



8 October 2007

10-5947 Stage 1 DA Letter Acoustics 20071008

Belmorgan Property Development
c/o Urbis
Level 21, 321 Kent Street
SYDNEY NSW 2000

Attention: Mr Paul Williams

Dear Paul

**Dwyer-Oxford Site Re-Development, Wollongong CBD
Stage 1 (Dwyers Site Podium) DA Revised Statement - Acoustics**

As you are aware, Heggies Pty Ltd (Heggies) has been engaged to assess a range of environmental impacts associated with the proposed Dwyer-Oxford Site Re-Development, including Noise Impacts (acoustics and vibration), ESD and Energy Efficiency, and Wind and Reflectivity.

Recently, we completed a revised acoustic assessment of the entire Dwyers-Oxford Site project (all stages):

- Heggies Report 10-5947-R1 "Dwyers-Oxford Site Re-Development – Concept Design, 31 Crown Street, Wollongong, DA Acoustic Assessment".

The enclosed provides an assessment of the acoustic impact in relation to the Stage 1 component of the development which has now undergone refined design amendments. A Statement of Commitments in relation to acoustic management and control initiatives is also included.

If any further information is required at this stage, please do not hesitate to call.

Yours sincerely

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1 DWYERS-OXFORD SITE CONCEPT DESIGN ACOUSTIC ASSESSMENT

Heggies has recently completed an acoustic assessment of the proposed Dwyers-Oxford Site Re-Development - Concept Design option:

- Heggies Report 10-5947-R1, “Dwyers-Oxford Site Re-Development – Concept Design, 31 Crown Street, Wollongong, DA Acoustic Assessment”.

The Concept Design encompasses the following major elements, illustrated in **Figure 1**:

Stage 1 – Dwyers Site

- Basement carparking levels B1 - B4.
- Podium retail and commercial Levels 1 – 4.

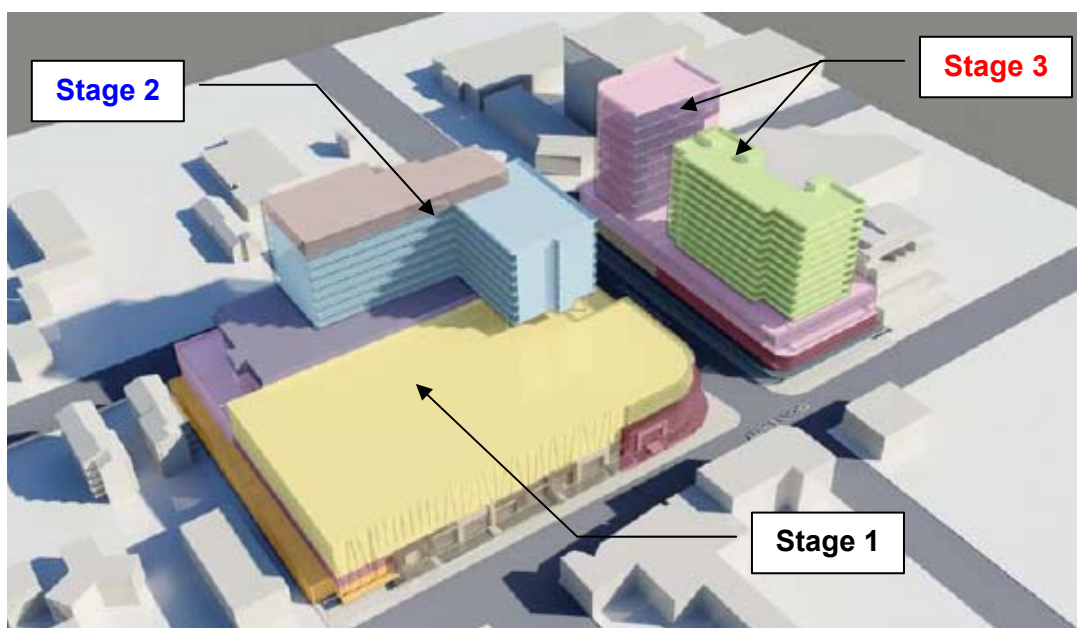
Stage 2 – Dwyers Site

- Hotel Levels 5 - 12 plus Restaurant Level 13.

Stage 3 – Oxford Site

- Basement carparking Levels B1 - B4.
- Podium Office Levels 1 – 4.
- Office Tower Levels 5 – 12.
- Residential Building Levels 5 – 15.

Figure 1 Dwyers-Oxford Site Re-Development Stages Illustration



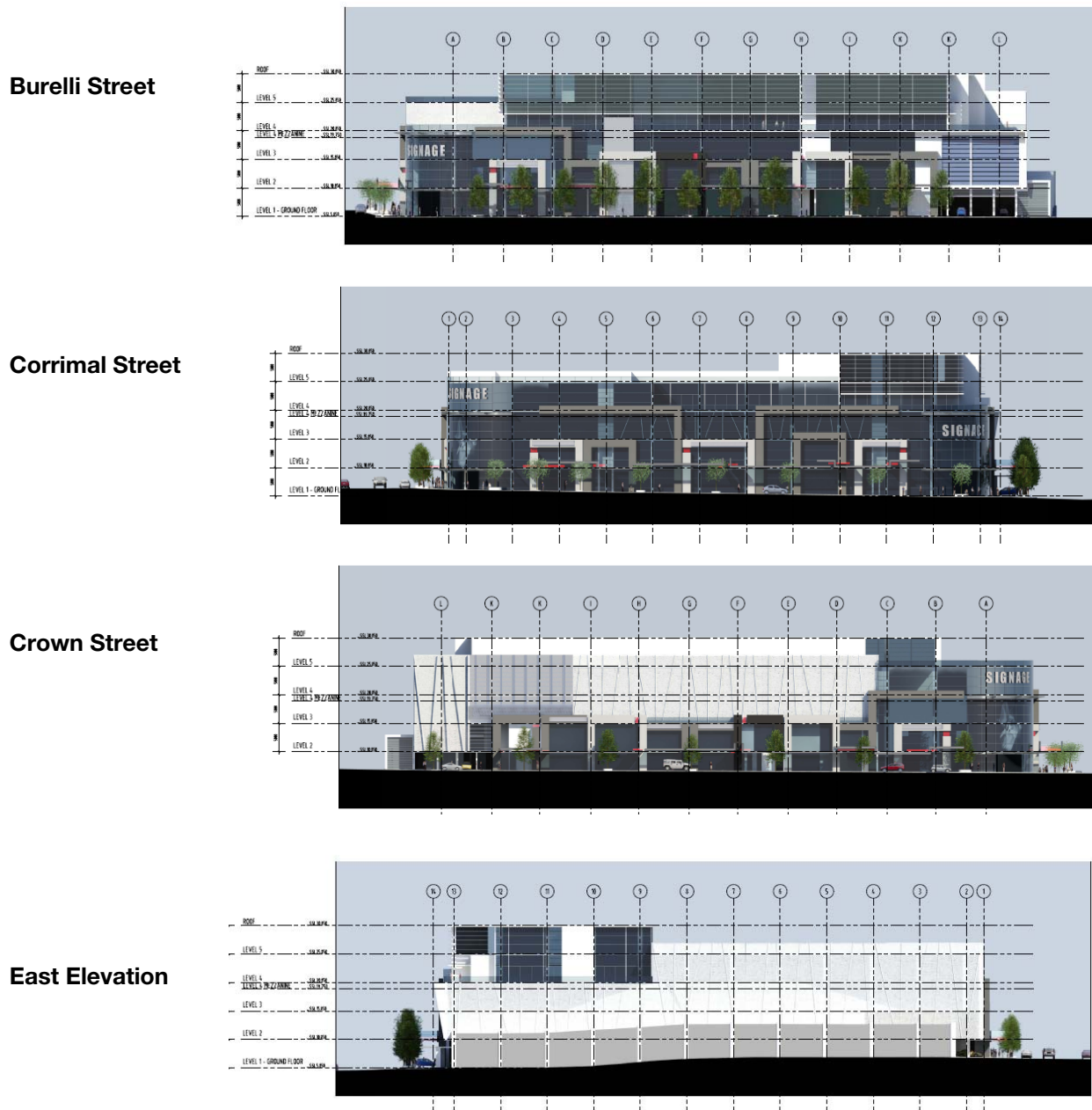


2 STAGE 1 DWYERS SITE DESIGN

Recent refinements have been made to the Stage 1 (Dwyers) component of the redevelopment.

These can be seen in the revised architectural drawings supplied by DBI Design (July 2007) and illustrated **Figure 2**.

Figure 2 Dwyers Site Stage Component of Re-Development





3 ACOUSTIC ASSESSMENT OF THE STAGE 1 DWYERS SITE COMPONENT

The acoustic assessment of the Dwyers-Oxford Site Redevelopment has included a review of the Stage 1 component of the project (the Dwyers Site podium). The sources of noise emission identified as being of potential acoustical significance are:

- Mechanical plant and equipment.
- Loading Dock.

In Heggies Report 0-5947-R1 it was noted that mechanical plant, such as air conditioning and refrigeration condensers and exhaust fans associated with the proposed redevelopment, has the potential to impact on nearby residential properties.

From the results of ambient noise surveys conducted at the site, appropriate noise criteria have been established based on the Department of Environment and Conservation (DEC) *Industrial Noise Policy* (INP) – refer Heggies Report 0-5947-R1, Section 3.1.1, Table 1.

Noise emissions from mechanical plant operation will be controllable by common engineering methods typically consisting of:

- Silencers.
- Acoustic louvres.
- Variable speed controls.
- Barriers.
- Acoustically lined ductwork.

The selected mechanical equipment must be reviewed and assessed for conformance with established criteria at the detailed design stage of the project when specific plant selection and location is determined.

Noise emissions from the loading dock facility associated with the Stage 1 development will require further review to determine whether the implementation of additional controls into the detailed project design is required.

4 STATEMENT OF COMMITMENTS RE STAGE 1 DWYERS SITE PODIUM

In relation to the Stage 1 component (Dwyers Site podium), the sources identified as being of potential acoustical significance are mechanical plant and equipment operation and the loading dock associated with future retail activities.

These sources can be controlled by the incorporation of engineering noise measures which include silencers, acoustic louvres, variable speed controls, barriers and acoustically lined ductwork. The specification of these will be determined during the detailed design phase of the project and prior to the Construction Certificate application for the project.

To preserve the existing acoustical amenity of the area, the developers of the project commit to implementing such measures as deemed necessary to control noise and vibration emissions from mechanical plant and equipment and loading dock operations.