Specified Points Toposurface

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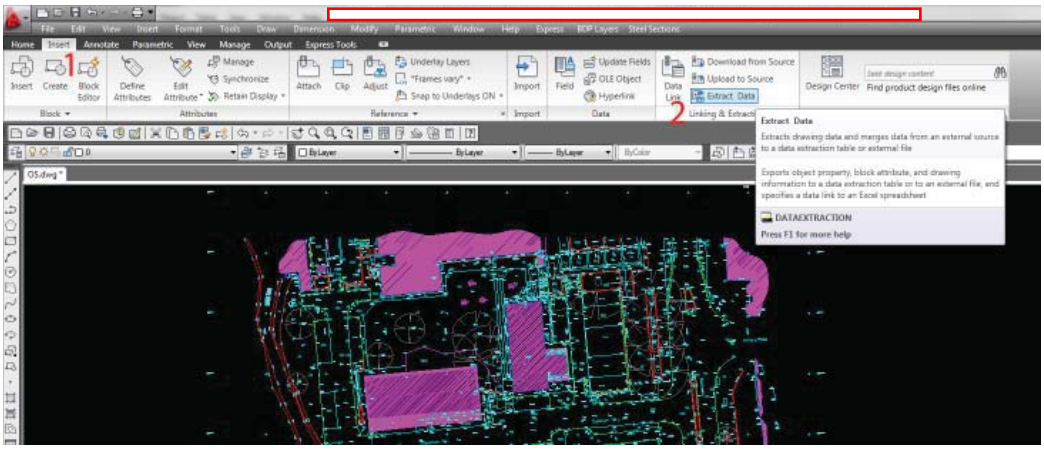
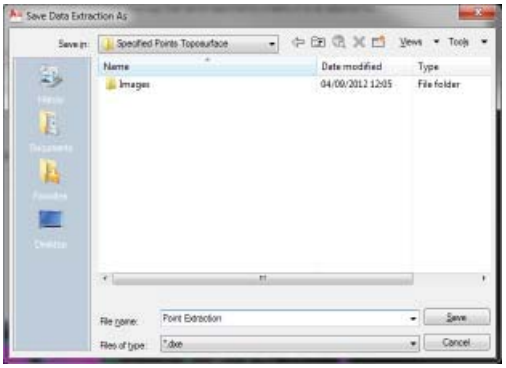
Click on the Insert tab and then on the Extract Data button (image 40, point 1 and 2).

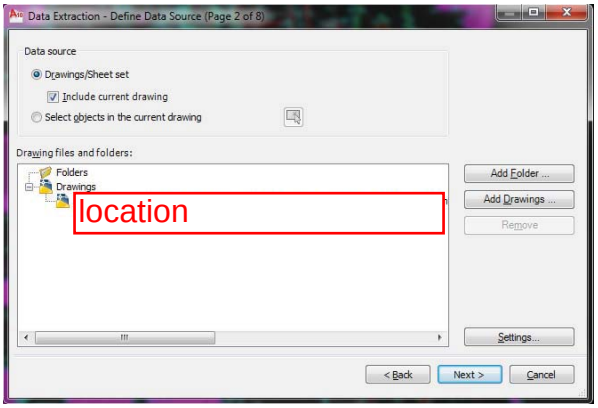
Select create a new data extraction and click next (image 41).

Save the dxe file in the relevant folder in your project [redacted] (image 42).

Set the data source settings according to image 43 and click Next.







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In the next window (image 44) the object available for data extraction are presented with a selection tick box. Untick all objects except for Points.

Click Next.

In the category filter section (image 45) untick all bxes apart from Geometry.

Click Next.

Click OK on the Non Uniformly Scaled Blocks alert. (image 46)

Select the tick box indicated in image 47 and click Next.

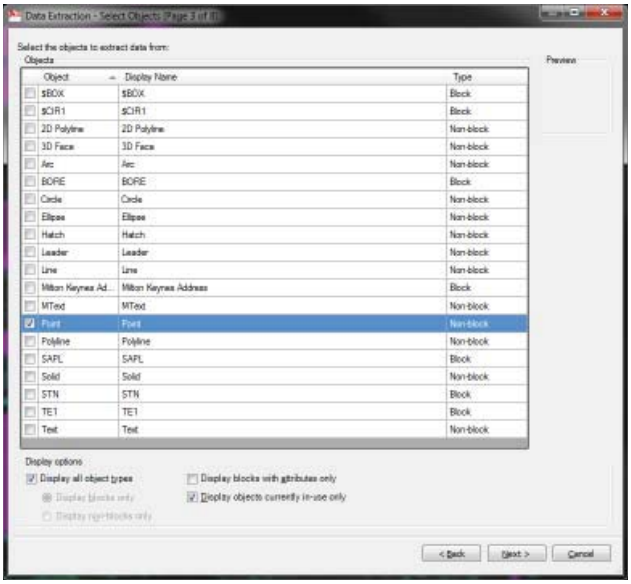

Image 44

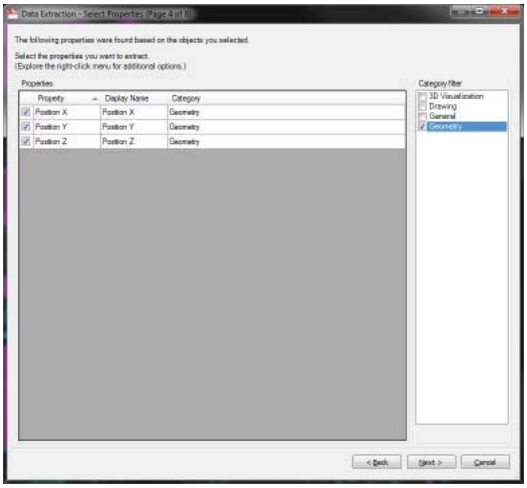

Image 45

Image 46

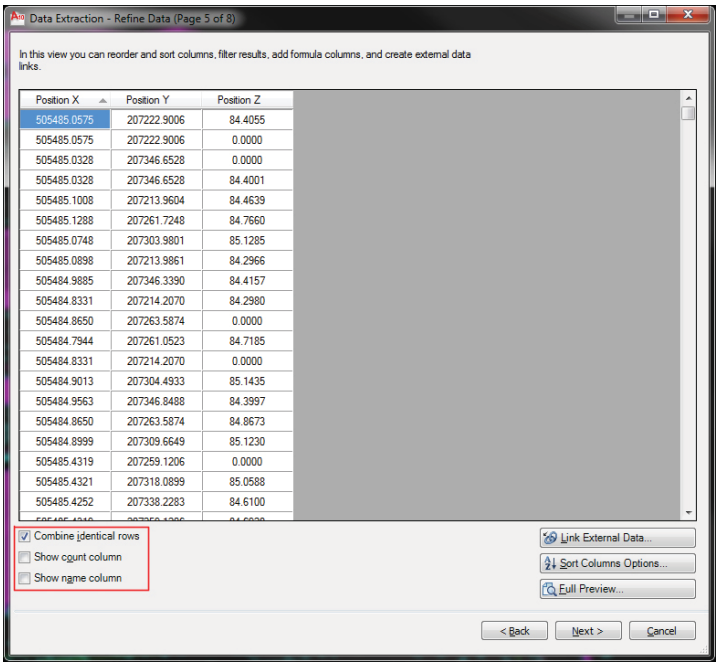

Image 47

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Select output data to external file and browse to relevant location.

Name and save the file with appropriate name e.g. Point Extraction.xls

Click Next (image 48 point 1-4).

Click Finish (image 49).

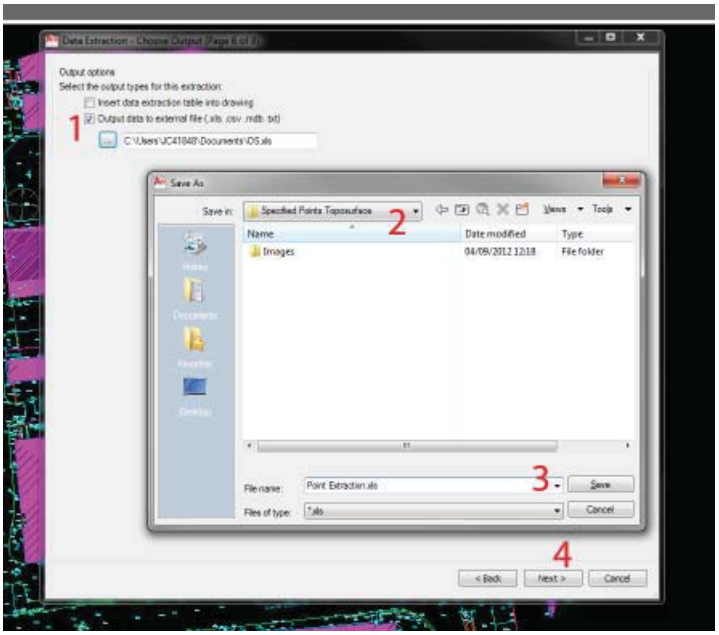
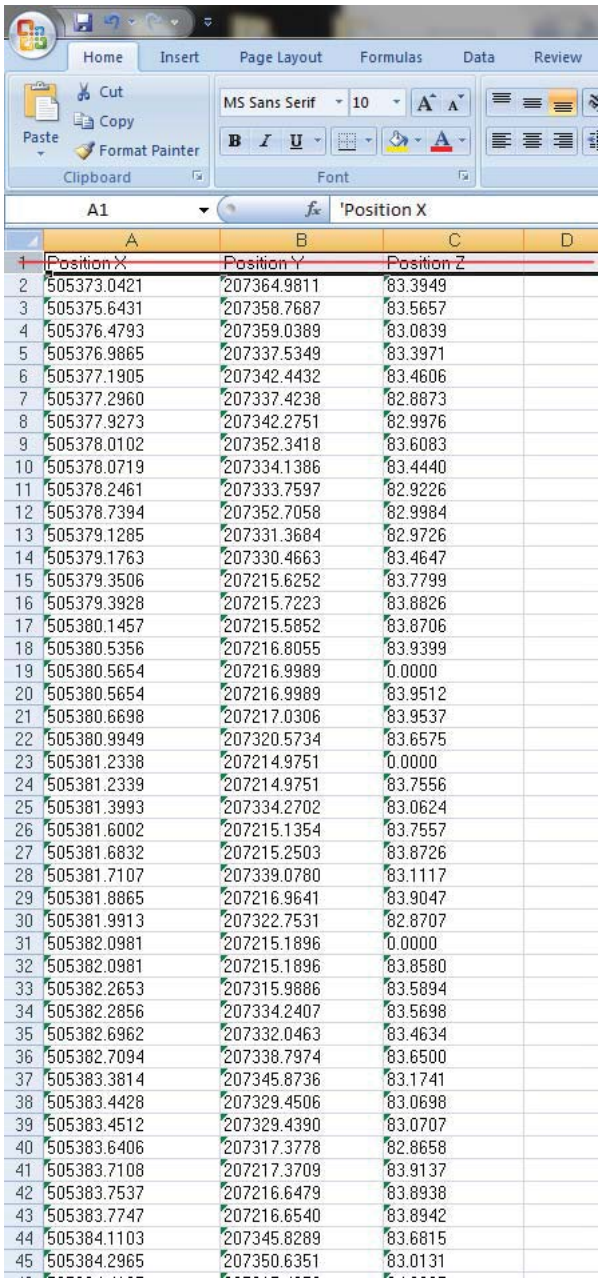


Image 48

Image 49

Specified Points Toposurface



	A	B	C	D
1	Position X	Position Y	Position Z	
2	505373.0421	207364.9811	83.3949	
3	505375.6431	207358.7687	83.5657	
4	505376.4793	207359.0389	83.0839	
5	505376.9865	207337.5349	83.3971	
6	505377.1905	207342.4432	83.4606	
7	505377.2960	207337.4238	82.8873	
8	505377.9273	207342.2751	82.9976	
9	505378.0102	207352.3418	83.6083	
10	505378.0719	207334.1386	83.4440	
11	505378.2461	207333.7597	82.9226	
12	505378.7394	207352.7058	82.9984	
13	505379.1285	207331.3684	82.9726	
14	505379.1763	207330.4663	83.4647	
15	505379.3506	207215.6252	83.7799	
16	505379.3928	207215.7223	83.8826	
17	505380.1457	207215.5852	83.8706	
18	505380.5356	207216.8055	83.9399	
19	505380.5654	207216.9989	0.0000	
20	505380.5654	207216.9989	83.9512	
21	505380.6698	207217.0306	83.9537	
22	505380.9949	207320.5734	83.6575	
23	505381.2338	207214.9751	0.0000	
24	505381.2339	207214.9751	83.7556	
25	505381.3993	207334.2702	83.0624	
26	505381.6002	207215.1354	83.7557	
27	505381.6832	207215.2503	83.8726	
28	505381.7107	207339.0780	83.1117	
29	505381.8865	207216.9641	83.9047	
30	505381.9913	207322.7531	82.8707	
31	505382.0981	207215.1896	0.0000	
32	505382.0981	207215.1896	83.8580	
33	505382.2653	207315.9886	83.5894	
34	505382.2856	207334.2407	83.5698	
35	505382.6962	207332.0463	83.4634	
36	505382.7094	207338.7974	83.6500	
37	505383.3814	207345.8736	83.1741	
38	505383.4428	207329.4506	83.0698	
39	505383.4512	207329.4390	83.0707	
40	505383.6406	207317.3778	82.8658	
41	505383.7108	207217.3709	83.9137	
42	505383.7537	207216.6479	83.8938	
43	505383.7747	207216.6540	83.8942	
44	505384.1103	207345.8289	83.6815	
45	505384.2965	207350.6351	83.0131	

Image 50

Open MS Excel and navigate to the xls file.

Delete the top row (image 50) and adjust the column width.

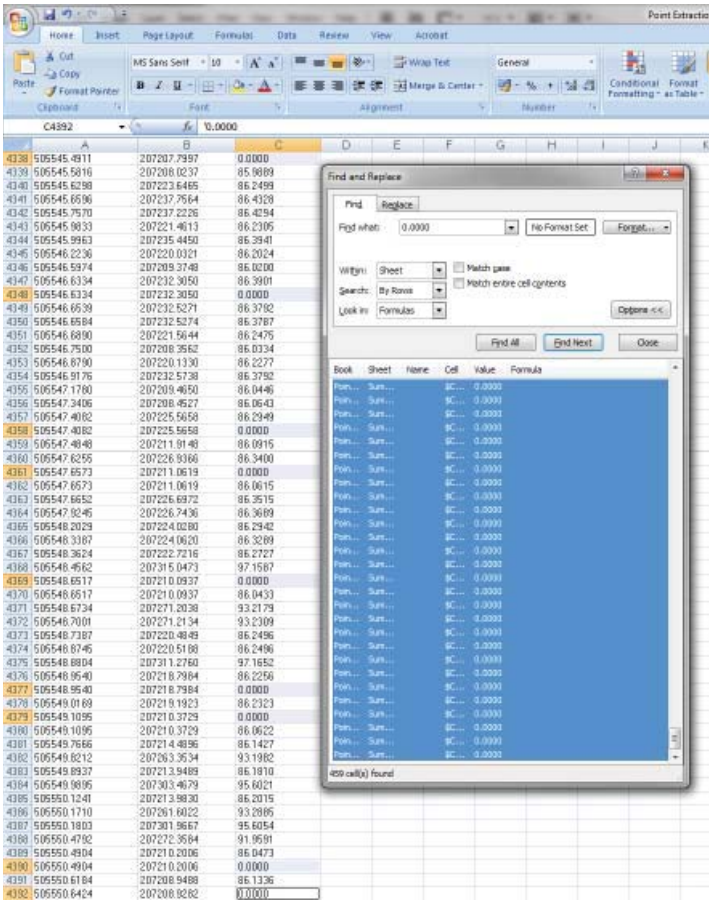
In this particular file we have some duplicate points with a Z position of 0.0000. In order to produce a tidy 3D toposurface the 0.0000 points need to be deleted from the xls file.

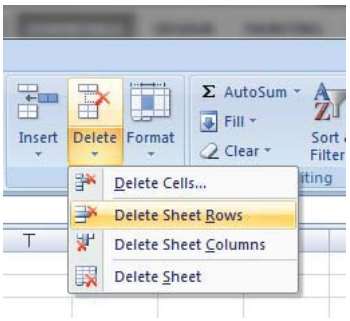
Click on the find and select button and find all 0.0000. Select all and delete all rows.

Specified Points Toposurface

Click on the find and select button and find all 0.0000 (image 51).

Select all and delete sheet rows (image 52).





Save the xls file.

Then go to save as and select CSV from the typ dropdown list (image 53).

Click yes on the alert popup (image 54).

Then save the xls file as a xlsx and rename it e.g. Point Extraction1.xlsx (image 55).

Open Revit Architecture

Open a new project.

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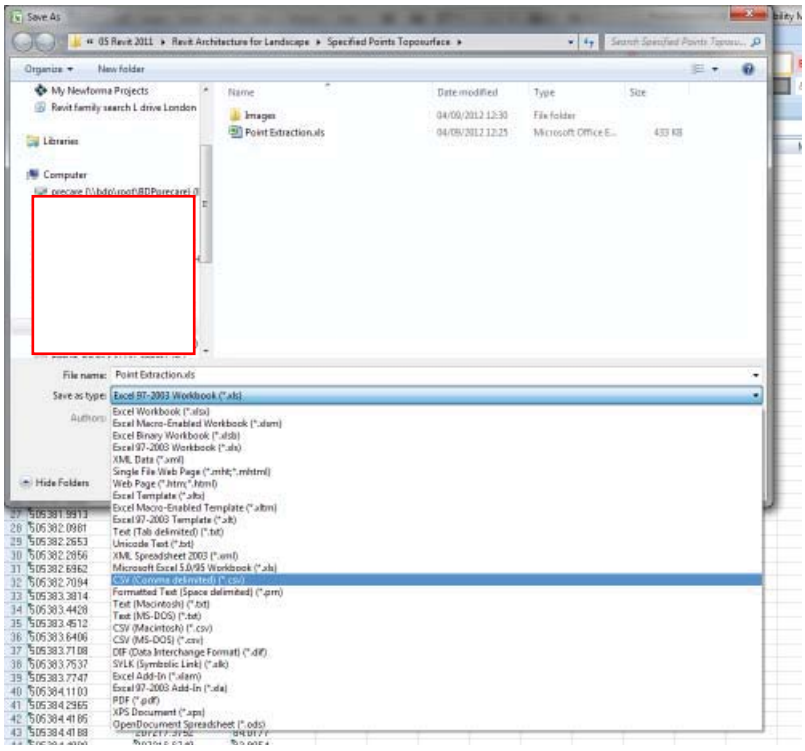

Image 53

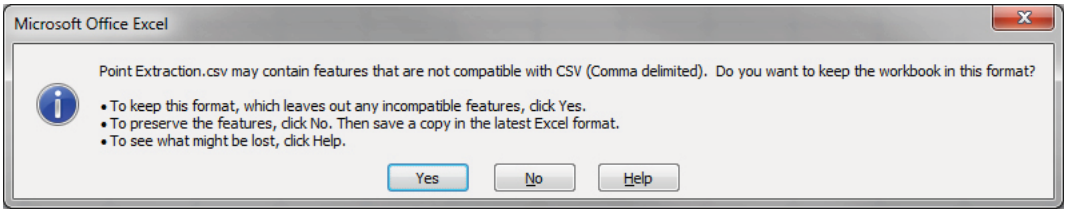

Image 54

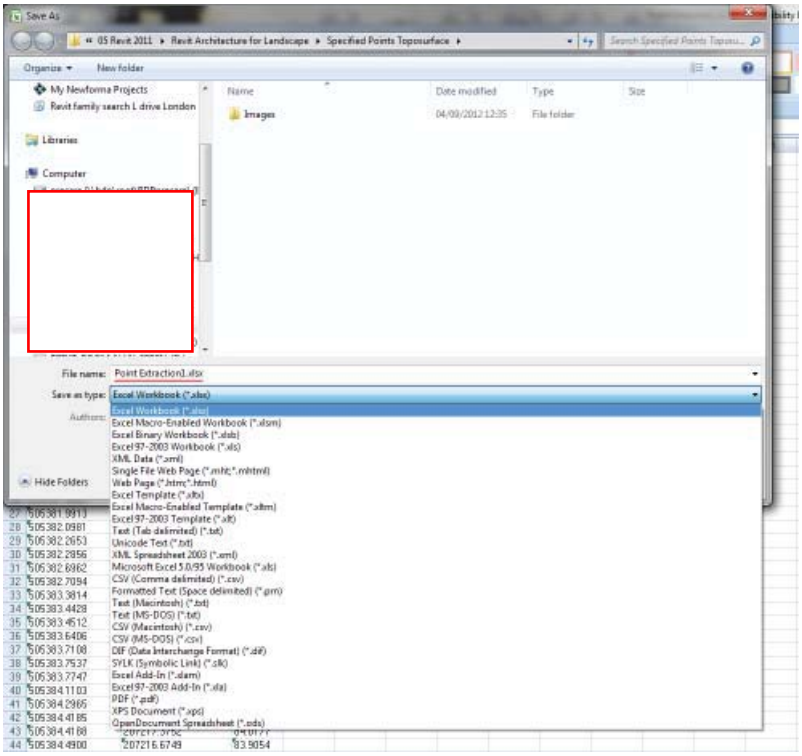

Image 55

Specified Points Toposurface

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Select the Site view from the project browser and click the TopoSurface button under the massing and site tab (image 56).

Click create from import and select the specify point file option from the dropdown list (image 57).

Navigate to the CSV file and open (image 58).

Select the units the OS was drawn in, in this case Meters (image 59).

Click OK.

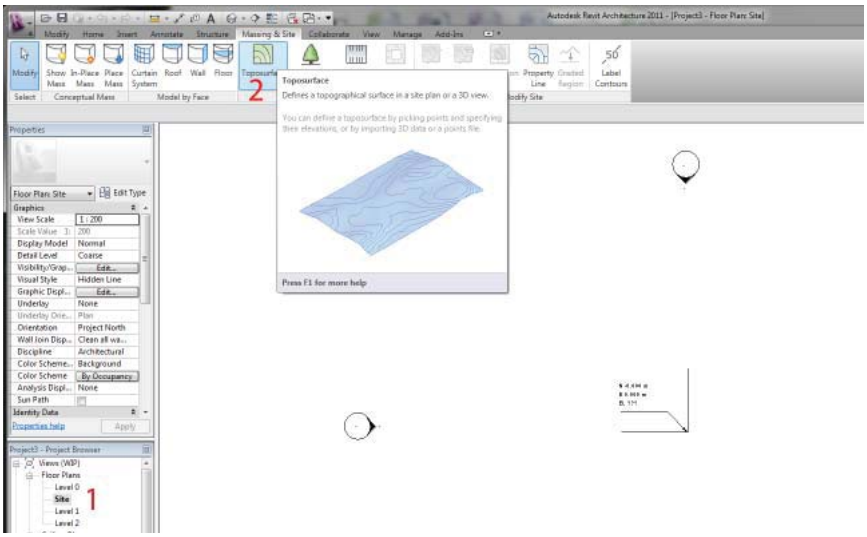

Image 56

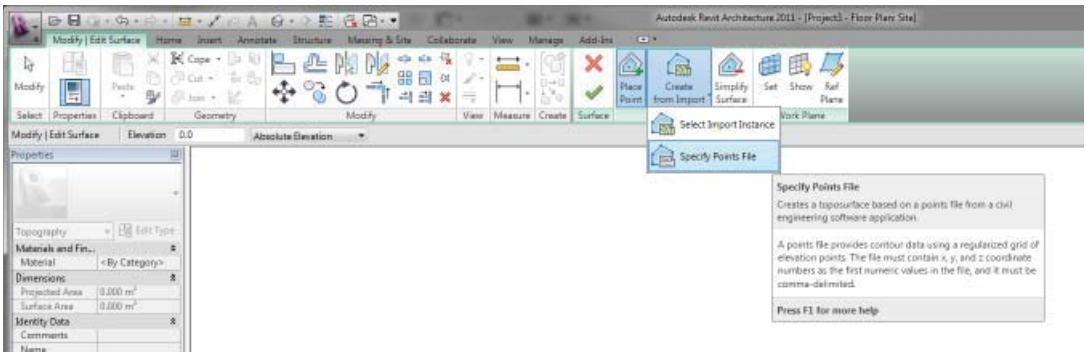

Image 57

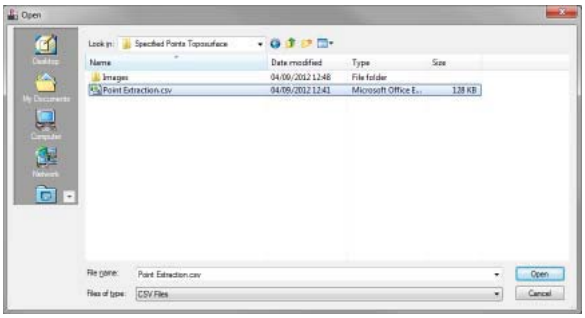

Image 58

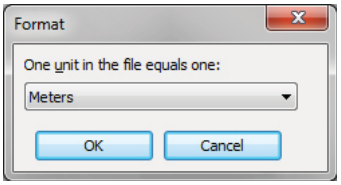

Image 59

Specified Points Toposurface

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Close the yellow warning (point 1, image 60).

Click the green tick to complete the data import (point 2, image 60).

Click the 3D view button to see the toposurface (image 61).

All other massing and site tools are available to use on the toposurface specified by points.

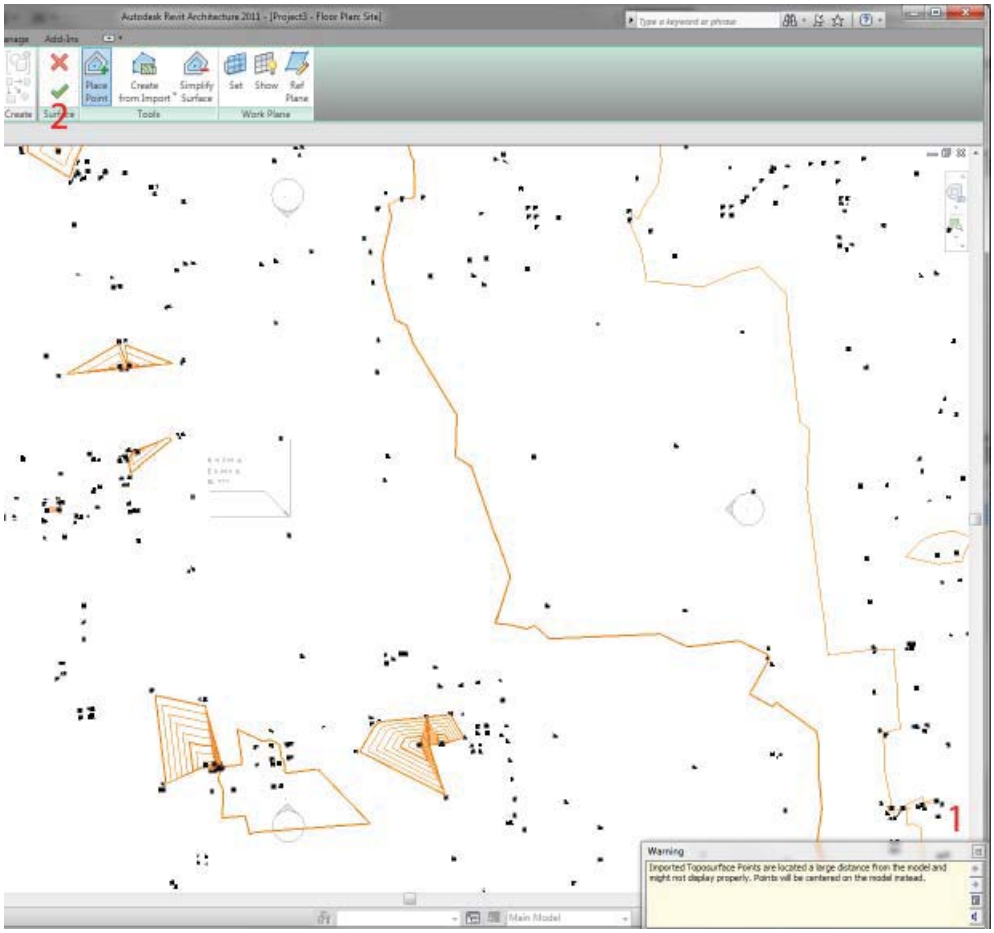

Image 60

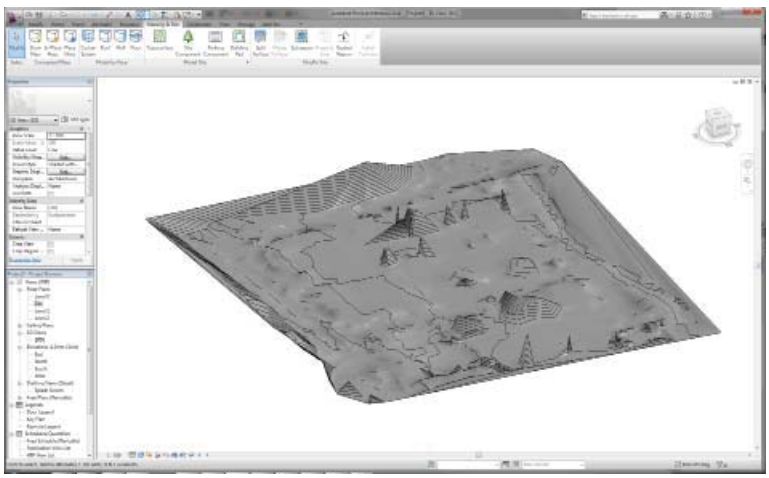

Image 61