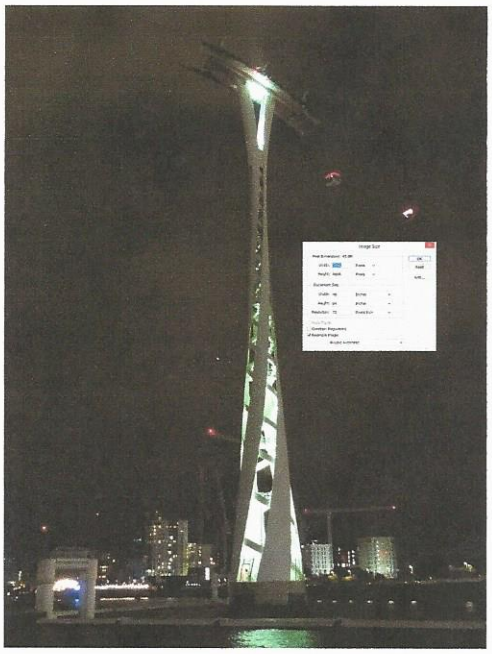
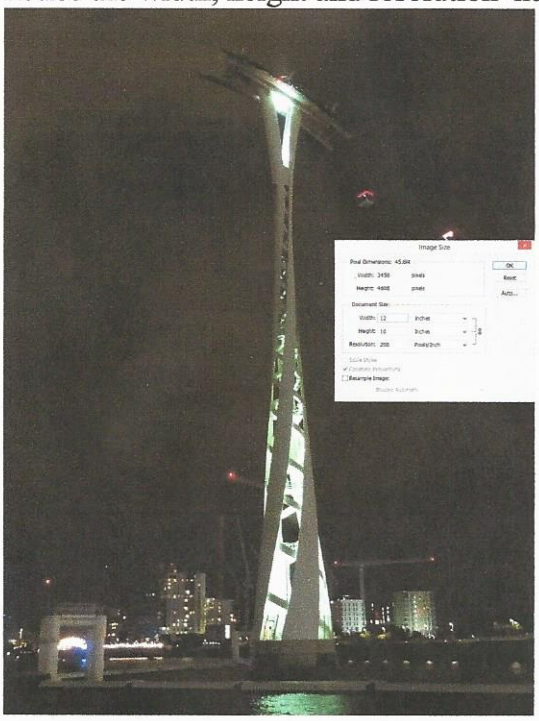
Changing resolution for images at 72PPI

Most compact cameras and some other digital cameras present the image as if it is a large image with low resolution. Typically this may be 64inches by 48 inches at 72ppi. You can check this by image > image size, and the following box appears



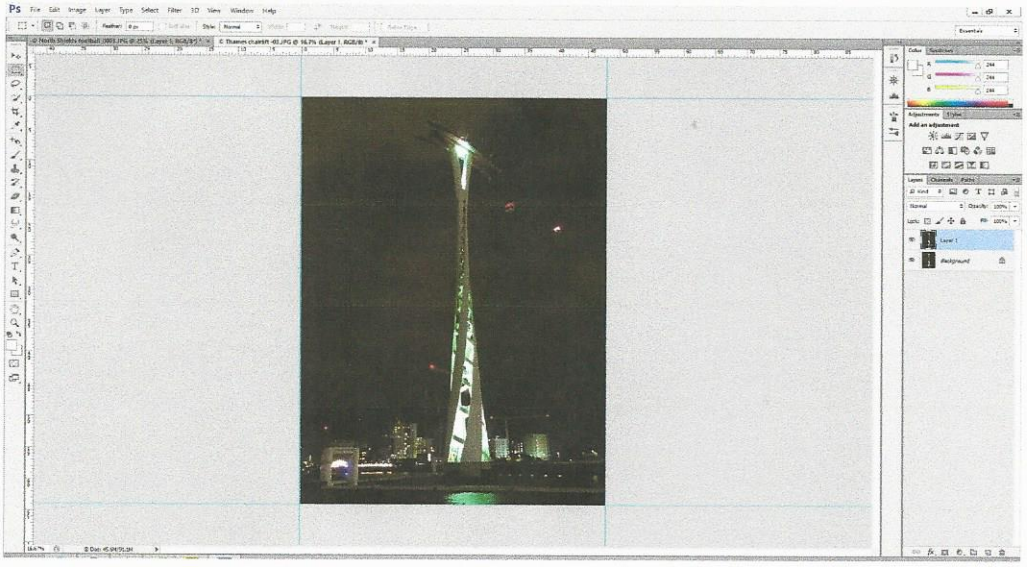
You couldn't print like this as 72ppi is low resolution, and the image size is massive. We need to change the resolution and size, without affecting the quality. It's important to note that 48*64 at 72ppi is the same as 24*32at 144ppi, and the same as 12*16 at 288ppi and indeed as 6*8 at 576ppi.

To change go image>image size and you'll get the box above. If resample image box is ticked, untick it. This is important, resampling the image degrades quality. You will notice the width, height and resolution numbers are locked together.

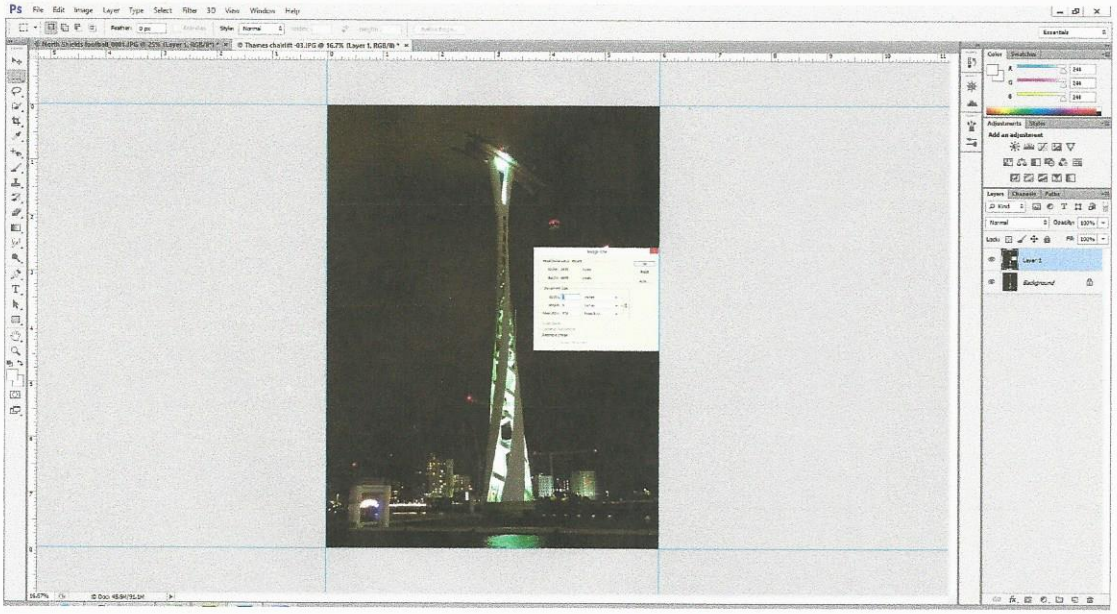


Changing any one number changes the others. If you have the rulers displayed then you will see the physical dimensions changing as the resolution changes. The actual size of the image in MB doesn't change whatever dimensions you choose. This shows you the image is not changing in quality at all. The pixels are being made smaller or larger but the colour information they contain remains the same. For display on a

screen, 72ppi is okay. For most none exhibition prints 150ppi is okay, especially if you print your own. This will save ink. For exhibition or large prints, 300ppi or more is required. Online web printers usually warn you if your resolution is less than 300ppi.



The above images shows the original dimensions with rulers and guides highlighting these. The image below shows the adjusted image at a higher resolution and the dimensions and ruler has adjusted itself to reflect this.



Again it's important to note that resampling should not be ticked throughout this process. When you've got the image to the resolution and size you require, "save as" with a different name will give you a version without affecting the original image.

If you do choose to resample for any reason, (perhaps to get a specific size at a specific resolution) it will have changed the pixels in some way, (it will have interpolated data from the original pixels, to create new pixels). This will soften your image although this is not apparent. After resampling you should sharpen the image to resolve this.