Landscape Institute Technical Information Note

# Visual Representation of Development Proposals: Camera Auto Settings

Technical Information Note 08/19

17 September 2019

This one page Technical Information Note explains why automatic settings are typically avoided with photography for visual representation

This Note is intended to be read in conjunction with LI TGN 06/19: Visual Representation of Development Proposals

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## 1 Auto settings generally

Automatic camera or lens settings are designed to make the photographer's task easier, but the loss of control can give unpredictable results and potentially reduce the quality of the photographic images. Most auto settings are typically switched off and if used are treated with caution. Photography for visual representation is generally undertaken using manual controls to avoid the camera creating unwanted differences (focus, exposure, white balance, ISO) between shots.

#### 2 Autofocus

Many passive autofocus systems are sensitive to the presence of foreground objects. This can result in focus being determined by a foreground twig, leaving the majority of the frame out of focus. Importantly, the focus can be slightly different in successive frames of a panorama, potentially precluding a clean splice and preventing the capture of a useful panorama. Autofocus is therefore switched off and manual focus engaged (usually a switch on the lens of a DSLR).

# 3 Digital zoom

Many inexpensive digital cameras offer both 'optical zoom' and 'digital zoom'. 'Optical zoom', as the name implies, uses the optics of a zoom lens to enlarge the image projected onto the sensor. 'Digital zoom' is a simple enlargement of the digital image by cropping and reduces the resolution of the image to that of the crop. As it reduces image quality, 'Digital zoom' is avoided.

#### 4 Automatic exposure

Automatic exposure greatly speeds opportunistic photography, but rarely results in optimum results for Photomontage. Manual

settings are typically preferred - see Appendix 02 of TGN 06/19 Visual Representation of Development Proposals.

#### 5 Automatic white balance

Many digital cameras have a facility to automatically compensate for ambient colour temperature, so that, for example, photographs taken under indoor lighting do not appear yellow compared with those taken in daylight. This facility can have unforeseen consequences when taking panoramas. For example, the presence of a red telephone box in the foreground of one frame may result in a cyan cast on the colour in that frame only. White balance is therefore set manually.

## 6 Image sharpening

Many digital cameras have a facility to sharpen the photographic image in the camera. This option is switched off. Compositing a photomontage is much more difficult to do satisfactorily if the base image has already been sharpened, particularly if it is over-sharpened. Any image sharpening required for printing can be done in a more controlled manner in image processing software.

# 7 Image stabilisation (IS)

'IS' is designed principally to reduce the effects of camera vibrations (eg when pressing the shutter button) when the camera is hand-held. If the camera is tripod-mounted, IS is generally be turned off as, in this situation, it can worsen, not improve, image quality.

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