

# Location Maps

## **Location Maps**

This document provides the directions to set up a location map in a Microsoft Word document as per the T.D.O.T. Roadway Design Division Roadway Design Guidelines.

The location map is first prepared in **MicroStation** using a standard 8.5 x 11 form cell with a design and/or raster map file attachment. A raster image file of the completed location map is then created in MicroStation which can then be inserted into a **MicroSoft Word** document.

To use the T.D.O.T. Design Division county map files, download from

https://www.tn.gov/content/tn/tdot/roadway-design/design-standards/design-cadd-files/tennessee-map-filesfor-microstation.html.

The files are listed by county name. All maps are in NAD 83 English mapping coordinates as set up in the standard T.D.O.T. Design Division English MicroStation DGN seed file. Graphics are set for scale 1" = 5280'

### Attach the County Map(s) to the Location Map Form

- 1. Create a new DGN file for the location map.
- 2. Reference your alignment DGN file to the location map DGN file.
- 3. Set the active scale = 5280.
- Place a location map cell so the alignment is centered in the map area. In MicroStation running the T.D.O.T. interface, go to T.D.O.T > Permits & Forms or in Geopak's D&C Manager go to Drafting Standards > Sheets > Permits & Forms.
- Reference the county DGN file to the location map DGN file. In MicroStation go to File > Reference. In the Reference dialog box, go to Tools > Attach and select the county DGN file. Set Attachment Method to Coincident (or Coincident World) and select OK.
- 6. Fence the map area you need on the location map and do a clip boundary for the DGN county file.
  - a. In the Reference File dialog box, select the county map DGN, go to Tools > Clip
     Boundary. In the MicroStation Tool Settings box set Method to Active Fence, click on Use
     References Dialog List and data point to accept.
- In MicroStation, turn off level DESIGN SCRATCH User 1, (#30), in the county DGN reference and go to File > Save Settings.
- 8. Annotate the map as needed

Note:

The location map will plot at **1**" = **5280**'.

#### **Generate JPG Image File of Location Map**

- 1. In the MicroStation location map DGN file, set the view attributes to Line Weights on, Data Fields off, Fill on.
- 2. Create a fence by snapping to the green snap points on the location map cell. This will place the fence just inside of the 8.5" x 11" border lines.
- 3. Use MicroStation Print to create the JPG file. Go to **File > Print**. In the MicroStation Print dialog, attach the **Tdotjpeg.pltcfg** plotter driver. Go to **File > Select Bentley Driver**.
- 4. Set the **Print Scale** to 5280 or otherwise to match the map scale.

📕 Print (Tdotjpeg.pltcfg)	
<u>F</u> ile <u>S</u> ettings <u>P</u> enTable	
General Settings	
Area: Fence  Rasterized	
View: View 1	
Color: Monochrome  Copies: 1	
Pen table: TdotPlot.tbl	
Printer and Paper Size	
Bentley driver	
Paper: Letter	
Usable area: 8.5 x 11 in.	
Portrait    Create plot file	Show <u>d</u> esign in preview
Print Scale and Position	
Scale: 5280.000000 9 1 in.	(paper) to 5280.000000 ' (design)
Si <u>z</u> e: 8.000 10.501 in.	Maximize Rotation: None -
<u>O</u> rigin: 0.000 0.000 in.	Auto-center

5. Go to File > Print (first icon) and save the JPG file to the project folder.

#### Insert JPG Image File into Microsoft Word Document

- 1. Open the Word document for the location map. Go to the **Page Layout** ribbon menu and click on **Margins**. Choose **Custom Margins** and set the margins on all sides to 0.25 inches.
- 2. Go to the **Insert** ribbon menu and click on **Picture.** Navigate to & select the image file created with MicroStation Print.
- 3. The image will come in to the available margin space in the Word file and if you used the green snap points on the form then the image size will be 8" X 10.5" which will be to scale. After insertion the **Picture Tools** ribbon menu is opened automatically and **Size** at the far right shows the width and height. For other map sizes, adjust these values to achieve the correct scale. (Map dimension in inches = Width in MicroStation / Scale).