38.4341.R6:ZSC

28th May, 2008

Hilrok Properties Pty Ltd 17 The Corso MANLY NSW 2095

Attention: Mr. T. Peterson

Dear Sirs,

ACOUSTIC ASSESSMENT PROPOSED ALTERATIONS & ADDITIONS THE IVANHOE HOTEL AT MANLY

The purpose of this report is to present the results and findings of an acoustic assessment in relation to a Development Application for alterations and additions to the Ivanhoe Hotel at Manly.

It is proposed to incorporate 23 and 25 The Corso into the existing Hotel (in 27 The Corso). A previous application for alterations and additions at the Hotel was the subject of an acoustic assessment in 2005 for a ground floor alteration and additions into the adjoining bank building to the east being the subject of another acoustic assessment in May, 2006.

Both investigations involved the conduct of ambient measurements of night and identification of nearest affected residential premises. This assessment has utilised the results of the previous night time noise monitoring.

With respect to the refurbishment of the Hotel, the principle noise component involves the provision of outdoor deck areas that may be utilised for smoking areas and also as an external beer garden.



Our previous investigation revealed that the critical receiver location with respect to noise emission from the Hotel is residential apartments located on the southeastern corner of the intersection of Darley Road and The Corso. Laser distance measurements conducted on site from the roof of the Hotel indicate the nearest residential façade is approximately 45 metres to the edge of the Hotel and the windows of the top floor residential occupancy are above the proposed parapet of the Ivanhoe Hotel.

Ambient measurements conducted at ground level of the commercial building with residential accommodation above on the corner of Darley Road and The Corso revealed a night time background level of 60 dB(A) as a result of general activity in the area from pedestrians and vehicles, etc.

The nearest residential premises in a northwesterly direction incorporates residential accommodation above commercial premises opposite the northern exit of the Council carpark. Nighttime ambient measurements recorded outside the residence opposite the Council carpark revealed a background level of 50 dB(A) which was controlled by mechanical plant serving commercial properties in proximity to that location and extending along the northern side of the Council carpark.

Residential premises to the northeast of the Hotel are located above commercial premises in Sydney Road and are significantly displaced from the Hotel and subject to masking from noise from mechanical plant and noise from various licensed premises closer to those residences than the Ivanhoe Hotel.

From an acoustic perspective, the provision of music entertainment currently occurring inside the Hotel satisfies the LAB criteria for before midnight with the balcony windows of The Corso open, but for after midnight requires doors and windows to be closed. Accordingly, on the proviso of such windows and doors are closed after midnight, then there is no issue in terms of compliance with LAB criteria associated with entertainment as it would be a continuation of the existing situation.



With respect to the outdoor deck areas that form part of the application, from the plans that have been provided for our review, the exposed deck areas of the Hotel are approximately 90m² for the ground floor, 160m² for the first floor. For the ground floor and first floor outdoor areas, the building structure provides acoustic shielding with respect to residential receivers. The critical and most exposed location for noise emission from the proposed smoking and bistro areas is that for the first floor of the Hotel.

To address the acoustic compliance issues, the drawing show that the rear wall of the building is of solid construction. The existing widow on the plans is to become fixed glazing for the transfer of light and is to have a minimum thickness of not less than 10.38mm.

With respect to the nearest residential location off The Corso, being the upper floor areas of the aforementioned building on the corner of Darley Road and The Corso, the proposed parapet at the Corso facade provides significant shielding to the first floor outdoor area.

To address the reverberant nature of the outdoor areas (first floor and ground floor) acoustic absorption is to be provided on the exposed walls. This acoustic absorption would take the form of 50mm thick fibreglass (35kg/m²) faced with perforated metal or perforated ply where the minimum openings in the facing panel is to be not less than 23%.

The awnings over the first floor exist to the outdoor courtyard require the provision of acoustic absorption on the underside (ceiling) of the awnings. The absorptive treatment is to provide a NRC (noise reduction co-efficient) of not less than 0.8.



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Conclusion

The current operations of the Ivanhoe Hotel at Manly have been found to comply with the LAB criteria at residential premises that are not ancillary to the subject Hotel. The proposed alterations with respect to current activities occurring in the Hotel do not constitute any increase in noise emission provided the current practice is continued of

external doors and windows to the Hotel being closed after midnight.

The provision of outdoor deck areas to be used as a bistro/smokers area on the first floor requires the awnings from the Hotel to the outdoor areas to incorporate acoustic absorption. There is to be acoustic absorption panels provided on the wall of the

ground floor and first floor outdoor areas.

With the provision of the noise control measures set out above, we are able to support the application for the proposed alterations and additions of the Ivanhoe Hotel at The Corso, Manly.

Yours faithfully,

THE ACQUSTIC GROUP PTY LTD

STEVEN E. COOPER

