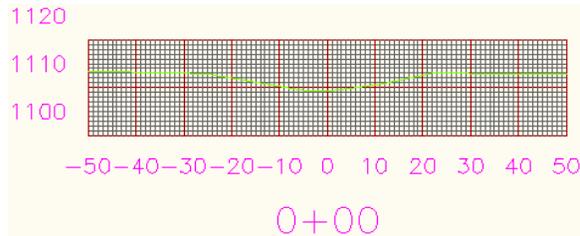


Section view styles are used to control the display of a sections plotted in a drawing. Some of the settings controlled by the view style include the horizontal and vertical axis stationing, gridline intervals, and vertical exaggeration of the plot.

This guide covers the section view styles that are provided with the Minnesota drawing template.

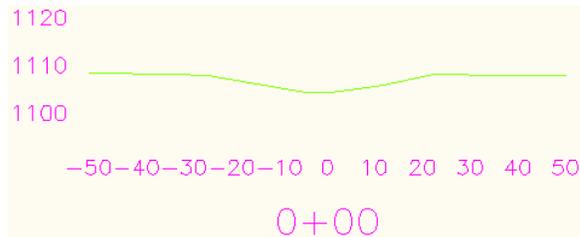
H10:V10 (VE 1:1)

Horizontal Grid Increment : 10 feet (major) 1.0 foot (minor)
 Vertical Grid Increment: 10 feet (major) 1.0 foot (minor)
 Vertical Exaggeration: 1:1 Horizontal and vertical axes are the same scale.
 10 feet vertical on the profile measures 10 feet in the drawing



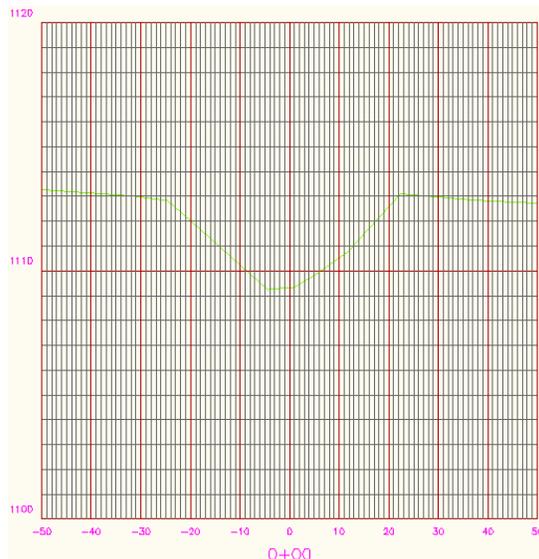
H10:V10 (VE 1:1) No Grid

Horizontal Grid Increment : None
 Vertical Grid Increment: None
 Vertical Exaggeration: 1:1 Horizontal and vertical axes are the same scale.
 10 feet vertical on the profile measures 10 feet in the drawing



H10:V10 (VE 5:1)

Horizontal Grid Increment : 10 feet (major) 1.0 foot (minor)
 Vertical Grid Increment: 10 feet (major) 1.0 foot (minor)
 Vertical Exaggeration: 5:1 vertical exaggeration
 10 feet vertical on the profile measures 50 feet in the drawing



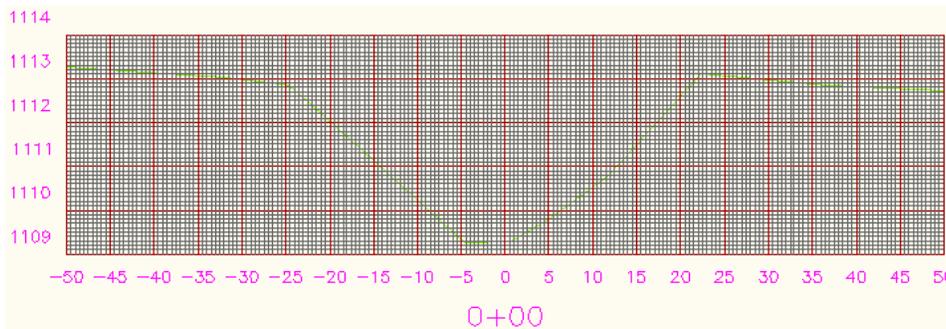
H10:V10 (VE 5:1) No Grid

Horizontal Grid Increment : None
 Vertical Grid Increment: None
 Vertical Exaggeration: 5:1 vertical exaggeration
 10 feet vertical on the profile measures 50 feet in the drawing



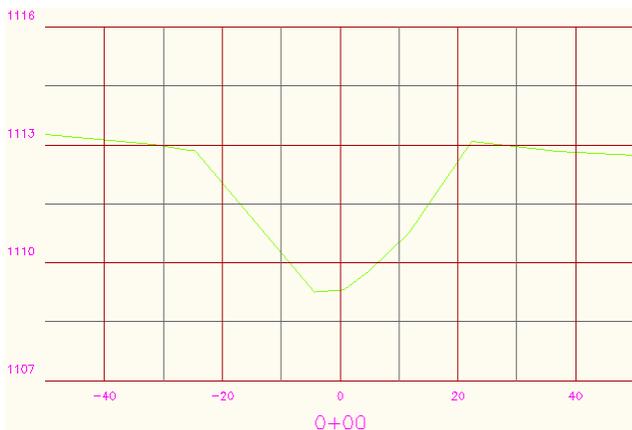
H5:V1 (VE 5:1)

Horizontal Grid Increment : 5 feet (major) 0.5 foot (minor)
 Vertical Grid Increment: 1 feet (major) 0.1 foot (minor)
 Vertical Exaggeration: 5:1 vertical exaggeration
 1 feet vertical on the profile measures 5 feet in the drawing



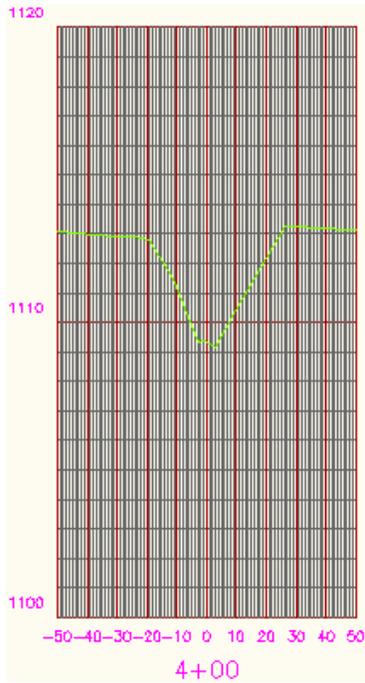
H20:V10 (VE 20:3)

Horizontal Grid Increment : 20 feet (major) 10.0 foot (minor)
 Vertical Grid Increment: 3 feet (major) 1.5 foot (minor)
 Vertical Exaggeration: 20:3 vertical exaggeration
 3 feet vertical on the profile measures 20 feet in the drawing



H10:V10 (VE 10:1)

Horizontal Grid Increment : 10 feet (major) 1.0 foot (minor)
Vertical Grid Increment: 10 feet (major) 1.0 foot (minor)
Vertical Exaggeration: 10:1 vertical exaggeration
10 feet vertical on the profile measures 100 feet in the drawing



H10:V10 (VE 10:1) No Grid

Horizontal Grid Increment : None
Vertical Grid Increment: None
Vertical Exaggeration: 10:1 vertical exaggeration
10 feet vertical on the profile measures 100 feet in the drawing



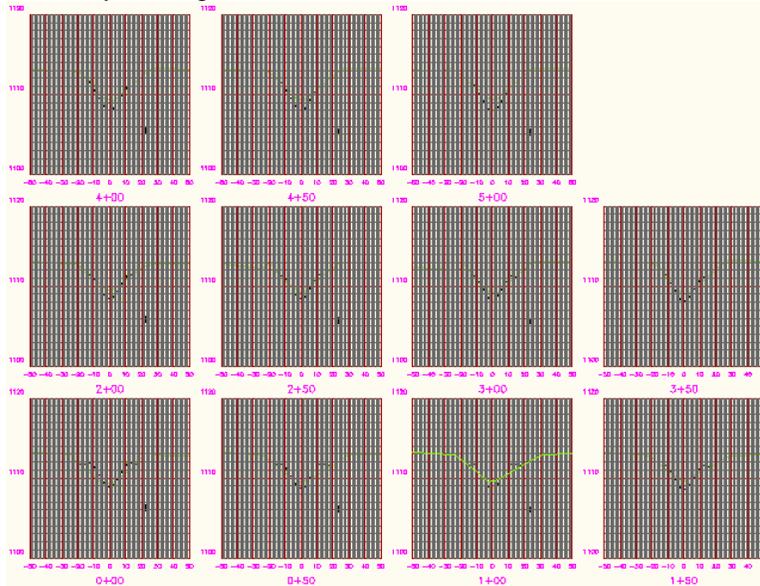
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Group plot styles are used to organize groups of multiple sections. The group plot styles can be set up to place sections on a sheet that is formatted for plotting.

This guide covers the group plot styles that are provided with the Minnesota drawing template.

Array of Sections

Sheet Style Assigned: None

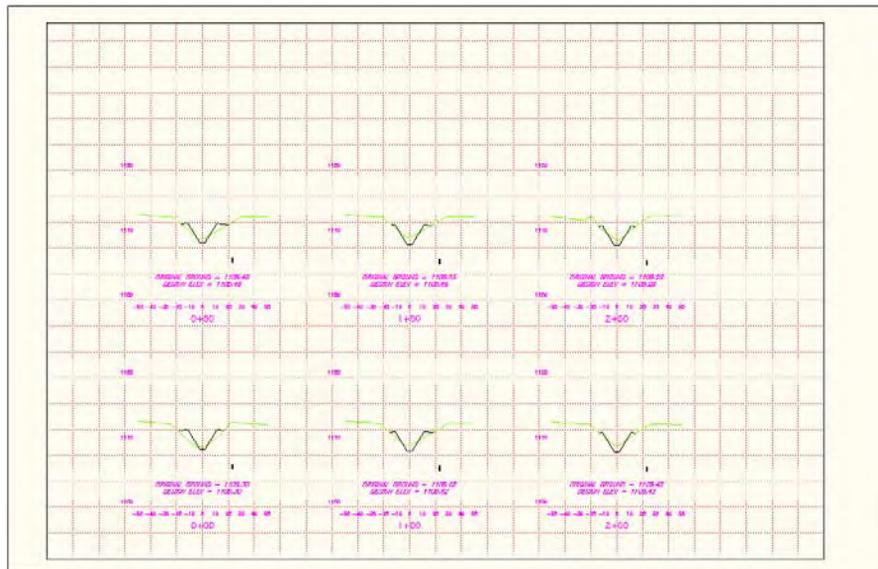


Each group plot style in the Minnesota drawing template has a corresponding sheet style automatically assigned to it, which controls the sheet size and the full sheet grid lines that are plotted. The section view style used in these samples have no grid lines displayed for the individual sections (designated by a No Grid in the style name), since grid lines are provided by the sheet style.

11x17 0.5 Grid With Dotted Lines

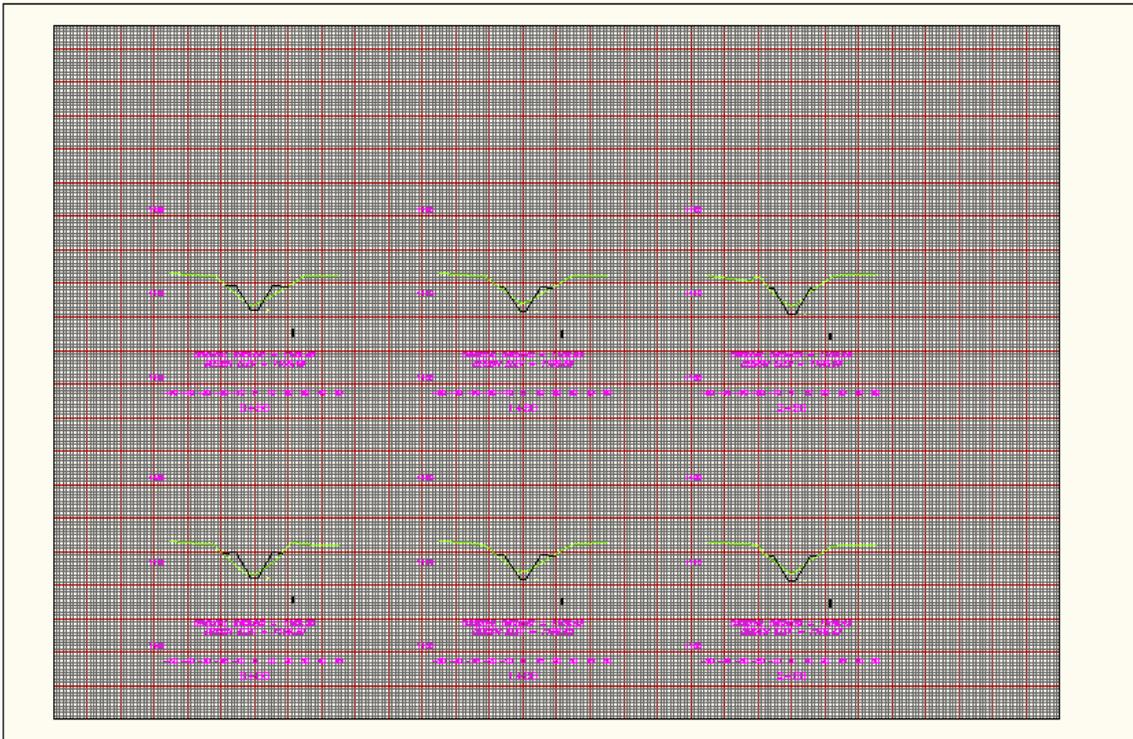
Horizontal Grid Increment : 0.5" on a plotted 11x17 sheet
 Vertical Grid Increment: 0.5" on a plotted 11x17 sheet

For the dotted lines to display properly with this plot style, the linetype scale of the drawing must be the same as the model space annotation scale. Change the linetype scale by typing LTSCALE at the command line and assigning a value.

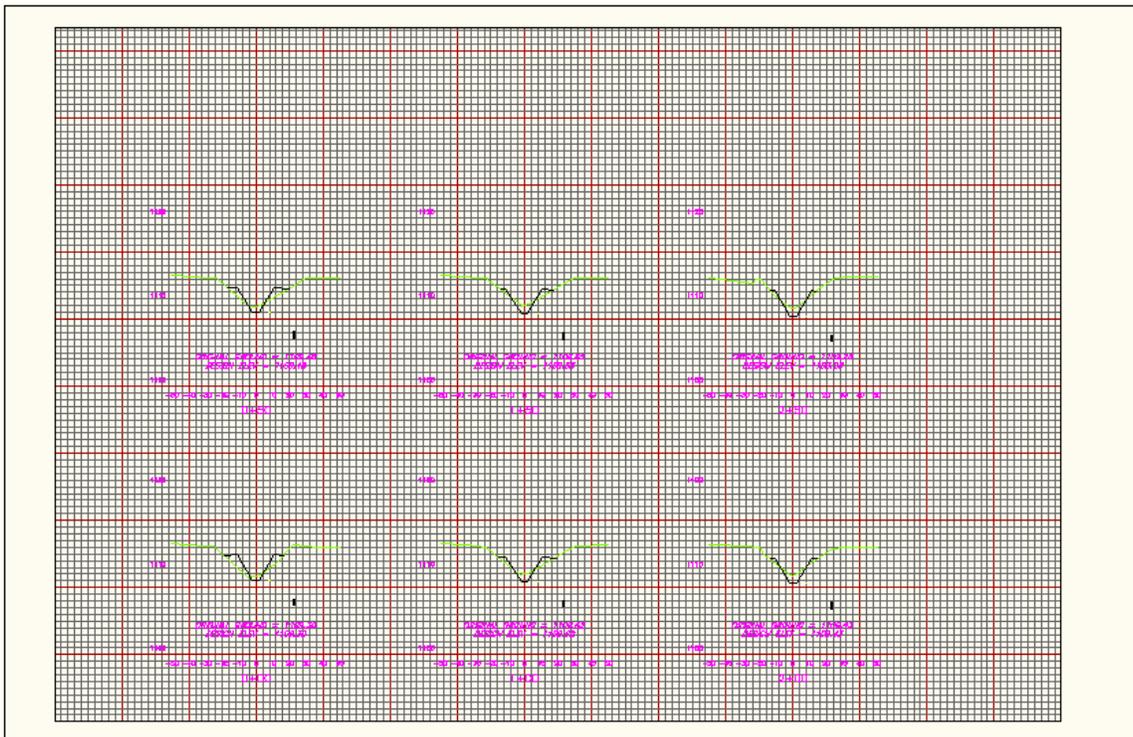


11x17 0.5 Major – 0.05 Minor

Horizontal Grid Increment : Major Grids at 0.5" and minor grids at 0.05", as plotted on an 11x17 sheet
Vertical Grid Increment: Major Grids at 0.5" and minor grids at 0.05", as plotted on an 11x17 sheet

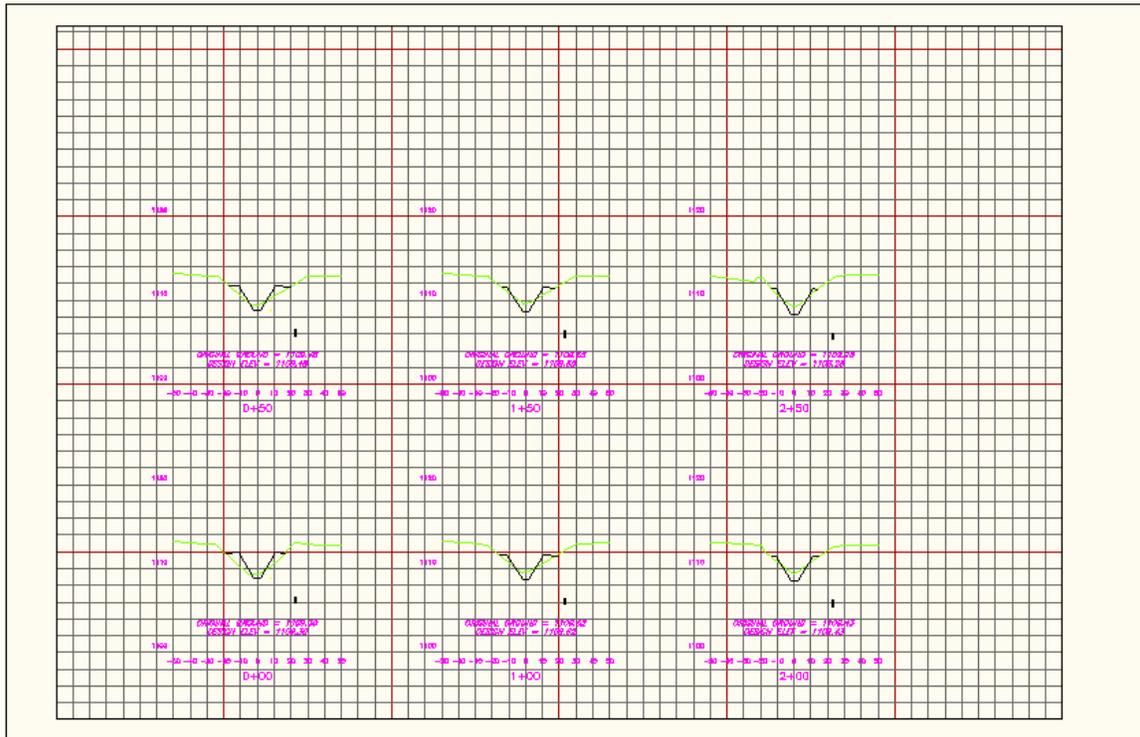
**11x17 1.0 Major – 0.1 Minor**

Horizontal Grid Increment : Major Grids at 1.0" and minor grids at 0.1", as plotted on an 11x17 sheet
Vertical Grid Increment: Major Grids at 1.0" and minor grids at 0.1", as plotted on an 11x17 sheet



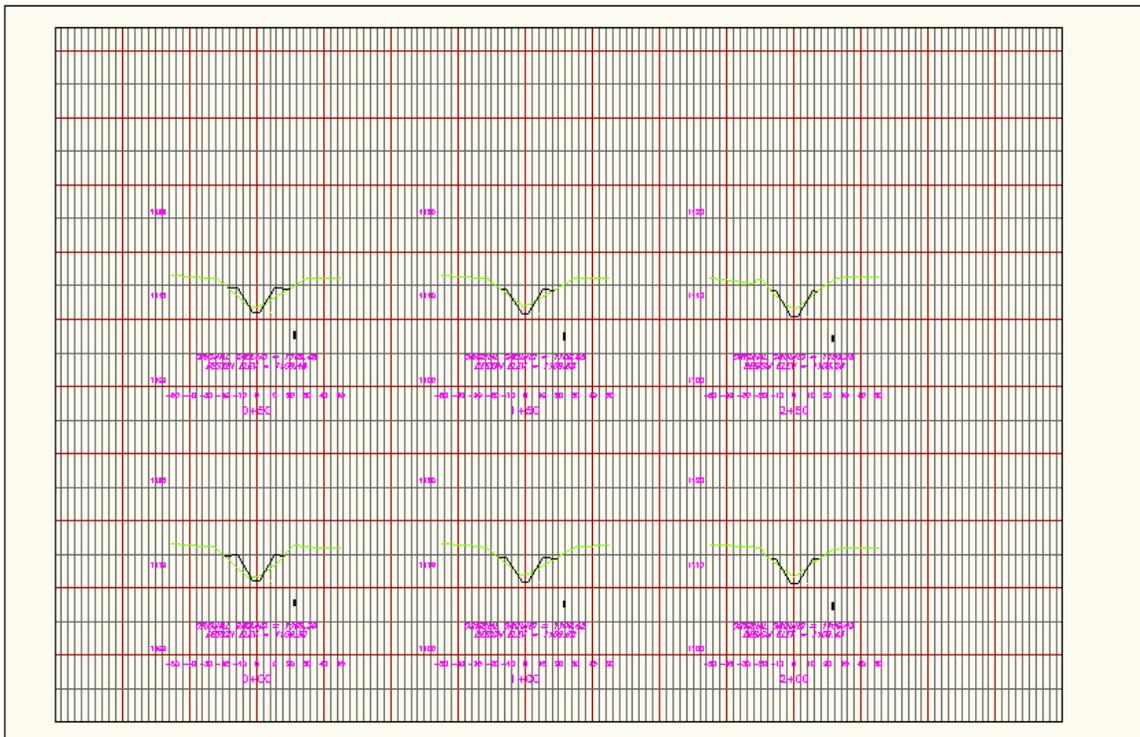
11x17 2.5 Major – 0.25 Minor

Horizontal Grid Increment : Major Grids at 2.5" and minor grids at 0.25", as plotted on an 11x17 sheet
Vertical Grid Increment: Major Grids at 2.5" and minor grids at 0.25", as plotted on an 11x17 sheet



11x17 H(1 – 0.5) V(1 – 0.1)

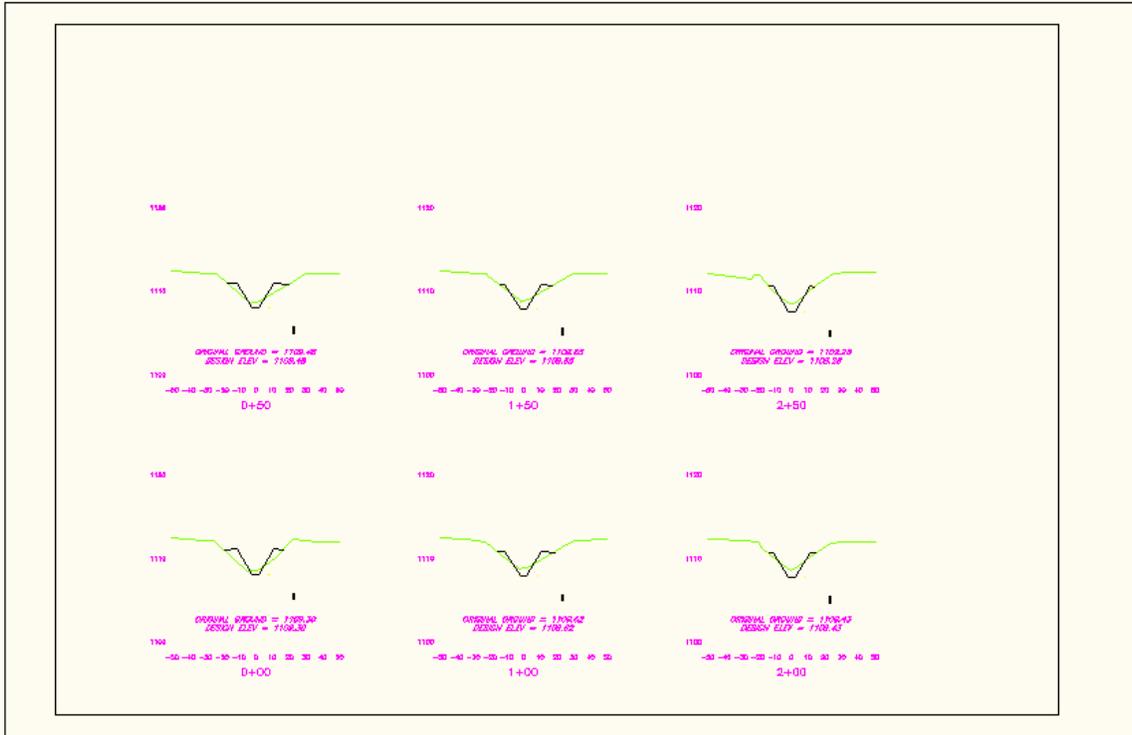
Horizontal Grid Increment : Major Grids at 1.0" and minor grids at 0.5", as plotted on an 11x17 sheet
Vertical Grid Increment: Major Grids at 1.0" and minor grids at 0.1", as plotted on an 11x17 sheet



11x17 Sheet – No grid lines

Horizontal Grid Increment : 0.5" on a plotted 11x17 sheet
 Vertical Grid Increment: 0.5" on a plotted 11x17 sheet

Only the plot and sheet boundaries are displayed.



Section band sets are used to automatically annotate section data, such as elevations, offset and cut/fill depths. This guide covers the section band sets that are provided with the Minnesota drawing template.

EG and FG Elevs

Displays the existing ground and finished ground surface elevations at the centerline of the section.



No Elevations

No display of elevations or other section data.



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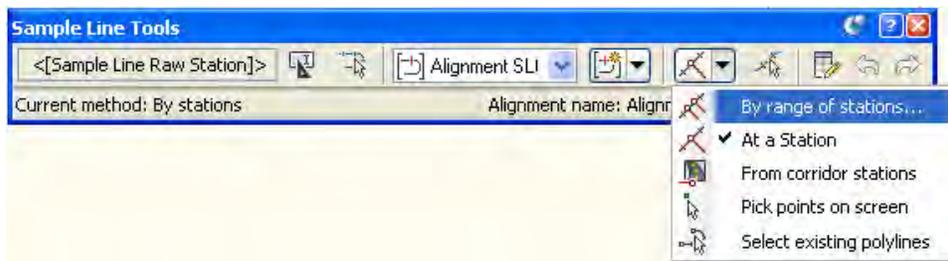
This guide covers the procedure for creating sample lines along an alignment that will be used to cut cross sections. Before sample lines can be created, you need to at least have an alignment and one profile in the drawing. This example also assumes that a corridor has been developed along the alignment.

For more information on developing alignments and profiles, refer to the following Quick Reference Guides:

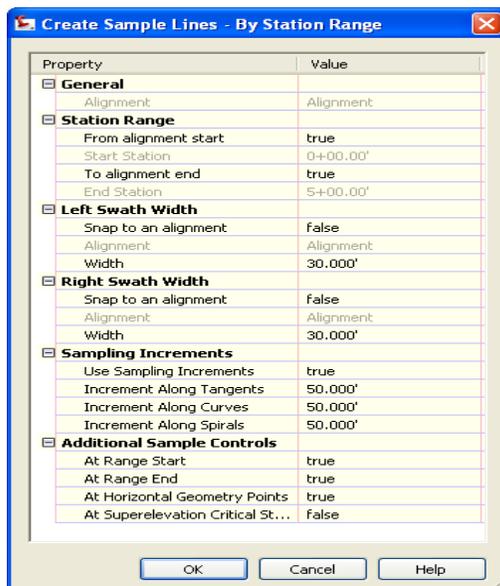
- 510.0 Creating an Alignment from Objects
- 511.0 Creating an Alignment Using Alignment Creation Tools
- 610.0 Profile from a Terrain Surface
- 611.0 Developing a Finished Ground Profile

Creating Sample Lines

1. Go to the *Profile & Section Views* panel on the *Home* ribbon and click on *Sample Lines*
2. At the command line, you will be prompted to select an alignment. Click on the alignment in the drawing or hit enter to bring up a list of alignments available in the drawing that you can select from.
3. The Create Sample Line Group window will appear. Make the following selections in this window.
 - You can use the name automatically generated for the sample line group or overwrite it with your own name.
 - You can provide a description, but it is not required.
 - The sample lines will be placed on the layer PLAN-SAMPLE. You can also choose a different layer for the lines.
 - Select the data sources to sample. A listing of the profiles and corridors in the drawing will appear in the *Select data sources to sample:* pane.
 - Click on the OK button after making your selections.
4. The Sample Line Tools toolbar will open. By default, the sample line creation method will be set to *At a Station*, which requires you to click on individual sample line locations in the drawings.



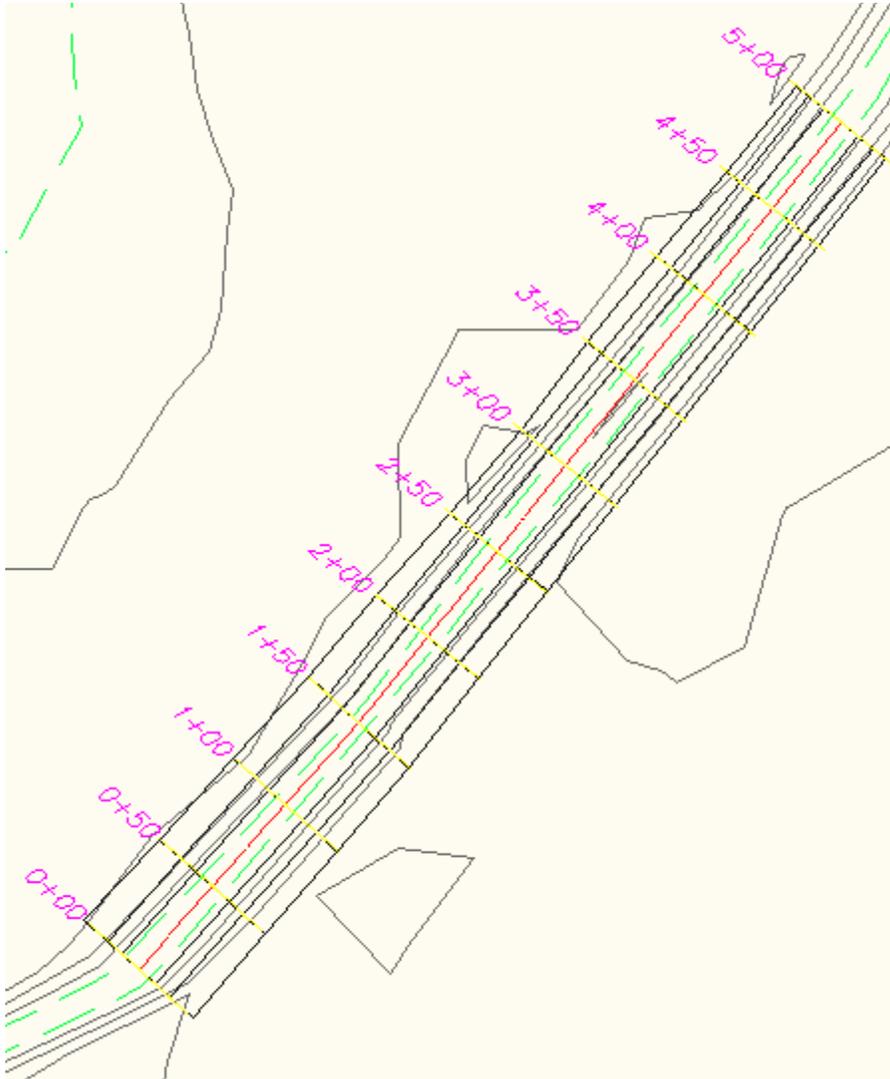
You can also select the *By range of stations...* option for the sample line creation method. This will bring up the *Create Sample Lines – By Station Range* window.



In this window, you can specify the left and right swath width for the sample line, and the sampling increments along tangent, curve and spiral sections of the alignment.

After you set the values in the table, click on the *OK* button, and you will be taken back to the drawing. The sample line creation command will still be active and set to create a sample line at a station. You can manually add additional sample lines, or right click to exit the command.

The sample lines will be drawn and labeled along the corridor according to the values you provided in the Create Sample Lines table.



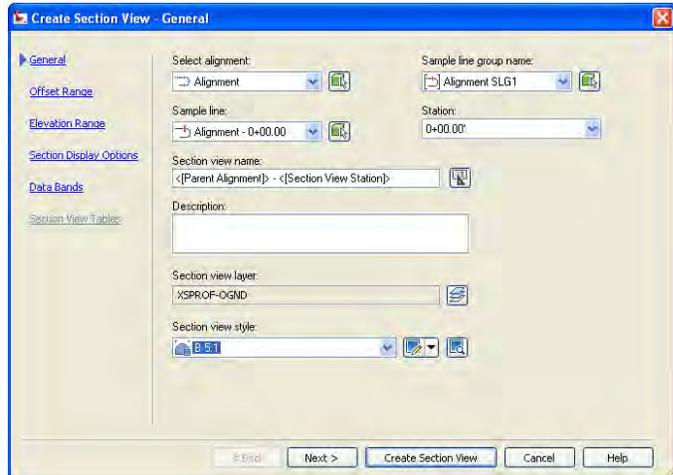
This guide covers the procedure for developing sections along an alignment. Before sections can be developed, you must first create sample lines along the alignment. For more information on developing sample lines, refer to Quick Reference Guide 710.0 *Creating Sample Lines*.

Go to the *Profile & Section Views* panel on the *Home* ribbon and click on *Section Views*. Select *Create Section View* from the drop down menu.

The following settings are controlled in the Create Section View windows:

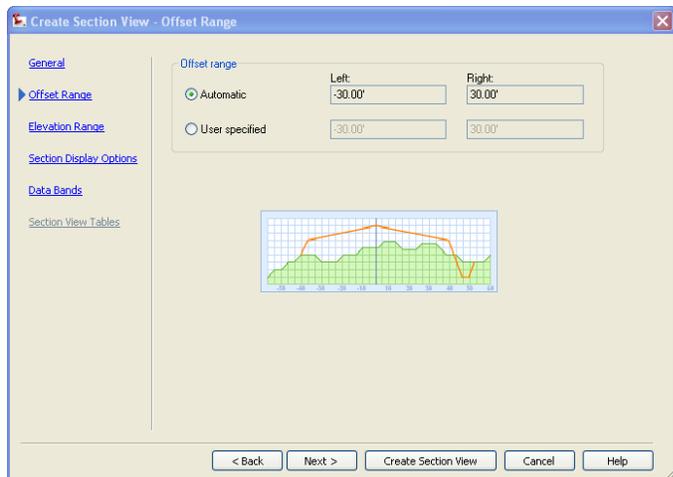
1. General window

- Select the station to plot
- You can overwrite the default name provided by the template in the *Section view name: cell*.
- You can provide a description, but it is not required.
- By default, the sections will be placed on the layer XSPROF-OGND, or a different layer can be selected.
- Select a section view style.



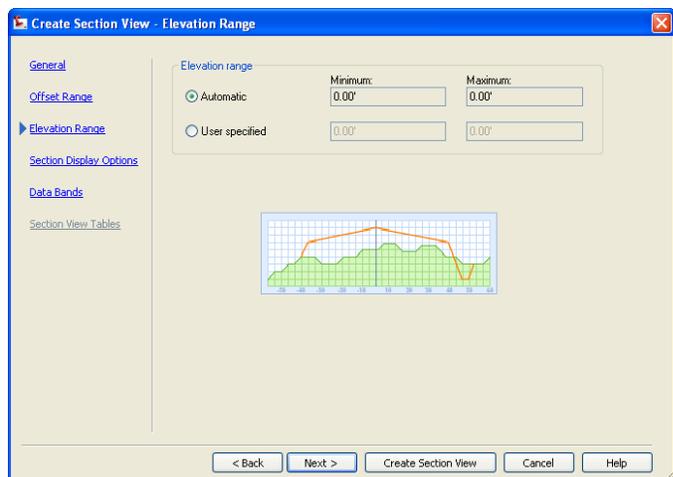
2. Offset Range

- You can specify the width to the left and right of centerline that you want drawn, or accept the default values.



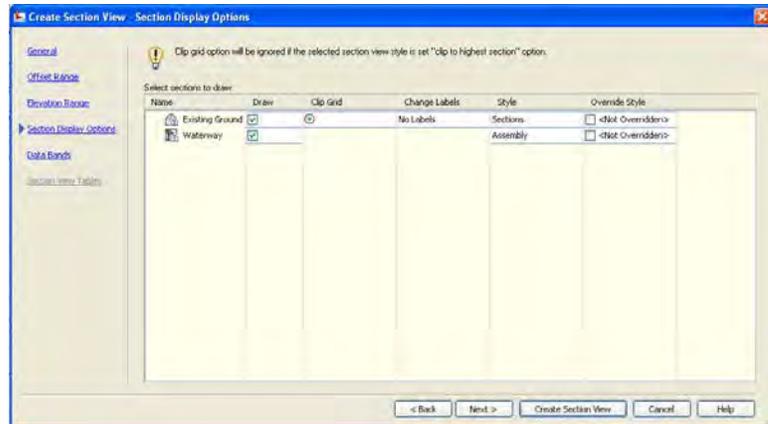
3. Elevation Range

- You can specify the minimum and maximum elevations for the plot, or accept the default values.



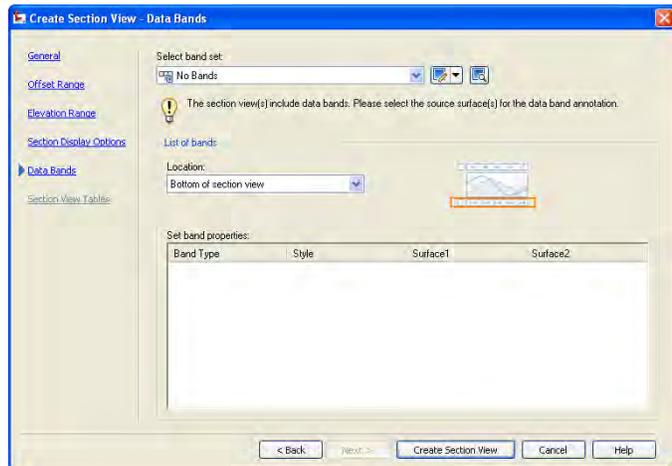
4. Section Display Options

- Select the sections that you want to plot on the cross section



5. Data Bands

- For more information on data bands used with section views, refer to Quick Reference Guide 701.0 Styles – Section Band Sets



When you are through making changes to the settings in the Create Section View windows, click on the Create Section View button. You will be prompted to select an insertion point for the section in the drawing. This will be the bottom left hand corner of the section.

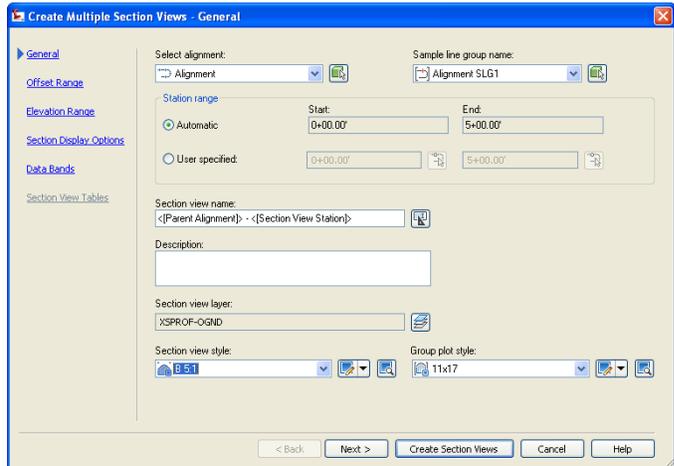
This guide covers the procedure for developing sections along an alignment. Before sections can be developed, you must first create sample lines along the alignment. For more information on developing sample lines, refer to Quick Reference Guide 710.0 *Creating Sample Lines*.

Go to the *Profile & Section Views* panel on the *Home* ribbon and click on *Section Views*. Select *Create Multiple Views* from the drop down menu.

The following settings are controlled in the Create Multiple Views windows:

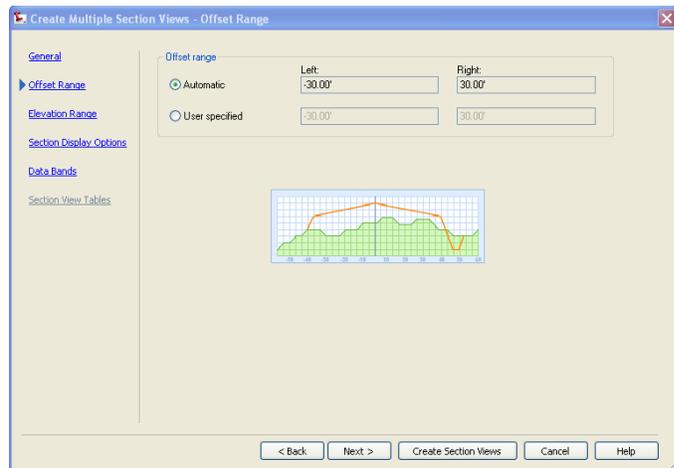
1. General window

- By default, the entire range of sections will be plotted, but you can also specify a different station range.
- You can overwrite the default name provided by the template in the *Section view name: cell*.
- You can provide a description, but it is not required.
- By default, the sections will be placed on the layer XSPROF-OGND, or a different layer can be selected.
- Select a section view style and group plot style.



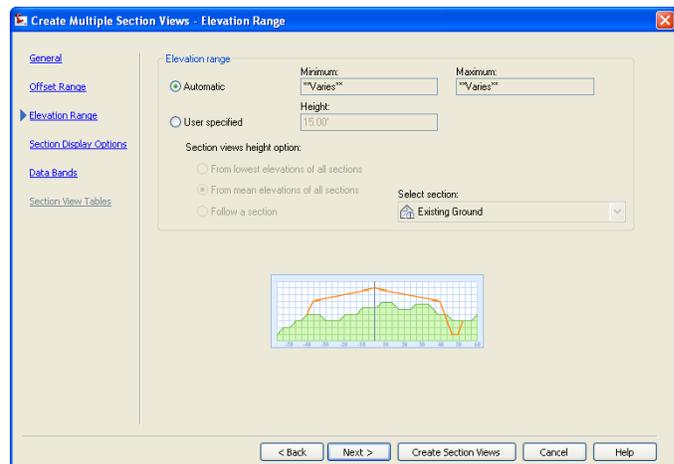
Offset Range

- You can specify the width to the left and right of centerline that you want drawn, or accept the default values.



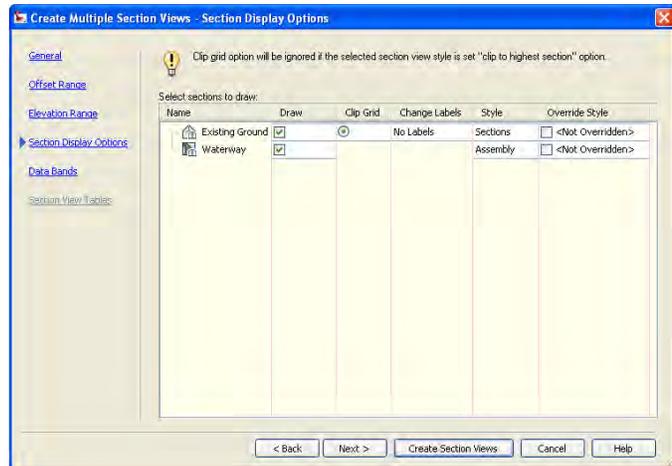
2. Elevation Range

- You can specify the minimum and maximum elevations for the plot, or accept the default values.



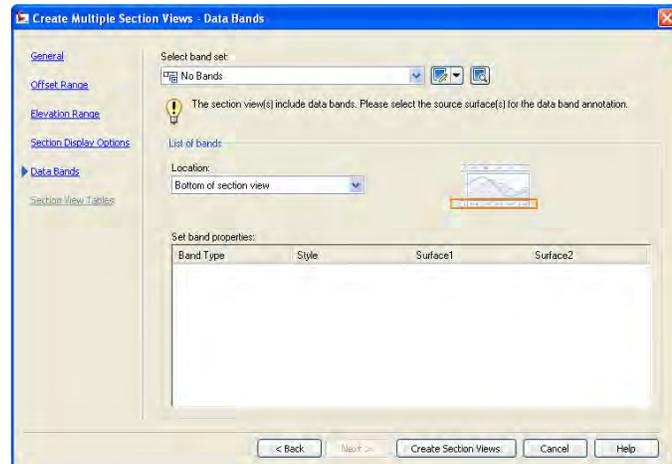
3. Section Display Options

- Select the sections that you want to plot on the cross section



4. Data Bands

- For more information on data bands used with section views, refer to Quick Reference Guide 701.0 Styles – Section Band Sets



When you are through making changes to the settings in the Create Section View windows, click on the Create Section View button. You will be prompted to select an insertion point for the section in the drawing. This will be the bottom left hand corner of the section.