

# LAB 23 - Batch Printing to PDF

In this lab, you'll use **Batch Printing** to print multiple files at one time. Instead of printing to a printer, you'll print to PDF for the reproduction department (i.e. a plot set for a milestone submittals).

**Note:** To batch print to a printer, see the workflow CDOT Batch Printing.

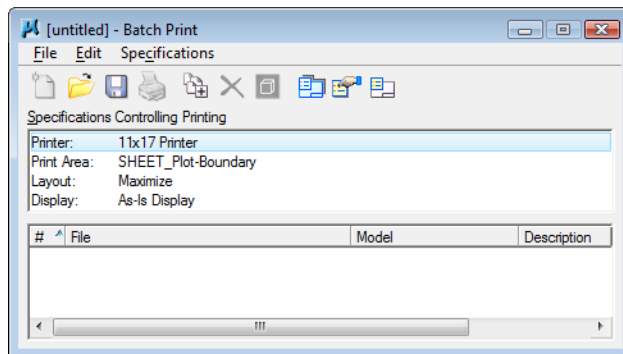
## Chapter Objectives:

After completing this exercise you will know how to:

- Select files to batch print.
- Set and change batch process specifications.
- Create a batch process job file (\*.job).
- Batch print to PDF files.

## Lab 23.1 - Select Files to Batch Print

1. Select **Batch Print** in MicroStation from the file pull down menu.



**Note:** You can be in any MicroStation file when you run the **Batch Print** process.

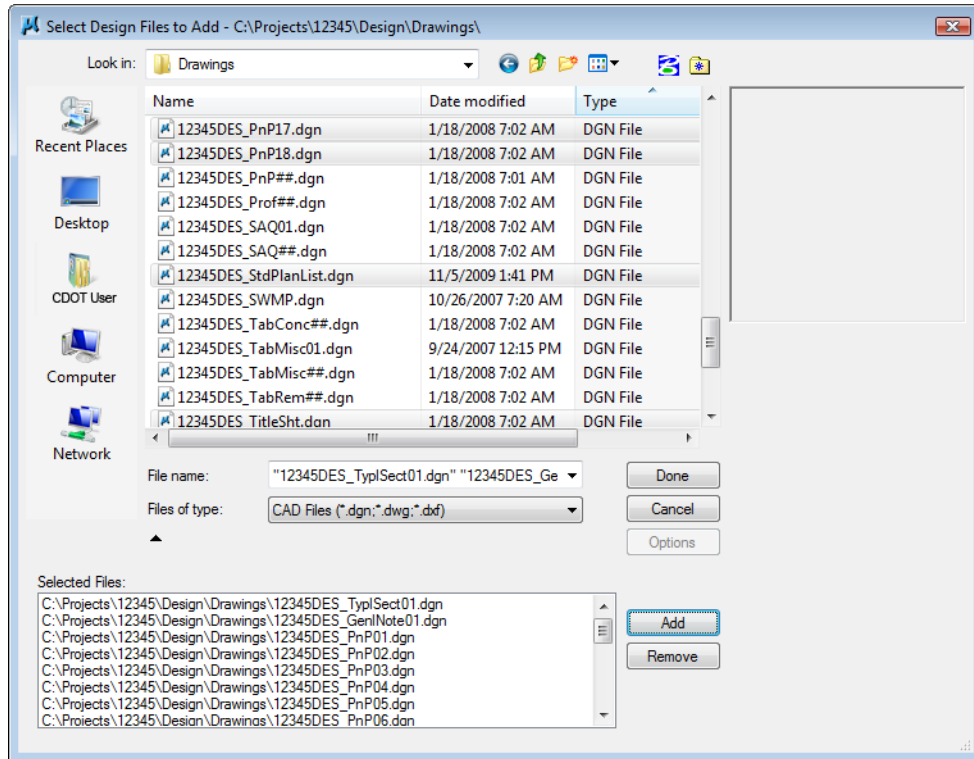
2. In the **Batch Print** dialog box, select **Edit > Add Files**.

**Note:** **Add Active File** adds the design file that is open in MicroStation.

3. Navigate to the C:\Projects\12345\Design\Drawings folder. Select the following files to add to the batch process (you can hold down the **Ctrl** or **Shift** key to select multiple files):

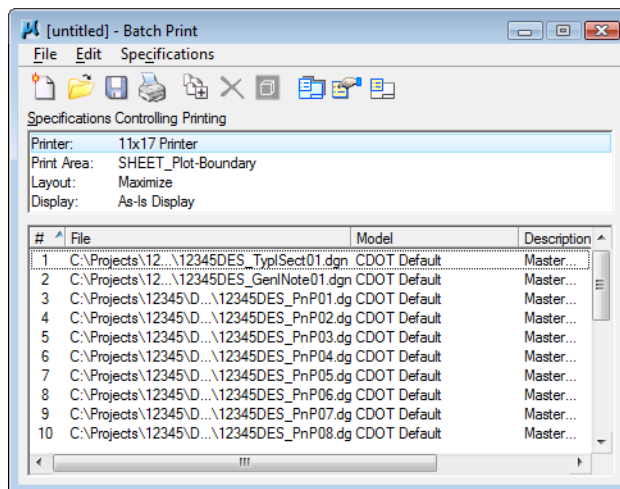
- ◆ 12345DES\_GenNote.dgn
- ◆ 12345DES\_PnP01.dgn – 12345DES\_PnP19.dgn
- ◆ 12345DES\_StdPlanList.dgn
- ◆ 12345DES\_TitleSheet.dgn
- ◆ 12345DES\_TypISect01.dgn

4. Select **Add**.



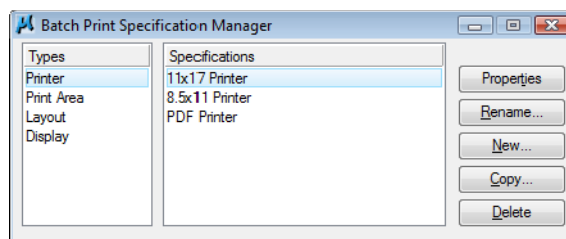
**Note:** If you want to add other sheets to the batch process, you can change folders, select the file(s) and select **Add** again.

5. When finished adding files, select **Done**.



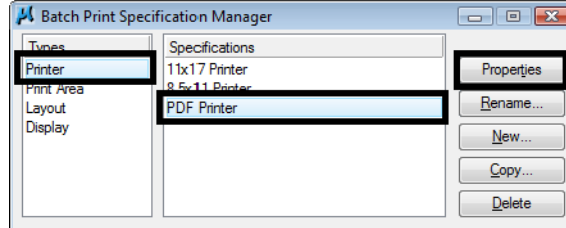
## Lab 23.2 - Set Batch Process Specifications

1. The batch process default specifications are:
  - ◆ **Printer: 11x17 Printer**
  - ◆ **Print Area: SHEET\_Plot-Boundary**
  - ◆ **Layout: Maximize**
  - ◆ **Display: As-Is Display**
2. Select **Specifications > Manage** to change the default specifications.



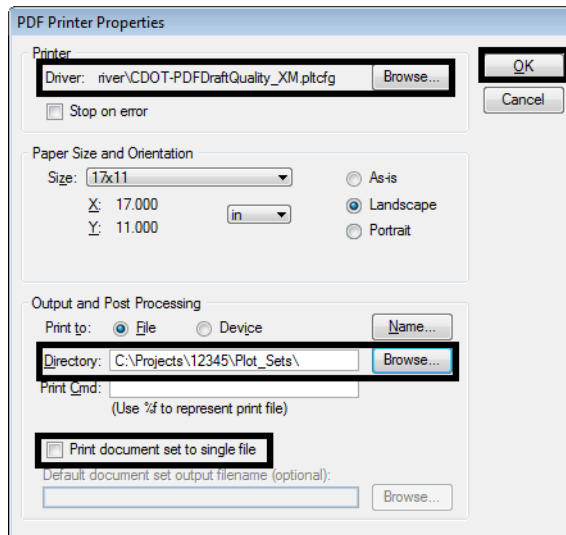
3. Under **Types**, select **Printer** and **PDF Printer**

- ◆ Select **Properties**



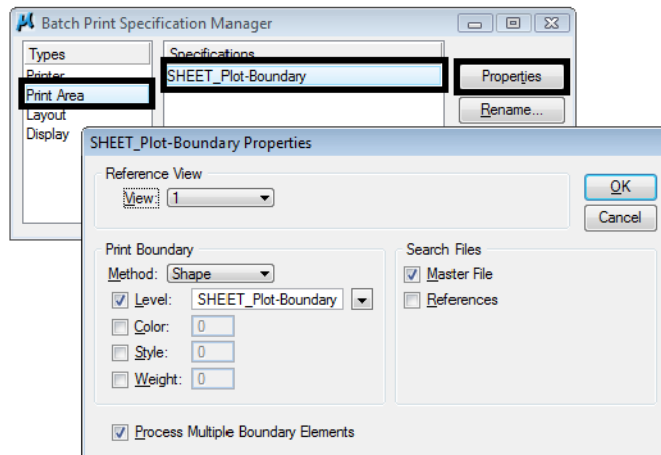
- ◆ Select **Driver** and select **CDOT-PDFDraftQuality\_XM.pltcfgr** and select **OK**
- ◆ Toggle off **Print document set to single file**

- ◆ Set the **Directory** to **c:\projects\12345\Plot\_Sets\**



**Note:** To print all these sheets to a single PDF, the toggle for **Print document set to single file** must be **ON**

- ◆ Select **OK**
- ◆ Under **Types**, select **Print Area** and then select **Properties**.



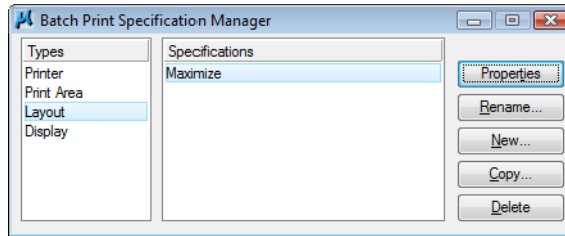
**Note:** The printable area defaults to the outer boundary of the standard CDOT sheet border (the yellow shape on level **SHEET\_Plot-Boundary**).

Just **Master File** is checked **ON** under **Search Files**.

If **References** is toggles **ON** and the level **SHEET\_Plot-Boundary** is not found in the **Master File** as a cell, it will search for the level in the Reference files associated with the sheet file. This might cause blank sheets to be generated.

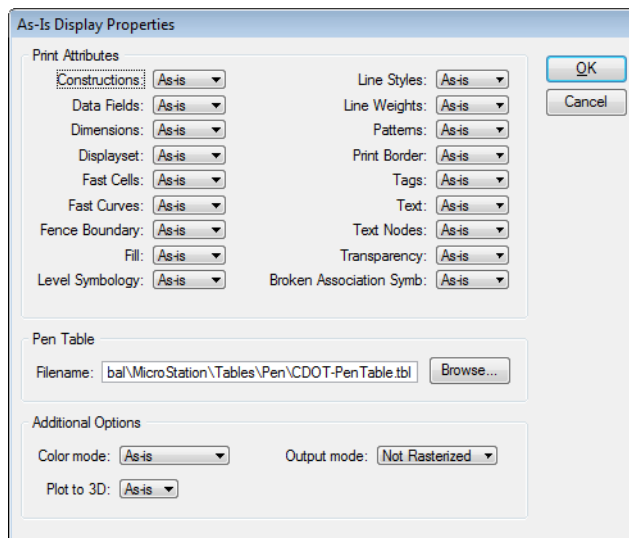
4. Cancel the **Properties** box.

- Under **Types**, select **Layout** and then select **Maximize**.



- Under **Types**, select **Display**

- ◆ Select **As-Is Display**
- ◆ Select **Properties**

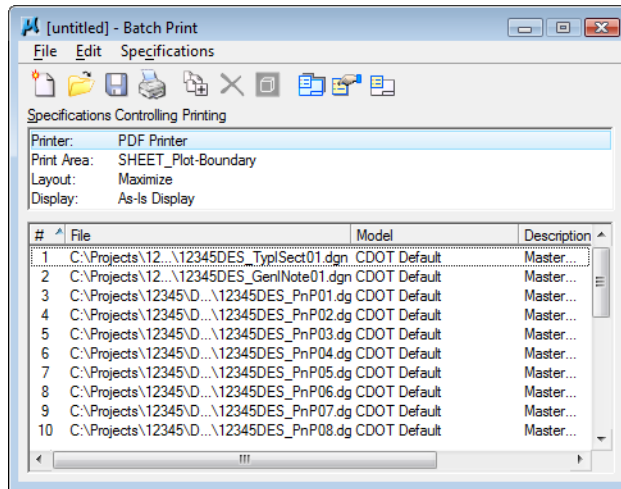


**Note:** The **As-Is Display Specification** sets up the print properties for various elements. The **As-Is** setting reads MicroStation's View Attributes setting for each design file.

The Pen Table defaults to **CDOT-PenTable.tbl**, which is the table used for black-and-white printing.

- Cancel** out of the **Properties** box.
- Close** the **Batch Print Specification Manager** box by selecting the **X** in the upper-right corner.

Your changes are shown in the main **Batch Print** dialog box.

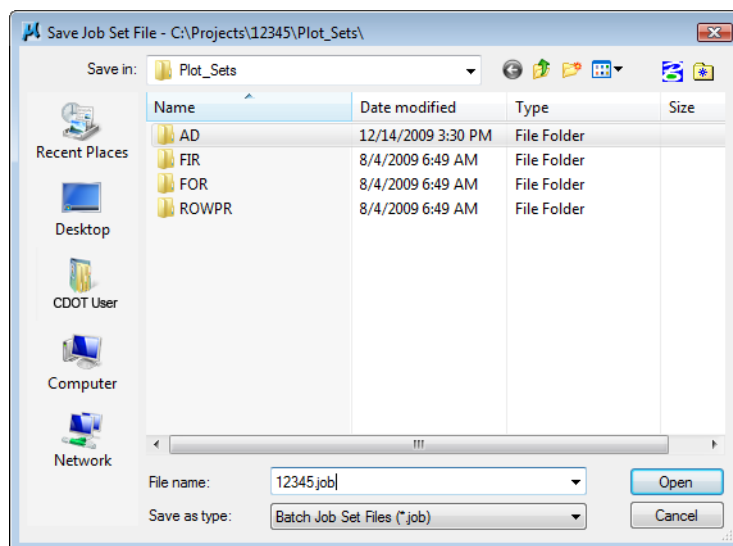


# LAB 23 - Save your Specifications to a Job file (\*.job)

1. From the Batch Print dialog box, select **File>Save As...**
2. Navigate to the project's ...**Plot\_Sets** folder.

**Note:** You should select one of the subfolders (FIR, FOR, etc.) for the appropriate plot set. For training purposes, you'll plot to the upper level Plot Sets folder.

3. In the **Files** field, key in **12345** and select **OK**.



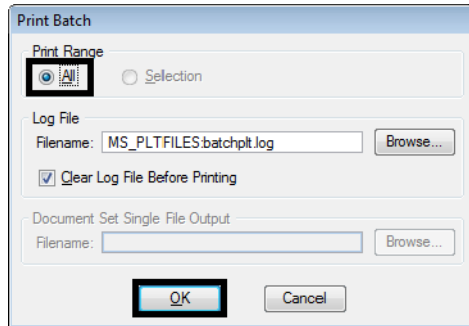
The job file should be saved to the project in the appropriate folder under the **Plot\_Sets**. The file is automatically assigned a .job extension. If you want to process this job again, select **File > Open** from the **Batch Print** dialog box and choose the **12345.job** file.

## Lab 23.1 - Create the Batch Prints

1. Select the **Print** icon to open the **Print Batch** dialog box.



- In the **Print Batch** dialog box, set **Print Range** to **All** to print all the files selected



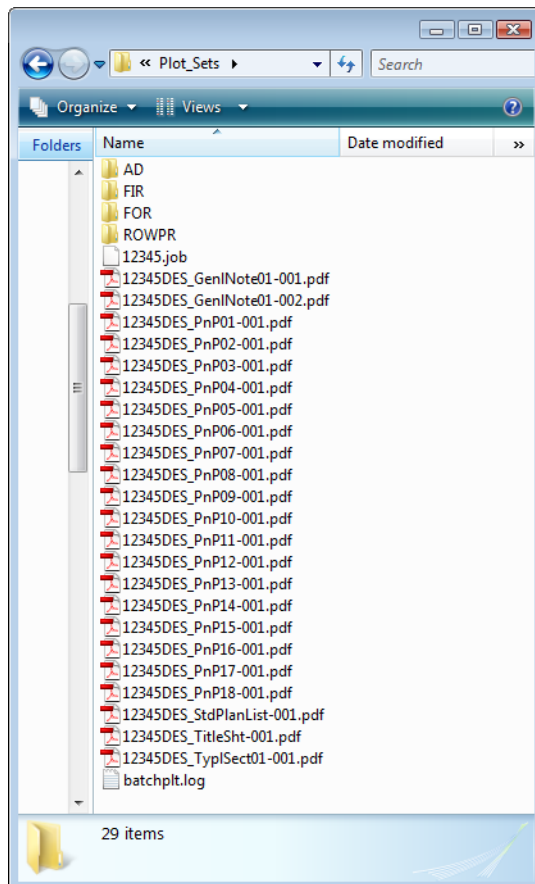
**Note:** The option **Selection** would print only the files that you highlight in the list.

- Select OK to start the batch process.

The process will take a few minutes to complete. If errors are encountered, open the error log **batchplt.log** in the **C:\Projects\12345\Plot\_Sets\** folder for more information.

## Lab 23.2 - Review the PDF files

- In Windows, open **My Computer**.
- Navigate to the **C:\Projects\12345\Plot\_Sets\** folder.





**Note:** The folder contains the all the individual pdf file sheets plus the **12345.job** file and batch log file.

3. Double-click on one of the **pdf** files to open.

**GENERAL NOTES**

Contractor shall not park any vehicles or equipment in, or disturb any areas not approved by the Engineer.

Willings shall become the property of the State. The Contractor shall supply all necessary equipment to haul this material to a site within the limits of the project as directed by the Engineer.

Prior to placing bituminous pavement, the paved surface shall be swept and cleaned. This will not be paid for separately, but shall be included in the cost of the Hot Mix Asphalt Pavement Item.

The Contractor shall coordinate the shouldering operation such that full compliance to the existing grade is obtained as a daily basis following the paving operation for the affected area unless otherwise approved by the Engineer.

Overlay of planned areas shall commence within 5 working days following the planning unless otherwise approved by the Engineer.

The pavement shall be cut to a neat line (XX) as directed by the Engineer. This will not be paid for separately, but shall be included in the Hot Mix Asphalt Pavement Item.

It is estimated that the old road is to be obliterated at the following locations: (XX - XX)

Moisture-density control will be required for the full depth of those embankments on this project.

Depth of moisture-density control for this project shall be as follows:  
 Full depth of embankment within 100 feet of bridge abutments.  
 Top (XX) Feet of these embankments which (XX) Feet or more in height.  
 Full depth of all embankments:  
 Base of cuts and fills (XX) Feet.  
 Base of fills (XX) Feet or less in height, (XX) Feet.  
 Full depth of near dikes (cross with bridge sections).  
 Full depth of embankment sections used for ditches and channel changes.

Excavation required for connection of bases of cuts and fills will be considered as subsidiary to that operation and will not be paid for separately.

The minimum thickness of topsoil shall be (XX) inches. It is estimated that (XX) Cu Yds. will be required based on the average thickness of (XX) inches.

Type of connection for this project will be ASHOTO 7-(XX).

Concrete size (incl. fasteners as shown as 8-Bars) are required on:  
 All concrete support installations including side drains.  
 All concrete in-pipe installations located at stations (XX)XXXX.

Guard posts, delineators and (XX) will be provided by State forces at no cost to the project. Mile posts will be adjusted or reset by State forces at no cost to the project.

It is estimated that (XX) gallons of pavement marking paint will be required as this project as follows:  
 White.....(XX) gallons  
 Yellow.....(XX) gallons

Final signing and striping will be done by state forces at no cost to the project.

It is estimated that (XX) hours of blasting with a vector grader in the (XX) to (XX) (XX) feet, horsepower range will be required as directed by the Engineer.

It is estimated that (XX) hours of grading with a power grader type tractor in the (XX) to (XX) horsepower range will be required as directed by the Engineer.

**As Constructed**

As Constructed	Project No./Code
No Revisions	Project Number
Revised	Code
Not	Sheet Number XXX

Sheet Revisions

Date	Comments	By

As Constructed

As Constructed	Project No./Code
No Revisions	Project Number
Revised	Code
Not	Sheet Number XXX

Sheet Revisions

Date	Comments	By

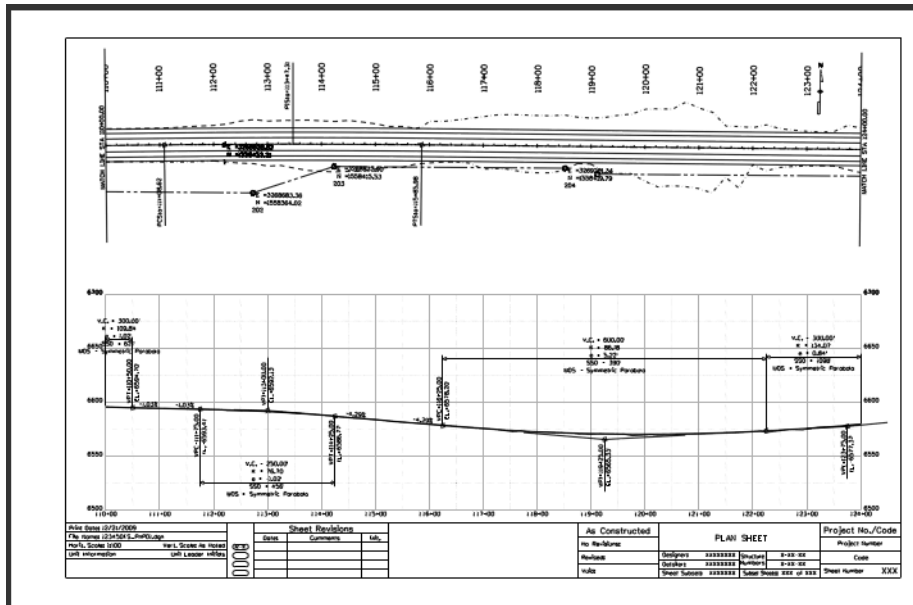
As Constructed

As Constructed	Project No./Code
No Revisions	Project Number
Revised	Code
Not	Sheet Number XXX

Sheet Revisions

Date	Comments	By

4. Continue opening sheets as desired.



5. **Close** My Computer.
6. Return to MicroStation and **Exit**.

