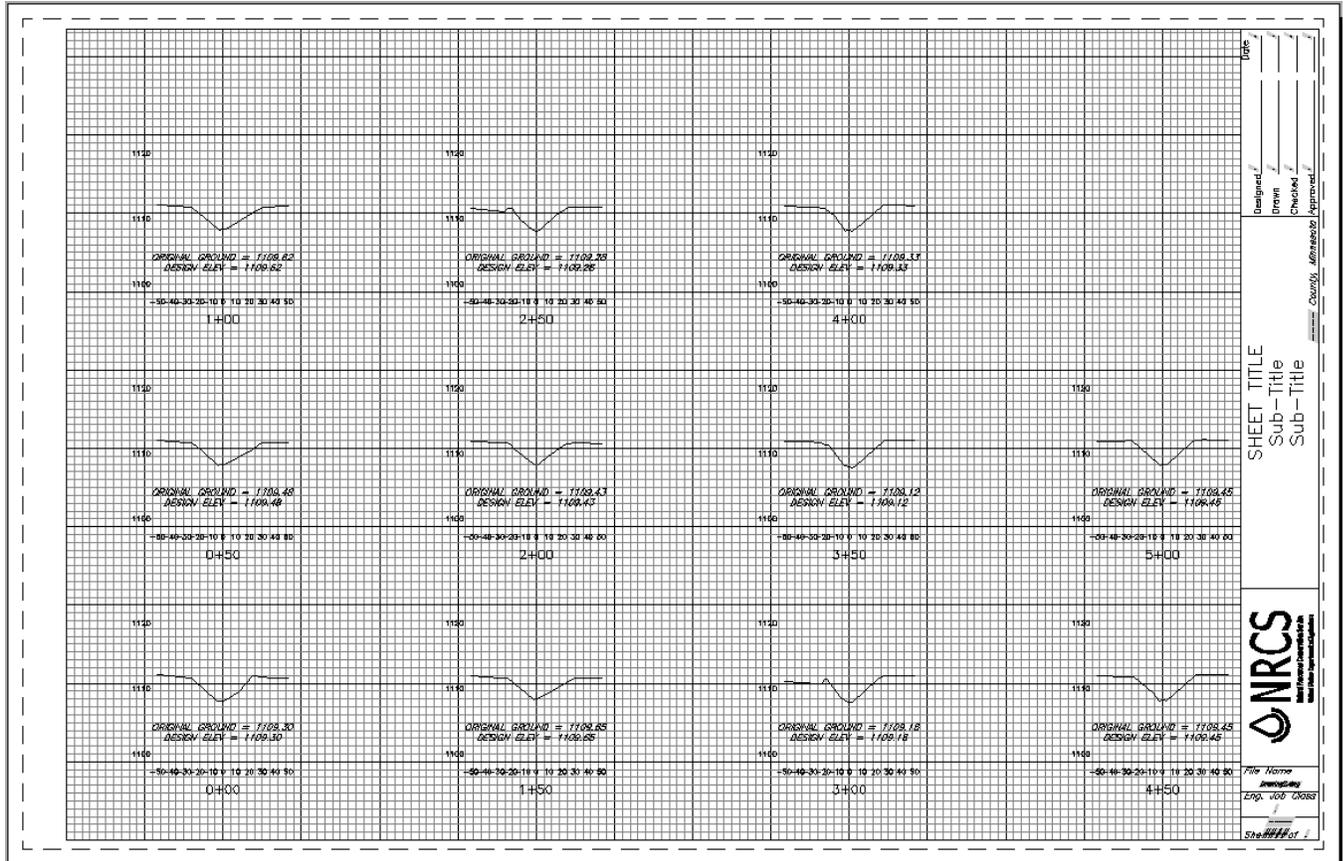


This guide covers the process for developing an automated plan sheet or set of sheets that plot a series of cross sections on the standard title block. The example in this guide will plot a series of sections with a vertical exaggeration of 5:1, with the existing ground and finished ground elevations labeled on each section. The sections will be organized on an 11x17 sheet that includes a full sheet of grid lines that have a major interval of 1 inch and a minor interval of 0.1 inch. The plot scale for the cross sections is 1" = 60'. The finished plan sheet is shown below:



This example assumes that the following items have already been set up in the drawing:

- An alignment along the centerline of the waterway. For more information on creating an alignment, refer to Quick Reference Guide 510.0 *Creating an Alignment from Objects* or Quick Reference Guide 511.0 *Creating an Alignment Using Alignment Creation Tools*.
- A terrain surface representing the ground surface. For more information on creating a terrain surface, refer to Quick Reference Guide 410.0 *Setting Up the Standard Existing Ground Surface* or Quick Reference Guide 411.0 *Creating a Surface From a Point Group*.
- A sample line group representing the locations of the cross sections you want to plot. For more information on creating sample lines, refer to Quick Reference Guide 710.0 *Creating Sample Lines*.

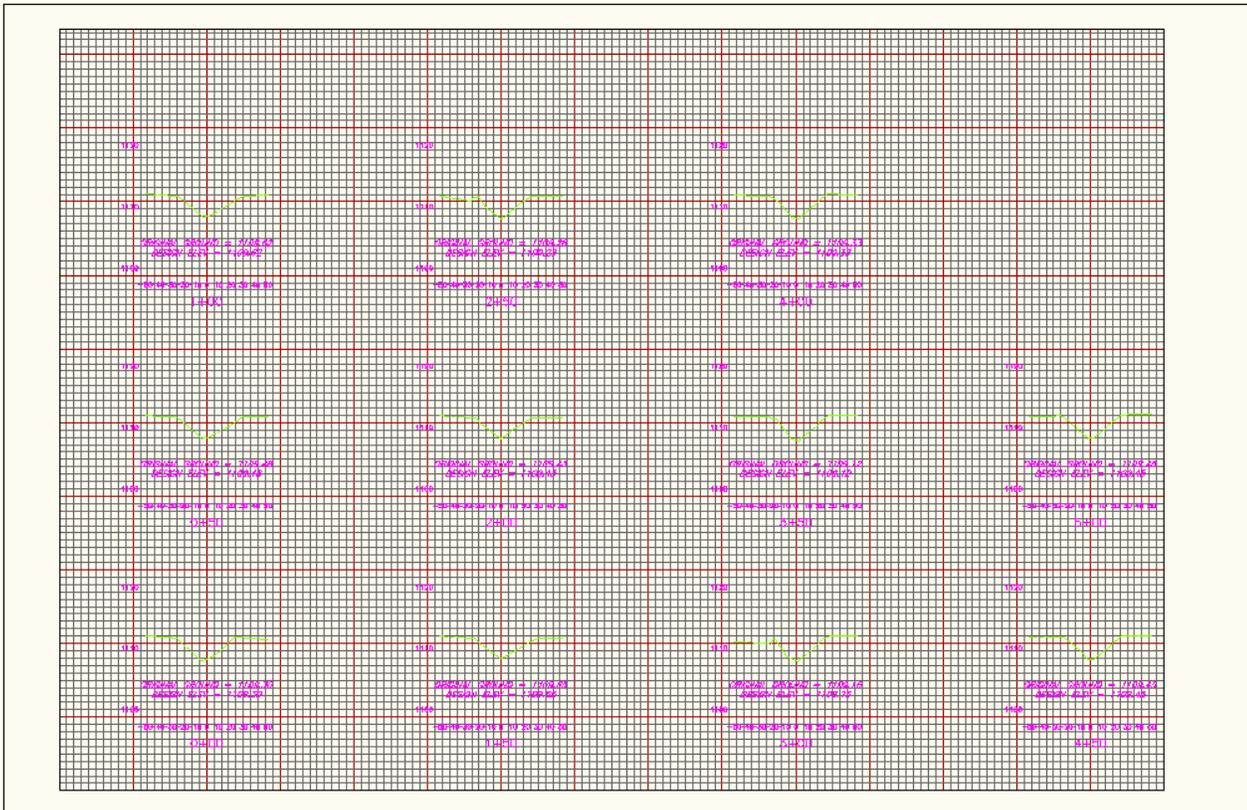
For more information on the styles that control individual cross sections and cross section sheets, refer to the following Quick Reference Guides:

- 700.0 Styles – Section View Styles
- 701.0 Styles – Group Plot Styles
- 702.0 Styles – Section Band Sets

Plot Cross Sections on an 11x17 Sheet

1. On the *Profile & Section Views* panel of the *Home* ribbon, click on *Section Views* and select *Create Multiple Views*.
2. In the *Create Multiple Select Views – General* tab, select the *H10:V10 (VE 5:1) No Grid* section view style.
3. In the *Create Multiple Select Views – General* tab, select the *11x17 1.0 Major – 0.1 Minor* group plot style.
4. In the *Create Multiple Select Views – Data Bands* tab, select the *EG and FG Elevs* band set.
5. Click on the *Create Section Views* button and click on a section view origin in the drawing.

A sheet containing the series of cross sections will be inserted into the drawing, as shown below. If there are more cross sections to plot than will fit on a single sheet, additional sheets will be generated as needed.



Changing the Sheet Style

You can change the sheet style for an individual sheet or for all of the sheets in the set.

To change the style assigned to an individual sheet, select the sheet, right click, and select *Sheet Properties* from the shortcut menu. In the *Sheet Properties* window, change the object style to the new sheet style that you want to assign to that sheet.

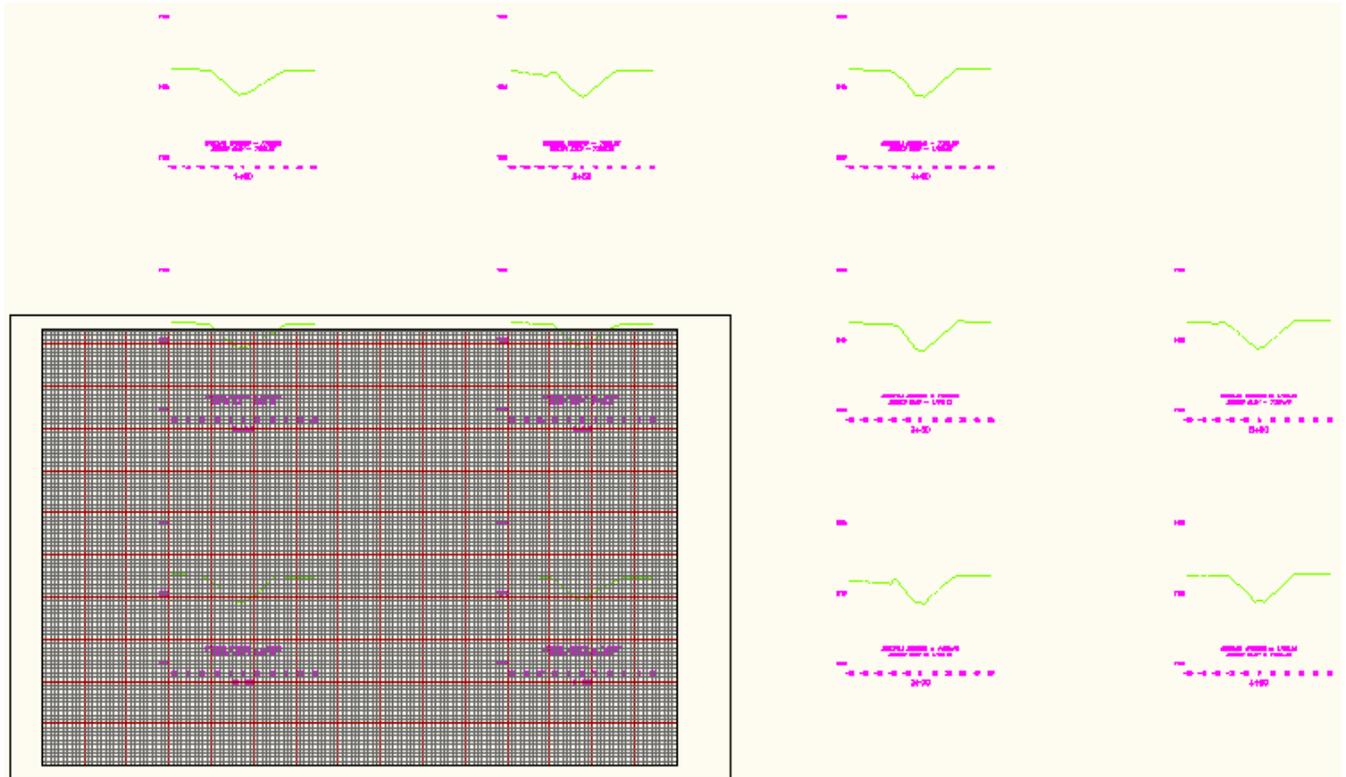
To change the style assigned to the entire set of sheets in the group, click on one of the sheets in the set to bring up the contextual ribbon for the section sheets. On the *Modify Sheet* panel, click on *View Group Properties* and select *View Group Properties* from the drop down menu. Window around all of the sheets in the group and right click to select the group. When the *Section View Group Properties* window opens, go to the *Section Views* tab, click on the cell in the *Group Plot Style* column, and select a new style to assign to the group.

The *Section View Group Properties* window can also be used to change the style assigned to the individual sections. Click on the cell in the top row of the *Style* column and select a new section style. That style will be assigned to all of the sections in the group. If you select a cell from any of the other rows in the table, the style you choose will be assigned to only that individual section.

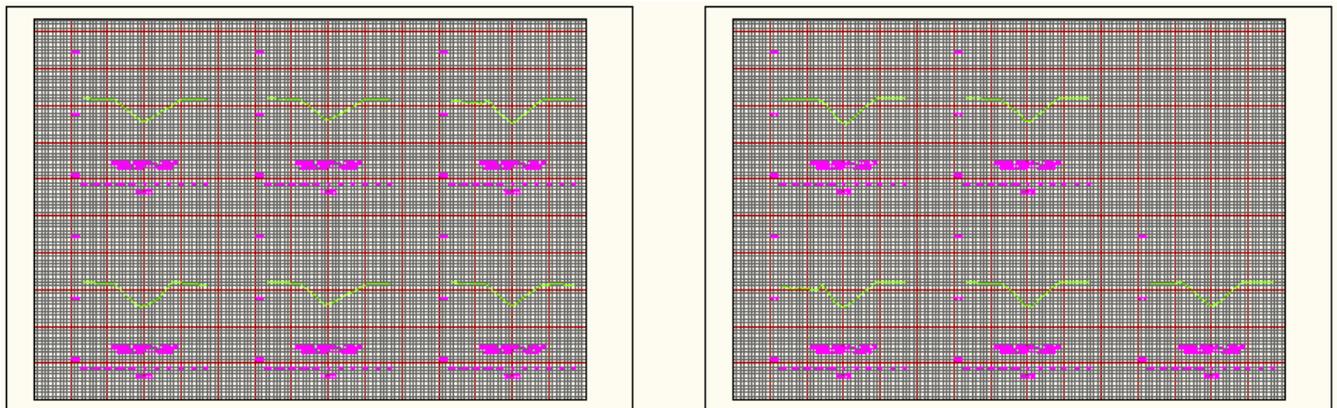
Changing the Plot Scale of the Sheet

The size of the sheet area relative to the cross sections is controlled by the model space annotation scale, which also controls the size of the station and elevation text and labels. When the model space annotation scale is changed, you will also need to manually update the section views. To do this, select the station on one of the individual sections in the array, right click, and choose *Update Section View Layout...* from the shortcut menu.

The figure below and to the left shows how the cross section sheet changes when the model space annotation scale is changed from 1" = 60' to 1" = 30'. The sheet and text sizes have changes, but the cross sections are still arranged in their original locations.



The figure below shows the cross section sheets after the section view layout was updated. The cross sections have been rearranged on the sheets. Because all of the sections could not fit on a single sheet, a second sheet was automatically added to the set.



Add Title Block to Sheet

There are two ways that you can add a title block to the cross section sheet. You can either insert the title block into model space or you can align a layout that contains the title block with the location in model space where the cross section sheet is located.

- To insert the title block into model space, insert the title block using the outer border as a reference point. The outer border around the cross section sheet is the same as the outer border around the MN NRCS title block. If you are inserting the title block from the MN NRCS Drafting tool palette, simply click on the lower right hand corner of this outer border as the insertion point.
- To align a layout with the cross sections, go to a layout containing the title block and use the align space command to align the viewport with the cross section sheet in model space. For more information on aligning viewports to objects in model space, refer to Quick Reference Guide *260.1 Aligning Model Space Objects in a Viewport*. When using this option, the viewport scale must be the same as the model space annotation scale.

When working with viewports and sheets in model space, you may need to regenerate the drawing frequently, especially when changing viewport scales. Type regen or regenall at the command line to update the drawing.