

Engineering Systems CADD Support

Application Support Guide

Application/Tool(s): MicroStation V8i SS10 / Power GEOPAK V8i SS10

Version(s): 08.11.09.918
Environment(s): OpenRoads (Enhanced) Workspace

Released/Revised: 11/18/2024

NAIP TIF IMAGERY FOR BENTLEY **PROJECTS**

ISSUE:

Displaying aerial imagery for projects designed in MicroStation / Power GEOPAK v8i SS10 comes with limitations. Montana State Library Web Mapping Services (WMS) are heavily relied on for MDT MicroStation / Power GEOPAK v8i SS10 projects but aren't always reliable with plans production processes.

SOLUTION:

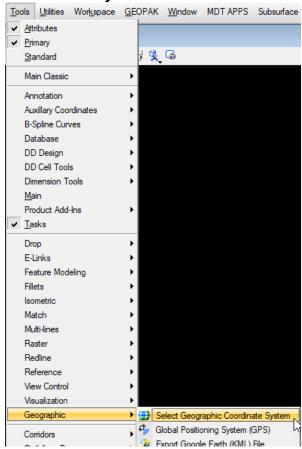
Aerial images may be requested from the Montana State Library in TIF format and attached to design files as a solution for displaying aerial images.

PROCEDURE:

1) Download and extract the collection of shape files for the desired year of imagery from the **Montana State Library** website.

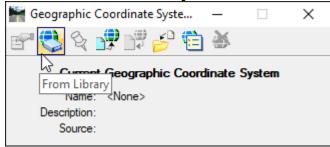
https://msl.mt.gov/geoinfo/data/Aerial_Photos/Ordering

- a. Once downloaded, navigate to the **Downloads** directory within **File Explorer**.
- b. Right-click and choose Extract All..., selecting any temporary location.
- 2) With the DGN mapping file open in MicroStation / Power GEOPAK, set the Geographic Coordinate System, if not already set, as follows:
 - a) From the MicroStation Tools menu, choose Geographic > Select Geographic Coordinate System.*



^{*}Alternatively accessed by choosing **Tools** > **Tool Boxes** and checking **Geographic**, then selecting **Select Geographic Coordinate System** from the Geographic tool bar.

b) Choose the **From Library** icon.



c) Follow the following path to select the appropriate coordinate system: (Projected (northing, easting, ...) >

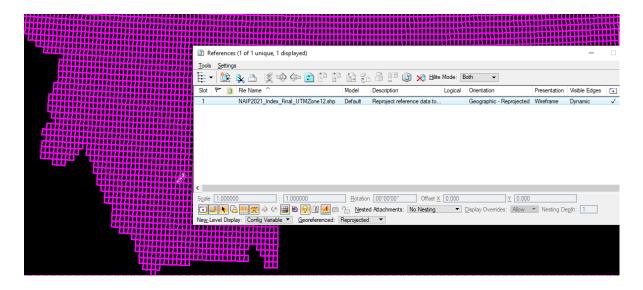
North America >

United States of America >

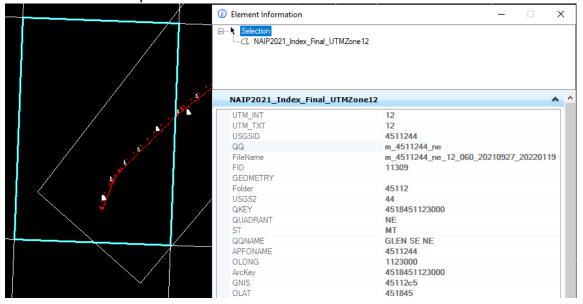
Montana > MT83IF - NAD83 Montana State Planes, International Foot OR

MT83/2011IF - NAD83/2011 Montana State Planes, International Foot

- d) Choose Ok.
- 3) Continuing with the DGN mapping file open in MicroStation / Power GEOPAK, Reference the final index SHP file into the DGN mapping file using **Geographic Reprojected** for the orientation. (File > References, Tools > Attach).



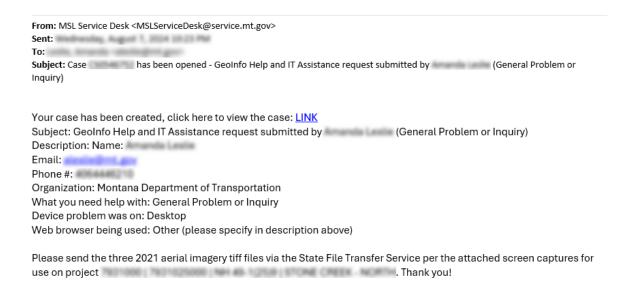
4) Select the shape(s) for the tiles within the project area and open **Element Information** (Ctrl+I). Note the tile information of the shape(s) or screen shot to include with the request.



- 5) Detach the final index SHP file.
- 6) Submit a GIS Information Help and Assistance Support Ticket requesting the TIF files be sent to you via the State of Montana File Transfer Service using the information previously captured from the shape(s). See the example request below.

GIS Information Help and Assistance - https://msl.mt.gov/geoinfo/Help/

State of Montana File Transfer Service - https://transfer.mt.gov/Home/Login



- 7) Once the TIF files are received, rename the files following PCMS naming standards using File Class "PIF", e.g. 12345000RDPIF001.tif. They will need to be uploaded to PCMS.
- 8) From the Raster Manager, attach the renamed TIF files.

See "Handling Rasters with PCMS" to properly reference the TIF files to MicroStation / Power GEOPAK drawings.

https://www.mdt.mt.gov/other/webdata/external/esdc/library/PCMSwRasters.pdf

SUPPORT CONTACT:

Please Open a Case with the MDT Service Desk for assistance. This is also accessible from the Engineering Apps & Resources web page.