CES500018

Professional Tips and Techniques using the Sheet Set Manager in AutoCAD

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Learning Objectives

- Create Identify ways to create several templates for different disciplines with the Sheet Set Manager.
- Expand your knowledge of the Sheet Set Manager with lesser-known tips and techniques increase productivity.
- Use the power of fields to populate and customize common data within your Sheet Sets.
- Learn how to leverage and understand system variables that can affect Sheet Set Manager Performance.

Class Description

Following up from A Complete Guide to the Sheet Set Manager this class will focus on professional tips and techniques while using the Sheet Set Manager. We will do a deep dive into the commands and settings and all components of the Sheet Set Manager covering over 50 tips that will help you increase your productivity. We will start with creating multiple templates for different disciplines, then review the Sheet Set Palette and how you can leverage that on projects, and finally covering areas that you may or may not be familiar with when using the Sheet Set Manager. This class will help you understand the power behind the tools included in the Sheet Set Manager that are rarely used or ignored. At the end of this class, you will be able to apply your knowledge to take your designs to the next level by connecting the data and staying on top of current industry practices.

Speaker

Sam is a Design Systems Administrator with CHA Consultants, Inc. Sam has over 25 years of experience in CAD drafting and design, CAD standards, CAD Customization, including training and customization of Autodesk software. He presents learning sessions and workshops on CAD productivity to managers and users while providing support on architectural, civil, mechanical, and structural design projects. Sam is the owner and operator of CADproTips.com, an Autodesk Expert Elite Member and certified in AutoCAD and Civil 3D.

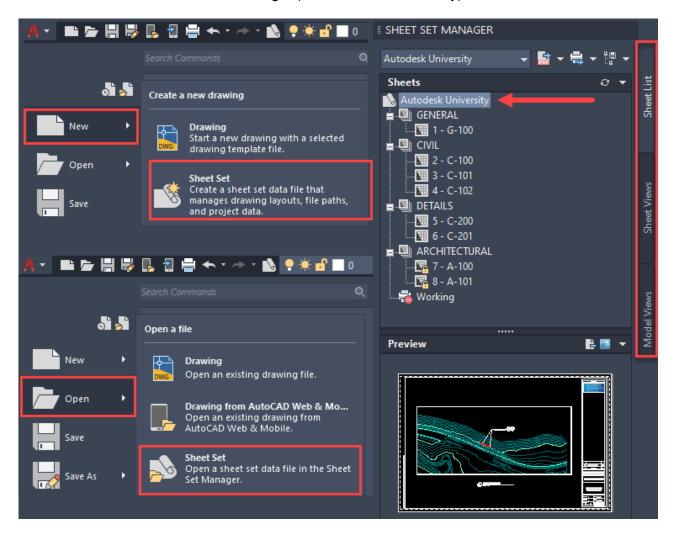
@CADproTips
https://cadprotips.com/

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Introduction

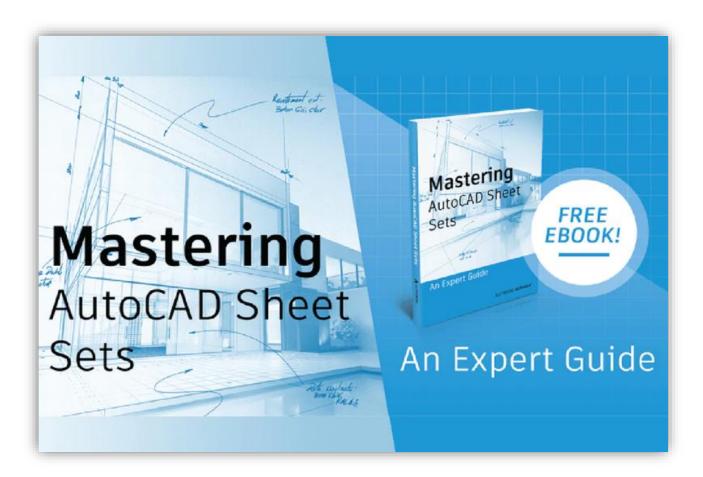
The Sheet set manager can be found on the ribbon under the application menu as shown in in the images below. You have the options of creating a new sheet set or opening an existing sheet set from this menu. If you use the menu bar **TIP #1**: (MENUBAR system variable set to 1) you can find it under the file section pull down menu. **TIP #2**: For those of you who use the command prompt type **SSM**. After you successfully create a sheet set you can view your Sheet Set through the SSM Palette shown below on the right (i.e., Autodesk University).



Each section of this document will be separated into Lessons (exercises) for you to use the dataset and practice. Within each lesson there will be tips which will be highlighted for you to pay attention to as you go through the document. Be sure to download the previous 2 classes and review the datasets and exercises as they have changed over the years. Thank you for reading my sheet set documents and attending my class.

Mastering AutoCAD Sheet Sets eBook

<u>Mastering AutoCAD Sheet Sets</u> was released as a free eBook from Autodesk in 2017. Read below and follow the link to download this reference to becoming an expert while using the full functionality of Sheet Sets.



Whether you design manufactured parts, maps, or buildings, the sheet set functionality in AutoCAD enables you to efficiently create, manage, and share your entire set of sheets from one convenient location. At first glance, the powerful functionality offered by the Sheet Set Manager may seem overwhelming, but the good news is you don't have to learn and implement all the functionality simultaneously.

TIP #3: We have developed this 60-page free e-book so you can immediately begin reaping the benefits of Sheet Set functionality. The eBook is structured to be self-paced, allowing you to progress through each level of implementation from the simplest to the most complex at your own speed. Spend just a few minutes each week or at your own pace until you've created a fully functional sheet set with minimum disruption to your current workflow. The e-book is conveniently organized into 17 chapters with step-by-step instructions on how to create a new sheet set, how to transition to sheet set master and how to implement sheet sets for maximum efficiency.

Sheet Set Resources and More

TIP #4: In addition to the Expert Guide from Autodesk and this class you will find many resources on the Sheet Set Manager at Autodesk University. While each class may be different, they all contain excellent information on the sheet set manager and tricks on how the author uses it efficiently within their design role. Please follow these links to sheet set classes as well as some of my favorite AutoCAD classes at Autodesk University.

A Complete Guide to the Sheet Set Manager in AutoCAD

Managing Your Sheets with the Sheet Set Manager: An Advanced Guide

6 Sheet Set Manager Strategies for Success

There's More to the Sheet Set Manager Than the Sheet

Advanced Topics Using the Sheet Set Manager in AutoCAD

Step out of the Past and into the Future with Sheet Set Manager

AutoCAD Sheet Sets: Custom Solutions to Improve Sheet Set Manager Productivity

Getting Productive with Plan and Production Tools in Civil 3D

Mighty Macros: Powerful Commands to Pump Up Productivity

3D Modeling with the Best: AutoCAD

Don't Be a Block Head—Make It a Dynamic Experience

AutoCAD Tips, Tricks, and Dazzling Drafting Techniques

Understanding the New AutoCAD—One AutoCAD with Seven Toolsets

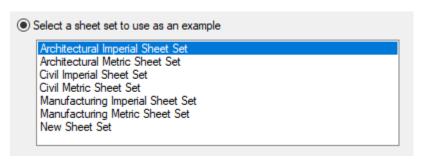
AutoCAD Customization Boot Camp: Basic (No Experience Required)

AutoCAD Customization Boot Camp: Automate Workflows and Tasks

Programming the Work Out of CAD Management

Lesson 1: Example Sheet Sets and Creating New Sheet Sets per Discipline

TIP #5: Autodesk provides us with 6 example sheet sets (3 Imperial – 3 Metric) to use as a guide and investigate the techniques used in creating an Architectural, Civil, and Mechanical Sheet Set.



- 1. Start AutoCAD and use the SSM palette shown left (Ctrl+4) to open and browse through the 3 example sheet sets provided in the Example Sheet Sets folder.
- 2. Under Each folder is an Example Sheet set.

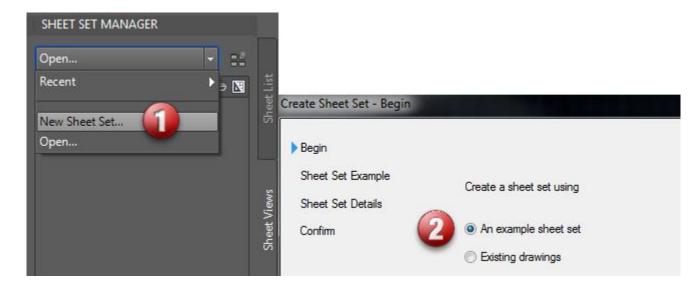


- 3. Open Each Sheet Set one at a time and look at all the properties of the SSM.
- 4. Use these as a guide and reference as you build your own sheet sets.
- 5. Close all your open Sheet Sets or close AutoCAD and restart.

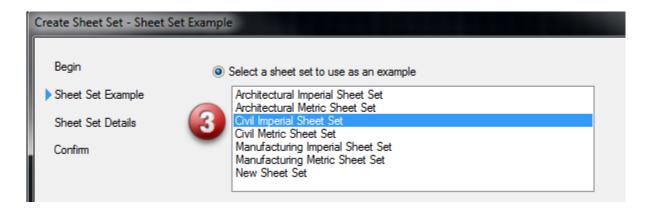
This section is for review only – When you look at the samples and work others provide you can gather tips and tricks on how you can use a technique to better help setup your projects.

Starting New Sheet Sets and Saving for Different Disciplines

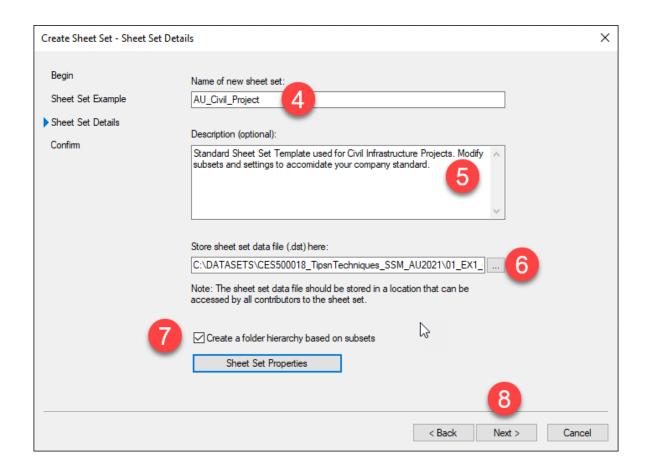
- 1. Start AutoCAD and Create a new Sheet Set using the SSM palette (Ctrl+4).
- 2. Select and Example Sheet Set.



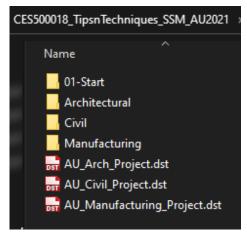
3. Select Civil Imperial Sheet Set for this example. We are going to create one for each discipline within our company standards.



- 4. Name your Sheet Set file: AU_Civil_Project.
- 5. Give a description for the template you are creating.
- 6. Select the ellipse and browse out to the folder where your (.dst) will be stored. We will move this to a template file location after we create the links with the title blocks.
- 7. Select the hierarchy button. This will bring in any subsets that are created by the example sheet set.
- 8. Browse to your folder and select Open select Next > then

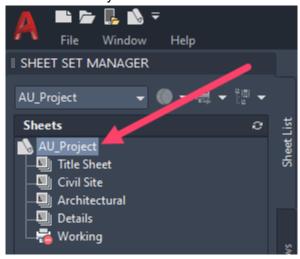


- 9. You now have created a .dst file to start with within the Exercise 2 folder.
- 10. Close the SSM.
- 11. Do the same and create an **AU_Manufacturing_Project** using the manufacturing template.
- 12. Create a third one named **AU_Arch_Project** using the architectural template.
- 13. TIP #6: Create different subsets for each project by opening the sheet set and saving the file, mirroring what you would do on that type of work.

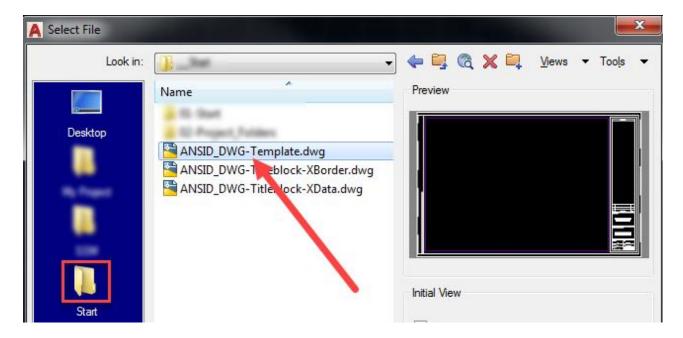


Lesson 2: Preparing your Drawing Sheet Border

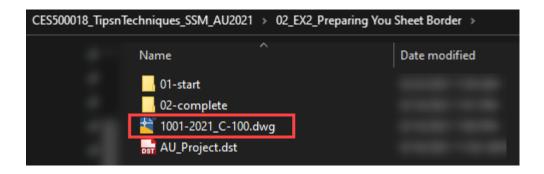
- 1. Start AutoCAD and open the Sheet Set in the Exercise 2 folder.
- 2. Notice the subsets have already been renamed to what is shown below.



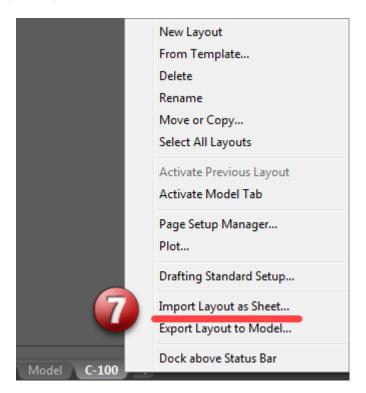
3. Open drawing ANSID_DWG-Template.dwg located in the start folder as shown.



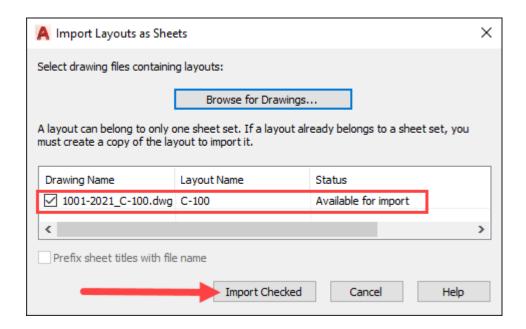
- 4. This drawing file is a standard 22 x 34 D size drawing with attributes added. We are going to take that drawing and use to create our template for the project. **TIP #7** This is where you would take your existing company title block and incorporate into your sheet set setup.
- 5. Save the drawing to your Exercise 2 folder and name the file **1001-2021_C-100**. Notice how some project folders have already been created for you to save time.



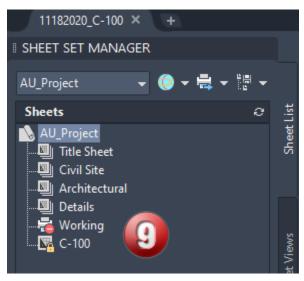
- 6. Keep the drawing open and right-click on the C-100 layout tab.
- 7. Select Import Layout as Sheet from the menu as shown.



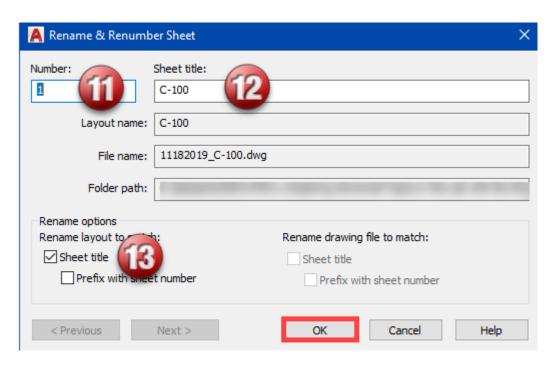
8. Check the drawing name box and look to see there is no warning on the import. If there is a warning on import the sheet may already be part of another sheet set and not available for import. In some instances, the sheet may have been attached to a previous sheet set and you will need to detach that if you have made a copy.



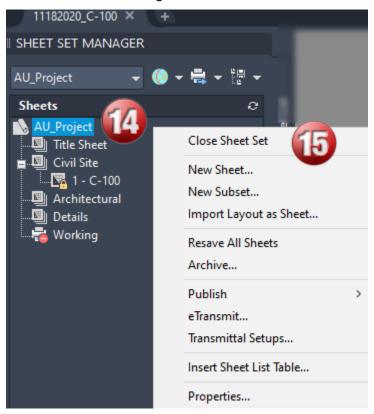
9. Your sheet will now appear in the layout as shown.



- 10. Right click the drawing and select Rename and Renumber. We do not have to do this, but we want to keep our drawing clean and consistent making sense as we go along.
- 11. Choose number 1.
- 12. Rename the Sheet Title to C-100.
- 13. Check the box to Rename the layout to match. This is important when using the file as a template.

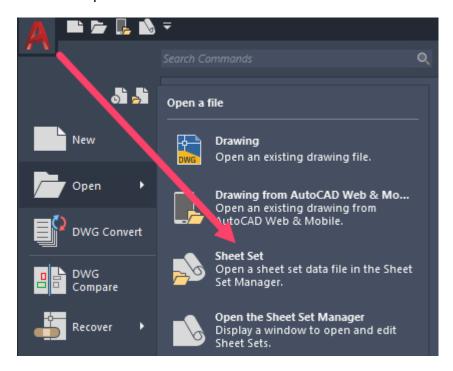


- 14. Our drawing is now linked to the current sheet set.
- 15. Close the SSM and Close the drawing file.

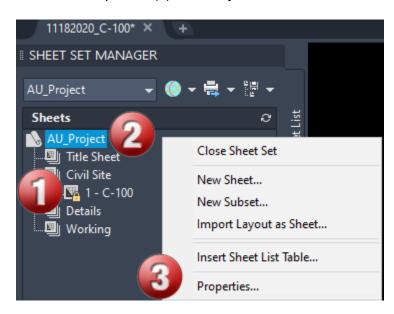


Lesson 3: Adding Sheet Custom Properties

1. Start AutoCAD and open the Sheet Set in the Exercise 3 folder.



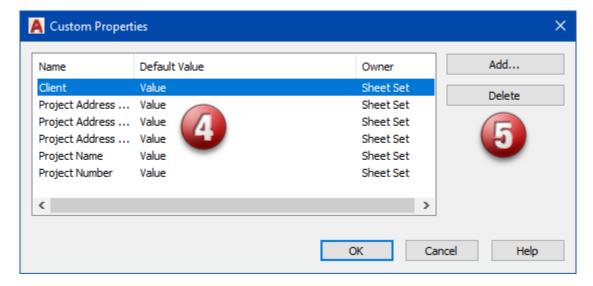
2. Double Click on 1-C-100 (1) to open the sheet set drawings. Right click (2) on the **AU_Project** and select Properties (3) on the fly out menu as shown.



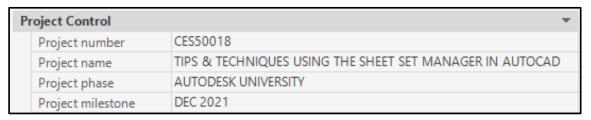
3. Select Edit Custom Properties on the lower left of the dialog box.



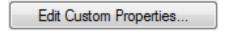
- 4. Select the value
- 5. Delete all default values provided within the Sheet Set.



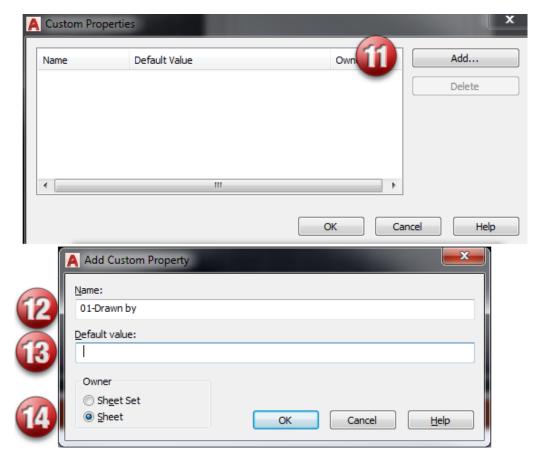
- 6. We are now left with Sheet Set properties that we will configure.
- 7. **TIP #8:** Add all the Project Control data This will be common project data that can be used throughout the lifecycle of any project. These properties cannot be deleted or removed only added.
- 8. Enter the values as shown (you may enter your own values we want to get something in there to visually see the field when it is updated.



- 9. Close out of the dialog box.
- 10. As in Step 2 right click the main sheet set and select Properties then....



- 11. We will first edit Sheet Custom Properties.
- 12. Select Add....
- 13. Enter 01-Drawn by:



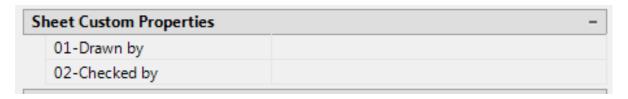
TIP #9: This is the area where you will see the word VALUE. You can use %% or %%U which enable a blank field, but we are going to use a key combination or **ALT+0160** (do not add the + sign) for a blank field. The key is to press and hold down the ALT key while you type 0160. The 0160 code will insert a non-breaking space and appear blank when plotted as shown below.



Select Sheet. These will be sheet only custom properties since there may be different Complete the same sequence and add another field named 02-Checked by.

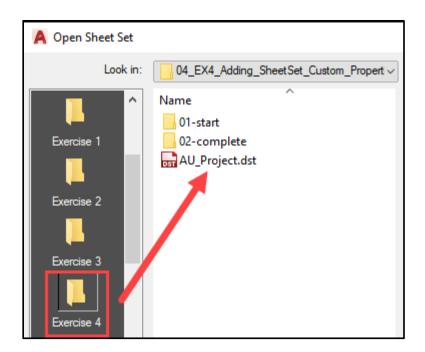
TIP #10: Why numbers in front of the text? AutoCAD will sort the sheet set information numberically and alphabetically therefore to have things in order of the titlle sheet (i.e. drawn by then checked by) would be a more practical approach.

Your sheet set will now have Sheet Custom Properties as shown.

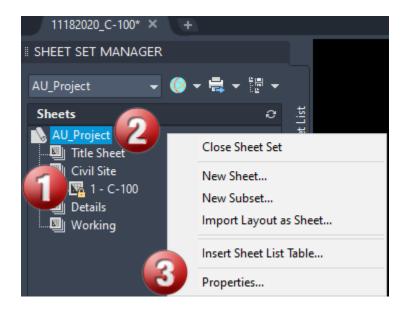


Lesson 4: Adding Sheet Set Custom Properties

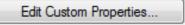
1. Start AutoCAD and open the Sheet Set in the Exercise 4 folder as shown.



2. Double Click on 1-C-100 (step 1) to open the sheet set drawings. Right click on the **AU_Project** (step 2) and select Properties (step 3) on the fly out menu as shown.



3. Select Edit Custom Properties on the lower left of the dialog box.



4. Select Add...



- 5. We are now going to add custom properties that will help define the attributes that are contained within our title block. **TIP #11** Keep in mind Sheet Number, Date, and Drawing Title will not be added since they are default values already controlled in the SSM.
- 6. Start by entering the names as shown below. Notice how the fields are numbered; this will help us control the use of the numbering in the Sheet Set Manager.

01-Drawing Name First 02-Drawing Name Second



03-Project Title Fist 04-Project Title Second

05-Sheet Total 06-Drawing Scale Project Name and Address

PROJECT NAME 1
PROJECT NAME 2

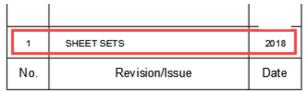
Drawn By:

AU
Sheet No.
1 of 10

C-100

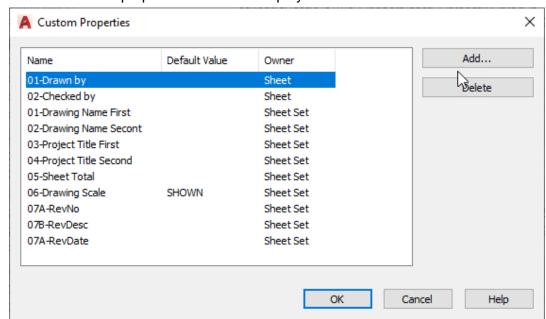
TIP #12 The Drawn by and Checked by fields are controlled by the individual sheet; the remaining fields are controlled by default settings within the Sheet Set Manager.

07a-RevNo 07b-RevDesc 07c-RevDate



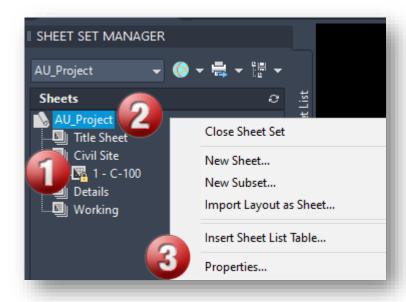
For the revision blocks we used one number since they are all related to each other.

7. Your Final Custom properties should be displayed as shown.

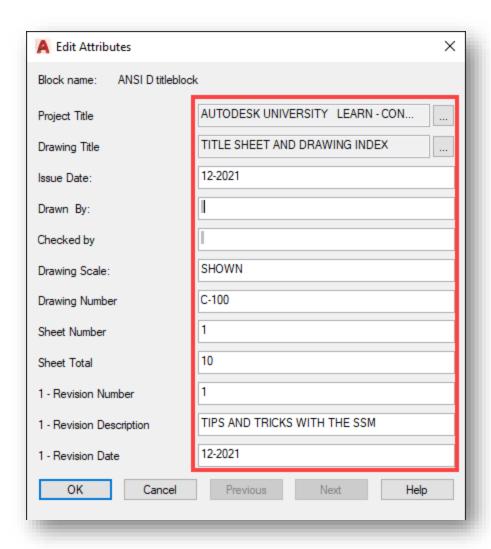


Lesson 5: Connecting the SSM template to the Drawing Template

- 1. Start AutoCAD and open the Sheet Set in the Exercise 5 folder.
- 2. Double Click on 1-C-100 (1) to open the sheet set drawings. Right click (2) on the **AU_Project**.



- 3. Select Properties as shown. You will now be able to see all the custom properties added to your sheet set. Let's review the title border using the attribute editor.
- 4. **TIP #13** We already have an existing block therefore we are going to use ATTEDIT, BATTMAN, REFEDIT, or BEDIT to access the definitions which will make sure we are in the Edit Attribute Definition dialog box and not the enhanced attribute editor.
- 5. We already have text and attributes inserted within our Sheet Set which will enable us to add the fields to the title block using the ATTEDIT command. This drawing file is a standard 22 x 34 D size standard title block. This is where you would take your existing company title block and incorporate into your sheet set setup.
- 6. Start by type ATE (ATTEDIT) at the command prompt to edit the attributes of the title block. Your edit attributes dialog box will be displayed as shown.



- 7. We are going to start adding the fields we already have in our SSM properties to all the data.
- 8. The following page will take us through the steps of adding the fields to our title block. The numbers will correspond to the fields that we will be adding to the SSM. We will go through the first one then you will do the remaining ones on your own.

Blue lettering references a Field Name in AutoCAD **Red lettering** Represents a custom property added in the Sheet Set Manager.

- 1. Sheet Description CurrentSheetDescription
- 2. Drawing Name Line 1
 CurrentSheetSetCustom
 01-Drawing Title First
- 3. Drawing Name Line 2
 CurrentSheetSetCustom
 02-Drawing Title Second
- 4. Project Name Line 1
 CurrentSheetSetCustom
 03-Project Name First
- 5. Project Name Line 2
 CurrentSheetSetCustom
 04-Project Name Second
- 6. Drawn by

 CurrentSheetCustom

 01-Drawn By
- 7. Checked by CurrentSheetCustom 02-Checked By
- 8. Sheet number CurrentSheetNumber
- 9. Sheet total

 CurrentSheetSetCustom

 05-Sheet Total
- 10. Scale

CurrentSheetSetCustom 06-Drawing Scale

- 11. Date
 - CurrentSheetSetProjectMilestone
- 12. Sheet Title CurrentSheetTitle
- 13. Revision number

 CurrentSheetSetCustom

 07a-RevNo
- 14. Revision description CurrentSheetSetCustom
- **07b-RevDesc**15. Revision date

CurrentSheetSetCustom

07c-RevDate

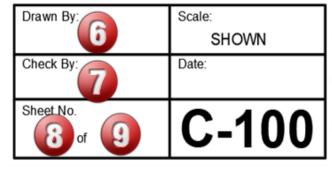
_ _ _ .

SHEET SET 14 GEMENT

No. Revision/Issue Date



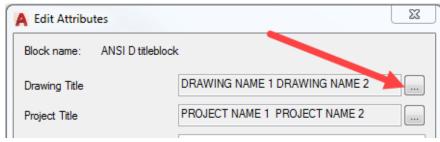






TIP #14: See the Sheet Set Management Cheat Sheet Provided with this handout

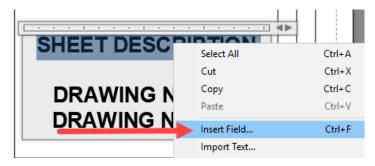
- 1. Select your title block to show the Edit Attributes dialog box again.
- 2. Select the ellipses as shown to bring up the multiline text object.



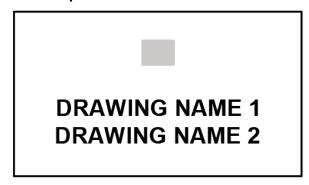
3. Left click and drag over the SHEET DESCRIPTION text.



4. Right Click and select Insert Field...

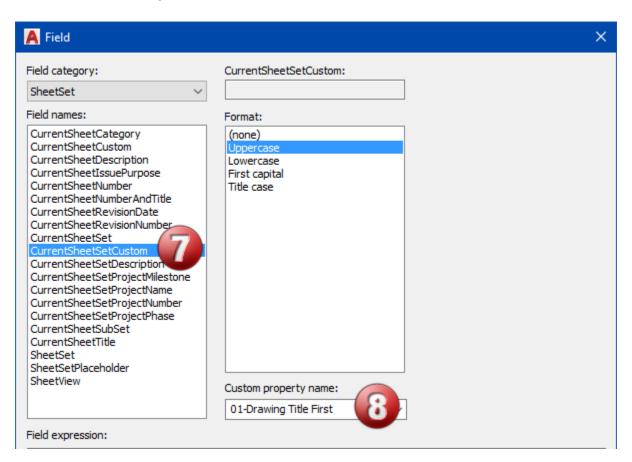


5. Select CurrentSheetDescription and select enter.

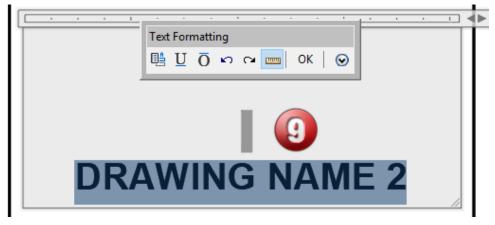


- 6. Select attribute DRAWING NAME 1, right click and select insert field.
- 7. Select CurrentSheetSetCutsom

8. Select 01-Drawing Title First



9. You should see a gray highlighted area to indicate that a bland field as added to the title block.

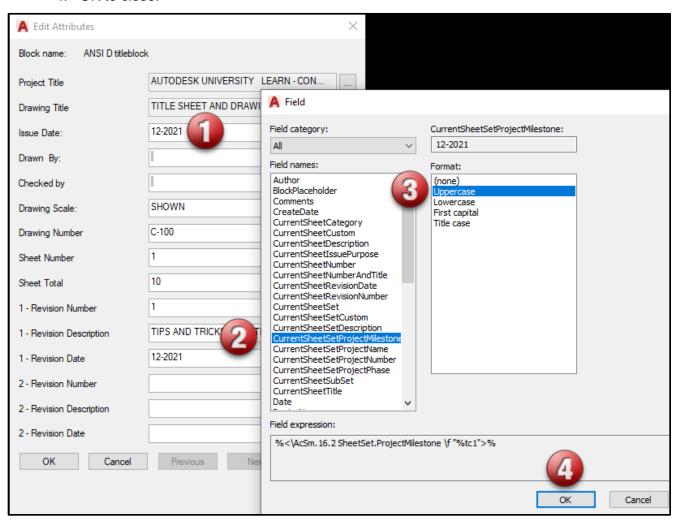


10. Continue with the remaining fields adding your data and referring to the reference chart for the field information. Keeping in mind that some are Custom Fields, and some are Standard field names.

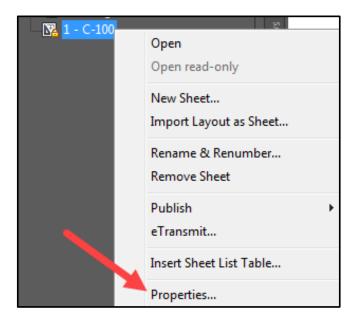
11. For example, when importing the date, we used a project control field name **TIP #15** Project milestone as shown below.



- 1. Right Click the attribute
- 2. Select the Project field CurrentSheetSetMilestone
- 3. Uppercase
- 4. OK to close.



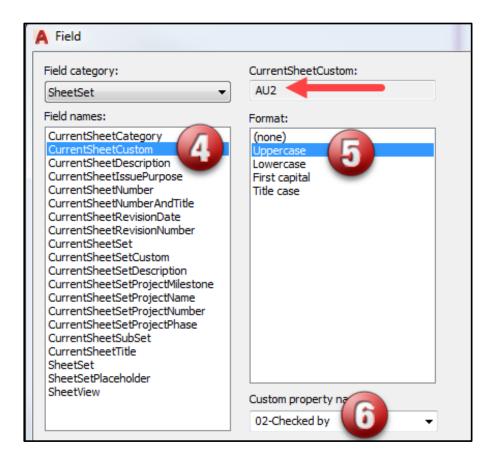
- 12. When adding the Drawn by and Checked by remember these are Sheet Custom Fields and not Sheet Set Custom Fields.
 - 1. We are first going to add a few names in there for the Field to hold and appear.
 - 2. Right Click on your Sheet C-100 and enter Properties



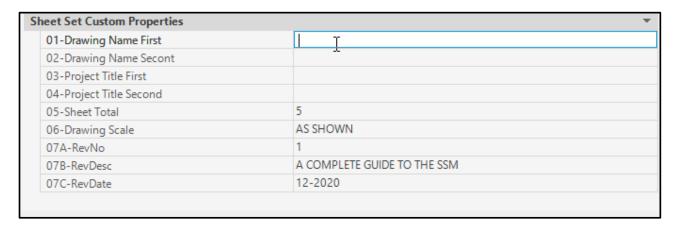
3. Enter AU1 and AU2 for the Drawn and Check by in your sheet.



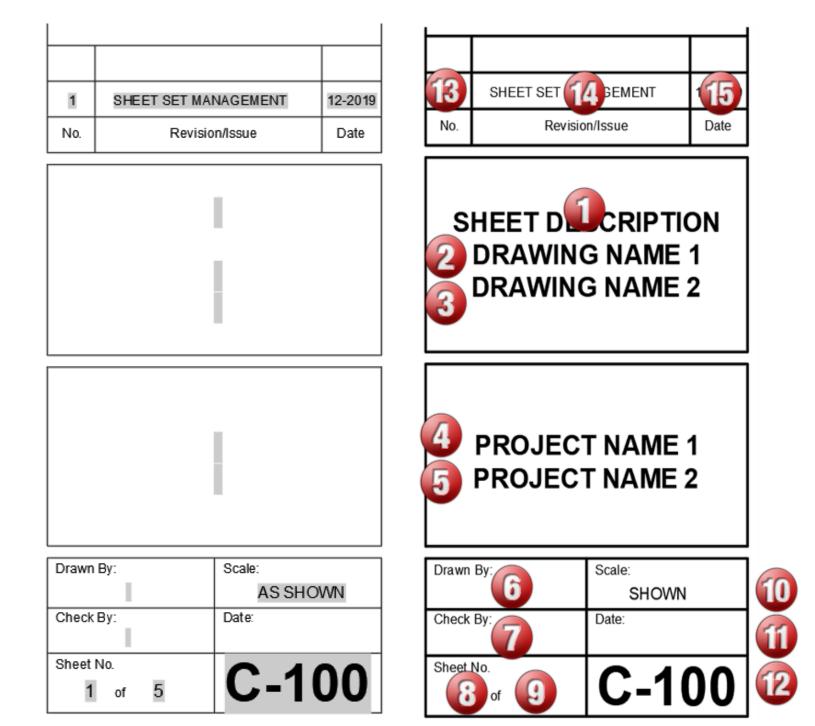
- 4. Select the Project field CurrentSheetcustom
- 5. Uppercase
- 6. OK to close.



13. Enter data in for the remaining areas of the Custom Sheets as shown. This will make it easier for us to see the fields and how they are linked to the title block.

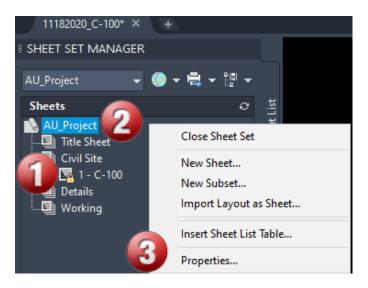


- 14. Complete the remaining fields for your Sheet Set.
- 15. When you are complete your title block should look like the image as shown with all the data displayed as fields as shown below.

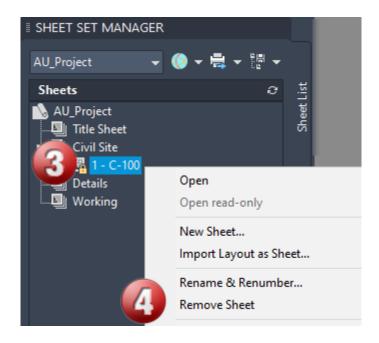


Lesson 6: Saving your Templates

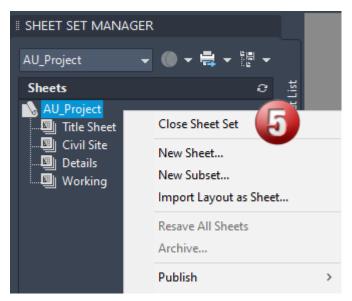
- 1. Start AutoCAD and open the Sheet Set in the Exercise 6 folder.
- 2. Double Click on 1-C-100 (1) to open the sheet set drawings. Right click (2) on the **AU_Project** and select Properties (3) on the fly out menu as shown.



- 3. Right Click your sheet
- 4. Select Remove Sheet.



5. Right-Click your Sheet Set and close it.

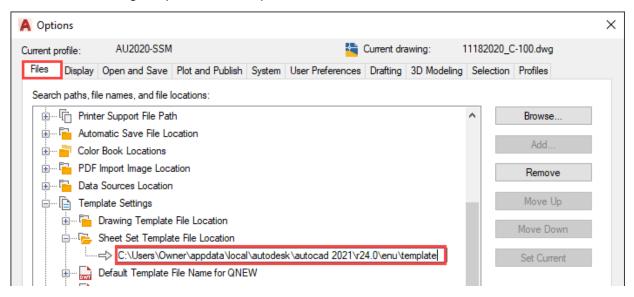


- 6. **TIP #16** We now have a standard sheet set template. We now need to save this to our template folder, so it becomes visible when we create a new drawing. Yes, you can copy sheet sets from one folder to another, but I find this way a little better and less chance of error.
- 7. Right click in the command area (or type options at the command prompt)
- 8. Select Options.



9. We are going to set the template path for Sheet Sets. Out of the box AutoCAD sets the default template folder to the path that exists in options.

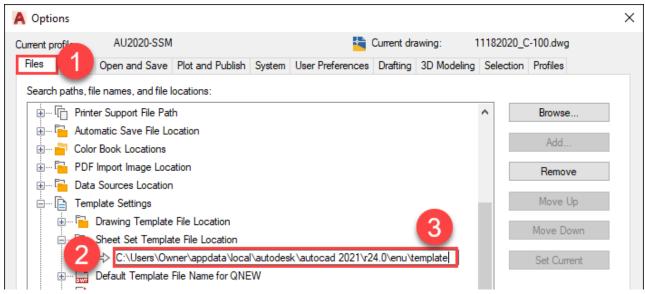
The template folder has already been changed for AutoCAD to look for standard templates. All of the existing templates were copied to this location for the dataset.



Follow the steps below to change the default template location for your CAD standard.

- 1. Select the Files tab as shown.
- 2. Expand the Sheet Set Template File location tab.
- 3. Left Click on the path to highlight the path and pause Right click and copy.

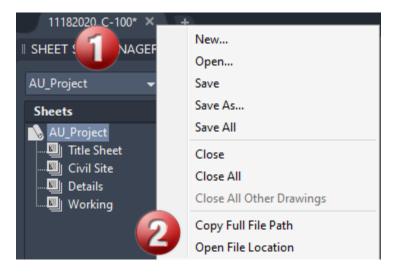
TIP #17: you may have a standard location where you keep your templates – this is where you would place your new template file(s).



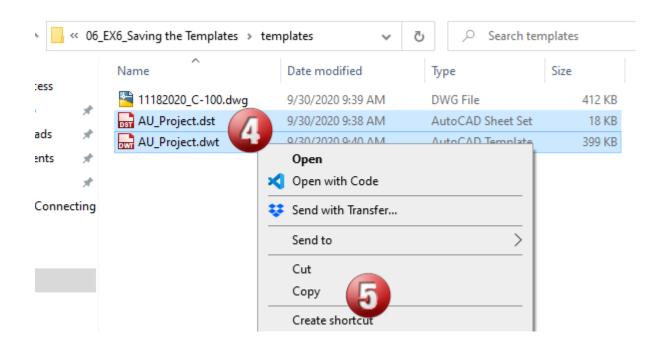
4. Close the dialog box and move back to AutoCAD.

We are now going to copy our standard template to that folder location.

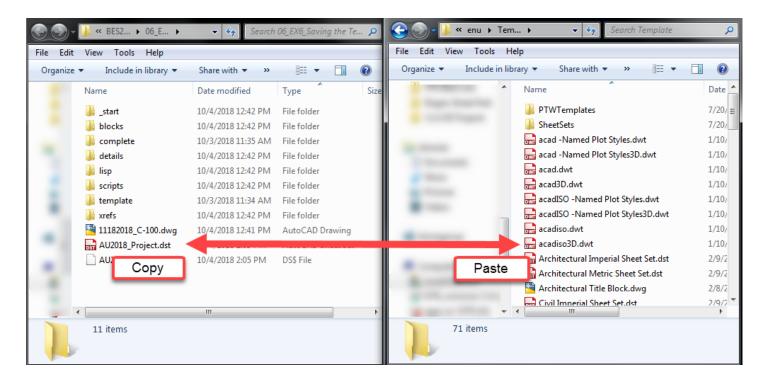
- 1. Right click on your drawing tab.
- 2. Select Open File Location.



- 3. Windows explorer will now open.
- 4. Select both file AU_Project.dst
- 5. Select Copy.

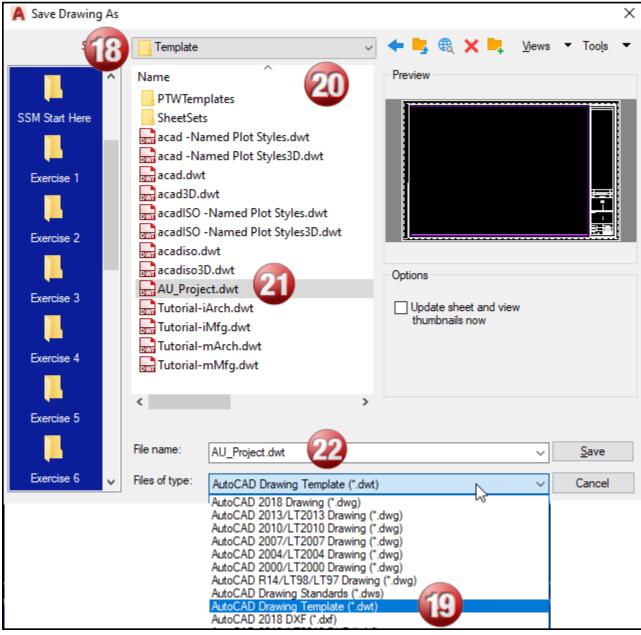


- 6. Leave this window open and switch back to AutoCAD.
- 7. Type options or config at the command prompt and move to the Files tab
- 8. Expand the Sheet Set Template file location.
- 9. Left click the path once and select Copy
- 10. Minimize AutoCAD and open Windows Explorer
- 11. Paste the path into the address bar to bring up your template folder.
- 12. Leave the window open and move back to AutoCAD.
- 13. In AutoCAD right click the file location.
- 14. Click Open File Location.

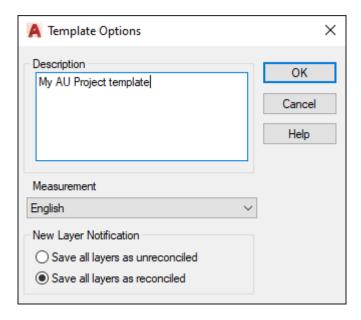


- 15. You now have two windows open.
- 16. **TIP #18** Copy your DST file from your project location over to the default Sheet Set Template folder as shown.

- 17. We are now going to do the same thing with our drawing file.
 - **TIP #19**: in this instance we do not have to save the file path since when you go to save the template file AutoCAD will move to the template folder that is selected within the options file.
- 18. Move to your drawing and select Save Drawing As.
- 19. Select the DWT option to save this drawing file as a template.
- 20. Notice how AutoCAD defaulted to the Template folder location.
- 21. Name your template file
- 22. AU_Project



- 23. Give your template a description.
- 24. Save all the layers as reconciled.



TIP #20: Save your layers as reconciled. This will ensure that we do not get a warning when we load the template into a new drawing.

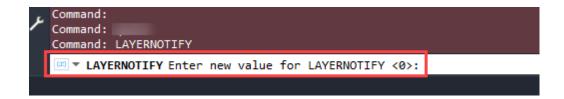
Save All Layers as Unreconciled

Saves the template file with its layers set as unreconciled, which means that a layer baseline is not created.

Save All Layers as Reconciled

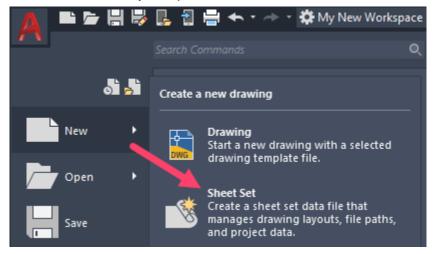
Saves the template file with its layers set as reconciled, which results in creating a layer baseline.

Alternatively, if you do not want to reconcile the layers you can set the layer notification system variable to 0 which would turn off any warns that new layers have been created.

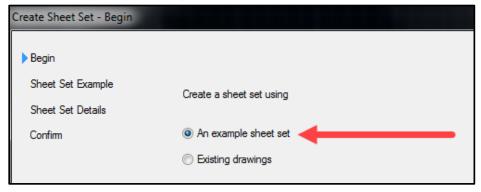


Lesson 7: Testing the Templates

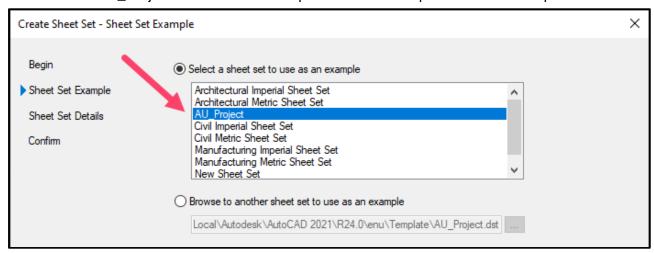
1. Start AutoCAD and Create a New Sheet Set. We are going to go through the wizard using the templates we have already setup.



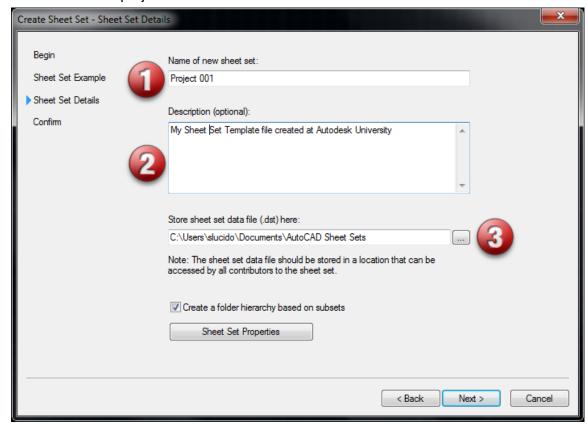
2. Select the radio button An Example Sheet Set and select Next



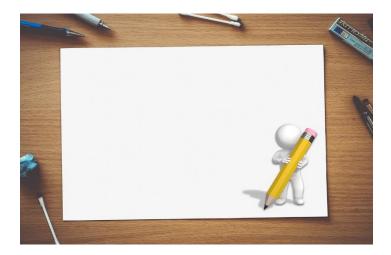
Select AU_Project as shown. Our template now shows up in the default template list.

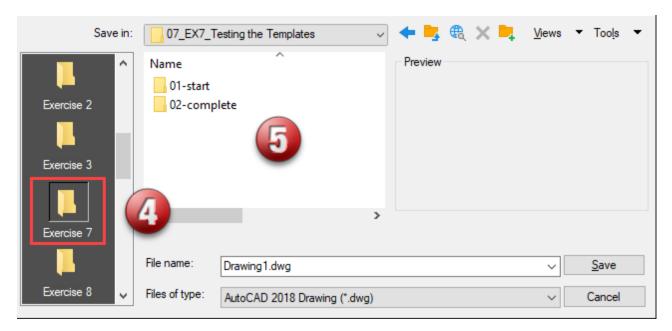


- 4. We are now at the Sheet Set details dialog box.
 - 1. Enter the name of your Project Sheet Set.
 - 2. Describe the design/drafting project.
 - 3. This is the location of the Sheet Set file. We are going to place the .dst file in the root folder for our project.

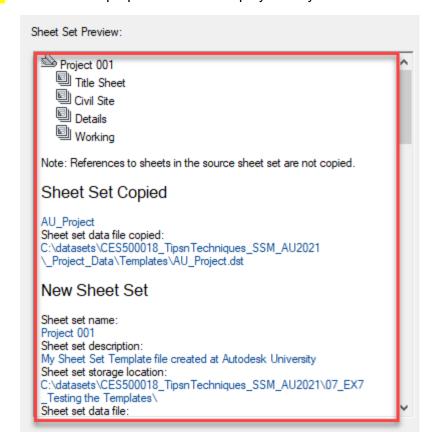


- 4. Select Exercise 7 on the Start Pane.
- 5. Save the file to the root folder

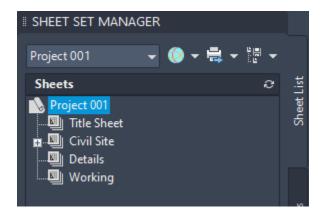




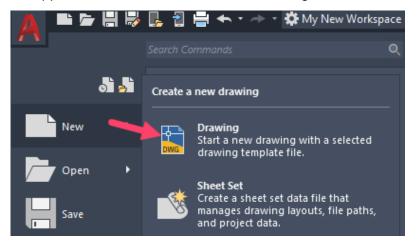
6. TIP #21 The Sheet Set properties will be displayed for you to take a final view.



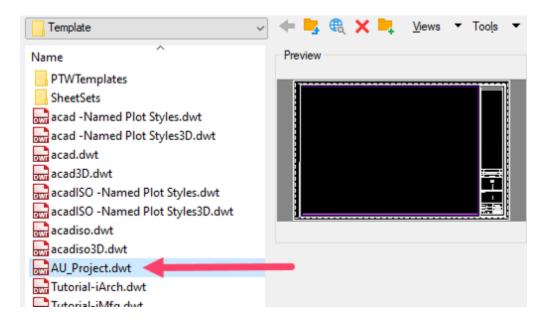
7. Select Finish and Project 001 will automatically launch on the SSM tool palette as shown



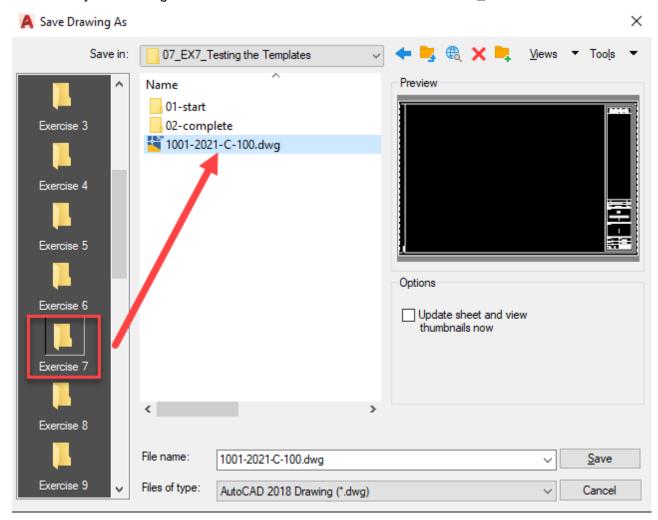
8. Move to the Application Menu and Select New Drawing.



9. You will be taken to the template menu; Select the New Template we have created.



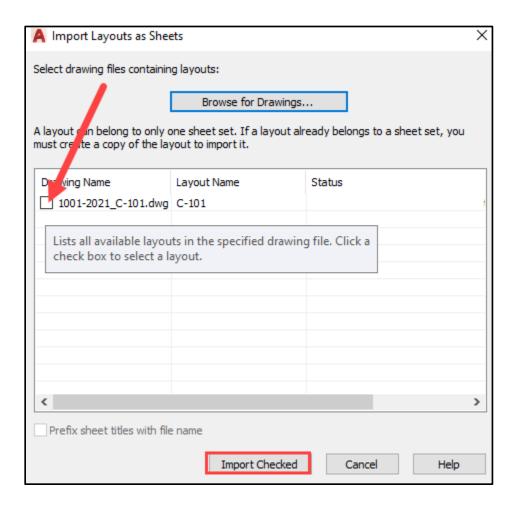
- 10. Your drawing will be open along with your Sheet Set.
- 11. Save your drawing to the Exercise 7 folder and name it 1001-2021_C-100



12. Move to the C-100 Layout tab and right-click and select Import Layout as Sheet.

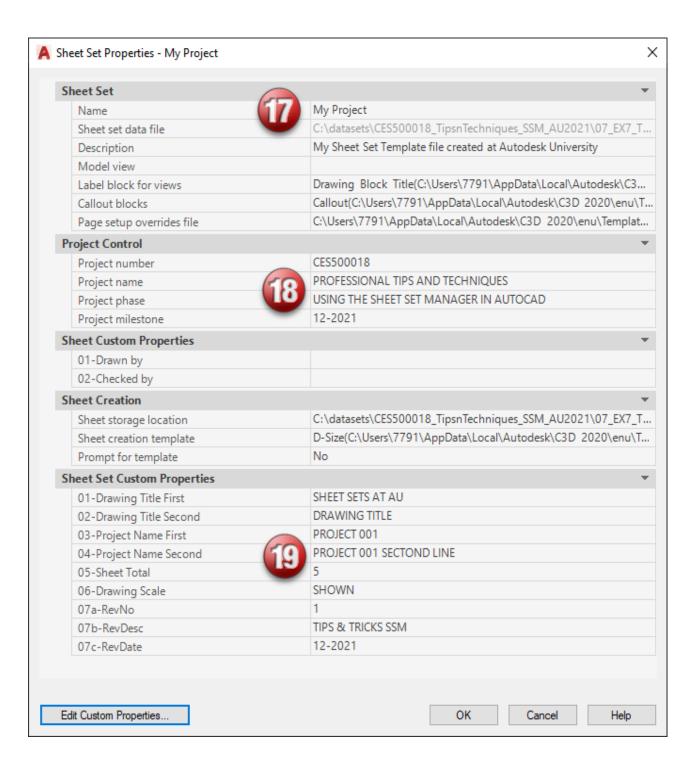


13. Select your drawing file and uncheck the prefix sheet title with file name.



- 14. C-100 will be added to your sheet set. Depending on where you last placed your cursor is where the drawing will fall into place.
- 15. TIP #22: You can drag and move the file as needed.
- 16. At this point you can now move around and give it a number and place it under you correct subset.
- 17. Add your Sheet Set Custom properties by right clicking the Project 001 Sheet Set.
- 18. First rename the Project then add the details as shown on the next page.

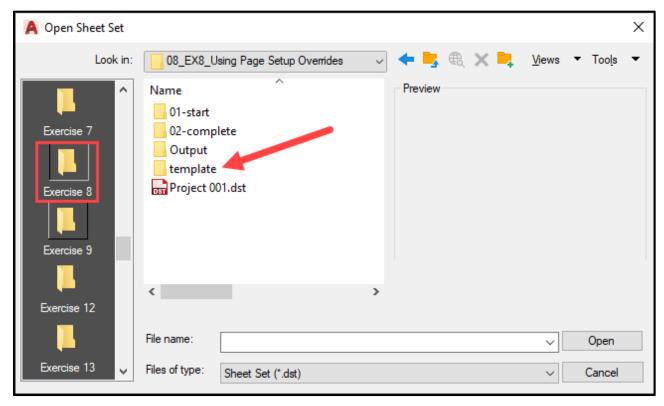
19. When complete type REGEN at the command prompt to see your properties added.



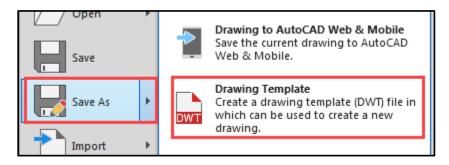
Lesson 8: Using Page Setup Overrides

TIP #23 Every CAD project is different. Each project contains a special set of information that pertains only to that project and not to a global template. We have configured the templates to work with our title block now we must setup a project and make those settings take affect for our current workflow.

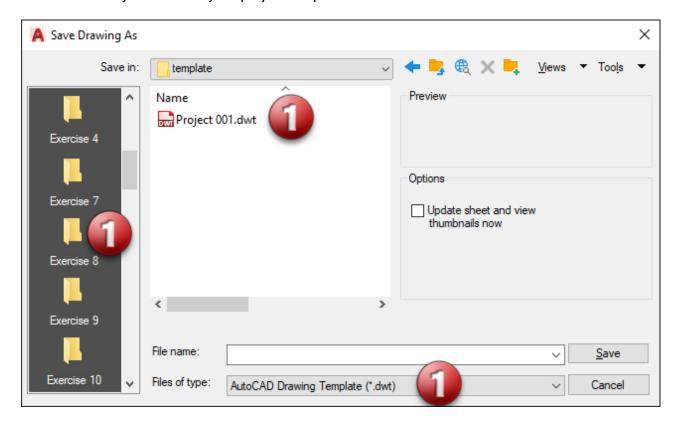
1. Start AutoCAD and open the sheet set in the exercise 8 folder.



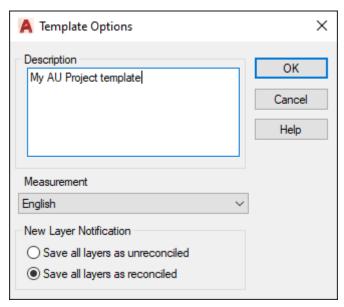
- 2. Notice there is a template folder highlighted in the image above.
- 3. Type Saveas or select saveas from the Application Menu.



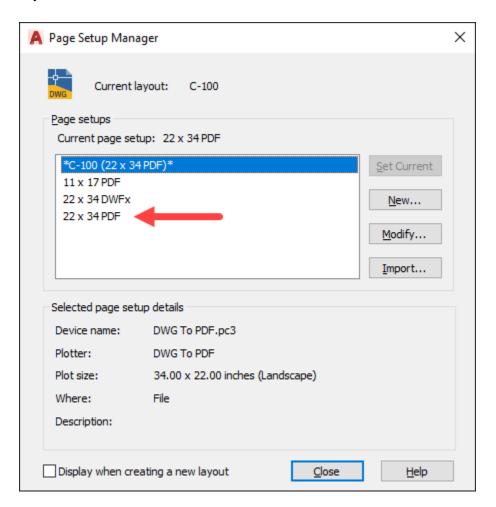
- 1. Select the template option. Note: you will be taken out to the default template folder.
- 2. Select Exercise 8.
- 3. Select the template folder.
- 4. Save your DWT to your project template.



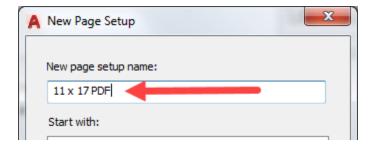
You will have to fill in the following box to complete your template.



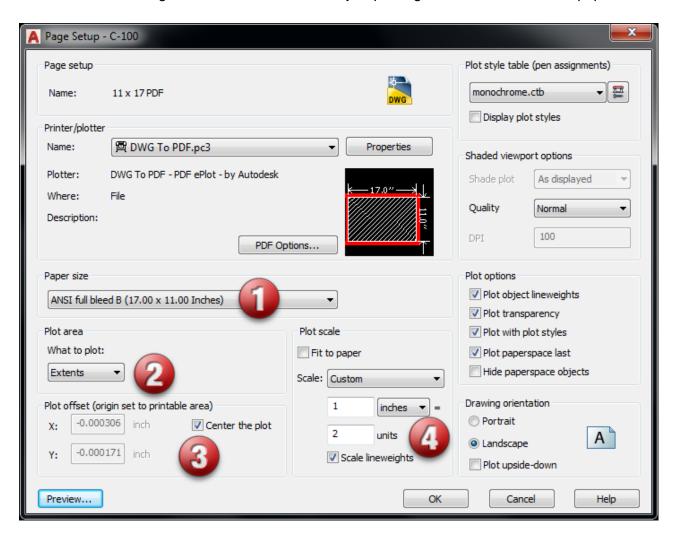
- 6. You are now in your drawing template file.
- 7. **TIP #24** Type **PAGE** at the command prompt. We are now going to setup page setup overrides to be used for our current project. Notice there is one-page setup already there named 22 x 34 PDF.



8. Select New....



- 9. **TIP #25** We are starting from the 22 x 34 pdf setting so we will need to just modify some of the parameters for this to work with our 11 x 17 PDF file.
 - 1. Change the paper size to ANSI full bleed B (17 x 11 inches)
 - 2. Set to Extents
 - 3. Check the Center on Plot
 - 4. Change the units to 1 2. We are just printing a half size sheet of our paper.



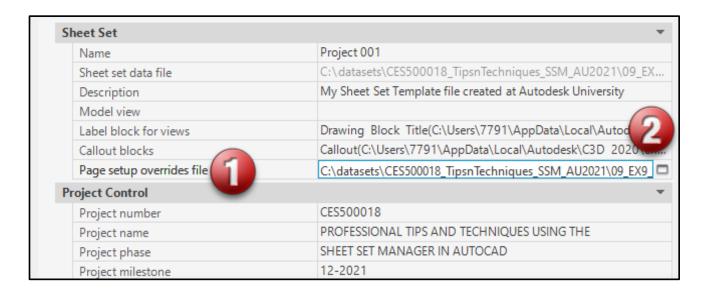
10. Select OK then Close.

- Close your template drawing and move back out to your AutoCAD and your Sheet Set.
- 12. Right Click on Project 001.

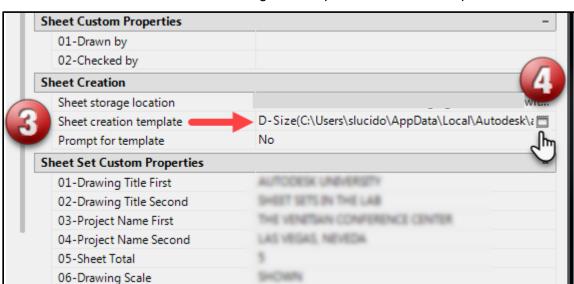
TIP #26 You can turn the layer settings on and off by selecting the pdf options button under the page setup.



- 13. TIP #27 We are now going to assign page setup overrides and a project template.
 - 1. Move to the page setup overrides file
 - 2. Select the Window at the end to browse.
 - a. Move to your template folder and select the template you just created.
 :\08_EX8_Saving Project Template\template\Project-001.dwt
 - b. Select OK to close the window.

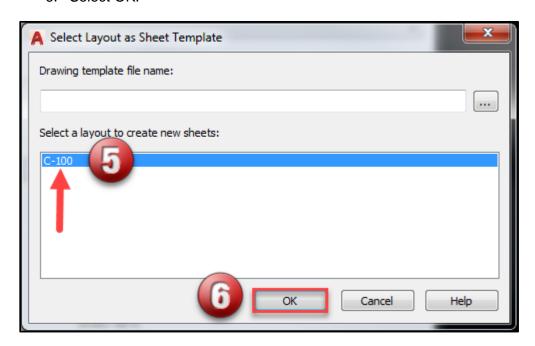


- 3. Move to the Sheet creation template section.
- 4. Select the Window at the end to browse.
 - a. Move to your template folder and select the same template.

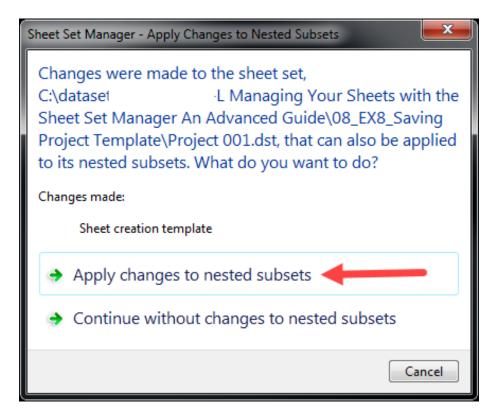


b. Notice we are using one template file for both templates.

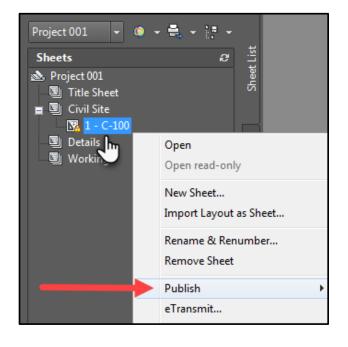
- 5. Select the C-100 layout that we have in our template.
- 6. Select OK.

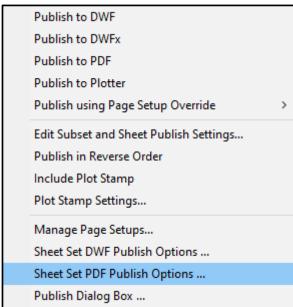


14. TIP #28 Apply changes to nested subset if you get this error.

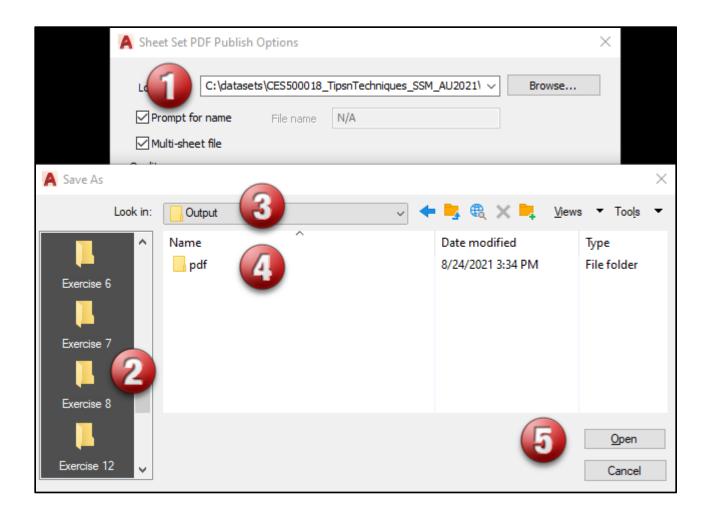


15. Move back out to your Sheet Set Manager and right-click your page and select Publish. We need to setup where the pdf files will be published.





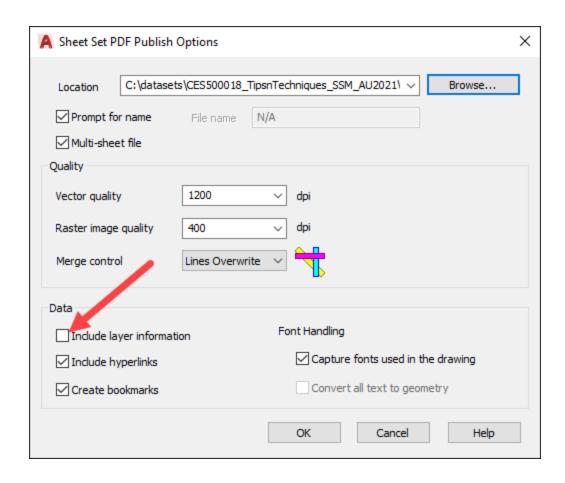
- 16. The Sheet Set Publish Options dialog box will appear. Select Browse...
 - 1. Select Browse on the Sheet Set PDF publish Options.
 - 2. Select the Exercise 8 folder.
 - 3. Select the pdf folder.
 - 4. Select the Output folder.
 - 5. Select Open to choose the folder.



17. Close AutoCAD and your Sheet Set.

TIP#29: When creating page setups, you have the option to turn the layers on and off within the pdf file. Uncheck layer information below to ensure that AutoCAD layers are not included within your pdf file.

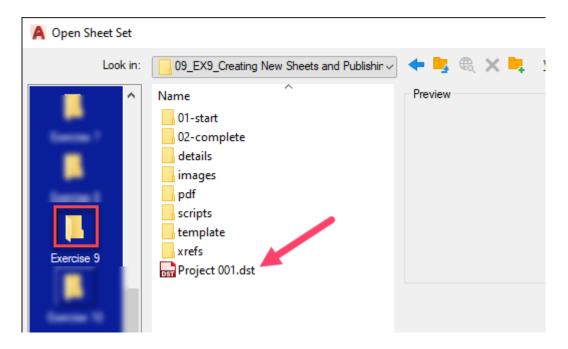
With the Sheet Set PDF publish options window there is a button for you to turn off layers when creating your pdf outputs for your project.



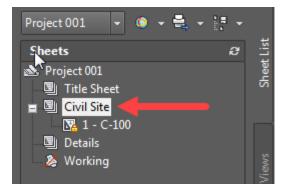
Lesson 9: Publishing using Publishcollate System Variable

TIP #30 Each project contains a special set of information that pertains only to that project and not to a global template. We have configured the templates to work with our title block now we must setup a project and make those settings take affect for our current workflow.

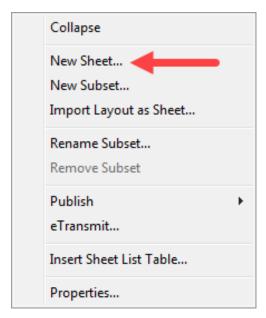
1. Start AutoCAD and open the Sheet Set in Exercise 9 folder.



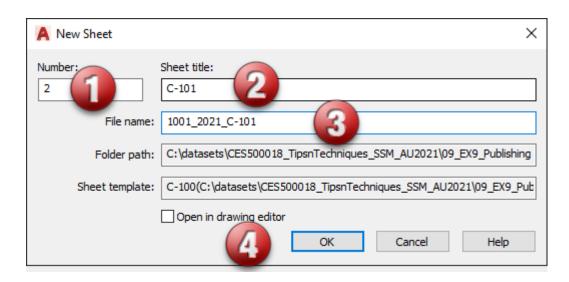
2. Right Click the Civil Site Subset.



3. Select New Sheet... from the menu.

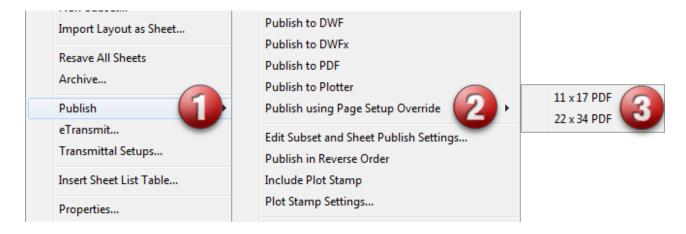


- 4. Enter the information about your new sheet.
 - 1. Drawing number is 2.
 - 2. Sheet Number is C-101.
 - 3. File name which the drawing will be saved to.
 - 4. Select OK to add the sheet.



- 5. Your new sheet will be added to the sheet set.
- 6. Navigate to that sheet to review the settings and how all the fields look.

- 7. Right click Project-001
 - 1. Select Publish
 - 2. Select using Page Setup Override
 - 3. TIP #31 Select 22 x 34 PDF



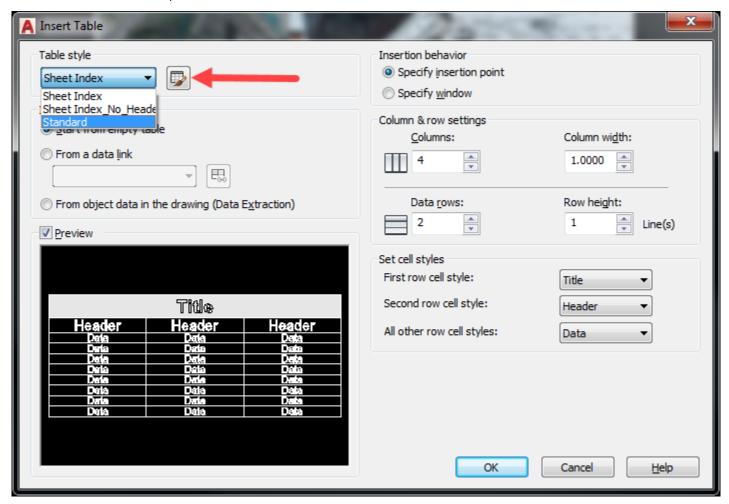
- 8. Move out to your pdf folder to see your results.
- 9. Depending on the **PUBLISHCOLLATE** system variable settings you will either be prompted for a compiled pdf name (Setting of 1) or individual sheets (setting of 0).
- 10. Continue adding your sheets to the design set.

Value	Description
0	A published sheet set is processed one sheet at a time. Separate PLT files are created for each sheet. If the sheet set is published, the sheets might be interleaved with other plot jobs.
1	A published sheet set is processed as a single job. A multi-sheet PLT file is created. If the sheet set is published, it is never interleaved with other plot jobs.

Lesson 10: Creating a Sheet Index Table

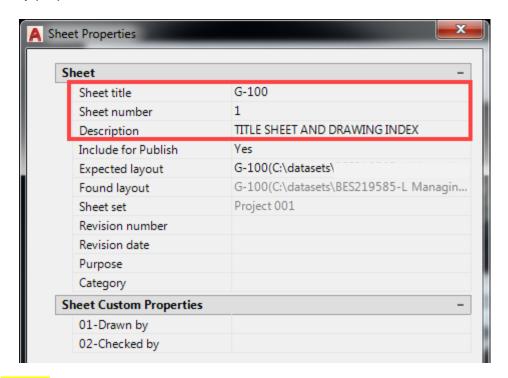
All design projects have a Sheet Index Table. TIP #32 We are now going to create a table style for our project then use that style to automate our sheets.

- 1. Start AutoCAD and open the Sheet Set in Exercise 10 folder.
- 2. Notice there are more sheets than before. The sheet set has been populated with data.
- 3. Double click or open drawing 1000_2021_G-100.
- 4. Type Table at the command prompt to bring up the table dialog box.
- 5. We have two types of Sheet Index Tables created for our project (one with headers and one without).

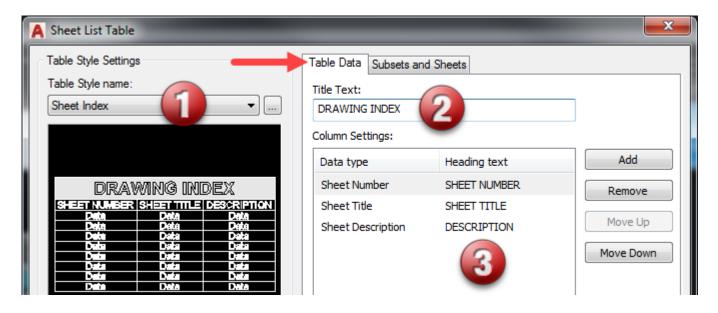


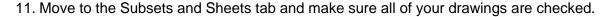
- 6. Select cancel and move back to your sheet. This is where you can create or import your own table style conforming to your company standard.
- 7. Right Click one of your sheets to display the Sheet Properties.

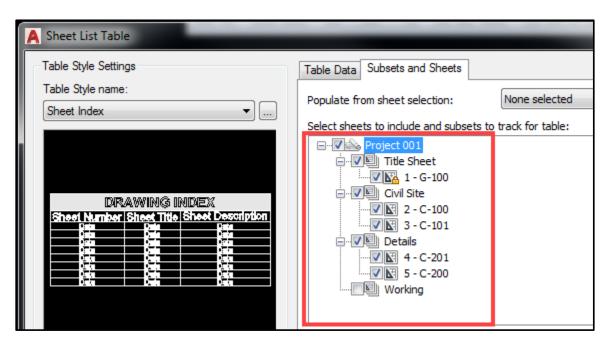
- 8. We are going to insert the Sheet Title, Sheet Number, and Sheet Description as shown.
- 9. Only properties that are customized within the sheet will be available for us to import.



- 10. TIP #33 Right-click G-100 and select insert Sheet List table.
 - 1. Make sure it is set for the Sheet Index Table Style.
 - 2. On the Table Data Tab enter a title.
 - 3. Check the data type to ensure you have the correct information.



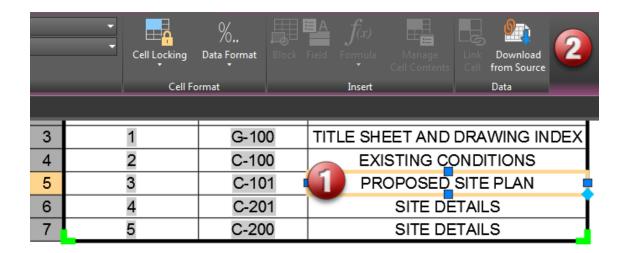




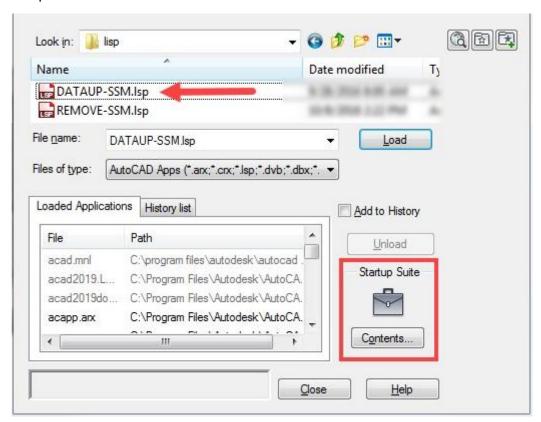
- 12. Insert the Sheet List Table underneath your aerial image.
- 13. Your Sheet List Table should look like shown below.

DRAWING INDEX					
SHEET NUMBER	SHEET TITLE	DESCRIPTION			
1	G-100	TITLE SHEET AND DRAWING INDEX			
2	C-100	EXISTING CONDITIONS			
3	C-101	PROPOSED SITE PLAN			
4	C-201	SITE DETAILS			
5	C-200	SITE DETAILS			

What happens if you update a drawing? You need to select the index table within the header or data area and on the contextual ribbon select download from source.



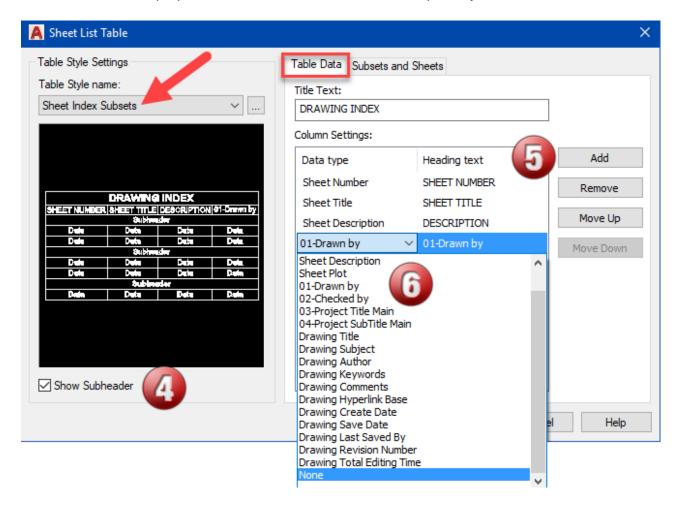
14. **TIP #34** There is one more way. Type **appload** at the command prompt and navigate to the lisp folder in the Exercise 10 folder.



15. Put the lisp file in your startup suite and your table will update without you manually doing selecting the table and download from source on the contextual ribbon.

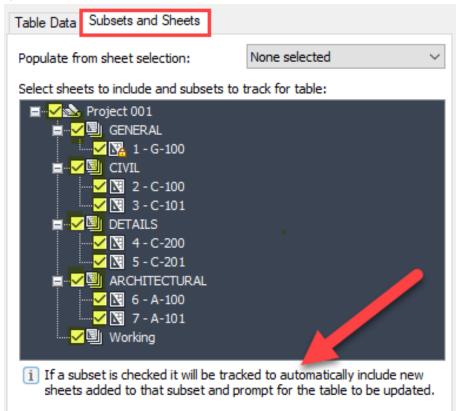
Lesson 11: Creating Sheet Index Table with Subsets Included.

- 1. You have some additional flexibility included with creating the sheet index table which includes adding or not adding subsets.
- 2. Continue using the same file you are in and delete the index table you created.
- 3. Make sure you are on Sheet G-100 and right click your project and add Sheet Index Table.
- 4. TIP #35: Change the Sheet Index Table and check the Show Subheader box.
- 5. If you select the add button notice how you can add Sheet Custom Properties that you have added to your sheet set.
- 6. Review the properties do not add shown for example only.



7. Review the Subsets and Sheets tab. Look at the subsets and make sure they are the headings that you would like displayed on the Sheet Index Table.

TIP #36: If you make changes to your Sheet Index Table you can right click and save a new table style from the fly out menu.

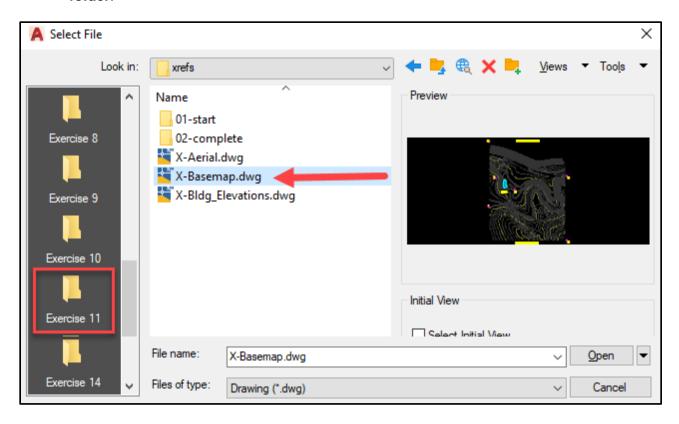


8. Review the Subsets and Sheets tab. Look at the subsets and make sure they are the headings that you would like displayed on the Sheet Index Table.

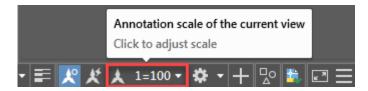
DRAWING INDEX				
SHEET NUMBER	SHEET TITLE	DESCRIPTION		
GENERAL				
1	G-100	TITLE SHEET AND DRAWING INDEX		
амг				
2	C-100	EXISTING CONDITIONS		
3	C-101	PROPOSED SITE PLAN		
DETAILS				
4	C-200	SITE DETAILS - 1 of 2		
5	C-201	SITE DETAILS - 2 of 2		
ARCHITECTURAL				
6	A-100	ARCHTECTURAL BUILDING ELEVATIONS - NORTH AND SOUTH		
7	A-101	ARCHTECTURAL BUILDING ELEVATIONS - EAST AND WEST		

Lesson 12: Creating Model Space Sheet Views

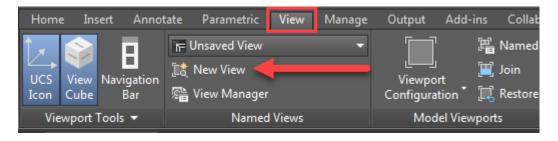
1. Under the start pane select Exercise 10 and open up X-Basemap located in the **xrefs folder**.



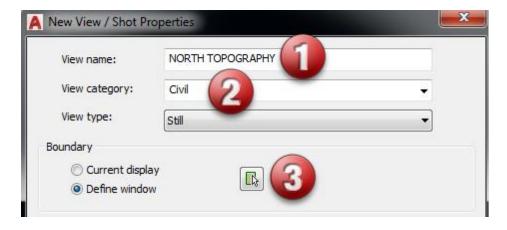
- 2. Notice in Model Space you have 3 named areas with markers.
- 3. Before making our views, check the Model space annotation scale since that is what the view will be inserted into the new drawing at.
- 4. TIP #37 Make sure the current scale is set to 1=100.



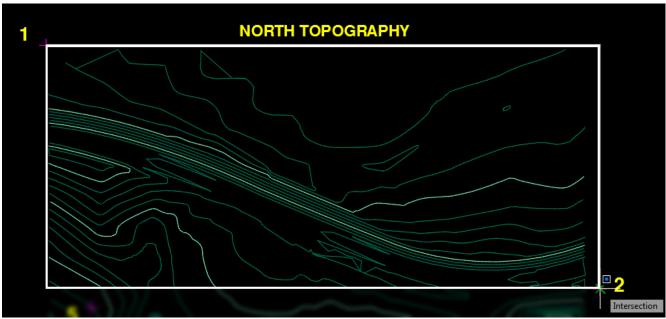
5. On the view tab of the ribbon select New View



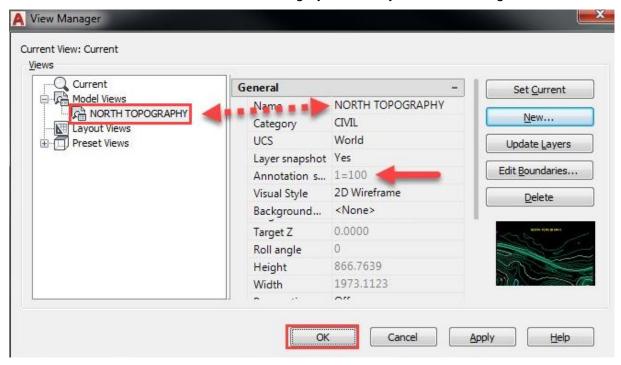
- 6. The New View properties dialog box will appear.
 - 1. Enter the view name: NORTH TOPOGRAPHY
 - 2. Enter the view category: CIVIL (this is more for organizational purposes)
 - 3. Select the window button.



7. You will be taken back out to AutoCAD to select the two corners of your view.



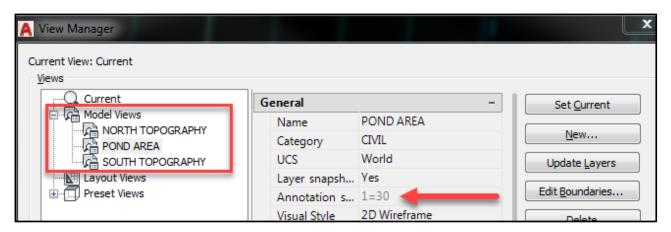
- 8. Select the intersections of the point markers shown at 1 and 2.
- 9. Select OK and your view will be placed within your drawing as shown.
- 10. The name of the view shows up in the Model View as well as the General Properties.
- 11. The Annotative Scale is set to 100 and greyed out as you cannot change that.



- 12. Follow the same procedure and create views for the **SOUTH TOGRAPHY** and then the **POND AREA.**
- 13. TIP #38 Make sure you change your model space scale to 1=30 for the POND AREA.



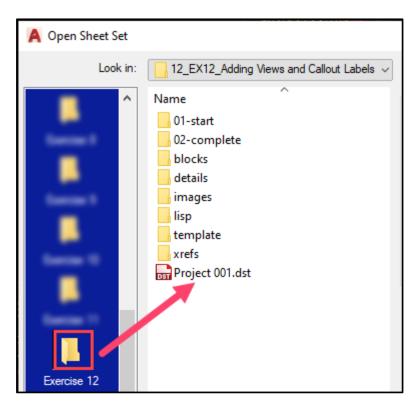
14. Your Final View list will appear as shown.



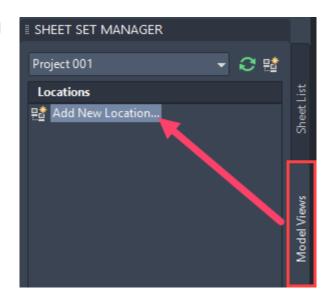
15. Close your Sheet set and drawing file.

Lesson 13: Using the Model Space Tab

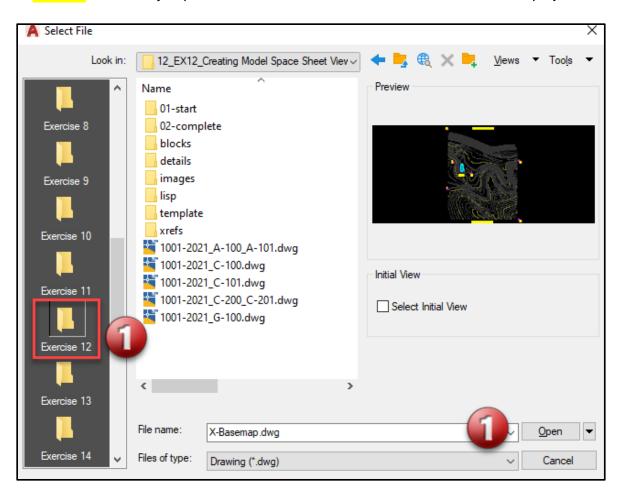
1. Open the Sheet Set located in the Exercise 11 folder.



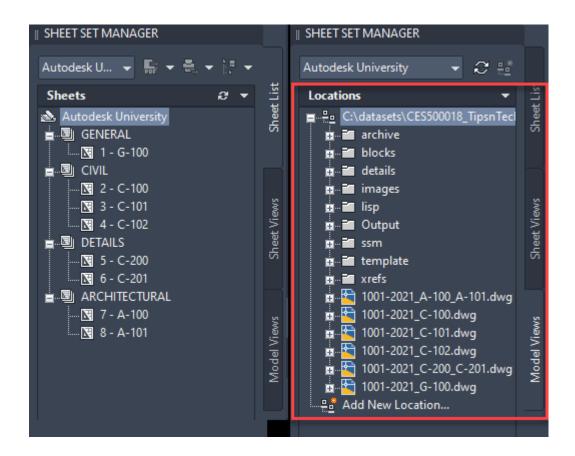
2. Move to the Model View Tab and select add a location.



- 3. Select Exercise 12 on the Start pane then select Open.
- 4. TIP #39: This is very important for users to add this folder at the start of each project.



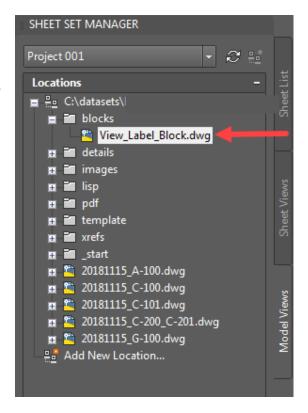
5. We now have our Model Space view setup as shown on the image to the right below.



TIP #40 Setting up the model space view not only give you access to the folders, but it can provide a way to add label view and callout blocks to your drawings quickly and efficiently.

Lesson 14: Adding Callout Blocks

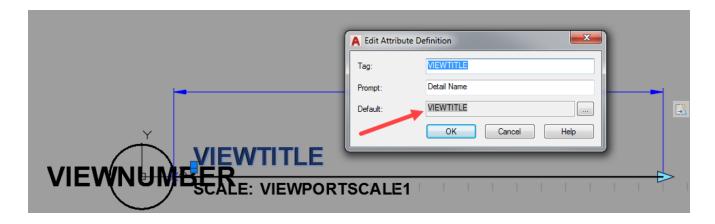
- We need to create and link our View Label Block.
- 2. Expand the details folder to see contents.
- 3. Double-click and open the drawing **View_Label_Block.**



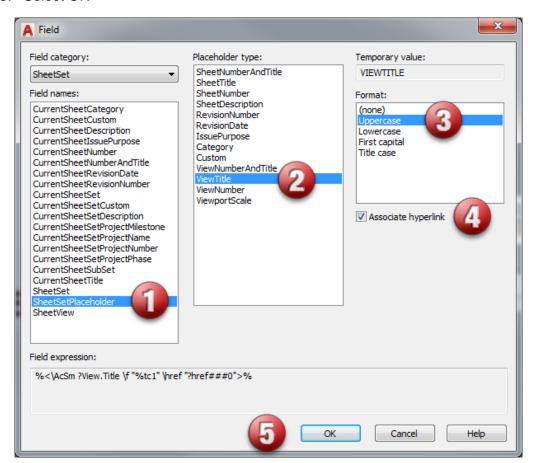
4. **TIP #41** Notice how the block has fields associated with the block. If you have an alternate way of labeling views you can customize your block by adding the same fields and referencing the text.



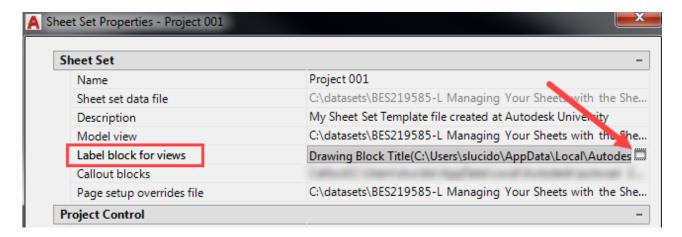
5. To view one of the fields right click the block and enter the block editor.



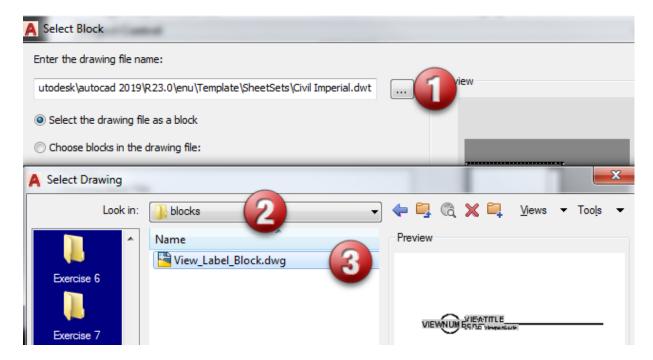
- 6. Click on the ellipse to enter the block and double-click the field.
 - 1. Enter Field Category
 - 2. Select placeholder type
 - 3. Select Uppercase Text
 - 4. Associate hyperlink.
 - 5. Select OK



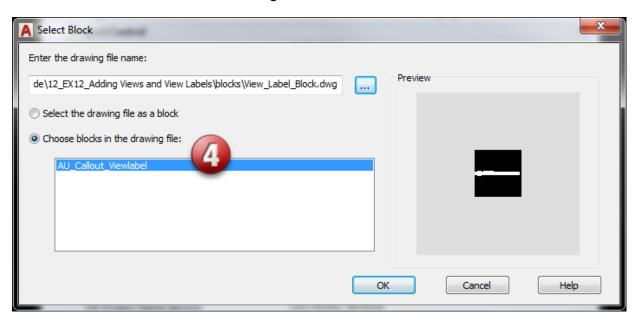
- 7. Close out of the block editor and close your drawing.
- 8. TIP #42 Move back out to the main tab of your sheet set and right click project 001 and select properties.



- 9. Select the window at the end of the Label block for views field.
 - 1. Select the ellipses.
 - 2. Move under Exercise 13 blocks folder
 - 3. Select your View_Label_Block drawing.



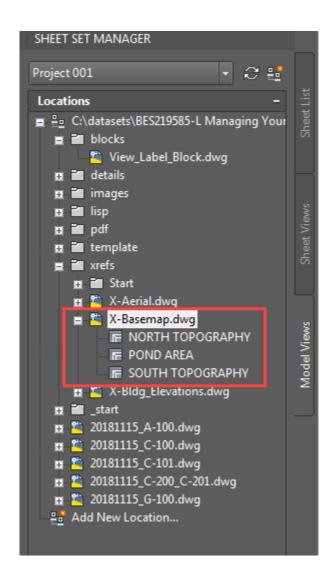
4. Choose blocks from the drawing file and select the block shown.



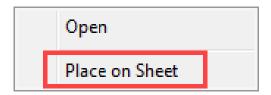
- 10. Within your Sheet List Tab open drawing C-100.
- 11. Keep in mind when you bring in a view the border and the block will reside on the layer you have current.
- 12. Set the layer to View_Border.
- 13. **TIP #43** It is important to create a new layer for the block to be placed on.



14. Under the model view tab expand the X-basemap drawing as shown.



15. **TIP #44** Right clock NORTH TOPGRAPHY and select place on sheet.

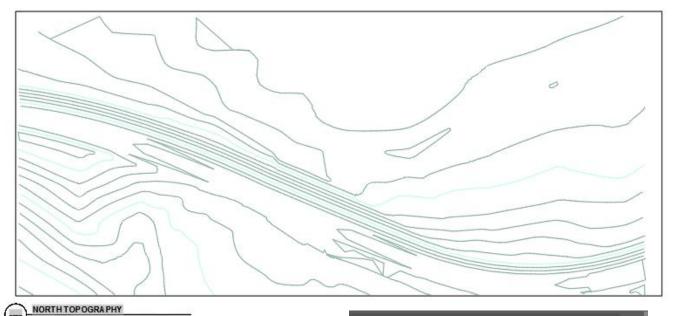


16. Your image view will be dragged into your current drawing. As you drag the view into place you can right click to change from your default scale of 1-100.

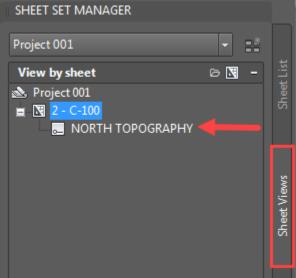
TIP #45 You can right-click to change the drawing scale upon inserting the model view into paper space.



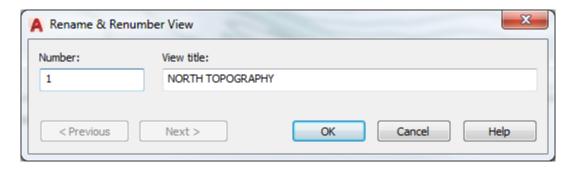
- 17. Left click and place your view.
- 18. You view along with the view label block will be placed into your drawing file with the fields populated and drawn at the correct scale.



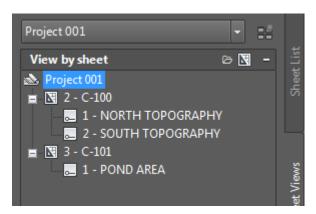
19. Move to the Sheet View tab on the Sheet Set Manager and you will see a new view.



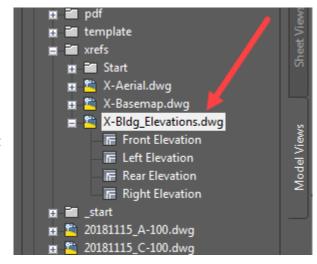
- 20. Right-click and Select Rename and Renumber.
- 21. Rename this view to 1.



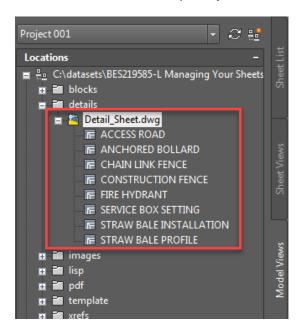
- 22. Regen your drawing to see the changes take effect.
- 23. Add the SOUTH TOPOGRAPHY view to the same sheet and name the view 2.
- 24. Move to sheet C-101 and add the POND AREA and name the view 1.
- 25. Your civil drawings are now complete.

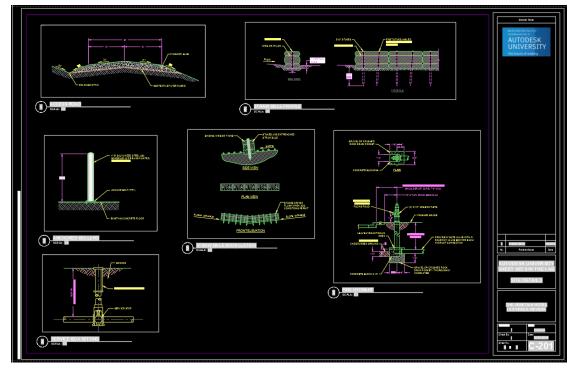


- 26. There are additional sheet views under the architectural xref.
- 27. Expand the X-Bldg_Elevations as shown and add the Front and Rear elevations to sheet A-100
- 28. Add the Left and Right Elevations to Sheet A-101.



- 29. There are a few tricks to this one. You will need to right-click to change the scale to 1/8 = 1' or another scale that fits your drawing.
- 30. Another approach would be to add the detail sheets.
 - a. Move under the details folder and expand your details folder.

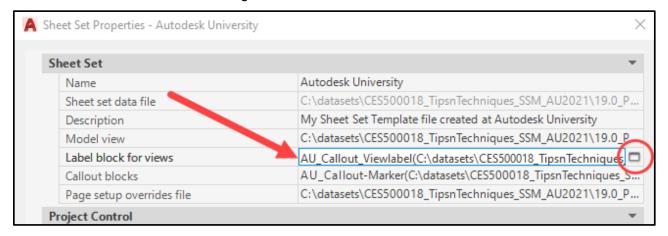




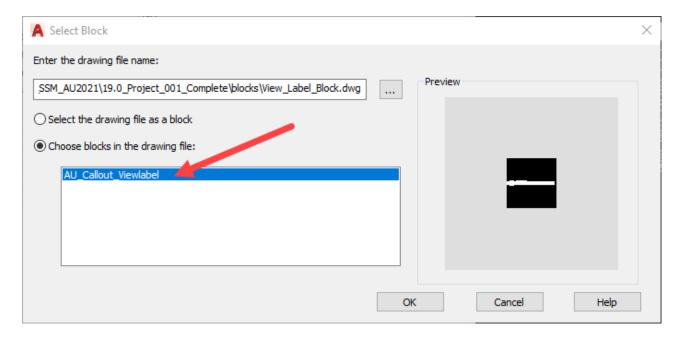
31. Add the detail into your detail sheets C-200 and C-201

Lesson 15: Adding additional View Label Blocks

- 1. Open the Sheet Set located in the Exercise 15 folder.
- 2. Navigate through the sheet set and notice that all the fields and data are populated.
- 3. Right click your project and select properties.
- 4. Select the window on the right.

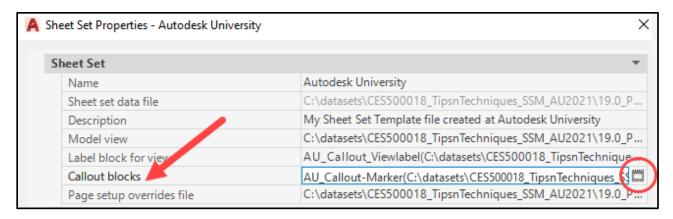


5. Select Add on the dialog box and choose the AU_Callout_Viewlabel block as shown.

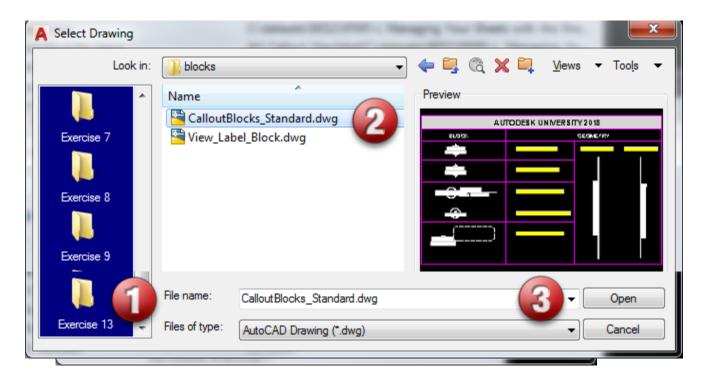


6. Next, we will follow the same procedure to add the Callout blocks.

1. Right click on your Autodesk University Sheet Set and this time select the window to the right of Callout blocks as shown.

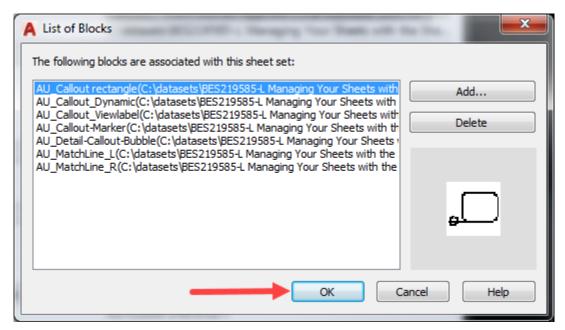


- 2. Select the blocks folder then the CalloutBlocks_Standard.dwg
- 3. Select Open.

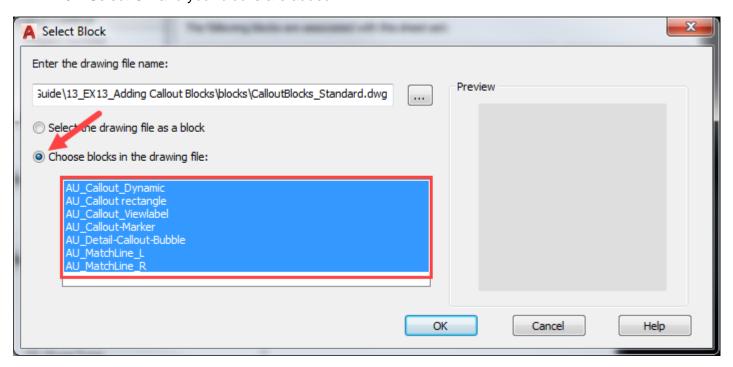


TIP #46 Create a drawing to include your standard callout blocks and save to the blocks folder.

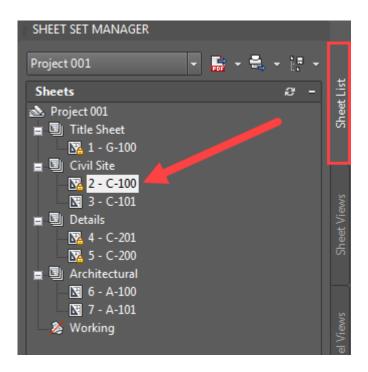
7. We are going to select choose block from drawing file and hold down our shift key and select all the drawing blocks within the file.



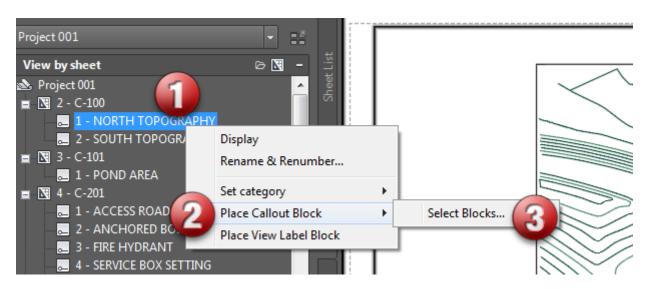
- 8. Click one hold down the shift key and select all of the blocks.
- 9. Select OK and your blocks are added.



10. Move to sheet C-100 in your sheet set and open up the drawing.

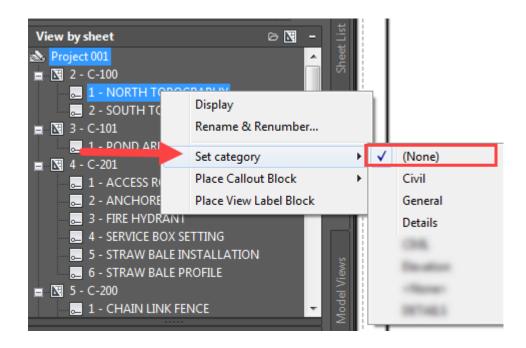


- 11. Move to the model view tab.
 - 1. Select the View North View Topography
 - 2. Place Callout Block
 - 3. Select Blocks...

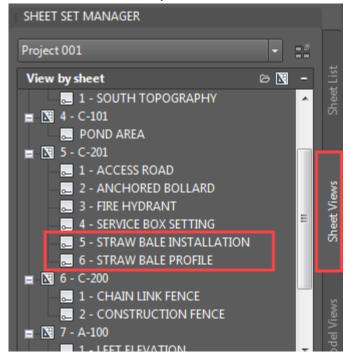


12. Since we gave the views a category you can specify what category these drawings can be associated with. This will already be set in your drawing.

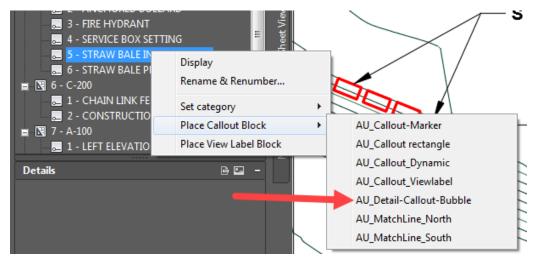
13. **TIP #46** Select None which will give us the option to choose all of our blocks regardless of category.



- 14. Open Sheet C-100 and notice there is a label for Straw Bales.
- 15. Move to the sheet view tab to see your details.



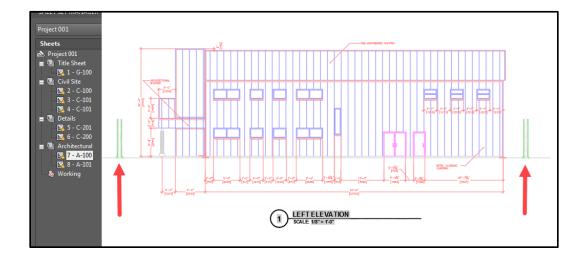
16. Right click detail 5 and select Place Callout Block then AU_Detail-Callout-Bubble.



17. Place Straw bale installation detail (5) and straw bale profile (6) on the sheet as shown.



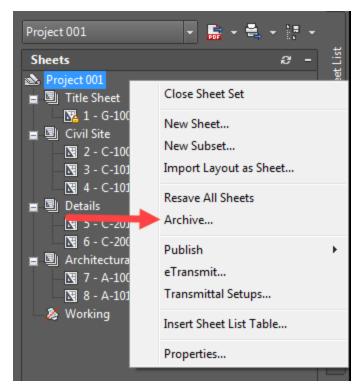
- 18. Notice how when you place the details, they are referenced back to the sheets the details are on.
- 19. We are now going to place one more label on the architectural sheets.
- 20. Move to sheet A-100 and notice there are two bollards on the left elevation view.



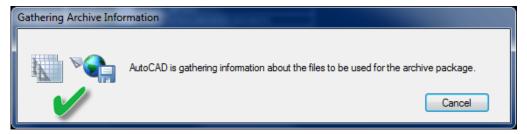
Lesson 16: Archiving and Etransmitting your Sheet Set

TIP #47 Archiving drawing sets during a design project becomes a necessary task, especially when we have those unexpected changes and "lock ups" where we need to go back a version just to see what was completed. Create a folder named archive in your project folder.

- 1. Open the Sheet Set located in the Exercise 14 folder.
- 2. Right click on your sheet set. Access the Archive command by right clicking your project and selecting archive as shown below.



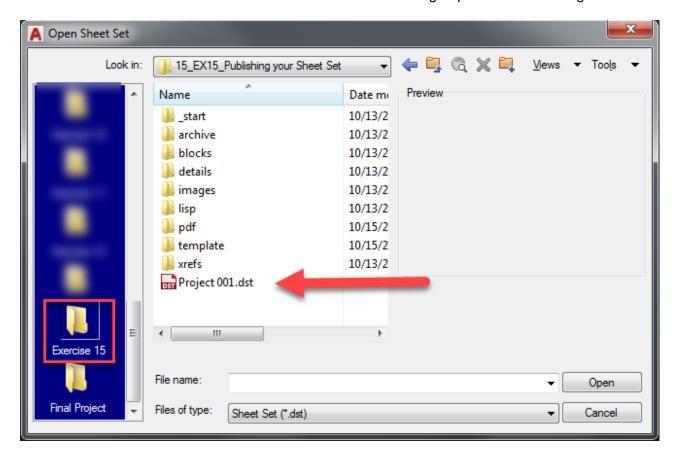
3. AutoCAD will gather the information from the sheet set, including images, xrefs, fonts, and templates.



After AutoCAD has compiled all the file locations you will see the Archive a Sheet Set dialog box. TIP #48 From this box you have 3 tabs to go through – Sheets, Files Tree, and Files Table.

Lesson 17: Publishing your Sheet Set

The final piece of any project is the production. Remember when we setup the page setup overrides earlier in this session. We will now revisit those setting to publish our drawing set.

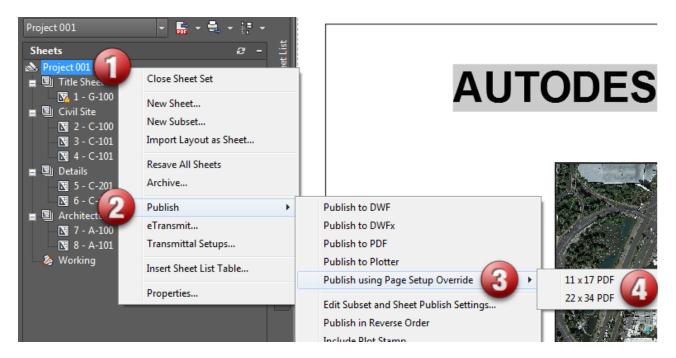


TIP #49: Remember to set the PublishCollate system variable to your preference.

Publishing sheets as a single job requires a plot driver that supports the multi-sheet plotting or printing option.

0	A published sheet set is processed one sheet at a time. Separate PLT files are created for each sheet. If the sheet set is published, the sheets might be interleaved with other plot jobs.
1	A published sheet set is processed as a single job. A multi-sheet PLT file is created. If the sheet set is published, it is never interleaved with other plot jobs.

- 1. Right click on your project and follow the 4 steps as shown.
- 2. Publish
- 3. Publish using Page Setup Override
- 4. Select your paper size.



Page Setup Override Settings.

Paper Size

Select the paper size from the drop-down list of paper sizes defined for the default plotter driver.

Plot Style Table (Pen Assignments)

Plot Style Name

Select a plot style table from the drop-down list to apply to all layouts.

Plot Style Table Editor

Click to open the Plot Style Table Editor.

Drawing Orientation

Specify if the output displays in portrait or landscape.

Plot Scale

Fit to Paper

Select to automatically scale the selection to fit the area on the paper size specified earlier.

Scale

Specify a scaling ratio for the drawing. This ratio varies depending on whether you select inches or millimeters as the measurement units.

Lesson 18: Sheet Set Commands and System Variables

TIP #50 Information within this section provided by Autodesk. There are hyperlinks attached to each of the commands to take to you the knowledge-based article on the command or system variable.

Commands

NEWSHEETSET

Creates a new project data (DST) file that manages drawing layouts, file paths, and project information.

OPENSHEETSET

The Open Sheet Set dialog box (a standard file selection dialog box) is displayed.

SHEETSET

Displays the Sheet Set Manager. The Sheet Set Manager organizes, displays, and manages sheet sets, a named collection of drawing sheets. Each sheet in a sheet set is a layout in a drawing (DWG) file

SHEETSETHIDE

Closes the Sheet Set Manager.

System Variables

CLOUDCOLLABMODIFIEDOPTION

Controls when documents (DWG and DWT files) are unlocked in BIM 360 after they are closed in AutoCAD

ENABLEDSTLOCK

Controls whether a sheet set (DST) file is automatically locked upon being opened from BIM 360

SSFOUND

Displays the sheet set path and file name if a search for a sheet set is successful. SSLOCATE must be set to 1 and the drawing file must be open for a successful search.

SSLOCATE

Controls whether the project associated with a drawing is located and opened when the drawing is opened

SSMAUTOOPEN

Controls the display behavior of the Project Manager when a drawing associated with a layout is opened. Setting this to 1 will open the sheet set automatically when the drawing file is opened.

SSMPOLLTIME

The SSMPOLLTIME timer sets the time in seconds between automatic refreshes of the status data of sheets in a sheet set. Valid values are 20-600. The SSMSHEETSTATUS system variable must be set to 2 for the timer to operate.

SSMSHEETSTATUS

The status data for layouts in the current project includes whether a layout is locked and whether a layout is missing (or found in an unexpected location). This status data can be updated automatically for all layouts.

• <u>SSMS</u>TATE

Indicates whether the Project Manager window is open or closed.

<u>UPDATETHUMBNAIL</u>

Controls updating of the thumbnail previews for views and layouts

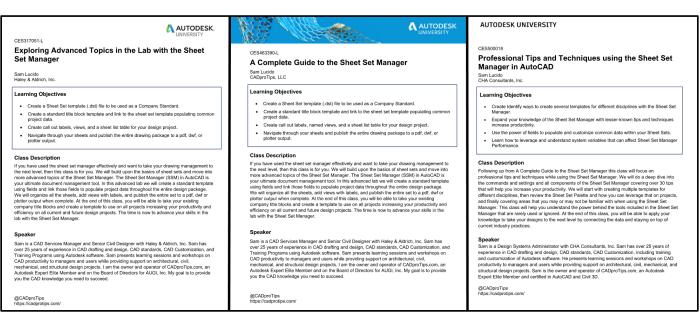
Conclusion

Autodesk first introduced the Sheet Set concept back with AutoCAD 2005. In my opinion, at first this did not go over very well, a whole new way of looking at layouts in drawings and yes there were some bugs. We are now at the 2022 version of AutoCAD and the SSM functionality is stable and greatly improved. Even if you just use the SSM as an organizational tool you will be able to access files quickly and efficiently. The real power is behind the properties of the SSM which allow you to share data and automate your data using sheet sets. We went through creating a template, linking the template (DWT) to the Sheet Set (DST) to create reusable content on projects existing and new.

TIP #51 Use this document, along with the previous 2 classes and the Mastering Sheet Sets and you will have a good foundation to continue to succeed and improve in your design workflow.

Make the Sheet Set Manager in AutoCAD work for you!





Enjoy Connecting and Learning at Autodesk University!

