

This document guides you through the Raster Manager settings in MicroStation for accurate placement of georeferenced image files. Setting the default Raster Manager preferences (steps 1-9) only needs to be done once. If your Raster Manager preferences have been previously set correctly you may proceed directly to step 10.

## **Setting the Default Preferences**

- 1. From the MicroStation pull-down menu select **Workspace** > **Preferences**. The Preferences dialog will appear.
- Under the *Category* list on the left pane, select *Raster Manager* then select the *Georeference* tab on the right pane. If preferences match the picture below preferences are set correctly. <D> OK and proceed to step 10.
- 3. Select the *Raster Manager Category* list in the left pane and then select the Georeference tab in the *Category* list in the left pane. If preferences match the picture below preferences are set correctly. <D> OK and proceed to step 10.

Category	Name for preferences Default Preferences	
Database Input Look and Feel Mouse Wheel Operation Raster Manager Reference Spelling Tags Task Navigation Text View Options	Set Raster Manager preferences.         General Georeference         Sister File Settings         Default GeoPriority on Attach Attachment ▼         ▼ Ele Georeference has Priority when Raster is Loaded         ▼ Use Sister File, if Present, for Georeferenced Files         ■ Save Location Info in Sister File if Required         Unit Settings         WorldFile Default Unit: 1 Unit = 1.000000000         Survey Feet ▼         Geotiff Default Unit: 1 Unit = 1.000000000         Working Units ▼         ▼         Use Unit Definition Geokey if Present (override PCS unit)	<u>Q</u> K Cancel Defaults

4. If preferences match the figure below follow steps 4-9 for the required changes and a brief explanation of what each change does.

Database Set Raster Manager preferences. Input General Georeference	
Raster Manager File Georeference has Priority when Raster is Loaded	OK Cancel Defaults

5. Place a check in the checkbox next to the preference for *File Georeference Has Priority*. When this setting is on, the georeferencing information contained in the world file takes precedence over any previous reference attachment information.

6. Place a check in the checkbox next to the preference Use *Sister File, if Present, for Georeferenced Files*. A sister file is a companion file to the image file that contains placement or georeference information. A world file is one type of sister file. Both .tif and .jpg images will typically require a world file for correct placement.

Preferences [CDO]	T User]	×
<u>C</u> ategory	Name for preferences Default Preferences	
Database Input Look and Feel Mouse Wheel Operation Position Mapping Raster Manager Reference Spelling Tags Task Navigation Text View Options	Set Raster Manager preferences.         General       Georeference         Sister File Settings         Default GeoPriority on Attach         ✓       File Georeference has Priority when Baster is Loaded         ✓       File Georeference has Priority when Baster is Loaded         ✓       Use Sister File, if Present, for Georeferenced Files         ✓       Save Location Into in Sister File if Required         Unit Settings       WorldFile Default Unit: 1 Unit =         Geotiff Default Unit: 1 Unit =       1.000000000         Meters       ▼         ✓       Use Unit Definition Geokey if Present (override PCS unit)         Focus Item Description       Use sister file, if present, for georeferenced files?	QK Cancel Defaults

7. Uncheck the checkbox next to the preference for *Save Location Info in Sister File*. This will guard against accidentally moving the raster image and updating the world file with incorrect coordinates.

Preferences [CDO	T User]	×
Category Database Input Look and Feel Mouse Wheel Operation Position Mapping Raster Manager Reference Spelling Tags Task Navigation Text View Options	Name for preferences       Default Preferences         Set Raster Manager preferences.       General   Georeference           Sister File Settings       Default GeoPriority on Attach         Attachment       Image: Setter File Settings         Default GeoPriority on Attach       Attachment         Image: Setter File Settings       Image: Setter File Settings         Image: Setter File Default Unit: 1 Unit =       1.000000000         Image: Image: Setter File Settings       Image: Setter Se	QK Cancel Defaults

8. The final preference adjustment setting under the Georeference tab is for the *WorldFile Default Units*. Select Survey Feet from the drop-down list so that *Raster Manager* will interpret the world file units as survey feet instead of meters.

Preferences [CDOT User]	
Category         Name for preferences         Description           Database         Set Raster Manager preference         Description           Look and Feel         General         Georeference         Set Raster Manager preference           Mouse Wheel         Operation         Sister File Settings         Default GeoPriority on Atta	Default Preferences  inces.  ttach Attachment  Priority when Raster is Loaded int, for Georeferenced Files Sister File if Required  Init = 1.00000000  Meters  I = Survey Miles I = Survey Feet Survey Inches

9. There is one setting under the General tab that should be set. The *Open Raster Files Read-Only* preference should typically be kept checked on. Turn this preference off if required to change the contrast and brightness display settings in the images for printing purposes. In some cases changing the display settings has no effect on the printed output if the image is attached read-only.

Preferences [CDC	)T User]	×
Category Database Input Look and Feel Mouse Wheel Operation Position Mapping Reference Spelling Tags Task Navigation Text View Options	Name for preferences         Set Raster Manager preferences.         General       Georeference         General Preferences         ✓ Open Raster Files Read-Only         T       Update MS_RFUIR Automatically         ✓ Ignore Locate Interiors         Display Plane:       Background ▼         Recent Files List Contains:       4         Default Raster Attributes         Level:       Default         Style:       2         Weight:       1	QK Cancel Defaults

10. **<D> OK** button to save these preferences. Once these preferences have been saved they should not have to be changed again.

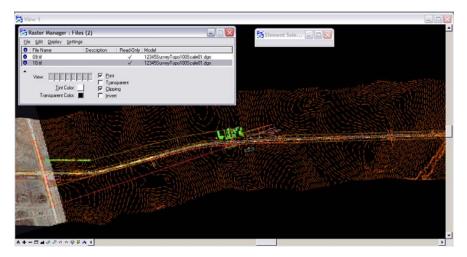
Preferences [CDO]	T User]	×
<u>Category</u> Database Input Look and Feel Mouse Wheel Operation Position Mapping Raster Manager Reference Spelling Tags Task Navigation Text View Options	Name for preferences         Set Raster Manager preferences.         General       Georeference         General       Ogen Raster Files Read-Only         Update MS_RFDIR Automatically       Image: georetical preference         Image: georet Files List Contains:       Image: georet Files         Default Raster Attributes       Image: georet Files List Contains:         Image: georet Files List Contains:       Image: georet Files         Image: georet Files       Image: georet Files     <	QK Cancel Defaults

### **Placing Georeferenced Images**

- From the MicroStation pull-down menu select File > Raster Manager. The Raster Manager dialog will appear.
- 2. From the *Raster Manager* menu select File > Attach. The *Attach* dialog will appear.
- 3. Navigate to the location of the raster image files and select the file(s) to attach.
- 4. It is important that the *Place Interactively* checkbox is unchecked. <D> Open to attach the image(s).

📕 Attach Rast	ter Reference					×
Look in:	Reference_Files	8	🔹 🕝 🤌	• 📰 🕈	2	i 🗈 😡
allers.	Name 🔺	- Date taken	▼ Tags ▼	Size 🔹	Rating	Preview Attachment
3	07a.TIF			810 KB	☆☆☆	Raster Preview
Recent Places	🗟 8a.TIF			1,001 KB		1079 X 471, RGB
	🗟 09a.TIF			768 KB		Origin: 3100855.973, 1375638.942
	🗟 10a.TIF			939 KB		
Desktop						
<b>1</b>						
						and the second se
CDOT User						and parameters and a second second
						No. of Street,
Computer						Contraction of the second s
1.1						
Network						
	•				•	
	File name:	10a.TIF		-	Open	
	rile fiame.	IUd. HF		<u> </u>		
	Files of type:	Georeferenced TIFF [*.tif	f;*.tiff]	•	Cancel	
	Attachement Settin	ngs:				
	View:	12345678	Place	e Interactively		
	Logical Name:			n Raster Files F		
	Description:					
	Description:					

- 5. After attaching the image a **Fit View** may be needed to display the image.
- 6. If the image does not appear in the correct location adjust the placement location.
- 7. Select the image from the *Raster Manager* dialog box.



- 8. From *Raster Manager* select Settings > Attachment. The Attachment Settings dialog will appear.
- 9. Select the *Location* tab.
- 10. <D> <D> on the File Name to see *Element Info*.

Raster Manager : 1 of 1 listed	_ <b>x</b>
File Edit View Display Settings Utilities	
E +   E   🚔 🛂 🐮 🏊 ピ 🤽 🐯 🖧 🐨 🏠 🍃 🖉 🚇	
🕼 🕼 File Name Description 🚱 Model	
12345678 S Int: Transparency:	

11. Select the **Geometry** tab and verify that the *Geo Priority* setting is set to Sister File. If it is not, <D> on the pull down and change the setting. This should show the correct *WorldFile Unit* setting also.

4	Element Info	_ 🗆 ג
F	- K <selection></selection>	
		nment [C:\Projects\12345\Desig
4	(	
-		
G	eneral	<u> </u>
In	nage	<u> </u>
E	xtended	
R	aw Data	8
G	eometry	\$
	Geo Priority	Sister File 🔹
	Aspect Ratio	Attachment
Ξ	Origin	Sister File
	×	3273012.344
	У	1554595.913
	Z	178956.971
_	Directional Vectors	
Ŧ	Pixel Size	
	Scale	17999.963424
	Dpi	
	Dimension	
Ε	Number of Pixels	0.001011
	Rotation	0°0'0" 0°0'0"
	Affinity Worldfile	000
	Unit	Survey Feet
	Unit Factor	1.000000
-	olor	
_		<u> </u>
D	isplay Print	

12. Fit View to display the image. The image should now appear in the correct location.

