



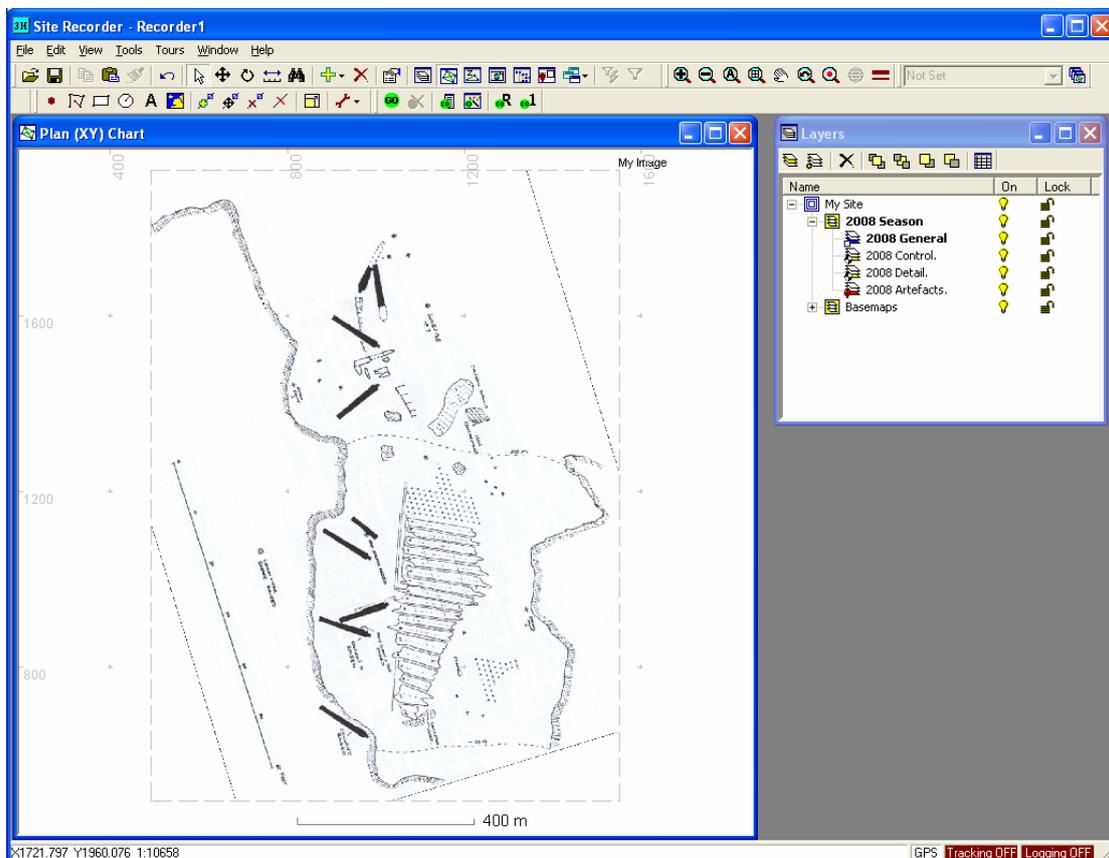
Site Recorder Technical Note 2

Adding Pictures to the Chart

This technical note is to be used with Site Recorder 4 Version 4.23.10 although the principles apply to all versions of this program.

Showing Pictures and Images on the Chart

A common requirement in Site Recorder is to be able to show pictures and images on the chart, this can be used to show multibeam and sidescan sonar images, previous site plans or aerial photographs. Any digital picture showing a view pointing straight down – an orthoimage – can be shown on the chart. Site Recorder can use images of any of the common file formats such as TIF, JPG and PNG.



Images and pictures to be shown on the chart are managed using Image Basemaps in Site Recorder.

The Image Basemap records the file name and folder for the image to be shown and does not contain the image itself, so when the Site file is shared or published then the associated images must be shared too.

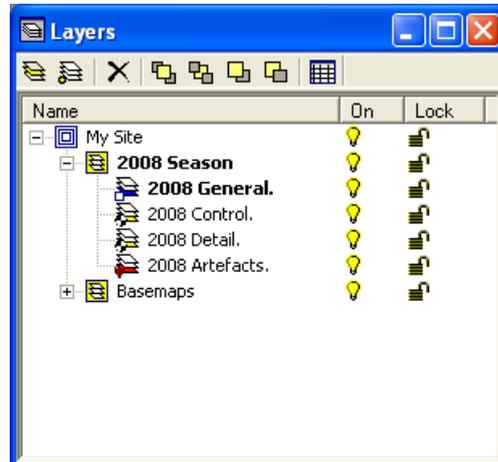
Each pixel or dot in the image on the chart will cover a certain area of the site in metres. The Image Basemap also records the scale of the image so this defines how the image is displayed on the chart.

The Image Basemap also contains the position of the bottom left corner of the image and the angle at which the image is to be displayed.

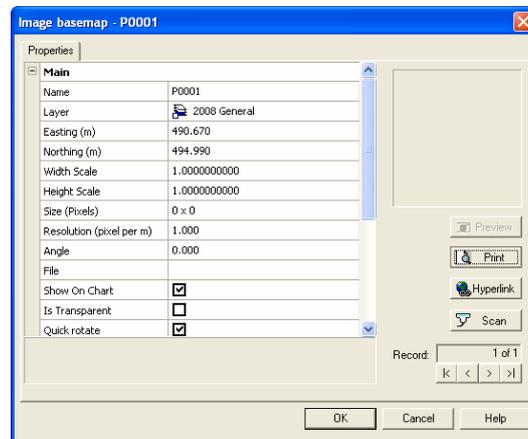
To Add an Image to the Chart

An image is added to the chart by adding an Image Basemap object then setting the file name and folder of the image file to display.

- 1 In the **Layers Display**, Set a General Layer to be the current Layer. Click on the Layer in the list then click the **Set Current** button .



- 2 On the **Drawing Toolbar**, click the **Image Basemap** button .
 - 3 Click on the chart where you want to put the bottom left corner of the picture
- The **Property Pages** are displayed for the new Image Basemap



- 4 In the **Property Pages**, set a new **Name** or use the default
- 5 Click the blank **File** property and an **Open** dialog will be displayed
- 6 Navigate through the folders to find the image file to use, click on that file then click **Open**
- 7 A preview of the image will now be shown in the **Property Pages**
- 8 Click **OK**

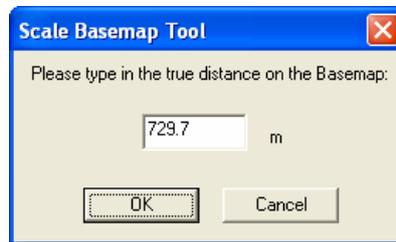
The image will now be shown on the chart at the default scale of 1 pixel per metre.

- 9 If the image is too large or too small to be shown at the current chart scale then click the **Zoom All** button  on the **Chart Toolbar** to show the extents of the site plan.

To Set the Scale of the Image

The scale of the image on the chart can be set from something on the image with a known length such as a scale bar. In the procedure below the object on the image with a known length is called the 'scale object'.

- 1 On the chart, click on the outside edge of the image to select it. Ensure that blue grips are shown at each corner of the image.
- 2 Zoom the chart so the scale object fills the chart display, this helps you select the end points accurately
- 3 From the **Tools Menu**, select **Basemaps | Scale Basemap**. The mouse cursor changes to an upward pointing arrow.
- 4 On the image, click on one end of the object to use as a scale then drag the mouse to the other end and let go. The **Scale Basemap Tool** dialog is shown



- 5 Type in the actual distance measured from the scale object and click **OK**

The image is resized so the scale object should now be the correct length

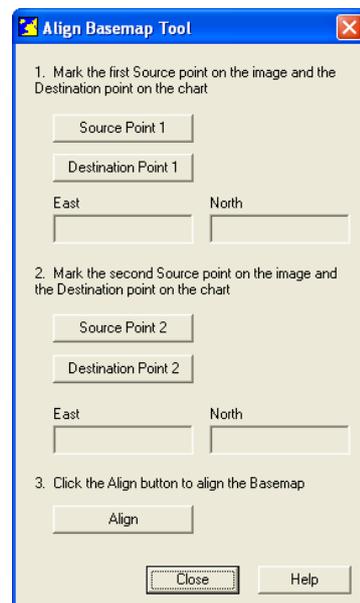
- 6 Zoom the chart in or out to show the newly resized image or click the **Zoom All** button  on the **Chart Toolbar** to show the extents of the site plan

You can use the **Measure Tool** to confirm the length of the scale object

To Align the Image

The image can be aligned on the chart using two points on the image and two equivalent points on the site plan. Try and choose points on the image that are in diagonally opposite corners if possible as this helps calculate the correct scale for both the width and height of the image.

- 1 Click on the outside edge of the image to select it. Ensure that blue grips are shown at each corner of the image.
- 2 From the **Tools Menu**, select **Basemaps | Align Basemap**. The **Align Basemap Tool** is shown.
- 3 Move the **Align Basemap Tool** so that it is not covering the image on the chart.
- 4 Zoom and pan the chart so the first point to align on the image can be seen.
- 5 On the **Align Basemap Tool**, click the **Source Point 1** button



- 6 On the Chart, click the first point to align on the image. A small red '+' marked 'S1' will be shown on the chart
- 7 Zoom and pan the chart so the first point to align on the site plan can be seen.
- 8 On the **Align Basemap Tool**, click the **Destination Point 1** button
- 9 On the Chart, click the first point to align on the site plan. A small red 'x' marked 'D1' will be shown on the chart
- 10 Repeat the steps above for the other pair of points **Source Point 2** on the image and **Destination Point 2** on the site plan
- 11 On the **Align Basemap Tool** click the **Align** button.

The tool will now calculate the new scale, position and rotation for the image; if the image is large this may take a few seconds. When complete the image is shown in its new position.

- 12 Check that the two points selected on the image now line up with the two points on the original site plan.
- 13 Click **Close** on the **Align Basemap Tool**

Repeat the procedure to make fine adjustments to the size, position or alignment of the Image Basemap on the chart.

Technical Support

The online help document in provides further information on this subject. To show this document, select **Help Topics** from the **Help** menu.

More information and example Site files can be found on the 3H Consulting web site found at:

<http://www.3HConsulting.com>

Faults and software problems should be reported to 3H Consulting Ltd by email, describing the nature of the problem and if possible the steps taken to reproduce it.

In some instances it is helpful to know the configuration of the computer showing the reported problems. The full configuration can be found using the System Information tool found on the **About** dialog available from the **Help** menu.

Support can be obtained directly from 3H Consulting Ltd. by sending an email to:

info@3HConsulting.com

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