

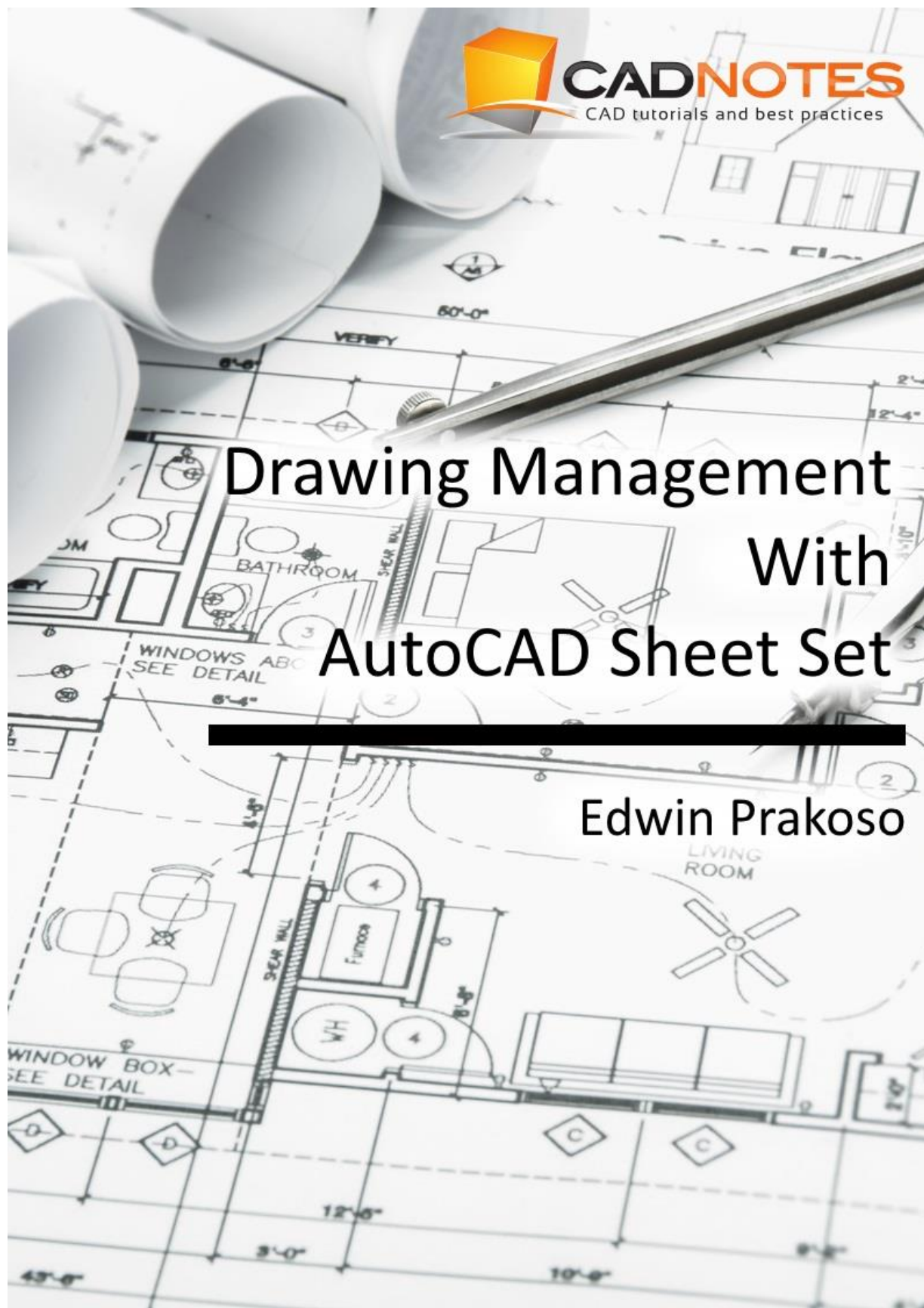


CADNOTES

CAD tutorials and best practices

Drawing Management With AutoCAD Sheet Set

Edwin Prakoso



PREFACE

Sheet Set is a great tool to manage your project's documentation. You can collect and manage all of your drawings to a Sheet Set. This will let you and your team access it easily during the design process. Sheet set also allows you to share common information to all drawings in Sheet Set. It allows you automate tasks, related to project's documentation. For example, you only need to change project name once. The text in all drawings in the same Sheet Set will change automatically.

These capabilities will help you to manage your drawings document easily.

This e-book will guide you to create your own Sheet Set and utilize it. You will learn how to create your own sheet template, set up Sheet Set, create sheets and use tools in Sheet Set Manager to make you more productive.

PREREQUISITE

You need to know AutoCAD basic features before using this e-book.

The skills that you need to know are:

1. You need to know how to work with AutoCAD dynamic blocks.
2. You need to know how to create and use block attributes.
3. You need to know how to work with layout and viewport
4. You need to know how to work with text fields.

You will use them in this e-book, but they are not covered in details here.

BEFORE YOU START

This e-book provides drawing data sets. You can use them to do the exercises.

You can download the datasets separately here:

http://www.cad-notes.com/download/SSM_datasets.zip

You need to extract the files to your hard drive. There are two folders in the zip file:

1. SSM final : completed exercises, the finished exercise.



2. SSM exercise: data sets that you can use to create template, blocks and drawings in this tutorial

Extract them to a location to let you access them easily.

You need to extract the datasets to your local disk to do this exercise. You can extract them to D:\SSM final and D:\SSM exercise.

THANKS

Thank you to Ellen Finkelstein who gave me a suggestion to cover this specific topic. Without you, I do not think this e-book would exist!

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PART 1 – INTRODUCTION TO SHEET SET

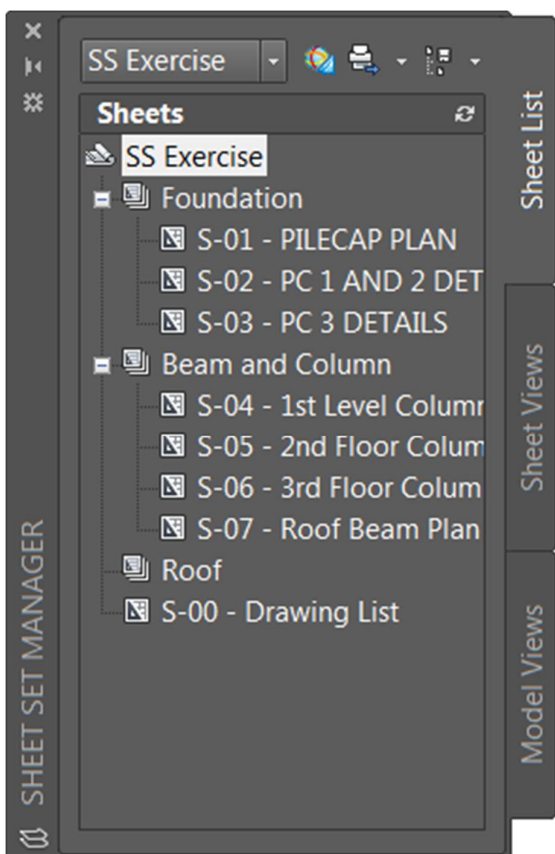
In this first chapter, we will take a short tour to let you familiar what benefits you can get by using Sheet Set. You will learn how you can create and set your own Sheet Set later.

ADVANTAGES OF USING SHEET SET

What is a Sheet Set?

Sheet set is a collection of sheets. Each sheet links to layout in your AutoCAD drawing.

Sheet Set Manager works like Windows Explorer. You can have Sheet Set as the main folder. To organize the drawings you can create Subsets that work like sub folders.



If you are not familiar with using layout, it is a good time to start using it now. There are many reasons why you should use layout. Sheet Set will take the advantages even further.

What are the advantages of using Sheet Set?

Sheet set can manage the drawings, share common information such as project information, and doing some automated tasks.

In this chapter, we will see what Sheet Set can do using provided sample Sheet Set.

EXPLORING SHEET SET MANAGER

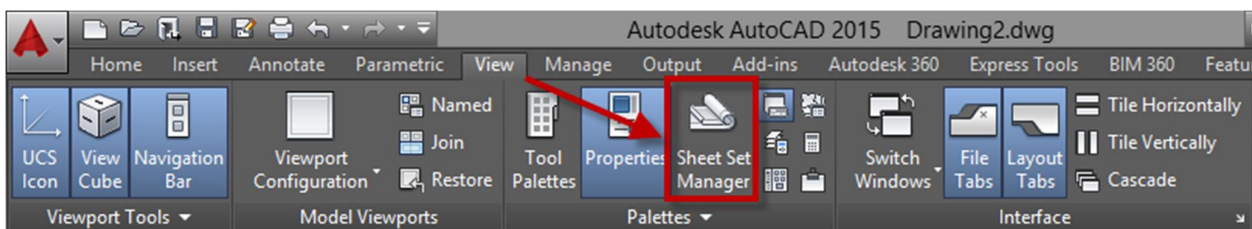
Before we start creating our own Sheet Set, let us explore what we can do with Sheet Set.

Opening Sheet Set Manager

To work with Sheet Sets, we need to use Sheet Set Manager. Let's open Sheet Set Manager.

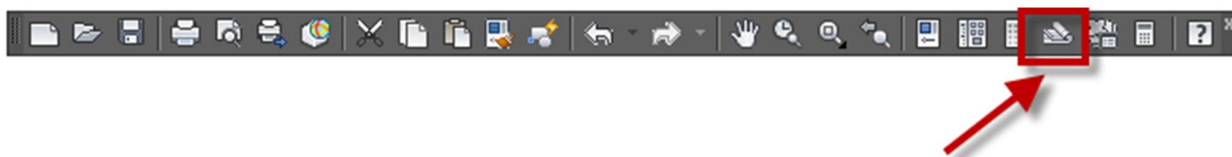
We can open Sheet Set Manager by accessing the following:

If you use ribbon interface, you can open view tab, in palettes panel, click Sheet Set Manager.



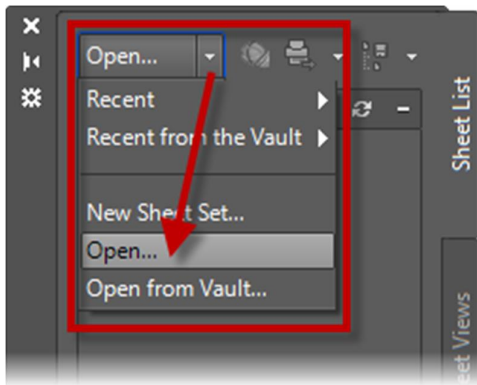
*You need to have an opened drawing before you can access ribbon or toolbar
You can also open Sheet Set Manager by typing SSM on command line then press Enter. Or you can use ctrl + 4 as shortcut key.*

If you use toolbar, you can access it from standard toolbar.



Opening a Sheet Set

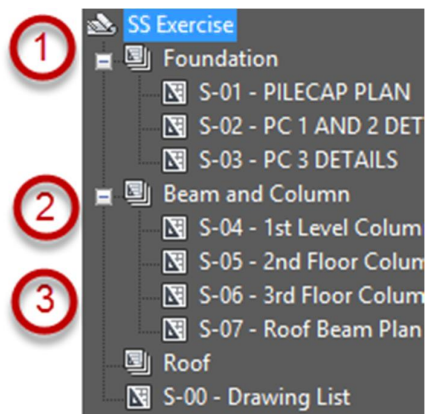
Let's open a sample Sheet Set. In Sheet Set Manager, click open... in drop down menu, then click open...



Browse to folder *D:\SSM final*. Open *SS exercise.dst*.

Now you will see the Sheet Set is loaded in Sheet Set Manager.

Let's see the Sheet Set tree.



At the top of this tree is the Sheet Set. Our Sheet Set name is SS exercise.

This Sheet Set has three sub sets: *foundation*, *beam and column*, and *Roof*. Subsets works like a folder. It keeps several common drawings inside it.

Each sub set has several sheets.

Opening a Sheet

Double click *S-04 1st LEVEL FLOOR COLUMN PLAN* in Sheet Set Manager. AutoCAD will open the drawing layout. You don't have to know the file name or the file location.

The drawing location in this Sheet Set can be a shared folder in your server if you work in team.



You should see lock symbol at your sheet icon now. The lock symbol shows that the drawing is opened and locked for editing. This is very handy if you are

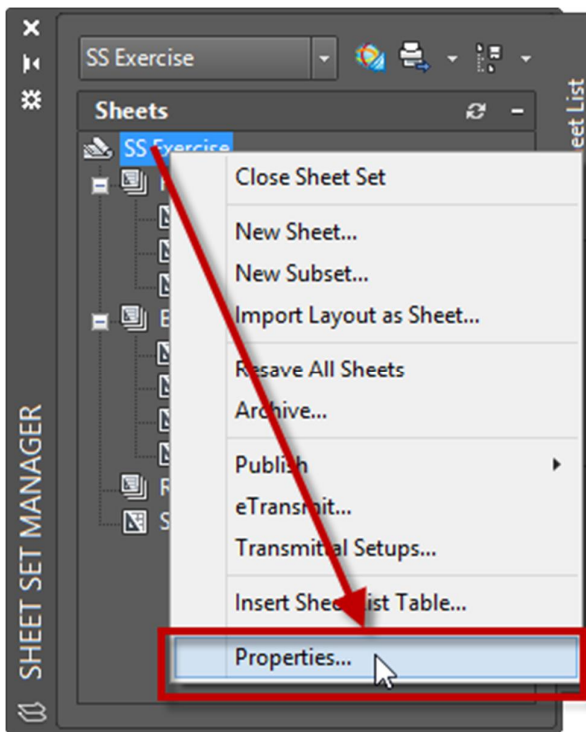
Project Information

Examine the title block.

PROJECT OWNER		
EDWIN PRAKOSO		
DESIGN BY		
CAD NOTES INC.		
DRAWING CONTENTS		
1ST LEVEL COLUMN PLAN		
DRAWN BY EP	CHECKED BY VCR	APPROVED BY RWP
SCALE	DATE 30-Dec-10	CODE
FILE NUMBER	SHEET NUMBER	
	S-04	

Some texts have gray background. The color shows that they are fields. Fields will change automatically when we change the information.

In Sheet Set Manager, right click above *SS exercise* Sheet Set. Click properties from context menu.



Change Project Name to *My Sheet Set Tutorial*.

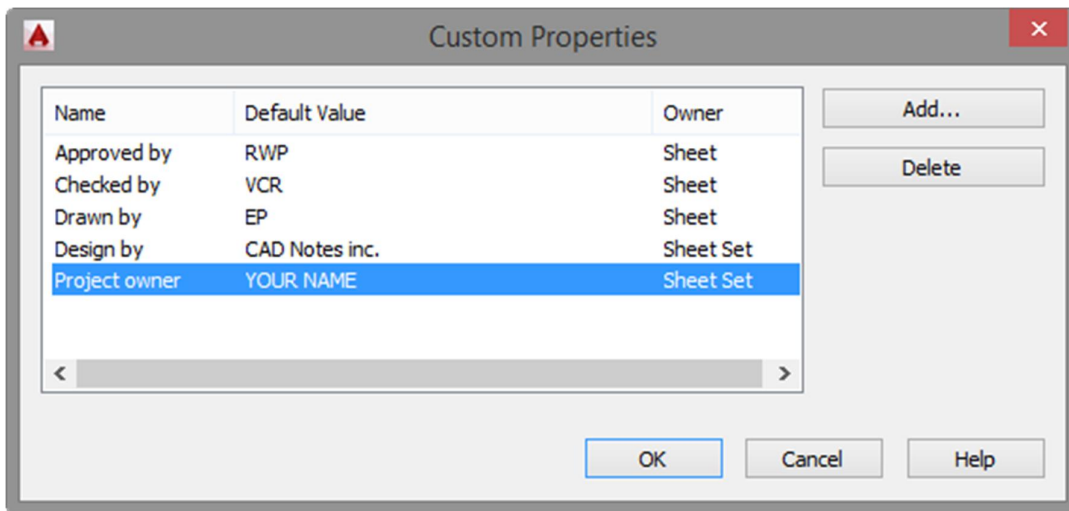
Project Control	
Project number	CN-04
Project name	My Sheet Set Tutorial
Project phase	
Project milestone	

This Sheet Set also has custom properties. We will edit them too. Click edit custom properties button at the left bottom of this dialog.

[Edit Custom Properties...](#)

AutoCAD will open another dialog box.

Find Project Owner field. Double click on the default value column. Change the value with your name.



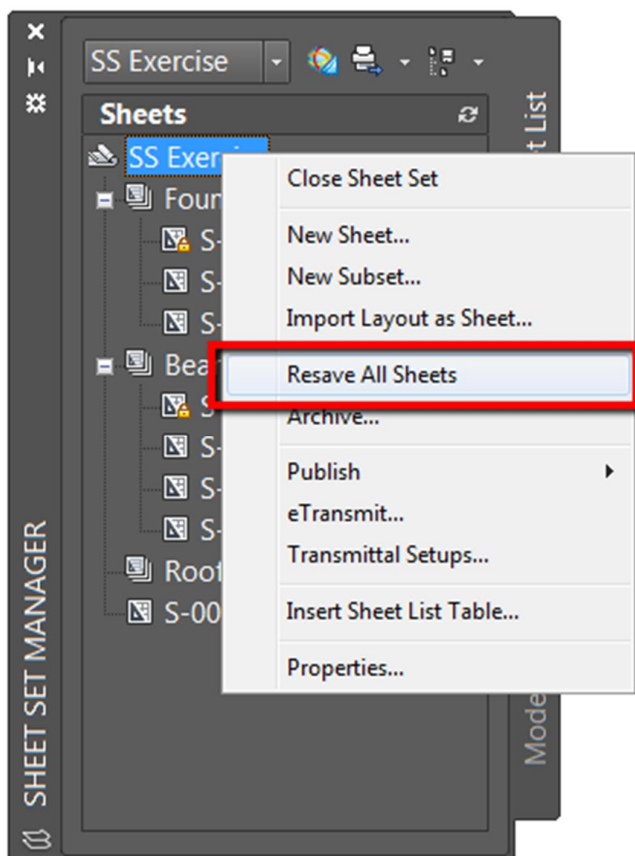
Click OK until all dialog boxes are closed.

You will not see the changes now. Type REGEN then Enter to update the value. Now you should see the new value in your title block.

*AutoCAD will update fields when you regenerate, save or plot the drawing.
However, if you plot without opening the file, the fields will not be updated.*

AutoCAD haven't updated title block texts on other sheets. We need to save all sheets to apply the changes. Don't worry, we don't have to open each sheet and save them manually.

Right click above the SS Exercise Sheet Set. Choose Resave All Sheets from the context menu. It will take a moment until AutoCAD finish updating all of your sheets.



You can try to open other sheets to check the title block. AutoCAD has updated all the title block texts automatically.

Automatic Sheet List

Now let us open *S-00 Drawing List*. This sheet has a sheet index (or sheet list). Sheet Set Manager automatically generates this sheet list.

Sheet List Table				
Sheet Number	Sheet Title	Drawn by	Checked by	Approved by
S-01	PILECAP PLAN	EP	VCR	RWP
S-02	PC 1 AND 2 DETAILS	EP	VCR	RWP
S-03	PC 3 DETAILS	EP	VCR	RWP
S-04	1st Level Column Plan	EP	VCR	RWP
S-05	2nd Floor Column Plan	EP	VCR	RWP
S-06	3rd Floor Column Plan	EP	VCR	RWP
S-07	Roof Beam Plan	EP	VCR	RWP
S-00	Drawing List	EP	VCR	RWP

Let's change the sheet number and description of sheet S-01 – PILECAP PLAN. Right click above the sheet in Sheet Set Manager, click properties.

Do the following in sheet properties dialog:

1. Change drawn by to your initial.
2. Change Sheet title to *Proposed Pile cap placement*.

Sheet	
Sheet title	PROPOSED PILECAP PLAN
Sheet number	S-01
Description	
Include for Publish	Yes
Expected layout	PILECAP PLAN(D:\SSM_final\SSM data sets\...
Found layout	PILECAP PLAN(D:\SSM_final\SSM data sets\...
Sheet set	SS Exercise
Revision number	
Revision date	
Purpose	
Category	

Sheet Custom Properties	
Approved by	RWP
Checked by	VCR
Drawn by	EP

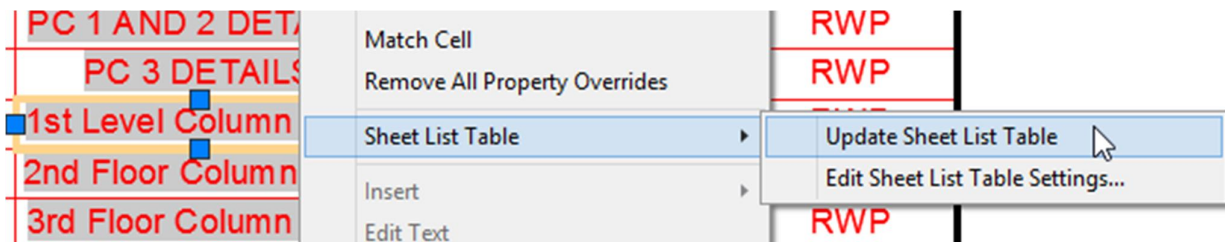
Click OK to close the dialog.

Now we need to update the Sheet List Table.

Click to select a cell in the sheet list. Make sure you select the cell, not the table. If you select correctly, you should see the grips at the cell.

Sheet Number	Sheet Title	Drawn by
S-01	PILECAP PLAN	EP
S-02	PC 1 AND 2 DETAILS	EP
S-03	PC 3 DETAILS	EP

With the cell selected, right click, then choose *sheet list table> update sheet list table* from context menu.



Now the sheet list is updated.

Publish the Whole Project

Another important thing about Sheet Set is the ability to publish the all or part of your project's documents.

For this tutorial, we will not use a plotter or printer to do this. We will publish the project to PDF.

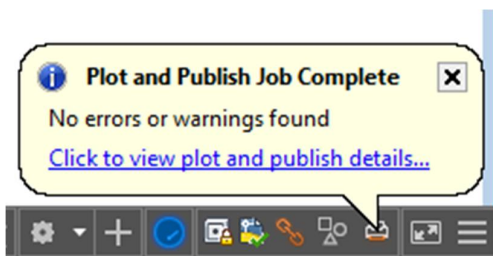
Right click above *SS Exercise* Sheet Set, choose publish to PDF. Type the file name then click Select.

Plotting will run on the background.

You can publish a Subset or a sheet by right clicking above Subset or sheet.

You may see notifications that AutoCAD will publish on the background. You will see notification bubble after the job is done.

Click the link to see the details.



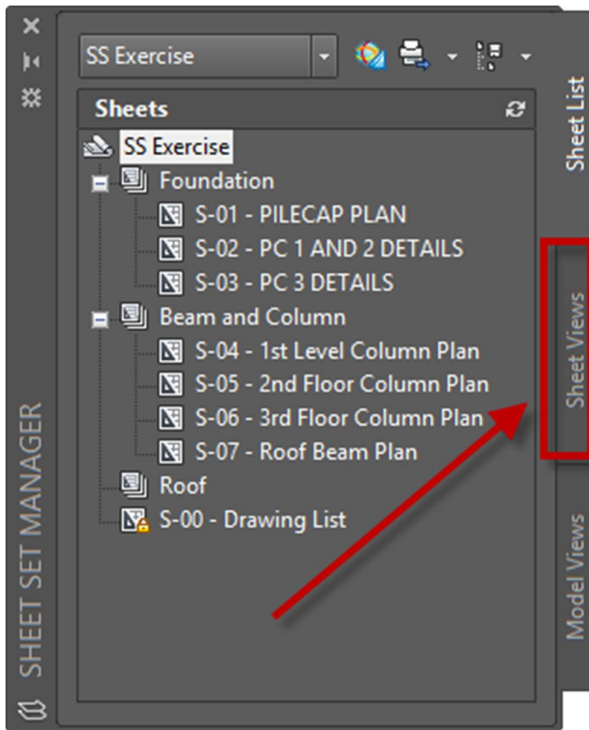
Open the PDF files using Adobe Reader and examine it.

As you can see, you only need a few mouse clicks to publish the whole or a part of project's documents.

Sheet Views

You have explored the sheet list tab. Now in Sheet Set Manager, click Sheet Views tab. In this tab, you will see views in your Sheet Set.

Double click the views to open them.



You will see view list in each sheet. This allows you to navigate to different views in model space. AutoCAD will open the layout and center the view you opened.

You can also place view title, callout, renumber and rename the view here. We will cover about this later.

Double click a view name in the Sheet Set Manager. You will see AutoCAD open the layout, and selected view is at the center. Let's try to change the viewport scale.

Double click inside the viewport to activate the viewport. Choose another scale from scale list.

Double click again outside the viewport to activate the paper space.



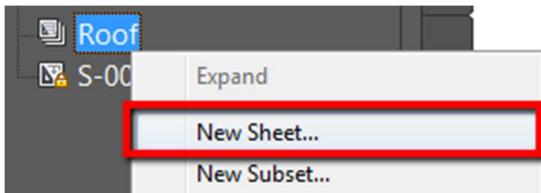
You can also change viewport scale using scale list by selecting the viewport boundary then select from scale list

You should see that the scale in view title is updated. Remember, you need to REGEN the drawing before the value is updated.

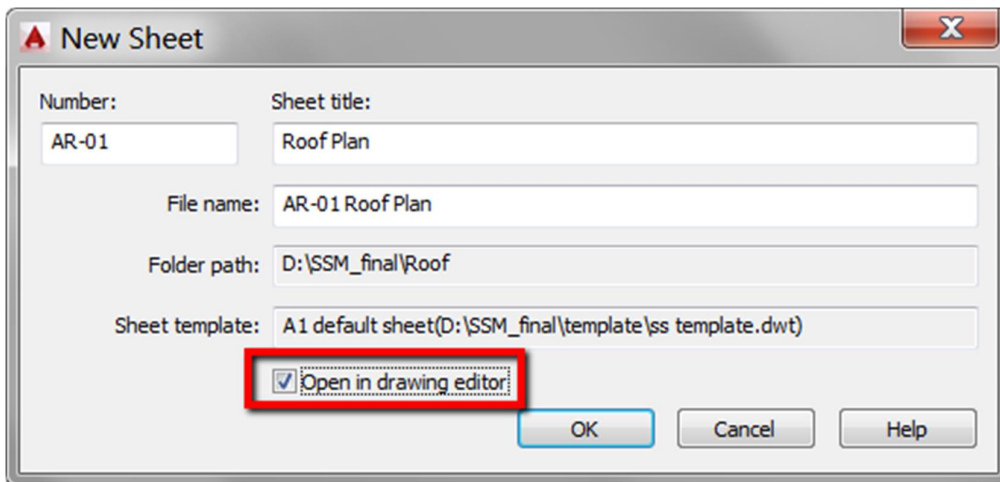


Placing views to sheet

We will add a new sheet under Roof Subset. Right click above Roof Subset, choose New Sheet... from context menu.



Fill the sheet number and sheet name in the new sheet properties dialog box. Check the Open in drawing editor option. By checking this option, AutoCAD will open the new sheet after you click OK.

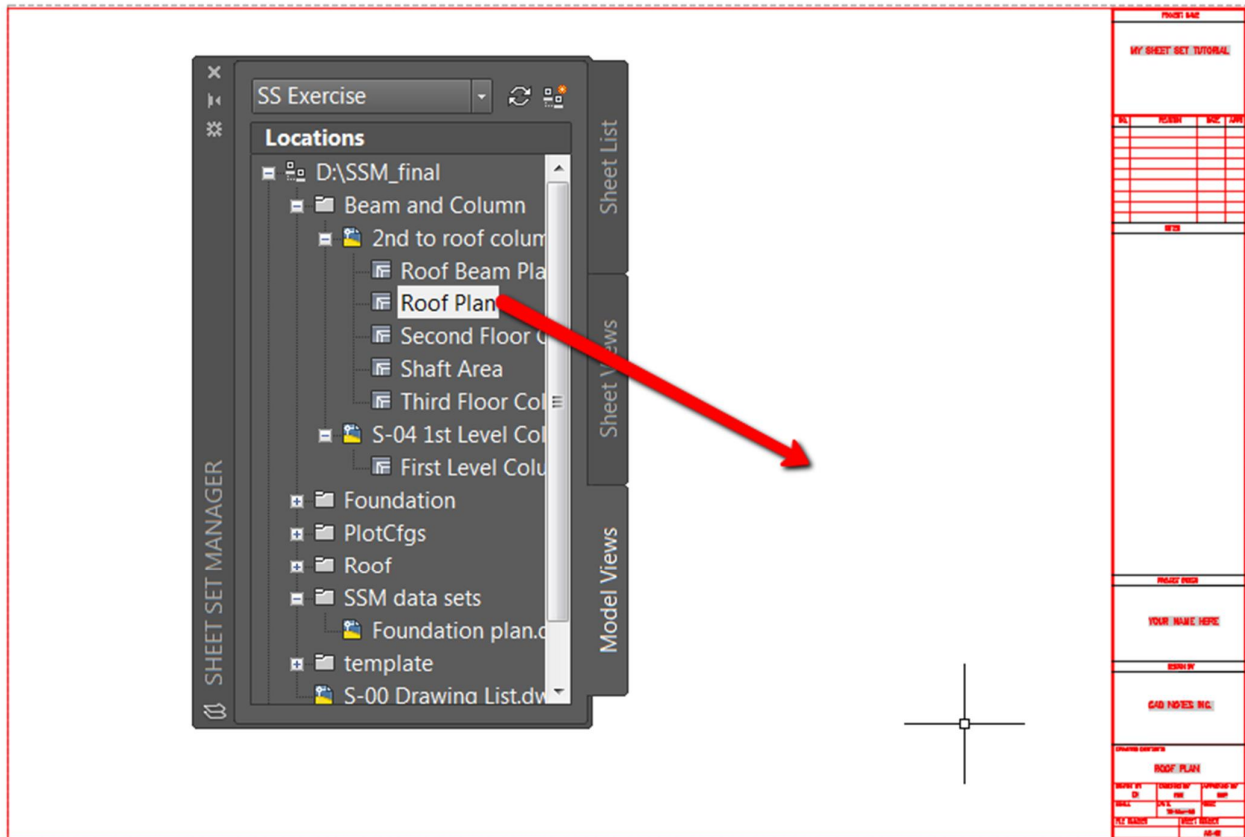


Examine the title block texts.

In Sheet Set Manager, go to Model Views tab. Expand the tree and find Roof Plan view.

The path in the tree is: *D:\SSM final> Beam and Column> 2nd to roof column plan.dwg> Roof Plan*. (See next image as reference).

Click and drag the view to the new sheet.



Don't click to place the view yet.

The view is too large for this sheet. Right click to change the drawing scale. Select 1:100 from the list.

Click to place the view.

AutoCAD will show Enter Attributes dialog box.

Don't change anything. Click OK.

Enter Attributes

Block name: View Title

VIEW NUMBER? VIEWNUMBER

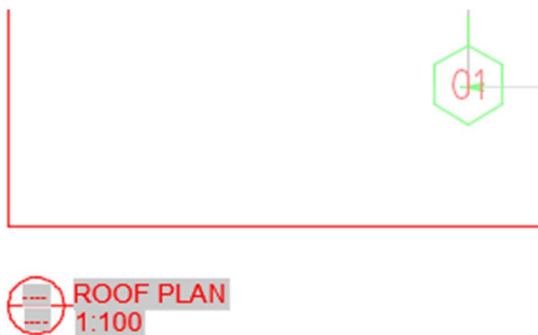
SHEET NUMBER? SHEETNUMBER

VIEW TITLE? VIEWTITLE

VIEW SCALE? ViewportScale

OK Cancel Previous Next Help

We have placed the view in the new sheet. Examine in the lower left of this view. AutoCAD will automatically place the view title.



This ends our short tour of what benefits we can get by using Sheet Set. We will create our own Sheet Set.

This e-book will guide you from preparation to using the Sheet Set.