

**Before an Independent Hearing
Panel Appointed by
Wellington City Council**

In the Matter of the Resource Management Act 1991

And

In the Matter of a Notice of Requirement to designate land for Airport Purposes known as the Main Site NOR

And

In the Matter of a Notice of Requirement to designate land for Airport Purposes known as the East Side Area NOR.

**Summary Statement of Evidence of
Andrew Read
for Wellington International Airport Ltd**

Dated: 19 May 2021

INTRODUCTION

Qualifications and Experience

1. My name is Andrew Read.
2. My qualifications and experience are provided in my statement of evidence dated 05 May 2021.

SCOPE OF EVIDENCE

3. My evidence deals with the potential lighting effects of the Designation Outcomes associated with the Main Site Notice of Requirements (NoR) and the East Side Area (ESA) NoR.

EXECUTIVE SUMMARY

4. An assessment of the environmental effects associated with the Main Site NoR was not included in the scope of my engagement. This was because the designation change proposes permitted activity standards and thresholds that are generally in accordance with those currently permitted under the Wellington District Plan (WDP).
5. Lighting associated with the Main Site NoR is not anticipated to give rise to adverse effects that are different to those that can occur under the presently permitted WDP provisions. I note that the proposed lighting condition is better at managing effects than the WDP because it requires compliance with AS/NZS 4282: 2019 "*Control of the obtrusive effects of outdoor lighting*".
6. The visual effects from the proposed development of the East Side Area would be quite different to the existing views, with the perception of the effects dependent upon the individual viewpoint and viewer.
7. The dark golf course area in the foreground would become permanently illuminated with airfield related lighting and lighting associated with transiting aircraft. The terminal precinct area, which is presently populated with multiple disparate glare sources and irregularly illuminated surfaces, would be replaced by a cool white uniform lighting effect. The lighting would be seen against the backdrop of internally illuminated terminal and carpark buildings and the apron floodlighting for the western apron.
8. The WDP Rules, limiting the amount of spill light to residential zoned sites, will be easily complied with given the distance between the properties and the lights.

9. Two key lighting effect characteristics are not addressed by the WDP Rules – namely glare and sky glow. These are addressed within AS/NZS 4282: 2019 “*Control of the obtrusive effects of outdoor lighting*” which, whilst excluding airfield lighting, provides a common basis for assessing the likely effects of outdoor lighting.
10. It is expected that lighting within the ESA will comply with the glare limitations specified in AS/NZS 4282: 2019, with the possible exception of the indirect effects from aircraft taxi lights – noting that these are not covered by the Standard and would not be operating during the period of 10:00pm to 7:00am as per the proposed designation condition.
11. Indirect sky glow effects may occur where light is reflected off the ground, other surfaces, and atmospheric particles. The effects would be acceptable - being minimised by using flat-glass luminaire orientation.
12. Changing image signs may be seen as obtrusive, however the limits on brightness and image duration in AS/NZS 4282: 2019 should appropriately mitigate potential effects.
13. From a visual perception perspective, Frank Boffa notes (Appendix D, F Boffa Response, Visual Effects of Designation Outcomes Section 6.6) that, “*while the terminal and apron extension lighting will be visible, it will be less visible and obtrusive than the existing airport lighting overall. In terms of mitigation, the use of LED lighting throughout the apron area would contribute to a meaningful reduction in night light effects*”. I support this statement from the perspective of directly viewable lamp sources however, indirect lighting effects (reflection off the apron, aircraft, etc) will be greater than those which presently exist – albeit more uniform in appearance.
14. The impact the lighting has upon the local environs will depend upon the viewing location and the perspective of the viewer. The limits on spill light, glare, and sky glow within AS/NZS 4282: 2019 would form a reasonable basis for managing potential lighting effects.



Andrew Read

19 May 2021