Printing

Print Icon

The print icon located on the Right of Way Mapping and Monitoring application will generate a predefined map layout as displayed on the application. This feature will not print MnDOT maps and is limited to the options available in ArcGIS Online. Additional information for this tool is located at ArcGIS's website.

Printing Right of Way Maps (TIF, DGN, PDF)

MnDOT's Right of Way Mapping and Monitoring application allows access to map data by download. The data will be in one of two format types; a multipage raster image (TIF) or a MicroStation CAD file (DGN). In addition, a PDF copy is available for each right of way and railroad map. Plats and graphic orders are only available as a raster image with no PDF copy.

Raster (TIF)

Settings and results will depend on the printer and software used to view a map. It is best to select options, such as Fit to Page, To Scale, Print at 100%, etc., to achieve desired results. Printing maps "to scale" will require the use of a large format printer as most maps will vary between 24 inches and 36 inches in width and up to 200 + inches in length.

If you are unable to view or print a TIF image with your default windows image viewer, we have seen good results using IrfanView. It is freeware and available for download from their website.

CAD (MicroStation-DGN)

All CAD maps originate in MicroStation and have a .DGN extension. To view and print a CAD file will require the use of CAD software. Settings and results will depend on the printer and software used. When printed to scale, CAD maps have a typical width of 36 inches and maybe over 200 inches in length.

If you are unable to open a (DGN) file, Bentley does offer a free product called **Bentley View** on their <u>website</u>. This product has not been used or tested.

PDF (Adobe Acrobat)

PDF maps are copies of the original source map (CAD or TIF image) and have the sole purpose of providing an alternative format to view a map. The PDF copy is only available for right of way and railroad maps. The recommendation is to install Adobe Acrobat Reader or a similar product to navigate PDF maps. A document called **Working with PDF maps**, located on our Right of Way Mapping and Monitoring splash page, contains some information to help view, navigate, and print PDF maps. Additional information on printing from a PDF is located at Adobe's website.

LIS & RW Mapping Unit December 14, 2018

Adobe products are the most common viewers of PDF documents but you should also consider others if encountering problems. If you are unable to print using Adobe products, attempt to use other free PDF viewers such as **Foxit Reader** or **Nitro PDF Reader**. Another option would be to use **IrfanView** to view PDF maps however; additional software called Ghostscript would need to be installed for IrfanView to display PDF documents.

Known issues: PDF maps originating from a TIF image longer than 200 inches are not to scale. PDF maps originating from a CAD file over 200 inches may not print using Adobe software.