

## Inserting and Clipping Images

The following instructions will guide you through inserting an image file into your drawing and clipping a larger image to decrease regeneration times. Also, a section at the end of this file has instructions for creating an image in ArcMap. Carlson modules are displayed as **{Survey}** main menus are displayed as **[Points]**, and submenus and menu commands are displayed as **<Edit Points>**.

### Inserting an Image

- 1) Navigate to the desired location in model space of your drawing to insert the image
- 2) Run the Insert Raster Image function: **{AC Module} → [Insert] → <Raster Image...>**
- 3) In the "Select Image File" window that appears, **navigate to and double click** on the **image file** to insert. Note: a single click will show a preview of the image.
- 4) In the "Image" window that opens, set the following options:
  - a. Path Type: **Full Path**
  - b. Insertion Point: **Check Specify on Screen**
  - c. Scale: **Use 1.0** if unknown or if known, enter it here
  - d. Rotation: **Leave as the default (E)**
- 5) Click **"OK"**
- 6) **Pick the lower left corner** of the location of the desired image.
- 7) The image likely will be very small relative to the rest of the drawing. **You need to scale it up** to make it larger.
  - a. **Measure something** in the image that has a known length
  - b. **Calculate the scale factor** by dividing the known length by the measured length (known/measured)
  - c. Type **"Scale"** at the command line or use a toolbar
  - d. **Select the image** and press **"Enter"**
  - e. **Select the lower left corner** of the image
  - f. **Type in the scale factor** calculated above

### Embedding an Image

- 8) Insert an OLE object: **{AC Module} → [Insert] → <OLE Object>**
- 9) Choose **"Create New"**, then choose **"Bitmap Image"**.
- 10) Windows Paintbrush should open up.
- 11) In Paintbrush, choose the **[Edit] → <Paste From>**
- 12) Navigate to and **select your image file** (JPG, BMP, PNG, TIF, etc.)
- 13) While still in Paintbrush, choose **[File] → <Exit and Return to AutoCAD>**

- 14) The image may need scaling:
  - a. **Measure something** in the image that has a known length
  - b. **Calculate the scale factor** by dividing the known length by the measured length (known/measured)
  - c. Type **“Scale”** at the command line or use a toolbar
  - d. **Select the image** and press **“Enter”**
  - e. **Select the lower left corner** of the image
  - f. **Type in the scale factor** calculated above

### Clipping an Image

- 15) Type **“IMAGECLIP”** at the command line.
- 16) **Select the image to clip**. You can only clip one image at a time and you cannot clip an embedded image.
- 17) Press **“Enter”** to create a new clip boundary.
- 18) Press **“Enter”** to create a rectangular boundary
  - a. Type **“P”** and **“Enter”** to create a polygonal boundary instead
- 19) **Pick the points** to define the clip boundary.
  - a. You must pick at least three points to define a polygonal boundary.

To restore the image, use the IMAGECLIP command and type OFF.

### Creating an Image in ArcMap

- 20) Open ArcMap
- 21) Add the Layers to the workspace using the **“Add Data”** button
- 22) **Zoom in to the desired region** of the map
  - a. **Set the map scale** in the “Map Scale” box next to the “Add Data” button if desired
- 23) Export the image file: **[File] → <Export Map...>**
- 24) Set the following in the “Export Map” window:
  - a. **Navigate** to your drawing folder and **give the file a name**
  - b. File format: common formats are **JPEG**, GIF, BMP, and TIFF
  - c. The options for each will change depending the file format. **Do not adjust** unless you are getting a poor quality image after export
  - d. Click **“Save”** when done
- 25) Open AutoCAD and **insert the image** using the “Inserting an Image” or “Embedding an Image” sections above