

MicroStation V8 Printing

Design Manual
Chapter #1
General Information

Originally Issued: 05-23-07

The Office of Design primarily uses two procedures to produce both paper sheet plots and PDF sheet plot files, including IPLOT Organizer and ModelPlot, which both use the Bentley IPLOT program. (The IPLOT Organizer procedure is rapidly being replaced by the ModelPlot procedure, as the preferred method of producing prints or plot files.)

Two standards, or rules, have been adopted for sheet plot files, including:

1. Each plan sheet is contained within a separate plot sheet model.
2. Each plot sheet model contains only one print border, which is a specific shape located on a non-printing level named DsnShtPlotShape.

When these two rules are combined with either of the above listed plot procedures, the one print border per model is located by the program, regardless of the location or orientation in the file, and the plot is automatically created. The program then moves to the next selected model and repeats the process.

When using the IPLOT Organizer procedure, after the file and models to be plotted are selected, the appropriate IPLOT settings file is chosen to apply specific print configuration settings, such as the print scale and rotation, the paper size, and the color table and design scripts to be used. Different settings files are necessary to achieve different plot (or plot file) results, and a short summary of these settings file groups is shown below:

- **ps0300** – for 300 foot wide plan sheets, referred to as 10 scale plan sheets
- **ps0600** – for 600 foot wide plan sheets, referred to as 20 scale plan sheets
- **ps1500** – for 1500 foot wide plan sheets, referred to as 50 scale plan sheets
- **ps3000** – for 3000 foot wide plan sheets, referred to as 100 scale plan sheets
- **xs0140** – for 140 foot wide cross-section sheets, referred to as 5 scale cross-section sheets
- **xs0280** – for 280 foot wide cross-section sheets, referred to as 10 scale cross-section sheets
- **xs0560** – for 560 foot wide cross-section sheets, referred to as 20 scale cross-section sheets
- **xs1400** – for 1400 foot wide cross-section sheets, referred to as 50 scale cross-section sheets
- **xs2800** – for 2800 foot wide cross-section sheets, referred to as 100 scale cross-section sheets

For each of the groups of settings listed above, there are three available settings files (where xxxx is the number of feet across the sheet as shown in the summary above):

- **B&W_XXXX.set** – used to create black and white prints.
- **Color_XXXX.set** – used to create color prints.
- **TIF_XXXX.set** – used to create TIFF files. (The TIF option is rarely used.)

In addition to the IPLOT settings files, there are some other files that are required, including color tables for printing (with the default extension of “.ctb” for the IPLOT software), design scripts (which Intergraph used to call IPLOT pen tables before Bentley purchased the software and changed the name to design scripts), and rendering attribute files. A summary of the files available is shown below:

- **designbw.ctb** – color table used to create black and white prints
- **hwyclr.ctb** – color table used to create color prints

- **RoadDesign.pen** – a design script that sets the correct weights for paper prints
- **tif.pen** – a design script that sets the correct weights for TIF files

- **tif.ra** – a rendering attributes file that determines how shaded areas are displayed inside of TIF files