

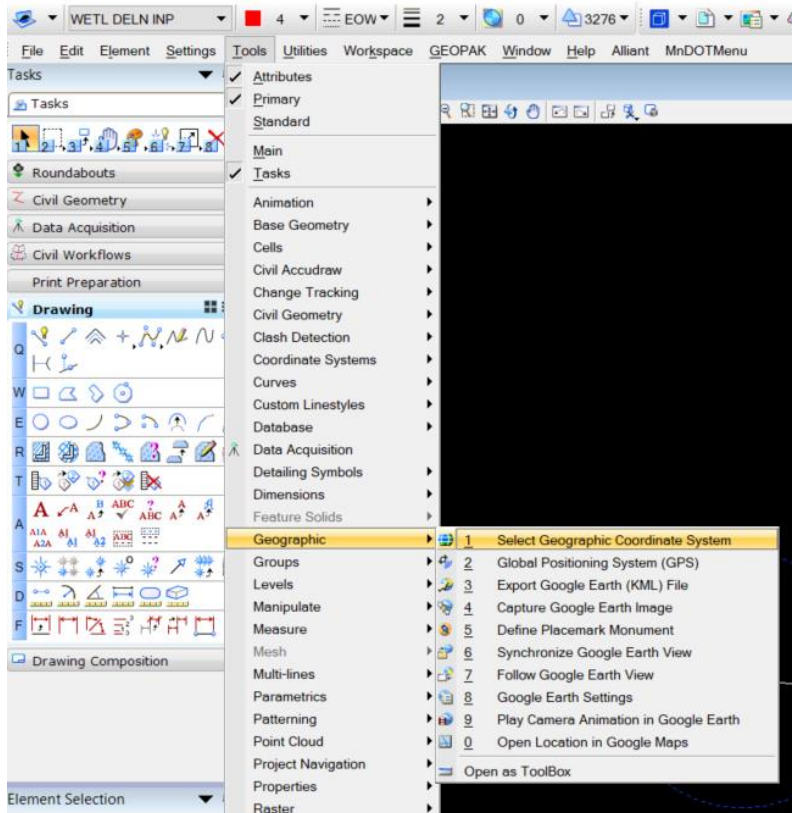


ALLIANT

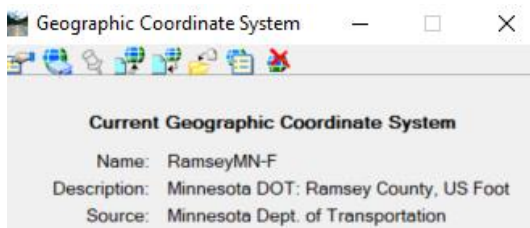
Adding Image Service (WMS) to MicroStation V8i

1) Assign a Geographic Coordinate System to the Drawing

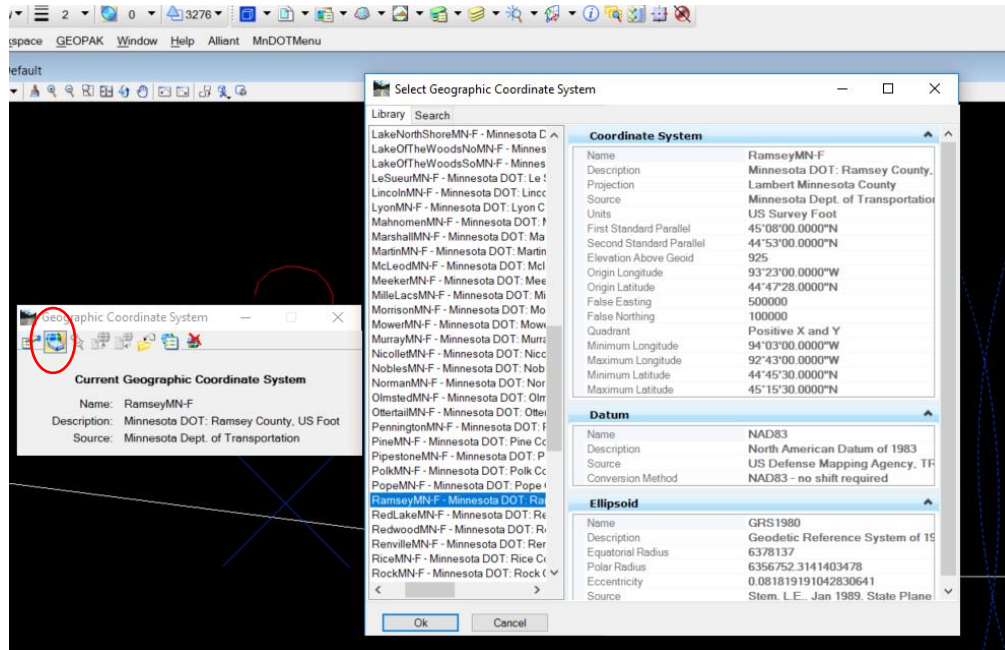
a) Click Tools>Geographic>Select Geographic Coordinate System.



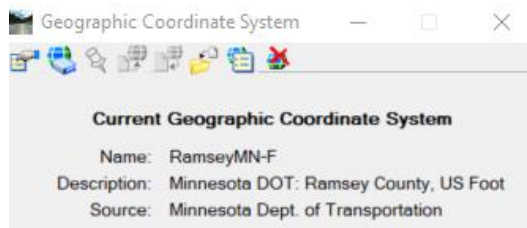
b) The following dialogue box will appear. It will be blank or it might already contain a geographic coordinate system. For this series of screen images, MnDOT's Ramsey County US Foot is the desired coordinate system:



- c) Click on 'From Library' and the 'Select Geographic Coordinate System' window appears.



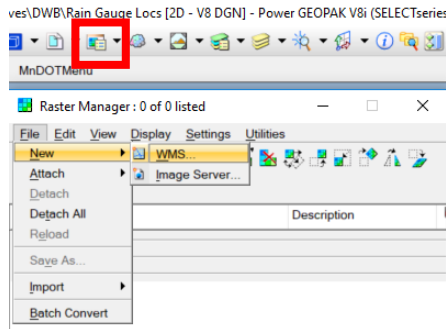
- d) Select the appropriate geographic coordinate system for the project. Alliant has prepared a favorites folder that includes commonly used coordinate systems. Click OK.



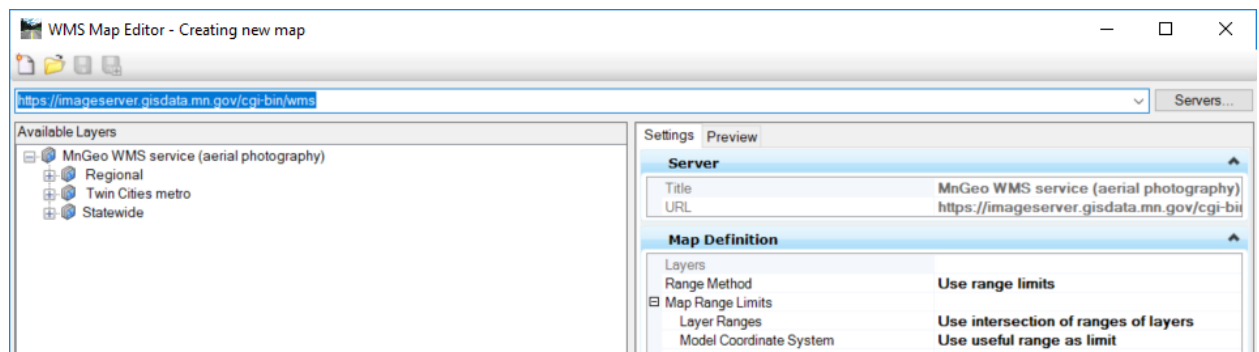
- e) Close the Geographic Coordinate System window or move to the side.

2) Create a new WMS configuration file with the Raster Manager dialogue box.

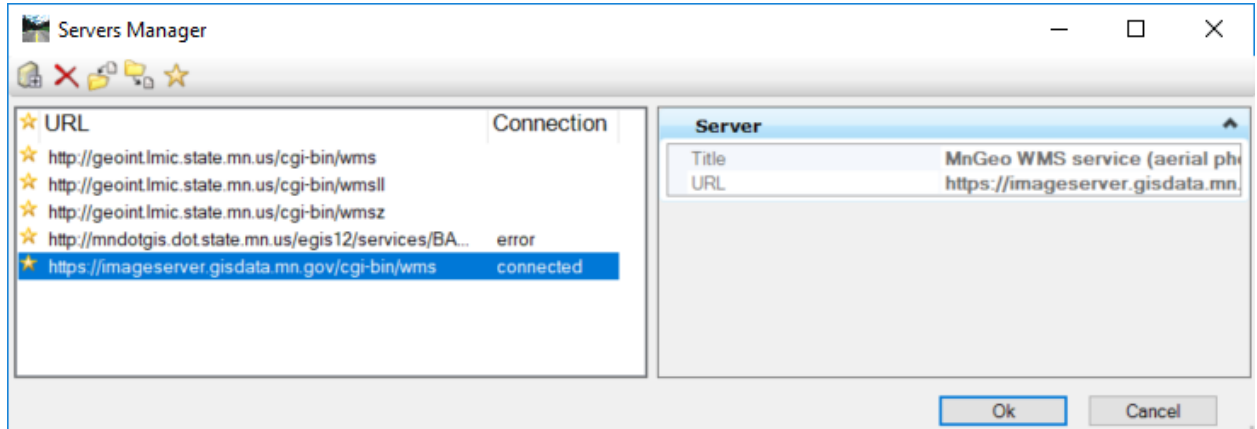
- a) Click the 'Raster Manager' icon. Select the 'File' dropdown and choose File>New>WMS.



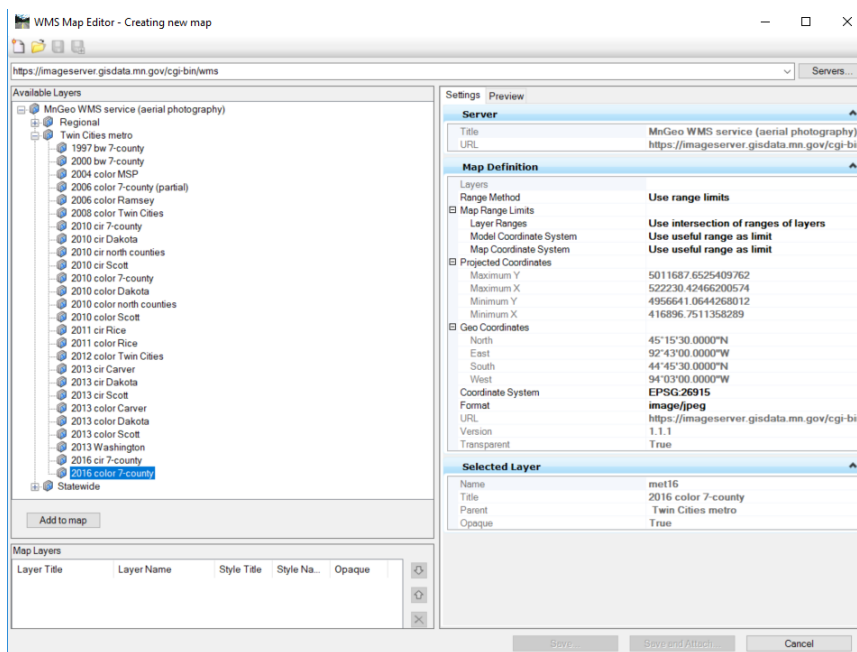
- b) In the 'WMS Map Editor' window, enter 'https://imageserver.gisdata.mn.gov/cgi-bin/wms' and press enter.



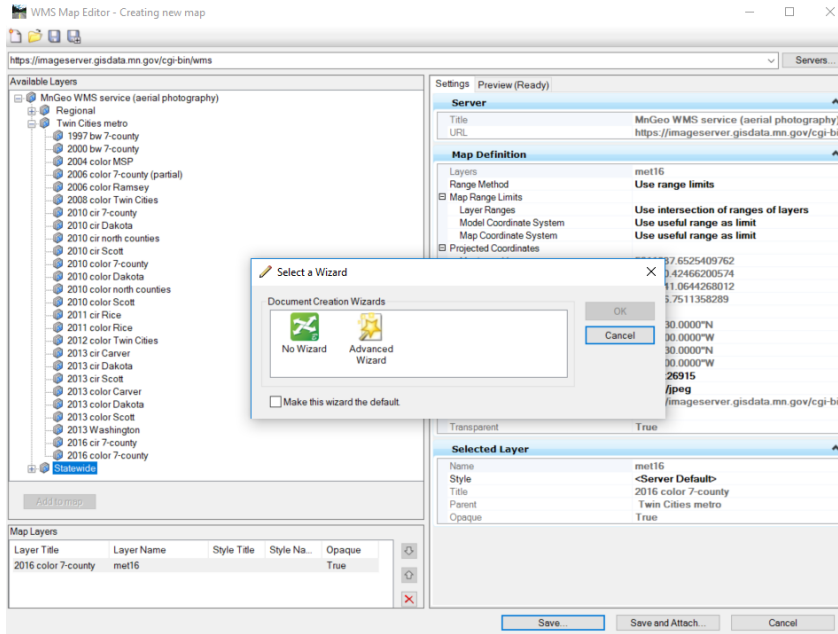
- c) In the 'WMS Map Editor' window, click on the 'Servers' button in the upper right. A list of servers appears. Select the service desired, make sure the 'Connection' tab lists it as 'connected' and not 'error' or blank, click 'OK'.



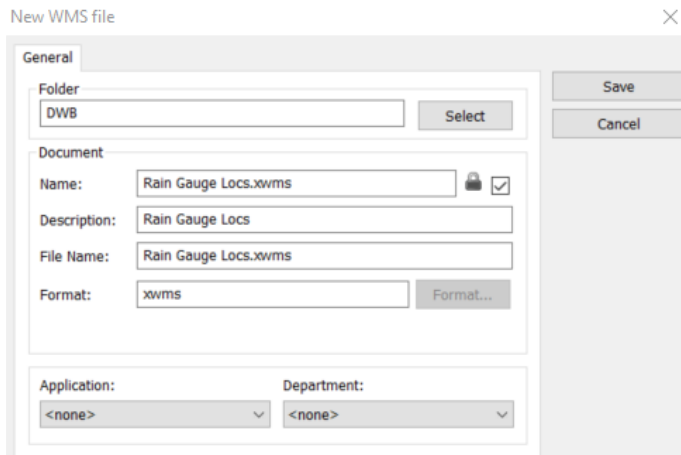
- d) In the 'WMS Map Editor' window, browse the 'Available Layers' to select the aerial photography needed for the project. After selecting the aerial photographs needed, click 'Add to map'. The selected layer, or layers, will appear in the lower left of the 'WMS Map Editor' window.



- e) Click Save in the lower right of the 'WMS Map Editor' window. Select "No Wizard" and click 'OK'.

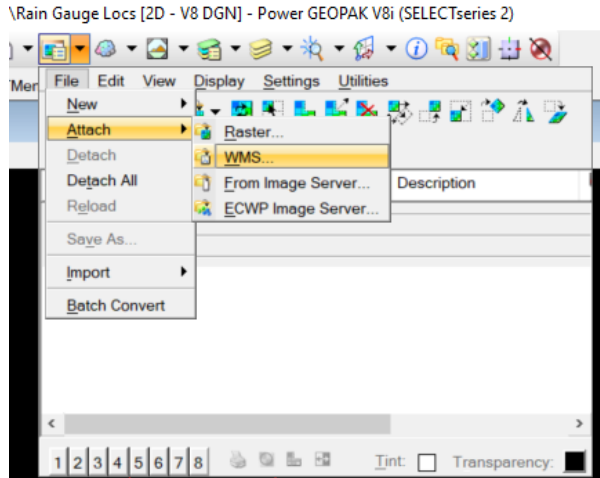


- f) A 'New WMS file' window appears with the default save location as the original file folder. Change location if necessary and click 'save'.

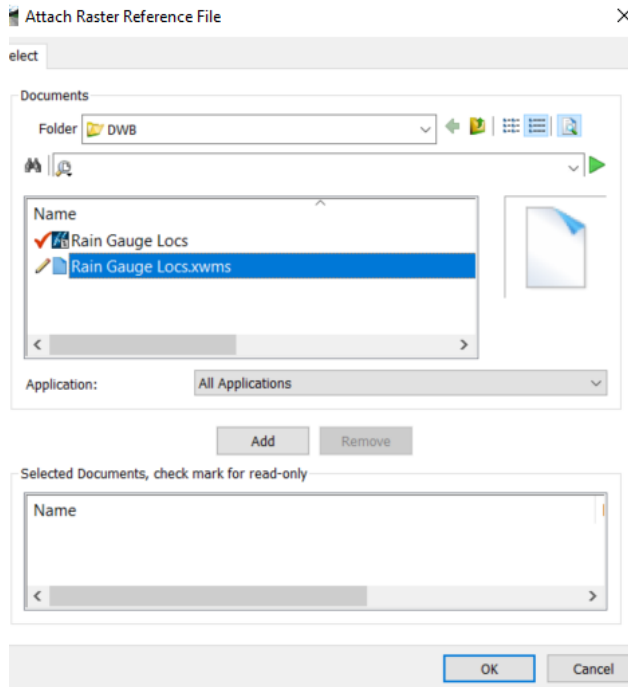


3) Attach WMS file within the Raster Manager Dialogue box

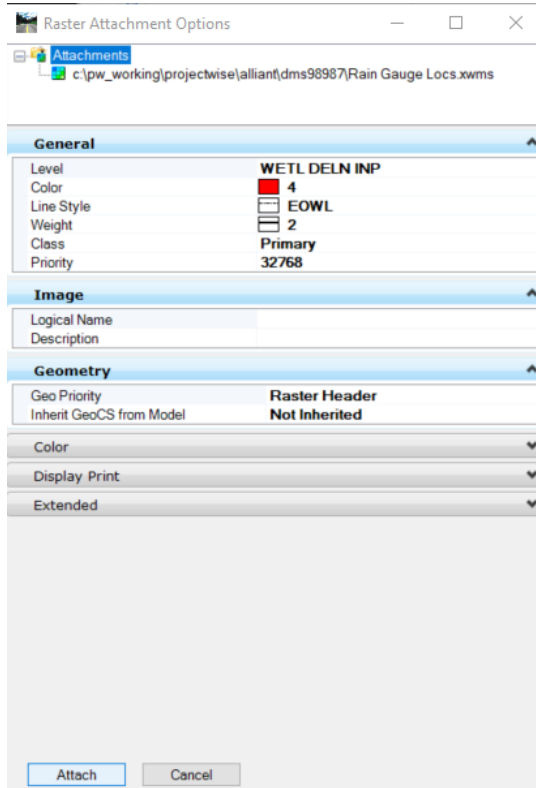
- a) Click on the 'Raster Manager' and select File>Attach>WMS.



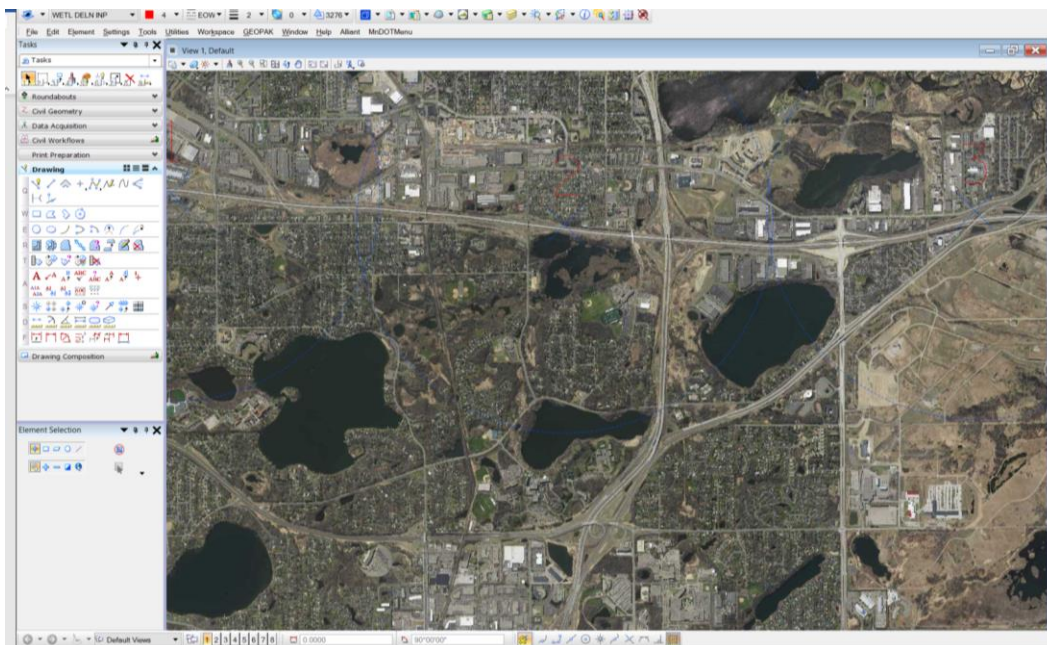
- b) In the 'Attach Raster Reference File' dialogue box, select the previously created WMS configuration file (ending in .xwms). Click OK.



- c) Verify under the 'Geometry' tab that the option for 'Inherit GeoCS from model' is set to 'Not Inherited' and click 'Attach'.

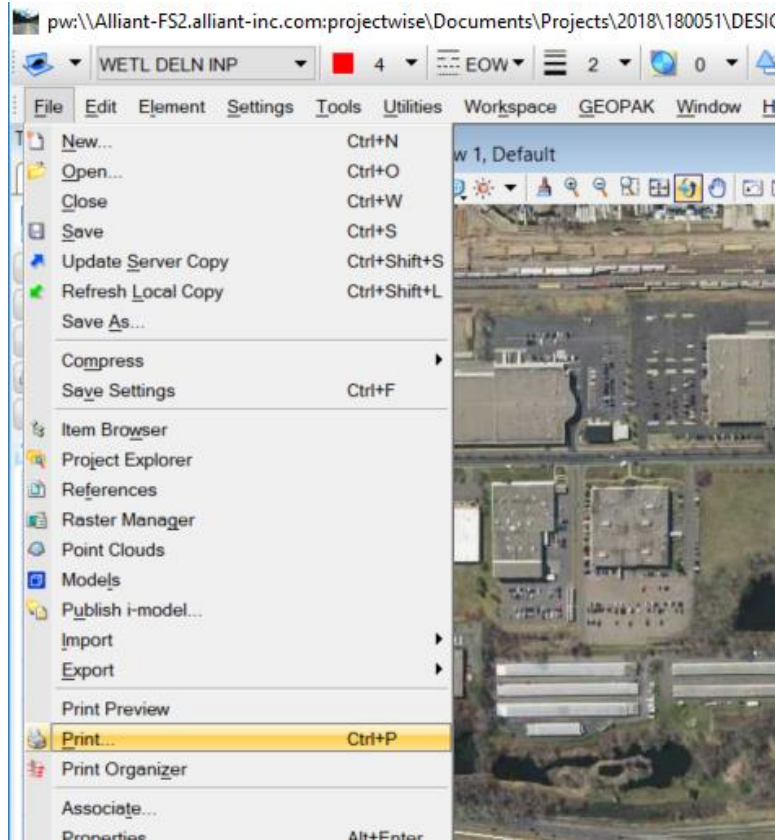


- d) The WMS Aerial photography should be successfully placed in the drawing per the appropriate geographic coordinate system for the project.

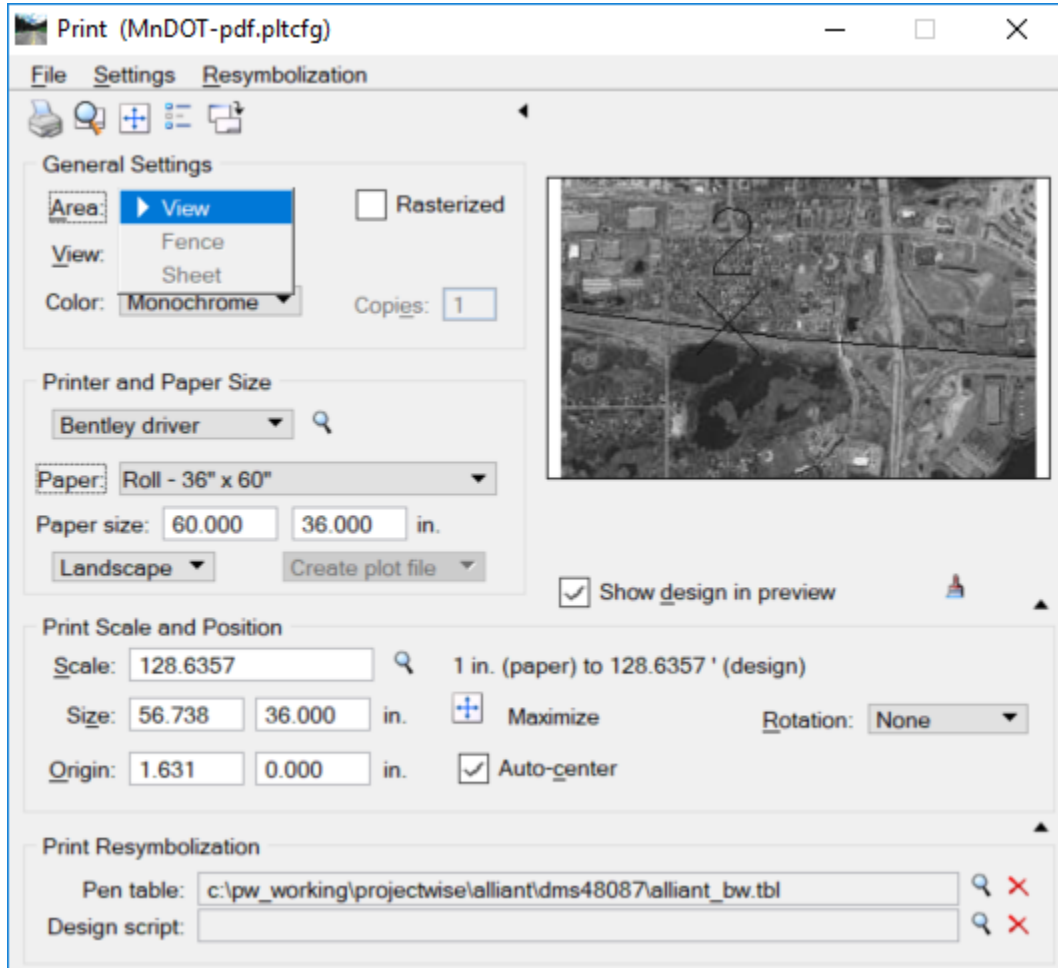


4) Printing with Images from a WMS Server in Microstation

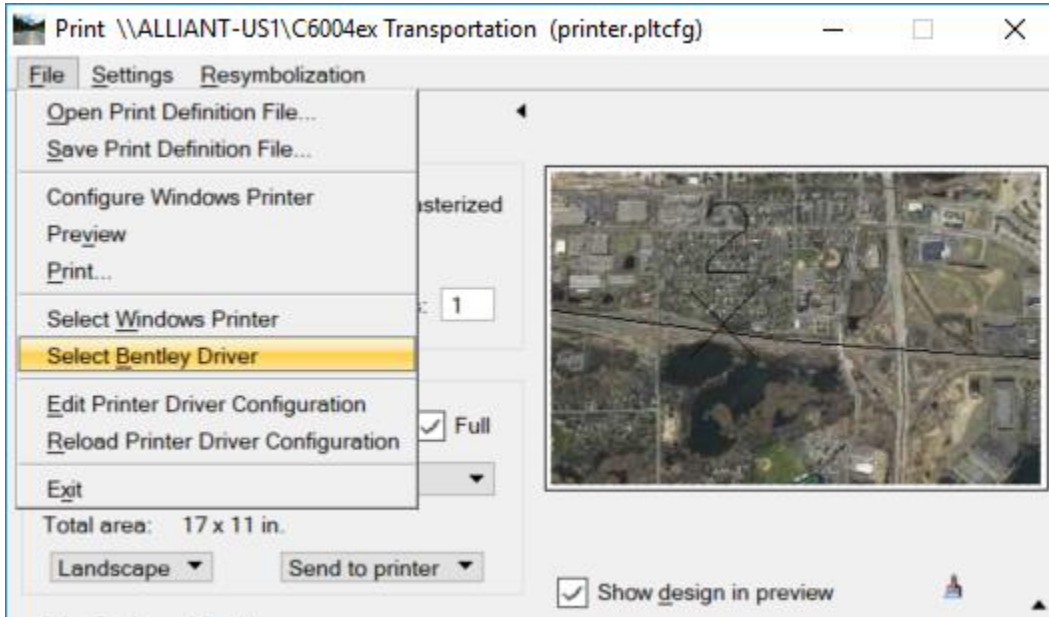
- a) Prepare your area to print, with either a fence or setting up the view. Select 'Print' from the 'File' dropdown menu.



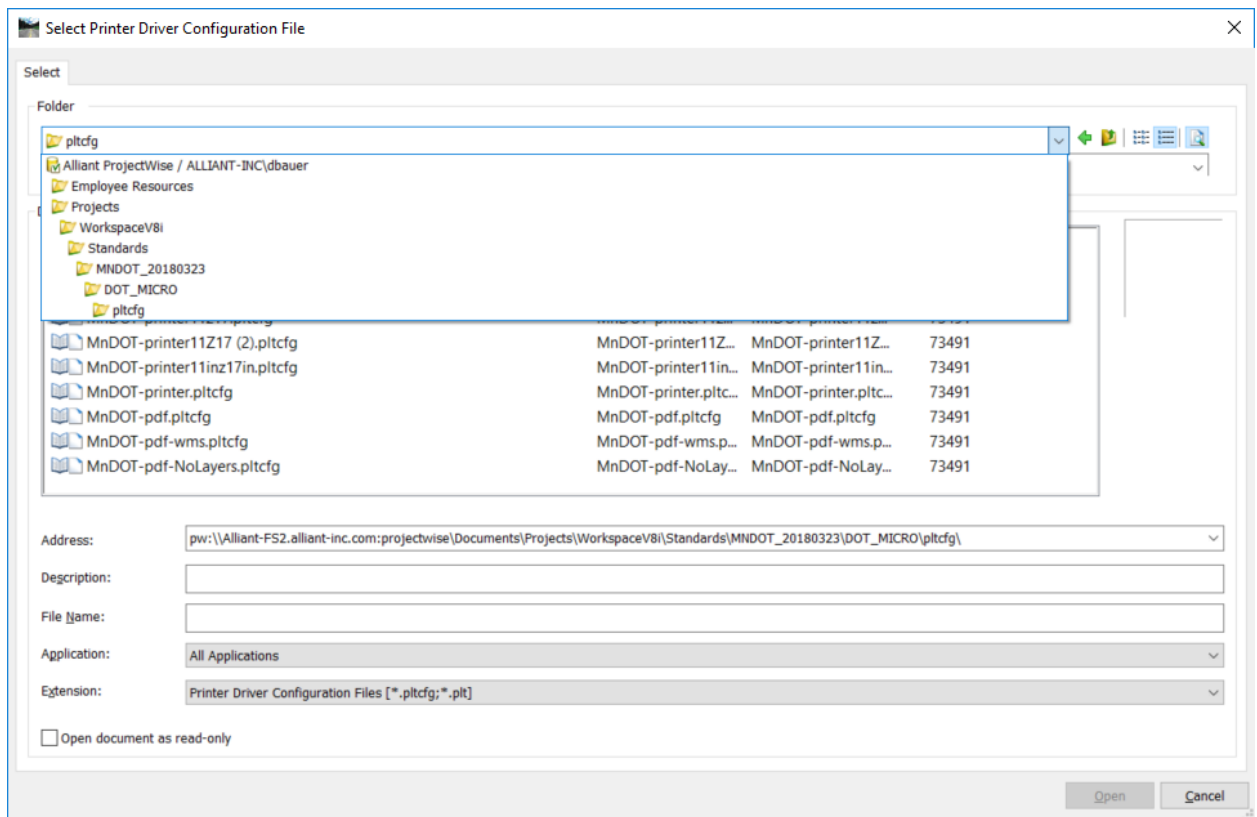
- b) In the 'Print' window, set the 'Area:' in the General Settings section to the desired choice.



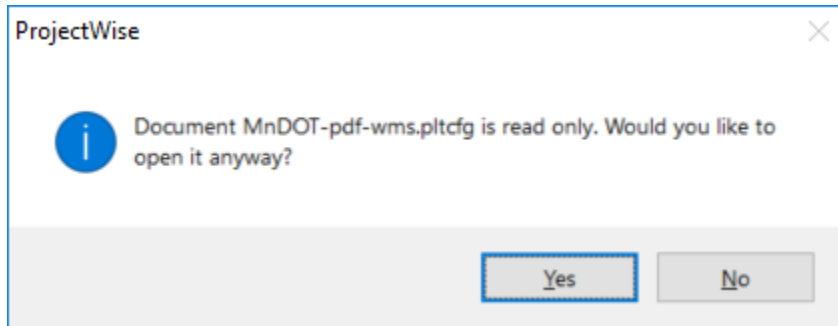
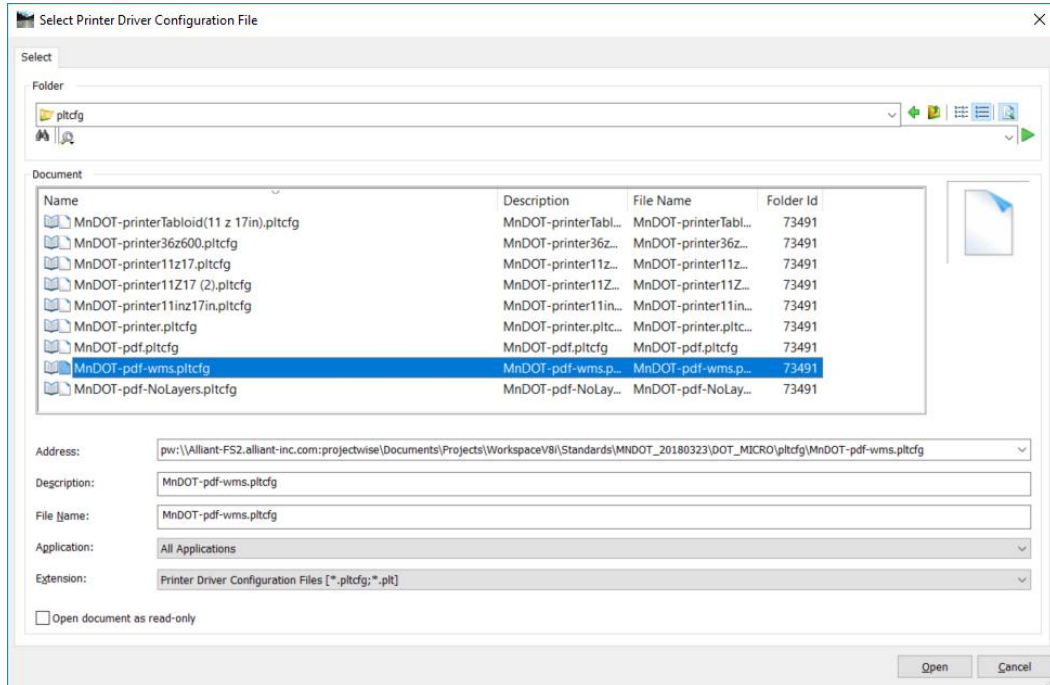
c) In the 'Print' window, select File>'Select Bentley Driver'



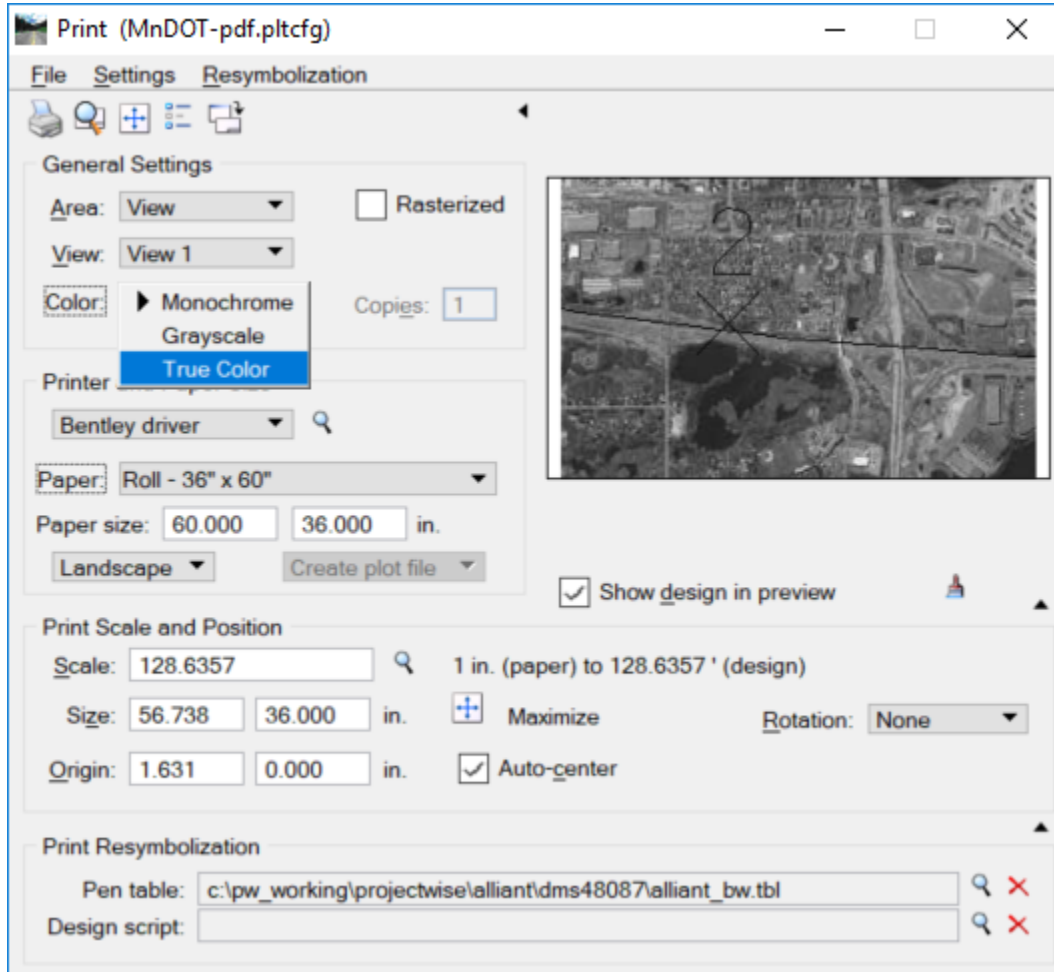
- d) Click the dropdown menu for the folder displayed at the top of the 'Select Printer Driver Configuration File' menu. Navigate to Projects\WorkspaceV8i\Standards\MNDOT_20180323\DOT_MICRO\pltcfg



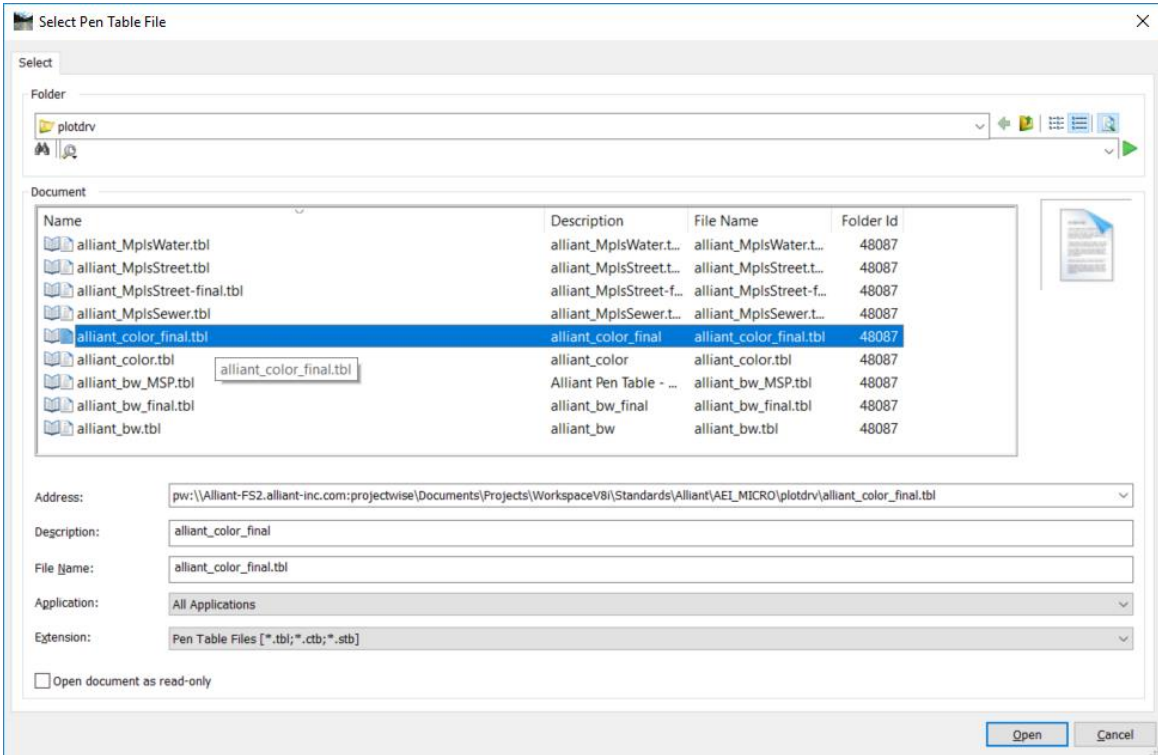
- e) Select MnDOT-pdf-wms.pltcfg and click 'Open'. A warning might appear "Document MnDOT-pdf-wms.pltcfg is read only. Would you like to open it anyway?" Click 'Yes'.



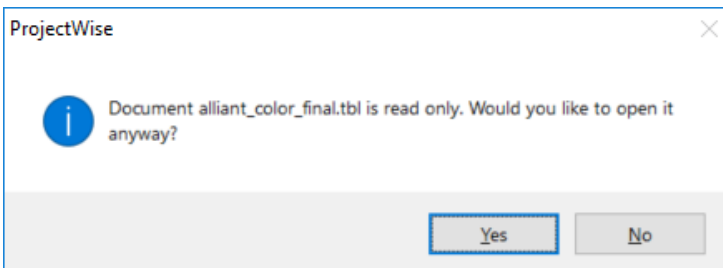
f) To print in color, set the 'Color:' choice to 'True Color'.



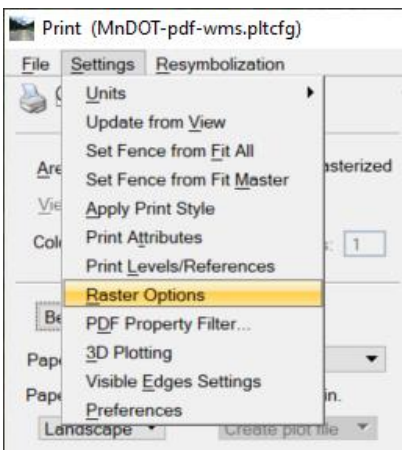
- g) To print in color, while still in the 'Print' window, go to the 'Print Resymbolization' section in the bottom and click the magnifying lens. Select 'alliant_color_final.tbl' and click 'Open'



- h) A warning might appear "Document alliant_color_final.tbl is read only. Would you like to open it anyway?" Click 'Yes'.



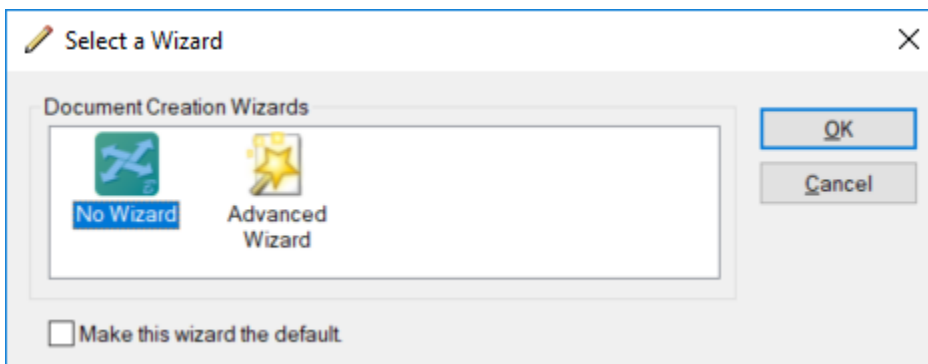
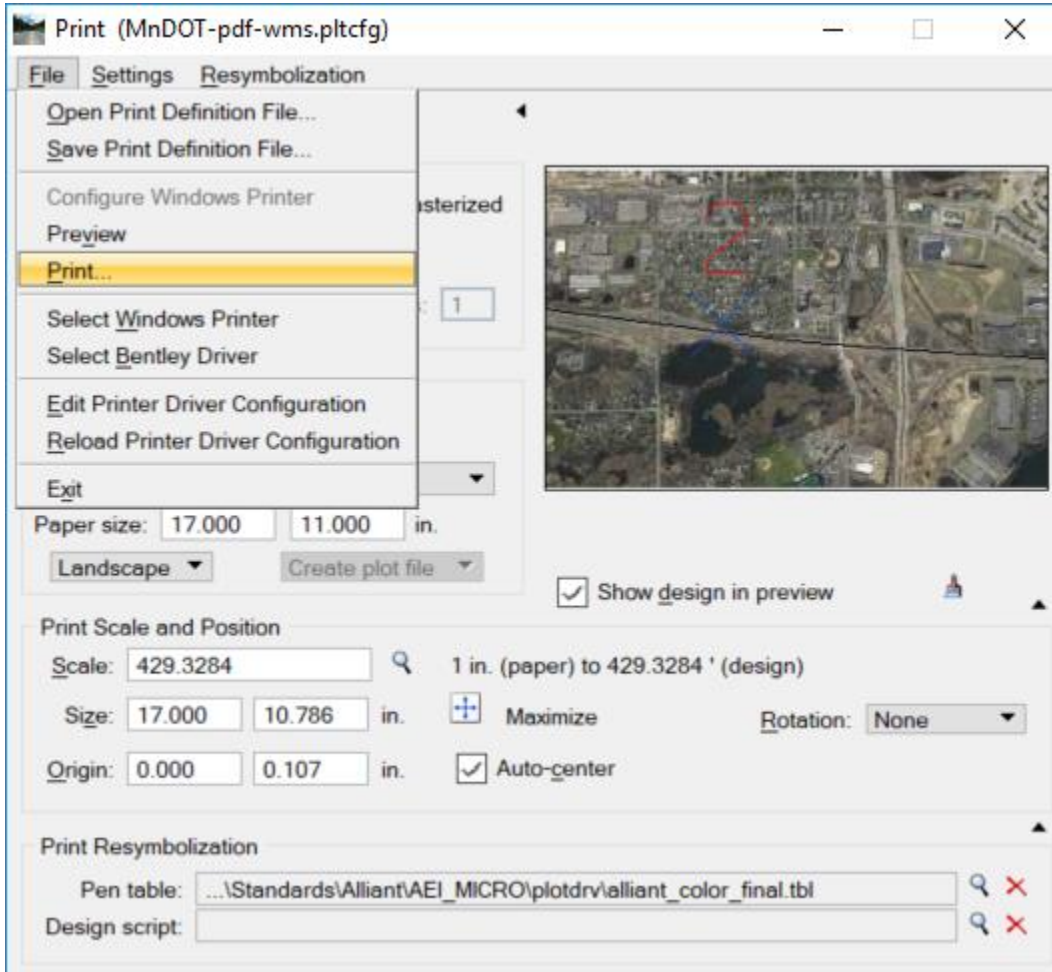
- i) In the Print dialog box, go to the Settings tab>Raster Options



- j) Change the raster quality factor to 30. This should keep the printed pdf file size down and prevent the error where the WMS server is not able to display data at certain (higher) resolutions.

The image shows a dialog box titled "Print - Raster Options". It has three main sections: "General", "Raster Color", and "Raster Quality". In the "General" section, the "Print raster images" checkbox is checked. In the "Raster Color" section, "Print raster in grayscale" and "Print monochrome raster as-is" are unchecked. There are sliders for "Brightness" and "Contrast", both ranging from 0 to 100. In the "Raster Quality" section, the "Quality factor" is set to 30, and this text is enclosed in a red rectangular box. Below it, "Printer resolution (dpi)" is 75 and "Raster resolution (dpi)" is 22. At the bottom, there are "OK" and "Cancel" buttons.

- k) While in the 'Print' window, select 'Print' from the 'File' dropdown menu. The 'Select a Wizard' will appear. Choose 'No Wizard' and select 'OK'.



- l) In the 'Save Print As' window, navigate to a folder using the 'Select' button in the 'Folder' section. Set the name in the 'Document' section under name. Set the 'Format' to *.pdf. The 'Application' should default to 'Bluebeam', if it does not, choose it from the 'Application' menu.
- m) Your document will save as a .pdf file. Open the .pdf file and print in a .pdf-reading software such as Revu. Congrats, you have created a WMS Aerial and Learned how to Print it.

