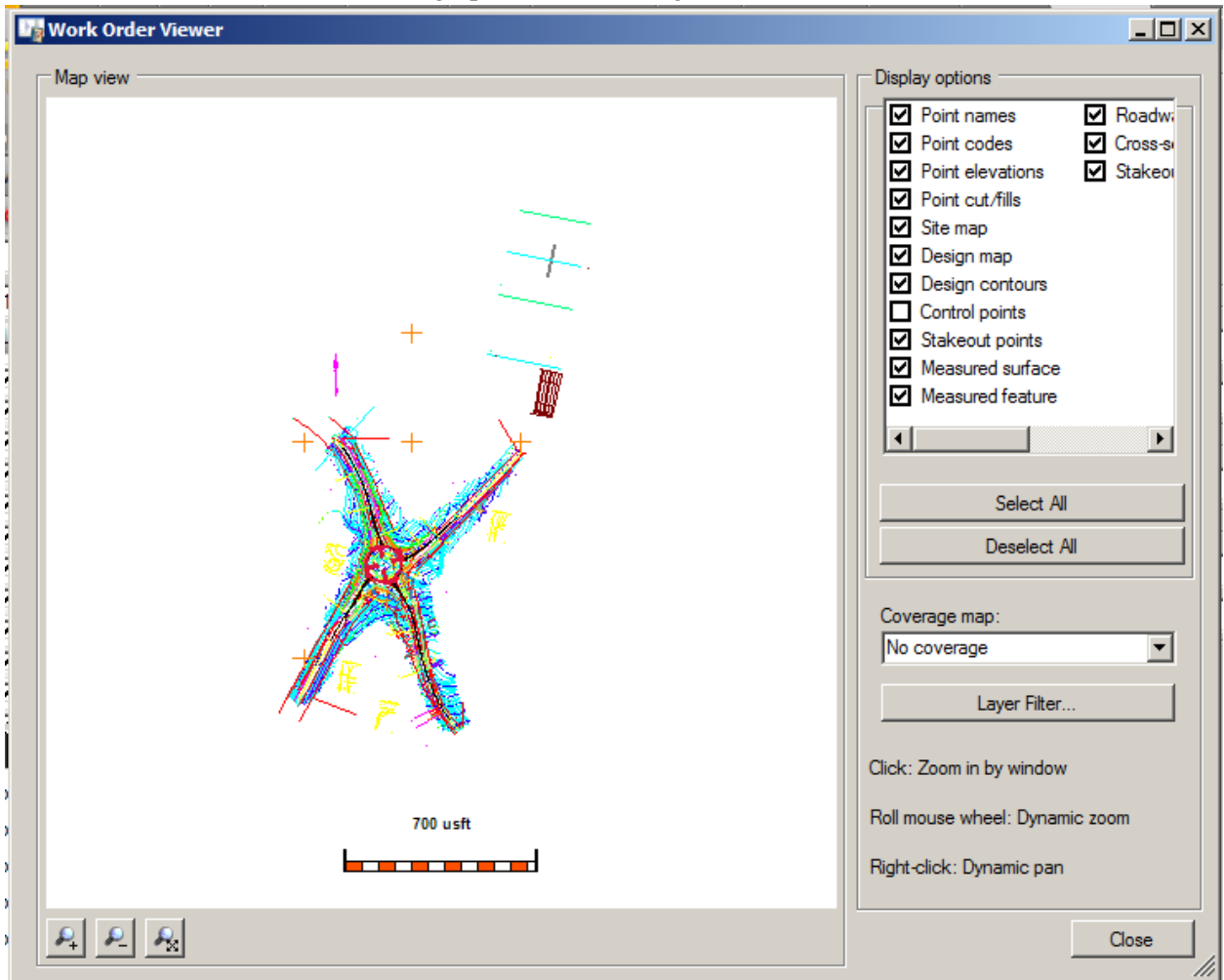


6. The Work Order box will appear as shown below



7. Review the information in the Work Order section
8. **Pick Design:** from the pull down to assign to the work order
9. For this **work order** we will assign the **PRO** which is the **base line geometry**
10. This will **display the station and offset dynamically** on the tablet
11. Change the work order **status** accordingly

12. Click **View** to review the work order graphics then clicking OK.



13. **Repeat and create a new Work order** called **0124-0162_TTM** assigning the Training_TTM to the work order

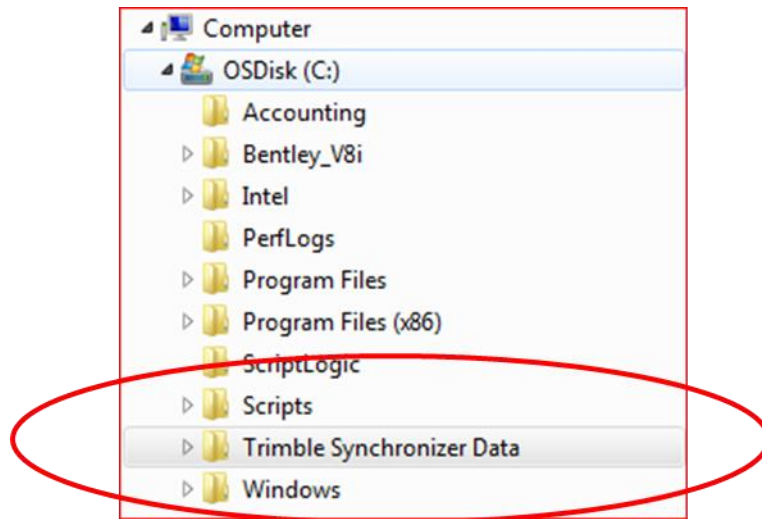
14. Click OK

2.5 Data Transfer

2.5.1 Transferring data from PC to Tablet or controller

Once the work order is complete a file gets created in the Trimble Synchronizer data folder located in the C: drive on your PC. The file gets copied to the synchronizer data folder on the tablet or data collector. This can be done with a USB flash drive. Next section we will review the process to sync the flash drive to your Business Center project on the PC and your scs900 project on the tablet or data collector. This will be done using the Office Synchronizer

1. Open the explorer window and navigate to the C: >Trimble Synchronizer Data



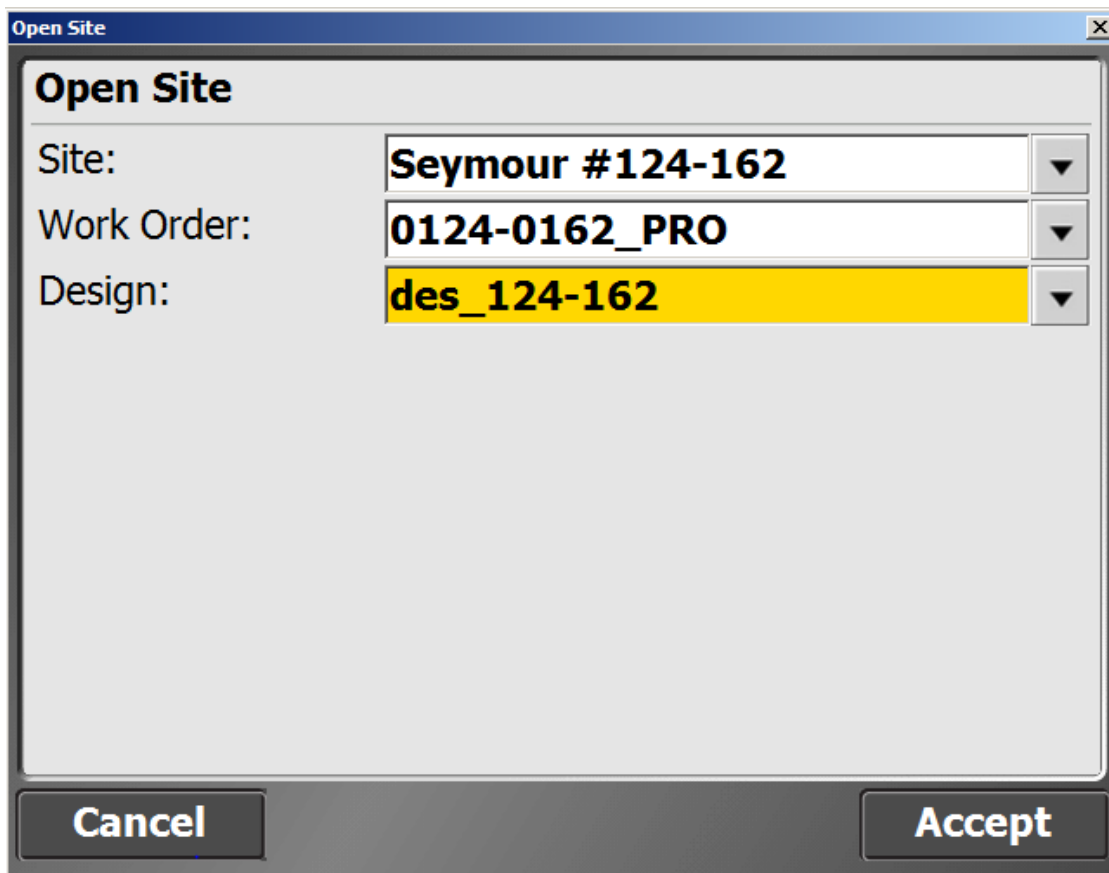
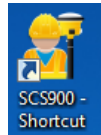
2. Open the Synchronizer data folder
3. Next click on the PC folder
4. Next click the Trimble SCS900 Data folder
5. Review your project files

Section 3 SCS900 Site Controller Software

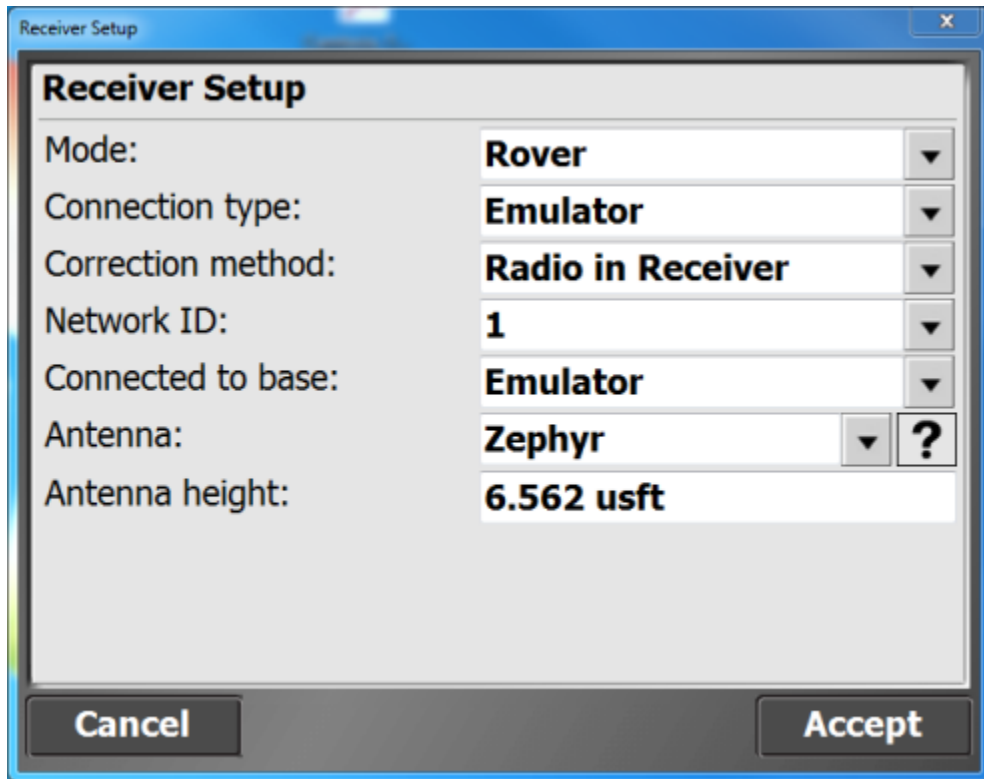
3.1 Introduction

The SCS900 software is a site measurement tool that streamlines earthworks and surface finishing operations. It enables construction contractors to measure material volumes, monitor grades and laid material thicknesses, and to perform site measurement tasks such as point, line, and surface stakeout.

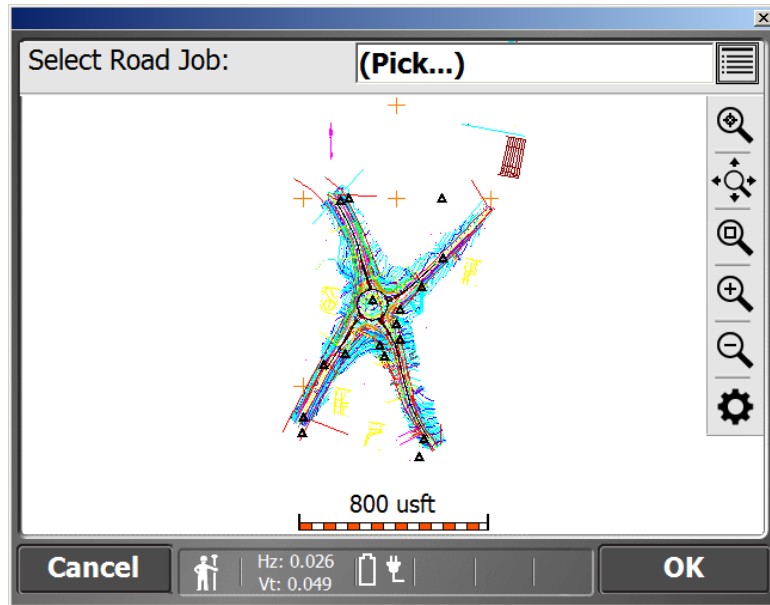
1. Open **Trimble SCS900 Emulator** by clicking on the **emulator** icon on your desk top

A screenshot of a software dialog box titled "Open Site". The dialog box has a blue title bar with a close button (X) in the top right corner. The main area is light gray and contains three rows of labels and text boxes. The first row is "Site:" followed by a text box containing "Seymour #124-162" and a dropdown arrow. The second row is "Work Order:" followed by a text box containing "0124-0162_PRO" and a dropdown arrow. The third row is "Design:" followed by a text box containing "des_124-162" and a dropdown arrow. The "Design:" text box is highlighted in yellow. At the bottom of the dialog box, there are two buttons: "Cancel" on the left and "Accept" on the right.

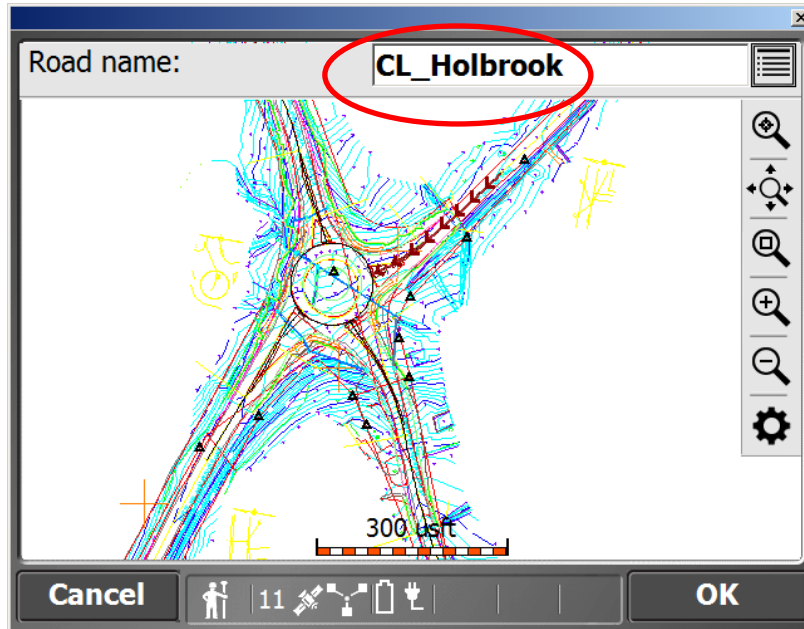
2. Mode will be set to **Rover**
3. Connection Type will be set to **Emulator**
4. Correction method will be set to **radio inside the receiver**
5. **Network ID** will be set **1**.
6. Connected to Base will be **Emulator/Zephyr**
7. Antenna height will be **6.562 usft**.

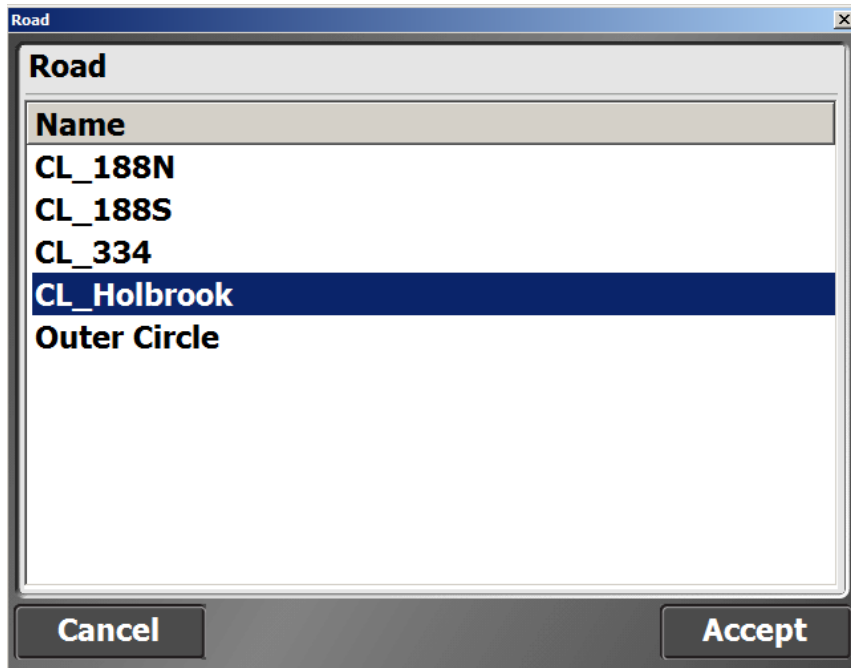


8. Click **Accept**
9. The software will prompt you to **calibrate**, click **NO**



10. Select Road Job by clicking the alignment on the screen or select the box in the upper right corner of the screen and choose the base line you wish to use.





11. Click: **Accept**

3.2 Taking Field Measurements

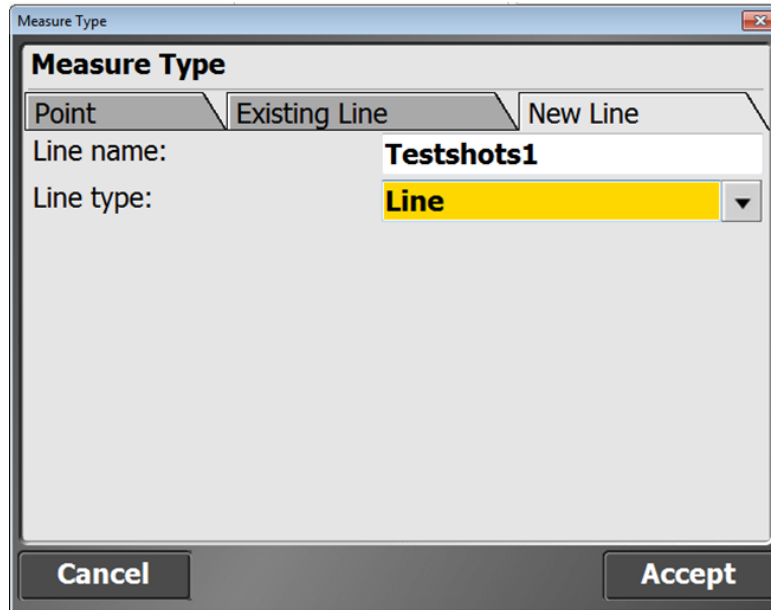
3.2.1 Measuring a Feature

1. Click the icon circled in **Red** below:

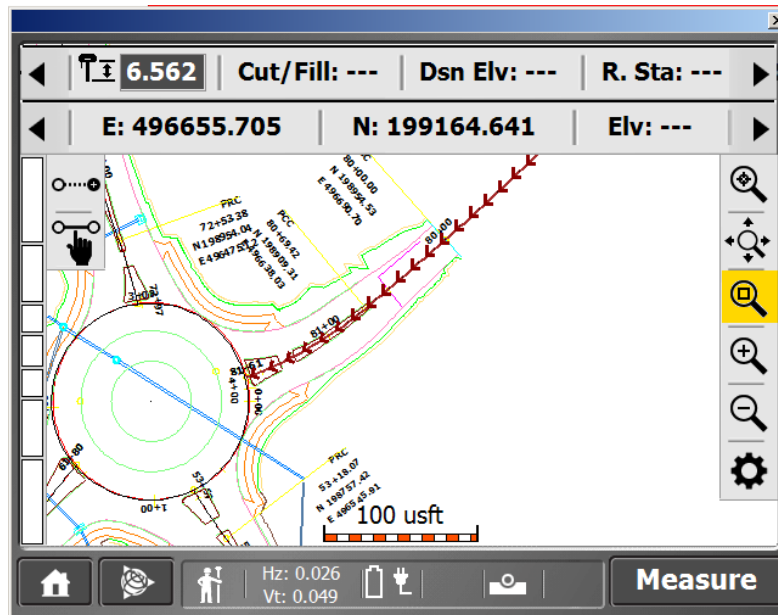


2. Next click on the **New Line Tab** and type in **Test shots 1**

3. Set Line type to **Line**

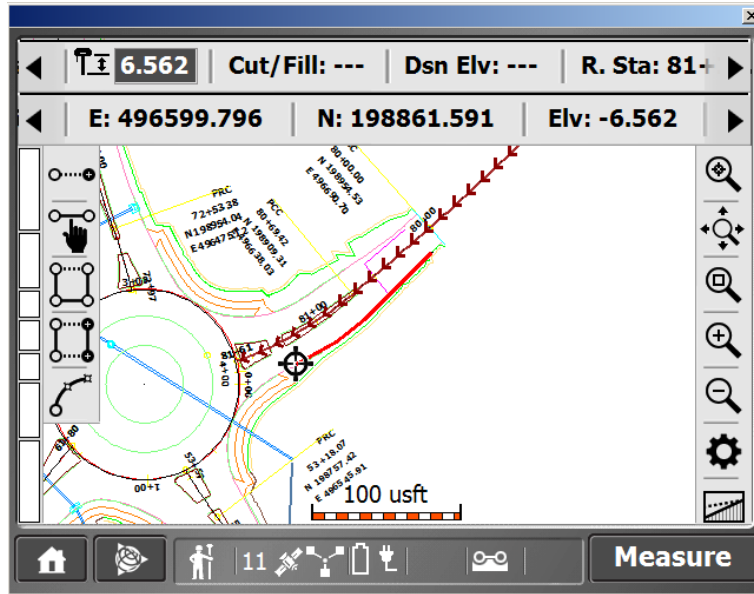


- Next click the **Zoom icon** shown highlighted in yellow

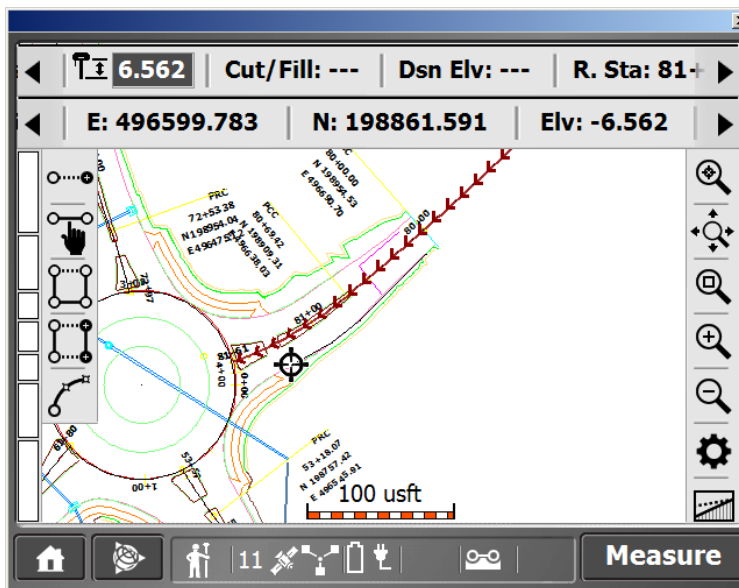


- Drag a window to zoom in on the **active alignment** shown with the **directional arrows**

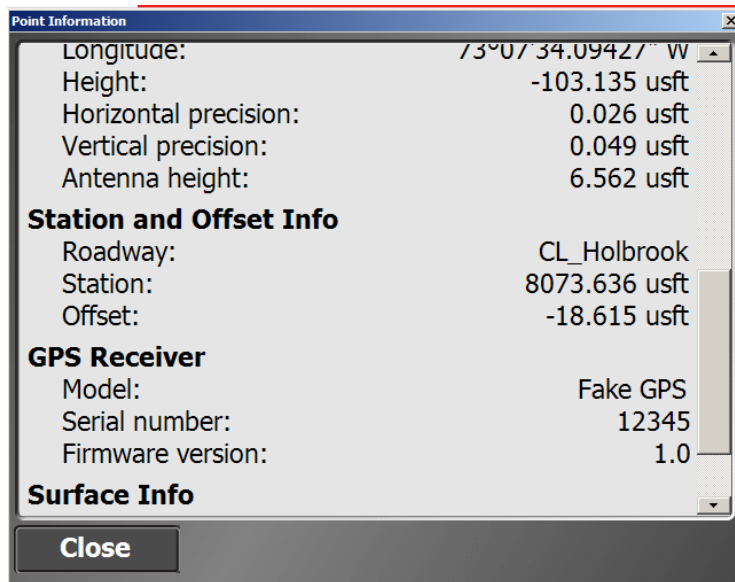
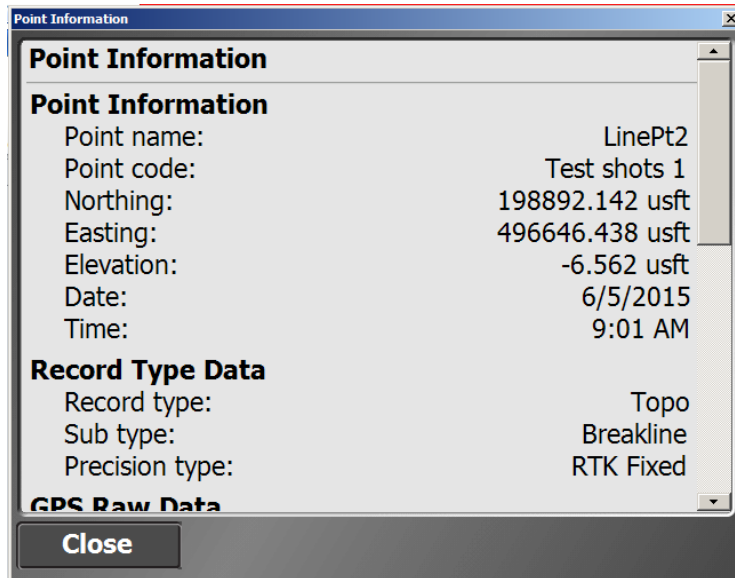
- Next click and **take a measurement** along the EOR



7. Next click the **line icon** to release the command and accept

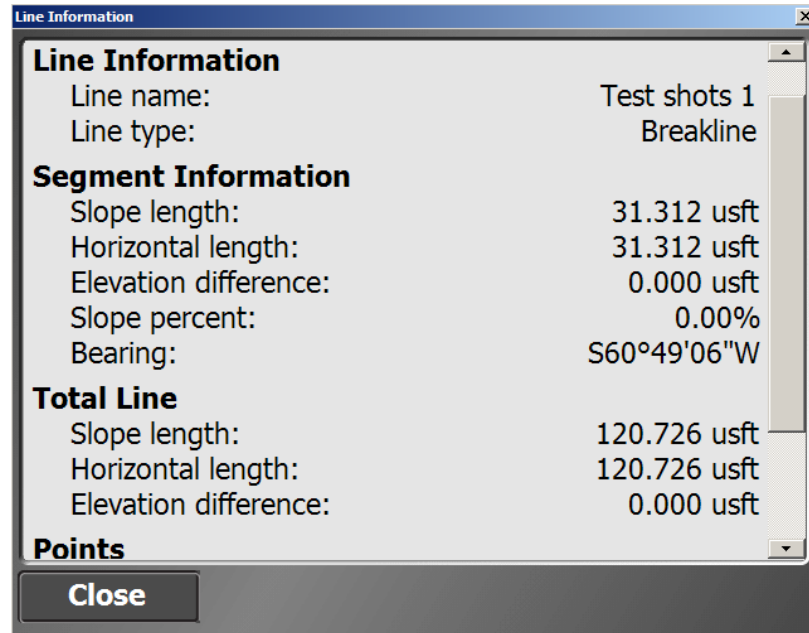


8. Next release the **view icon** if it is highlighted
9. **Click and hold on the first shot** until it gives you the **point information**



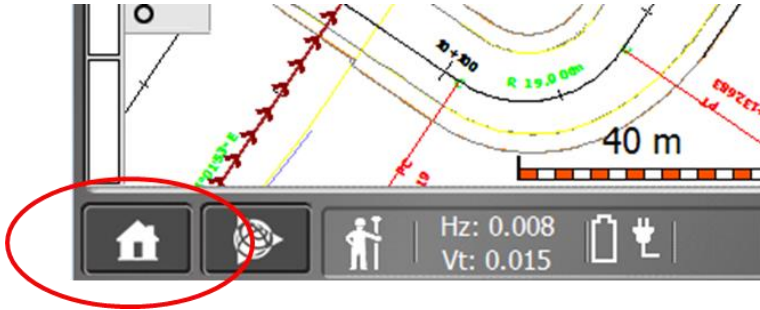
10. Click Close

11. Repeat but choose the **line information** and notice the Segment information Slope and Horizontal **line length** information as well as the Total Line information.

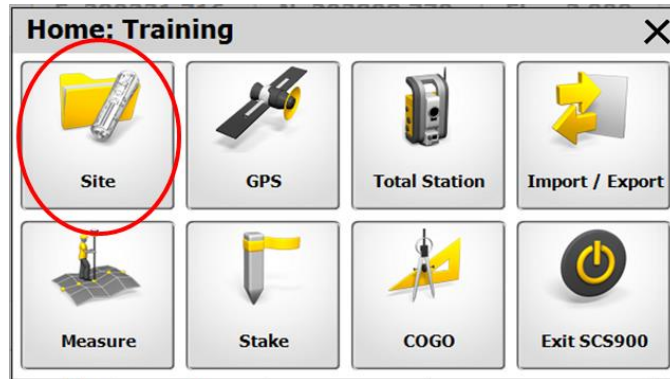


3.2.2 Measuring a Surface

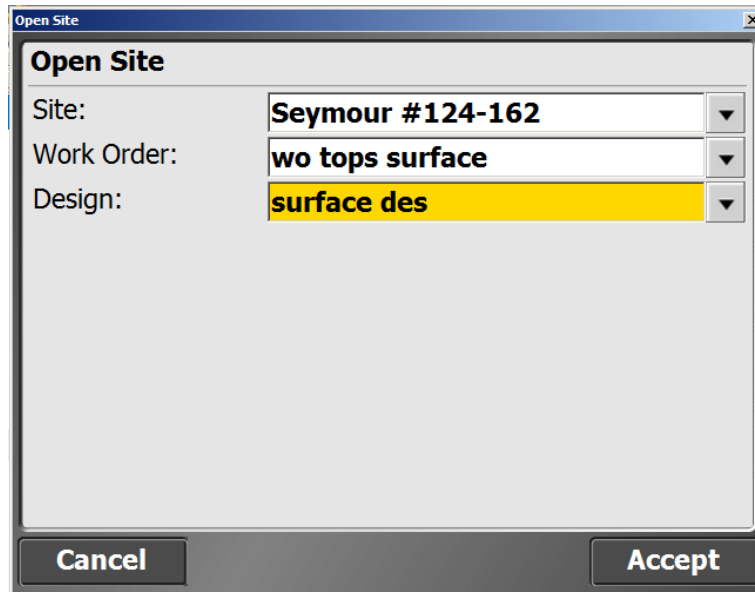
1. Click the **Home Icon** shown below



2. Click **Site** button shown below



3. Next change the design to **Training_TTM** and click **Accept**



4. Click the **Shot icon**

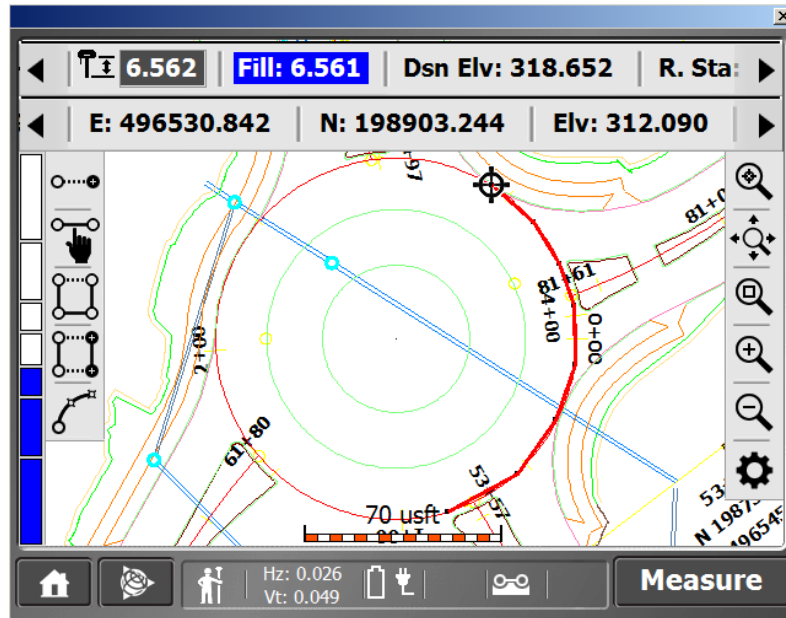


5. Click the **New Line tab**

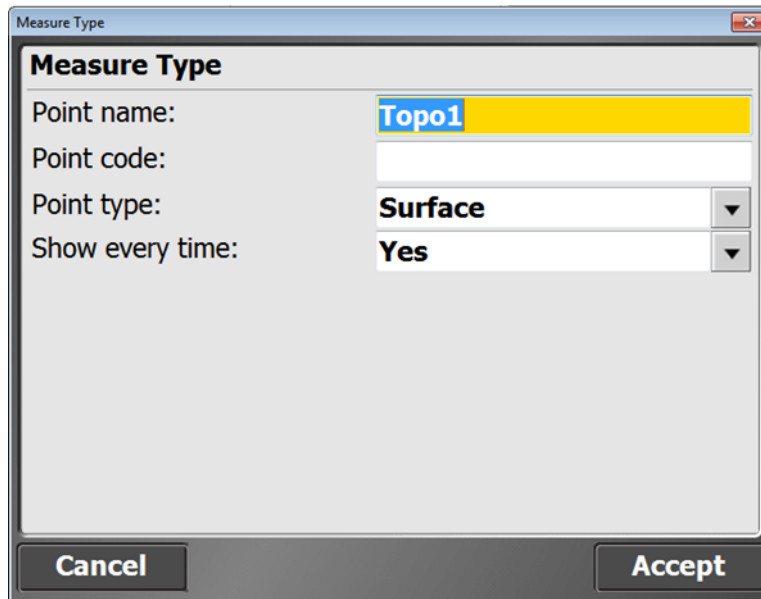
A screenshot of a software dialog box titled "Measure Type". The dialog has three tabs: "Point", "Existing Line", and "New Line". The "New Line" tab is selected. Below the tabs, there are two input fields. The first is labeled "Line name:" and contains the text "vlb1" in a yellow-highlighted text box. The second is labeled "Line type:" and is a dropdown menu with "Volume Boundary" selected. At the bottom of the dialog are two buttons: "Cancel" on the left and "Accept" on the right.

6. Line Name: **vlb1**
7. Change the Line type: **Volume Boundary**
8. Click Accept

9. Take shots to create your desired **surface boundary**



10. Change the Measure **Type to Point**



11. Take a few shots inside the center of your surface. This give the software more points to triangulate

3.3 Volume Methods

3.3.1 Saving design as a surface

1. Click the **Home icon**



2. Next click the **Import/Export icon**



3. Next click **Surface as Design**



4. Name the surface **Training Surface1** and **Include Measured Line work**

Save Surface as Design

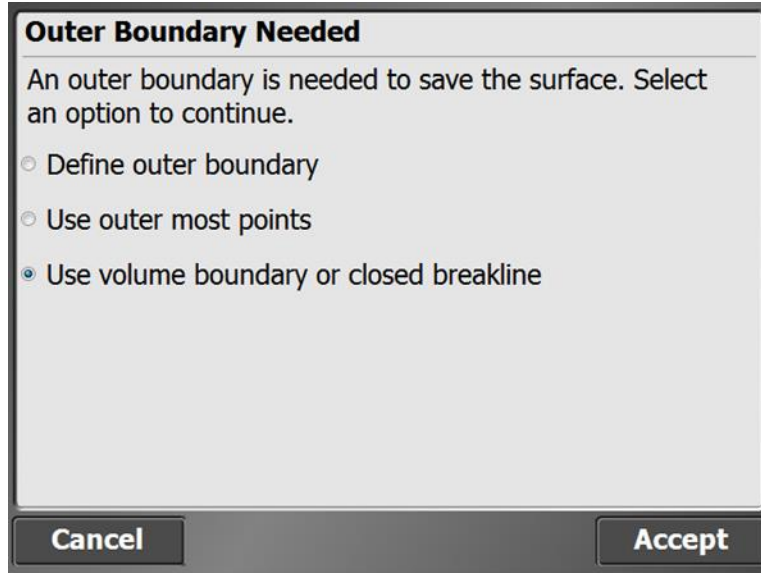
New design name:

Linework: **Include Measured Linework** ▼

Merge measured surface with the design surface.

Cancel **Accept**

5. Click **Accept**
6. Select **Use volume boundary or closed break line**



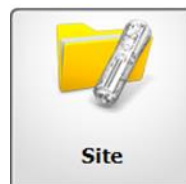
7. Click Accept

3.3.2 Surface to surface volume

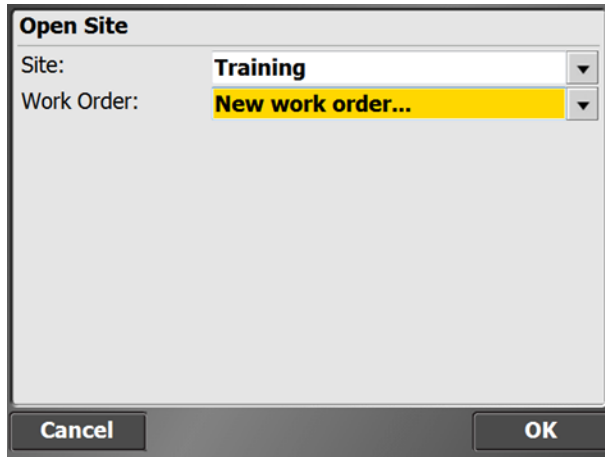
1. Next go to the **Home icon**



2. Click the **Site icon**



3. Click **New Work Order**



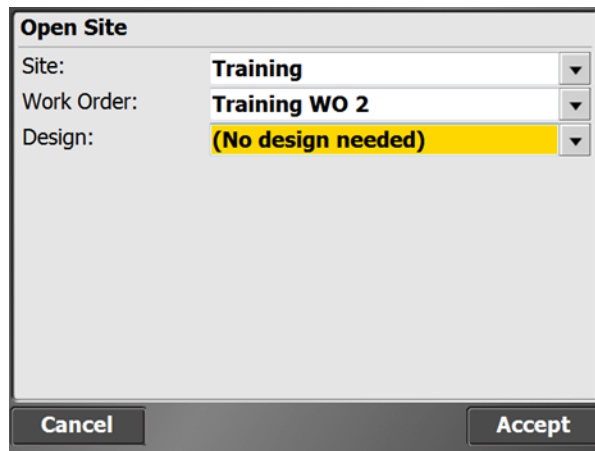
Open Site

Site: Training

Work Order: **New work order...**

Cancel OK

4. Name the new Work Order **Training WO 2**



Open Site

Site: Training

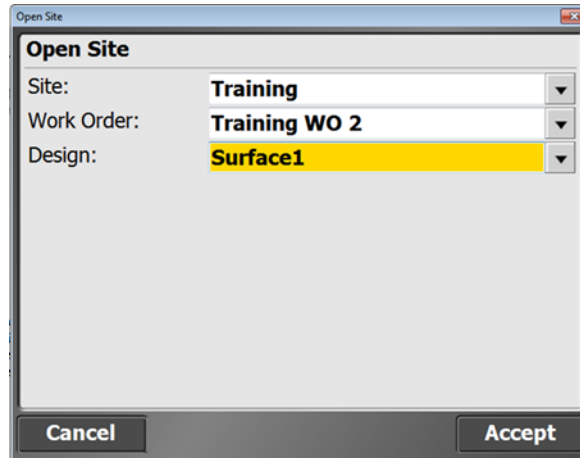
Work Order: **Training WO 2**

Design: **(No design needed)**

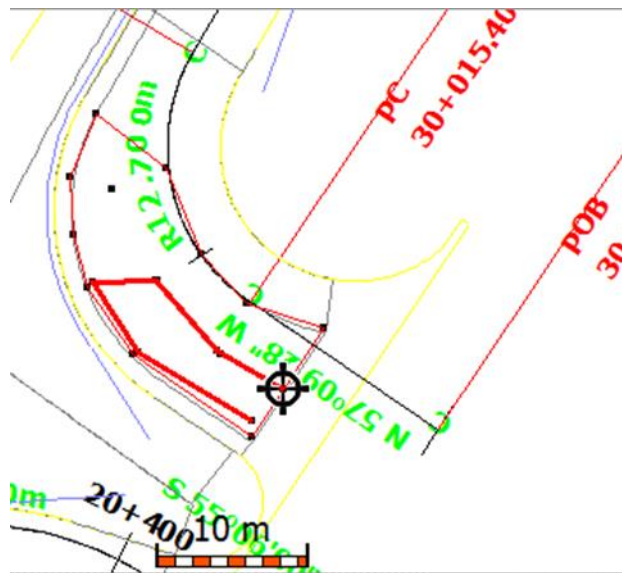
Cancel Accept

3.3.3 Assigning design to new work order

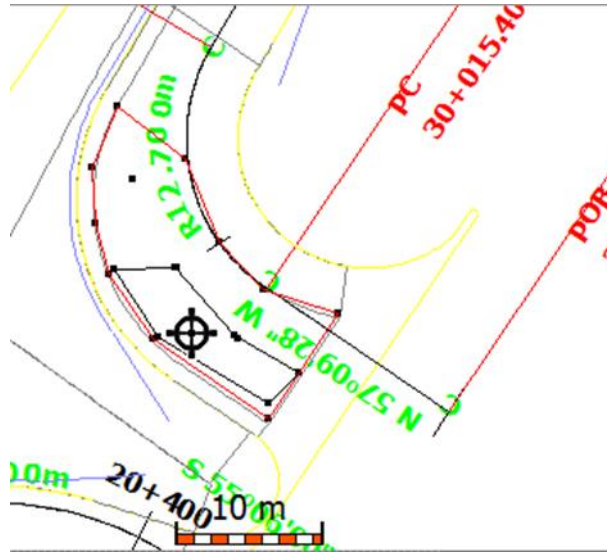
5. Choose the Design: **Surface1**



6. Click Accept
7. **Next go back to the area where the original surface was taken**
8. Next take shots in the **same area but only shoot the lane**



9. Also take a shot in the **middle of the lane**



10. Next go to the **Home icon** and select the **COGO** icon

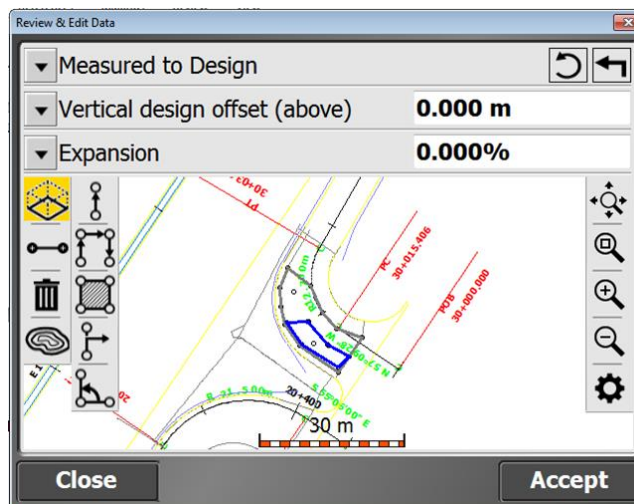


11. Click **review and edit data**

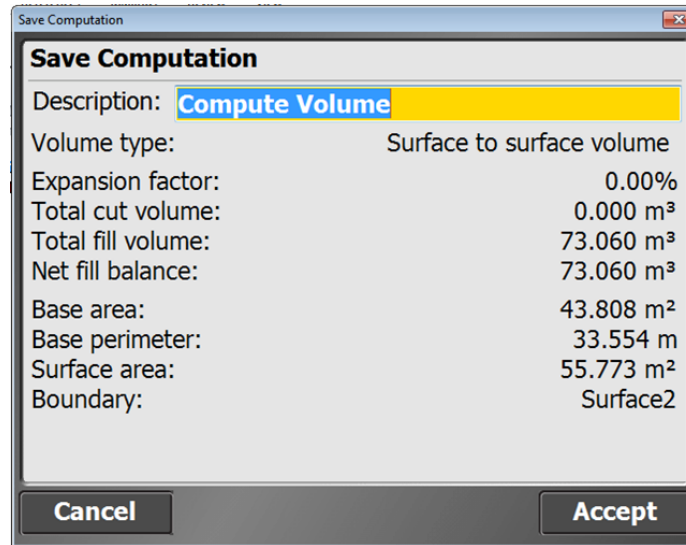


12. Click on **the smaller** Volume boundary

13. Select **Measure to Design** at the top of the screen



14. Click Accept



15. Click Accept

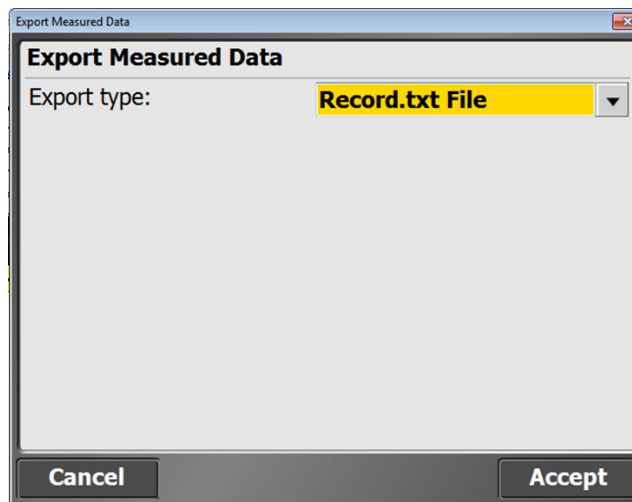
16. Next go to the **Home icon**

17. Select **Import/Export**

18. Select **Measured Data**

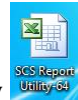


19. Click Accept and a **.txt file and your field data** will be stored in the project folder in the **Synchronizer Data folder** on your C: drive

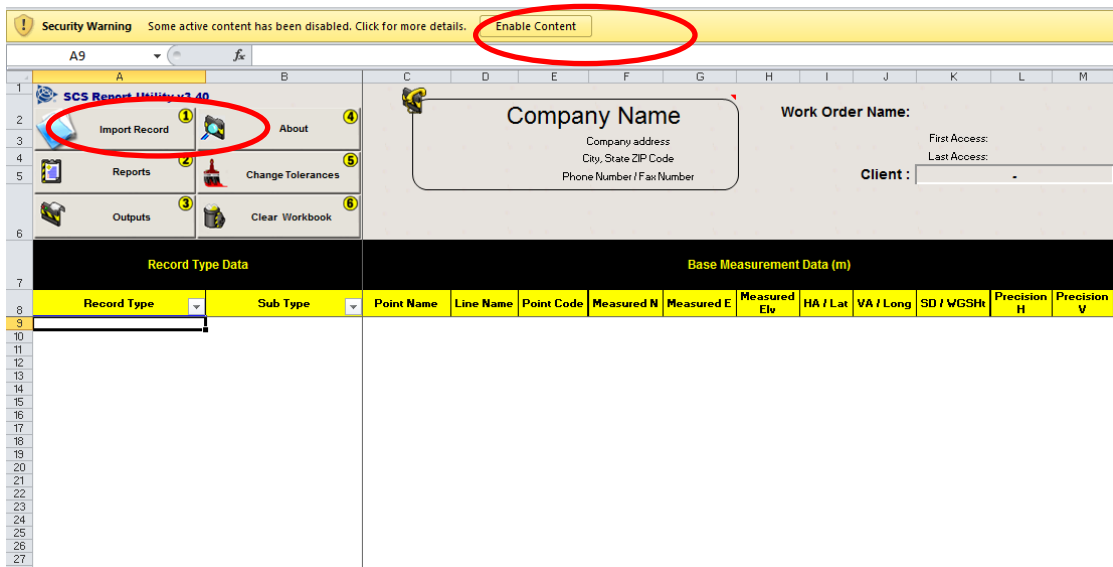


Section 4 Create Record .txt file for reporting using SCS report utility-64

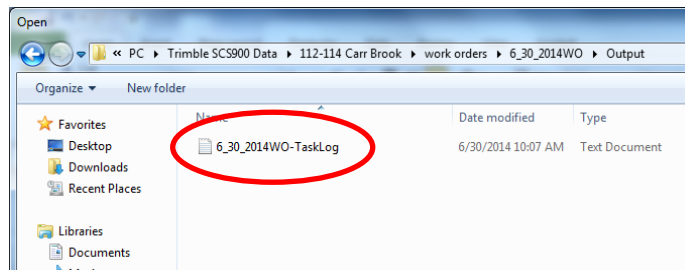
4.1 SCS900 COGO SCS Report Utility



1. After the synch is complete open the scs report utility



2. First click the **Enable Content**
3. Next **Import Record**
4. Browse to the C:/Trimble Synchronizer Data folder /PC/Trimble SCS900 Data/the project folder Work orders/Output and select the **Task log text file** and click open

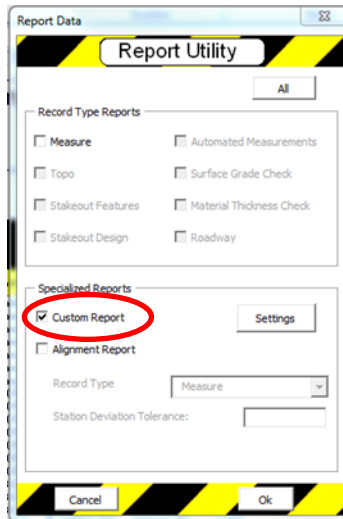


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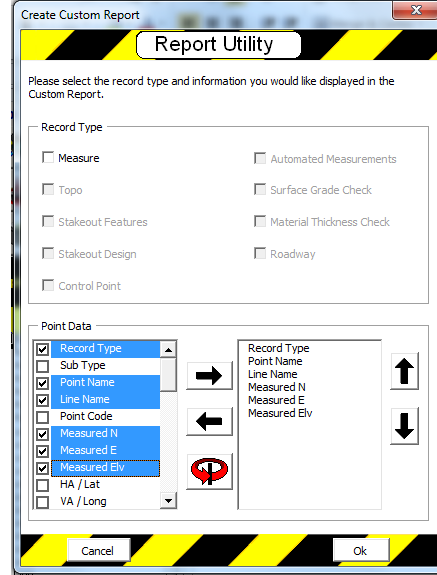
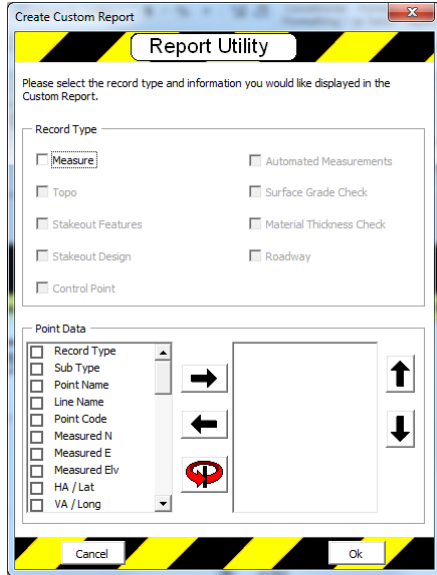
Record Type Data		Base Measurement Data (US Survey ft)											Alignment Data				
Record Type	Sub Type	Point Name	Line Name	Point Code	Measured N	Measured E	Measured Elev	HA / Lat	VA / Long	SD / WGS84	Precision H	Precision V	Precision Type	Design Station	Design Offset	Measured Station	Measured Offset
Measure	Point	Type C CB		drainage	77382.508	1036069.615	-6.552				0.026	0.049	RTK Fixed			6+30.754	-10.529
Measure	Point	Type C CB1		drainage	77342.344	1036131.197	-6.552				0.026	0.049	RTK Fixed			6+35.629	11.238
Measure	Point	Type C CB2		drainage	773488.134	1036174.831	-6.552				0.026	0.049	RTK Fixed			7+73.830	-12.305
Measure	Point	Type C CB3		drainage	779557.066	1036276.732	-6.552				0.026	0.049	RTK Fixed			9+00.608	11.268
Measure	Point	Type C CB4		drainage	779638.539	1036376.479	-6.552				0.026	0.049	RTK Fixed			10+71.856	-12.733
Measure	Point	Type C CB5		drainage	773767.448	1036477.078	-6.552				0.026	0.049	RTK Fixed			11+91.130	12.250
Measure	Point	Type C CB6		drainage	779556.572	1036528.075	-6.552				0.026	0.049	RTK Fixed			12+90.253	-14.895
Measure	Line	LineP1	RCP18	RCP18	779556.556	1036528.081	-6.552				0.026	0.049	RTK Fixed			12+90.247	-14.875
Measure	Line	LineP2	RCP18	RCP18	779767.907	1036477.107	-6.552				0.026	0.049	RTK Fixed			11+91.540	11.949
Measure	Line	LineP3	RCP18	RCP18	779638.552	1036376.351	-6.552				0.026	0.049	RTK Fixed			10+72.807	-12.457
Measure	Line	LineP4	RCP18	RCP18	779557.063	1036277.271	-6.552				0.026	0.049	RTK Fixed			9+00.342	11.610
Measure	Line	LineP5	RCP18	RCP18	779489.079	1036174.834	-6.552				0.026	0.049	RTK Fixed			7+80.434	-13.058
Measure	Line	LineP6	RCP18	RCP18	779412.387	1036131.653	-6.552				0.026	0.049	RTK Fixed			6+35.371	11.541
Measure	Line	LineP7	RCP18	RCP18	779382.019	1036070.554	-6.552				0.026	0.049	RTK Fixed			6+31.083	-9.523
Measure	Line	LineP8	BCLC	BCLC	779361.347	1036047.555	-6.552				0.026	0.049	RTK Fixed			6+00.216	-10.916
Measure	Line	LineP9	BCLC	BCLC	779434.846	1036122.440	-6.552				0.026	0.049	RTK Fixed			7+05.115	-10.367
Measure	Line	LineP10	BCLC	BCLC	779433.203	1036181.285	-6.552				0.026	0.049	RTK Fixed			7+87.989	-11.432
Measure	Line	LineP11	BCLC	BCLC	779552.039	1036248.763	-6.552				0.026	0.049	RTK Fixed			8+84.724	-12.345
Measure	Line	LineP12	BCLC	BCLC	779627.822	1036310.812	-6.552				0.026	0.049	RTK Fixed			9+75.380	-12.714
Measure	Line	LineP13	BCLC	BCLC	779703.612	1036380.150	-6.552				0.026	0.049	RTK Fixed			10+78.079	-13.548
Measure	Line	LineP14	BCLC	BCLC	779809.241	1036485.383	-6.552				0.026	0.049	RTK Fixed			12+26.772	-11.199
Measure	Line	LineP15	BCLC	BCLC	779875.400	1036552.310	-6.552				0.026	0.049	RTK Fixed			13+21.101	-10.943
Measure	Line	LineP16	BCLC1	BCLC1	779853.332	1036568.046	-6.552				0.026	0.049	RTK Fixed			13+20.732	11.230

4.2 Custom Reporting

- Go to Custom Reports and select what you want to display



Connecticut Department of Transportation GPS Construction Inspection



6. Click OK

Company Name

Company address:
City, State ZIP Code
Phone Number / Fax Number

Client: -

Sort Output Report

Work Order Name: 6_30_2014WD

First Access: 6/30/14 7:32 AM

Last Access: 6/30/14 9:45 AM

Operator Name: -

Site Name: 112-114 Carr Brook

Design: Can Brook DESIGN

Units: (US Survey Feet)

Total Number of Points: 23

Record Type	Sub Type	Line Name	Measured N	Measured E	Measured Elv	Precision H	Precision V	Measured Station	Measured Offset	Alignment Name
Measure	Point		77382.508	1036063.615	-6.562	0.026	0.049	6+30.754	-10.523	R17A Baseline
Measure	Point		77942.344	1036131.197	-6.562	0.026	0.049	6+95.629	11.238	R17A Baseline
Measure	Point		779486.104	1036174.631	-6.562	0.026	0.049	7+73.830	-12.305	R17A Baseline
Measure	Point		779557.066	1036276.732	-6.562	0.026	0.049	9+00.608	11.268	R17A Baseline
Measure	Point		779638.533	1036376.479	-6.562	0.026	0.049	10+71.856	-12.733	R17A Baseline
Measure	Point		779767.448	1036477.078	-6.562	0.026	0.049	11+31.190	12.250	R17A Baseline
Measure	Point		779856.572	1036528.075	-6.562	0.026	0.049	12+30.253	-14.635	R17A Baseline
Measure	Line	RCP18	779856.556	1036528.081	-6.562	0.026	0.049	12+30.247	-14.673	R17A Baseline
Measure	Line	RCP18	779767.307	1036477.107	-6.562	0.026	0.049	11+31.540	11.349	R17A Baseline
Measure	Line	RCP18	779638.552	1036376.351	-6.562	0.026	0.049	10+72.187	-12.457	R17A Baseline
Measure	Line	RCP18	779557.069	1036277.271	-6.562	0.026	0.049	9+00.342	11.610	R17A Baseline
Measure	Line	RCP18	779489.078	1036174.834	-6.562	0.026	0.049	7+80.434	-13.058	R17A Baseline
Measure	Line	RCP18	77942.367	1036131.653	-6.562	0.026	0.049	6+95.971	11.541	R17A Baseline
Measure	Line	RCP18	77382.019	1036070.554	-6.562	0.026	0.049	6+31.083	-5.523	R17A Baseline
Measure	Line	BCLC	77361.347	1036047.595	-6.562	0.026	0.049	6+00.216	-10.916	R17A Baseline
Measure	Line	BCLC	773434.846	1036122.440	-6.562	0.026	0.049	7+05.115	-10.367	R17A Baseline
Measure	Line	BCLC	779493.203	1036181.285	-6.562	0.026	0.049	7+87.989	-11.432	R17A Baseline
Measure	Line	BCLC	779562.099	1036248.783	-6.562	0.026	0.049	8+84.724	-12.345	R17A Baseline
Measure	Line	BCLC	779627.822	1036310.812	-6.562	0.026	0.049	9+75.360	-12.714	R17A Baseline
Measure	Line	BCLC	773703.012	1036300.150	-6.562	0.026	0.049	10+78.079	-13.548	R17A Baseline
Measure	Line	BCLC	773609.241	1036485.383	-6.562	0.026	0.049	12+26.772	-11.193	R17A Baseline
Measure	Line	BCLC	779675.400	1036552.310	-6.562	0.026	0.049	13+21.101	-10.843	R17A Baseline
Measure	Line	BCLC1	779693.332	1036568.046	-6.562	0.026	0.049	13+20.792	11.230	R17A Baseline
Measure	Line	BCLC1	779768.832	1036475.726	-6.562	0.026	0.049	11+91.233	10.315	R17A Baseline
Measure	Line	BCLC1	779670.534	1036385.226	-6.562	0.026	0.049	10+57.334	12.638	R17A Baseline
Measure	Line	BCLC1	779557.522	1036276.352	-6.562	0.026	0.049	9+00.631	10.635	R17A Baseline
Measure	Line	BCLC1	779463.347	1036187.244	-6.562	0.026	0.049	7+71.358	14.009	R17A Baseline
Measure	Line	BCLC1	779382.620	1036112.360	-6.562	0.026	0.049	6+68.370	12.151	R17A Baseline
Measure	Line	BCLC1	779345.795	1036063.220	-6.562	0.026	0.049	6+00.478	11.230	R17A Baseline

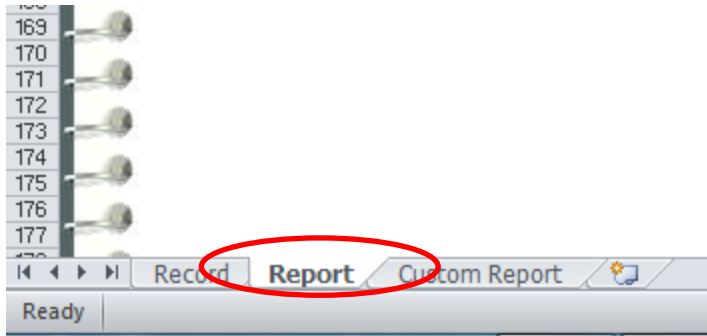
Reporting

1 new sheet(s) created.

OK

7. Next go to the Report Tab at the bottom of the report utility

Connecticut Department of Transportation GPS Construction Inspection



8. Copy and paste the computed value generated from the COGO section of SCS900

Compute Total Distance				Date	6/30/2014
				Time	10:07:11AM
				Description	Compute Total Distance
				Total HD	720.371 usft
				Total SD	720.371 usft
				Net VD	0.000 usft

9. If Business Center is open the project area use the snipping tool to take a graphical snap shot of the CAD graphics and copy/paste into the report utility

Record Type	Sub Type	Line Name	Measured N	Measured E	Measured Elev	Precision H	Precision V	Measured Station	Measured Offset	Alignment Name
Measure	Point		779382.508	1036063.615	-6.562	0.026	0.049	6+30.754	-10.529	Rt 17A Baseline
Measure	Point		779412.344	1036131.197	-6.562	0.026	0.049	6+95.629	11.238	Rt 17A Baseline
Measure	Point		779488.134	1036174.831	-6.562	0.026	0.049	7+79.830	-12.385	Rt 17A Baseline
Measure	Point		779557.066	1036276.732	-6.562	0.026	0.049	9+00.608	11.268	Rt 17A Baseline
Measure	Point		779698.539	1036376.479	-6.562	0.026	0.049	10+71.956	-12.793	Rt 17A Baseline
Measure	Point		779767.448	1036477.078	-6.562	0.026	0.049	11+91.190	12.250	Rt 17A Baseline
Measure	Point		779856.572	1036528.075	-6.562	0.026	0.049	12+90.253	-14.695	Rt 17A Baseline
Measure	Line	RCP18	779856.556	1036528.081	-6.562	0.026	0.049	12+90.247	-14.679	Rt 17A Baseline
Measure	Line	RCP18	779767.907	1036477.107	-6.562	0.026	0.049	11+91.540	11.949	Rt 17A Baseline
Measure	Line	RCP18	779698.552	1036376.351	-6.562	0.026	0.049	10+72.387	-12.457	Rt 17A Baseline
Measure	Line	RCP18	779557.069	1036277.271	-6.562	0.026	0.049	9+00.942	11.610	Rt 17A Baseline
Measure	Line	RCP18	779489.079	1036174.834	-6.562	0.026	0.049	7+80.494	-13.058	Rt 17A Baseline
Measure	Line	RCP18	779412.367	1036131.653	-6.562	0.026	0.049	6+95.371	11.541	Rt 17A Baseline
Measure	Line	RCP18	779382.019	1036070.554	-6.562	0.026	0.049	6+31.093	-9.523	Rt 17A Baseline
Measure	Line	BCLC	779361.347	1036047.595	-6.562	0.026	0.049	6+00.216	-10.816	Rt 17A Baseline
Measure	Line	BCLC	779434.846	1036122.440	-6.562	0.026	0.049	7+05.115	-10.967	Rt 17A Baseline
Measure	Line	BCLC	779493.203	1036181.285	-6.562	0.026	0.049	7+87.989	-11.432	Rt 17A Baseline
Measure	Line	BCLC	779562.099	1036248.783	-6.562	0.026	0.049	8+84.724	-12.345	Rt 17A Baseline
Measure	Line	BCLC	779627.822	1036310.812	-6.562	0.026	0.049	9+75.380	-12.714	Rt 17A Baseline
Measure	Line	BCLC	779703.612	1036380.190	-6.562	0.026	0.049	10+78.079	-13.548	Rt 17A Baseline
Measure	Line	BCLC	779809.241	1036485.383	-6.562	0.026	0.049	12+26.772	-11.199	Rt 17A Baseline
Measure	Line	BCLC	779875.400	1036552.910	-6.562	0.026	0.049	13+21.101	-10.843	Rt 17A Baseline
Measure	Line	BCLC1	779853.332	1036568.046	-6.562	0.026	0.049	13+20.732	11.230	Rt 17A Baseline
Measure	Line	BCLC1	779788.832	1036475.726	-6.562	0.026	0.049	11+51.233	10.916	Rt 17A Baseline
Measure	Line	BCLC1	779670.534	1036385.226	-6.562	0.026	0.049	10+57.334	12.698	Rt 17A Baseline
Measure	Line	BCLC1	779557.522	1036276.352	-6.562	0.026	0.049	9+00.631	10.635	Rt 17A Baseline
Measure	Line	BCLC1	779463.347	1036187.244	-6.562	0.026	0.049	7+71.358	14.009	Rt 17A Baseline
Measure	Line	BCLC1	779332.620	1036112.360	-6.562	0.026	0.049	6+68.370	12.151	Rt 17A Baseline
Measure	Line	BCLC1	779345.765	1036063.220	-6.562	0.026	0.049	6+00.478	11.250	Rt 17A Baseline

Compute Total Distance				Date	6/30/2014
				Time	10:07:11AM
				Description	Compute Total Distance
				Total HD	720.371 usft
				Total SD	720.371 usft
				Net VD	0.000 usft

10. Save as Adobe PDF and attach into your DWR in Site Manager

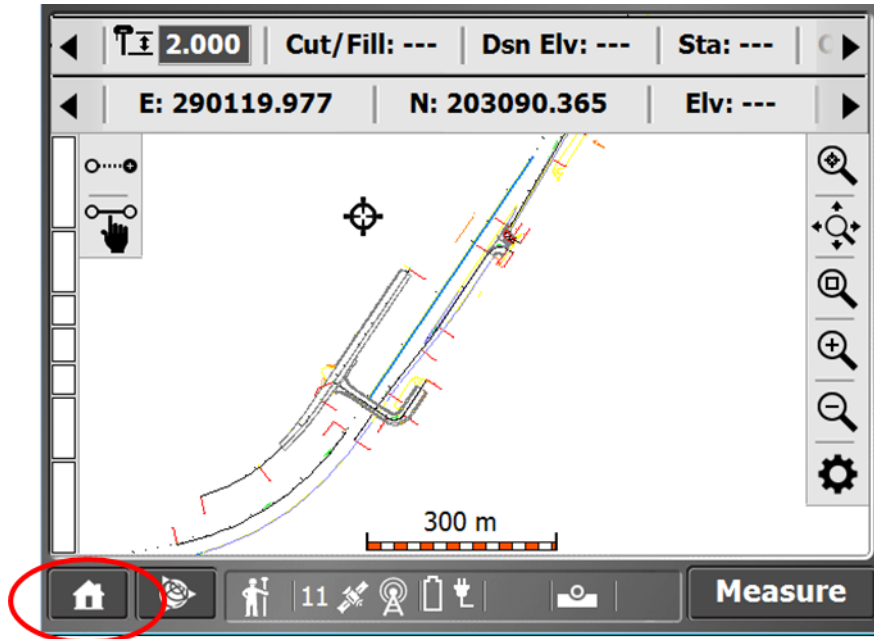
Section 5 Enter/Edit Stakeout Points

5.1.1 Introduction

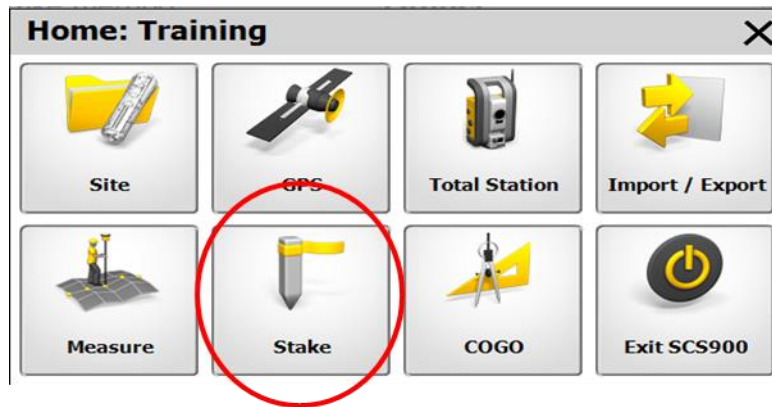
The SCS900 software enables stakeout points, lines, surfaces and roads stored in a design. The user can access the stakeout menu either through the Home menu, or tap and hold on items in the measurement screen. The intention is to use this capability within the software for field verification purposes. Before you can stake out, points must be part of the currently loaded design. There are different ways to get the points into the design. The coordinates can be input into the software using the Enter/Edit Stakeout Points functions. Also by using the create stake point in the COGO functions.

5.1.2 Points

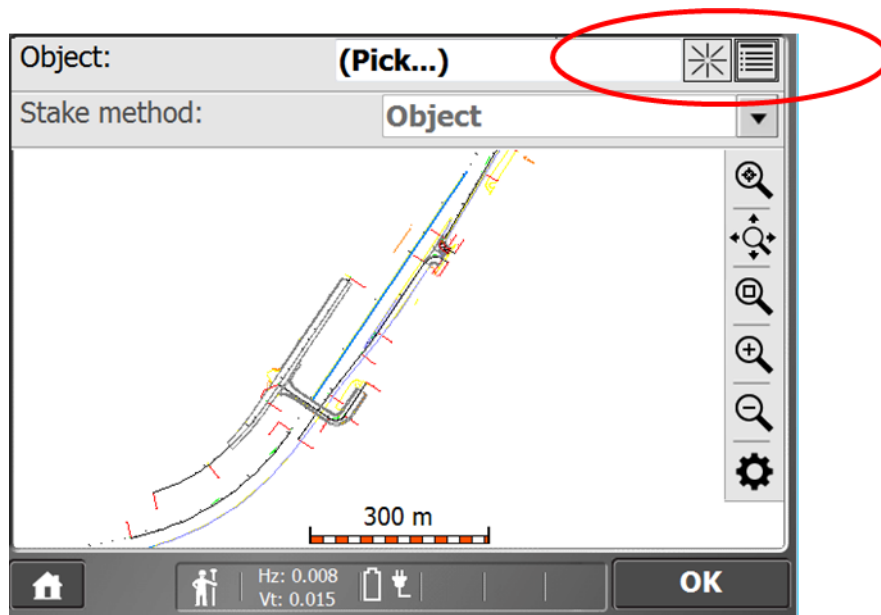
1. From the Measurement screen, tap the **Home icon**



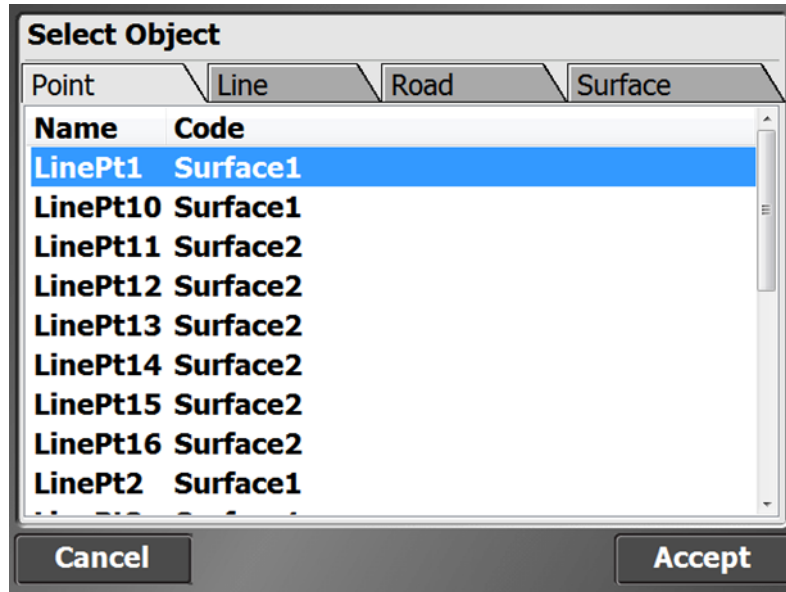
2. Tap the **Stake Icon**



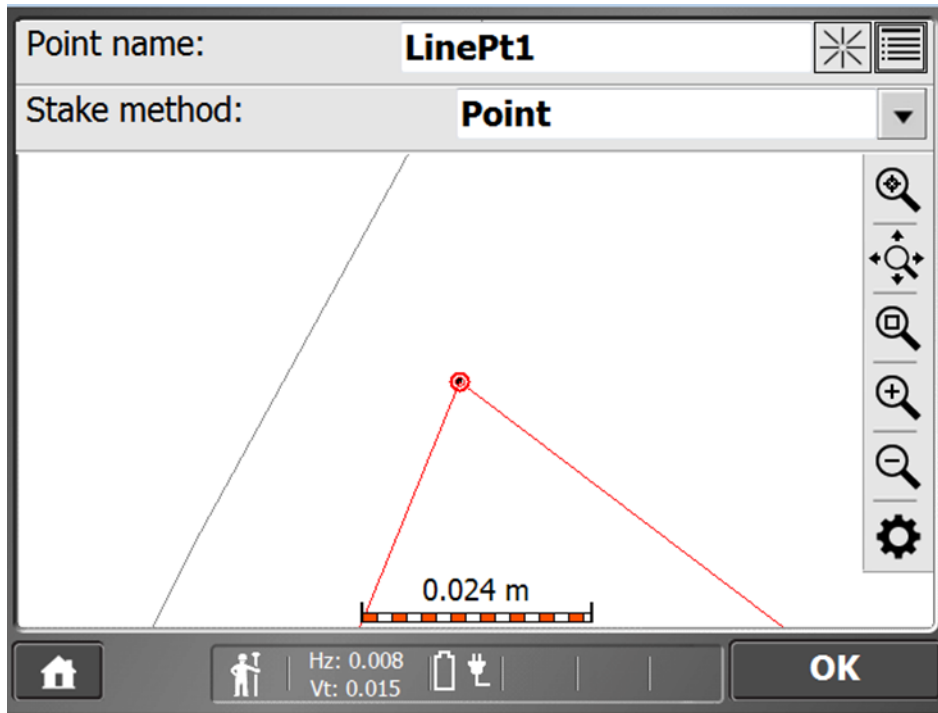
3. Select a **point** from the list at the **top right of the stake out screen**



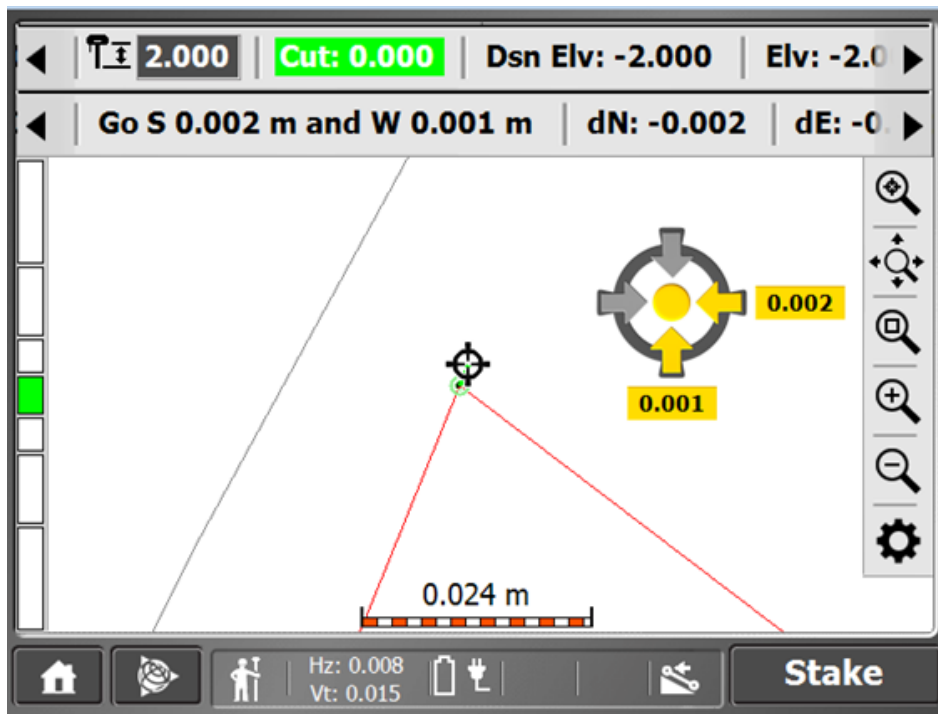
4. Then select **LinePt1** in the Points tab and **click Accept**



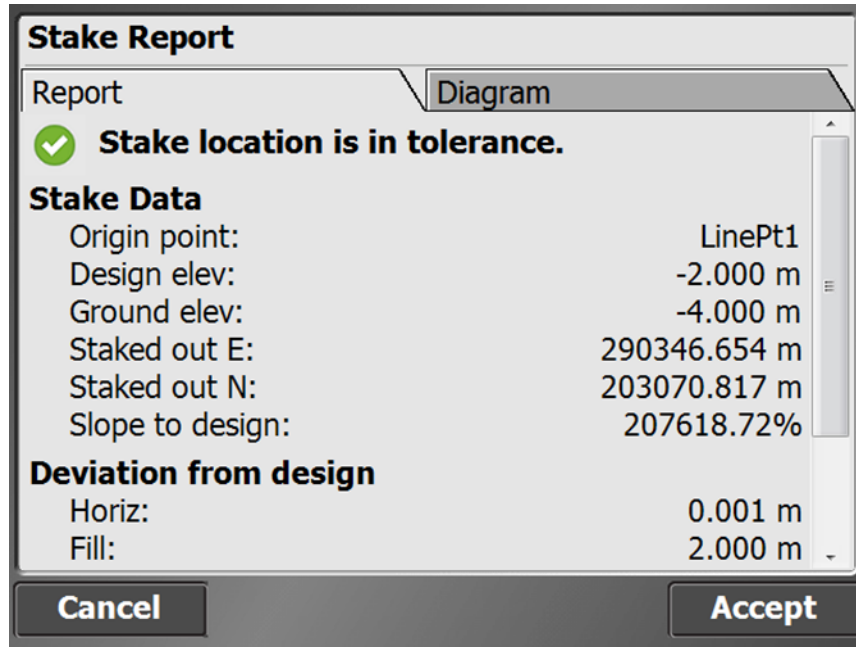
5. The point will show as a **red circle** over the point that was selected.



6. Click OK
7. Next click **as close to the point as you can** and then watch the **directional signal change**

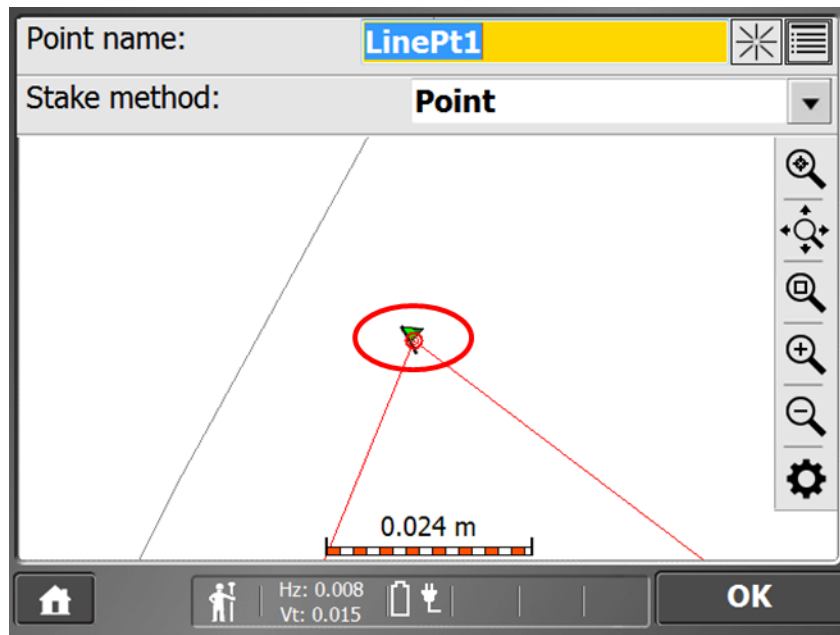


8. Click the **Stake icon**
9. View the **report**

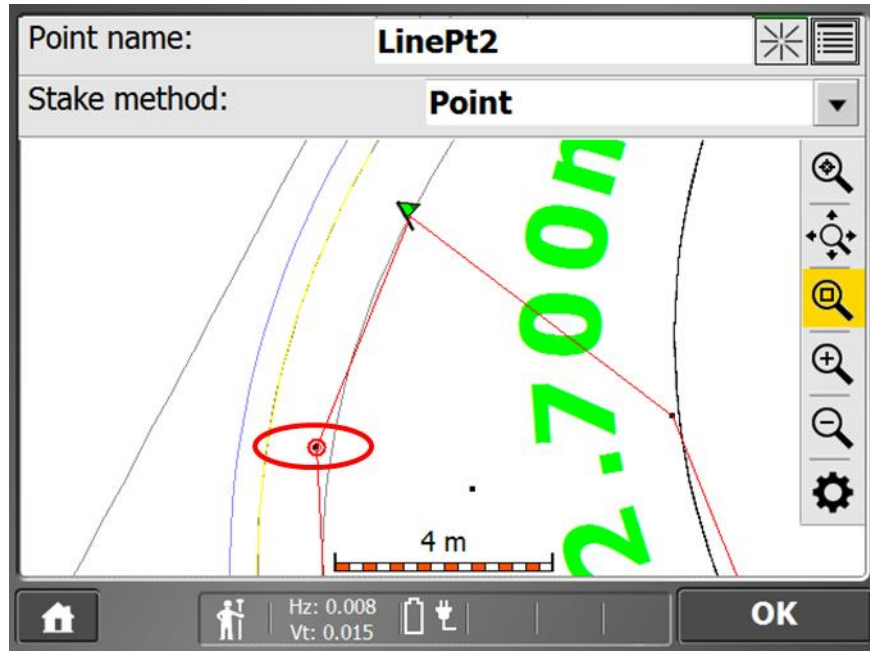


10. Note: this training is using the emulator, the data is not relative

11. Click **Accept** and see the **stake flag** show on the measurement screen



12. Next go back to the **point list** and select **LinePt2**



13. **Repeat** the exercise
14. **View** the report