Creating PDF's with MicroStation Print Organizer (CADD Files)

Using the Traffic Control Workspace

NOTE: IMPORTANT – You must use the current sheet cells. If the outside sheet fence border is the color red than replace the cells;

Print Organizer is a batch print utility that focuses on printing multiple files, models, and Project Explorer links versus just printing the active DGN file.

Print Organizer stores project deliverables in a print set file with a .pset extension. These project deliverables are represented as a set of organized print definitions. Each print definition consists of a reference to a DGN file to be published, like a sheet model in a DGN file, along with properties, such as size, scale, and form name that determine how the DGN file will be published within the print set.

Let's get started shall we?

- 1) First connect to the appropriate location of your project files.
- 2) While in MicroStation invoke the Print Organizer by simply selecting **File>Print Organizer** from the top menu. (This can also, be found on the TCP Toolbox)



Once opened go ahead and select **File>Add Files to Set** or simply hit the appropriate button as shown below along the top ribbon.



The image below displays the resultant dialog box:

reate Print Definitions	×
Input files	
	<u>A</u> dd
Print definition creation options Print style name:	Q
Manually Specified Options	
	OK Cancel

Once hitting the <u>Add</u> button the Select Files dialog box will appear already pointing to the default directory from whence you came when you started the program. (See Below) **NICE!**

K Select Files		X
Files: B-4176_TC_TCP_02A.dgn B-4176_TC_TCP_02A.dgn B-4176_TC_TCP_01.dgn B4176_TC_BTCP_02.dgn B4176_TC_TCP_01.dgn B4176_TC_TCP_01.dgn B4176_TC_TCP_01.dgn B4176_TC_TCP_01.dgn B4176_TC_TCP_01.dgn B4176_TC_TCP_01.dgn B4176_TC_TCP_02.dgn B4176_TC_TCP_03.dgn B4176_TC_TCP_05.dgn B4176_TC_TCP_07.dgn B4176_TC_TCP_09.dgn	Directories: \b4176\traffic\trafficcontrol\tcp\ p:\ b4176 b4176 b4176 b4176 bftraffic bftrafficcontrol trafficcontrol trafficentrol final_deliverable New folder text	Done Cancel
List Files of <u>Type:</u> [MicroStation DGN Files [*.dgn]	Drives: P:\\dot\dfsroot01\proj\	Help
		Remove

From here you simply select all the design files making up your set of plans. (Don't worry you can add others later)

Notice how the Add button is highlighted once you select a file or group of files? Go ahead and Hit this button once you are through with your selection. (See Below)

📕 Select Files		X
Files	Directories: \b4176\traffic\trafficcontrol\tcp\	
B-4176_TC_TCP_02A.dgn B-4176_TC_TCP_10.dgn B4176_TC_BTCP_01.dgn B4176_TC_BTCP_02.dgn B4176_TC_TCP_02.dgn B4176_TC_TCP_02.dgn B4176_TC_TCP_03.dgn B4176_TC_TCP_05.dgn B4176_TC_TCP_06.dgn B4176_TC_TCP_06.dgn B4176_TC_TCP_07.dgn B4176_TC_TCP_09.dgn	 p:\ tipprojects-b b b4176 traffic traffic control tcp final_deliverable New folder text 	D <u>o</u> ne Cancel
List Files of <u>T</u> ype:	Dri <u>v</u> es:	
MicroStation DGN Files [*.dgn]	P:\\dot\dfsroot01\proj\	<u>H</u> elp
p:\tipprojects-b\b4176\traffic\trafficcon p:\tipprojects-b\b4176\traffic\trafficcon p:\tipprojects-b\b4176\traffic\trafficcon p:\tipprojects-b\b4176\traffic\trafficcon	ntrol\tcp\B-4176_TC_TCP_10.dgn = ntrol\tcp\B4176_TC_TCP_01.dgn	Add <u>R</u> emove

Once you are satisfied with your selection (NOTE you can add or remove files) go ahead and hit Done.

The result will be reflected in the original Create Print Definition Dialog Box (See Below)

p:\tipprojects-b\b417 p:\tipprojects-b\b417 p:\tipprojects-b\b417 p:\tipprojects-b\b417 p:\tipprojects-b\b417 p:\tipprojects-b\b417 p:\tipprojects-b\b417 p:\tipprojects-b\b417	6\traffic\trafficcontrol\tcp\B-4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4 6\traffic\trafficcontrol\tcp\B4	176_TC_TCP_10. 76_TC_TCP_01. 76_TC_TCP_02. 76_TC_TCP_03. 76_TC_TCP_04. 76_TC_TCP_05. 76_TC_TCP_06. 76_TC_TCP_06.	<u>A</u> dd <u>R</u> emove
Print definition creation	options		
Delate to de la server			
Print style name:			0
Frint style name:			7
Manually Specif	ied <u>O</u> ptions		

The following is an **IMPORTANT STEP** that you must do prior to proceeding:

Once your Input files are staged within this dialog box you must select a **print style definition** that you wish applied to the files. Do this by hitting the magnifying glass found on the dialog box.

Once done you will notice the following dialog box (NOTE: These Print Style Names were specifically setup for WZTC's use) (see listing at the end of your handout)

Print Style Name	File Name
🗸 WZ Default	TRAFFIC_CONTROL_Englis
🐇 WZ_Full (22x34)	TRAFFIC_CONTROL_Englis
🗸 WZ_Half (11x17)	TRAFFIC_CONTROL_Englis
K WZ_Letter (8.5x11)	TRAFFIC_CONTROL_Englis
🥰 WZ_PDF (Full)	TRAFFIC_CONTROL_Englis
& WZ_PDF (Oversized)	TRAFFIC_CONTROL_Englis
	TRAFFIC_CONTROL_Englis
🐇 WZ_Rdwy_Half (11x17)	TRAFFIC_CONTROL_Englis

Let's pick WZ_PDF (Full)

Apply Print Style	X
Select a print style to apply:	
Print Style Name	File Name
WZ Default WZ_Full (22x34) WZ_Half (11x17) WZ_Letter (8.5x11) WZ_PDF (Full) WZ_PDF (Oversized) WZ_Rdwy_Full (22x34) WZ_Rdwy_Half (11x17)	
	OK Cancel

Once selected **Hit OK** in both this and the subsequent dialog box.

The application will visit each and every design file indicated applying the print style as it goes along.

Print Organizer Status					
Adding print definitions	to oot				
Loading design file 'p:\ \traffic\trafficcontrol\tcp	httpprojects-b\b4176	dan'			
		ugn			
]		

The final product will contain a listing of all files with the proper print/plot parameters.

The end user should now quickly review the parameters of each file listed to insure the proper results will be had once submitting for printing.

Let's review and make note of things you should be aware of:

The example below depicts some things you may wish to fix prior to saving the pset(more on this later) and or submitting all of the plots at once. *CAN YOU FIND A FEW?*

Eile Edit View Tools	× 🖻 🛪 🔺 ⊻		
🕞 Untitled	Name	File Name	Model
B-4176_TC_TCP_02A B4176_TC_TCP_01 B4176_TC_TCP_01 B4176_TC_TCP_01 B4176_TC_TCP_01 B4176_TC_TCP_02 B4176_TC_TCP_03 B4176_TC_TCP_03 B4176_TC_TCP_04 B4176_TC_TCP_05 B4176_TC_TCP_06 B4176_TC_TCP_07 B4176_TC_TCP_09	<pre><root></root></pre>	B-4176_TC_TCP_02A.dgn B4176_TC_TCP_01.dgn B4176_TC_TCP_01.dgn B4176_TC_TCP_01.dgn B4176_TC_TCP_01.dgn B4176_TC_TCP_02.dgn B4176_TC_TCP_03.dgn B4176_TC_TCP_04.dgn B4176_TC_TCP_05.dgn B4176_TC_TCP_06.dgn B4176_TC_TCP_07.dgn B4176_TC_TCP_09.dgn	Default Default Default Default Default Default Default Default Default Default

- 1) You more than likely will have to manually sort some of the sheets into the proper order prior to printing now and in the future.
- 2) Design Files containing multiple sheets will be listed (using the same name) they will be in the order as placed in the design file.
 - a. First select and preview each file (this can be done with either the preview button or by double clicking on each file)
 - b. Sort according to your findings
 - c. Once sorted rename the files

Renaming the files within Print Organizer

Once you have reviewed the listing of files and sorted them the proper order you will want to rename them according to the rules set forth for Final Submittal. NOTE we haven't printed anything yet!

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	がく ミット イン	u •			
E 📂 Untitled	Name	File Name	Model	View	Print Are
B4176_TC_TCP_01	<root></root>				
B4176_TC_TCP_01	@ B4176_TC_TCP_01	84176 TC TCP 01.dan	Default	View 1	Fence
B4176_TC_TCP_01	G 84176 TC TCP 01	B4176_TC_TCP_01.dgn	Default	View 1	Fence
B4176_TC_TCP_02	B4176_TC_TCP_01	B4176_TC_TCP_01.dgn	Default	View 1	Fence
	B4176_TC_TCP_02	B4176_TC_TCP_02.dgn	Default	View 1	Fence
B4176_TC_TCP_03	B-4176_TC_TCP_02A	B-4176_TC_TCP_02A.dgn	Default	View 1	Fence
B4176_TC_TCP_04	B4176_TC_TCP_03	B4176_TC_TCP_03.dgn	Default	View 1	Fence
B4176_TC_TCP_05	@ B4176_TC_TCP_04	B4176_TC_TCP_04.dgn	Default	View 1	Fence
B4176_TC_TCP_06	<pre>@ B4176_TC_TCP_05</pre>	B4176_TC_TCP_05.dgn	Default	View 1	Fence
B4176_TC_TCP_07	<pre>@ B4176_TC_TCP_06</pre>	B4176_TC_TCP_06.dgn	Default	View 1	Fence
	# B4176_TC_TCP_07	B4176_TC_TCP_07.dgn	Default	View 1	Fence
B-4176_TC_TCP_10	@ B4176_TC_TCP_09	B4176_TC_TCP_09.dgn	Default	View 1	Fence
	B-4176_TC_TCP_10	B-4176_TC_TCP_10.dgn	Default	View 1	Fence
	And a second sec				
	* [

Select all files within the window as shown below:

File Edit View Tools		a - a			
Untitled	Name	File Name	Model	View	Print Area
B4176_TC_TCP_01	<root></root>				
B4176_TC_TCP_01	4176 TC TCP 01	84176 TC TCP 01.dan	Default	View 1	Fence
B4176_TC_TCP_01	B4176_TC_TCP_01	B4176_TC_TCP_01.dgn	Default	View 1	Fence
B4176_TC_TCP_02	B4176_TC_TCP_01	B4176_TC_TCP_01.dgn	Default	View 1	Fence
B-4176_TC_TCP_02A	B4176_TC_TCP_02	B4176_TC_TCP_02.dgn	Default	View 1	Fence
B4176_TC_TCP_03	B-4176_TC_TCP_02A	B-4176_TC_TCP_02A dgn	Default	View 1	Fence
B4176_TC_TCP_04	B4176_TC_TCP_03	B4176_TC_TCP_03.dgn	Default	View 1	Fence
B4176_TC_TCP_06	B4176_TC_TCP_04	B4176_TC_TCP_04.dgn	Default	View 1	Fence
	B4176_TC_TCP_05	B4176_TC_TCP_05.dgn	Default	View 1	Fence
B4176_TC_TCP_09	B4176_TC_TCP_06	84176_TC_TCP_06.dgn	Default	View 1	Fence
B4176_TC_TCP_10	B4176_TC_TCP_07	B4176_TC_TCP_07.dgn	Default	View 1	Fence
at b41/0_10_101_10	B4176_TC_TCP_09	84176_TC_TCP_09.dgn	Default	View 1	Fence
	B-4176_TC_TCP_10	B-4176_TC_TCP_10.dgn	Default	View 1	Fence

While all files are highlighted select Edit>Rename from the top menu within the PrintOrganizer Dialog box as shown:



Within the resultant dialog box you will pick an expression name from the drop down:

Expression name:			
<design name=""></design>			
Expression:			B
System.Path.GetFileNameV	VithoutExtension (PrintDefinition	on.SourceFile)	
Preview Names			
Preview Names			

Within the Drop Down Listing select WZTC_PDF And watch the results in PrintOrganizer



⊡- 🥟 Untitled	Name	File Name	Model	Vie
<pre>200_005_B4176_TC_TCP_01_1 200_010_B4176_TC_TCP_01_1 200_015_B4176_TC_TCP_01_1 200_020_B4176_TC_TCP_02_1 200_025_B-4176_TC_TCP_02A 200_030_B4176_TC_TCP_03_1 200_035_B4176_TC_TCP_04_1 200_040_B4176_TC_TCP_05_1 200_045_B4176_TC_TCP_06_1 200_055_B4176_TC_TCP_09_1 200_055_B4176_TC_TCP_09_1 200_060_B-4176_TC_TCP_10_1</pre>	<pre>200_005_B4176_TC_TCP_01_140724 200_010_B4176_TC_TCP_01_140724 200_015_B4176_TC_TCP_01_140724 200_020_B4176_TC_TCP_01_140724 200_025_B4176_TC_TCP_02_140724 200_030_B4176_TC_TCP_03_140724 200_035_B4176_TC_TCP_04_140724 200_040_B4176_TC_TCP_05_140724 200_045_B4176_TC_TCP_06_140724</pre>	B4176_TC_TCP_01.dgn B4176_TC_TCP_01.dgn B4176_TC_TCP_01.dgn B4176_TC_TCP_02.dgn B4176_TC_TCP_02.dgn B4176_TC_TCP_03.dgn B4176_TC_TCP_04.dgn B4176_TC_TCP_05.dgn B4176_TC_TCP_06.dgn B4176_TC_TCP_00.dgn B4176_TC_TCP_09.dgn B4176_TC_TCP_09.dgn B4176_TC_TCP_10.dgn	Default Default Default Default Default Default Default Default Default Default Default	Vie Vie Vie Vie Vie Vie Vie Vie Vie Vie

All files have been renamed for final delivery into the project common folder setup by contracts for Transportation Management Plans.

Now merely select all files listed and hit the printer icon within printorganizer.

Make Sure to create separate print jobs

The resultant pdf's will be created in the same directory as the MicroStation files unless you indicate otherwise.

I suggest you leave in the CADD file directory until you have gotten the plans signed and sealed through DocuSign. Once signed and sealed you will no longer need the working copies.

nt		×
Printer Driver	Configuration	
File name:	pdf.pltcfg	
Type:	Bentley PDF printer driver	Printer Setup
Print Range		Copies
O AII		Number of copies: 1
 Selection 		Make sure to select
Submit		Separate print jobs
	Create print file	
Submit as:	Separate print jobs	Output File Names
Destination:	P:\TIPProjects-B\B4176\Traffic	:\TrafficControl\tcp\
	Use master design file direct	ctory for print destination
	Either leave as default or select a different location	OK Cancel

Tip on printing PDF's all at once.

Hit the start button in lower left hand corner of windows and select >devices and printers

Once all printers are displayed double click on the desired output device

(For the plotter in room 374 Central plotting area choose TE248546) note if running particularly slow select TE248546ps which is the postscript version of the same device.

TE248546 on dot-ccpp05								
Printer Document View	er Document View							
Document Name	Status	Owner	Pages	Size	Submitted	Port		
			_					

From the top menu select>Printer>Printer Preferences

dvanced	Printing Shortcuts	Paper/Quality	Features	Color	Services			
Paper (Options							
	520				1			
Docun	nent size:	34 ×	22 inches			1077		
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Paper	source:				Print Quality	8 S	5.	
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Make sure to setup the device by selecting the proper paper size and orientation:

34x22 inches or "D" sized sheet & Landscape mode

HIT OK once setup properly

Using windows explorer go to location on the server where pdf's reside and once selecting all pdf's right click and drag and drop onto the opened print queue dialog box

A small dialog should open and simply pick print;

A warning will immediately appear advising you that you are printing multiple files to which you answer to the affirmative.

THAT'S IT.....All plots will come out as desired (no trimming if done right)

Resource Links:

Link to PEF PowerPoint Presentation regarding esignatures:

https://connect.ncdot.gov/projects/roadway/Private%20Engineering%20Firm%20Resources/Forms/AllIt ems.aspx

Link to FileRenamer utility: (Note we will most likely do this initially)

https://connect.ncdot.gov/resources/CADD/PlanFileRenamer/Forms/Allitems.aspx