



22 March 2021
L164K_R20- Granville Responses

Ethos Urban
173 Sussex St
Sydney NSW 2000

Attention: Gareth Bird

Sydney Trains Billboard Signage Response to Granville Submissions

As requested, we have addressed the submissions raised.

Background

Prior to 2017 there was little regulatory control of outdoor illuminated signage.

- AS4282:1997 Control of the obtrusive effects of outdoor lighting did not include them in its scope.
- In 2017 the NSW Transport Corridor Advertising and Signage Guidelines were published. These set maximum luminance (brightness) for signs at different time of the day in different areas. It also set the minimum dwell time, the time that an image must remain before it can be changed.
- In 2019 AS/NZS4282:2019 was published. This edition included:
 - Additional limits on sign luminance,
 - Limits on the illuminance on residential properties, before and after 11:00pm, and
 - Threshold Increment, a measure of the impact of the signage on drivers.

As a result, there are many existing signs that exceed the limits of the standards due to predating the standards or being installed or upgraded without approval.

This means that preconception as to the appearance of a sign might be impacted by the knowledge of existing signs in the area.

Objections

The major grounds for objection are:

- The impact of the changing sign and the brightness being an irritant for nearby residential properties.
- Glare on drivers is also raised.
- Colour of night lights for driving safety is also identified as a concern.

All three matters are included in the standards requirements and have therefore been addressed in the assessment.

Impact on residences

The impact of nearby residents has been included in the conformance requirements to AS/NZS4282:2019. The Lighting, Art and Science original assessment included assessment for conformance to this standard and was found to conform with the dimming levels included in the original report.

Sign 1, the south facing sign has been classified as an A3 environmental area, with lower limits, due to the residential nature of the area. The recommended maximum luminance for this zone is 250Cd/m², compared with the maximum of 350 Cd/m² for an A4 zone.

The recommended maximum luminance in our report is 173cd/m² for the pre-curfew period to conform to the thresholds increment limits and 114 Cd/m² to conform with the curfew illuminance limits on residences.

Glare to drivers

The glare impact of the sign on drivers is addressed in the Threshold Increment analysis.

This assessment was in the original Lighting, Art and Science report and was found to conform with the dimming levels recommended in the report.

For Sign 1 this has resulted in limiting the maximum luminance for night operation to 73%.

Sign 2, being a higher environment zone and flatter approach conforms with the maximum luminance allowable under AS/NZS4282:2019 and NSW Transport Corridor Advertising and Signage Guidelines.

Distracting colour of signage lighting on drivers

This is controlled by the NSW Transport Corridor Advertising and Signage Guidelines in the following section:

"3.3.1 Advertising signage and traffic control devices

Signs that display information that is contrary to, or competing with, prescribed traffic control devices or make locating prescribed traffic control devices difficult, have the potential to distract and confuse motorists. Therefore, the following criteria apply to all advertising signage:

- a. The advertisement must not distract a driver from, obstruct or reduce the visibility and effectiveness of, directional signs, traffic signals, prescribed traffic control devices, regulatory signs or advisory signs or obscure information about the road alignment.
- b. The advertisement must not interfere with stopping sight distance for the road's design speed or the effectiveness of a prescribed traffic control device. For example:
 - i. Could the advertisement be construed as giving instructions to traffic such as 'Stop', 'Halt' or 'Give Way'?
 - ii. Does the advertisement imitate a prescribed traffic control device?
 - iii. If the sign is in the vicinity of traffic lights, does the advertisement use red, amber or green circles, octagons, crosses or triangles or shapes or patterns that may result in the advertisement being mistaken for a traffic signal?

Additional criteria for digital signs and moving signs:

- a. The image must not be capable of being mistaken:
 - i. for a rail or traffic sign or signal because it has, e.g. red, amber or green circles, octagons, crosses or triangles or shapes or patterns that may result in the advertisement being mistaken for a traffic signal
 - ii. as text providing driving instructions to drivers.
- b. The amount of text and information supplied on a sign should be kept to a minimum (e.g. no more than a driver can read at a short glance)."

This is part of the review and approval by the RMS and is not part of our assessment.

Local Environment Assessment

We undertook a review of signs in the area to indicate level of conformance of existing signs that might be affecting people's pre-conception. We have measured the white component of the sign as this is the area that is used for measurement for conformance of a digital sign with variable content. Where a sign has a fixed graphic then the sign is assessed on the average of all the areas of the sign. This means that these signs, although the reading may be above the limit for the white, may still conform as an average sign.

1. Budget Service Station -Woodville Road
Fixed graphic - luminance of white 230cd/m²
2. Miami Pizza under awning sign – Railway Parade
LED Variable Content - 4250 cd/m² – this is over 10 time the limit and does not appear to be switching to night mode. The dwell time is also approximately 4 seconds compared to the minimum allowable of 10 seconds.



Fig 1 Miami Pizza Sign- Contrast too high for the camera

3. 7 eleven – corner of Bold Street and Parramatta Road
Fixed graphic – The white area is 200 cd/m².



Fig 2 7 Eleven sign

4. Ampol – opposite corner of Bold Street and Parramatta Road
Fixed graphic – The white area is 1000 cd/m² – This sign although new appears to exceed the standards limits.



Fig 3 Ampol Sign

5. Kroon Car Rentals – Parramatta Road
LED Variable Content - 5600 cd/m² – this is over 10 times the limit and does not appear to be switching to night mode. The dwell time is also approximately 5 seconds compared to the minimum allowable of 10 seconds.



Fig 4 Kroon Car Rentals

Although we did not measure the luminance of the sign due to its location, the sign on the new footbridge across James Ruse Drive north of Hope Street is a good indication of a modern compliant sign.



The original assessment carried out by Lighting, Art and Science assessed the proposed sign with relation to the impact on drivers and local residences as required to conform to the limits proscribed in AS/NZS4282:2019 and recommended reduction in the luminance necessary to achieve conformance.

Figures K1 to K4 indicate that there are many signs in the vicinity that significantly exceed the maximum limits set in standards, with only the 7 eleven sign being of a similar luminance as the proposed sign. We therefore believe that the proposed sign will have similar or less impact on its surrounding area than the local existing signs.