

CDOT MicroStation PDF Composer



This document guides you through using MicroStation PDF Composer to create PDF renditions of MicroStation files. PDF Composer runs outside of MicroStation so it is not necessary to have MicroStation open to run this utility.

MicroStation PDF Composer is based on the IPlot plotting system from Bentley and uses a different set of configuration and settings files than the MicroStation Print and Batch Print commands. PDF Composer uses design scripts instead of .plt files and pen tables for reassigning line weights, colors, priorities, etc. For each MicroStation pen table a corresponding design script has been created. Plot sets can be stored in .ips files instead of .job files used by Batch Print. In addition, PDF Composer has the ability to use settings files for configuring default plot parameters such as paper size, design script, sheet border, etc. Several settings files have been created for common paper sizes and design script settings. The default settings are for 11x17 inch paper size and the CDOT-PenTable design script.

Basic PDF Composer Workflow

There are two methods for starting PDF Composer

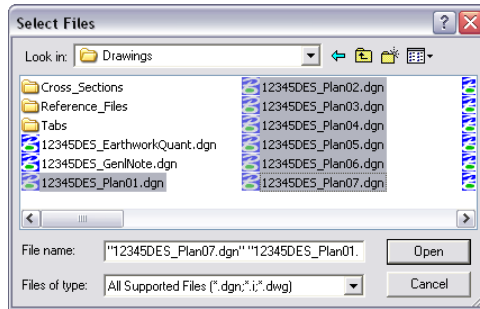
- From the Windows Start menu select **Start > All Programs > Bentley > MicroStation V8 XM > MicroStation PDF Composer**
 - If MicroStation is open select **File > PDF Composer...** from the MicroStation pull-down.
1. Once the program initializes the **Welcome** dialog will be displayed. Select the **Create a new plot set** option and <D> **OK**. This will bring up the **Create Plots** dialog.



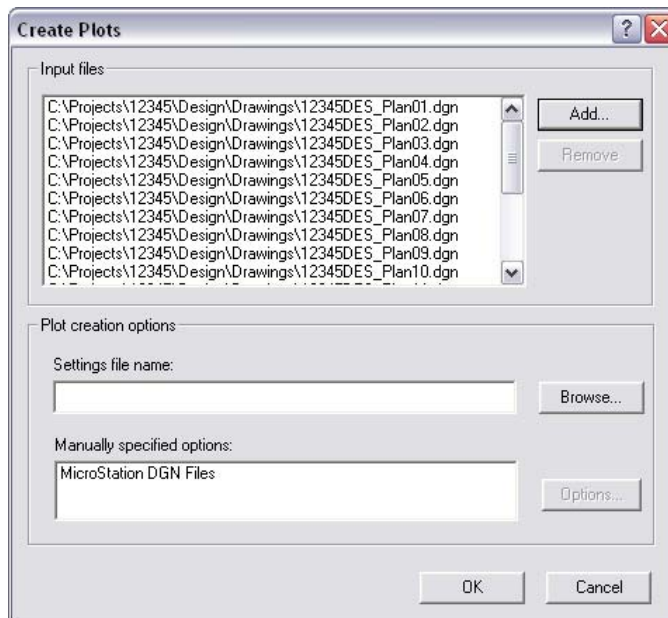
2. <D> **Add...** to add the dgn files you want to use to make a PDF file.

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3. In the **Select Files** dialog, Navigate to the location of your dgn files and select the files you want to use. Use **Ctrl** and **Shift** keys to select multiple files, the selection order of the files does not matter.
4. **<D> Open** when they have all been selected. The files you have selected will be listed in the **Create Plots** dialog.

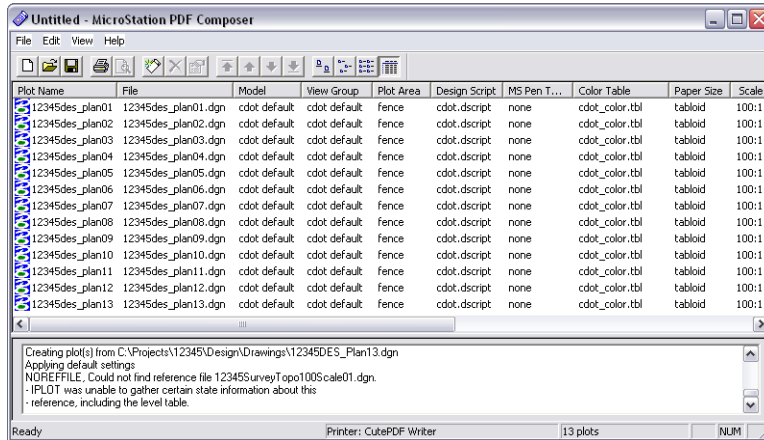


5. **<D> OK** to continue.

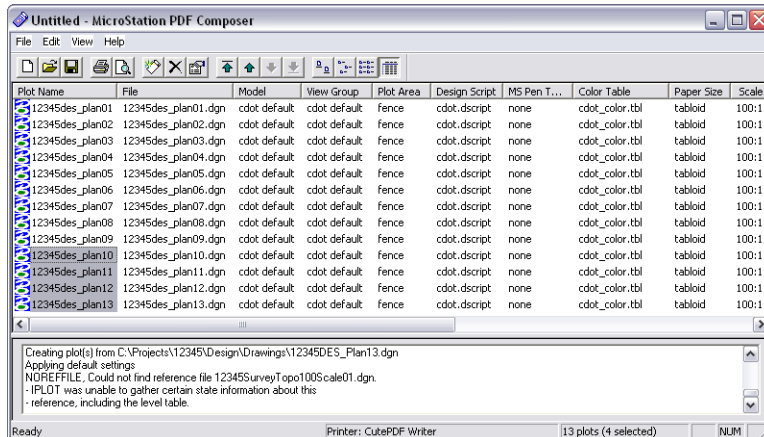
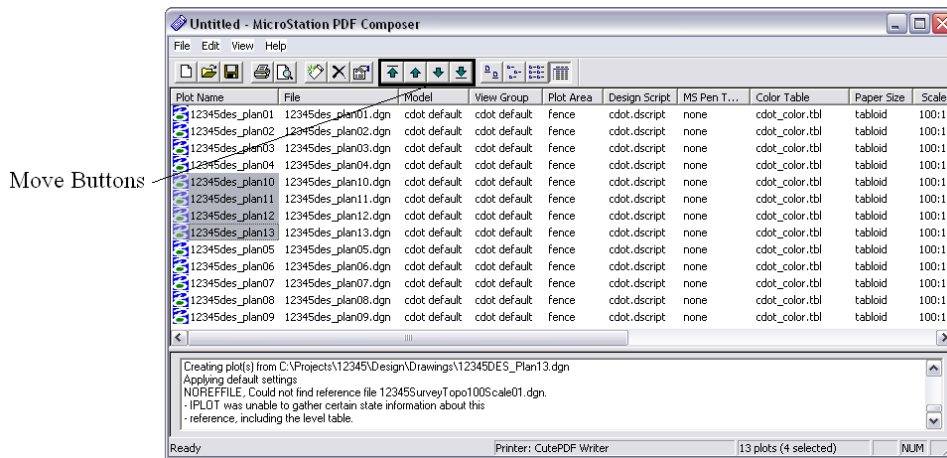


After reading in each of the dgn files the **MicroStation PDF Composer** window will display all of the sheets selected. The plot area(s) for each file are automatically extracted by reading the shape element limits on the **SHEET_Plot-Boundary** level. PDF Composer will generate multiple plots from a single file if more than one shape is found on the plot sheet boundary level. The other automatic setting you will notice is to scale the output for tabloid (11x17) paper size.

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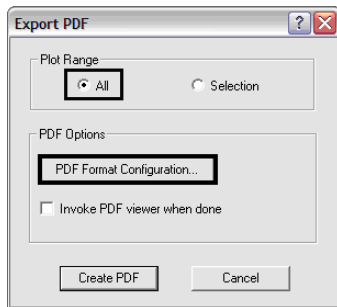


- The PDF pages will be created in the order the sheets appear in the display. If they are displayed in the incorrect order this will have to be changed. Select the sheets to change under the **Plot Name** column.
- Using the **Move** Buttons, move the selected sheets to the desired location. In this example the selected sheets are being moved to the bottom of the list. The selected sheets should now be displayed at the bottom of the list and are in the correct PDF page order.

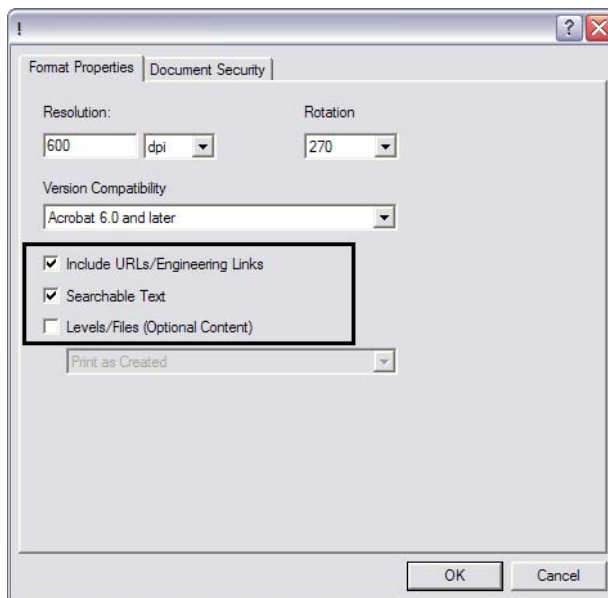


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8. In the *MicroStation PDF Composer* window select **File > Export PDF...** from the pull-down. This will display the *Export PDF* dialog.
9. In the *Plot Range* section select the *All* option to create the PDF file using all of the sheets listed.
10. Under *PDF Options*, <D> **PDF Format Configuration...** to adjust the output PDF settings.

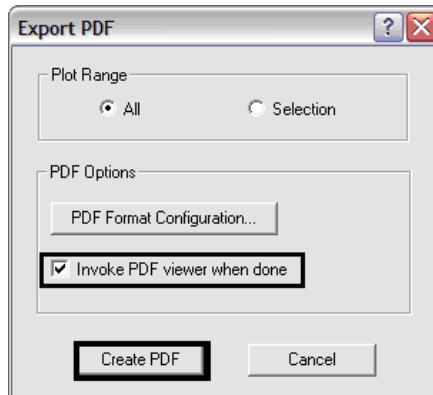


11. You will typically only need to adjust the settings associated with the three checkboxes outlined in the image below. The *Resolution*, *Rotation*, and *Version Compatibility* settings should not be altered. <D> **OK** to save these settings and return to the *Export PDF* dialog. These saved settings will be used on subsequent runs of PDF Composer.



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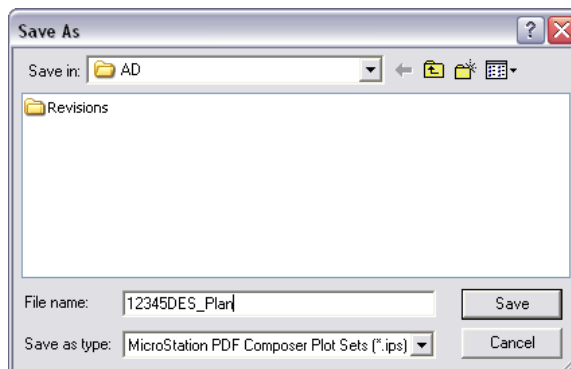
12. You may also elect to launch the **PDF viewer** automatically after the PDF has been created. <D> **Create PDF** to continue.



13. In the **Save PDF File** dialog, Navigate to the folder location of your pdf file, enter a **file name**, and <D> **Save**.

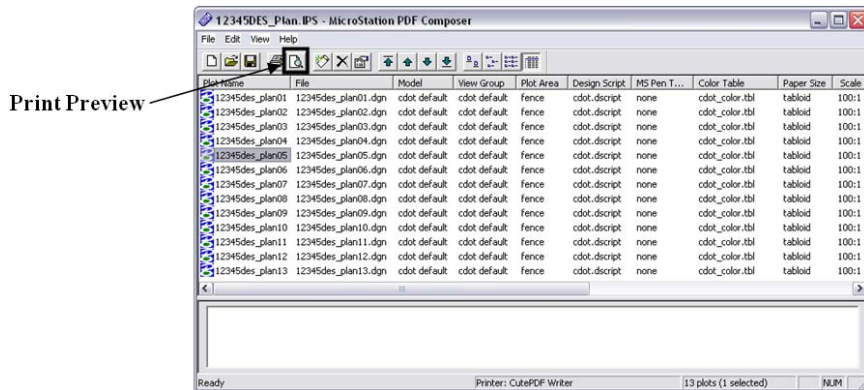
The PDF creation process will take several minutes. If the **Invoke PDF viewer** option was selected, the newly created file will be displayed in your PDF viewer application when completed.

14. You may save the plotting information used to create this PDF in a MicroStation PDF Plot Set file (.ips file). In the **MicroStation PDF Composer** window select **File > Save As...** to display the **Save As** dialog.
15. In the **Save As** dialog, Navigate to the folder location for your .ips file, enter a **file name**, and <D> **Save**.

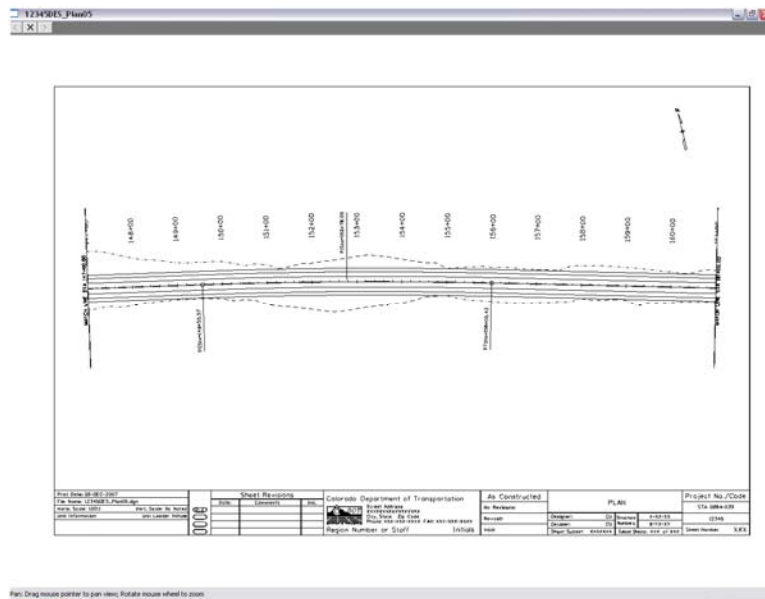


Previewing Plots

1. Prior to saving a PDF you may preview one or more sheets in a print preview window. Select the sheets you want to preview from the **Plot Name** column of the **MicroStation PDF Composer** window.
2. After the sheets are selected, <D> the **Print Preview** icon found on the toolbar or select **File > Print Preview** from the pull-down.



It may take a few minutes to generate the print preview. When ready, the print preview will be displayed in a new window.



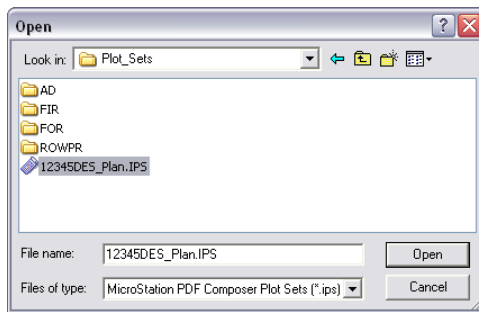
3. If multiple sheets were selected for preview you may navigate between the sheets by using the **forward** and **back** arrows in the top left corner of the preview window.
4. Measurement functions and windowing functions such as **Zoom**, **Pan**, and **Fit** are available via a right click menu. <R> anywhere within the preview window to display this menu.

Using a Previously Saved Plot Set

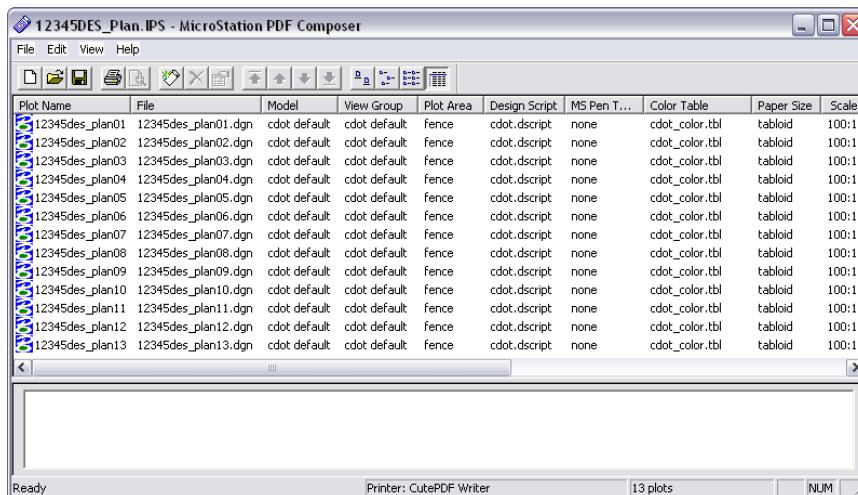
1. In the *Welcome* dialog box select the **Open an existing plot set** option



2. In the *Open* dialog, Navigate to your previously created .ips file, select the file, and <D> **Open**.



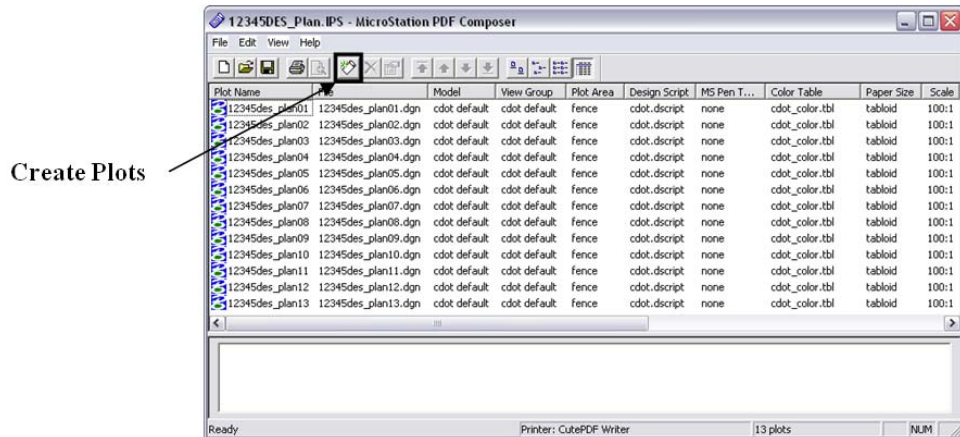
The .ips file is read in and the previously saved plot information is displayed in the *MicroStation PDF Composer* window.



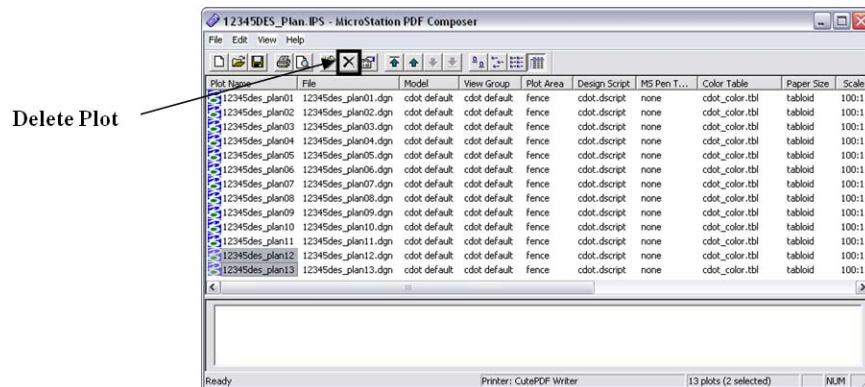
3. To recreate the PDF file select **File > Export PDF...** from the *MicroStation PDF Composer* pull-down as before and repeat *Basic PDF Composer Workflow* steps 6-15. The new PDF file will reflect changes made to the MicroStation design files as well as any changes in the referenced Design Script(s).

Adding/Removing Plots

1. To add additional plots to a plot set <D> **Create Plots** from the *MicroStation PDF Composer* toolbar, or select **File > Create Plots...** from the pull-down. Selecting either option will redisplay the *Create Plots* dialog.



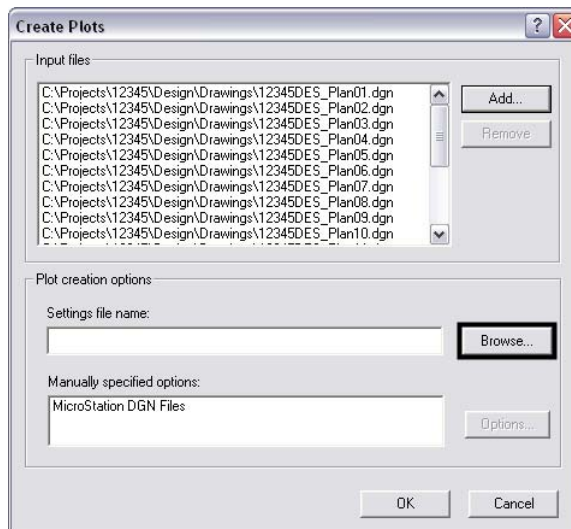
2. Add design files as described previously. The newly added plots will be placed at the bottom of the plot list. Reorder as necessary.
3. To remove plots select the **Plot Names** from the list. Once selected, either <D> **Delete Plot** found on the toolbar, or select **Edit > Delete** from the pull-down to remove the plots from the list.



Changing Plot Settings

MicroStation PDF Composer allows for applying different settings files to easily change a plot's size and/or appearance.

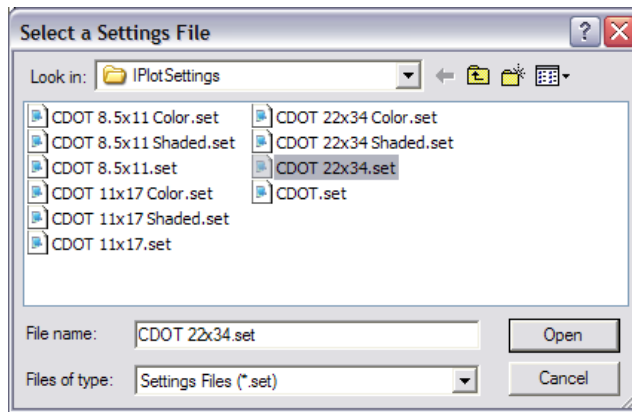
1. Follow same steps as above to create plots and <D> **Browse** to choose a different settings file.



2. Select the settings file that matches your required paper size and rendering. Listed below are the general equivalent MicroStation pen table files to assist with making the right selection:

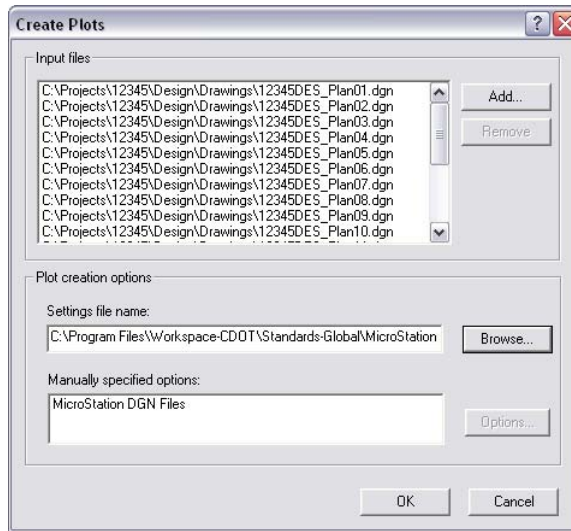
- **CDOT * Color.set** - CDOT-ColorPenTable.tbl
- **CDOT * Shaded.set** - CDOT-Shading_GrayscalePenTable.tbl
- **CDOT *.set** - CDOT-PenTable.tbl

3. <D> **Open** after selecting the required settings file.

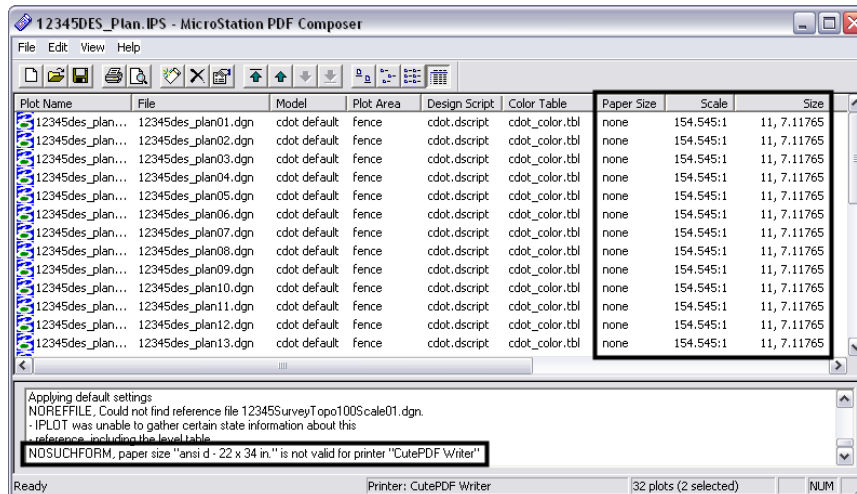


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- The selected settings file will be displayed in the *Create Plots* dialog. <D> OK to create the plots with the new settings file.

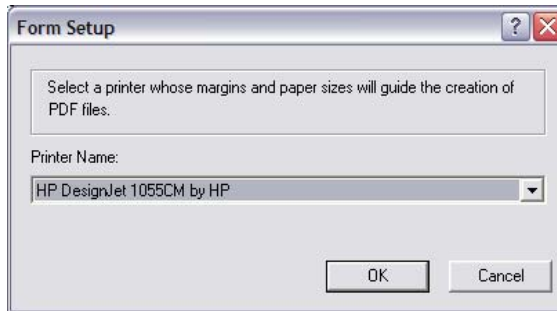


- Verify that the *Paper Size*, *Scale*, and *Size* settings are correct. A *Paper Size* setting of none means your active printer does not recognize the paper size specified in the settings file. You will also see error messages displayed in the bottom pane of the *MicroStation PDF Composer* window.

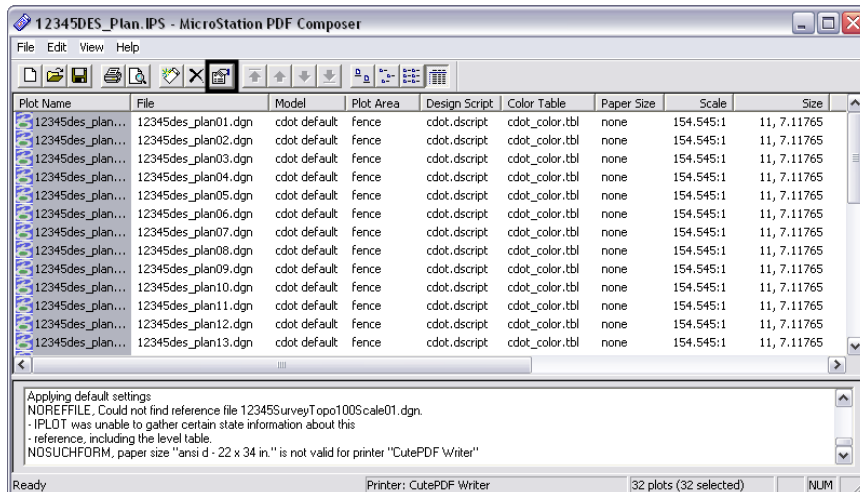


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- To correct this problem you will need to change the active printer and change the paper size setting. Select **File > Form Setup...** from the pull-down. This will display the **Form Setup** dialog.
- From the list of available printers select a printer that supports your paper size setting, then <D> **OK**.

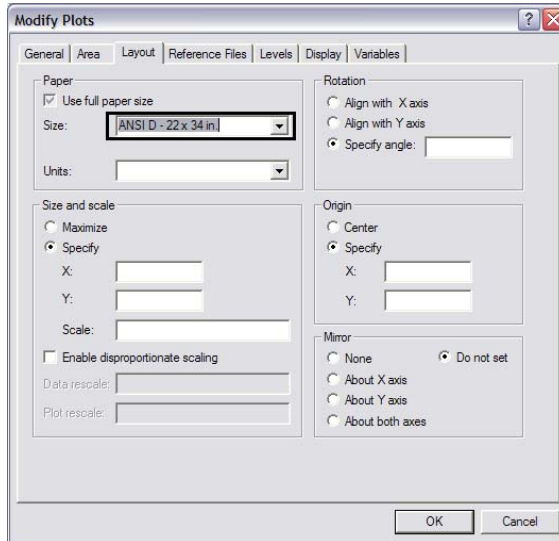


- With the correct active printer set the paper sizes can be changed. Select all of the plots in the list and <D> the **Plot Properties** icon found on the toolbar. This will display the **Modify Plots** dialog.



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9. In the **Modify Plots** dialog select the correct paper size from the drop-down list and <D> OK.



Note: As you can see from the figure above there are many other plot settings that can be modified. When applying the correct settings file in combination with the appropriate active printer these other settings will rarely need to be modified. Setting the correct **Paper Size** will change the **Scale** and **Size** settings to the correct values.

