Our Ref: MA/150166/L03

12th August 2011

To whom it may concern,

RE: PHOTO MONTAGE CERTIFICATION
PROJECT: WARNERVALE TOWN CENTRE WOOLWORTHS SITE

This document, together with the prepared photo montage and plan 150166-SK-001[A] , provide a package of information suitable for the accurate appreciation of the proposed Woolworths town centre development, prepared to industry standard using "12d Civil and Surveying Software"(hereby referred to as "12d").

Scope of photo montage

The proposed development has been modelled to demonstrate the proposed building mass. The building mass has been constructed from elevations of the development by BN Group Pty Ltd and an electronic cad drawing of the proposal. Final surface finishes have not been installed to the model. The model has however, been purposely coloured for the identification of particular building elements. The corner structures have been coloured brown, the main roof structure and facade are light grey and the cinema complex is off yellow. The mass edges have a black property for structure clarification.

Image location

The rail bridge on sparks road was chosen for two main reasons.

1. It represents the most forward facing view for east bound traffic.
2. There are visible power poles on the eastern side of the rail corridor (not the rail power structure) which have been located by survey and are used to accurately position the building model into the existing view(image 1). The bridge has also been surveyed, which allows accurate co-ordination of the camera position.

This location is also relevant as open spaces, such as the rail clearing, tend to momentarily draw you attention in transit along tree corridored roads.

ADW JOHNSON PTY LIMITED
ABN 62 129 445 398

central coast
2 bounty close, tuggerah nsw 2259
nsw 2282
po box 3717, tuggerah nsw 2259
ph. 02 4305 4300
fax. 02 4305 4399
video. 02 43054374
email. coast@adwjohnson.com.au

hunter region
7/335 hillsborough road, warners bay
ph. 02 4978 5100
fax. 02 4978 5199
video. 02 4954 3948
email. hunter@adwjohnson.com.au

Photo Montage Creation

In order to correctly position the building, a number of elements and data points need to be common between the existing view and the software generated model.

1. The Camera location and height must be known for the accurate generation of the computer model image from the same known camera position.

Image 1 – 12d generated image of model

2. The power poles were also modelled in 12d from survey information and were used to correctly scale the proposed building into the existing view. These poles which are located on the right, in the middle and on the far left in the existing view. These positions as well as being at greatly varying distances to the camera position, give excellent resolving confidence when overlaying the photo and generated model image.

   Having the ground survey in 12d, also allowed the comparative overlay of the modelled rail line to give further montage confidence (image 2).

Image 2 – overlay of model image without foreground

The existing view photo and plan view image were inspected to ascertain what elements of vegetation are in front of the development to accurately determine foreground trees.

Final Photo Montage

The final montage image was cropped to a specific field of view that is controllable in 12d. The angular value of 37 degrees represents the image field of view and was chosen to easily allow the viewer to recreate a real image. This is achieved by printing the image to standard A3 paper size in landscape format, and holding the image at arms length (approx 600mm). This 400mm(approx) image at 600mm away from the eye, will subtend the 37 degrees the image was designed to yield.

Image 3 – Final 37 degree photo montage

Yours faithfully,

Mark Anderson
B.Surv
Surveyor, Civil Design & Visualisation
ADW Johnson
Central Coast

Disclaimer: whilst every care was taken in the preparation of the model, and montage, no responsibility is taken for the accuracy of the data supplied by others.