

The layers listed in a drawing can be limited through the use of layer filters. Layer filters control which layers are displayed based on the layer name or properties. There are two types of layer filters, group filters and property filters. The Minnesota NRCS drawing template contains layer group filters for several types of projects and also layer property filters to help further control the display of layers.

This guide provides a brief description of the two types of layer filters, and how they can be used to control the display of layers in a drawing.

### Layer Group Filters

To create a new layer group filter, either click on the *New Group Filter* icon  on the *Layer Properties Manager* window, or right click in the filters tree list in the *Layer Properties Manager* window and select *New Group Filter* from the menu.

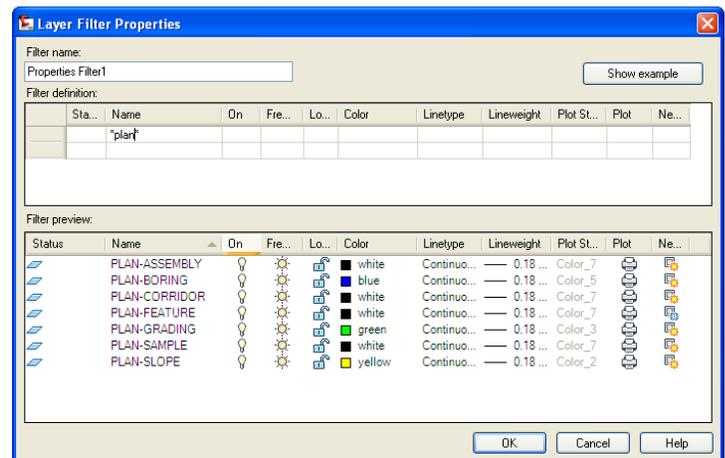
Layers are added to the group filter by selecting objects in the drawing that are on the layer you want to add to the group, or by dragging and dropping layers from the list of all layers in the layer property manager.

Layer property filters can also be applied to layer group filters in order to further control the display of the layers in a group. Refer to the next section for more information on layer property filters.

### Layer Property Filters

To create a new layer property filter, either click on the *New Property Filter* icon  on the *Layer Properties Manager* window, or right click in the filters tree list in the *Layer Properties Manager* window and select *New Properties Filter...* from the shortcut menu. Other options on the right-click shortcut menu can also be used to delete, rename, or modify filters. You can convert a layer property filter to a layer group filter, or change the visibility or lock or unlock all layers in a filter. The *Isolate Group* option turns off all layers in the drawing that are not in the selected filter.

A layer property filter includes layers whose properties meet certain criteria, such as having a given color or whose name contains certain characters. Once you have created a layer property filter you specify the properties of the layers to be included in the filter by double clicking on its name in the filters tree list to open the *Layer Filter Properties* window.



Any of the following properties can be included in the filter definition:

- Layer names, colors, linetypes, lineweights, and plot styles
- Whether layers are in use
- Whether layers are turned on or off
- Whether layers are frozen or thawed in the active viewport or all viewports
- Whether layers are locked or unlocked
- Whether layers are set to be plotted

Layer property filters can also be nested under other layer property filters, similar to the nesting that can be done with layer group filters.

Wildcard characters can be used to help when selecting layers with a specific text string in its name.

The following wildcard characters can be used to help filter layer names:

# (pound)	Matches any numeric digit
@ (at)	Matches any alphabetic character
. (period)	Matches any nonalphanumeric character
* (asterisk)	Matches any string and can be used anywhere in the search string
? (question mark)	Matches any single character; for example, ?BC matches ABC, 3BC, and so on
~ (tilde)	Matches anything but the pattern; for example, ~*AB* matches all strings that don't contain AB
[ ]	Matches any one of the characters enclosed; for example, [AB]C matches AC and BC
[~]	Matches any character not enclosed; for example, [~AB]C matches XC but not AC
[ - ]	Specifies a range for a single character; for example, [A-G]C matches AC, BC, and so on to GC, but not HC
` (reverse quote)	Reads the next character literally; for example, `~AB matches ~AB. Use this when the text you want to filter contain a character that is ordinarily a wildcard character.

### Invert Filter

You can also invert a layer filter. For example, if all the site plan information in a drawing is contained in multiple layers that include the word *site* as part of the layer name, you can display all information except site plan information by first creating a filter definition that filters layers by name (*\*site\**) and then using the Invert Filter option.

### Sort Layers

Once you have created layers, you can sort them by name or other properties. In the Layer Properties Manager, click the column heading to sort layers by the property in that column. Layer names can be sorted in ascending or descending alphabetical order.