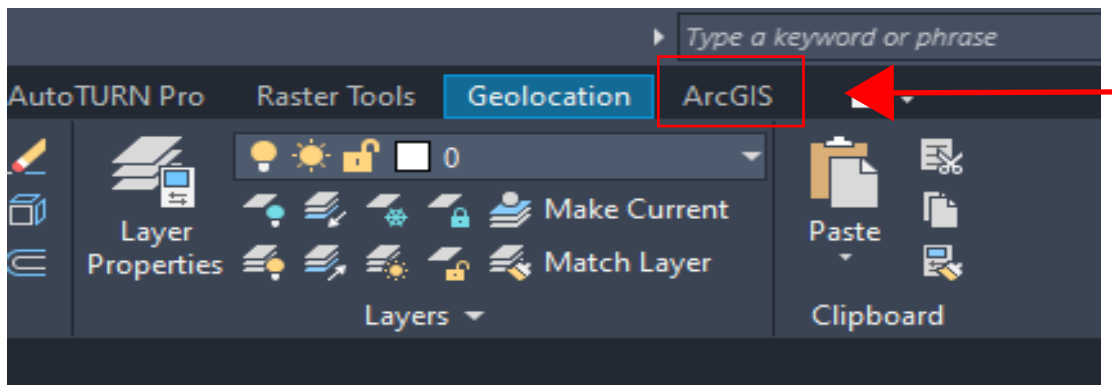


Instructions for adding aerial images to Autocad drawing with assigned local county coordinate system

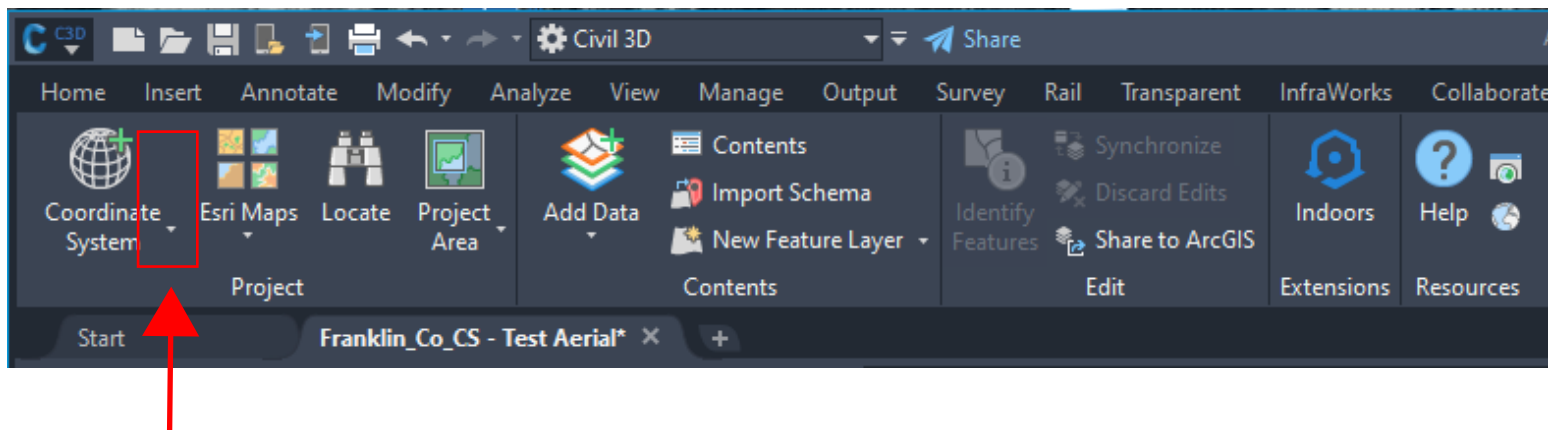
Section 1: Adding published GIS maps

Install ArcGIS for Autocad extension and launch Autocad

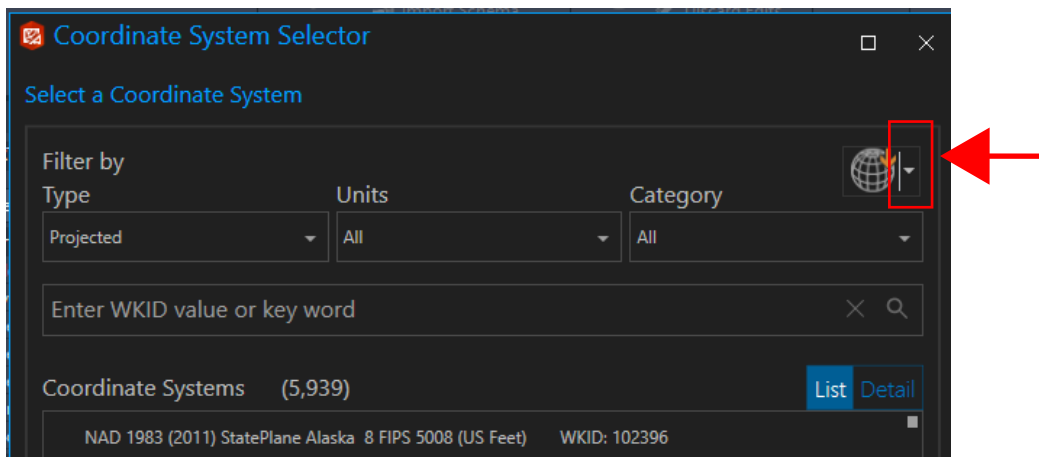
Select ArcGIS panel from ribbon



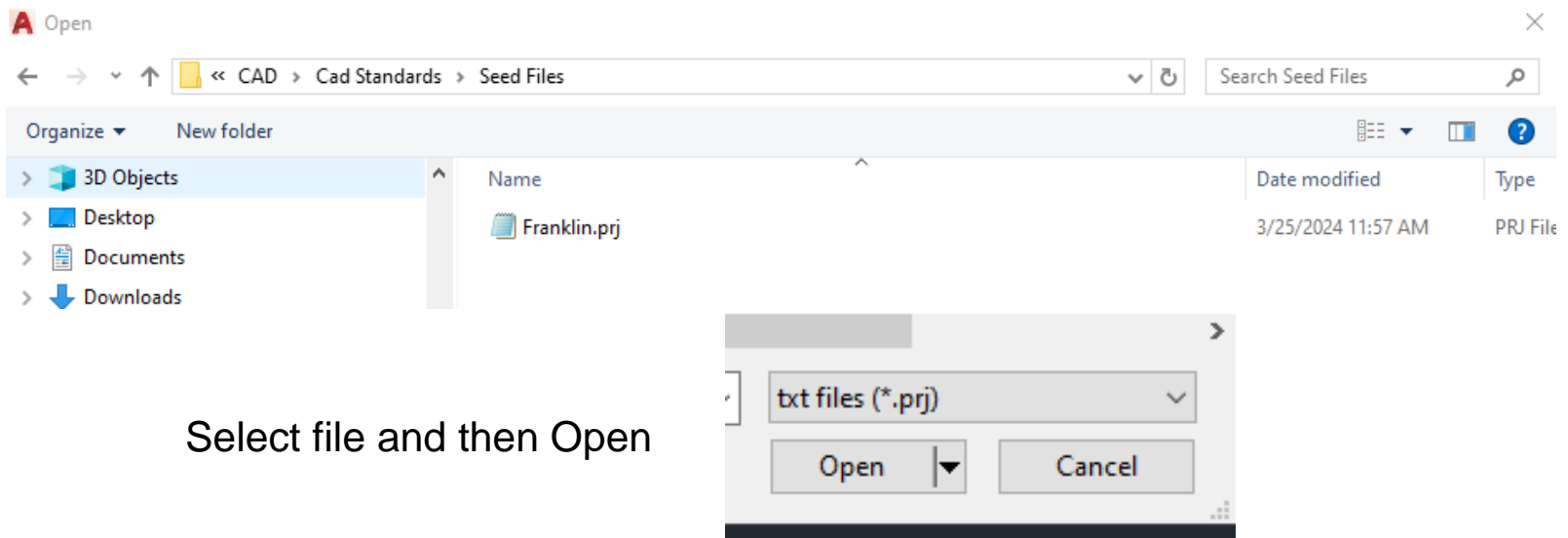
Select Coordinate System drop down and select assign to open panel to assign coordinate system to drawing for ArcGIS



Select drop down next to globe to select import from file

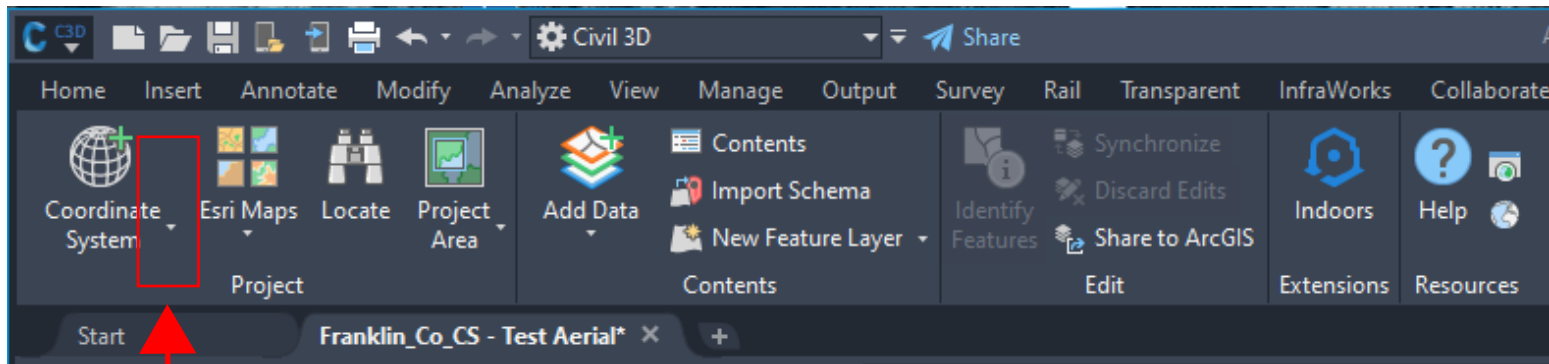


Select county projection file to import (Example Franklin.prj)

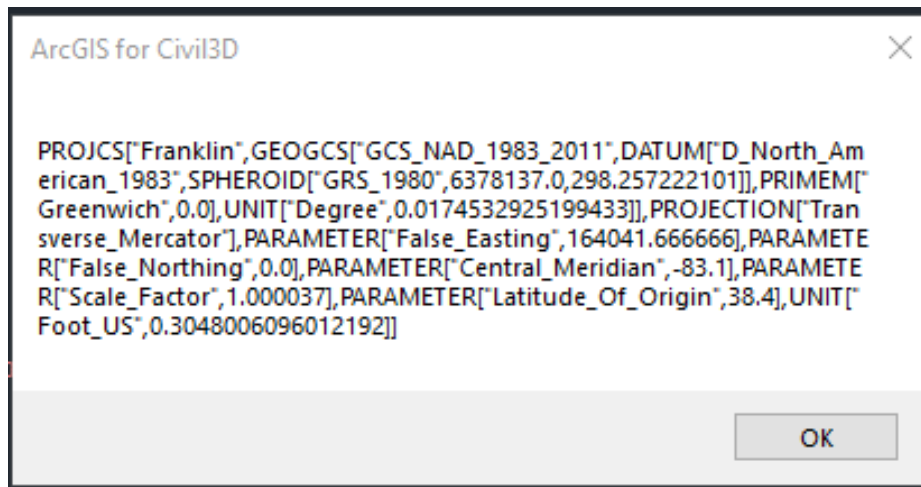


Select file and then Open

Check coordinate system assigned:

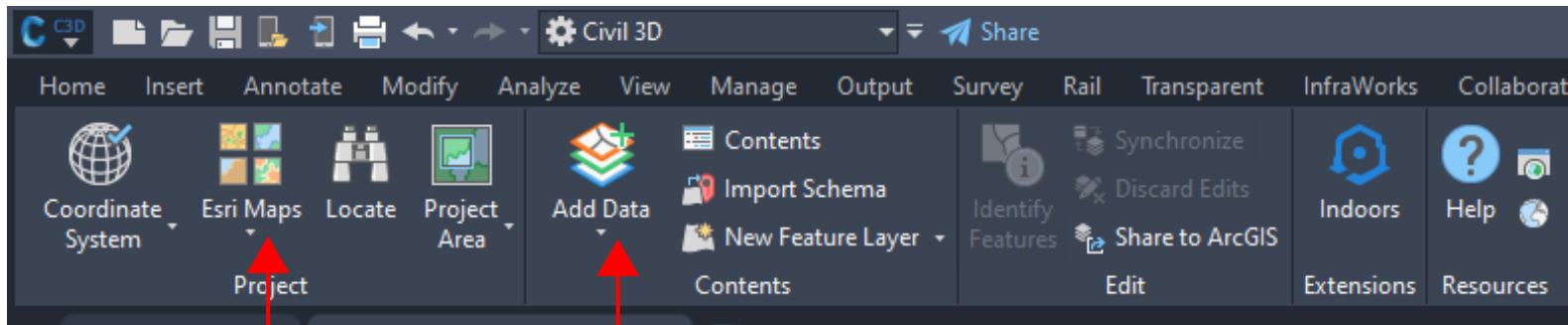


Click drop down next to coordinate system in GIS panel and select LIST



Loaded projection file / assigned GIS coordinate system is displayed

Published GIS maps can now be loaded into drawing



Select Add Data for published map services to be added

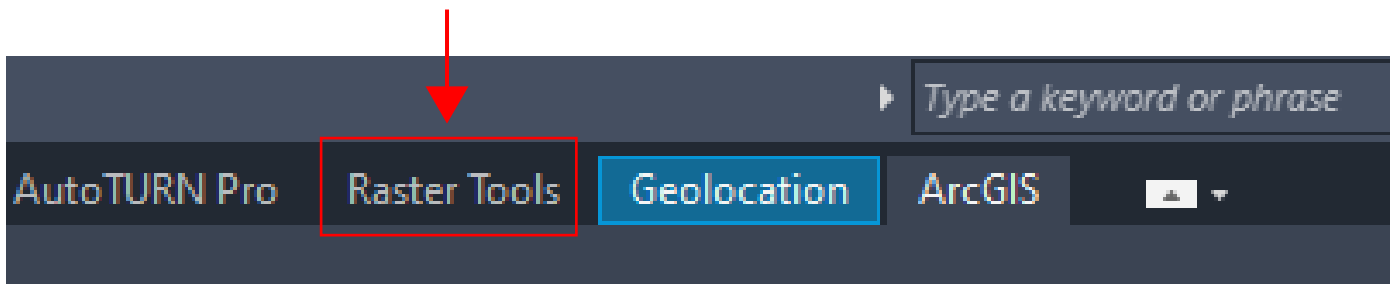
Select ESRI maps for general ESRI maps

Section 2: Adding individual aerial images to AutoCad drawings with local coordinate system

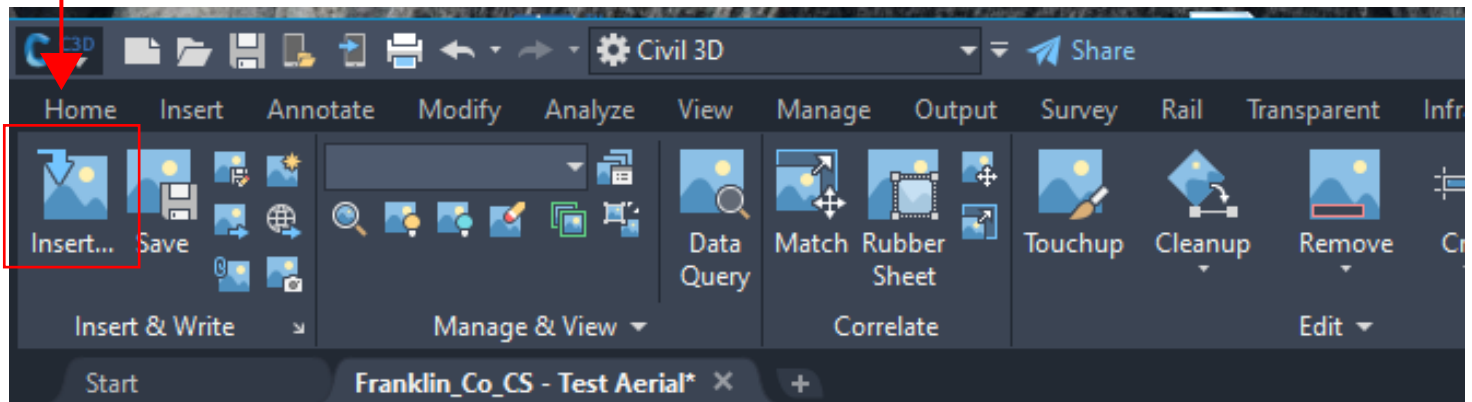
Requirements: The Raster Design Extension from Autodesk must be installed on the workstation.

If the aerial or other image is based on a coordinate system other than the local coordinate system projection then the image will need to be added using Raster Tools to translate the image to the local coordinate system for the drawing.

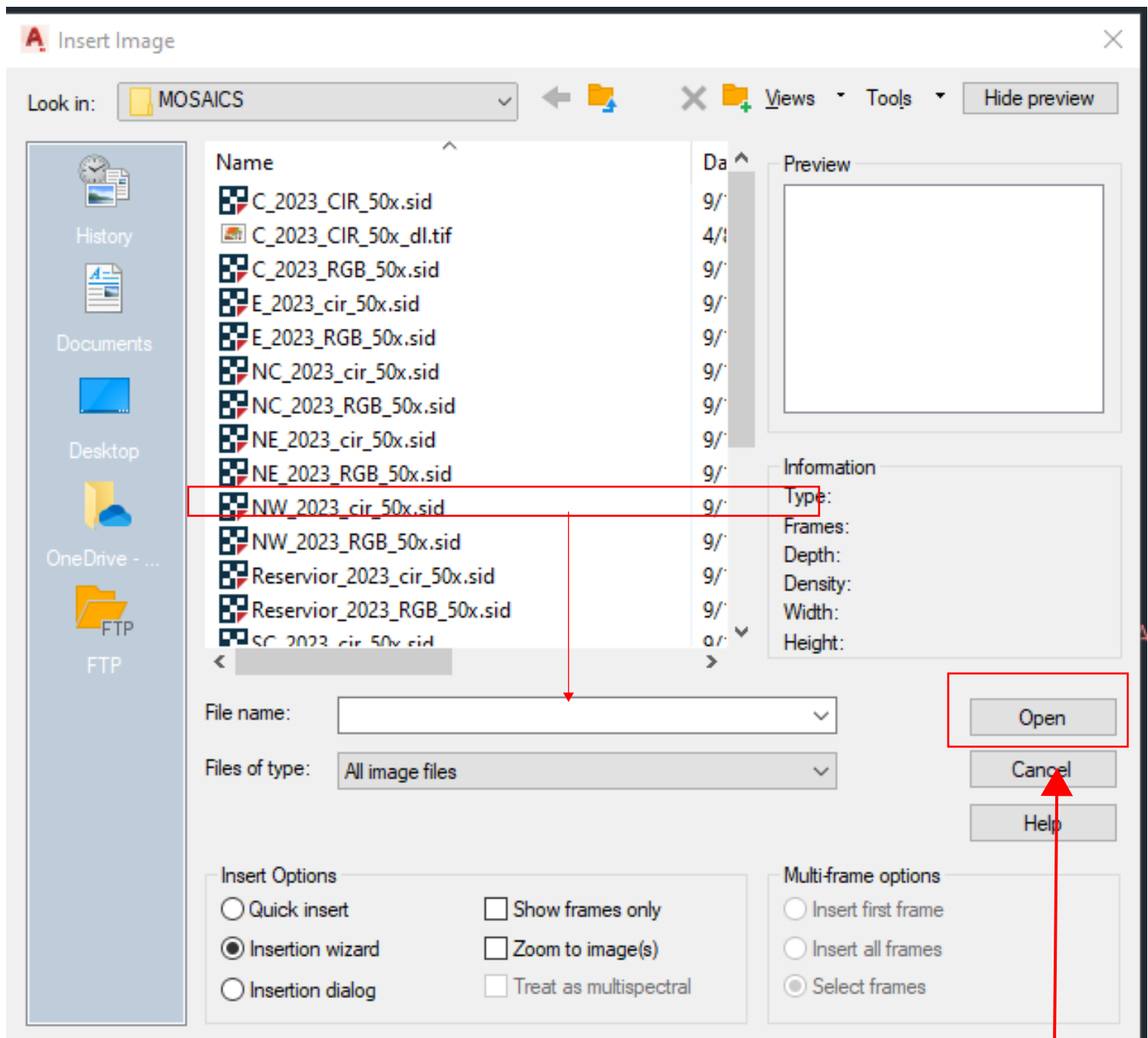
Select the Raster Tools panel in the ribbon



Select the Insert Tool or enter IIMAGE in the command panel



Select desired image file to add to drawing



Select Open

Select Image correlation source (typically WCF)

The screenshot shows a 'Pick Correlation Source' dialog box. A red arrow points to the 'World File Correlation' button in the 'Correlation source:' section. Another red arrow points to the 'Next >' button at the bottom, which is also highlighted with a red rectangle. The text 'Select Next' is written to the right of this button. The dialog box contains the following fields:

Correlation source: World File Correlation

Correlation Values

Insertion point:		Rotation:
X:	1762500.0000	0
Y:	756250.0000	Scale:
		1 : 1.0000

Density

4.0000 x 4.0000

Image file name: I:\GIS\Orth...\NW_2023_cir_50x.sid
Correlation file name: I:\GIS\Orth...\NW_2023_cir_50x.sdw

Buttons: Cancel, < Back, Next >, Help

Modify Correlation Source Values - (Typically do not need to change the default values)

Modify Correlation Values

Correlation Values

Insertion point: X: 1762500.0000 Y: 756250.0000 Z: 0.0000

Rotation: 0

Scale: 1 : 1.0000

Density: 4.0000 x 4.0000 pixels per Foot

Units: Image units: Feet










Image file name: I:\GIS\Orth...\NW_2023_cir_50x.sid
Correlation file name: I:\GIS\Ort...\NW_2023_cir_50x.sdw

Cancel < Back Next > Help

Select Next

Enter the coordinate system information from the image correlation file:

If you are not sure of the coordinate system for the image you are importing, open the image metadata file with a text editor to view the data:

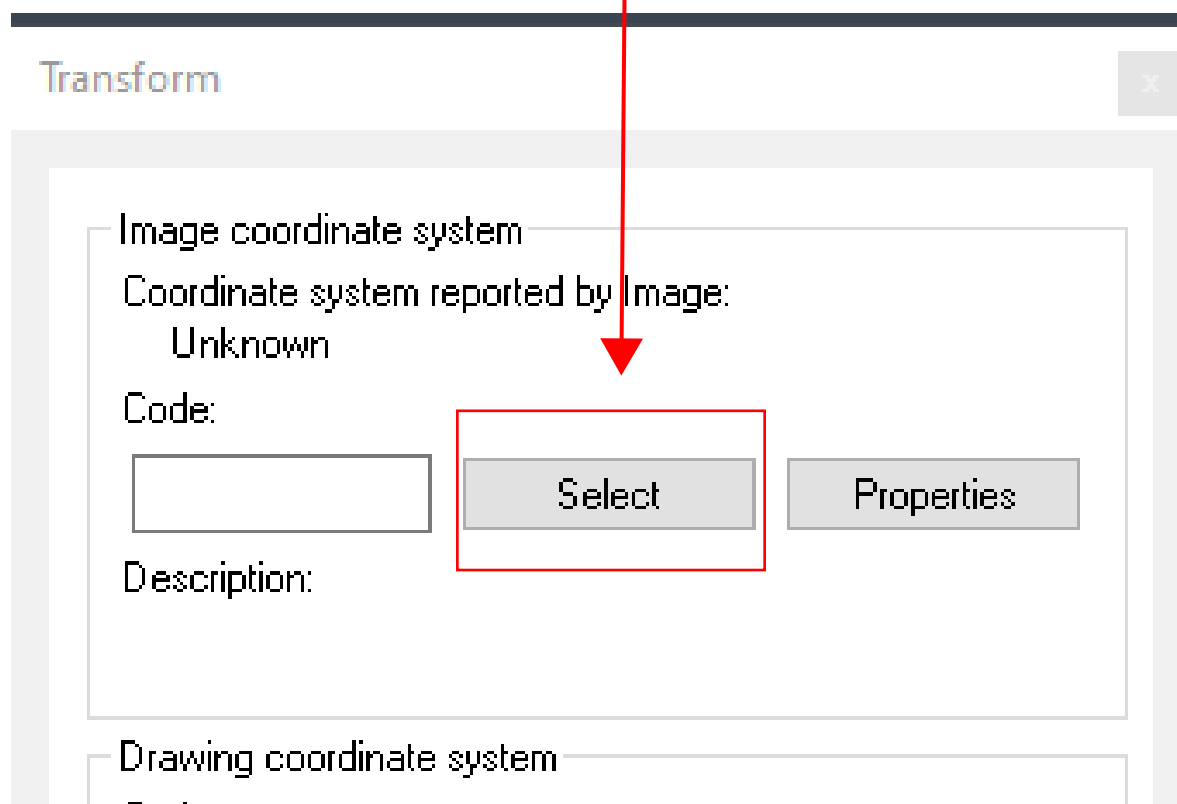
 NE_2023_cir_50x.sid	9/18/2023 11:33 AM	SID File	3,726,567 KB
 NE_2023_cir_50x.sid.xml	9/22/2023 9:07 PM	Microsoft Edge H...	13 KB
 NE_2023_RGB_50x.sdw	9/18/2023 12:04 PM	SDW File	1 KB
 NE_2023_RGB_50x.sid	9/18/2023 12:04 PM	SID File	3,726,567 KB
 NE_2023_RGB_50x.sid.xml	9/22/2023 9:07 PM	Microsoft Edge H...	13 KB
 NW_2023_cir_50x.sdw	9/18/2023 11:34 AM	SDW File	1 KB
 NW_2023_cir_50x.sid	9/18/2023 11:34 AM	SID File	3,164,067 KB
 NW_2023_cir_50x.sid.xml	9/22/2023 9:07 PM	Microsoft Edge H...	13 KB
 NW_2023_RGB_50x.sdw	9/18/2023 12:05 PM	SDW File	1 KB

File Edit Format View Help

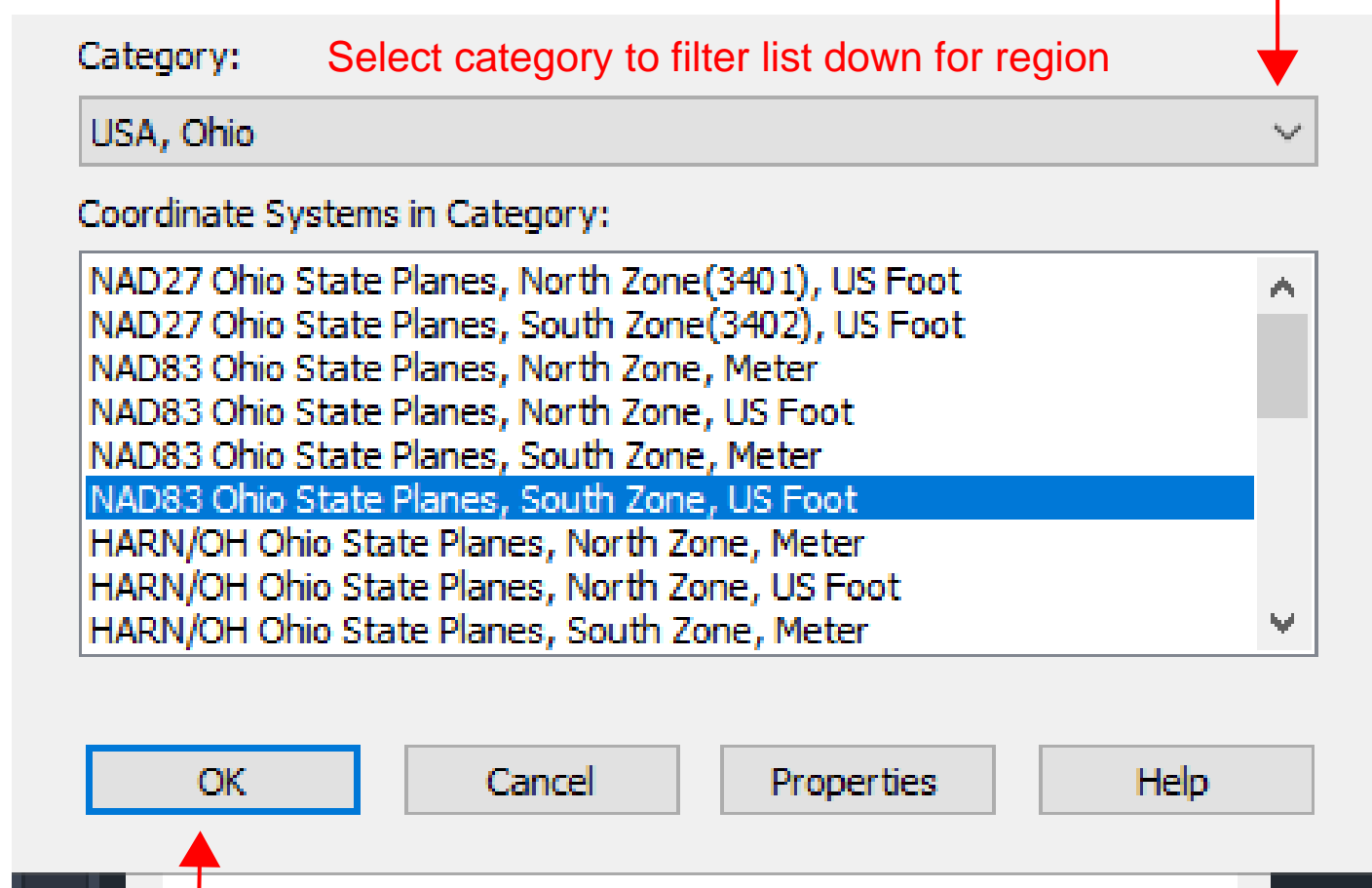
```
</procstep>
</lineage>
</dataqual>
<spdoinfo>
  <direct>Raster</direct>
  <rastinfo>
    <rasttype>Pixel</rasttype>
    <rowcount>265000</rowcount>
    <colcount>240000</colcount>
  </rastinfo>
</spdoinfo>
<spref>
  <horizsys>
    <planar>
      <mapproj>
        <mapprojn>NAD 1983 2011 StatePlane Ohio South FIPS 3402 Ft US</mapprojn>
        <lambertc>
          <stdpar11>38.73333333333333</stdpar11>
          <stdpar11>40.03333333333333</stdpar11>
          <longcm>-82.5</longcm>
          <latprjo>38.0</latprjo>
          <feast>1968500.0</feast>
          <fnorth>0.0</fnorth>
        </lambertc>
      </mapproj>
    </planar>
  </horizsys>
  <planci>
    <plance>row and column</plance>
    <coordrep>
      <absres>0.25</absres>
      <ordres>0.25</ordres>
    </coordrep>
    <plandu>survey feet</plandu>
  </planci>
</spref>
</planar>
```

Read through the data file to find the coordinate system reference

Look up the coordinate system specified in the image metadata file



Select Coordinate System



The selected coordinate system code is displayed

Transform

Image coordinate system

Coordinate system reported by Image:

Unknown

Code:

OH83-SF

Select

Properties

Description:

NAD83 Ohio State Planes, South Zone, US Foot

Drawing coordinate system

Code:

Franklin

Properties

Description:

Franklin Co, OH

Transform

☒ Transform to drawing's coordinate system

Transform type: True (pixel by pixel)

Image file name: I:\GIS\Orth...\NW_2023_cir_50

Correlation file name: I:\GIS\Orth...\NW_2023_cir_50x...

Cancel < Back Next > Help

Select Transformation

Options (in order of accuracy)

- True (pixel by pixel)
- 4 point rubbersheet
- 3 point affine

Select Next

** Note: True (Point by Point) and 4 point rubbersheet translation take quite a bit of time depending on network and workstation resources.*

Confirm the previous data and click Finish to begin transformation and insert drawing

The transformation process will take some time to apply.
The larger the image the longer the process
True - (point by point) - longest processing time
4 point rubbersheet - 2nd longest processing time
3 point affine - relatively fast and will normally align ok.

if desired attached images may be embedded in drawing
enter IEMBED in command panel the select image(s) to
embed into drawing. This will make drawing larger. but image
is saved in drawing.