Workflow MP 1- MicroStation Printing

This document guides you through the basic functions of MicroStation printing. It is used for printing single sheets on a sheet by sheet basis. See workflow document *CDOT Workflow Print Organizer* for guidance on printing multiple sheets at one time.

There are two procedures that can be used to set printing properties. The first is using a *Print Style* (new in MicroStation V8i SS2) and the second is using a *Print Driver* (similar to past versions of MicroStation).

Note: Mixing the two printing procedures is known to create some inconsistencies. If you find that something does not look correct, it is best to cancel out of the Print dialog box and start over using only one of the procedures.

Using Print Styles

A Print Style is a collection of frequently used print properties that have been saved for later use. Default CDOT Print Styles have been created for common settings and are included in the CDOT workspace. These Print Styles automatically set a Printer Driver, Pen Table, scale, page size of 11x17 landscape orientation, toggles on line styles and line weights, and sets the printer.

- 1. Print Style settings are accessed from the *Print* dialog box.
- 2. From the *Settings* pull down menu, select *Apply Print Style*.



3. Nine Print Styles have been created. Two drivers have been created for default Adobe PDF file creation; one for draft quality and one for high quality outputs.

Ч	Print - A	Apply Print Style	X	
Ë	rint style:	CDOT Default Plotter	•	
		CDOT Default Plotter		
		CDOT Default Printer		
		CDOT PDF (Color)		
		CDOT PDF (Draft Quality)		
_		CDOT PDF (High Quality)		ſ
		CDOT ROW Plotter		
		CDOT ROW Printer		
		CDOT Shaded Plotter		
		County Sheet Composer		

- 4. Select a Print Style and *<D>OK*. This will automatically set the appropriate print settings.
- 5. **<D>** the *printer icon* or use *File > Print* to print the document.
- 6. If a Print Style was selected for a printer or plotter, the file will be sent to the device.
- 7. If a Print Style was selected for Adobe PDF creation, the user will be asked to name the file and save it. Navigate to the correct directory and enter a file name to save the file. Select **Save**.

📕 Save Print As	- C:\Projects\8710	17\Plot_Sets\		×
Save in:	Plot_Sets	•	G 🤌 📂 🛄 -	3 🖲
Ca	Name	*	Date modified	Туре
Recent Places	AD		2/4/2011 8:25 AM	File folder
	FOR		2/4/2011 8:25 AM	File folder
Desktop	퉬 ROWPR		2/4/2011 8:25 AM	File folder
Libraries				
Computer				
Network				•
	File name:	12345DES_PnP09.pdf		 Save
	Save as type:	Print Output Files (*.*)		Cancel

Note: For tips on printing raster references (e.g. aerial photos), see the workflow **Printing Raster Images**.

Using Default Printer Driver Settings

- *Note:* When using this method of printing, it is important to check the line weight setting under the print attributes to make sure it is toggled on before creating a plot.
- 1. In MicroStation V8i, place a fence to define the print area.



Note: As of this printing if you place the fence BEFORE activating the Print command, the line weight toggle will be turned off. This will be fixed in the next service pack (SS3) from Bentley due out in the fall of 2011.

2. Set the *Fence Type* to **Block**. This *Fence Type* will work for both sheet borders placed as reference files and as cells.



3. Place the fence by snapping to the outer corners of the plot boundary. The shape defining the outer edge of the border (in this example) is called SHEET_Plot-Boundary.



4. Open the **Print** dialog box by selecting **File > Print**.



5. Optionally, **<D>** the *Printer* icon an the Standard Tool Box.



6. The current *Printer Driver* will display in the title bar at the top of the *Print* dialog box.



7. Make sure the *Fence* option is selected under *General Settings*.



8. The current **Pen Table** will display under the *General Settings* area of the dialog box.

📕 Print Xerox Phaser 8560N PS (CDOT-DefaultPrinter_V8i.pltcfg)
<u>F</u> ile <u>S</u> ettings <u>P</u> enTable
General Settings
Area Fence Rasterized
View: View 1 Vie
Color: True Color Copies: 1
Pen table: CDOT-Pen Table.tbl
Printer and Paper Size
Paper: 1/x11
Total area: 17x 11 in.
Landscape Send to printer Show design in preview
Print Scale and Position
Scale: 100.000 Q 1 in. (paper) to 100.000 ' (design)
Size: 17.000 11.000 in. ++ Maximize Rotation: None -
Origin: 0.000 in. 🔽 Auto- <u>c</u> enter

9. If these settings are correct (default printer using CDOT-PenTable.tbl), check to make sure pen weights have been toggled on under the *Settings > Print Attributes* pull down.

🦊 Print	Xerox Phaser 856	ON PS (CDO	T-Default	Printer_		
<u>File</u> S	ettings <u>P</u> enTabl	e				
	<u>U</u> nits	+	•			
Gene	Update from <u>V</u> iev	v				
Area	Set Fence from Fi	t All	ized			
Viev	Set Fence from Fi	t <u>M</u> aster				
	Apply Print Style					
Por	Print Attributes					
ren	Raster Options					
Print	<u>3</u> D Plotting					
Wi	Hidden Line Rem	oval	Full			
Pape	<u>P</u> references		• '			
Total ar	nea: 17x 11 in.					
Lands	scape 🔻 Se	nd to printer	•	🔽 Sh		
V Print /	Attributes			×		
P+ 1111C7	-tenbutes					
🔽 Clip I	Back	📃 Le	vel Override	s		
Clip	Front		e Styles			
	volume		e <u>Weights</u>			
Dime	ensions	V Po	ints			
🔽 Data	a Fie <u>l</u> ds	🗸 Ta	gs			
Disp	lays <u>et</u>	V Te	<u>xt</u>			
Fast	<u>Cupres</u>	Te	xt N <u>o</u> des			
Fill	Fast Curves Fill Fill					
Print	Print broken associations with different symbols or					
Appl	y print color mode to	raster	oymoology			
Use view background color when rendering						
	hard and a second se					
Print	border	Prir	nt fence			
Border co	omment:					
	<u>о</u> к	Cancel				

- 10. Once toggled on, **<D>** *OK* to close the Print Attributes dialog box.
- 11. **<D>** the *printer icon* or use *File > Print* to print the document to the default printer.

Changing the Default Printer Driver Settings

Seven default CDOT printer drivers have been created for common settings and are included in the CDOT workspace. Settings like Pen Table can be changed by the user. Follow the same steps in the above section *Using Default Printer Driver Settings* to start the printing workflow.

1. The default printer driver sets the *CDOT-DefaultPrinter_V8i* printer driver. To change this, <D> the magnify glass icon under the Printer and Page Size section in the print dialog box.

Nervint Xerox Phaser 8560N PS (CDOT-DefaultPrinter_V8i.pltcfg)
<u>File</u> <u>Settings</u> <u>P</u> enTable
General Settings
Area: Fence Rasterized
Mew: View 1
Color: True Color Copies: 1
Pen table: CDOT-Pen Table tbl
Printer and Paper Size
Windows driver V Q N V Full
Paper: 17x11
Total area: 17x 11 in.
Landscape Send to printer Send to printer Show design in preview
Print Scale and Position
Scale: 100.000 Q 1 in. (paper) to 100.000 ' (design)
Size: 17.000 11.000 in +++ Maximize Potetion: Mana
Origin: 0.000 0.000 in. 📝 Auto- <u>c</u> enter

2. Select the appropriate *Printer Driver* (for example, *CDOT-PDFHighQuality_V8i.pltcfg*) and *<D> Open*.

Select Printer Driver Configuration File - C:\Workspace\Workspace-CDOT_V8i\Standards							23
Look in:	Plotter Driver		- (3 🦻	⊳	8	*
Recent Places Desktop Libraries Computer	Name CDOT-Defau CDOT-Pefau CDOT-PDFD CDOT-PDFH CDOT-ROW CDOT-ROW	IttPlotter_V8i.pltcfg IttPrinter_V8i.pltcfg raftQuality_V8i.pltcfg ighQuality_V8i.pltcfg DefaultPlotter_V8i.pltcfg DefaultPrinter_V8i.pltcfg ed_PlotterDriver_V8i.pltcfg					
Network	File name:	CDOT-DefaultPlotter_V8i.pltc	sfg		•	Open	
	Files of type:	Printer Driver Configuration F	iles (*.pltcf	fg;*.plt)	•	Cance	!

3. Check the *Pen Table* setting. If it needs to be changed (for example to the color pen table), select the *PenTable* pulldown and *<D> Attach*.

📕 Print (CDOT-	PDFHighQua	lity_V8i.pltcfg)	
<u>File</u> <u>S</u> ettings	PenTable		
🚵 🗣 🕂	New		•
General Settings	<u>A</u> ttach		
Area: Fence	<u>E</u> dit	Rasterized	
<u>Vi</u> ew: View 1	<u>D</u> etach	Print to 3D	
Color: True Co	lor 🔻	Copi <u>e</u> s: 1	
Pen table: CD	OT-PenTable.	tbl	

4. Select the appropriate pen table and *<D> Open*.



5. Once the settings are correct, check to be sure pen weights have been toggled on under the *Settings > Print Attributes* pull down.

N Print Xerox Phaser 8560N PS (CDOT-DefaultPrinter					
<u>File</u> <u>Settings</u> <u>P</u> enTable					
Units Update from View Gene Set Fence from Fit All Are Set Fence from Fit Master Mev Set Fence from Fit Master Apply Print Style Col Print Attributes Print Per Raster Options Print 3D Plotting Wi Hidden Line Removal Pape Preferences Total area: 17x 11 in.	· · ·				
Landscape Send to printer	Sh				
📕 Print Attributes	X				
Image: Clip Back Level Overrides Image: Clip Front Image: Level Overrides Image: Clip Volume Image: Line Styles Image: Clip Volume Image: Line Weights Image: Clip Volume Image: Clip Volume Image: Clip Volume Image: Clip Volume <td< td=""><td></td></td<>					
Border comment:					
<u>O</u> K Cancel					

- 6. Once toggled on, *<D> OK* to close the Print Attributes dialog box.
- 7. **<D>** the *printer icon* or use *File > Print* to print the document to the default printer.