



Revu File Edit View Document Batch Tools Window Help

Name: Scheme plan-A1 Scheme Plan Pages: 1

Measurements

Scale

- Store Scale in Page
- Separate Vertical Scale
- Independent Units
- 9.7389 cm =
- 9.7 m =

Precision: 0.1

Calibrate

Recalculate

Measurements

Subject: lot areas

Label: lot 3

Depth: 2.4 m

Width: 0 m

Height: 0 m

Rise/Drop: 0

Slope: Select 0

Scale: 9.7389 cm = 9.7 m

Type	Current	Total
Length:	0	0
Area:	0	0
Polylength:	0	0
Perimeter:	0	0
Diameter:	0	0
Angle:	0	0
Radius:	0	0
Volume:	0	0
Count:	0	0

Measurements on drawing: 5' 37.03", 89° 56' 04.84", 89° 46' 24.70", 12.186, 19.476, 19.476, 0° 05' 08.52", 319.40, 359° 38' 29.14", 25.900, 25.948, 170° 30' 03.67", 19.472, 269° 54' 56.08", 89° 55' 19.46", 19.463, 0° 02' 58.07", 67° 09.29", 3.021

**Dynamic PDF
Area Take-off
with Bluebeam**

KB002
A2K Knowledgebase Series

June 2018 | REV 0

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1. Introduction

1

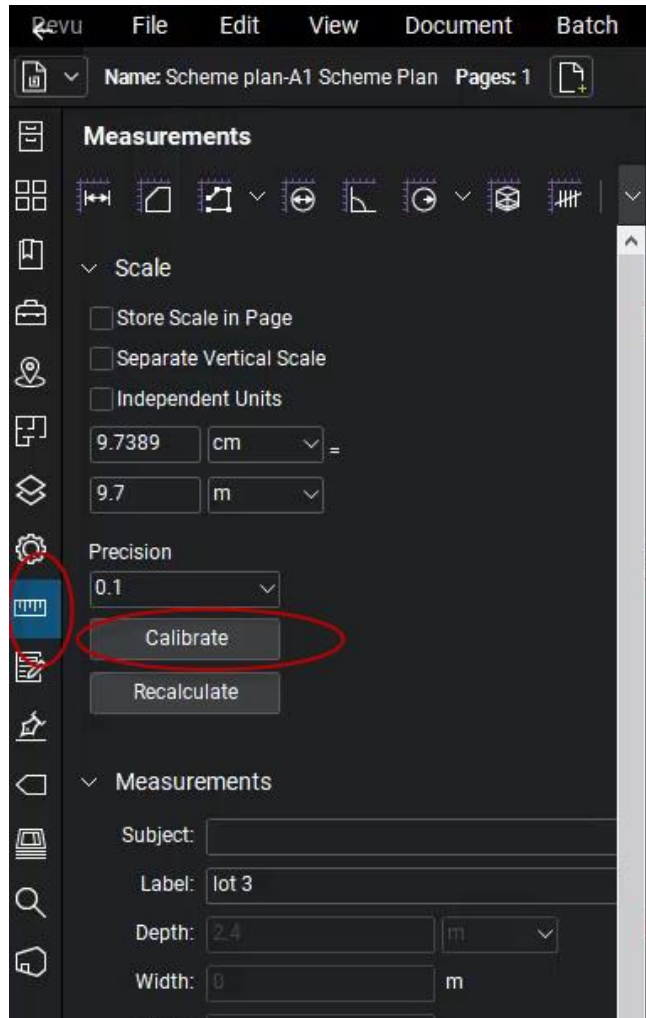
This Module will take you through the steps in Bluebeam Revu to simply and easily use a 'bucket fill' type tool to work out areas on a PDF document.

The areas generated in this way can then be dynamically linked into an Excel spreadsheet for further calculations to be performed.



2. Area Takeoffs

2 2.1 Calibration

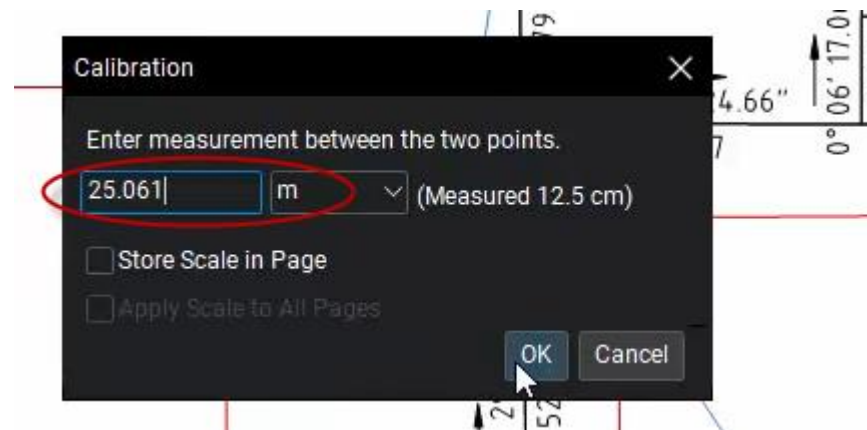


In Bluebeam, the first thing we need to do is to calibrate the PDF.

From the 'Measurements' tool palette click the Calibrate button.

Then pick two known points on the PDF with a known distance between them, Bluebeam will snap to line ends etc in a similar way to Autocad.

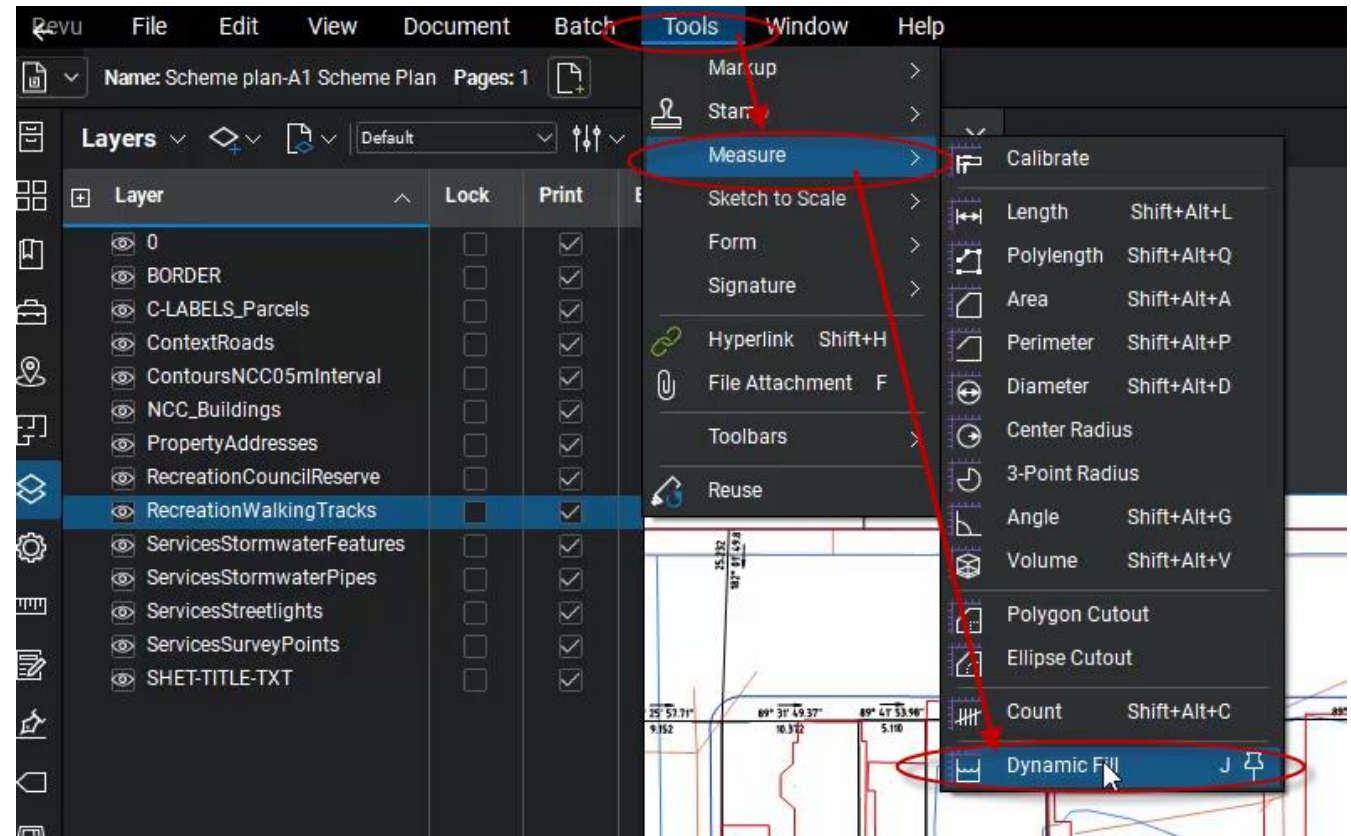
In the dialogue box that comes up set the known distance between those 2 points.



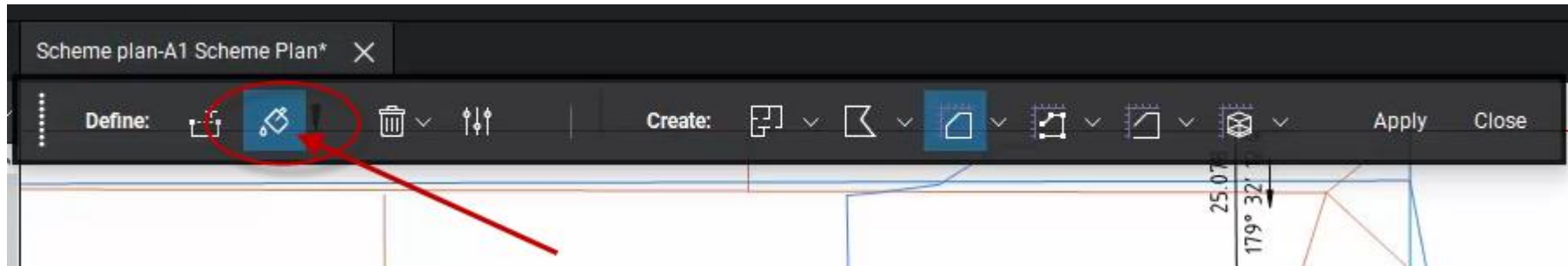
2.2 Dynamic Fill

The Dynamic Fill tool is found in the Tools Menu / Measure / Dynamic Fill flyout.

Any layers in the PDF that are in the way or are not wanted when calculating the areas can be turned off in the Layers manager as you would in other PDF viewers.

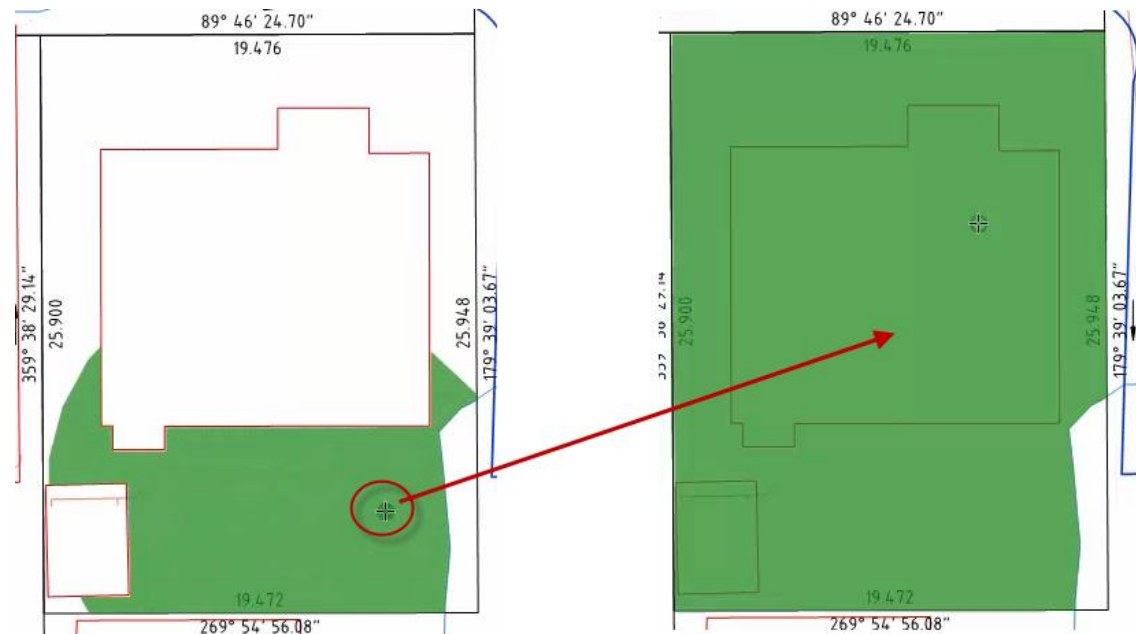


In the toolbar that comes up click the Dynamic Fill button.



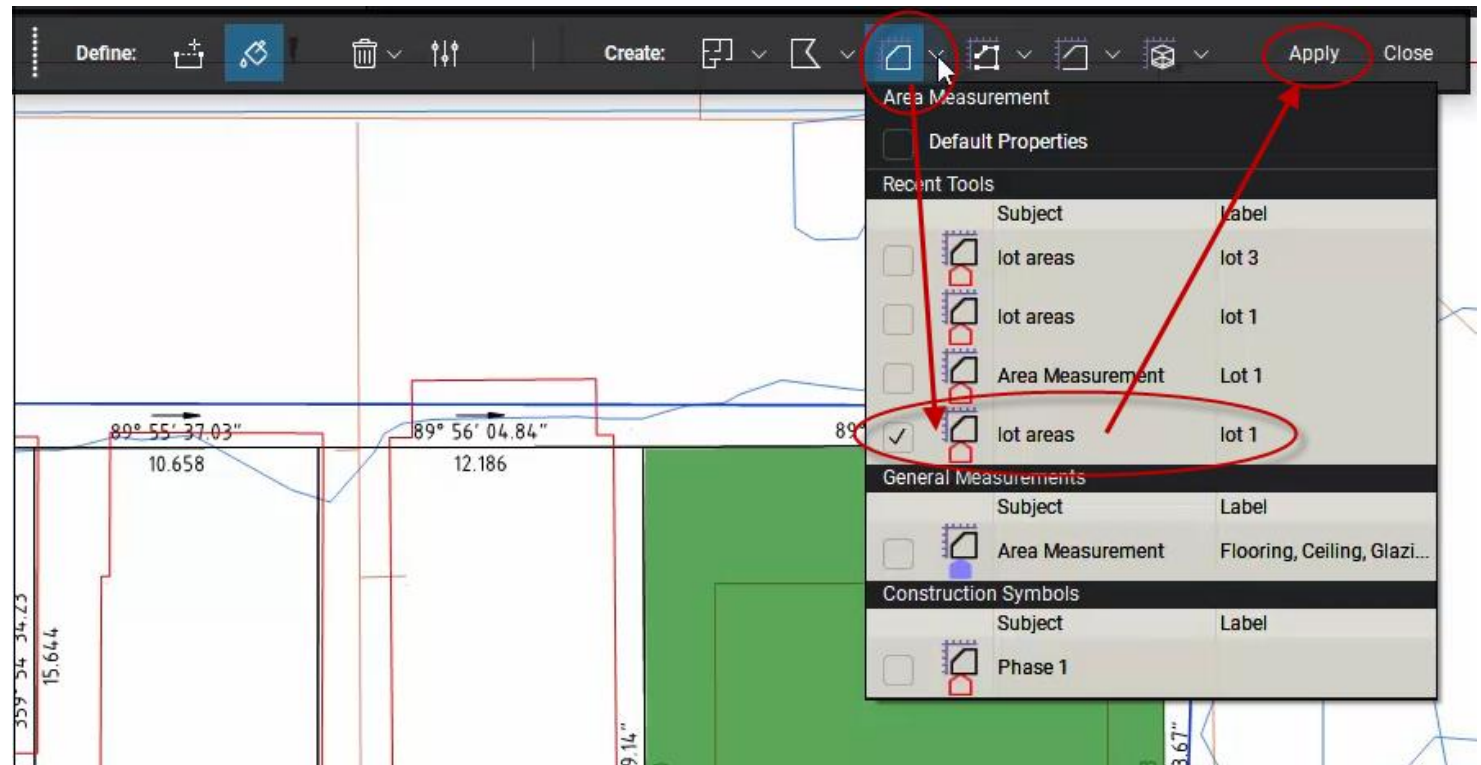
Left click and hold in the area you want to calculate and the area will spread out graphically from there.

Any additional areas that are not filled in the first instance can be additionally added by simply dragging the cursor over them and left clicking.



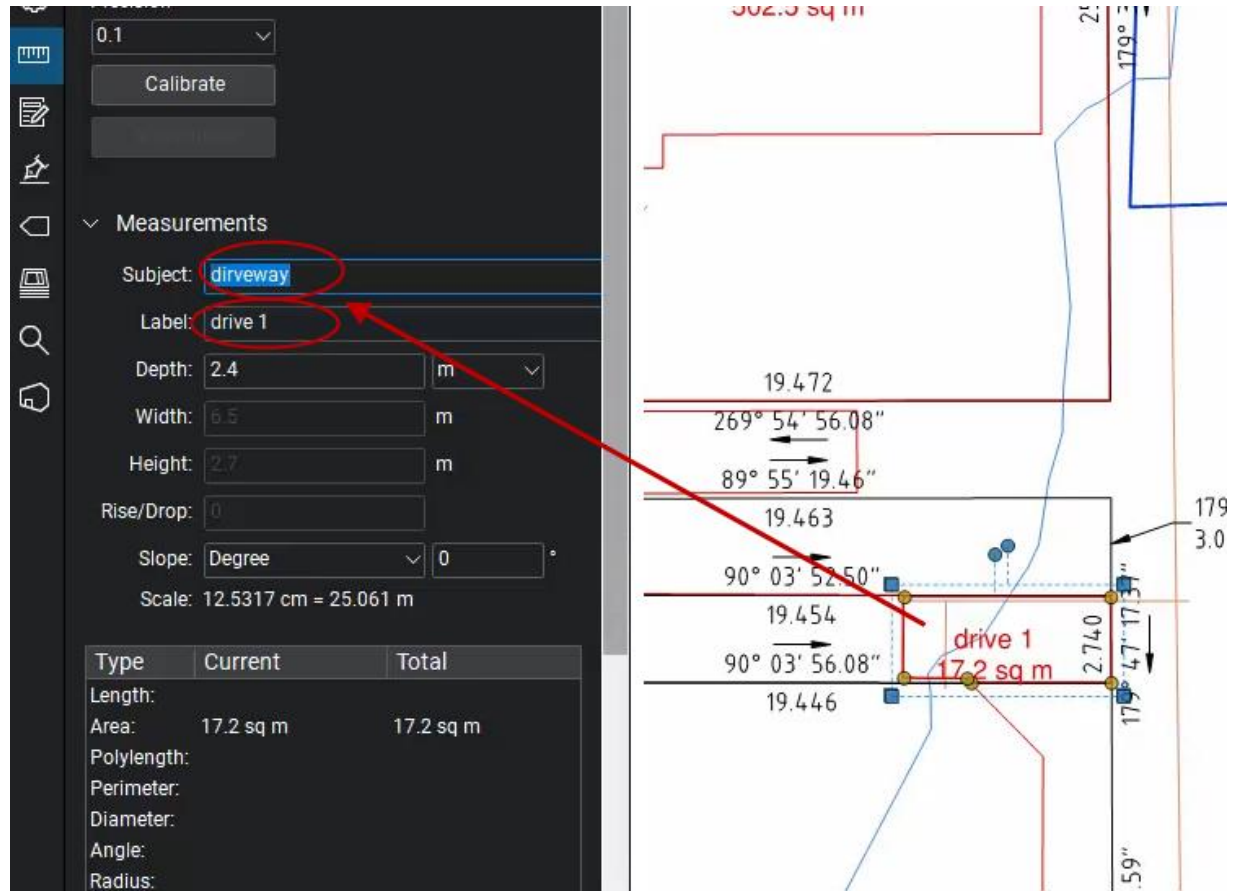
When the appropriate area has been defined choose to make an area from it (other options include spaces, perimeters, and volumes).

Then from the dropdown select an initial Subject and Label to be applied and click apply.





Once created an area can be selected and it's Subject and Label tags can be updated. This is updated immediately in the PDF.



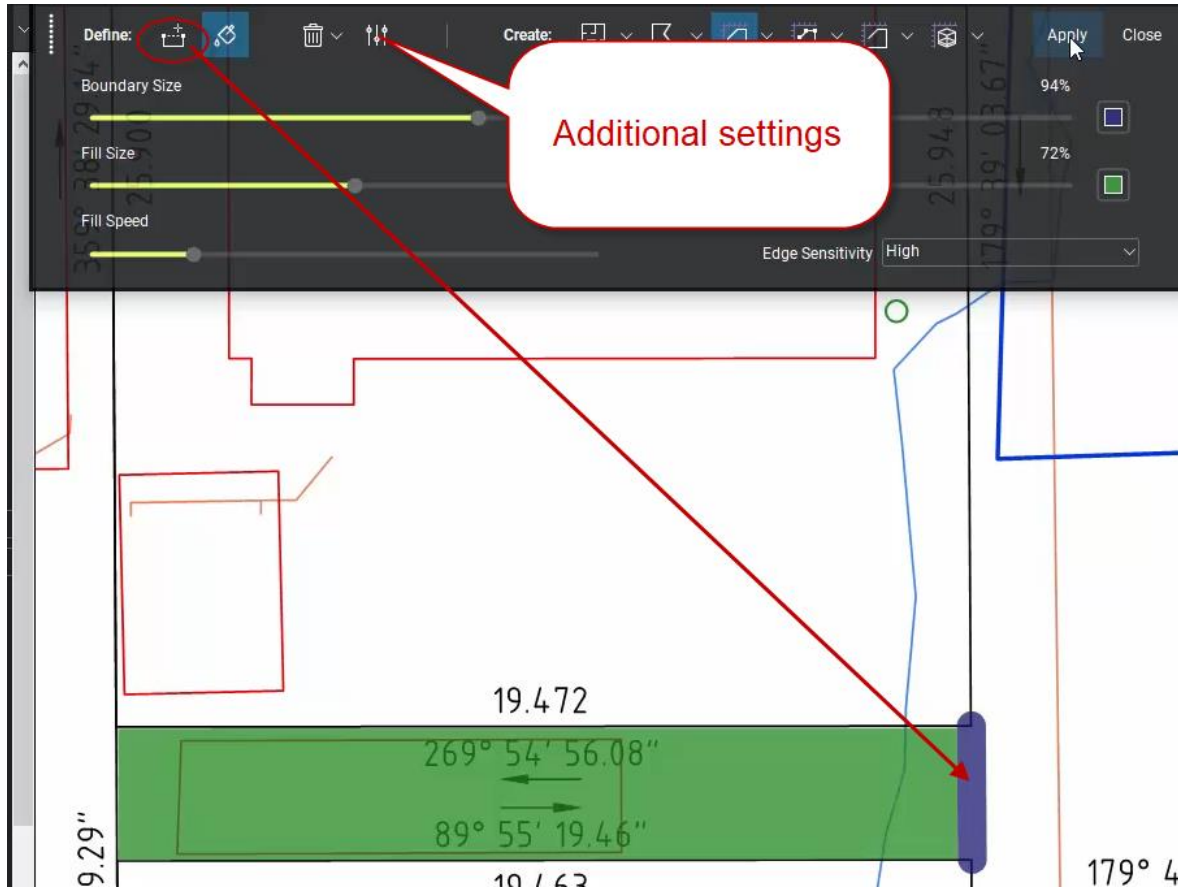
The screenshot displays the Bluebeam software interface. On the left, the 'Measurements' panel is visible, showing the following details:








- Subject: **driveway** (circled in red)
- Label: **drive 1** (circled in red)
- Depth: 2.4 m
- Width: 6.5 m
- Height: 2.7 m
- Rise/Drop: 0
- Slope: Degree 0
- Scale: 12.5317 cm = 25.061 m

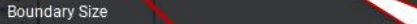
At the bottom of the panel is a table:

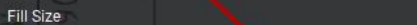
Type	Current	Total
Length:		
Area:	17.2 sq m	17.2 sq m
Polylength:		
Perimeter:		
Diameter:		
Angle:		
Radius:		


The right side of the image shows a technical drawing of a driveway area. A red area is labeled 'drive 1' with a value of '17.2 sq m'. Various dimensions and angles are shown, including 19.472, 269° 54' 56.08", 89° 55' 19.46", 19.463, 90° 03' 52.50", 19.454, 90° 03' 56.08", 19.446, 2.740, 179° 47' 17.31", 179° 59', 179, and 3.0. A red arrow points from the 'Subject' field in the panel to the 'drive 1' label in the drawing.



Define:     Create:   

Boundary Size  94%

Fill Size  72%

Fill Speed 

Edge Sensitivity High

Additional settings

Apply Close

9.29" 19.472 269° 54' 56.08" 89° 55' 19.46" 10 / 62 179° 48' 25.943

There is a Boundary tool that lets you sketch in any additional lines that may be required to close off an open part of the PDF to allow an area to be computed.

Additionally, there is a settings button to change the size of the cursor for selection on screen, change the fill speed etc.

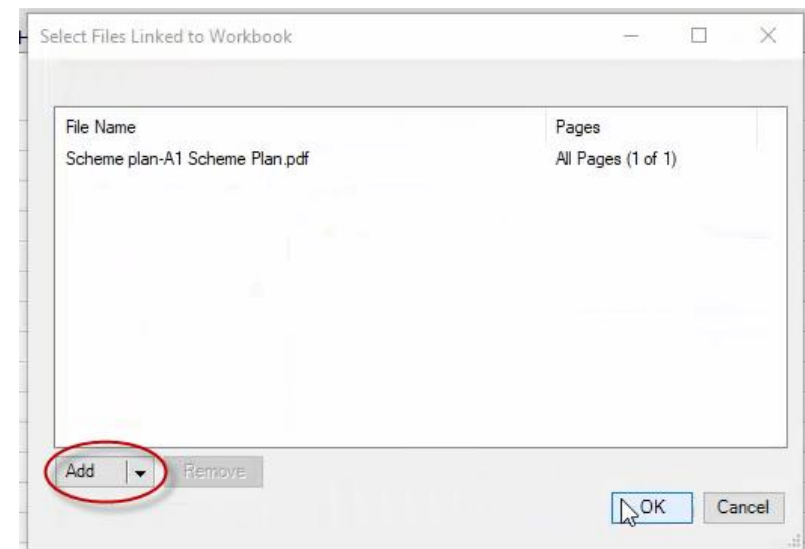
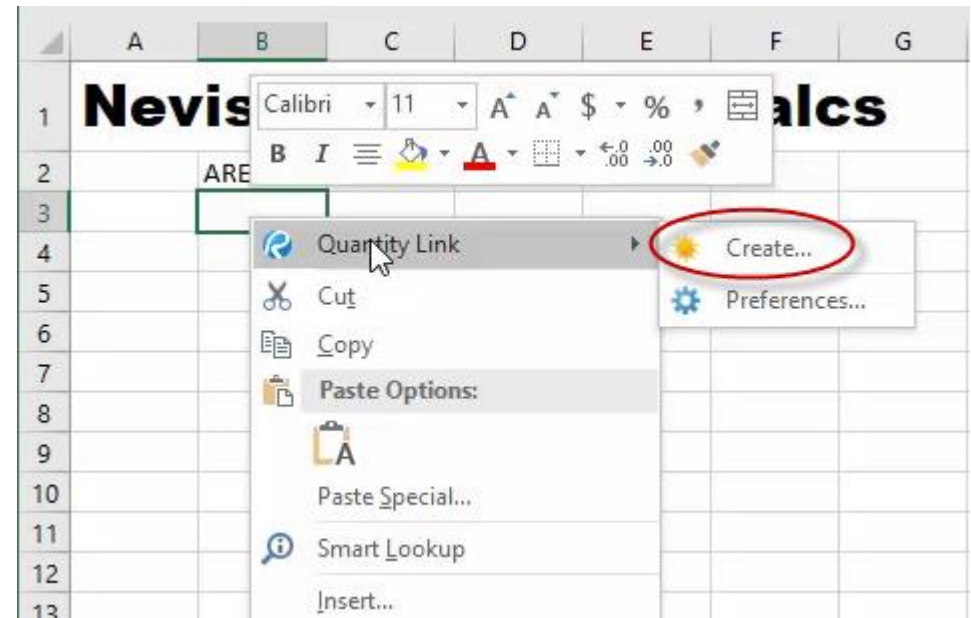
SAVE the PDF to record all the computed areas as mark-ups that other people will be able to see.

3. Link to Excel

When you load Bluebeam on a machine it puts new functions in the right click menu within Excel.

The Preferences button controls cell colour to highlight the links, and also whether the units and the number of areas are imported as separate cells too.

When you click to create a new link for the first time you will be asked What PDFs to connect to. You can use one or can select many.



Create Link

Total: Area

Subject: lot areas

Label: lot 1

and

Cell Name: AreaTotal1

OK Cancel

AREA	units	number
502.5	sq m	1

Then to create the live link you select the measurement type of area made in the PDF, and can filter based on the labels applied in the PDF to select the correct area that you want in excel. This will then fill out the 3 cells in excel shown above, (assuming you have all 3 Preferences turned on)

	AREA	units	number	Rate
Lot 1	502.5	sq m	1	
Lot 2				
Lot 3	388	sq m	1	=B5*800
Lot 4				
Lot 5				
driveway	116.9	sq m	3	

You can then format excel to create the report as you desire and can add calculations etc for working out say rateable value based on area, land clearance costs, cost of berm grassing, etc

These are now 'live links' back to the PDF so if we add or remove or resize any areas in the PDF with labels that match the linked cells in Excel, the spreadsheet will be updated when the PDF is saved.

