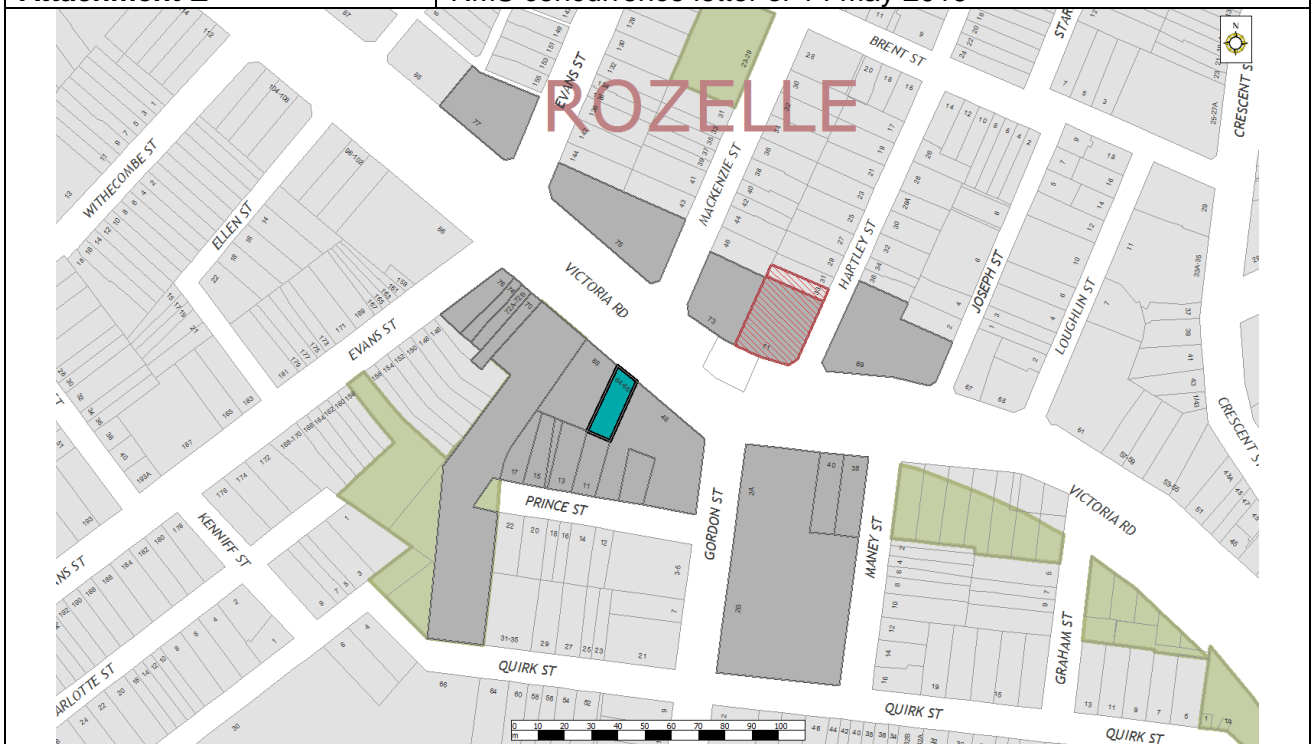




INNER WEST COUNCIL

DEVELOPMENT ASSESSMENT REPORT

Application No.	D/2019/119
Address	64-66 Victoria Road, ROZELLE NSW 2039
Proposal	Replace the existing fixed outdoor advertising sign with a digital screen sign and installation of associated louvres to the adjacent residential window.
Date of Receipt	1 April 2019
Applicant	Ooh! Media
Owner	Mr M L Marshall and Mr P A Marshall
Number of Submissions	2 objections
Building Classification	N/A
Main Issues	<ul style="list-style-type: none"> • Traffic safety • Visual character • Public benefits
Reason for determination at Planning Panel	Applicant proposes a Deed of Agreement to provide a monetary contribution to Council to satisfy the public benefit requirements of SEPP 64
Recommendation	Approval
Attachment A	Recommended conditions of consent
Attachment B	Plans
Attachment C	Traffic Assessment Report
Attachment D	Lighting Assessment Report
Attachment E	RMS concurrence letter of 14 May 2019



LOCALITY MAP

Subject Site		Objectors		↑ N
Notified Area		Supporters		

1. Executive Summary

This report relates to a development application to replace an existing static roof advertising sign with a digital LED roof advertising sign and install window louvres to an adjacent residential window (which is on the subject property) to mitigate light spill at 64-66 Victoria Road, Rozelle.

The proposed illuminated advertising roof sign is permissible with consent and is generally satisfactory. The scale and proportion of the proposed sign (42.16m²) would be very similar to the existing sign (42.84m²). The proposal includes the introduction of an 11pm to 6am curfew and the installation of louvres on the adjacent residential window to safeguard residential amenity. However, the application, as submitted, fails to satisfy some provisions of SEPP 64, in particular:

- Provision of public benefits
- Full-length logo strip
- Precinct specific DCP criteria of SEPP 64.

These have been addressed by appropriate conditions of consent.

In addition, the proposed 10 second advertising dwell time may not meet the safety provisions of SEPP 64, nor be consistent with desired visual character provisions set out in the Leichhardt DCP 2013. The RMS have provided concurrence to this application subject to conditions, including a condition requiring the applicant to provide a road safety audit report which considers the effects of the placement and operation of the sign after 12 months of operation.

In summary, subject to the recommended conditions of consent, the proposed development is considered satisfactory, and approval is recommended.

2. Proposal

This report relates to a development application lodged under Section 4.12 of the Environmental Planning and Assessment Act 1979 (EP&A Act) to:

- Replace an existing static roof advertising sign with a 12.4m x 3.4m (42.16m²) digital LED roof advertising sign with a static display dwell time of 10 seconds; and
- Install louvres (6.3m x 5m) adjacent to the residential window of 64 Victoria Road to mitigate light spill.

The proposed digital LED advertising screen sign is to be supported on an existing frame and mounting which was the subject of Building Certificate BC/2016/100 issued by Council on 2 February 2017, which includes four bottom mounted lights. The four bottom mounted lights are to be removed.

Both the existing and proposed sign only face towards outbound traffic on Victoria Road.

The original Development Application determined on 30 November 1988, gave approval for the erection of a 9m x 3m (27m²) roof-top advertising sign.

3. Site Description

64-66 Victoria Road, Rozelle (Lot 100 in DP 812224) is approximately 234.3m² in area and has a frontage of 9.25m to Victoria Road at Rozelle. The site is located on the south-western side of Victoria Road, west of Gordon Street and adjoining The Native Rose Hotel (refer to **Figure 1** and **Figure 2**).



Figure 1: Location Diagram (Source: Six Maps – NSW Government)



Figure 2: The existing sign on the subject site (Source: Google Maps - Street view)

The site presently accommodates a 3-storey mixed use building with an existing 12.6m x 3.4m (42.84m²) roof-top advertising sign. The adjoining properties consist of mixed-use buildings, predominantly commercial, some with shop top housing.

The site is located within the distinctive neighbourhood of *Rozelle Commercial Distinctive Neighbourhood (Victoria Road Sub-Area, Rozelle Commercial Neighbourhood)* under the Leichhardt Development Control Plan 2013.

The subject site is not a heritage item and is not located in a conservation area.

While there are a number of roof-top advertising signs between the Anzac Bridge and the intersection of Victoria Road and Darling Street, the nearest one to the subject site is on the opposite side of Victoria Road and approximately 75m away at 71 Victoria Road. This is a roof-top advertising sign facing both inbound and outbound traffic (refer to **Figure 3**).



Figure 3: Roof-top advertising sign at 71 Victoria Road (Source: Google Maps - Street view)

4. Site History

The following table outlines the development history of the subject site.

Date	Application Details
30/11/1988	DA 496/88 – consent issued for a 9m x 3m (27m ²) roof-top advertising sign.
22/3/2016	D/2015/289 - Alterations and additions to the existing building and change of use to a mixed development containing two commercial suites and three dwellings.
2/2/2017	BC/2016/100 - 'Like for like' rectification works to part of the billboard sign frame. The Billboard sign has existing approval.
21/12/2017	M/2017/250 - Modification to convert the existing illuminated static roof advertising sign to a digital LED roof advertising sign with an advertisement dwell time of 10 seconds; and erection of a 6.3m x 5m solid 'black-out screen' adjacent to the residential façade. Council refused this application and this is now the subject of appeal in the Land and Environment Court (L&E 2018/310808).
18/9/2018	DAREV/2018/16 - Request for review of Council's refusal of M/2017/250; proposing to change the dimensions of the proposed digital LED advertising screen, replace the proposed 'black-out screen' with external window louvres to the adjacent residential window, introduce a curfew between 11:00 pm and 6:00 am for the illumination the digital LED advertising sign and provide of 5% screen time as a public benefit. This application remains undetermined.

5. Section 4.15(1) Assessment

The following is a summary of the assessment of the application in accordance with Section 4.15 of the Environmental Planning and Assessment Act, 1979.

(a)(i) Environmental Planning Instruments

The application has been assessed against the relevant Environmental Planning Instruments listed below:

- State Environmental Planning Policy No. 64 – Advertising and Signage
- Leichhardt Local Environmental Plan (LEP) 2013

Nevertheless, it is considered that these matters can be resolved by a deferred commencement and suitable conditions of consent.

The proposed illuminated advertising roof sign is permissible under both the SEPP and LEP in this location, and satisfies other aims of these Environmental Planning Instruments in relation to quality design, scale, illumination and amenity, subject to the recommended conditions.

SEPP 64 – Advertising and Signage

SEPP 64 applies to the proposal, being signage that can be permitted with development consent under the applicable Leichhardt LEP 2013, and that would be visible from a public place. The proposed signage is neither exempt development, nor prohibited development under the SEPP.

Under **clause 8** of SEPP 64 *‘A consent authority must not grant development consent to an application to display signage unless the consent authority is satisfied:*

- that the signage is consistent with the objectives (Aims) of this Policy as set out in clause 3 (1) (a), and*
- that the signage the subject of the application satisfies the assessment criteria specified in Schedule 1.’*

An assessment has been made against the Aims, Schedule 1 and Part 3 requirements of the SEPP, as well as the related *Transport Corridor Outdoor Advertising and Signage Guidelines*. The findings of this assessment are outlined below.

SEPP 64 – Aims

- to ensure that signage (including advertising):***
 - is compatible with the desired amenity and visual character of an area, and***
 - provides effective communication in suitable locations, and is of high quality design and finish, and***

The proposed roof sign replaces an existing externally illuminated static roof advertising sign in this location. The proposed structure itself, its size and the LED nature of the illumination are suitable and would have a substantially similar compatibility with the character of the area as the current sign. The proposed 10 second dwell time proposed for the display of this sign would potentially impact on road safety in this location, and impact on visual amenity to a minor extent.

With regards to visual character, the requirement under **clause 21(1) (c)** that a precinct specific DCP based on advertising design analysis be in force, is not considered necessary

or appropriate in this instance as the proposed digital sign re-uses (i.e. the digital screen will be mounted onto) the existing advertising structure. In addition, the existing advertising sign has the benefit of current development consent.

It must also be taken into account that the change to digital technology together will improve the visual character of the area. Digital technology achieves a more even diffusion of light across a signage face, reduces the potential for light spill and enables the illumination to be dimmed to accord with ambient light conditions. The busy main road commercial environment is suitable for such illuminated advertising signs and the proposed LED display provides a cleaner, higher quality design than the existing sign.

(b) to regulate signage (but not content) under Part 4 of the Act, and

The application enables assessment and regulation.

(c) to provide time-limited consents for the display of certain advertisements, and

The application does not propose a time limited consent. However, this can be addressed by a condition limiting any consent to 10 years in accordance with **clause 21(2)** of the SEPP.

(d) to regulate the display of advertisements in transport corridors, and

The application enables assessment and regulation.

(e) to ensure that public benefits may be derived from advertising in and adjacent to transport corridors.

The Statement of Environmental Effects (SEE) submitted with the application indicates that *'The Applicant is willing to allocate 5% of display time... for the display of community and civic related messages...'* Council resolved on 14 May 2019 to adopt the **Outdoor Advertising and Signage in Transport Corridors Policy**.

This policy requires a monetary or in-kind contribution equal to 1 in 6 advertisements or 15% of display time. Where in-kind contributions are considered appropriate or beneficial to the community, Council is to negotiate the resale of advertising time back to the advertiser for full commercial rates, so that this amount is made as the community contribution or public benefit.

The Applicant has not yet entered into formal arrangements for the provision of public benefits in accordance with **clause 13(3)** of the SEPP, however, the offer of a Deed of Agreement has been provided by the Applicant. The amount of \$150,000 has been offered to be provided as an annual payment of \$10,000 over the life of the consent. Council's preferred position is to have the full contribution to be made prior to the new advertising sign commencing operation. Such arrangements are recommended as a condition of consent to be finalised before an occupation certificate is issued for the advertising sign.

SEPP 64 – Schedule 1 Criteria Assessment Table

Clause	SEPP 64 Provision	Finding	Comment
1	<p>Character of the area</p> <ul style="list-style-type: none"> Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located? Is the proposal consistent with a particular theme for outdoor advertising in the area or locality? 	Satisfactory	<p>Currently the Leichhardt DCP 2013 states that signs should <i>'not dominate the setting'</i> and provides general controls and advice that roof signs <i>'...are generally not supported in Leichhardt...'</i></p> <p>In this instance, the proposed</p>

			digital sign is to be placed on the existing sign structure. Bearing this in mind, the digital conversion of the existing roof general advertising sign is acceptable given the existing and future context of the site as commercial with a high incidence of advertising and signage.
2	<p>Special areas</p> <ul style="list-style-type: none"> Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas? 	Satisfactory	The subject site is not located within an environmentally sensitive, heritage conservation or residential area. It is noted that the site is within the vicinity of heritage items but a substantially similar sign currently occupies the same location.
3	<p>Views and vistas</p> <ul style="list-style-type: none"> Does the proposal obscure or compromise important views? Does the proposal dominate the skyline and reduce the quality of vistas? Does the proposal respect the viewing rights of other advertisers? 	Satisfactory	The structure itself does not reduce views or vistas, nor dominate the skyline. The proposed changing display does not interfere with the viewing of the nearby sign, though it is advised that the approach to each sign in relation to the frequent changing (10 second dwell) display should be considered cumulatively in this location. To this end, the RMS require a condition to be imposed that the applicant provide a road safety audit report which considers the effects of the placement and operation of the sign after 12 months of operation.
4	<p>Streetscape, setting or landscape</p> <ul style="list-style-type: none"> Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape? Does the proposal contribute to the visual interest of the streetscape, setting or landscape? Does the proposal reduce clutter by rationalising and simplifying existing advertising? Does the proposal screen unsightliness? Does the proposal protrude above buildings, structures or tree canopies in the area or locality? Does the proposal require ongoing vegetation management? 	Satisfactory Subject to conditions	<p>The sign is generally appropriate in this main road commercial setting. The scale and proportion of the sign would be substantially similar to the existing sign. The visual interest may be slightly improved by the removal of the existing floodlight structures and inclusion of a more streamlined screen.</p> <p>Although the proposal simplifies the advertising structure, the proposed frequently changing (10 second dwell) display, in addition to the second similar advertising sign at 71 Victoria Road, would increase visual clutter to a minor extent, which may impact on road safety and the road safety audit report required by the RMS will address this matter.</p>
5	<p>Site and building</p> <ul style="list-style-type: none"> Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located? Does the proposal respect important features of the site or building, or both? Does the proposal show innovation and imagination in its relationship to the site or 	Satisfactory	<p>The scale and proportion would be substantially similar to the existing sign, generally appropriate to the site.</p> <p>The application proposes the introduction of an 11pm to 6am curfew and installation of louvres</p>

	building, or both?		on the adjacent residential window to better respect the amenity of the residential dwelling on the site.
6	<p>Associated devices and logos with advertisements and advertising structures</p> <ul style="list-style-type: none"> Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed? 	Satisfactory	<p>The proposal maintains the current maintenance access arrangements of a ladder and safety gantry mounted at the rear of the sign.</p> <p>LED technology integrates the illumination into the sign and does not require the manual change of content, minimising safety issues, structures needed and light spillage.</p> <p>The advertising company logo is proposed to be integrated within the design of the support structure, at the bottom left of the sign. This is required to be incorporated within a full-length strip under clause 20 (2) of the SEPP, which is to be addressed within the recommended conditions of consent (refer to Condition 2).</p>
7	<p>Illumination</p> <ul style="list-style-type: none"> Would illumination result in unacceptable glare? Would illumination affect safety for pedestrians, vehicles or aircraft? Would illumination detract from the amenity of any residence or other form of accommodation? Can the intensity of the illumination be adjusted, if necessary? Is the illumination subject to a curfew? 	Satisfactory	<p>The application proposes the introduction of an 11pm to 6am curfew and the LED lighting is capable of being adjusted (dimmed), providing a greater level of control over unwanted light spillage. The Lighting Impact Assessment Report submitted with the application finds that with the installation of louvres to the adjacent residential window and the introduction of the curfew, the proposed illuminated sign would achieve compliance with AS4282-2019 - Control of Obtrusive Effects of Outdoor Lighting. The report states that in relation to its illumination, the proposal <i>“will not result in unacceptable glare, nor will it adversely impact the safety of pedestrians, residents or vehicular traffic.”</i></p>
8	<p>Safety</p> <ul style="list-style-type: none"> Would the proposal reduce the safety for any public road? Would the proposal reduce the safety for pedestrians or bicyclists? Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas? 	Inconclusive Subject to conditions	<p>The proposed sign replaces an existing advertising sign of substantially similar size and would not obscure pedestrian sightlines in this roof-top position. However, the location does not comply with the 150m min. safe sign spacing standards under the guidelines and the proposed frequently changing (10 second dwell) display would increase visual clutter, in addition to the second similar advertising sign at 71 Victoria Road within close proximity to traffic signals. This has the potential to reduce safety for road users.</p>

			To this end, the RMS require a condition to be imposed that the applicant provide a road safety audit report which considers the effects of the placement and operation of the sign after 12 months of operation (refer to Condition 5).
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Part 3 of the SEPP provides specific requirements for certain advertisements and under clause 9 ‘applies to all signage to which this Policy applies, other than the following:

- *business identification signs,*
- *signage that, or the display of which, is exempt development under an environmental planning instrument that applies to it,*
- *signage on vehicles.’*

Part 3 of the SEPP applies to the proposed roof adverting sign. An assessment of the proposal against the provisions under Part 3 is provided below:

SEPP 64 - Part 3 (Advertisements) Assessment Table

Clause	SEPP 64 Provision	Finding	Comment
10	Despite the provisions of any other environmental planning instrument, the display of an advertisement is prohibited on land that, under an environmental planning instrument, is within any of the following zones or descriptions: <ul style="list-style-type: none"> • environmentally sensitive area • heritage area (excluding railway stations) • natural or other conservation area • open space • waterway • residential (but not including a mixed residential and business zone, or similar zones) • scenic protection area • national park • nature reserve 	Considered	The site is not located on land for which the display of an advertisement is prohibited under clause 10.
11	A person must not display an advertisement, except with the consent of the consent authority or except as otherwise provided by this Policy.	Considered	The application has been made to Inner West Council - the consent authority for this proposal.
12	For the purposes of this Policy, the consent authority is: <ol style="list-style-type: none"> the council of a local government area in the case of an advertisement displayed in the local government area (unless paragraph (c), (d) or (e) applies), or the Maritime Authority of NSW in the case of an advertisement displayed on a vessel, or the Minister for Planning in the case of an advertisement displayed by or on behalf of RailCorp on a railway corridor, or the Minister for Planning in the case of an advertisement displayed by or on behalf of the RTA on: 	Considered	The application has been made to Inner West Council - the consent authority for this proposal.

	<ul style="list-style-type: none"> • a road that is a freeway or tollway (under the Roads Act 1993) or associated road use land that is adjacent to such a road, or • a bridge constructed by or on behalf of the RTA on any road corridor, or • land that is owned, occupied or managed by the RTA, or <p>(e) the Minister for Planning in the case of an advertisement displayed on transport corridor land comprising a road known as the Sydney Harbour Tunnel, the Eastern Distributor, the M2 Motorway, the M4 Motorway, the M5 Motorway, the M7 Motorway, the Cross City Tunnel or the Lane Cove Tunnel, or associated road use land that is adjacent to such a road.</p>		
13 (1)	<p>A consent authority (other than in a case to which subclause (2) applies) must not grant consent to an application to display an advertisement to which this Policy applies unless the advertisement or the advertising structure, as the case requires:</p> <ul style="list-style-type: none"> • is consistent with the objectives of this Policy as set out in clause 3 (1) (a), and • has been assessed by the consent authority in accordance with the assessment criteria in Schedule 1 and the consent authority is satisfied that the proposal is acceptable in terms of its impacts, and • satisfies any other relevant requirements of this Policy. 	Considered	<p>It is considered that the proposed illuminated advertising roof sign is consistent with the criteria set out in Schedule 1 of SEPP 64 in relation to quality design, scale, illumination and amenity.</p> <p>However, the proposal is not consistent with Aims relating to time limited consents and public benefits.</p> <p>Furthermore, it is not possible to determine conclusively if the frequently changing (10 second dwell time) displays are consistent with the safety aims and criteria under Schedule 1 of the SEPP.</p> <p>To this end, the RMS require a condition to be imposed that the applicant provide a road safety audit report which considers the effects of the placement and operation of the sign after 12 months of operation.</p>
13 (2)	<p>If the Minister for Planning is the consent authority or clause 18 or 24 applies to the case, the consent authority must not grant consent to an application to display an advertisement to which this Policy applies unless the advertisement or the advertising structure, as the case requires:</p> <ul style="list-style-type: none"> • is consistent with the objectives of this Policy as set out in clause 3 (1) (a), and • has been assessed by the consent authority in accordance with the assessment criteria in Schedule 1 and in the Guidelines and the consent authority is satisfied that the proposal is acceptable in terms of: design, and road safety, and the public benefits to be provided in connection with the display of the advertisement, and • satisfies any other relevant requirements of this Policy. 	Considered	<p>Clause 18 applies to the application. See also clauses 13(1) above and 13(3) below.</p>
13 (3)	<p>In addition, if clause 18 or 24 applies to the case, the consent authority must not grant consent unless arrangements that are</p>	Considered	<p>The Applicant has recently offered an alternative public benefit in the form of financial contribution per</p>

	<p>consistent with the Guidelines have been entered into for the provision of the public benefits to be provided in connection with the display of the advertisement.</p>		<p>year via a Deed of Agreement. The financial contribution could be used towards improvements to the surrounding public domain.</p> <p>Council's <i>Outdoor Advertising and Signage in Transport Corridors Policy</i> (adopted 14 May 2019) identifies Council's future <i>Traffic and Transport Needs Study</i>, <i>Integrated Transport Strategy</i> and <i>Section 7.11/7.12 Local Infrastructure Contribution Plans</i> as the necessary documents that will inform how the distribution of any monetary or in-kind contributions are to take place.</p> <p>However, the Applicant has not yet entered into formal arrangements for the provision of public benefits in accordance with clause 13 (3) of SEPP 64. Such arrangements are recommended to be dealt with as a condition of consent, to be finalised and the contribution made to Council before the new advertising sign commences operation (refer to Condition 3).</p>
14 (1)	<p>A consent granted under this Part ceases to be in force:</p> <p>(a) on the expiration of 15 years after the date on which the consent becomes effective and operates in accordance with Section 83 of the Act, or</p> <p>(b) if a lesser period is specified by the consent authority, on the expiration of the lesser period.</p>	Considered	A time limited consent of 15 years is recommended.
14 (2)	<p>The consent authority may specify a period of less than 15 years only if:</p> <p>(a) before the commencement of this Part, the consent authority had adopted a policy of granting consents in relation to applications to display advertisements for a lesser period and the duration of the consent specified by the consent authority is consistent with that policy, or</p> <p>(b) the area in which the advertisement is to be displayed is undergoing change in accordance with an environmental planning instrument that aims to change the nature and character of development and, in the opinion of the consent authority, the proposed advertisement would be inconsistent with that change, or</p> <p>(c) the specification of a lesser period is required by another provision of this Policy.</p>	Considered	A shorter period is not considered appropriate.
15-16	<i>Advertisements on rural or non-urban land or Transport corridor land</i>	N/A	
17 (1)	<p>This clause applies to an advertisement:</p> <p>(a) that has a display area greater than 20 square metres, or</p>	Considered	This clause applies to the proposed roof advertising sign.

	(b) that is higher than 8 metres above the ground		
17 (2)	The display of an advertisement to which this clause applies is advertised development for the purposes of the Act.	Considered	The subject application has been notified in accordance with Division 7 of the EP&A Regulations and notification provisions of the relevant Leichhardt DCP 2013.
17 (3)	<p>The consent authority must not grant consent to an application to display an advertisement to which this clause applies unless:</p> <p>(a) the Applicant has provided the consent authority with an impact statement that addresses the assessment criteria in Schedule 1 and the consent authority is satisfied that the proposal is acceptable in terms of its impacts, and</p> <p>(b) the application has been advertised in accordance with section 79A of the Act, and</p> <p>(c) the consent authority gave a copy of the application to the RTA at the same time as the application was advertised in accordance with Section 79A of the Act if the application is an application for the display of an advertisement to which clause 18 applies.</p>	Considered	<p>The application was accompanied by a Statement of Environmental Effects addressing the assessment criteria in Schedule 1.</p> <p>The application has been advertised in the local newspaper in accordance with the EP&A Act and Regulations, and forwarded to the RMS for concurrence.</p>
18 (1)	This clause applies to the display of an advertisement which clause 17 applies that is within 250 metres of a classified road, any part of which visible from the classified road.	Considered	This clause applies to the roof advertising sign, as proposed on the subject site.
18 (2)	The consent authority must not grant development consent to the display of an advertisement to which this clause applies without the concurrence of the RTA.	Considered	The RMS has reviewed the application and granted its concurrence, subject to conditions of any consent.
18 (3)	<p>In deciding whether or not concurrence should be granted, the RTA must take into consideration:</p> <ul style="list-style-type: none"> • The impact of the display of the advertisement on traffic safety, and • The Guidelines. 	Considered	The RMS has provided concurrence subject to conditions of consent.
18 (4)	If the RTA has not informed the consent authority within 21 days after the copy of the application is given to it under clause 17 (3) (c) (ii) that it has granted, or has declined to grant, its concurrence, the RTA is taken to have granted its concurrence.	Considered	The RMS has informed Council of its concurrence, subject to conditions of consent.
19	<i>Advertising display area greater than 45 square metres</i>	N/A	
20 (1)	The name or logo of the person who owns or leases an advertisement or advertising structure may appear only within the advertising display area.	Considered	The advertising company logo is proposed to be located in a separate box beneath the advertising panel, on the left hand side.
20 (2)	<p>If the advertising display area has no border or surrounds, any such name is to be located:</p> <p>(a) within the advertisement, or</p>	Non-compliant	The proposed advertising display area has no boarder or surrounds and the advertising company logo is proposed to be located below the sign, though not within a full-

	(b) within a strip below the advertisement that extends for the full width of the advertisement.		width strip as prescribed. This can be addressed by a condition requiring the submitted plans to be amended (refer to Condition 2).
20 (3)	The area of any such name or logo must not be greater than 0.25 square metres.	Considered	The logo is proposed to be no greater than 0.25m ² .
20 (4)	The area of any such strip is to be included in calculating the size of the advertising display area.	Considered	The inclusion of a strip to achieve compliance with clause 20(2) would cause the advertising display area to increase from the proposed 41.2m ² to approximately 42.2m ² ; equivalent to the current advertising display area, as stated in the SEE report.
21 (1)	The consent authority may grant consent to a roof or sky advertisement only if: (a) the consent authority is satisfied: (i) that the advertisement replaces one or more existing roof or sky advertisements and that the advertisement improves the visual amenity of the locality in which it is displayed, or (ii) that the advertisement improves the finish and appearance of the building and the streetscape, and (b) the advertisement: (i) is no higher than the highest point of any part of the building that is above the building parapet (including that part of the building (if any) that houses any plant but excluding flag poles, aerials, masts and the like), and (ii) is no wider than any such part, and (c) a development control plan is in force that has been prepared on the basis of an advertising design analysis for the relevant area or precinct and the display of the advertisement is consistent with the development control plan.	Considered	The proposed roof advertisement is of similar size and display area as the existing sign. It would improve the appearance of the streetscape and visual amenity insofar that the exterior flood lights would be removed and an 11pm to 6am curfew would be introduced. The proposal would have only a minor impact on visual amenity and there is no proposed change to the overall height of the signage. No precinct specific DCP is in force specifically for this area based on an advertising design analysis as required under subclause (c). The SEE agrees that <i>'There is no DCP in place that has been prepared having regard to advertising design analysis...'</i> but argues that <i>'As there is a legal and valid consent existing use rights apply to the extent that this provision would apply a prohibition to the development.'</i> The intent of this provision is not to prohibit, but rather ensure place-specific guidance on the advertisement display. In summary, the existing sign has the benefit of an earlier (not time limited) consent and the busy main road commercial environment is expected to remain suitable, generally, for illuminated advertising signs.
21 (2)	A consent granted under this clause ceases to be in force: (a) on the expiration of 10 years after the date on which the consent becomes effective and operates in accordance with section 83 of the Act, or (b) if a lesser period is specified by the consent authority, on the expiration of the lesser period.	Considered	Clause 21 of the SEPP does not apply to the extent that Council has not prepared an advertising design analysis, but the existing development has the benefit of a previous consent. A review of Council's files demonstrates that Council has accepted that clause 21 does not apply in respect of the consent

			granted for No 71 Victoria Road. Accordingly, a condition of consent is recommended limiting consent for a period of 15 years in accordance with clause 14 of SEPP 64 (refer to Condition 10).
21 (3)	The consent authority may specify a period of less than 10 years only if: (a) before the commencement of this Part, the consent authority had adopted a policy of granting consents in relation to applications to display advertisements for a lesser period and the duration of the consent specified by the consent authority is consistent with that policy, or (b) the area is undergoing change in accordance with an environmental planning instrument that aims to change the nature and character of development and, in the opinion of the consent authority, the proposed roof or sky advertisement would be inconsistent with that change.	Not Applicable	There is no policy or plan in place that would necessitate a time limit of less than the period specified under SEPP 64, which in this instance is set at 15 years under clause 14.

Transport Corridor Outdoor Advertising And Signage Guidelines Assessment Table

Clause	Guideline Design Criteria	Compliance	Comment
2.5.1	General criteria		
2.5.1 a.	The advertising structure should demonstrate design excellence and show innovation in its relationship to the site, building or bridge structure.	Satisfactory	<p>The proposal replaces an existing externally illuminated static advertising sign with an internal illuminated digital LED screen.</p> <p>The proposal is considered to have a good standard of design, materials and detailing, in that the screen is streamlined, the metal structure is uncomplicated and existing floodlights are removed.</p> <p>LED lighting is more sustainable than the current lighting and would eliminate light spill.</p> <p>The introduction of a 11pm to 6am curfew and the installation of louvres on the adjacent residential window will improve the relationship to the site and environment.</p> <p>The replacement roof sign proposal has limited opportunity to achieve design excellence in relation to public domain improvements, ground level interfaces and integration of landscape design. It is noted that a public benefit offer has been made for a financial contribution which could be used towards public domain improvements.</p>
2.5.1 b.	The advertising structure should be compatible	Satisfactory	See Schedule 1, clause 5 above.

	with the scale, proportion and other characteristics of the site, building or structure on which the proposed signage is to be located.		
2.5.1 c.	The advertising structure should be in keeping with important features of the site, building or bridge structure.	Satisfactory	See Schedule 1, clause 5 above.
2.5.1 d.	The placement of the advertising structure should not require the removal of significant trees or other native vegetation.	Satisfactory	Replacement of the roof advertising sign does not necessitate the removal of any native vegetation or significant trees.
2.5.1 e.	The advertisement proposal should incorporate landscaping that complements the advertising structure and is in keeping with the landscape and character of the transport corridor.	Satisfactory	Given the context of the site and the roof-top location of the advertising structure it is not practicable to incorporate landscaping.
2.5.1 f.	Any safety devices, platforms, lighting devices or logos should be designed as an integral part of the signage or structure on which it is to be displayed.	Satisfactory	See Schedule 1, clause 6 above.
2.5.1 g.	Illumination of advertisements must comply with the requirements in Section 3.3.3.	Satisfactory	See Schedule 1, clause 7 above and 3.3.3 below.
2.5.1 h.	Illumination of advertisements must not cause light spillage into nearby residential properties, national parks or nature reserves.	Satisfactory	See Schedule 1, clause 7 above and 3.3.3 below.
2.5.3	Roof or sky advertisements		
2.5.3 a.	The consent authority must be satisfied that: <ul style="list-style-type: none"> i. the advertisement replaces one or more existing roof or sky advertisements and that the advertisement improves the visual amenity of the locality in which it is displayed ii. that the advertisement improves the finish and appearance of the building and the streetscape. 	Satisfactory	The proposed roof advertisement replaces an existing advertisement of similar size and display area. It would improve the appearance of the streetscape and visual amenity insofar that the exterior flood lights would be removed and an 11pm to 6am curfew would be introduced.
2.5.3 b.	The advertisement must be: <ul style="list-style-type: none"> i. no higher than the highest point of any part of the building that is above the building parapet (including that part of the building (if any) that houses any plant but excluding flag poles, aerials, masts and the like) ii. no wider than any such part. 	Satisfactory	There is no proposed change to the overall height of the signage.
2.5.3 c.	A DCP must be in force that has been prepared on the basis of an advertising design analysis for the relevant area or precinct and the display of the advertisement must be consistent with the DCP.	N/A	See clause 21 above. No precinct specific DCP is in force specifically for this area based on an advertising design analysis as required. It is considered that clause 21 of the SEPP does not apply to the extent that Council has not prepared an advertising design analysis because the clause amounts to a prohibition which would deny that the existing development has the benefit of current development consent.

2.5.8	Digital signs		
2.5.8 a.	Each advertisement must be displayed in a completely static manner, without any motion, for the approved dwell time as per criterion (d) below.	Satisfactory	The application proposes a static 10 second dwell time.
2.5.8 b.	Message sequencing designed to make a driver anticipate the next message is prohibited across images presented on a single sign and across a series of signs.	Satisfactory	The application does not propose sequencing.
2.5.8 c.	The image must not be capable of being mistaken: <ul style="list-style-type: none"> <li data-bbox="331 573 807 752">i. for a prescribed traffic control device because it has, for example, red, amber or green circles, octagons, crosses or triangles or shapes or patterns that may result in the advertisement being mistaken for a prescribed traffic control device <li data-bbox="331 775 807 819">ii. as text providing driving instructions to drivers. 	Satisfactory	The application does not propose such images.
2.5.8 d.	Dwell times for image display must not be less than: <ul style="list-style-type: none"> <li data-bbox="331 920 807 965">i. 10 seconds for areas where the speed limit is below 80km/h <li data-bbox="331 987 807 1032">ii. 25 seconds for areas where the speed limit is 80km/h and over. 	Satisfactory	The application proposes a 10 second dwell time based on the 60km/h speed limit.
2.5.8 e.	The transition time between messages must be no longer than 0.1 seconds, and in the event of image failure, the default image must be a black screen.	Satisfactory	The application proposes a 0.1 second transition.
2.5.8 f.	Luminance levels must comply with the requirements in Section 3 below.	Satisfactory	See Section 3 assessment below.
2.5.8 g.	The images displayed on the sign must not otherwise unreasonably dazzle or distract drivers without limitation to their colouring or contain flickering or flashing content.	Satisfactory	The application does not propose such images.
2.5.8 h.	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).	Satisfactory	The SEE states that ‘...content will be managed in accordance with this requirement’.
2.5.8 i.	Any sign that is within 250m of a classified road and is visible from a school zone must be switched to a fixed display during school zone hours.	N/A	The proposed sign is not visible from a school zone, the nearest being over 300m distance.
2.5.8 j.	Each sign proposal must be assessed on a case-by-case basis including replacement of an existing fixed, scrolling or tri-vision sign with a digital sign, and in the instance of a sign being visible from each direction; both directions for each location must be assessed on their own merits.	Satisfactory	The SEE argues that ‘the application is for the digital conversion of the existing illuminated sign with a digital screen of similar but reduced proportions.’ Nevertheless, the proposed replacement of an existing fixed roof sign with a static LED sign has been assessed on the merits of the specific circumstances, particularly in relation to the changing (10 second dwell time) sought.

2.5.8 k.	At any time, including where the speed limit in the area of the sign is changed, if detrimental effect is identified on road safety post installation of a digital sign, RMS reserves the right to re-assess the site using an independent RMS-accredited road safety auditor. Any safety issues identified by the auditor and options for rectifying the issues are to be discussed between RMS and the sign owner and operator.	Satisfactory	The application notes the RMS role. The RMS has granted its concurrence, subject to conditions.
2.5.8 l.	Sign spacing should limit drivers' view to a single sign at any given time with a distance of no less than 150m between signs in any one corridor. Exemptions for low speed, high pedestrian zones or CBD zones will be assessed by RMS as part of their concurrence role.	No	The Traffic Impact Assessment report concludes that the spacing is satisfactory given that <i>'the proposed digital sign will replace an existing externally illuminated static advertising sign'</i> and <i>'the crash data did not show a high crash rate that would deem the proposed location unsuitable.'</i> The RMS has assessed the zone and provided its concurrence to the exemption, subject to conditions to be imposed on any consent granted.
2.5.8 m.	Signs greater than or equal to 20sqm must obtain RMS concurrence and must ensure the following minimum vertical clearances; <ul style="list-style-type: none"> i. 2.5m from lowest point of the sign above the road surface if located outside the clear zone ii. 5.5m from lowest point of the sign above the road surface if located within the clear zone (including shoulders and traffic lanes) or the deflection zone of a safety barrier if a safety barrier is installed. If attached to road infrastructure (such as an overpass), the sign must be located so that no portion of the advertising sign is lower than the minimum vertical clearance under the overpass or supporting structure at the corresponding location.	Satisfactory	The RMS has granted its concurrence, subject to conditions of consent. The existing and proposed roof top signs comply with the clearance zone requirements.
2.5.8 n.	An electronic log of a sign's operational activity must be maintained by the operator for the duration of the development consent and be available to the consent authority and/or RMS to allow a review of the sign's activity in case of a complaint.	Satisfactory	The SEE states that the Applicant will maintain a log of the sign's operational activity and a condition of consent is recommended to ensure compliance (refer to Condition 8).
2.5.8 o.	A road safety check which focuses on the effects of the placement and operation of all signs over 20sqm must be carried out in accordance with Part 3 of the RMS Guidelines for Road Safety Audit Practices after a 12 month period of operation but within 18 months of the signs installation. The road safety check must be carried out by an independent RMS-accredited road safety auditor who did not contribute to the original application documentation. A copy of the report is to be provided to RMS and any safety concerns identified by the auditor relating to the operation or installation of the sign must be rectified by the Applicant. In cases where the	Satisfactory	The SEE states that <i>'the Applicant is agreeable to the requirements of the RMS...'</i>

	Applicant is the RMS, the report is to be provided to the Department of Planning and Environment as well.		
2.5.10	Residential amenity		
	Where it can be demonstrated that there will be a negative impact on residential amenity from a proposed digital sign, a consent authority may specify a higher dwell time, or restrict the dwell time hours (i.e. its operation) as a condition of consent to minimise the impacts.	Satisfactory	The proposal replaces an existing externally illuminated static advertising sign with an internal illuminated digital LED screen. The introduction of a curfew from 11pm to 6am and installation of adjustable louvres to the adjacent residential window would result in a reasonable and improved residential amenity when compared with the current situation.
3.2.1	Road clearance		
3.2.1 a.	The advertisement must not create a physical obstruction or hazard. For example: <ul style="list-style-type: none"> i. Does the sign obstruct the movement of pedestrians or bicycle riders? (e.g. telephone kiosks and other street furniture along roads and footpath areas)? ii. Does the sign protrude below a bridge or other structure so it could be hit by trucks or other tall vehicles? Will the clearance between the road surface and the bottom of the sign meet appropriate road standards for that particular road? iii. Does the sign protrude laterally into the transport corridor so it could be hit by trucks or wide vehicles? 	Satisfactory	The proposed roof sign does not create a physical obstruction for pedestrians, bicycle riders or vehicles.
3.2.1 b.	Where the sign supports are not frangible (breakable), the sign must be placed outside the clear zone in an acceptable location in accordance with Austroads Guide to Road Design (and RMS supplements) or behind an RMS approved crash barrier.	Satisfactory	The proposed roof sign is located outside the clear zone and in accordance with the Austroads Guide.
3.2.1 c.	Where a sign is proposed within the clear zone but behind an existing RMS-approved crash barrier, all its structures up to 5.8m in height (relative to the road level) are to comply with any applicable lateral clearances specified by Austroads Guide to Road Design (and RMS supplements) with respect to dynamic deflection and working width.	N/A	The proposed roof sign is located outside the clear zone.
3.2.1 d.	All signs that are permitted to hang over roads or footpaths should meet wind loading requirements as specified in AS 1170.1 and AS1170.2. All vertical clearances as specified above are regarded as being the height of the sign when under maximum vertical deflection.	N/A	The proposed roof sign does not hang over a road or footpath.
3.2.1 A	<i>Additional criteria for digital signs:</i> Digital signs greater or equal to 20sqm must ensure the following clearances: <ul style="list-style-type: none"> a. 2.5m from lowest point of the sign above the road surface if located outside the clear zone b. 5.5m from lowest point of the sign above the road surface if located within the clear zone or the deflection 	Satisfactory	The proposal provides a 6m clearance level which complies with the 2.5m minimum clearance level requirement for signs located outside the clear zone.

	zone of a safety barrier, if installed.		
3.2.2	Line of sight		
3.2.2 a.	An advertisement must not obstruct the driver's view of the road, particularly of other vehicles, bicycle riders or pedestrians at crossings.	Satisfactory	The proposed location of the advertising sign would not obstruct driver view of the road or other users.
3.2.2 b.	An advertisement must not obstruct a pedestrian or cyclist's view of the road.	Satisfactory	The proposed location of the advertising sign would not obstruct pedestrian or cyclist view of the road.
3.2.2 c.	The advertisement should not be located in a position that has the potential to give incorrect information on the alignment of the road. In this context, the location and arrangement of signs' structures should not give visual clues to the driver suggesting that the road alignment is different to the actual alignment. An accurate photo-montage should be used to assess this issue.	Satisfactory	The proposed location and arrangement of the signs' structures would not give incorrect information on the alignment of the road.
3.2.2 d.	The advertisement should not distract a driver's attention away from the road environment for an extended length of time. For example: <ul style="list-style-type: none"> i. The sign should not be located in such a way that the driver's head is required to turn away from the road and the components of the traffic stream in order to view its display and/ or message. All drivers should still be able to see the road when viewing the sign, as well as the main components of the traffic stream in peripheral view. ii. The sign should be oriented in a manner that does not create headlight reflections in the driver's line of sight. As a guideline, angling a sign five degrees away from right angles to the driver's line of sight can minimise headlight reflections. On a curved road alignment, this should be checked for the distance measured back from the sign that a car would travel in 2.5 seconds at the design speed. 	Satisfactory	The Traffic Impact Assessment report concluded that <i>'...the proposed sign is not expected to reduce the safety of any public road, pedestrians or cyclists because of its location...'</i> and the sign <i>'...will be located within the driver's ordinary field of view when approaching northbound and only require glance appreciation.'</i>
3.2.3	Proximity to decision making points and conflict points		
3.2.3 a.	The sign should not be located: <ul style="list-style-type: none"> i. less than the safe sight distance from an intersection, merge point, exit ramp, traffic control signal or sharp curves ii. less than the safe stopping sight distance from a marked foot crossing, pedestrian crossing, pedestrian refuge, cycle crossing, cycleway facility or hazard within the road environment iii. so that it is visible from the stem of a T-intersection. 	Satisfactory	It is noted that the two nearby intersections meet Approach Sight Distance standard under the Austroads Guide, but not the Safe Intersection Sight Distance and Minimum Gap Sight Distance standards. The Traffic Impact Assessment report found that proposed location meets the safe Approach Sight Distance standard under the Austroads Guide. It concludes that the spacing is satisfactory given that <i>'the proposed digital sign will replace an existing externally illuminated static advertising sign'</i>

			and 'the crash data did not show a high crash rate that would deem the proposed location unsuitable.'
3.2.3 b.	The placement of a sign should not distract a driver at a critical time. In particular, signs should not obstruct a driver's view: <ul style="list-style-type: none"> i. of a road hazard ii. to an intersection iii. to a prescribed traffic control device (such as traffic signals, stop or give way signs or warning signs) iv. to an emergency vehicle access point or Type 2 driveways (wider than 6-9m) or higher. 	Satisfactory	With regards to the placement of the sign, the submitted Traffic Impact Assessment report concludes that, ' <i>...the proposed sign does not obstruct the view of any traffic control devices, vehicles, pedestrians or cyclists...</i> ' and ' <i>does not restrict sight distances to any intersection or traffic control device.</i> '
3.2.4	Sign spacing		
3.2.4 a.	Sign spacing should limit drivers view to a single sign at any given time with a distance of no less than 150m between signs in any one corridor. Exemptions for low speed, high pedestrian zones or CBD zones will be assessed by RMS as part of their concurrence role.	Satisfactory	See 2.5.8 l. above.
3.3.1	Advertising signage and traffic control devices		
3.3.1 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.	Satisfactory	See 3.2.2 d. and 3.2.3 b. above.
3.3.1 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: <ul style="list-style-type: none"> 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? 	Satisfactory	The application does not propose any misleading advertisement. The RMS has granted its concurrence, subject to conditions.
3.3.1 A a.	<i>Additional criteria for digital signs:</i> The image must not be capable of being mistaken: <ul style="list-style-type: none"> 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. 	Satisfactory	The application does not propose misleading images. The RMS has granted its concurrence, subject to conditions.
3.3.1 A b.	<i>Additional criteria for digital signs:</i> The amount of text and information supplied on a sign should be kept to a minimum (e.g. no	Satisfactory	Conditions of consent are recommended to ensure compliance.

	more than a driver can read at a short glance).		
3.3.2	Dwell time and transition time		
3.3.2 a.	Each advertisement must be displayed in a completely static manner, without any motion, for the approved dwell time as per criterion (b) below.	Satisfactory	The SEE states that <i>'The digital LED displays will not scroll, flash, flicker or feature movie or TV style pictures...'</i> and <i>'An operation management system (and security webcam) will be in place to ensure that only static images are displayed.'</i>
3.3.2 b.	Dwell times for image display must not be less than: <ul style="list-style-type: none"> i. 10 seconds for areas where the speed limit is below 80km/h. ii. 25 seconds for areas where the speed limit is 80km/h and over. 	Satisfactory	See 2.5.8 d. above. The application proposes a 10 second dwell time based on the 60km/h speed limit.
3.3.2 c.	Any digital sign that is within 250 metres of a classified road and is visible from a school zone must be switched to a fixed display during school zone hours.	N/A	The proposed sign is not visible from a school zone, the nearest being over 300m distance.
3.3.2 d.	Digital signs must not contain animated or video/movie style advertising or messages including live television, satellite, Internet or similar broadcasts.	Satisfactory	See 3.3.2 a. above.
3.3.2 e.	The transition time between messages must be no longer than 0.1 seconds, and in the event of image failure, the default image must be a black screen.	Satisfactory	See 2.5.8 e. above. The application proposes a 0.1 second transition.
3.3.3	Illumination and reflectance		
3.3.3 a.	Luminance levels must comply with the requirements in Table 6 below. <i>Zones 2 and 3:</i> <ul style="list-style-type: none"> • Full sun on face of signage - No limit • Daytime luminance - 6000 cd/sqm • Morning and evening twilight and inclement weather - 700 cd/sqm • Night time - 350 350 cd/sqm 	Satisfactory	The SEE report states that the proposed sign will be commissioned on site to yield the maximum luminance of: 6000 cd/sqm in Day Time (other than when full sun on face of signage); 700 cd/sqm in the Morning, Evening Twilight and in Overcast Weather; 158 cd/sqm at Night Time (Until 11pm); and no illumination (off) between 11pm and 6am.
3.3.3 b.	The images displayed on the sign must not otherwise unreasonably dazzle or distract drivers without limitation to their colouring or contain flickering or flashing content.	Satisfactory	See 2.5.8 g. above. A condition of consent is recommended to ensure compliance.
3.5.1	Road safety review of signs over 20sqm		
	A road safety check which focuses on the effects of the placement and operation of all signs over 20sqm must be carried out in accordance with Part 3 of the RMS Guidelines for Road Safety Audit Practices after a 12 month period of operation but within 18 months of the sign's installation.	Satisfactory	See 2.5.8 o. above.
4.2.3	Advertising approved by councils		
	In instances where a local council is the consent authority, public benefit contributions may also be required as part of the approval to	Subject to conditions	At the date of preparing this report, the Applicant has not entered into any arrangements for the provision

	<p>display an outdoor advertisement.</p> <p>The Applicant should liaise with the council prior to lodging a DA to determine what public benefit requirements are likely to be required... In addition to the standard development application fees, the Applicant may be required to provide an upfront fee or an annual fee (payable to the council) for the duration of consent of the advertisement.</p> <p>In some instances, the proponent may negotiate with council to provide in-kind contributions rather than a fee. In-kind contributions may include on-ground works to improve local amenity such as pedestrian bridges, pedestrian refuges, landscaping, graffiti management, safety lighting or other works provided as part of the installation of the advertising structure.</p> <p>Other types of in-kind contributions may also be negotiated with councils including the use from time to time of the advertising structure for promotion of community programs, events, public safety programs or other appropriate public purposes.</p>		<p>of public benefits in accordance with clause 13 (3) of the SEPP. Any consent granted should be on the basis of the recommended condition of consent requiring the preparation of a Deed of Agreement (at no cost to Council) and that agreement being entered into with Council.</p>
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Leichhardt Local Environmental Plan 2013

The application was assessed against the relevant clauses of the Leichhardt Local Environmental Plan 2013 (LLEP 2013). The following provisions of LLEP 2013 are particularly relevant to the assessment of the application:

Clause 1.2 – Aims of the Plan

- (b) *to minimise land use conflict and the negative impact of urban development on the natural, social, economic, physical and historical environment,*
- (c) *to identify, protect, conserve and enhance the environmental and cultural heritage of Leichhardt,*
- (d) *to promote a high standard of urban design in the public and private domains,*
- (e) *to protect and enhance the amenity, vitality and viability of Leichhardt for existing and future residents, and people who work in and visit Leichhardt,*
- (f) *to maintain and enhance Leichhardt’s urban environment...*
- (i) *to provide for development that promotes road safety for all users...*
- (l) *to ensure that development is compatible with the character, style, orientation and pattern of surrounding buildings, streetscape, works and landscaping and the desired future character of the area...*

In relation to the LEP aims to ‘*promote a high standard of urban design*’ and ‘*maintain and enhance (the) urban environment*’, and B4 zone objective to ‘*ensure that development is appropriately designed to minimise amenity impacts*’ it is noted that there is an existing illuminated advertising sign on the site. Comparing the proposed and existing sign, the proposed sign is considered to have a higher standard of design, materials and detailing, in that the LED screen is streamlined, the metal structure is uncomplicated and existing floodlights are removed. The impact of the new proposed structure itself and the LED nature of the illumination would be negligible, if not improved in terms of residential amenity. The introduction of an 11pm to 6am curfew and the installation of louvres on the adjacent residential window will improve amenity.

In relation to the LEP aims to ‘provide for development that promotes road safety’ and ‘ensure that development is compatible with the... desired future character of the area’, the nearby traffic signals and second advertising structure, and the cumulative impact need to be considered. As discussed earlier in this report, the suitability of the proposed frequently changing (10 second dwell time) display with regards to potential to reduce road safety is inconclusive. While the sign itself is considered to be consistent with these LEP safety and character aims, the proposed dwell time may not be. To this end, the RMS require a condition to be imposed that the applicant provide a road safety audit report which considers the effects of the placement and operation of the sign after 12 months of operation.

The DCP provides further guidance on the desired visual outcomes, discussed later in this report, in order to meet the LEP aims. In summary, it specifies that advertising signs be compatible with the character of the area, add to the urban streetscape character and not dominate the setting of the building or site.

Clause 2.3 – Zone objectives and Land Use Table

The site is located within the B2 - Local Centre zone, pursuant to LLEP 2013. An “advertisement” and “advertising structure” are permissible with consent in the B2 zone. Notable objectives relevant to the application are:

- To ensure that development is appropriately designed to minimise amenity impacts...
- To ensure that uses support the viability of local centres...
- To provide a mixture of compatible land uses...
- To reinforce and enhance the role, function and identity of local centres by encouraging appropriate development... and
- To integrate suitable business, office, residential, retail and other development in accessible locations.

The proposal for an illuminated LED screen sign relies upon the installation of louvres to the adjacent residential dwelling to ensure a reasonable level of amenity and compliance with the Obtrusive Lighting standards under AS 4282-2019. This is an acceptable visual outcome, with regards to how it will be viewed from the street, compared to the black-out screen previously proposed (M/2017/250). Coupled with the proposed 11pm to 6am curfew proposed; the adjustable louvres would result in reasonable residential amenity being maintained, noting that the dwelling currently receives light spill from the existing illuminated sign.

5(a) Draft Environmental Planning Instruments

There are no relevant Draft Environmental Planning Instruments.

5(B) Development Control Plans

The application has been assessed against the relevant Development Control Plans listed below:

Leichhardt Development Control Plan 2013

DCP Control	Requirement	Compliance	Comment
C1.15 C1	The sign is to relate to an approved or lawful use of the building or site	Yes	Permitted land use and roof-top advertising sign approved on site (30/11/1988).
C1.15 C2	The design, scale and siting of signs is to be	Yes	a. Proposed structure is

	<p>visually interesting and relate to the building or structure on which the sign is to be located. The sign is to:</p> <ul style="list-style-type: none"> a. be compatible with the architectural style or period of the building; b. fit within the opportunities of the façade as determined by the lines of awnings, windows, doors and parapet; c. be compatible with, and not dominate, the setting of the building or site; d. in the case of new buildings, be integrated into the façade design; e. retain and not cover or otherwise obscure decorative features of façades; f. not obscure pedestrian, cycling or vehicle sight lines, especially near intersections, traffic control devices or driveways; g. not interfere with landscaping in the public or private domain; h. respect the viewing rights of other advertisers; i. not cause significant overshadowing; j. have a minimal depth in size; k. allow sufficient light and ventilation of the building; and l. where located within the vicinity of a Heritage Conservation Area or Heritage Item, take into account the controls specified under the heading "Signs on Heritage Items and in Heritage Conservation Areas" of this section. 		<p>streamlined and uncomplicated such that it is compatible.</p> <ul style="list-style-type: none"> b. Size of advertising sign structure and proximity to window is existing on site. c. Existing sign is a dominant feature and changing display has minor impact. d. Existing building and sign location adjacent to wall. e. Existing structure, no notable decorative features on building. f. Roof sign will not obscure sight lines of traffic signals (but is within safe distance). g. Roof advertising sign will not interfere with landscaping. h. Considered in the context of second nearby sign. i. Existing structure adjacent to wall. j. 300mm is required for LED sign display. k. Proposed window louvres will permit ventilation. l. Site is not a heritage item, however is located within vicinity of items.
<p>C1.15 C3</p>	<p>The main facade of buildings above awning height is to remain free from signs and advertising, unless it can be demonstrated that the sign or advertising will have minimal impacts on the desired future character of the area and is appropriate for the building typology.</p>	<p>Yes</p>	<p>Rooftop sign, not located on building facade</p>
<p>C1.15 C4</p>	<p>Lettering, materials and colours are to complement the existing building and be compatible with surrounding buildings and the setting.</p>	<p>Yes Subject to conditions</p>	<p>Details not provided in application. The submitted SEE states "SEPP 64 does not regulate the content of Signs... the sign will continue to display third party content..." Noting that the sign is not located within a conservation area, the primary concerns in relation to text and colours are desired visual character and road safety. Suitable conditions of consent are recommended.</p>

C1.15 C5	Innovative proposals for signs not envisaged by these controls will be considered on their merits taking into account the location, characteristics of adjoining and nearby land uses and the objectives of this section.	Yes	The SEE report states that the “recent amendments to the SEPP 64 Guidelines have been introduced specifically to guide (the introduction of digital technology for signage)” and “...the proposal complies with the digital criteria, with the exception of the spacing criteria which has been assessed on merit...”
C1.15 C6	Illuminated signs will be considered taking into account potential impacts on amenity. Timing limitations for illuminated signs may be considered appropriate.	Yes	The proposal replaces an existing externally illuminated static advertising sign with an internal illuminated digital LED screen and the introduction of a curfew from 11pm to 6am to improve residential amenity.
C1.15 C7	Light spill from illumination is not to affect nearby residential properties.	Yes	In addition to the 11pm to 6am curfew, the application proposes the installation of louvres on the adjacent residential window.
C1.15 C8-C10	<i>Temporary signs and banners</i>	N/A	
C1.15 C11	The following sign types are generally not supported in Leichhardt: a. projecting roof signs and signs that protrude above the parapet or eaves; b. illuminated signs in residential zones; c. flashing and moving signs except in appropriate areas such as main roads; d. above awning signs; e. roof signs.	No, but acceptable	Existing roof advertising sign structure above building parapet. No change proposed to size, height, location, siting or orientation. SEE notes that the sign is “...located on the roof of a single storey building with mezzanine which adjoins a two-storey building...” and “...given the juxtaposition of the two buildings the sign presents in the streetscape as a wall sign and it does not protrude above the dominant skyline.”
C1.15 C12-13	<i>Signs in Residential Zones</i>	N/A	
C1.15 C14	Signs are to be visually interesting and contribute to the character of the local centre.	Yes	Digital LED Screen is not uninteresting.
C1.15 C15	Signs are not to obscure shop fronts or cover more than 25% of the window surface. Elevations of proposed window signs are required with the application.	Yes	Sign will not obscure any part of the building façade.
C1.15 C16	Only one sign is normally permitted on the building façade of one tenancy, excluding suspended awning signs.	Yes	One sign proposed for site.
C1.15 C17-19	<i>Signs in Industrial Zones</i>	N/A	
C1.15 C20-23	<i>Signs on Heritage Items and in Heritage Conservation Areas</i>	N/A	
C1.15 C24-26	<i>Controls for Particular Sign Types (Projecting wall signs, Freestanding advertisements,</i>	N/A	

	<i>Building wrap advertisements on scaffolding/hoardings)</i>		
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The proposal is generally consistent with the general amenity-focused signage controls contained within Section C1.15 of the Leichhardt DCP 2013.

(a)(iv) Environmental Planning and Assessment Regulation 2000

The application has been assessed against the relevant clauses of the Environmental Planning and Assessment Regulation 2000. The application fully complies with the Environmental Planning and Assessment Regulation 2000.

(b) The likely environmental both natural and built environment, social and economic impacts in the locality

The assessment of the application demonstrates that the proposed sign itself will have an suitable impact on the localit.

(c) The suitability of the site for the development

The site is zoned B2 *Local Centre* and the site contains an existing static roof advertising sign of substantially similar scale, proportion and lit nature. The development would introduce an 11pm to 6am curfew and installation of louvres on the adjacent residential window, improving the amenity of the residential dwelling on the site. The site is considered to be generally suitable to accommodate the proposed development.

(d) Any submissions made in accordance with the Act or the regulations

The application was notified for a period of 14 days in accordance with Division 7 of the EP&A Regulations and notification provisions of the relevant Leichhardt DCP 2013. The notification period was from 8 January 2019 to 22 January 2019.

Two (2) submissions were received during or following the advertising period objecting to the proposal. A summary of the issues and a response to those issues is provided below.

Issue: Sign spacing

The proposed digital sign at 64 Victoria Road, Rozelle would be less than 150m (by our measurement 33m) from the approved digital sign at 71 Victoria Road, Rozelle (both seen travelling in an outbound or north westerly direction), and the application will not comply with the provisions of the Guideline (2.5.8 (I)).

Comment:

The subject site at 64 Victoria Road contains an existing static roof advertising sign of substantially similar scale, proportion and lit nature to that proposed. The spacing between this sign and the sign opposite at 71 Victoria Road (approximately 75m) does not currently comply with the 150m spacing. In this regard the road safety considerations have been assessed by the RMS and a condition is required to be imposed that the applicant provides a road safety audit report which considers the effects of the placement and operation of the sign after 12 months of operation.

Issue: Road safety

The proposed digital sign with a change of image every 10 seconds, directly in the centre of that right-hand field of vision of when exiting left from Hartley Street onto Victoria Road, would cause drivers lose focus on the traffic, reducing the safety of pedestrians, cyclists and other vehicles. This is an already complex intersection with a bend in Victoria Road and

traffic lights at off-set intersection with Gordon Street. The current fixed image on the billboard is more easily ignored.

Comment:

A Traffic Impact Assessment report was submitted with the application and an assessment has been undertaken by the Roads and Maritime Services (RMS) and Council traffic engineers. The RMS require a condition to be imposed that the applicant provides a road safety audit report which considers the effects of the placement and operation of the sign after 12 months of operation.

(e) The public interest

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by Council ensuring that any adverse effects on the surrounding area and the environment are appropriately managed.

The proposal, with the additional information, amendments and suitable conditions of consent, would not be contrary to the public interest.

6. Internal Referrals

The application was referred to the following Council Officers:

Traffic Engineer

Council's Traffic Engineer has reviewed the application and provided the following comments:

Reference is made to RMS referral response letter dated 14 May 2019 and Transport Corridor Outdoor Advertising and Signage Guidelines.

Dwell Time

The guidelines require dwell times not less than 10 seconds for areas where the speed limit is below 80 km/h and sign spacing should limit drivers' view to a single sign at any given time (signs greater than 20sqm)

The applicant proposes a dwell time of 10 seconds however this is not supported due to the proximity of the adjacent advertising sign at 71 Victoria Road (10 second dwell time) and both signs will be within drivers view which will result in a change of displays every 5 seconds on average between the two signs.

A Fixed / 24 hour dwell time is required to address this issue and substantially maintain the existing situation.

Road Safety Audit

It is noted that the RMS conditions require a road safety audit report consistent with Council's standard requirements for digital signage however the RMS conditions do not provide a mechanism to address any issues identified particularly with respect to advertising dwell time should it be approved by the court. Amended conditions provided.

Luminance Levels

The RMS attachment for luminance levels is inconsistent with Transport Corridor Outdoor Advertising and Signage Guidelines table 6 as several values are missing. Luminance levels must be as per Transport Corridor Outdoor Advertising and Signage Guidelines table 6. Amended conditions provided.

Zone Classification

The lighting level will vary depending on Zone classification.

Zone 1 covers areas with generally very high off-street ambient lighting, e.g. display centres similar to Kings Cross, central city locations.

Zone 2 covers areas with generally high off-street ambient lighting e.g. some major shopping/commercial centres with a significant number of off-street illuminated advertising devices and lights.

Zone 3 covers areas with generally Medium off-street ambient lighting e.g. small to medium shopping/commercial centres.

Zone 4 covers areas with generally low levels of off-street ambient lighting e.g. most rural areas, many residential areas.

Recommend Zone 2 and 3 as per approval for 71 Victoria Road or Zone 4 if residential properties are nearby by to the subject site.

Planner's Comments:

1. Council's engineers have recommended a fixed / 24 hour dwell time to substantially maintain the status quo in terms of safety and visual environmental impacts. The Applicant proposes a dwell time of 10 seconds and no objection to this has been raised by the RMS; accordingly, a condition requiring a fixed / 24 hour dwell time is not recommended.
2. The mechanism recommended by Council's engineers to address any issues identified in the road safety audit is to set a trial period of 12 months for the operation of the sign. The establishment of a trial period is not required by the RMS and accordingly, a condition to this effect is not recommended.
3. Luminance levels as per Transport Corridor Outdoor Advertising and Signage Guidelines, and as recommended by Council's engineers have been included in the table accompanying the RMS conditions.

7. External Referrals

The application was referred to RMS for comment, which raised no objections subject to conditions of consent as discussed throughout this report. The response from the RMS is included at **Attachment E**.

8. Conclusion

This application has been assessed under Section 4.12 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and it is considered that the outstanding issues with the proposal can be addressed by appropriate conditions of consent.

9. Recommendation

That the Inner West Local Planning Panel exercising the functions of the Council as the consent authority, pursuant to section 4.16 of the Environmental Planning and Assessment Act 1979, grant consent to Development Application D/2019/119 for the replacement of the existing outdoor advertising sign with a digital screen sign and installation of associated louvres to the adjacent residential window, at 64-66 Victoria Road, Rozelle, subject to the conditions listed in **Attachment A**.

Attachment A - Recommended conditions of consent

CONDITIONS OF CONSENT

1. Development must be carried out in accordance with Development Application No. D/2019/119 and the following plans and recommendations of the supplementary documentation, except where amended by the conditions of this consent.

Plan Reference	Drawn By	Dated
Drawing No. 170377 1401 Issue C "64 Victoria Rd Rozelle Site Plan"	Group GSA	16 August 2018
Drawing No. 170377 2401 Issue C "64 Victoria Rd Rozelle Elevation"	Group GSA	16 August 2018
Document Title	Prepared By	Dated
Digital Sign Traffic Impact Assessment Report	Bitzios Consultants	27 November 2017
Lighting Impact Assessment (Revision D)	Electrolight Pty Ltd	7 March 2019
Statement of Environmental Effects	Urban Concepts	March 2019

In the event of any inconsistency between the approved plans and the conditions, the conditions will prevail.

2. Amended plans are to be submitted incorporating the following amendments:
 - a) The name or logo of the person who owns or leases the approved advertisement must only appear within the advertising display area or within the strip below advertisement that extends for the full width of the advertisement and must not be greater than 0.25 m².

Details demonstrating compliance with the requirements of this condition are to be marked on the plans and be submitted to the Principal Certifying Authority's satisfaction prior to the issue of any Construction Certificate.

3. Prior to the lodgement of an application for a Construction Certificate:
 - (a) In accordance with Clause 13(3) of *State Environmental Policy* No 64-Advertising and Signage provision, the provision of a public benefit is to be provided in connection with the construction and display of the signage. The public benefit is to be paid to Council pursuant to a Deed of Agreement.
 - (b) The Deed of Agreement with Council referred to in paragraph (a) is to be prepared by the applicant and the Deed must:
 - (i) Be undertaken between Inner West Council and the owner of the land; and
 - (ii) Require that the owner is to ensure that any lease or licence agreement in relation to the sign is to reflect the terms of the Deed; and
 - (iii) Require that the first payment of \$10,000 be paid to Inner West Council prior to the release of the Construction Certificate and that subsequent payment of \$140,000 be made prior to the release of an Occupation Certificate; and
 - (iv) Require that twice per calendar year (dates to be at Council's discretion) Council will be entitled, at no charge to Council, to advertising time on the digital screen for a minimum of 10% (one 10-

second slot in a rotation of up to nine advertisers) for a two-week period (therefore total of four weeks per calendar year). The content of the advertising is to be at Council's discretion, but shall be of a community/civic nature, not a commercial nature. Council is to supply the advertising content to the applicant no less than 2 weeks before the advertising is to be displayed; and

- (v) Be prepared and/or amended at no cost to Council; and
 - (vi) Include the requirement for a caveat or a positive covenant to be registered on the title of the land; and
 - (vii) Expire on the expiry of this consent; and
 - (viii) Be reviewed and approved in writing by Council prior to execution.
- (c) Where the applicant/owner enters into a Deed of Agreement in accordance with this Condition, failure to make the abovementioned payments within 14 days of the due date will result in this consent being null and void.
4. Details demonstrating compliance with the recommendations of the Lighting Impact Assessment (Revision D) prepared by Electrolight Pty Ltd (dated 7 March 2019) are to be included on the plans and documentation to satisfaction of the Principal Certifying Authority prior to the issue of any Construction Certificate.
5. New South Wales Roads and Maritime Services (RMS) have given the following general terms of approval in relation to the development, in accordance with State Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64) as modified by Council in c) below:
- a) All works and signage structures are to be wholly within the freehold property (unlimited in height or depth) along the Victoria Road boundary.
 - b) Advertisements displayed shall not contain/use:
 - i. Flashing lights.
 - ii. Animated display, moving parts or simulated movement.
 - iii. A method of illumination that unreasonably distracts or dazzles.
 - iv. Images that may imitate a prescribed traffic control device, for example red, amber or green circles, octagons or other shapes or patterns that may result in the advertisement being mistaken for a prescribed traffic control device.
 - v. Text providing driving instructions to drivers.
 - c) Luminance levels for the sign must comply with the following requirements as modified by Council to comply with the Department of Planning and Environment Transport Corridor Outdoor Advertising and Signage Guidelines:

LUMINANCE LEVELS - Luminance means the objective brightness of a surface as measured by a photometer, expressed in candelas per square meter (cd/m ²). Levels differ as digital signs will appear brighter when light levels in the area are low. Luminance levels must comply with Australian Standard AS4282 Control of the Obtrusive Effects of Outdoor Lighting which recommends the following levels:			
Lighting Condition	Zone 1	Zones 2 and 3	Zone 4
Full Sun on face of Signage	Maximum Output	Maximum Output	Maximum Output
Day Time Luminance	Maximum Output	6000 cd/m ²	6000 cd/m ²
Morning and Evening Twilight and Inclement Weather	700 cd/m ²	700 cd/m ²	500 cd/ m ²
Night Time	350 cd/m ²	350 cd/m ²	200 cd/m ²

Zone 1 covers areas with generally very high off-street ambient lighting, e.g. display centres similar to Kings Cross, central city locations.

Zone 2 covers areas with generally high off-street ambient lighting e.g. some major shopping/commercial centres with a significant number of off-street illuminated advertising devices and lights.

Zone 3 covers areas with generally Medium off-street ambient lighting e.g. small to medium shopping/commercial centres.

Zone 4 covers areas with generally low levels of off-street ambient lighting e.g. most rural areas, many residential areas.

- d) The transition time between messages shall be no longer than 0.1 seconds.
 - e) Construction and maintenance activities shall be undertaken wholly within the private property.
 - f) All works associated with the proposed sign, including maintenance activities, shall be at no cost to Roads and Maritime.
 - g) The applicant must provide Roads and Maritime with a road safety audit report which considers the effects of the placement and operation of the sign after 12 months of operation. The report must:
 - i. Be prepared in accordance with Part 3 of the Roads and Maritime Guidelines for Road Safety Audit Practices;
 - ii. Be prepared by an independent Roads and Maritime accredited road safety auditor.
6. The luminance level must comply with Zones 2 and 3 referred to in the table in Condition 5 above.
 7. The person acting on this consent must assess the operation of the advertising sign for a continual period of 12 months and incorporate the assessment into the road safety audit report required by this consent.
 8. An electronic log of the sign's activity must be maintained by the person acting on this consent for the duration of the development consent and be available to the Council and/or Roads and Maritime to allow a review of the sign's activity for any reason, including where a complaint has been made.
 9. Each advertisement shall be displayed in a completely static manner, without any motion or flash, for the approved dwell time of 10 seconds.
 10. Pursuant to Section 4.17(1) (d) of the Environmental Planning and Assessment Act

1979, this consent is limited to a period of **fifteen (15) years** from the date of commencement of the use. Notice of the commencement must be provided in writing to Council at least seven (7) days prior to the use commencing.

A new Development Application must be submitted and approved prior to the expiration of the time period if it is intended to continue the use. If an Application is not submitted and determined (or the application is subsequently refused) within the specified time period the development subject to this consent must cease.

PRIOR TO THE RELEASE OF A CONSTRUCTION CERTIFICATE

11. In accordance with the provisions of the Environmental Planning and Assessment Act 1979 construction works approved by this consent must not commence until:
 - a) A Construction Certificate has been issued by Council or an Accredited Certifier. Either Council or an Accredited Certifier can act as the "Principal Certifying Authority."
 - b) A Principal Certifying Authority has been appointed and Council has been notified in writing of the appointment.
 - c) At least two days' notice, in writing has been given to Council of the intention to commence work.

The documentation required under this condition must show that the proposal complies with all Development Consent conditions and is not inconsistent with the approved plans, the Building Code of Australia and the relevant Australian Standards.

12. In accordance with Section 34 of the *Building and Construction Industry Long Service Payments Act 1986*, the applicant must pay a long service levy at the prescribed rate of 0.35% of the total cost of the work to either the Long Service Payments Corporation or Council for any work costing \$25,000 or more. The Long Service Levy is payable prior to the issue of a Construction Certificate.

Details demonstrating compliance are to be shown on the plans submitted to the satisfaction of the Certifying Authority prior to the issue of the Construction Certificate.

13. A Certificate prepared by an appropriately qualified and practising structural engineer, certifying the structural adequacy of the property and its ability to withstand the proposed additional, or altered structural loads during all stages of construction must be provided prior to the issue of a Construction Certificate to the satisfaction of the Principal Certifying Authority. The certificate shall also include all details of the methodology to be employed in construction phases to achieve the above requirements without result in demolition of elements marked on the approved plans for retention.

Details demonstrating compliance with the requirements of this condition are to be submitted to the satisfaction of the Certifying Authority prior to the issue of any Construction Certificate.

14. Prior to the issue of a Construction Certificate, the applicant must prepare a Construction Management and Traffic Management Plan. The following matters should be addressed in the plan (where applicable):
 - a) A plan view of the entire site and frontage roadways indicating:
 - i) Dedicated construction site entrances and exits, controlled by a certified traffic controller, to safely manage pedestrians and construction related

vehicles in the frontage roadways.

- ii) The locations of work zones (where it is not possible for loading/unloading to occur on the site) in the frontage roadways accompanied by supporting documentation that such work zones have been approved by the Local Traffic Committee and Council.
 - iii) Location of any proposed crane and concrete pump and truck standing areas on and off the site.
 - iv) A dedicated unloading and loading point within the site for construction vehicles, plant and deliveries.
 - v) The proposed areas within the site to be used for the storage of excavated material, construction materials and waste and recycling containers during the construction period.
- b) Noise and vibration
During excavation, demolition and construction phases, noise & vibration generated from the site must be controlled. Refer to other conditions of this consent. If during excavation, rock is encountered, measures must be taken to minimise vibration, dust generation and impacts on surrounding properties. Refer to Environmental Noise Management Assessing Vibration: a technical Guideline (Department of Environment and Conservation, 2006) www.epa.nsw.gov.au for guidance and further information.
- c) Occupational Health and Safety
All site works must comply with the occupational health and safety requirements of the New South Wales Work Cover Authority.
- d) Toilet Facilities
During excavation, demolition and construction phases, toilet facilities are to be provided on the site, at the rate of one toilet for every twenty (20) persons or part of twenty (20) persons employed at the site. Details must be shown on the plan.
- e) Traffic control plan(s) for the site
All traffic control plans must be in accordance with the Roads and Maritime Services publication "Traffic Control Worksite Manual"

Approval is to be obtained from Council for any temporary road closures or crane use from public property. Applications to Council shall be made a minimum of 4 weeks prior to the activity proposed being undertaken.

Details demonstrating compliance with the requirements of this condition are to be submitted to the satisfaction of the Certifying Authority prior to the issue of any Construction Certificate.

15. If the development is likely to disturb or impact upon telecommunications infrastructure, written confirmation from the service provider that agreement is given to the works must be submitted to the Certifying Authority prior to the issue of a Construction certificate.

The arrangements and costs associated with any adjustment to telecommunications infrastructure shall be borne in full by the Applicant/Developer.

16. The approved '*advertisement*' (as defined under SEPP 64) must meet wind loading requirements as specified in Australian Standard AS 1 170.1 and AS 1 170.2. Details must be submitted to the Certifying Authority prior to the issue of a Construction certificate.

PRIOR TO WORKS COMMENCING OR ISSUE OF A CONSTRUCTION CERTIFICATE (WHICHEVER OCCURS FIRST)

17. Prior to the commencement of demolition works on the subject site or a Construction Certificate being issued for works approved by this development consent (whichever occurs first), a security deposit and inspection fee as detailed below must be paid to Council to cover the cost of making good any damage caused to any Council property or the physical environment as a consequence of carrying out the works.

Security Deposit (FOOT)	\$2,152.50
Inspection fee (FOOTI)	\$230.65

Payment will be accepted in the form of cash, bank cheque or EFTPOS/credit card (to a maximum of \$10,000) or bank guarantee. Bank Guarantees must not have an expiry date.

The inspection fee is required for Council to determine the condition of the adjacent road reserve & footpath prior to & on completion of the works being carried out.

Should any of Council's property and/or the physical environment sustain damage during the course of the demolition or construction works, or if the works put Council's assets or the environment at risk, Council may carry out any works necessary to repair the damage and/or remove the risk. The cost of these works will be deducted from the security deposit.

A request for release of the security may be made to the Council after all construction work has been completed and a Final Occupation Certificate issued.

The amount nominated is only current for the financial year in which the consent was issued and is revised each financial year. The amount payable must be consistent with Council's Fees and Charges in force at the date of payment.

Requirements of this condition are to be met prior to works commencing or prior to release of a Construction Certificate (whichever occurs first). Details demonstrating compliance with the requirements of this condition are to be submitted to the satisfaction of the Principal Certifying Authority prior to the issue of any Construction Certificate.

18. Should works require any of the following on public property (footpaths, roads, reserves), an application shall be submitted and approved by Council prior to the commencement of the works associated with such activity or the Construction Certificate (whichever occurs first)
- a) Work/Construction zone (designated parking for construction vehicles). – A Work Zone application
 - b) A concrete pump across the roadway/footpath. – A Standing Plant permit
 - c) Mobile crane or any standing plant – A Standing Plant Permit
 - d) Skip bins other than those authorised by Leichhardt Council – Skip Bin Application
 - e) Scaffolding/Hoardings (fencing on public land) – Scaffolding and Hoardings on Footpath Application
 - f) Road works including vehicle crossing/kerb & guttering, footpath, stormwater provisions etc – Road works Application
 - g) Awning or street verandah over footpath. – Road works Application
 - h) Installation or replacement of private stormwater drain, utility service or water supply – Road Opening Permit

Requirements of this condition are to be met prior to works commencing or prior to

release of a Construction Certificate (whichever occurs first). Details demonstrating compliance with the requirements of this condition are to be submitted to the satisfaction of the Principal Certifying Authority prior to the issue of any Construction Certificate.

PRIOR TO THE COMMENCEMENT OF WORKS

19. The site must be secured with temporary fencing prior to any works commencing. Separate approval is required under the *Roads Act 1993* to erect a hoarding or temporary fence or awning on public property. Approvals for hoardings, scaffolding on public land must be obtained and clearly displayed on site for the duration of the works.

Any hoarding, fence or awning is to be removed when the work is completed and must be maintained clear of any advertising.

20. Any person or contractor undertaking works on public property must take out Public Risk Insurance with a minimum cover of ten (10) million dollars in relation to the occupation of, and approved works within public property. The Policy is to note, and provide protection for Leichhardt Council, as an interested party and a copy of the Policy must be submitted to Council prior to commencement of the works. The Policy must be valid for the entire period that the works are being undertaken on public property.
21. Prior to the commencement of works, the Principal Certifying Authority shall be notified in writing of the name and contractor licence number of the owner/builder intending to carry out the approved works.
22. At least forty-eight (48) hours prior to the commencement of works, a notice of commencement form (available on Council's web page) and details of the appointed Principal Certifying Authority shall be submitted to Council.
23. Prior to the commencement of works, a sign must be erected in a prominent position on the site (for members of the public to view) on which the proposal is being carried out. The sign must state:
 - a) Unauthorised entry to the work site is prohibited.
 - b) The name of the principal contractor (or person in charge of the site) and a telephone number at which that person may be contacted at any time for business purposes and outside working hours.
 - c) The name, address and telephone number of the Principal Certifying Authority for the work.

Any such sign must be maintained while the work is being carried out, but must be removed when the work has been completed. Photographic evidence demonstrating compliance with the requirements of this condition is to be submitted to the satisfaction of the Principal Certifying Authority and Council for records purposes prior to the commencement of any onsite work.

DURING WORKS

24. No approval is granted or implied for the installation of any crane on the premises that has the potential to swing beyond the boundaries of the site. Separate necessary approval, including but not limited to section 138 of the *Roads Act 1993* and/or section 68 of the *Local Government Act 1993*, must be obtained from Council prior to the installation of such cranes.

25. Building materials and machinery are to be located wholly on site unless separate consent (Standing Plant Permit) is obtained from Council/ the roads authority. Building work is not to be carried out on the footpath. Construction materials and vehicles shall not block or impede public use of the footpath or roadway.
26. The site must be appropriately secured and fenced at all times during works.
27. Excavation, demolition, construction or subdivision work shall only be permitted during the following hours:
 - a) 7:00 am to 6.00 pm, Mondays to Fridays, inclusive (with demolition works finishing at 5pm);
 - b) 8:00 am to 1:00 pm on Saturdays with no demolition works occurring during this time; and
 - c) at no time on Sundays or public holidays.

Works may be undertaken outside these hours where they do not create any nuisance to neighbouring properties in terms of dust, noise, vibration etc and do not entail the use of power tools, hammers etc. This may include but is not limited to painting.

In the case that a standing plant or special permit is obtained from Council for works in association with this development, the works which are the subject of the permit may be carried out outside these hours.

This condition does not apply in the event of a direction from police or other relevant authority for safety reasons, to prevent risk to life or environmental harm.

Activities generating noise levels greater than 75dB(A) such as rock breaking, rock hammering, sheet piling and pile driving shall be limited to:

8:00 am to 12:00 pm, Monday to Saturday; and
2:00 pm to 5:00 pm Monday to Friday.

The Proponent shall not undertake such activities for more than three continuous hours and shall provide a minimum of one 2 hour respite period between any two periods of such works.

"Continuous" means any period during which there is less than an uninterrupted 60 minute respite period between temporarily halting and recommencing any of that intrusively noisy work.

Noise arising from the works must be controlled in accordance with the requirements of the *Protection of the Environment Operations Act 1997* and guidelines contained in the New South Wales Environment Protection Authority Environmental Noise Control Manual.

28. In addition to meeting the specific performance criteria established under this consent, the Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the demolition, construction or operation/use of the development.
29. Any new information revealed during development works that has the potential to alter previous conclusions about site contamination or hazardous materials shall be immediately notified to the Council and the Principal Certifying Authority.
30. A copy of the approved plans and this consent must be kept on site for the duration of site works and in the case of any commercial or industrial premise for the duration of the use/trading. Copies shall be made available to Council Officer's upon request.

31. The sign approved by this Development Consent must be erected in a secure manner to ensure safety. Installation is not to involve measures that would cause irreversible damage to the building.

All existing advertisements not approved by a valid consent or permissible as exempt development shall be removed. Areas affected by the removal shall be made good to match the finish of the existing building or the materials and finishes approved by this Development Consent.

PRIOR TO THE ISSUE OF AN OCCUPATION CERTIFICATE

32. An Occupation Certificate must be obtained prior to any use or occupation of the development or part thereof. The Principal Certifying Authority must ensure that all works are completed in accordance with this consent including all conditions.
33. Prior to the release of an Occupation Certificate, the Principal Certifying Authority must be satisfied that the development complies with:
- the approved plans;
 - approved documentation (as referenced in this consent); and
 - the conditions of this consent.

ONGOING CONDITIONS OF CONSENT

34. The owner/manager of the site is responsible for the removal of all graffiti from the sign within seventy-two (72) hours of its application.
35. Any lighting of the premises shall be installed and maintained in accordance with Australian Standard AS 4282-2019: *Control of the Obtrusive Effects of Outdoor Lighting* so as to avoid annoyance to the occupants of adjoining premises or glare to motorists on nearby roads.
36. The approved sign must be maintained in a presentable and satisfactory state of repair.
37. The proposed use of the premises and the operation of all plant and equipment shall not give rise to an '*offensive noise*' as defined in the Protection of the Environment Operations Act 1997 and Regulations.
- In this regard, the operation of the premises and plant and equipment shall not give rise to a sound pressure level at any affected premises that exceeds the background LA90, 15min noise level, measured in the absence of the noise source/s under consideration by 5dB(A). The source noise level shall be assessed as an LAeq, 15min and adjusted in accordance with the NSW Environment Protection Authority's Industrial Noise Policy and Environmental Noise Control Manual (sleep disturbance).
38. All advertising must comply with the requirements of the Australian Association of National Advertisers' 'Code of Ethics' and Outdoor Media Associations 'Code of Ethics' or as updated.
39. No advertisements are to be displayed between 11pm and 6am every day.

PRESCRIBED CONDITIONS

A. BASIX Commitments

9 of 12

Under clause 97A of the Environmental Planning & Assessment Regulation 2000, it is a condition of this development consent that all the commitments listed in each relevant BASIX Certificate for the development are fulfilled. The Certifying Authority must ensure that the building plans and specifications submitted by the Applicant, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

In this condition:

- a) Relevant BASIX Certificate means:
 - (i) a BASIX Certificate that was applicable to the development when this development consent was granted (or, if the development consent is modified under section 96 of the Act, a BASIX Certificate that is applicable to the development when this development consent is modified); or
 - (ii) if a replacement BASIX Certificate accompanies any subsequent application for a construction certificate, the replacement BASIX Certificate; and
- b) BASIX Certificate has the meaning given to that term in the Environmental Planning & Assessment Regulation 2000.

B. Building Code of Australia

All building work must be carried out in accordance with the provisions of the Building Code of Australia.

C. Home Building Act

- 1) Building work that involves residential building work (within the meaning and exemptions provided in the Home Building Act 1989) must not be carried out unless the Principal Certifying Authority for the development to which the work relates has given Leichhardt Council written notice of the following:
 - a) in the case of work for which a principal contractor is required to be appointed:
 - i) the name and licence number of the principal contractor, and
 - ii) the name of the insurer by which the work is insured under Part 6 of that Act, or
 - b) in the case of work to be done by an owner-builder:
 - i) the name of the owner-builder, and
 - ii) if the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.
- 2) If arrangements for doing residential building work are changed while the work is in progress so that the information submitted to Council is out of date, further work must not be carried out unless the Principal Certifying Authority for the development to which the work relates (not being the Council), has given the Council written notice of the updated information.

Note: A certificate purporting to be issued by an approved insurer under Part 6 of the Home Building Act 1989 that states that a person is the holder of an insurance policy issued for the purposes of that Part is, for the purposes of this clause, sufficient evidence that the person has complied with the requirements of that Part.

D. Site Sign

- 1) A sign must be erected in a prominent position on any work site on which work involved in the erection or demolition of a building is being carried out:
 - a) stating that unauthorised entry to the work site is prohibited;
 - b) showing the name of the principal contractor (or person in charge of the work site), and a telephone number at which that person may be contacted at any time for business purposes and outside working hours; and

- c) showing the name, address and telephone number of the Principal Certifying Authority for the work.
- 2) Any such sign must be maintained while building work or demolition work is being carried out, but must be removed when the work has been completed.

E. Condition relating to shoring and adequacy of adjoining property

- (1) For the purposes of section 80A (11) of the Act, it is a prescribed condition of development consent that if the development involves an excavation that extends below the level of the base of the footings of a building on adjoining land, the person having the benefit of the development consent must, at the person's own expense:
 - (a) protect and support the adjoining premises from possible damage from the excavation, and
 - (b) where necessary, underpin the adjoining premises to prevent any such damage.
- (2) The condition referred to in subclause (1) does not apply if the person having the benefit of the development consent owns the adjoining land or the owner of the adjoining land has given consent in writing to that condition not applying.

NOTES

- 1. This Determination Notice operates or becomes effective from the endorsed date of consent.
- 2. Section 82A of the *Environmental Planning and Assessment Act 1979* provides for an applicant to request Council to review its determination. This does not apply to applications made on behalf of the Crown, designated development, integrated development or a complying development certificate. The request for review must be made within six (6) months of the date of determination or prior to an appeal being heard by the Land and Environment Court. Furthermore, Council has no power to determine a review after the expiration of these periods. A decision on a review may not be further reviewed under Section 82A.
- 3. If you are unsatisfied with this determination, Section 97 of the *Environmental Planning and Assessment Act 1979* gives you the right of appeal to the Land and Environment Court within six (6) months of the determination date.
- 4. Failure to comply with the relevant provisions of the *Environmental Planning and Assessment Act 1979* and/or the conditions of this consent may result in the serving of penalty notices or legal action.
- 5. Works or activities other than those approved by this Development Consent will require the submission of a new development application or an application to modify the consent under Section 96 of the *Environmental Planning and Assessment Act 1979*.
- 6. This decision does not ensure compliance with the *Disability Discrimination Act 1992*. Applicants should investigate their potential for liability under that Act.
- 7. This development consent does not remove the need to obtain any other statutory consent or approval necessary under any other Act, such as (if necessary):
 - a) Application for any activity under that Act, including any erection of a hoarding.
 - b) Application for a Construction Certificate under the *Environmental Planning and Assessment Act 1979*.
 - c) Application for an Occupation Certificate under the *Environmental Planning and Assessment Act 1979*.

- d) Application for a Subdivision Certificate under the *Environmental Planning and Assessment Act 1979* if land (including stratum) subdivision of the development site is proposed.
 - e) Application for Strata Title Subdivision if strata title subdivision of the development is proposed.
 - f) Development Application for demolition if demolition is not approved by this consent.
 - g) Development Application for subdivision if consent for subdivision is not granted by this consent.
 - h) An application under the Roads Act 1993 for any footpath / public road occupation. A lease fee is payable for all occupations.
8. Prior to the issue of the Construction Certificate, the applicant must make contact with all relevant utility providers (such as Sydney Water, Energy Australia etc...) whose services will be impacted upon by the development. A written copy of the requirements of each provider, as determined necessary by the Certifying Authority, must be obtained.

RMS Advisory notes:

1. The proponent is advised that the subject property is within a broad area currently under investigation for the proposed Western Harbour Tunnel and Beaches Link motorway. Further information about this project is available by contacting 1800 931 189 or whtbl@rms.nsw.gov.au or by visiting the project website at <http://www.rms.nsw.gov.au/projects/sydney-north/western-harbour-tunnelbeaches-link/index.html>
2. The proponent is advised that the subject property is within a broad area currently under investigation in relation to the proposed WestConnex Project (M4 — M5). Further information about this project is available by contacting the WestConnex Team on 1800 660 248 or info@westconnex.com.au or by visiting the project website at www.westconnex.com.au

Attachment B – Plans

APPROVED
 NAME: DAVID COLLIER
 POSITION: DIRECTOR
 BOARD: INNER WEST LOCAL PLANNING PANEL
 DATE: 28/07/2017
 REFERENCE: 17/0377
 C:\Users\davidc\Documents\17/0377

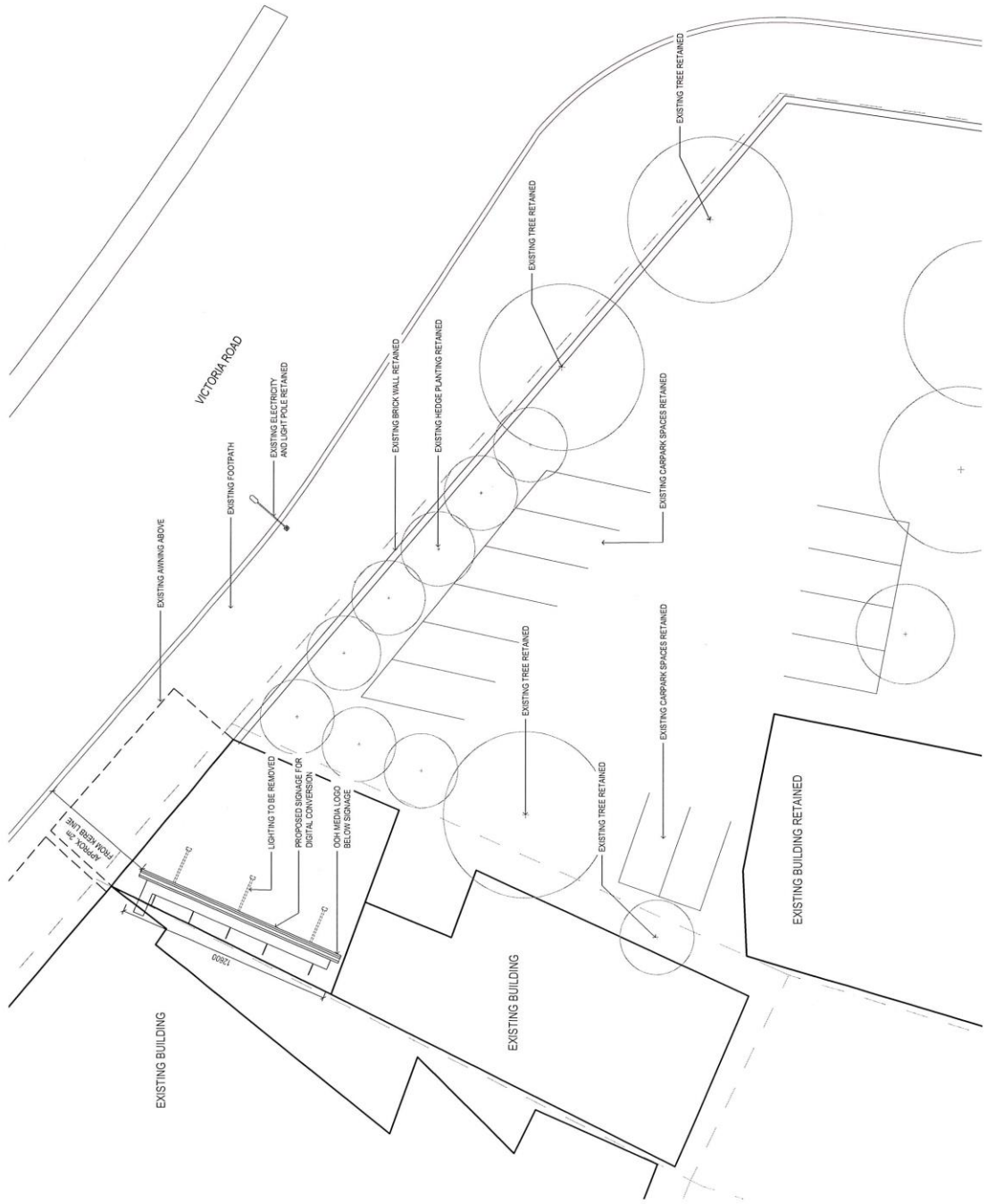
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 A. LAYTON 28 MARY ST, NORTH SYDNEY, NSW
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GROUP SA
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 10/100 MARY ST, NORTH SYDNEY, NSW
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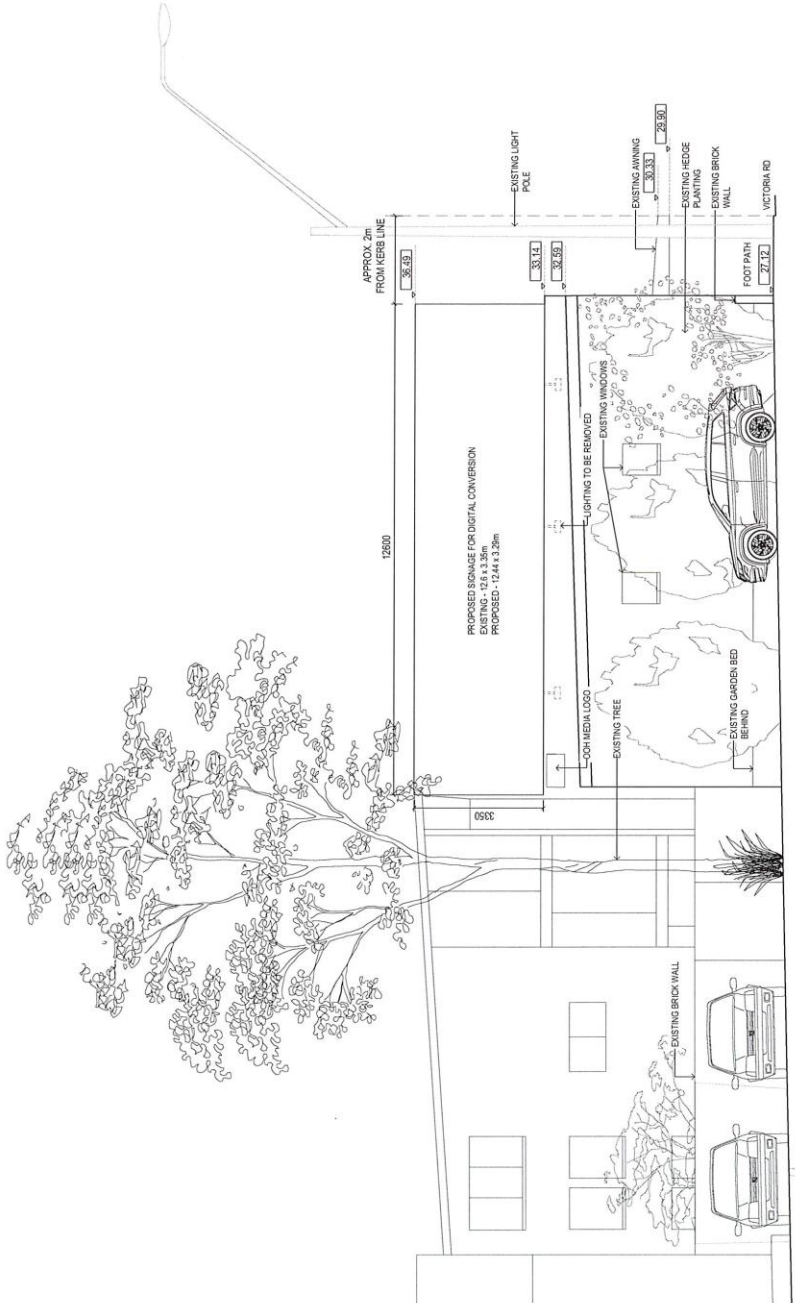
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17/0377 1401 C
 PROJECT NO.
 SHEET NO.
 DATE
 DRAWN BY
 CHECKED BY
 APPROVED BY

This drawing has the approval of David Collier, Director of Inner West Local Planning Panel.
 It is a condition of this approval that the applicant must ensure that the proposed works are carried out in accordance with the conditions set out in the relevant consent.



APPROVED BY: **DATE:**
 JAMES DALZIELL
 20/05/2017
 APPROVED BY: **DATE:**
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DRAWN BY:	ROBELL
CHECKED BY:	ROBELL
APPROVED BY:	ROBELL
PROJECT NO.:	17/0377 2401
DATE:	C

(B) ELEVATION
 1/3

Attachment C - Traffic Assessment Report

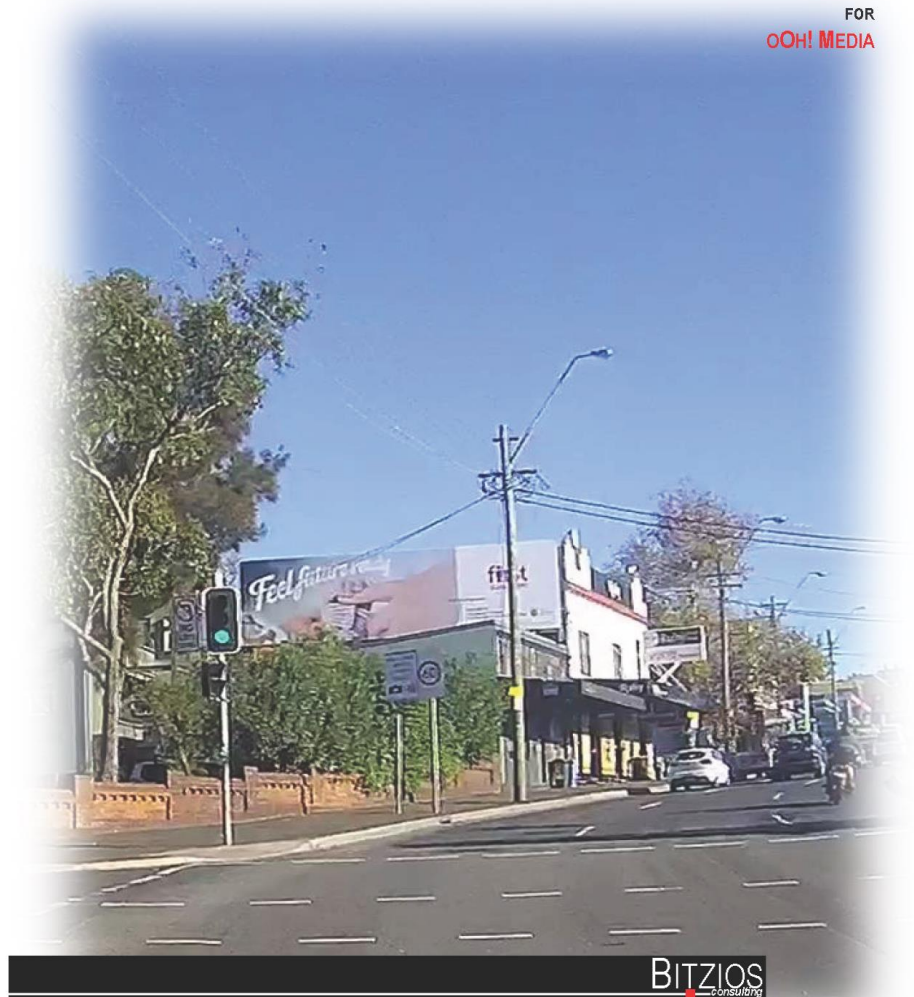
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Appendix C
Traffic Impact
Assessment prepared
by Bitzios Consulting
and Letter of RMS
Concurrence dated 20
February 2018

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64 VICTORIA ROAD, ROZELLE
DIGITAL SIGN TRAFFIC IMPACT ASSESSMENT

FOR
OOH! MEDIA



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DOCUMENT CONTROL SHEET

Issue History

Report File Name	Prepared by	Reviewed by	Issued by	Date	Issued to
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P3205.002R 64 Victoria Road Rozelle Digital Sign TIA	A. Choudhury	M. Thompson	M. Thompson	06/11/2017	Belinda Barnett, Urban Concepts
P3205.003R 64 Victoria Road Rozelle Digital Sign TIA	S. Daizli	M. Thompson	M. Thompson	27/11/2017	Belinda Barnett, Urban Concepts

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1. INTRODUCTION

1.1 BACKGROUND

oOh!Media is seeking development approval for the conversion of an existing static sign to a digital LED sign. The sign is located 50 metres south-east of the intersection of Evans Street with Victoria Road and 50 metres north-west of the intersection of Gordon Street with Victoria Road in Rozelle. Figure 1.1 shows the location of the existing static sign which is proposed to be converted to a digital sign.



Figure 1.1: Aerial Image of the Existing Sign

Bitzios Consulting has been commissioned by oOh!Media to undertake a traffic safety assessment of the proposal and produce this traffic impact assessment report to be submitted as part of the development application.

The assessment team has undertaken assessments of similar digital advertising sign proposals elsewhere in NSW and Australia. In addition to the use of NSW guidelines, our assessments are founded on road safety auditing principles and traffic safety risk assessments. Where a significant change in road safety risk has been identified due to the proposal, potential treatment measures to mitigate the change in risk have been suggested. However, the adoption of any or all the treatment measures does not warrant that the site is absolutely safe from incidents in the future whether they be unrelated or related to the proposed digital sign.

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1.2 METHODOLOGY

The proposal has been assessed using:

- the former Leichhardt Council (now part of Inner West Council) Development Control Plan;
- State Environmental Planning Policy no. 64 – Advertising and Signage (or SEPP 64);
- the Draft Transport Corridor Outdoor Advertising and Signage Guidelines 2015 (or *Draft Guidelines*);
- the Roads and Maritime Services (RMS) Advertising Sign Safety Assessment Matrix; and
- other traffic engineering and traffic safety considerations.

The Draft Guidelines are yet to be finalised and officially endorsed. Further, SEPP 64 does not account for all relevant variables specifically regarding digital signage and engineering judgement is required to use and interpret the Draft Guidelines. It is considered that the basic principle of the Draft Guidelines is to seek to restrict potentially-distracting advertising signage on those parts of the road network where driver attention to the road, traffic control devices, appropriate direction and warning signage and other moving vehicles is likely to be most critical.

The process used to assess the impact of proposed digital advertising sign on traffic safety is as follows:

- undertake review of literature and research including:
 - a brief literature review of electronic sign installations and their effects on traffic operations and safety, including recent case law in Queensland that examined the impacts of a digital billboard;
 - a brief review of typical crash causes in NSW and Victoria to identify the proportion of crashes occurring as a result of external distractions and compare this to other factors; and
 - a review of a relevant post-installation Road Safety Audit for a site where a digital billboard was installed.
- undertake a review of existing conditions at the subject site;
- undertake a review of the proposed sign specifications;
- undertake a site inspection to understand the road user's perspective of the proposed sign. A driver sightline assessment was prepared using images captured from in-vehicle video recordings;
- undertake a review of available crash data in proximity to the subject site; and
- assess the sign against:
 - Local Government requirements;
 - State Environmental Planning Policy no. 64 – Advertising and Signage (or SEPP 64);
 - the Draft Transport Corridor Outdoor Advertising and Signage Guidelines 2015 (or *Draft Guidelines*); and
 - the RMS Advertising Sign Safety Assessment Matrix.

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2. THE PROPOSAL

oOh!Media is seeking modification to an existing development consent for the digital conversion of an existing static advertising sign. The sign faces south-east towards northbound traffic on Victoria Road and can be seen by traffic turning left onto Victoria Road from Gordon Street and Maney Street. The sign could theoretically also be seen by traffic turning left onto Victoria Road from MacKenzie Street, Hartley Street and Joseph Street. The proposed digital sign will have the same orientation (i.e. south-eastern face) as the current static sign and the display size will be slightly smaller than the existing sign.

The location and directionality of the proposed sign is presented in Figure 2.1 and Figure 2.2.



Figure 2.1: Existing Site Location and Directionality



Figure 2.2: View of Existing Site – Northbound Approach (Victoria Road)

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Table 2.1 summaries the proposed sign's specifications.

Table 2.1: Specifications and Site Information for Proposed Sign

Attribute	Details
Local Government Area (LGA)	Inner West Council
Land Use zoning	B2 Local Centre
Type of Advertisement/Sign: Existing Sign	Externally Illuminated General Advertising
Type of Advertisement/Sign: Proposed Sign	Internally Illuminated Digital (LED)
Location	64 Victoria Road, Rozelle. Southside of Victoria Road, 50m north Gordon Street and 50m south of Evan Street.
Sign Facing	South-east
Current Size	12.66m x 3.35m
Proposed Size	12.44m x 3.29m
Display area greater than 20 m ² ?	Yes
Is the proposed site located within 250 metres of and visible from a Classified Road under the <i>Roads Act 1993</i> ?	Yes
Consent authority	Inner West Council (formerly Leichhardt Council)
RMS concurrence required? (yes/no)	Yes
Display area greater than 45m ² ?	No
Any additional requirement in Council's DCP for display area?	No
Does the proposed sign contain moving parts? (yes/no)	No
Is it a Variable Message Sign? (yes/no)	No
Does it have any flashing or flickering content? (yes/no)	No
Minimum vertical pavement clearance	N/A – not over the road

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3. LITERATURE REVIEW

The Draft Guidelines provide a somewhat limited assessment framework for the considering the traffic impacts of roadside digital advertising signage. The following sections provide evidence from international research and reviews of digital sign installations in Sydney and elsewhere as further context in consideration of potential traffic safety risks.

3.1 LITERATURE REVIEW – SAFETY IMPACTS OF ELECTRONIC SIGNS

A literature review of electronic sign installations and their effects on road safety could not establish any large-sample research undertaken in Australia, with most of the available research generated in Europe and the United States of America. The results of three key studies are listed below:

Research Article 1 (Hawkins, Kuo and Lord, 2012) was based on 135 “on-premise digital sign” locations and undertook statistical analysis of crash data for before and after each sign installation. The signs were located in California, North Carolina, Ohio, and Washington. This study concluded “that the installation of digital on-premise signs does not lead to a statistically significant increase in crashes on major roads”.

Research Article 2 (Tantala and Tantala, undated) was based on “26 existing, non-accessory, advertising digital billboards along routes with periods of comparison as long as 8 years in the greater Reading area, Berks County, Pennsylvania”. This research looked at both temporal and spatial details around the electronic signs and compared the data to 51 non-electronic signs. The digital signs had message duration times of 6, 8 or 10 seconds. This research concluded that:

1. “The before and after rates of accidents near the twenty digital billboards show an 11.1% decrease within 0.5 miles of all digital billboards over eight years near twenty locations. Similar decreases and trends in both averages and peaks are observed for both smaller and larger vicinity ranges, and for specific groups of locations by duration time”.
2. “The accident statistics and metrics remain consistent, exhibiting statistically insignificant variations at each of the digital billboards. The metrics include the total number of accidents in any given month, the average number of accidents, the peak number of accidents in any given month, and the number of accident-free months. These conclusions account for variations in traffic-volume and other metrics”.
3. “The statistical evaluation of the Empirical Bayes method and actual versus predicted results show that the total number of accidents is comparable to what would be statistically expected with or without the introduction of digital technology and that the safety near these locations are consistent with the model benchmarked by 77 locations within Berks County”.

Research Article 3 (Pandey and Shafizadeh, 2011) reviewed a range of traffic flow parameters upstream of electronic billboards on Highway 50 near Sacramento. The study concluded that “The presence of the electronic billboard does not appear to have a significant negative impact in traffic performance (flow, speed, and lane occupancy) or incidents in the study section of the freeway”.

There are dozens on similar articles in the literature and the research consensus is that there is no definitive link between electronic billboards and increased crash rates.

Furthermore, Monash University Accident Research Centre (MUARC), carried out a study on accidents in Victoria and New South Wales between the years 2000-2011 and found the most common causes of crashes as summarised in Table 3.1.

Digital roadside advertising may influence a very small population of “failed to look” but “failed to see” crashes representing a very small percentage of 4.7% of crashes. That is, this data further validates the research consensus that there is not valid link between roadside advertising and increased crash risk.

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Table 3.1: Causes of vehicle crashes in NSW and Victoria

Percent of Crashes	Causes
13.5%	Intoxication
11.8%	Fell asleep
10.9%	Fatigued
3.2%	Failed to look
3.2%	Passenger interaction
2.6%	Fell ill
2.6%	Blacked out
1.8%	Feeling stressed
1.5%	Looked but failed to see
1.4%	Animal or insect in vehicle
0.9%	Using a mobile phone
0.9%	Changing CD/Cassette/Radio
0.9%	Adjusting vehicle systems
0.9%	Looking at vehicle systems
0.3%	Searching for objects

Source: <http://www.keepyoureyesontheroad.org.au/pages/Accident-statistics-Cont>

3.2 POST-INSTALLATION ROAD SAFETY CHECK OF A SIMILAR SITE

Bitzios Consulting has reviewed the "Digital Advertising Sign Post Installation Road Safety Check" report (Issue B, 08/02/2016) prepared by GTA Consultants for a sign at 169 Darlinghurst Road, Kings Cross. In November 2013, a digital LED sign was installed, replacing a printed advertising sign. The sign was mounted on the building façade well above road height. There were no risks in road safety identified as a result of the sign's installation with the average number of crashes in the study area decreasing in the time following the installation of the sign. The three crashes that occurred in the vicinity of the sign since its installation were not within the exposure distances associated with the sign and none were located on Darlinghurst Road. The GTA report concluded that "the number and type of crashes both pre-installation and post-installation of the sign does not present any indication that the digital advertising sign has had a negative impact on road safety."

A copy of this report can be found in **Appendix D**.

3.3 REVIEW OF CRASH DATA NEAR AN EXISTING ELECTRONIC ADVERTISING SIGN

Bitzios Consulting has reviewed the available vehicle crash data near the corner of O'Riordan Street and Robey Street, Mascot (see Figure 3.1 below) where a digital sign was installed approximately four years ago (and has since been removed). The purpose of this study was to ascertain if there was a higher crash rate following the installation of the digital sign. A comparison of the "before" and "after" installation crash statistics at the existing digital site were reviewed to confirm the findings of the available research (i.e. that the installation of a digital sign did not result in an increase in crash rates at that site).

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Figure 3.1: Location of Previous Digital Sign

Crash data within a 200-metre radius of this sign has been reviewed and summarised in Table 3.2.

Table 3.2: Summary of road crashes near Robey Street/O'Riordan Street Intersection

Year	Number of Crashes	Severity of Injury				
		F	S	M	O	U
2010	10	-	2	1	2	-
2011	6	-	1	-	-	-
2012	9	-	1	4	-	-
2013	10	-	1	3	-	-
2014	4	-	-	-	-	9
2015	7	-	-	-	-	5
2016	0	-	-	-	-	-

Note:
 F Number of fatalities
 S Number seriously injured (admitted to hospital)
 M Number moderately injured (treated to hospital but not admitted)
 O Number minor/other injured (injured but no hospital admission/treatment record)
 U Injury severity currently unavailable (applies to 2014 onwards)
 Data available from 1st January 2010 up to 4th April 2016

The data shows no increase in crash rate after the installation of the digital sign. Whilst based on a limited sample, this data further supports the research of the absence of a link between roadside digital advertising signage and crashes.

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3.4 QUEENSLAND CASE STUDY OF A DIGITAL SIGN AT AN INTERSECTION

Bitzios Consulting acted as expert traffic witness in a Queensland Planning and Environment Court Appeal where the local traffic authority argued that a digital sign would cause distraction and adversely impact road safety. The court ruled in favour of the proponent in this case on the basis that there was insufficient evidence to support the link between digital signs and road safety risk changes.

3.5 NEARBY SECTION 96 APPROVAL WITH RMS CONCURRENCE

Bitzios Consulting reviewed the DA documentation for a digital sign site near Sydney Airport that was granted development consent by the former Botany Bay Council, now Bayside Council with RMS concurrence. RMS concurrence was initially refused but then granted with the following conditions:

- a minimum dwell time of 45 seconds (to match the traffic signal cycle time);
- each advertisement being displayed in a completely static manner without any motion;
- the image not being capable of being mistaken for a traffic control device; and
- no advertisement display can be dominated by the colours red, yellow, white or green.

It was stated in the RMS correspondence that "the conditions were developed to mitigate the increased safety risk the digital LED sign posed to motorists".

3.6 LAND AND ENVIRONMENT COURT OF NSW RULING - KOGARAH

In April 2017, Outdoor Systems Pty Ltd (the applicant) sought approval from the Land and Environment Court (the Court) to allow for a 15 second dwell time for a new digital sign on the Princes Highway, Kogarah. In assessing the application, Roads and Maritime Services was concerned that the dwell time proposed for the sign did not address *SEPP 64 Schedule 1* and did not comply with its Draft Guidelines. Roads and Maritime's position was that the sign should remain as a static sign and recommended that council refuse the application. An appeal was lodged and the case is cited in *Outdoor Systems Pty Ltd v Georges River Council and Roads and Maritime Services [2017] NSWLEC 1505*.

The Commissioner found that in this case there was no evidence that digital signs contribute to crashes. Key statements included:

- "After careful consideration of all of the evidence I must agree with Ms Samra's assessment that the scientific literature is vastly inconclusive of any direct evidence that digital billboards contribute to crashes"
- "While billboards are clearly designed to attract attention there is no satisfactory evidence before me to conclude that there is a significant difference in average fixation durations between digital and static billboards."; and
- In reaching his determination the Commissioner noted the importance of considering each case on its merit.

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4. **DEVELOPMENT CONTROL PLAN CONSIDERATIONS**

Due to the recent amalgamation of Leichhardt Council, Ashfield Council and Marrickville Council, the newly established Inner West Council does not have a single current Development Control Plan (DCP) for the whole Council area. As such, the pre-existing DCP for Leichhardt Council has been used in order to assess any relevant Local Government requirements.

"Signage" is permitted with consent in the land use zone that the proposed sign is located in (i.e. B2 Local Centre). In addition to the existing sign, Victoria Road and the surrounding area has a number of other advertising signs.

The Leichhardt DCP 2013 does not provide provisions for signage having an advertising display area greater than 45m². For signs under 45m², the Leichhardt DCP is primarily concerned with visual aspects, un-related to traffic considerations.

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5. TRAFFIC SAFETY ASSESSMENT

5.1 KEY ASSUMPTIONS

The assessment of the proposed digital sign was undertaken on the basis of the following:

- the existing static sign at the subject site will be replaced by a digital LED sign;
- the proposed sign will have the same orientation as the existing static sign;
- the dimensions of the proposed sign will be consistent with the dimensions of the existing sign. It is noted that the dimensions of the proposed digital screen result in a slightly reduced advertising display area;
- the existing sign is internally illuminated. Illumination of the proposed sign is therefore consistent with the existing sign operations. It is, however, noted that the level of luminance between the existing and proposed signs will most likely differ;
- no significant change is proposed to the structure that will support the digital screen (i.e. existing roadside structure to remain with its current form and function);
- illumination / lighting levels for the digital LED sign shall comply with the Draft Transport Corridor Outdoor Advertising and Signage Guidelines 2015; and
- the display of content will be static for the duration of each advert; a dwell time of 10 seconds will be used with a refresh rate of 0.1 seconds, based on the SEPP 64 criteria.

The display area of the proposed sign will be larger than 20 square metres and hence the Inner West Council will require RMS concurrence before issuing development consent. On this basis, the proposed sign has been assessed against the Draft Transport Corridor Outdoor Advertising and Signage Guidelines 2015, SEPP 64 and the RMS Advertising Sign Safety Assessment Matrix.

5.2 SITE INSPECTION

A site inspection was conducted on Thursday 6 July 2017. The inspection was completed during both daylight hours (around 10.30am) and night-time hours (around 8.30pm). The weather was clear and traffic conditions were moderate on both occasions. In-vehicle video recordings were taken for further analysis and for use in compiling photomontages from the driver's perspective of the approach to the proposed site.

The photomontages can be found in **Appendix B**.

5.3 REVIEW OF CRASH DATA

Crash data for the relevant sections of Victoria Road and surrounding streets was obtained from Transport for NSW in order to assess the crash history in proximity to the subject site. The most recent five years of data at the time of the request has been used for the assessment (2011-2015). Crash data was reviewed for sections of Victoria Road, MacKenzie Street, Hartley Street, Gordon Street, Maney Street and Joseph Street extending from the subject site approximately 140m west, 290m east, 245m north and 120m south of the subject site (i.e. the section of road where the sign will be potentially visible to drivers). Crash data was provided in the following severity categories:

- **Fatal** - a crash in which at least one person was killed;
- **Injury** - a crash involving at least one person identified as an injury in a police report who or is matched to an injury CTP claim AND no one was killed, and
- **Non-casualty (tow away)** - a crash in which no one was killed or injured but at least one motor vehicle was towed away.

Crash data was mapped using GIS software and is presented in **Appendix A**. The crash data maps have been presented in terms of crash type (road user movement) and severity.

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Table 5.1: Summary of Crash Data in Proximity to Site

Year	Total Number of Crashes	Casualties		
		F	I	N
2011	9	-	6	3
2012	8	-	4	4
2013	15	-	9	6
2014	12	1	8	3
2015	6	-	3	3
Total Number of Crashes		1	30	19

Notes:
 F: Number of Fatality Crashes
 I: Number of Crashes resulting in Injury
 N: Number of Non-casualty (towaway) Crashes
 Data for 2011-2015 (Inclusive)

The crash data does not indicate an excessively high crash rate, particularly considering the high volumes of traffic through this area.

The fatality reported in 2014 occurred on Victoria Road, 190 metres south of the existing sign. It was classified as a pedestrian on footpath impact, with the primary direction of travel reported as east (or eastbound, in the opposite direction to which the sign may be viewed). Given the location, type of impact and direction it is unlikely that the proposed signage would have influenced the crash in any way.

5.4 APPROACH SIGHT LINE ASSESSMENTS

5.4.1 Description of Approaches

Table 5.2 provides details on the Victoria Road northbound approach in proximity to the proposed sign.

Table 5.2: Description of Approach (Victoria Road Northbound)

Attribute	Details
Posted Speed Limit:	60 km/h
Decision points within 250m of the proposed site:	Victoria Road / Gordon Street signalised intersection (located approximately 50m south of the proposed site)
Approach Arrangement:	At the Gordon Street intersection, northbound: three through traffic lanes (driver's perspective from all lanes is similar)
Sight Length:	From approximately 125m to 10m south of the sign (northbound)
Minimum duration of visibility	26 seconds at free-flow speed

The Gordon Street northbound approach is technically within the viewing distance of the sign however the sign cannot be observed from Gordon Street due to the presence of a building façade and trees. Similarly, Maney Street is within the 250m possible observation distance however the view to the sign is blocked by building facades. The Hartley Street approach is also within the 250m viewing range and a driver of a vehicle turning left out of Hartley Street may observe the sign when searching for a gap in southbound traffic on Victoria Road, as would be the case for a vehicle turning left out of Mackenzie Street.

Table 5.3 provides details on the Hartley Street southbound approach in proximity to the proposed sign whilst Table 5.4 provides details on the Mackenzie Street southbound approach in proximity to the proposed sign.

The signs is not visible in the southbound direction on Victoria Road and this approach has not been assessed.

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Table 5.3: Description of Approach (Hartley Street Southbound)

Attribute	Details
Posted Speed Limit:	10 km/h (shared zone)
Decision points within 250m of the proposed site:	Victoria Road / Hartley Street non-signalised intersection (located approximately 75m north of the proposed site)
Approach Arrangement:	At the Victoria Road intersection, southbound: one left turn traffic lane
Sight Length:	From approximately 75m north of the sign (southbound turning left)

Table 5.4: Description of Approach (MacKenzie Street Southbound)

Attribute	Details
Posted Speed Limit:	10 km/h (shared zone)
Decision points within 250m of the proposed site:	Victoria Road / Hartley Street non-signalised intersection (located approximately 75m north of the proposed site)
Approach Arrangement:	At the Victoria Road intersection, southbound: one left turn traffic lane
Sight Length:	From approximately 75m north of the sign (southbound turning left)

5.4.2 Intersection Safety Assessment: Clear Sight Distance

Design sight distance requirements under the *Draft Guidelines* for the Victoria Street/Gordon Street intersection was assessed against the relevant *Austrroads Guide to Road Design, Part 4A: Unsignalised and Signalised Intersections*.

Key elements for the northbound approach to the subject site are as follows:

- location type: built-up area – high traffic volumes;
- speed limit: 60 km/h (70km/h design speed);
- driver’s reaction time = 1.5 seconds;
- critical gap acceptance time = 5 seconds (for the left turn from Maney Street); and
- horizontal and vertical geometry: sweeping left-hand curve and moderate upgrade.

Clear sight distances to the following intersections points located near the subject site are summarised in Table 5.5:

- Victoria Road northbound on approach to the Gordon Street signalised intersection; and
- Victoria Road northbound on approach to the Evans Street signalised intersection.

Table 5.5: Relevant sight distances

Type	Requirement	Achieved? (Yes/No)
Approach Sight Distance (ASD)	75 m	Yes
Safe Intersection Sight Distance (SISD)	130 m	No
Minimum Gap Sight Distances (MGSD)	111 m	No

Approach sight distances are achieved for both intersections. This means that drivers would have no obstructions generated by the sign or its message change that would cause them to not identify a change in signal from green to amber to red at the Gordon Street signal. Also, if a driver did glance away to the sign on approach to the Evan Street signalised intersection, there would still be sufficient ASD to the signal when the sign was out of view.

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Importantly, the location of the proposed sign (and the existing sign) does not restrict driver sightlines to any intersection or any traffic control device. In this regard, the following is noted:

- the proposed sign will be located on a fixed structure (i.e. rigid structure on side of the carriage-way); and
- the proposed structure is angled to ensure a driver would not need to turn their head away from the ordinary field of view to observe the sign.

5.4.3 Driver Sightline Assessment

In-vehicle observations was undertaken to assess the subject site with respect to traffic signals and other traffic control devices. An assessment of still images taken from the driver's perspective with a windscreen mounted camera is presented in Figure 5.1. It should be noted that the assessment was undertaken based on a standard car. Driver eye height may vary for larger or smaller vehicles. The proposed location of the electronic sign will not obstruct a driver's sightlines to any intersection or traffic control device, nor will the changing sign be located as such that it may be confused, or confuse interpretation of the adjacent traffic signals.

The assessment was undertaken from the left northbound lane on Victoria Road. Given the geometry of the road, all through movement approach lanes have similar sightlines to the proposed sign. The proposed sign will not be visible to southbound vehicles.

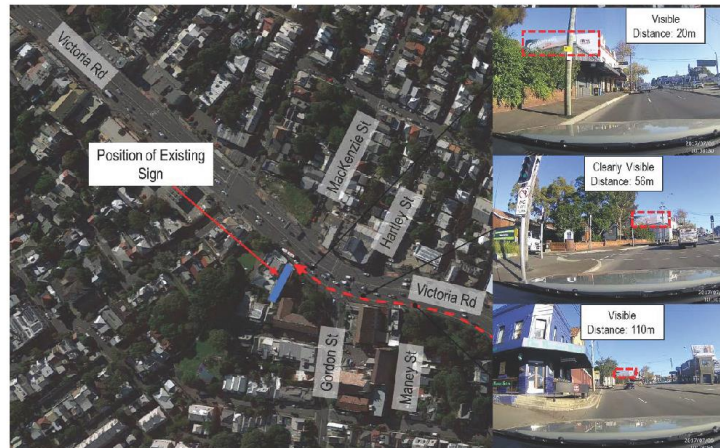


Figure 5.1: Driver Sightlines Assessment

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5.5 COMPLIANCE ASSESSMENT

5.5.1 Compliance Documents

The proposed conversion of the existing static advertising sign to a digital static LED sign has been evaluated against the following:

- the RMS Risk Matrix;
- Schedule 1 Assessment Criteria of SEPP 64. Only Section 8 of Schedule 1 relates specifically to safety; and
- the Digital Signs of Draft Transport Corridor Outdoor Advertising and Signage Guidelines 2015.

Assessment against the relevant criteria of the above guidelines is detailed in Table 5.6, Table 5.7 and Table 5.8.

5.5.2 RMS Assessment Matrix

Table 5.6 summarises the assessment of the considerations relevant to traffic safety, being A to E. Relevant details are:

- for **Consideration A**: The existing and the digital sign do not create any potential hazard;
- for **Consideration B**: The sign is only slightly offset from the northbound direction of travel and would be in the ordinary field of view;
- for **Consideration C**: The sign is located >100m from a northbound decision point but <100m from the left turn from Gordon Street into Victoria Road. In the latter case, this left turn movement occurs at a signalised intersection, and as such, this distance complies with the risk matrix;
- for **Consideration D**: No primary signal is located in front of the sign; and
- for **Consideration E**: The sign is one of a number of existing signs in this urban environment and the level of signage clutter is minimal.

Table 5.6: Assessment against RMS Advertising Sign Safety Assessment Matrix

Considerations	Risk Rating	Risk Level
A: It obscures a view of an object/vehicle/pedestrian that creates a hazard	1	Low
B: Sign Positioning relative to travel direction	2/3	Low
C: It distracts a driver at a critical time	3	Low/Medium
D: It interferes with the effectiveness and safety of a traffic control device (e.g. traffic signals, traffic signals or other traffic control devices)	1	Low
E: Sign Clutter	2	Low

A copy of the RMS assessment matrix is provided in **Appendix C**.

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5.5.3 SEPP 64 Schedule 1

The assessment against SEPP 64 Schedule 1 is provided in Table 5.7. Whilst the SEPP 64 criteria are quite generic, the basis for the responses to each criterion are provided below:

- the proposal would not reduce the safety to the public road because the traffic safety risks associated with the digital sign are not materially different to the traffic safety risks associated with the existing static sign. There are no crash-related risks linked to the existing sign apparent in the crash data;
- there are very few on-road cyclists in this area, and off-road pedestrians and cyclists are protected by the kerb. In any event, the change in traffic safety risk associated with a digital sign replacement is considered to be negligible; and
- no sightlines for pedestrians and children are obscured by the proposal.

Table 5.7: Assessment against SEPP 64 Schedule 1

Section	Consideration	Criteria	Response
8	Safety	Would the proposal reduce the safety for any public road?	No
		Would the proposal reduce the safety for pedestrians or bicyclists?	No
		Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	No

5.5.4 Assessment against the Draft Guidelines (2015)

Table 5.8 summarises the assessment against the relevant traffic safety-related criteria in the Draft Guidelines.

Table 5.8: Assessment against the Draft Guidelines

Criteria No.	Criteria Details	Response
(a)	Each advertisement must be displayed in a completely static manner, without any motion, for the approved dwell time as per criterion (d) below.	Conditions of consent can be imposed by the approval authority to ensure that the sign is completely static for the specified dwell time.
(b)	Message sequencing designed to make a driver anticipate the next message is prohibited across images presented on a single sign and across a series of signs.	Conditions of consent can be imposed by the approval authority to ensure there is no message sequencing that creates driver anticipation for the next message on the proposed sign or with any other signs.
(c)	The image must not be capable of being mistaken: (i) For a prescribed traffic control device because it has, for example, red, amber or green circles, octagons, crosses or triangles or shapes or patterns that may result in the advertisement being mistaken for a prescribed traffic control device, or (ii) As text providing driving instructions to drivers.	Conditions of consent can be imposed by the approval authority to ensure that sign content, design, imagery and messages neither replicate nor can be mistaken for a prescribed traffic control device or instruction to drivers. For example, advertisements must not instruct drivers to perform an action such as "Stop".
(d)	Dwell times for image display are: (i) 10 seconds for areas where the speed limit is below 80km/h. (ii) 25 seconds for areas where the speed limit is 80km/h and over.	The minimum allowed dwell time is 10 seconds based on the posted speed of 60km/h. Conditions of consent can be imposed by the approval authority to ensure a minimum dwell time of 10 seconds.
(e)	The transition time between messages must be no longer than 0.1 seconds.	Conditions of consent can be imposed by the approval authority to ensure that sign has a transition time of less than or equal to 0.1 seconds.

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Criteria No.	Criteria Details	Response
(f)	Luminance levels must comply with the requirements in Table 3.	This area is Zone 3 as categorised in Section 3, Table 5 of the Draft Guidelines. Acceptable luminance levels are: 6000 cd/m ² (day), 700 cd/m ² (twilight and inclement weather), 350 cd/m ² (night). Conditions of consent can be imposed by the approval authority stipulating maximum allowable luminance levels
(g)	The images displayed on the sign must not otherwise unreasonably dazzle or distract drivers without limitation to their colouring or contain flickering or flashing content.	Conditions of consent can be imposed by the approval authority to ensure the sign images comply with requirements to not contain flickering or flashing content.
(h)	The amount of text and information supplied on a sign should be kept to a minimum (for example no more than a driver can read at a short glance). Text should preferably be displayed in the same font and size. Table 6 in Section 3 of these Guidelines provides further guidance.	Conditions of consent can be imposed by the approval authority to ensure that content complies with the guidance in Table 6 in Section 3 of the Draft Guidelines 2015.
(i)	Any sign that is within 250 metres of a classified road and is visible from a school zone must be switched to a fixed display during school zone hours.	The sign is not visible from any school zone.
(j)	Each sign proposal must be assessed on a case by case basis including replacement of an existing fixed, scrolling or tri-vision sign with a digital sign and in the instance of a sign being visible from each direction, both directions for each location must be assessed on their own merits.	All relevant traffic directions have been assessed on their own merits.
(k)	At any time, including where the speed limit in the area of the sign is changed, if detrimental effect is identified on road safety post installation of a digital sign, RMS reserves the right to re-assess the site which may result in a change to the dwell time or removal of the sign.	Noted.
(l)	Sign spacing should limit drivers view to a single sign at any given time with a distance of no less than 150 metres between signs in any one corridor. Exemptions for low speed, high pedestrian zones or CBD zones will be assessed by RMS as part of their concurrence role.	The proposed sign replaces an existing sign and its location is within 150 metres of other existing signs. The sign's proximity to traffic signals lessens the important of the sign spacing criterion.
(m)	Signs greater than or equal to 20m ² must obtain RMS concurrence AND must ensure the following minimum vertical clearances; 2.5m from lowest point of the sign above the road surface if located outside the clear zone. 5.5m from lowest point of the sign above the road surface if located within the clear zone (including shoulders and traffic lanes) or the deflection zone of a safety barrier if a safety barrier is installed. If attached to Road Infrastructure (e.g. Overpass), the sign must be located so that no portion of the advertising sign is lower than the minimum vertical clearance under the overpass or supporting structure at the corresponding location.	The proposed sign is located on a structure sitting above 64 Victoria Road adjacent to the road and is not located in a clear zone. The sign has a vertical clearance of approximately 4 metres from the lowest point above the ground surface.

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(n)	An electronic log of a sign's activity must be maintained by the operator for the duration of the development consent and be available to the consent authority and/or RMS to allow a review of the signs activity in case of a complaint.	Conditions of consent can be imposed by the approval authority to ensure that this criterion is met. For example, an electronic log must be kept for the duration of the consent and be available to the consent authority for review in case of a complaint.
(o)	A road safety check which focuses on the effects of the placement and operation of all signs over 20sq metres must be carried out in accordance with Part 3 of the RMS Guidelines for Road Safety Audit Practices after a 12-month period of operation but within 18 months of the signs installation. The road safety check must be carried out by an independent RMS accredited road safety auditor. A copy of the report is to be provided to RMS and any safety concerns identified by the auditor relating to the operation or installation of the sign must be rectified by the applicant.	Conditions of consent can be imposed by the approval authority to ensure this criterion is met. For example, a road safety audit could be carried out after 12 months but within 18 months of the sign's installation.

Schedule 1 of State Environmental Planning Policy no. 64, and Section 3 of the Draft Transport Corridor Outdoor Advertising and Signage Guidelines are provided in **Appendix D**.

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6. CONCLUSIONS

The proposed digital sign has been assessed for compliance against the Draft Guidelines, the SEPP 64 criteria and the RMS safety assessment matrix, and is found to be compliant. Furthermore, a first principles assessment suggests that the digitisation of the existing sign will result in no appreciable change in traffic safety risk in the area. Key details of the assessment are as follows:

- the proposed digital sign will replace an existing externally illuminated static advertising sign. The proposed digital sign is consistent with the existing sign in terms of size, location and orientation;
- the proposed sign does not obstruct the view of any traffic control devices, vehicles, pedestrians or cyclists;
- the proposed sign does not restrict sight distances to any intersection or traffic control device;
- the proposed sign is not expected to reduce the safety of any public road, pedestrians or cyclists because of its location. The proposed sign will be located within the driver's ordinary field of view when approaching northbound and only require glance appreciation;
- a review of available five years of crash data within 290 metres of the site was undertaken as part of the traffic safety assessment. The crash data did not show a high crash rate that would deem the proposed location unsuitable;
- the proposed digital sign can be conditioned to comply with requirements the Draft Guidelines in terms of display and operational requirements, including with regards to:
 - message displays remaining static;
 - sequencing of displays or messaging;
 - minimum dwell times;
 - transition of displays;
 - the use of flickering, flashing or moving content;
 - quantity/size of text used on message displays; and
 - maintaining a log of sign activity.
- a review of the post-installation road safety report for a similar digital sign installed at 169 Darlinghurst Road, Kings Cross, revealed that it has had no impact on road safety. The average number of crashes at this location has decreased since the installation of this sign. That is not to say that this is attributable to the sign's installation rather that the sign did not cause an increase in crashes; and
- a literature review of electronic sign installations and their effects on road safety could not establish any large-sample research undertaken in Australia, with most of the available research generated in Europe and the United States of America. The research consensus is that there is no definitive link between electronic billboards and increased crash rates.

Accordingly, it is concluded that the proposal is not expected to adversely impact traffic safety.

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APPENDIX A

CRASH DATA



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ROW NO	DEVELOPER NAME	ADDRESS	POSTAL CODE	LOT NO	PLAN NO	SECTION NO	SECTION NO	SECTION NO	SECTION NO	SECTION NO	SECTION NO	SECTION NO	SECTION NO	SECTION NO	SECTION NO	SECTION NO	SECTION NO	SECTION NO	SECTION NO	SECTION NO	SECTION NO
1	OH MEDIA	64-66 VICTORIA RD	1526	1	120/204	1	120/204	1	120/204	1	120/204	1	120/204	1	120/204	1	120/204	1	120/204	1	120/204
2	OH MEDIA	64-66 VICTORIA RD	1526	2	120/204	2	120/204	2	120/204	2	120/204	2	120/204	2	120/204	2	120/204	2	120/204	2	120/204
3	OH MEDIA	64-66 VICTORIA RD	1526	3	120/204	3	120/204	3	120/204	3	120/204	3	120/204	3	120/204	3	120/204	3	120/204	3	120/204
4	OH MEDIA	64-66 VICTORIA RD	1526	4	120/204	4	120/204	4	120/204	4	120/204	4	120/204	4	120/204	4	120/204	4	120/204	4	120/204
5	OH MEDIA	64-66 VICTORIA RD	1526	5	120/204	5	120/204	5	120/204	5	120/204	5	120/204	5	120/204	5	120/204	5	120/204	5	120/204
6	OH MEDIA	64-66 VICTORIA RD	1526	6	120/204	6	120/204	6	120/204	6	120/204	6	120/204	6	120/204	6	120/204	6	120/204	6	120/204
7	OH MEDIA	64-66 VICTORIA RD	1526	7	120/204	7	120/204	7	120/204	7	120/204	7	120/204	7	120/204	7	120/204	7	120/204	7	120/204
8	OH MEDIA	64-66 VICTORIA RD	1526	8	120/204	8	120/204	8	120/204	8	120/204	8	120/204	8	120/204	8	120/204	8	120/204	8	120/204
9	OH MEDIA	64-66 VICTORIA RD	1526	9	120/204	9	120/204	9	120/204	9	120/204	9	120/204	9	120/204	9	120/204	9	120/204	9	120/204
10	OH MEDIA	64-66 VICTORIA RD	1526	10	120/204	10	120/204	10	120/204	10	120/204	10	120/204	10	120/204	10	120/204	10	120/204	10	120/204

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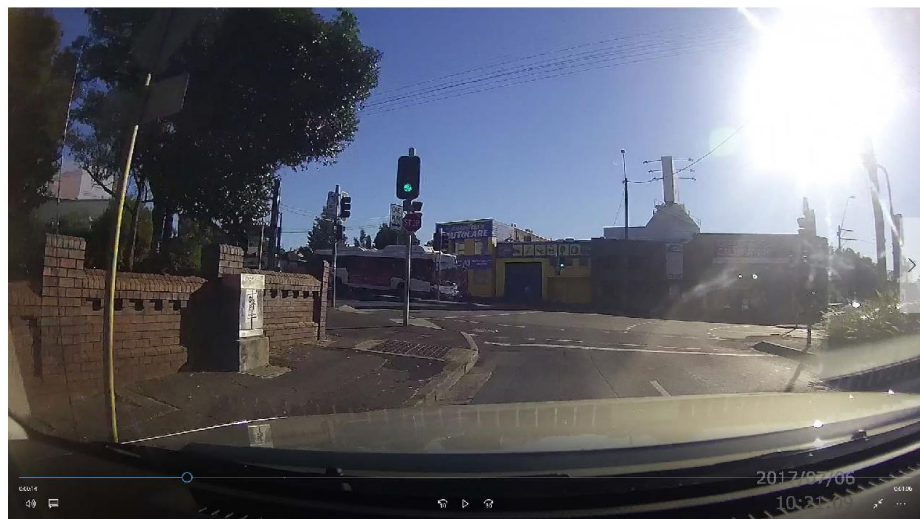
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APPENDIX B

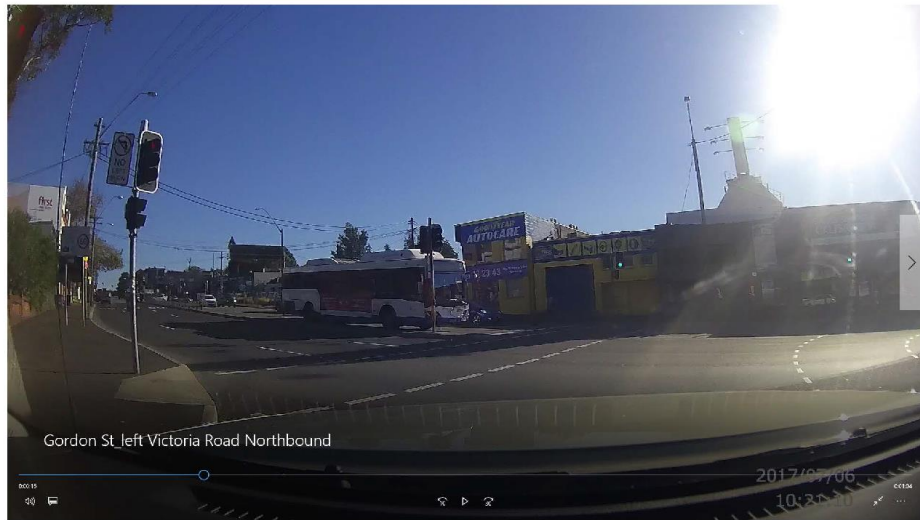
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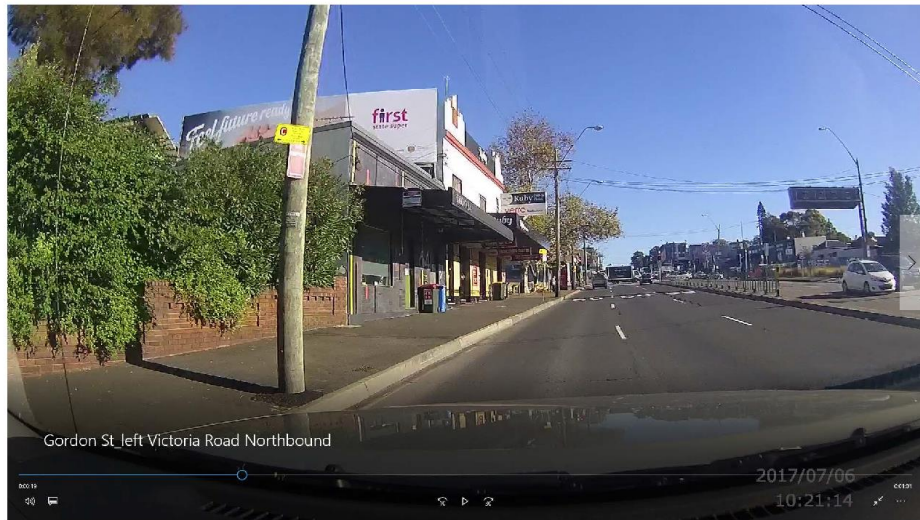
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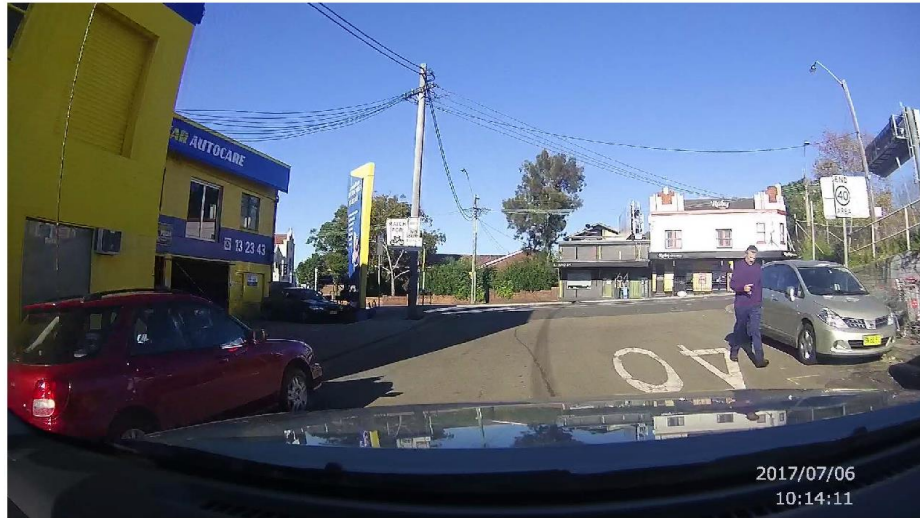
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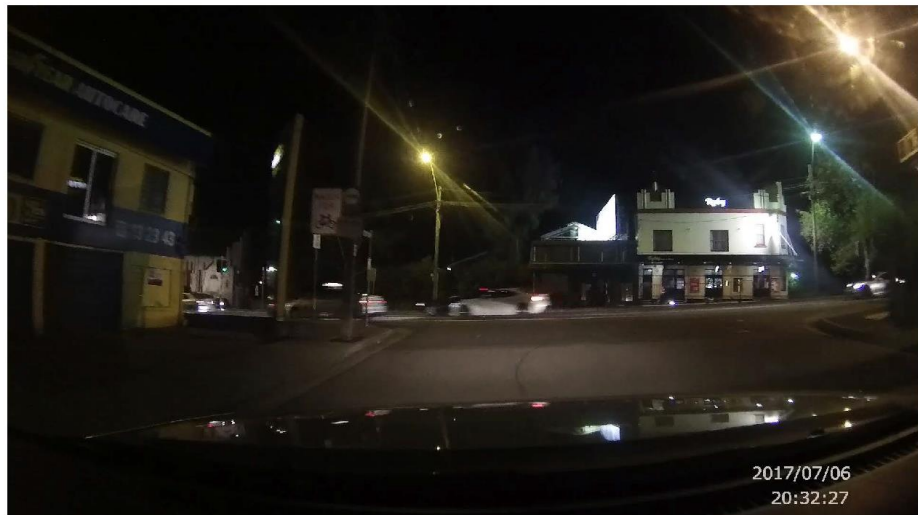
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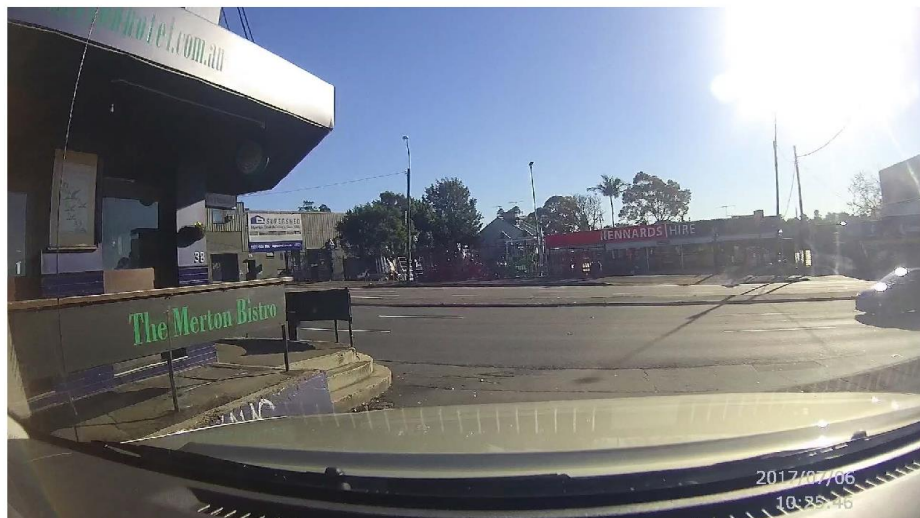
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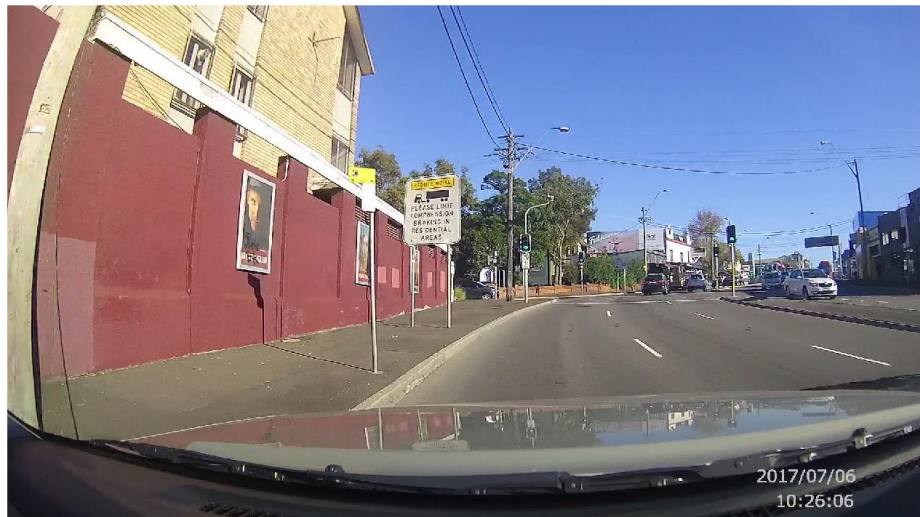
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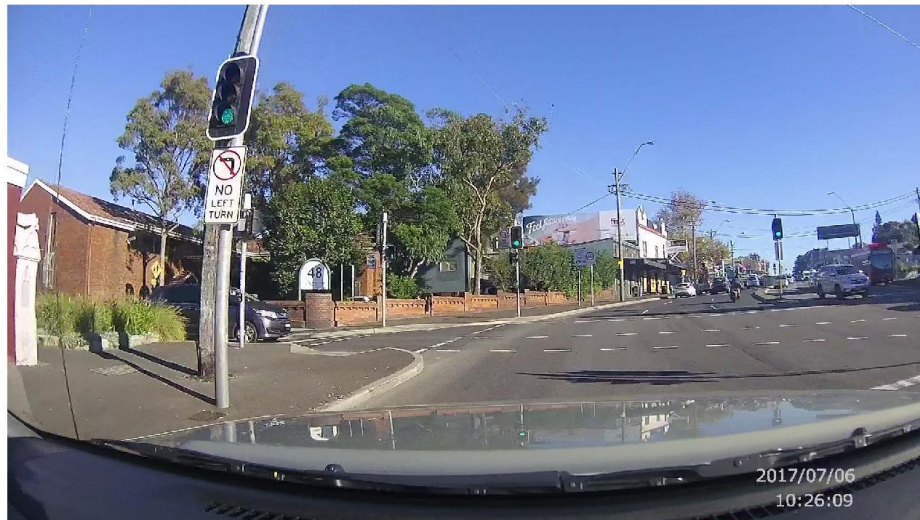
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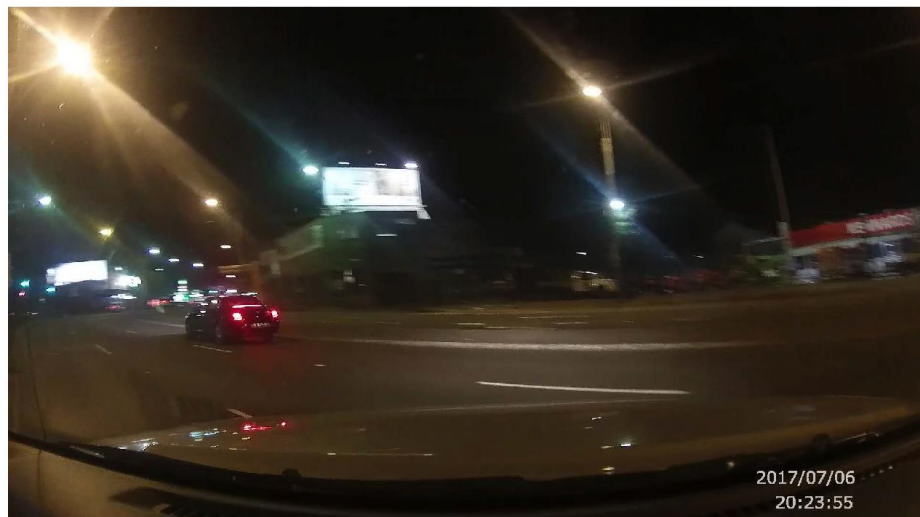
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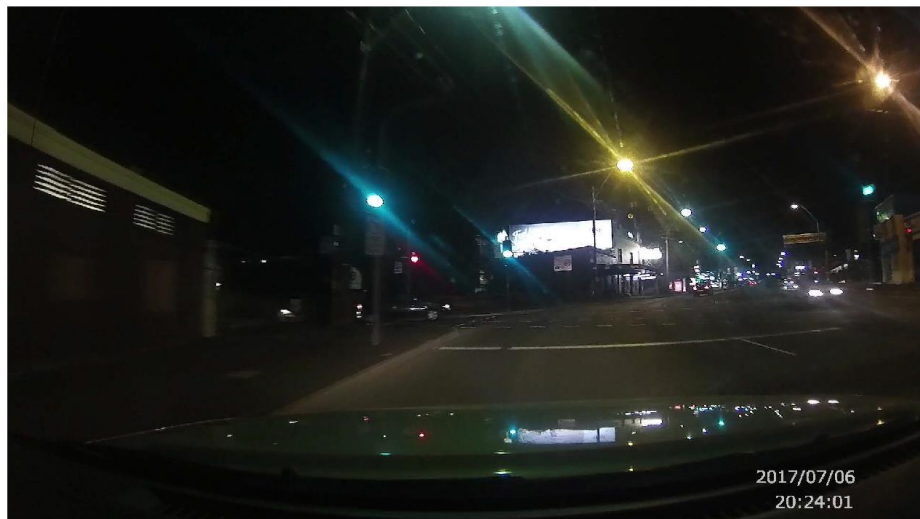
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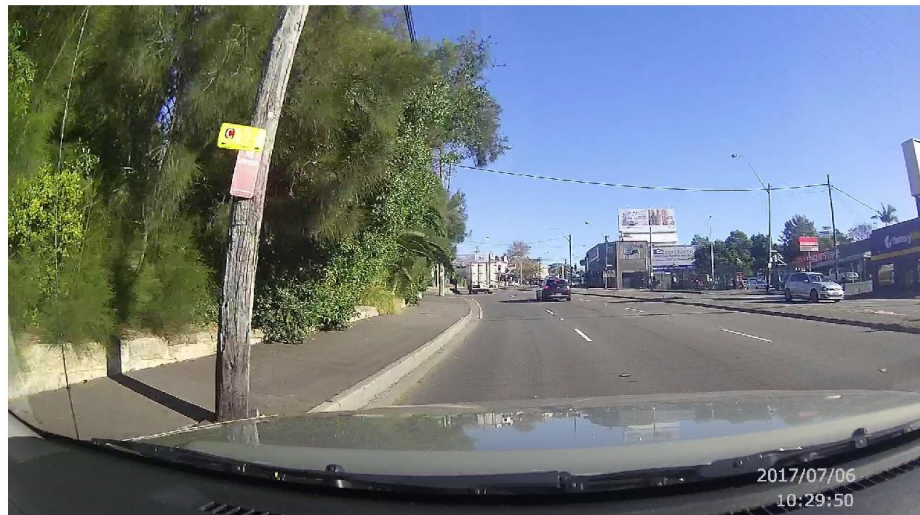
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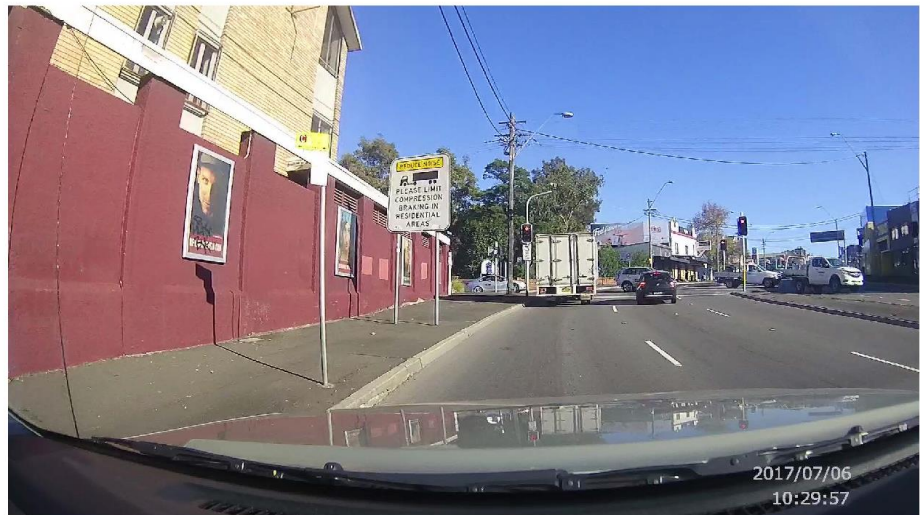
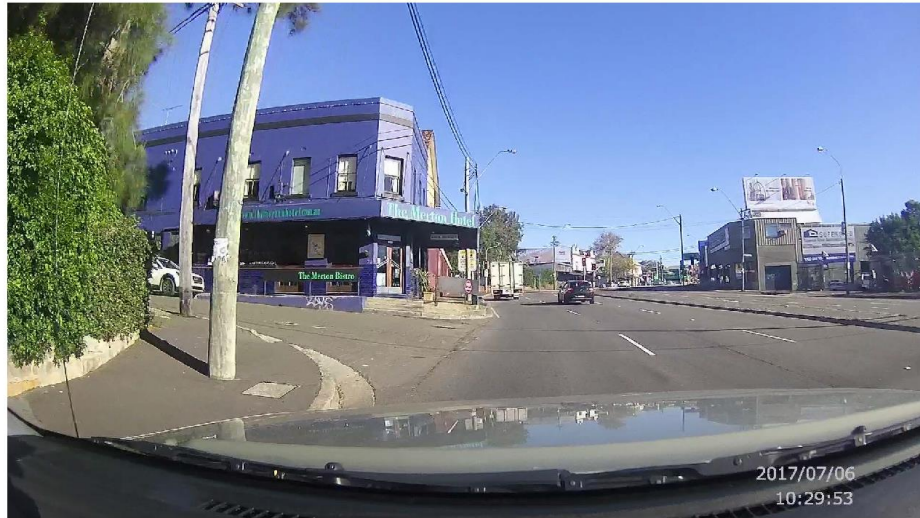
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APPENDIX C

GUIDELINES AND ASSESSMENT CRITERIA



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State Environmental Planning Policy No 64—Advertising and Signage [NSW]
Schedule 1 Assessment criteria

Schedule 1 Assessment criteria

(Clauses 8, 13 and 17)

1 Character of the area

- Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?
- Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?

2 Special areas

- Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?

3 Views and vistas

- Does the proposal obscure or compromise important views?
- Does the proposal dominate the skyline and reduce the quality of vistas?
- Does the proposal respect the viewing rights of other advertisers?

4 Streetscape, setting or landscape

- Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?
- Does the proposal contribute to the visual interest of the streetscape, setting or landscape?
- Does the proposal reduce clutter by rationalising and simplifying existing advertising?
- Does the proposal screen unsightliness?
- Does the proposal protrude above buildings, structures or tree canopies in the area or locality?
- Does the proposal require ongoing vegetation management?

5 Site and building

- Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?
- Does the proposal respect important features of the site or building, or both?
- Does the proposal show innovation and imagination in its relationship to the site or building, or both?

6 Associated devices and logos with advertisements and advertising structures

- Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?

7 Illumination

- Would illumination result in unacceptable glare?
- Would illumination affect safety for pedestrians, vehicles or aircraft?
- Would illumination detract from the amenity of any residence or other form of accommodation?
- Can the intensity of the illumination be adjusted, if necessary?
- Is the illumination subject to a curfew?

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State Environmental Planning Policy No 64—Advertising and Signage [NSW]
Schedule 1 Assessment criteria

8 Safety

- Would the proposal reduce the safety for any public road?
- Would the proposal reduce the safety for pedestrians or bicyclists?
- Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?

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3. Advertisements and road safety

3.1 ROAD SAFETY OBJECTIVES

Advertising displays within the visual catchments of roads are designed to attract driver's and passenger's attention. A reduction in driver attention away from the road however has the potential to create a road safety hazard. It is the aim of RMS to minimise these hazards and improve road safety for all drivers where possible.

The purpose of this section is to outline RMS advertisement policy in relation to road safety. The policy is designed to ensure that roadside advertising does not create a road safety hazard or confuse or distract drivers in any road environment, or compromise bicycle and pedestrian safety.

Schedule 1 of SEPP 64 (Table 4) outlines safety considerations that must be addressed for any advertisement proposal under SEPP 64. Advertisements have the potential to create a safety hazard if designed and placed contrary to RMS' *Road Design Guide* and the principles and rules outlined below. The following traffic, bicycle, and pedestrian safety assessment criteria must be applied (as a minimum) in the design and assessment of all advertisement proposals on or within the vicinity of a classified road.

Table 4: ROAD SAFETY ASSESSMENT CRITERIA- SCHEDULE 1 SEPP 64

Safety
1) Would the proposal reduce the safety for any public road?
2) Would the proposal reduce the safety for pedestrians or bicyclists?
3) Would the proposal reduce the safety for pedestrians, by obscuring sightlines from public areas?

3.2 ROAD SAFETY ASSESSMENT CRITERIA

3.2.1 Sign location and design

- (a) An advertisement must not obstruct the driver's view of the road particularly of other vehicles, bicycle riders or pedestrians at crossings.
- (b) An advertisement must not obstruct a pedestrian or cyclist's view of the road.
- (c) The placement of a sign should not distract a driver at a critical time. In particular, signs should not obstruct a driver's view:
 - (i) to a road hazard
 - (ii) to an intersection
 - (iii) to a traffic control device (such as traffic signals, stop or give way signs or warning signs)
 - (iv) to an emergency vehicle access point or Type 2 driveways (wider than 6-9 metres) or higher.
- (d) The advertisement must not distract a driver from or reduce the visibility and effectiveness of directional signs, traffic signals, other traffic control devices, regulatory signs or advisory signs or to obscure information about the road alignment.
- (e) The advertisement must not incorporate technology which interacts with in-vehicle electronic devices or mobile devices.
- (f) The advertisement should not be located in a position that has the potential to give incorrect information on the alignment of the road. In this context, the location and arrangement of sign structures should not give visual clues to the driver suggesting that the road alignment is different to the actual alignment. An accurate photo-montage should be used to assess this issue.
- (g) A sign should not be located:
 - (i) less than the safe sight distance from an intersection, merge point, exit ramp, traffic control signal or sharp curves
 - (ii) less than the safe stopping sight distance from a marked foot crossing, pedestrian crossing, pedestrian refuge, cycle crossing, cycleway facility or hazard within the road environment
 - (iii) so that it is visible from the stem of a T-intersection.

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Note: The minimum sight distance requirements for the design speed of the road must be met for road hazards (stopping sight distance), emergency vehicle access points and driveways (approach sight distance) and intersections (safe intersection sight distance). Refer to RMS *Road Design Guide* for minimum stopping sight distances, minimum approach and safe intersection sight distances.

Design speed means a nominal speed fixed to determine the geometric features of a road. In the context of sight distances, the design speed is taken as the higher of the posted speed limit or the 85th percentile speed.

- (h) The advertisement must not interfere with stopping sight distance for the road's design speed or the effectiveness of a traffic control device. For example:
 - (i) Could the advertisement be construed as giving instructions to traffic such as 'Stop' or imitate a traffic control device?
 - (ii) 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.
- (i) The advertisement should not distract a driver's attention away from the road environment for an extended length of time. For example:
 - (i) The sign should not be located in such a way that the driver's head is required to turn away from the road and the components of the traffic stream in order to view its display and/or message. All drivers should still be able to see the road when viewing the sign, as well as the main components of the traffic stream in peripheral view.
 - (ii) The sign should be oriented in a manner that does not create headlight reflections in the driver's line of sight. As a guideline, angling a sign five degrees away from right angles to the driver's line of sight can minimise headlight reflections. On a curved road alignment, this should be checked for the distance measured back from the sign that a car would travel in 2.5 seconds at the design speed.

- (j) The advertisement must not create a physical obstruction or hazard. For example:
 - (i) Does the sign obstruct the movement of pedestrians or bicycle riders? (e.g. telephone kiosks and other street furniture along roads and footpath areas).
 - (ii) Does the sign protrude below a bridge or other structure so it could be hit by trucks or other tall vehicles? Will the clearance between the road surface and the bottom of the sign meet appropriate road standards for that particular road?
 - (iii) Does the sign protrude laterally into the transport corridor so it could be hit by trucks or wide vehicles?

Note: Where advertising structures hang over the road, the minimum vertical clearance should be the same as other structures in that road environment. Generally, the sign should have a vertical clearance equal or greater than the overpass, tunnel portal or pedestrian bridge. However, in cases where these structures exceed the minimum vertical clearance specified for the particular type of road, the sign may protrude below the bridge or other structure.

If the minimum vertical clearance for other surrounding structures is not known then a minimum vertical clearance of 5.8 metres is to be used for the sign structure. However, on high performance motorways, the minimum clearance may be more than 5.8 metres.

See also **Section 2.5.5 Bridge signage criteria** for minimum road clearance criteria.

- (k) Where the sign supports are not frangible (breakable), the sign must be placed outside the clear zone as defined in Section 3.7 of RMS' *Road Design Guide* or behind an RMS-approved crash barrier.
- (l) Where a sign is proposed within the clear zone but behind an existing RMS-approved crash barrier, all its structures up to 5.8m in height (relative to the road level) are to comply with lateral clearances as specified by Section 6 of RMS' *Road Design Guide* with respects to dynamic deflection and working width.

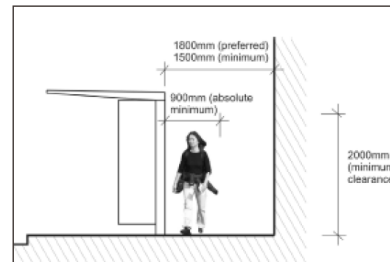
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Note: *Clear zone* means the total roadside border area, starting at the edge of the travelled way, available for safe use by errant vehicles and the display of traffic control signs. This area may consist of a shoulder, a recoverable slope, a non-recoverable slope and/or a clear run-out area. The minimum clear zone width is dependent upon the speed environment and roadside geometry.

- (m) All signs that are permitted to hang over roads or footpaths should meet wind loading requirements as specified in AS 1170.1 and AS1170.2. All vertical clearances as specified above are regarded as being the height of the sign when under maximum vertical deflection.
- (n) The location of a sign on footpaths or nature strips must meet the following criteria to ensure adequate clearance for pedestrian and wheel chair access:
 - (l) A sign must be positioned so that an absolute minimum envelope of 900 millimetres x 2000 millimetres of unobstructed clear path of travel is maintained for the entire length of the advertising structure (see figure below).


Further advice is also available from RMS in relation to sign posting in certain locations such as hospitals, regional shopping centres and tourist areas.

Note: Where applicable, these safety assessment criteria must be applied where signs are proposed along or adjacent to operational rail corridors in consideration of the potential impact on train drivers carrying out their duties.



MINIMUM UNOBSTRUCTED CLEAR PATH OF TRAVEL ON FOOTPATHS AND NATURE STRIPS.



 SIGNS WILL BE ASSESSED AGAINST SAFETY CRITERIA TO ENSURE THAT THEY DO NOT OBSCURE OR OTHERWISE ALTER THE EFFECTIVENESS OF ANY ADJACENT TRAFFIC CONTROL DEVICE.

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3.2.5 Illumination and reflectance for static billboards

An illuminated sign refers to any sign illuminated by an artificial source. Illuminated signs include conventional billboard illuminated by fluorescent and/or incandescent bulbs (Table 5).

In addition to design guidelines in relation to illumination and its effects (Section 2), the following assessment criteria are used to ensure that illumination and reflectance qualities of signs do not cause a road safety hazard.

- (a) Advertisements must comply with the following luminance rules shown below.
- (b) The maximum night-time luminance of the aforementioned signs in this section must be one-quarter of the above prescribed values.
- (c) For night time use, the sign (whether internally illuminated or lit from its exterior) must not cast a shadow on areas that were previously lit and that have a special lighting requirement e.g. pedestrian crossings.

- (d) The light sources for illuminated signs must focus solely on the sign and:
 - (i) be shielded so that glare does not extend beyond the sign; and,
 - (ii) with the exception of back-lit neon signs, have no light source visible to passing motorists with a light output greater than that of a 65W incandescent bulb.
- (e) The level of reflectance of an advertisement, and its content, is not to exceed the 'Minimum coefficients of Luminous intensity per unit area for Class 2A Material', as set out in Australian Standard AS/NZS 1906.1:2007. Flashing illuminated advertisements will not be approved.

Information in relation to street name signs that are illuminated is also available in RMS document *Management of Illuminated Street Name and Advertising Sign proposals – January 2000* (Ref TM P99/3).

TABLE 5: MAXIMUM ALLOWABLE DAYTIME LUMINANCE OF ILLUMINATED ADVERTISEMENTS (NOTE NOT DIGITAL SIGNS)

<i>Illuminated Area (sq m)</i>	<i>Zone 1</i>	<i>Zone 2 (cd/sq m)</i>	<i>Zone 3 (cd/sq m)</i>	<i>Zone 4 (cd/sq m)</i>	<i>Zone 5</i>
up to 0.5	no limit	2900	2000	1000	no limit
0.5 to 2.0		2300	1600	800	
2.0 to 5.0		2000	1200	600	
5.0 to 10.0		1500	1000	600	
over 10.0		1200	800	400	

Luminance means the objective brightness of a surface as measured by a photometer, expressed in candelas per square meter.

Zone 1 covers areas with generally very high off-street ambient lighting, e.g. display centres similar to Kings Cross, central city locations

Zone 2 covers areas with generally high off-street ambient lighting eg. some major shopping/commercial centres with a significant number of off-street illuminated advertising devices and lights.

Zone 3 covers areas with generally medium off-street ambient lighting e.g. small to medium shopping/commercial centres.

Zone 4 covers areas with generally low levels of off-street ambient lighting e.g. most rural areas, many residential areas.

Zone 5 covers areas within underground railway stations and areas fully contained within station buildings which are visible only from within the Rail Corridor.

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3.3 REVIEW OF NEW SIGNS

RMS may review the crash history of any new or modified advertising signs after a three year period to determine whether the sign has had an adverse effect on road safety. If RMS is of the opinion that a sign is a traffic hazard, RMS may direct the owner or occupier of the land on which the sign is situated or the person who erected the sign to screen, modify or remove the sign, regardless of whether or not the sign is the subject of a development consent under the Act or a consent under the *Roads Act 1993*.

Note: *Traffic hazard* is defined under the *Roads Act 1993* to mean a structure or thing that is likely:

- (a) to obscure or limit the view of the driver of a motor vehicle on a public road, or
- (b) to be mistaken for a traffic control device, or
- (c) to cause inconvenience or danger in the use of a public road, or
- (d) to be otherwise hazardous to traffic.

3.4 ROAD SAFETY GUIDELINES FOR SIGN CONTENT

SEPP 64 does not regulate the content of advertisements and signs and does not require consent for a change in content. It is recommended that advertisers follow RMS advisory guidelines with respect to sign content of advertisements to be displayed along road corridors. Note: applicants should keep in mind that under Section 104 of the *Roads Act 1993* RMS has the power to direct the owner or occupier of land on which any work or structure is situated, or the person by whom any work or structure was carried out or erected to screen, modify or remove the work or structure if, in the opinion of RMS the work or structure is a traffic hazard.

It is recommended that advertisers have regard to the following advisory guidelines (Table 6) with respect to the content of advertisements to be displayed along road corridors.

TABLE 6: RMS ROAD SAFETY ADVISORY GUIDELINES FOR SIGN CONTENT

1. Advertisements must not imitate a traffic control device such as traffic lights
2. Advertisements must not instruct drivers to perform an action such as 'Stop', 'Halt' or 'Give Way'
3. Advertisements must not invite traffic to move contrary to any traffic control device, or turn where there is fast moving traffic
4. Advertisements must not contain reflectors, which at night could be mistaken for a traffic control device
5. The permissible level of reflectance of an advertisement also applies to the content of the sign. That is, the level of reflectance is not to exceed the 'Minimum coefficients of luminous intensity per unit area for Class 2A', as set out in Australian Standard AS/NZS 1906.1:2007
6. Advertisements should not contain messages that are distractive or otherwise inconsistent with road safety
7. Advertisements should be legible. A clear font at least 150 millimetres high is advisable
8. Advertisements should not contain large areas of red display if it is to be illuminated. In wet night-time conditions it may cause confusion with traffic control signals or 'stop' or 'tail lights' of moving vehicles
9. The amount of information supplied on a sign should be minimised so that the time required to read and understand the sign's message is minimised. As a guide, each sign should be restricted to 6 units of information. The summation of units is to be calculated as follows:
 Words of up to 8 letters, inclusive = 1 unit
 Numbers up to 4 digits, inclusive = 0.5 unit
 Numbers of 5-8 digits = 1 unit
 Symbol, picture, logo or abbreviation = 0.5 unit;
10. The proposed advertising message should not spread the message across more than one adjoining sign.

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Advertising Sign Safety Assessment Section 3 TRANSPORT CORRIDOR OUTDOOR ADVERTISING AND SIGNAGE GUIDELINES					
Considerations	← Less Risk		Guide to Risk		More Risk →
	1	2	3	4	5
A. It obscures a view of an object/vehicle/pedestrian that creates a hazard	Does not create a hazard	Partly obscures a road hazard but does not hide the nature of the hazard	Partly obscures a road hazard but adequate warning provided that there may be a hazard	Partly obscures a road hazard and provides no warning that a hazard exists	Creates a road hazard
B. Sign Positioning relative to travel direction	Sign is over travel lane	Sign within sight lines & glance only appreciation	Sign requires more than glance appreciation	Motorist required to turn away from traffic ahead to view sign	Sign is parallel to direction of travel
C. It distracts a driver at a Critical time	It is not located near any decision points	It is located within 200 & 300m from a decision point	It is located within 100 & 200m from a decision point	It is located less than safe sight distance from a decision point	It is located within decision point
D. It interferes with the effectiveness and safety of a traffic control device. (e.g. traffic signs, traffic signals or other traffic control devices)	Does not interfere with the safety/ effectiveness of any traffic control device	It interferes with effectiveness and safety of a traffic control device			
E. Sign Clutter	Sign located in an Urban Environment. No Multiple signs visible along given sightline.	Sign located in an Urban Environment. Multiple signs visible along given sightline strategically spaced. Readability acceptable given speed zoning and road environment.	Sign located in a rural environment and no other advertising structure visible along sightline	Multiple signs visible along given sightline resulting multiple competing messages. Information overload.	
F. The brightness and contrast of the sign is inappropriate	The sign is unlit or retroreflective	The sign is set to match the minimum ambient light levels expected. Complies with luminance levels of policy	The sign varies its brightness to match ambient levels. Complies with luminance levels of policy	The sign does not comply with specified luminance levels of policy	
G. Electronic Variable messages signs	The sign is static sign and is not a variable message sign	The speed limit of the Rd is < 70km/h. The time to change the display is not greater than 1 second. Sign complies with policy	The sign contains scrolling messages and does not comply with all criteria set out in section 3.2.2 of policy		
H Mechanical Moving signs (E.g. Tri Vision or scrolling bus shelter signs)	The speed limit of the Rd is < 70km/h. Display remains completely static from its first appearance to the commencement of a change to another display. Sign complies with policy 3.2.3	The sign contains scrolling/moving messages and does not comply with section 3.2.3 of policy			

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APPENDIX D

POST INSTALLATION ROAD SAFETY AUDIT REPORT



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March 2019



169 Darlinghurst Road, Kings Cross
Digital Advertising Sign
Post-Installation Road Safety Check

Client // APN Outdoor
Office // NSW
Reference // 1551638000
Date // 08/02/16



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169 Darlinghurst Road, Kings Cross
 Digital Advertising Sign
 Post-Installation Road Safety Check

Issue: B 08/02/16

Client: APN Outdoor
 Reference: 1551638000
 GTA Consultants Office: NSW

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
A	22/01/16	Final	Brigette Humphrey-Robinson	Brett Maynard	Brett Maynard	Brett Maynard
B	08/02/16	Final	Brigette Humphrey-Robinson	Brett Maynard	Brett Maynard	<i>B. Maynard</i>

PSA-NSW (15/03/16 v2.3)

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1. Introduction



1.1 Background

GTA Consultants prepared a Signage Safety Assessment in December 2011 as part of the Development Application (DA) for the replacement of an existing static advertising sign with a digital LED sign located at 169 Darlinghurst Road, Kings Cross. The digital LED sign was approved in 2013 and began operation on 3 November 2013.

This letter provides a response to *Item 10 Safety Audit and Risk Analysis on the First Anniversary of the Conditions of Consent*, as provided by City of Sydney Council:

10. The applicant shall have a Safety Audit and Risk Analysis carried out by an independent RMS accredited road safety auditor acceptable to the applicant and to Sydney City Council after the sign has been in operation for a period of 12 months. Any measures recommended by the auditor to address any safety concerns must be implemented by the applicant.

Subsequent to the approval of the digital LED sign located at 169 Darlinghurst Road, Kings Cross, Draft amendments were released to the Transport Corridor Outdoor Advertising and Signage Guidelines – Assessing Development Applications under SEPP 64 (Draft Guidelines). The Draft Guidelines were released in December 2015 and are on public exhibition until 31 January 2016. More specific wording requiring the preparation of a road safety check, which has the same intent as the above Condition of Consent, has been included in the Draft Guidelines for digital signs.

It is worth noting that the Draft Guidelines indicate that this sign could operate safely with a 10 second dwell time. However, the DA conditions prescribed a 45 second dwell time. It is understood that all other operating parameters in place are consistent with the Draft Guidelines.

On the above basis, APN Outdoor has commissioned GTA Consultants to complete a road safety check to correlate with the Draft Guidelines.

1.2 Project Objectives

The objective of the road safety check is to identify risks in road safety and areas of risk that could potentially lead to crashes, while also considering the factors behind previous crashes. This report describes the findings of a road safety review conducted of the existing roads and road related areas surrounding the sign, and particularly those areas where the sign is visible, while also examining the crash history in this area.

This road safety check report is an amalgamation of two formal examinations and does not include suggested actions or recommendations, in accordance with RMS Guidelines for Road Safety Audit Practices. The two formal examinations are discussed further below.

Road Safety Review

A road safety review is a formal assessment of the existing/ proposed roads and associated areas. The aim of the road safety review is to identify road safety issues that could potentially lead to a crash. A road safety review typically includes site visits during both day and night periods, particularly during identified problematic time periods, and considers the perspective of all road users.

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A road safety review is conducted by a qualified professional or team of professionals.

Crash Investigation

A crash investigation is a formal assessment of the crash history for a particular stretch of road or intersection over a specified period of time. Crash investigations are typically used to identify trends and patterns associated with previous crashes. As such, safety issues that have previously been associated with crashes and are likely to be associated with future crashes are identified.

A crash investigation is conducted by a qualified professional or team of professionals.

1.3 Reference Material

The road safety check has been carried out in accordance with the Guidelines for Road Safety Audit Practices (RMS, 2011), in particular Part 3: Road Safety Check, which also references the following:

- o Guide to Road Safety – Part 6: Road Safety Audit, Austroads, 2009
- o Guide to Road Safety – Part 8: Treatment of Crash Locations, Austroads, 2009.

1.4 Project Team

The road safety check team comprised independent representatives from GTA Consultants with appropriate knowledge, experience and road safety audit training.

1.5 Outcomes of Signage Safety Assessment

The analysis presented in the 169 Darlinghurst Road, Signage Safety Assessment (GTA Consultants, 2011) suggested that the installation of a digital LED sign located at 169 Darlinghurst Road would not compromise road safety outcomes. It was recommended the content of the sign should change periodically at 15 second intervals to ensure drivers do not see more than one message in accordance with the *Transport Corridor Outdoor Advertising and Signage Guidelines* (although subsequently approved at 45 seconds).

It was also recommended that the *Transport Corridor Outdoor Advertising and Signage Guidelines* relating to sign content be considered further to ensure that these factors would not compromise road safety in the vicinity of any of the sign.

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2. Existing Conditions

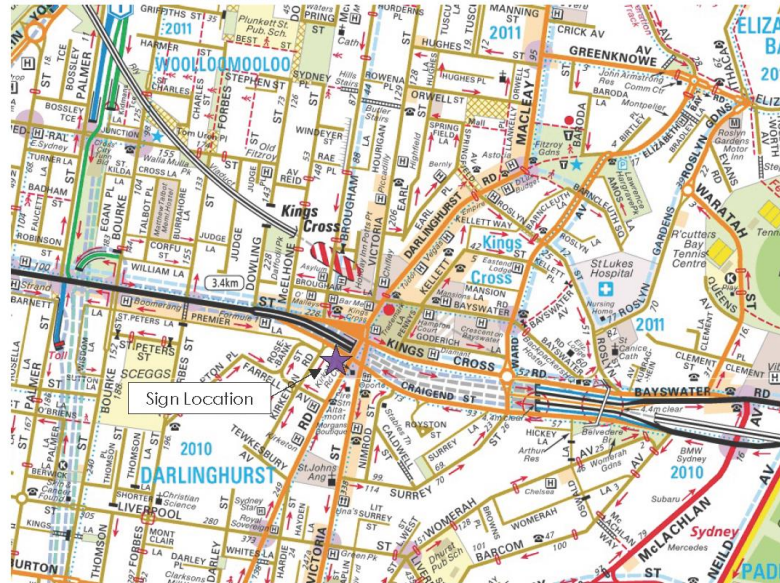
1

2.1 Location Details

The sign is located on the northern facade of the building at 169 Darlinghurst Road, situated on the south-west corner of the intersection of Darlinghurst Road, Kings Cross Road and Craigend Street. Figure 2.1 shows the subject site and surrounds, while Figure 2.2 shows the existing sign location in relation to the surrounding road environment.

The surrounding properties include a mixture of restaurants, bars and clubs, as well as residential, commercial and retail land uses.

Figure 2.1: Sign Location and Surrounds



Source: Sydway

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Figure 2.2: Digital LED Sign Location



2.2 Sign Exposure

In the context of this report, the exposure distance relates to the section of road where the sign is visible to a driver. The sign is visible from Darlinghurst Road south of Kellett Way and north of Craigend Street. A driver is most likely to read the sign while travelling on Darlinghurst Road, mid-block between Bayswater Road and William Street/ Kings Cross Road or while stationary at the associated signalised intersections.

The sign is also partially visible from the following secondary locations:

- William Street between Dowling Street and Darlinghurst Road
- Dowling Street at William Street (complete sign is visible on approach to the intersection)
- McElhone Street at William Street
- Brougham Street at William Street
- Victoria Street at Darlinghurst Road.

The primary and secondary exposure distances are shown in Figure 2.3.

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Figure 2.3: Sign Exposure



Base source: Nearmap

2.3 Road Network

Darlinghurst Road is classified as a local road and is configured with one lane in each direction and indented time restricted kerbside parking. Darlinghurst Road has a posted speed limit of 50km/h, indicative of the high pedestrian activity generated by the surrounding land uses, as well as Kings Cross Railway Station, which has access from Darlinghurst Road.

There are a number of closely spaced signalised intersections along Darlinghurst Road on approach to the sign. These include:

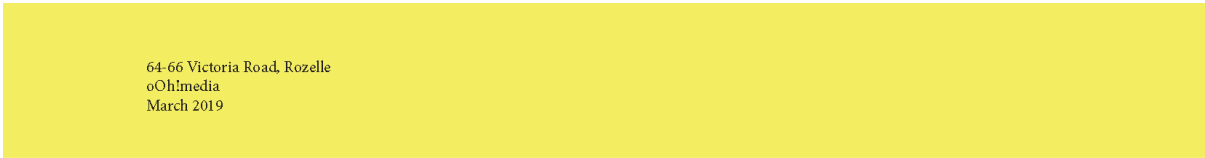
- o Darlinghurst Road/ Bayswater Road
- o Darlinghurst Road/ Kings Cross Road/ William Street
- o Darlinghurst Road/ William Street/ Craigend Street/ Victoria Street.

Darlinghurst Road is shown in Figure 2.4.

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Figure 2.4: Darlinghurst Road (looking south from Bayswater Road)





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3. Road Safety Review

2

3.1 Introduction

This road safety review has been completed with reference to the RMS Guidelines for Road Safety Audit Practices and with specific consideration for the road safety objectives set out in the 2007 Guidelines and the Draft Guidelines, which includes the following:

- Does the sign reduce the safety for any public road?
- Does the sign reduce the safety for pedestrians and cyclists?
- Does the sign reduce the safety for pedestrians, by obscuring sight lines from public roads?

In order to review the sign with respect to the above road safety objectives, the road safety assessment criteria set out in the 2007 Guidelines and the Draft Guidelines have been consolidated into a number of key road safety considerations, including

- sight distance
- clear zones
- visual assessment
- advertising content.

3.2 Risks in Road Safety

Specific details of the nature of the risks in road safety identified as part of the safety review have been outlined below, as well as a risk rating as high, medium or low. The risk ratings have been based on the risk matrix presented in Table 3.1, which has been adapted from the standard Austroads Risk Matrix.

Table 3.1: Risk Matrix

LIKELIHOOD \ SEVERITY	Improbable	Occasional	Highly Probable
Minor	Low	Low	Medium
Moderate	Low	Medium	High
Major	Medium	High	High

The terms in Table 3.1 are described below.

Likelihood:

- Highly probable: It is likely that more than one crash of this type could occur within a five year period.
- Occasional: It is likely that less than one crash of this type could occur within a five year period.
- Improbable: Less than one crash of this type could occur within a 10 year period.

Severity:

- Major: The crash is likely to result in a fatality or serious injuries.
- Moderate: The crash is likely to result in minor injuries or large scale of property damage.
- Minor: The crash is likely to result in minor property damage or many near miss crash events.

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Priority:

- o High: Very important, and needs to be addressed urgently.
- o Medium: Important, and needs to be addressed as soon as possible.
- o Low: Needs to be considered as part of regular maintenance/planning program.

3.3 Sight Distance

The definition of Sight Distance in the *Guide to Road Design* (Austroads, 2010) is the distance that must be provided to “enable drivers to perceive and react to any hazardous situation”.

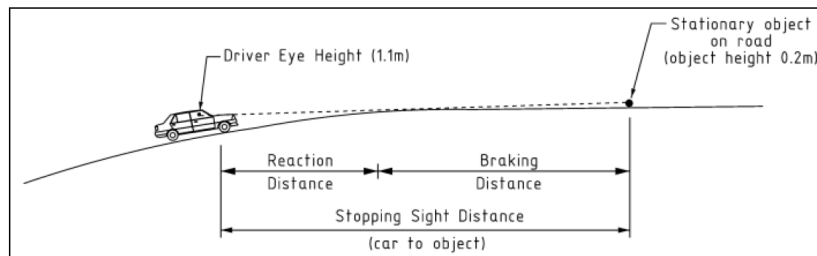
The *Guide to Road Design Part 3: Geometric Design* (Austroads, 2010) and the *Guide to Road Design Part 4A: Unsignalised and Signalised Intersections* (Austroads, 2010) set out the following relevant Sight Distance requirements:

- o Stopping Sight Distance (SSD)
- o Safe Intersection Sight Distance (SISD) for intersections
- o Approach Sight Distance (ASD) for intersections.

The above are illustrated in Figure 3.1 to Figure 3.3, indicating that the application of the Sight Distance definition requires an unobstructed line-of-sight between the road feature, object or hazard and a vehicle located at the relevant minimum Sight Distance.

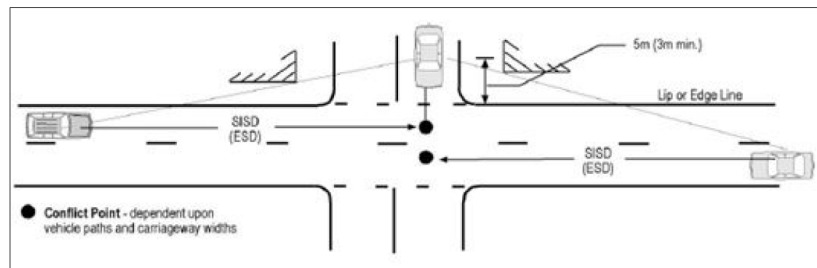
The sign is mounted on the building facade (above the third level); well above the road and adjacent footpath and therefore does not physically obstruct a driver or other road users’ view or compromise the Sight Distance requirements.

Figure 3.1: Stopping Sight Distance Criteria



Source: *Guide to Road Design Part 3: Geometric Design*, Austroads, 2010

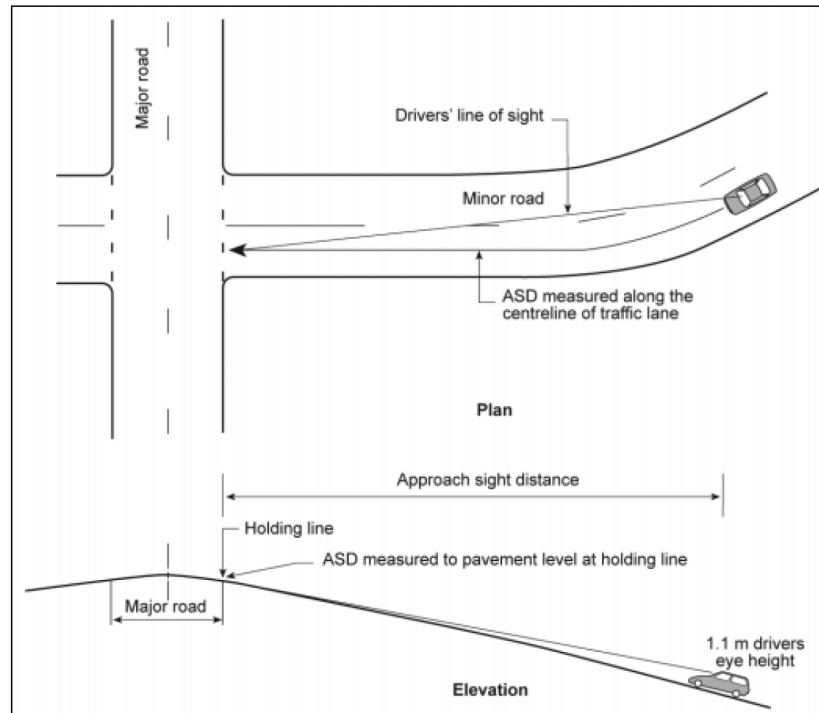
Figure 3.2: Safe Intersection Sight Distance Criteria



Source: *Guide to Road Design, Part 4A: Unsignalised and Signalised Intersections*, Austroads, 2010

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Figure 3.3: Approach Sight Distance Criteria



Source: Guide to Road Design, Part 14A: Unsignalised and Signalised Intersections, Austroads, 2010

3.4 Clear Zones

A clear zone is the total roadside border area, starting at the edge of the travel lane, which is available for safe use by errant vehicles. It is an unobstructed, relatively flat area beyond the edge of the travelled way that allows a driver to stop safely or regain control of a vehicle that leaves the carriageway.

The *Guide to Road Design Part 6: Roadside Design, Safety and Barriers* (Austroads, 2010) sets out the national clear zone distance requirements and the *Supplement to Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers* (RMS, 2009) sets out the NSW requirements. The clear zone requirements are based on the average annual daily traffic volumes (AADT) and the road's design speed.

In addition to the above, the *Guide to Road Design Part 3: Geometric Design* (Austroads, 2010) also specifies vertical clearance requirements over roadways, depending on the environment.

In accordance with the above, the William Street on-ramp, of which the sign is located above, has a speed limit of 50km/h, corresponding to a clear zone requirement of 2.5m-3.0m depending on the AADT, and a minimum vertical clearance 4.6m.

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The sign is mounted on the building facade (above the third level), well above the road and adjacent footpath and therefore does not encroach within the required clear zone or vertical clearance for the surrounding road environment.

3.5 Visual Assessment

In accordance with the 2007 Guidelines and the Draft Guidelines, the following criteria and their implications have been reviewed with respect to the visual impact of the sign on road safety:

- ability for the sign to distract road users
- ability for the sign to give incorrect information on the alignment of the road
- ability for the sign to reduce the effectiveness of other signs or traffic control devices
- ability for a driver to read the sign without looking away from the road.

3.5.1 Darlinghurst Road

The following observations were made in relation to the visibility of the sign from Darlinghurst Road, distraction potential and the road safety implications:

- The sign is elevated above the driver's direct line-of-sight for all southbound traffic on Darlinghurst Road and therefore drivers are not required to turn-away from the road to view the sign and it does not give incorrect information on the alignment of the road.
- The sign generally blends in with the surrounding road environment, noting the level of vibrant building identification signage and other street elements along Darlinghurst Road.
- The sign is static with 0.1 second transition time in accordance with the Draft Guidelines, minimising potential driver distraction from changes in displays.
- The sign's elevation above a driver's line of sight on Darlinghurst Road is such that any traffic signs remain visible to a driver. The most notable traffic signs identified along the subject section of Darlinghurst Road were a number of 'No Right Turn' signs. A driver is unlikely to miss these signs and turn right across traffic as a result of viewing the advertisements. Therefore, the associated risk in road safety is considered to be **low** (improbable and minor).
- The overhead primary signal lantern at the Darlinghurst Road/ Bayswater Road intersection is back-dropped by the sign for a brief period of approximately 40m (beyond 55m from the stop line). However, the signal lantern appeared to be significantly brighter than the sign at all times (including at night) and therefore the sign is not considered to reduce the effectiveness of the signal lanterns. Therefore, no risks in road safety were identified as a result of the sign back-dropping the signal lanterns.
- As discussed in Section 2.3, the sign is visible for drivers on approach to three signalised intersections. The sign has the potential to distract a driver from the traffic signals changing to red (with a driver also not seeing or responding to the amber display) and/or pedestrians crossing on a red pedestrian signal and not noticing an approaching vehicle.

With consideration for the maximum ASD requirements of 48m for a 50km/h speed environment (Austroads, 2010) including a 1.5s reaction time, as well as the typical distraction potential (maximum glance time) of a static digital sign (less than 2 seconds), the likelihood of a driver being required to react to the above scenarios at the minimum ASD location also being distracted in the 2 seconds immediately prior to the ASD, is highly improbable; thus resulting in a **low** safety risk. To illustrate this further, the ASD requirements are presented in Figure 3.4.

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- Given that there is typically high pedestrian activity along Darlinghurst Road and frequent mid-block crossing activity, there is also potential for a driver to be distracted by the sign while pedestrians are crossing. However, on-site observations indicate that drivers are generally alert (having driven through part or all of a busy road environment immediately prior to the sign) and are less likely to view the sign until they are stationary at one of the signalised intersections. Therefore, the associated risk in road safety is considered to be **low** (improbable and moderate).
- A significant contrast between two displays (advertisements) could increase the likelihood of a driver being distracted by the sign or increasing a driver's glance beyond the typical 2 seconds. This would increase the likelihood of the above risks in road safety.

Figure 3.4: Approach Sight Distance for the Darlinghurst Road/ Bayswater Road intersection (example)



Base source: Nearmap

3.5.2 William Street

The sign is only partially visible to drivers from William Street as a result of the acute angle from a driver's direct line-of-sight. Therefore a driver would not typically turn away from the road to view the sign for a significant period of time unless stationary at the intersection with Darlinghurst Road (due to the limited sign visibility) and therefore, no risks in road safety were identified for drivers travelling on William Street.

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3.5.3 Surrounding Streets

The sign is visible from a number of T-intersections with William Street. A driver stopped at one of these intersections is generally looking to the west (towards oncoming traffic) to identify appropriate gaps to enter the traffic stream. Given the vehicle is stationary at these locations, no risks in road safety were identified, should a driver look away from the traffic to view the sign.

The sign is visible on approach to William Street from approximately 25m north on Brougham Street. There is potential for a driver to look at the sign on approach to the intersection and associated pedestrian crossing. However, good sight lines are provided to the intersection and pedestrian crossing, ensuring that they are both visible well before the sign. Therefore, the risk of a collision as a result of a driver viewing the sign on approach to the intersection is considered to be **low** (improbable and moderate).

3.6 Advertising Content

Section 3.4 of the 2007 Guidelines and the Draft Guidelines details the advisory guidelines that advertisers should have regard to with respect to the content of advertisements to be displayed along road corridors. The aim is to ensure that sign content does not compromise road safety.

The sign content was not specifically reviewed as part of this road safety check. Notwithstanding this, based on on-site observations, the sign content was generally in accordance with the Draft Guidelines.

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4. Crash Investigation

3

GTA obtained crash data from Roads and Maritime Services (RMS) for the area surrounding the sign, including but not limited to Darlinghurst Road and William Street. The data was provided for the most recent 5 year period (January 2010 –December 2014) and broken down into pre-installation and post-installation periods as shown in Figure 4.1 and included in Appendix A.

Figure 4.1: RMS Crash Data



Basemap source: Land and Property Information

Detailed GIS analysis was completed for this dataset, specifically identifying crashes that occurred on the relevant approaches to the sign, as shown in Figure 4.2 and summarised in Table 4.1, including consideration for the total number of crashes and the number of relevant crashes.

It is noted that there have been no reported crashes on the primary approach to the digital sign since its installation in late 2013.

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Figure 4.2: Relevant Crash Data



Basemap source: Land and Property Information

Table 4.1: Crash Data Summary

	No. of Crashes	Average Crashes per Year
Total Crashes (All directions)	62	12-13
Relevant Crashes	26	5-6
% Relevant Crashes	42%	-

The crash data summary indicates that 42% of total crashes in the area surrounding the sign occurred on the relevant approaches. Of these crashes, 11 (42%) occurred late at night and early morning (9:00pm-5:00am), with a high proportion involving pedestrians.

Figure 4.2 indicates that only three of the relevant crashes occurred post-installation of the sign (3 November 2013). However, all three crashes occurred outside the exposure distance (shown in purple) on all approaches to the sign. None of these crashes involved pedestrians.

It is also worth noting that the average number of relevant crashes per year has nearly halved to 3 crashes per year. Given the high number of pedestrian crashes and particularly those which occurred late at night and/ or early morning, the decline in relevant (and total) crashes could be attributed to the closure of The Goldfish hotel/ club (corner Darlinghurst Road/ Victoria Street), implementation of 1:00am lock outs for pubs, bars and clubs across the Sydney CBD and Kings Cross area and associated strict controls and management of the responsible service of alcohol.

Based on the above, the number and type of crashes both pre-installation and post-installation of the sign is typically representative of a congested and high pedestrian environment. As such, the crash data for the area surrounding the sign does not present any indication that the digital advertising sign has had a negative impact on road safety, nor that the road environment would typically be considered unsafe. It is noted that any existing risks in road safety that are not relevant to the sign have not specifically been considered as part of this road safety check.

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5. Summary of Findings

4

The replacement of a static advertising sign with a digital LED sign located at 169 Darlinghurst Road, Kings Cross was approved in 2013. Subsequently the digital LED sign began operation on 3 November 2013.

A road safety check has been completed to identify risks in road safety and areas of risk that could potentially lead to crashes specifically relating to the digital LED sign. The key findings of the road safety check include the following:

- i The sign is mounted on the building facade well above the road and adjacent footpath and does not physically obstruct a driver or other road users' view or compromise the Sight Distance requirements.
- ii The sign does not encroach within the required clear zone or vertical clearance for the surrounding road environment.
- iii The sign is elevated above the driver's direct line-of-sight for all southbound traffic on Darlinghurst Road and therefore drivers are not required to turn-away from the road to view the sign.
- iv The sign does not give incorrect information on the alignment of the road.
- v The sign is only partially visible to drivers from William Street and would not typically be read unless the driver is stationary at the intersection with Darlinghurst Road. Therefore, no risks in road safety were identified for drivers travelling on William Street.
- vi The risk of a collision as a result of a driver viewing the sign on approach to the Brougham Street/ William Street intersection is considered to be **low**.
- vii No risks in road safety were identified as a result of the sign being partially visible from a number of priority controlled intersections in the area.
- viii The signage content observed at the time of the site visit was generally compliant with the Guidelines.
- ix The average number of crashes in the area surrounding the sign has recently reduced, which could be attributed to significant changes to the Kings Cross environment, including closures of key establishments.
- x Three crashes have occurred on the relevant approaches to the sign since its installation. However, none of these crashes were within the exposure distances on the associated approaches to the sign and none of the crashes were on Darlinghurst Road.
- xi The number and type of crashes both pre-installation and post-installation of the sign does not present any indication that the digital advertising sign has had a negative impact on road safety.

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1551 638000 // 08/02/16
Post-Installation Road Safety Check // Issue: B
169 Darlinghurst Road, Kings Cross, Digital Advertising Sign



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Appendix A

Appendix A

RMS Crash Data

1551638000 // 08/02/16
Post-Installation Road Safety Check // Issue: B
169 Darlinghurst Road, Kings Cross, Digital Advertising Sign



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Summary Crash Report



# Crash Type	Contributing Factor	Crash Movement	CRASHES	CASUALTIES
Car Crash 1 50.0%	Speeding 0 0.0%	Intersection, adjacent approaches 0 0.0%	Fatal 0 0.0%	Killed 0 0.0%
Light Truck Crash 1 50.0%	Fatigue 0 0.0%	Head-on (not overtaking) 0 0.0%	Serious inj. 1 50.0%	Seriously inj. 1 50.0%
Rigid Truck Crash 0 0.0%		Opposing vehicles; turning 0 0.0%	Moderate inj. 0 0.0%	Moderately inj. 0 0.0%
Articulated Truck Crash 0 0.0%		U-turn 0 0.0%	Minor/Other inj. 1 50.0%	Minor/Other inj. 1 50.0%
Heavy Truck Crash (0) 0.0%	Weather	Rear end 0 0.0%	Uncategorised inj. 0 0.0%	Uncategorised inj. 0 0.0%
Bus Crash 0 0.0%	Fine 2 100.0%	Lane change 0 0.0%	Non-casualty 0 0.0%	Unrestrained 0 0.0%
*Heavy Vehicle Crash (0) 0.0%	Rain 0 0.0%	Parallel lanes; turning 0 0.0%	Self Reported Crash 0 0%	* Belt fitted but not worn, No restraint used to position OR No helmet worn
Emergency Vehicle Crash 0 0.0%	Overcast 0 0.0%	Vehicle leaving driveway 0 0.0%	Time Group	Crashes
Motorcycle Crash 0 0.0%	Fog or mist 0 0.0%	Overtaking; same direction 0 0.0%	00:01 - 02:59 0 0.0% 12.5%	Casualties
Pedal Cycle Crash 0 0.0%	Other 0 0.0%	Overlapped vehicle 0 0.0%	03:00 - 04:59 0 0.0% 8.3%	2 2012 2
Pedestrian Crash 2 100.0%	Road Surface Condition	Hit railway train 0 0.0%	05:00 - 05:59 0 0.0% 4.2%	
*Light or Artic. Truck **Heavy Truck or Heavy Bus	Wet 0 0.0%	Hit pedestrian 1 50.0%	06:00 - 06:59 0 0.0% 4.2%	
# These categories are NOT mutually exclusive	Dry 2 100.0%	Permanent obstruction on road 0 0.0%	07:00 - 07:59 1 50.0% 4.2%	
Location Type	Show or ice 0 0.0%	Hit animal 0 0.0%	08:00 - 08:59 0 0.0% 4.2%	
* Intersection 0 0.0%	Natural Lighting	Off road, on straight 0 0.0%	09:00 - 09:59 0 0.0% 4.2%	
** Non Intersection 2 100.0%	Dawn 0 0.0%	Off road on straight, hit object 0 0.0%	10:00 - 10:59 0 0.0% 4.2%	
* Up to 10 metres from an intersection	Daylight 2 100.0%	Out of control on straight 0 0.0%	11:00 - 11:59 0 0.0% 4.2%	
Collision Type	Dusk 0 0.0%	Off road, on curve 0 0.0%	12:00 - 12:59 0 0.0% 4.2%	
Single Vehicle 0 0.0%	Darkness 0 0.0%	Off road on curve, hit object 0 0.0%	13:00 - 13:59 0 0.0% 4.2%	
Multi Vehicle 2 100.0%		Out of control on curve 0 0.0%	14:00 - 14:59 0 0.0% 4.2%	
Road Classification	Speed Limit	Other crash type 1 50.0%	15:00 - 15:59 0 0.0% 4.2%	
Freeway/Motorway 0 0.0%	40 km/h or less 1 50.0%	80 km/h zone 0 0.0%	16:00 - 16:59 1 50.0% 4.2%	
State Highway 0 0.0%	60 km/h zone 1 50.0%	90 km/h zone 0 0.0%	17:00 - 17:59 0 0.0% 4.2%	
Other Classified Road 0 0.0%	80 km/h zone 0 0.0%	100 km/h zone 0 0.0%	18:00 - 18:59 0 0.0% 4.2%	
Unclassified Road 2 100.0%	100 km/h zone 0 0.0%	110 km/h zone 0 0.0%	19:00 - 19:59 0 0.0% 4.2%	
Week	Day of the Week	Street Lighting ON/OFF	20:00 - 21:59 0 0.0% 8.3%	
-:07:30-09:30 or 14:30-17:00 on school days	Monday 1 50.0%	% of Dark	22:00 - 24:00 0 0.0% 8.3%	
~:40km/h or less 1 50.0%	Tuesday 0 0.0%	0 of 0 In Dark 0.0%		
~:School Travel Time Involvement 2 100.0%	Wednesday 0 0.0%			
Day of the Week	Thursday 1 50.0%			
Monday 1 50.0%	Friday 0 0.0%			
Tuesday 0 0.0%	Saturday 1 50.0%			
Wednesday 0 0.0%	Sunday 0 0.0%			
Thursday 1 50.0%	WEEKDAY 2 100.0%			
Friday 0 0.0%				
Saturday 1 50.0%				
Sunday 0 0.0%				
WEEKDAY 2 100.0%				
Holiday Periods				
New Year 0 0.0%	Easter 0 0.0%	Queen's BD 0 0.0%	Christmas 0 0.0%	Easter SH 0 0.0%
Aust. Day 0 0.0%	Anzac Day 0 0.0%	Labour Day 0 0.0%	January SH 0 0.0%	June/July SH 0 0.0%

Crashid dataset 6659 - Reported crashes on Brougham St between William St & Rae Pl - 1 Jan 10 to 31 Dec 14
 Note: Crash self reporting, including self reported injuries began in Oct 2014. Trends from 2014 are expected to vary from previous years. More unknowns are expected in self reported data.
 Reporting years 2014 onwards contain uncategorised injury crashes.
 Percentages are percentages of all crashes. Unknown values for each category are not shown on this report.

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Summary Crash Report



# Crash Type		Contributing Factors		Crash Movement		CRASHES 37		CASUALTIES 24	
Car Crash	20 54.1%	Speeding	1 2.7%	Intersection, adjacent approaches	1 2.7%	Fatal	0 0.0%	Killed	0 0.0%
Light Truck Crash	3 8.1%	Fatigue	0 0.0%	Head-on (not overtaking)	0 0.0%	Serious inj.	11 29.7%	Seriously inj.	13 38.2%
Rigid Truck Crash	1 2.7%	Weather		Opposing vehicles; turning	2 5.4%	Moderate inj.	15 40.5%	Moderately inj.	17 50.0%
Articulated Truck Crash	0 0.0%	Fine	28 75.7%	U-turn	1 2.7%	Minor/Other inj.	4 10.8%	Minor/Other inj.	4 11.8%
Heavy Truck Crash	(1) 2.7%	Rain	5 13.5%	Rear end	2 5.4%	Uncategorised inj.	0 0.0%	Uncategorised inj.	0 0.0%
Bus Crash	0 0.0%	Overcast	2 5.4%	Lane change	0 0.0%	Non-casualty	7 18.9%	Unrestricted	3 9.8%
Heavy Vehicle Crash	(1) 2.7%	Fog or mist	0 0.0%	Parallel lanes; turning	0 0.0%	Self Reported Crash	0 0%	* Belt tied but not worn, No restraint used to position OR No helmet worn	
Emergency Vehicle Crash	1 2.7%	Other	1 2.7%	Vehicle leaving driveway	0 0.0%	Time Group			
Motorcycle Crash	6 16.2%	Road Surface Condition		Overtaking; same direction	0 0.0%	00:01 - 02:59	4 10.8%	Crashes	Casualties
Pedal Cycle Crash	3 8.1%	Wet	8 21.6%	Hit parked vehicle	0 0.0%	03:00 - 04:59	4 10.8%	1	2014
Pedestrian Crash	25 67.6%	Dry	29 78.4%	Hit railway train	0 0.0%	05:00 - 05:59	2 5.4%	8	2012
		Show or ice	0 0.0%	Hit pedestrian	20 54.1%	06:00 - 06:59	1 2.7%	9	2011
Location Type		Natural Lighting		Permanent obstruction on road		07:00 - 07:59	3 8.1%	13	2010
*Intersection	21 56.9%	Dawn	2 5.4%	Hit animal	0 0.0%	08:00 - 08:59	1 2.7%	Week	
Non intersection	16 43.2%	Daylight	16 43.2%	Off road, on straight	0 0.0%	09:00 - 09:59	2 5.4%	A	6 16.2%
Collision Type		Darkness		Off road, on straight, hit object		10:00 - 10:59	0 0.0%	B	5 13.5%
Single Vehicle	2 5.4%	Dusk	3 8.1%	Out of control on straight	1 2.7%	11:00 - 11:59	1 2.7%	C	3 8.1%
Multi Vehicle	35 94.6%	Darkness	16 43.2%	Off road, on curve	0 0.0%	12:00 - 12:59	0 0.0%	D	2 5.4%
Road Classification		Speed Limit		Off road on curve, hit object		13:00 - 13:59	1 2.7%	E	1 2.7%
Freeway/Motorway	0 0.0%	40 km/h or less	2 5.4%	Other crash type	9 24.3%	14:00 - 14:59	2 5.4%	F	4 10.8%
State Highway	0 0.0%	60 km/h zone	32 86.5%			15:00 - 15:59	2 5.4%	G	6 16.2%
Other Classified Road	0 0.0%	80 km/h zone	2 5.4%			16:00 - 16:59	1 2.7%	H	1 2.7%
Unclassified Road	37 100.0%	100 km/h zone	0 0.0%			17:00 - 17:59	2 5.4%	I	4 10.8%
		70 km/h zone	0 0.0%			18:00 - 18:59	3 8.1%	J	5 13.5%
		~40km/h or less	0 0.0%	~ School Travel Time Involvement	7 18.9%	19:00 - 19:59	2 5.4%		
		Day of the Week				20:00 - 21:59	2 5.4%		
Monday	4 10.8%	Tuesday	6 16.2%			22:00 - 24:00	3 8.1%		
Tuesday	6 16.2%	Wednesday	2 5.4%			Street Lighting OFF/IN	% of Dark		
Wednesday	2 5.4%	Thursday	4 10.8%			0	of	16	in Dark
Thursday	4 10.8%	Friday	8 21.6%						
Friday	8 21.6%	Saturday	6 16.2%						
Saturday	6 16.2%	Sunday	7 18.9%						
Sunday	7 18.9%	WEEKDAY	24 64.9%						
WEEKDAY	24 64.9%	WEEKEND	13 35.1%						
WEEKEND	13 35.1%								
		*Holiday Periods							
New Year	0 0.0%	Easter	1 2.7%	Queen's BD	0 0.0%	Christmas	0 0.0%	Easter SH	3 8.1%
Aust. Day	0 0.0%	Anzac Day	0 0.0%	Labour Day	0 0.0%	January SH	3 8.1%	June/July SH	1 2.7%
								September SH	1 2.7%
								December SH	2 5.4%

Crashid dataset 6659 - Reported crashes on Darlinghurst Rd between Rozlyn St & Craigend St - 1 Jan 10 to 31 Dec 14
 Note: Crash self reporting, including self reported injuries began in Oct 2014. Trends from 2014 are expected to vary from previous years. More unknowns are expected in self reported data.
 Reporting years 2014 onwards contain uncategorised injury crashes.
 Percentages are percentages of all crashes. Unknown values for each category are not shown on this report.

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Summary Crash Report



# Crash Type	Contributing Factors	Crash Movement	CRASHES	CASUALTIES
Car Crash 1 100.0%	Speeding 0 0.0%	Intersection, adjacent approaches 1 100.0%	Fatal 0 0.0%	Killed 0 0.0%
Light Truck Crash 1 100.0%	Fatigue 0 0.0%	Head-on (not overtaking) 0 0.0%	Serious inj. 0 0.0%	Seriously inj. 0 0.0%
Rigid Truck Crash 0 0.0%		Opposing vehicles; turning 0 0.0%	Moderate inj. 0 0.0%	Moderately inj. 0 0.0%
Articulated Truck Crash 0 0.0%		U-turn 0 0.0%	Minor/Other inj. 0 0.0%	Minor/Other inj. 0 0.0%
Heavy Truck Crash (0) 0.0%	Weather	Rear end 0 0.0%	Uncategorised inj. 0 0.0%	Uncategorised inj. 0 0.0%
Bus Crash 0 0.0%	Fine 1 100.0%	Lane change 0 0.0%	Non-casualty 1 100.0%	Unrestrained 0 0.0%
Heavy Vehicle Crash (0) 0.0%	Rain 0 0.0%	Parallel lanes; turning 0 0.0%	Self Reported Crash 0 0%	* Belt tied but not worn, No restraint used to position OR No helmet worn
Emergency Vehicle Crash 0 0.0%	Overcast 0 0.0%	Vehicle leaving driveway 0 0.0%		
Motorcycle Crash 0 0.0%	Fog or mist 0 0.0%	Overtaking; same direction 0 0.0%	Time Group	% of Day
Pedal Cycle Crash 0 0.0%	Other 0 0.0%	Hit parked vehicle 0 0.0%	00:01 - 02:59	0 0.0% 12.5%
Pedestrian Crash 0 0.0%	Road Surface Condition	Hit railway train 0 0.0%	03:00 - 04:59	0 0.0% 8.3%
	Wet 0 0.0%	Hit pedestrian 0 0.0%	05:00 - 05:59	0 0.0% 4.2%
	Dry 1 100.0%	Hit animal 0 0.0%	06:00 - 06:59	0 0.0% 4.2%
	Show or ice 0 0.0%	Off road, on straight 0 0.0%	07:00 - 07:59	0 0.0% 4.2%
	Natural Lighting	Off road on straight, hit object 0 0.0%	08:00 - 08:59	1 100.0% 4.2%
	Dawn 0 0.0%	Out of control on straight 0 0.0%	09:00 - 09:59	0 0.0% 4.2%
	Daylight 1 100.0%	Off road, on curve 0 0.0%	10:00 - 10:59	0 0.0% 4.2%
	Dusk 0 0.0%	Off road on curve, hit object 0 0.0%	11:00 - 11:59	0 0.0% 4.2%
	Darkness 0 0.0%	Out of control on curve 0 0.0%	12:00 - 12:59	0 0.0% 4.2%
	Speed Limit	Other crash type 0 0.0%	13:00 - 13:59	0 0.0% 4.2%
	40 km/h or less 1 100.0%		14:00 - 14:59	0 0.0% 4.2%
	60 km/h zone 0 0.0%		15:00 - 15:59	0 0.0% 4.2%
	80 km/h zone 0 0.0%		16:00 - 16:59	0 0.0% 4.2%
	100 km/h zone 0 0.0%		17:00 - 17:59	0 0.0% 4.2%
	110 km/h zone 0 0.0%		18:00 - 18:59	0 0.0% 4.2%
	70 km/h zone 0 0.0%		19:00 - 19:59	0 0.0% 4.2%
	School Travel Time Involvement		20:00 - 21:59	0 0.0% 8.3%
	~07:30-09:30 or 14:30-17:00 on school days ~40km/h or less 0 0.0%		22:00 - 24:00	0 0.0% 8.3%
	Day of the Week		Street Lighting ON/OFF	% of Dark
Monday 0 0.0%	Wednesday 0 0.0%	Friday 0 0.0%	Sunday 1 100.0%	WEEKEND 1 100.0%
Tuesday 0 0.0%	Thursday 0 0.0%	Saturday 0 0.0%	WEEKDAY 0 0.0%	0 of 0 in Dark 0.0%
	Holiday Periods			
New Year 0 0.0%	Easter 0 0.0%	Queen's BD 0 0.0%	Christmas 0 0.0%	Easter SH 0 0.0%
Aust. Day 0 0.0%	Anzac Day 0 0.0%	Labour Day 0 0.0%	January SH 0 0.0%	June/July SH 0 0.0%
				Sep/Oct. SH 0 0.0%
				December SH 0 0.0%

Crash dataset 6659 - Reported crashes on McEhane St between William St & Bougham Ln - 1 Jan 10 to 31 Dec 14
 Note: Crash self reporting, including self reported injuries began in Oct 2014. Trends from 2014 are expected to vary from previous years. More unknowns are expected in self reported data.
 Reporting years 2014 onwards contain uncategorised injury crashes.
 Percentages are percentages of all crashes. Unknown values for each category are not shown on this report.

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Summary Crash Report



# Crash Type	Contributing Factors	Crash Movement	CRASHES	CASUALTIES
Car Crash 1 50.0%	Speeding 0 0.0%	Intersection, adjacent approaches 0 0.0%	Fatal 0 0.0%	Killed 0 0.0%
Light Truck Crash 0 0.0%	Fatigue 0 0.0%	Head-on (not overtaking) 0 0.0%	Serious inj. 1 50.0%	Seriously inj. 1 100.0%
Rigid Truck Crash 0 0.0%		Opposing vehicles; turning 0 0.0%	Moderate inj. 0 0.0%	Moderately inj. 0 0.0%
Articulated Truck Crash 0 0.0%		U-turn 0 0.0%	Minor/Other inj. 0 0.0%	Minor/Other inj. 0 0.0%
Heavy Truck Crash (0) 0.0%	Weather	Rear end 0 0.0%	Uncategorised inj. 0 0.0%	Uncategorised inj. 0 0.0%
Bus Crash 0 0.0%	Fine 1 50.0%	Lane change 0 0.0%	Non-casualty 1 50.0%	Unrestrained 0 0.0%
Heavy Vehicle Crash (0) 0.0%	Rain 1 50.0%	Parallel lanes; turning 0 0.0%		
Emergency Vehicle Crash 0 0.0%	Overcast 0 0.0%	Vehicle leaving driveway 0 0.0%	Self Reported Crash 0 0%	* Belt tied but not worn, No restraint used to position OR No helmet worn
Motorcycle Crash 1 50.0%	Fog or mist 0 0.0%	Overtaking; same direction 0 0.0%	Time Group	Crashes
Pedal Cycle Crash 0 0.0%	Other 0 0.0%	Hit parked vehicle 0 0.0%	00:01 - 02:59 0 0.0% 12.5%	Casualties
Pedestrian Crash 0 0.0%	Road Surface Condition	Hit railway train 0 0.0%	03:00 - 04:59 0 0.0% 8.3%	1 2013 1
	Wet 1 50.0%	Hit pedestrian 0 0.0%	05:00 - 05:59 0 0.0% 4.2%	
	Dry 1 50.0%	Permanent obstruction on road 0 0.0%	06:00 - 06:59 1 50.0% 4.2%	
	Show or ice 0 0.0%	Hit animal 0 0.0%	07:00 - 07:59 0 0.0% 4.2%	
	Natural Lighting	Off road, on straight 0 0.0%	08:00 - 08:59 0 0.0% 4.2%	
	Dawn 0 0.0%	Off road on straight, hit object 0 0.0%	09:00 - 09:59 0 0.0% 4.2%	
	Daylight 2 100.0%	Out of control on straight 1 50.0%	10:00 - 10:59 0 0.0% 4.2%	
	Dusk 0 0.0%	Off road, on curve 0 0.0%	11:00 - 11:59 0 0.0% 4.2%	
	Darkness 0 0.0%	Off road on curve, hit object 0 0.0%	12:00 - 12:59 0 0.0% 4.2%	
	Speed Limit	Out of control on curve 0 0.0%	13:00 - 13:59 1 50.0% 4.2%	
	40 km/h or less 0 0.0%	Other crash type 1 50.0%	14:00 - 14:59 0 0.0% 4.2%	
	60 km/h zone 2 100.0%		15:00 - 15:59 0 0.0% 4.2%	
	80 km/h zone 0 0.0%		16:00 - 16:59 0 0.0% 4.2%	
	100 km/h zone 0 0.0%		17:00 - 17:59 0 0.0% 4.2%	
	110 km/h zone 0 0.0%		18:00 - 18:59 0 0.0% 4.2%	
	70 km/h zone 0 0.0%		19:00 - 19:59 0 0.0% 4.2%	
	~40km/h or less 0 0.0%		20:00 - 21:59 0 0.0% 8.3%	
	~40km/h or less 0 0.0%		22:00 - 24:00 0 0.0% 8.3%	
	Day of the Week		Street Lighting ON/OFF	% of Dark
Monday 0 0.0%	Monday 0 0.0%		0 of 0	0.0%
Tuesday 0 0.0%	Tuesday 0 0.0%			
Wednesday 0 0.0%	Wednesday 0 0.0%			
Thursday 0 0.0%	Thursday 0 0.0%			
Friday 0 0.0%	Friday 0 0.0%			
Saturday 0 0.0%	Saturday 0 0.0%			
Sunday 0 0.0%	Sunday 0 0.0%			
WEEKEND 2 100.0%	WEEKEND 0 0.0%			
Holiday Periods				
New Year 0 0.0%	Easter 0 0.0%	Queen's BD 0 0.0%	Christmas 0 0.0%	Easter SH 0 0.0%
Aust. Day 0 0.0%	Anzac Day 0 0.0%	Labour Day 0 0.0%	January SH 0 0.0%	June/July SH 0 0.0%
				Sep/Oct. SH 0 0.0%
				December SH 0 0.0%

Crashid dataset 6659 - Reported crashes on Victoria St & Brougham Ln between Darlinghurst Pk & 50m north & west - 1 Jan 10 to 31 Dec 14
 Note: Crash self-reporting, including self-reported injuries began in Oct 2014. Trends from 2014 are expected to vary from previous years. More unknowns are expected in self-reported data.
 Reporting years 2014 onwards contain uncategorised injury crashes.
 Percentages are percentages of all crashes. Unknown values for each category are not shown on this report.

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Summary Crash Report



# Crash Type		Contributing Factors		Crash Movement		CRASHES		CASUALTIES	
Car Crash	14 77.8%	Speeding	0 0.0%	Intersection, adjacent approaches	1 5.6%	Fatal	0 0.0%	Killed	0 0.0%
Light Truck Crash	2 11.1%	Fatigue	0 0.0%	Head-on (not overtaking)	0 0.0%	Serious inj.	4 22.2%	Seriously inj.	4 20.0%
Rigid Truck Crash	0 0.0%			Opposing vehicles; turning	0 0.0%	Moderate inj.	1 5.6%	Moderately inj.	1 5.0%
Articulated Truck Crash	0 0.0%	Weather		U-turn	0 0.0%	Minor/Other inj.	7 38.9%	Minor/Other inj.	12 60.0%
Heavy Truck Crash	0 0.0%	Fine	14 77.8%	Rear end	6 33.3%	Uncategorised inj.	2 11.1%	Uncategorised inj.	3 15.0%
Bus Crash	0 0.0%	Rain	1 5.6%	Lane change	2 11.1%	Non-casualty	4 22.2%	Unrestrained	1 5.0%
Heavy Vehicle Crash	0 0.0%	Overcast	3 16.7%	Parallel lanes; turning	2 11.1%	Self Reported Crash	1 5.6%	* Belt tied but not worn, No restraint used to position OR No helmet worn	
Motorcycle Crash	4 22.2%	Fog or mist	0 0.0%	Vehicle leaving driveway	0 0.0%	Time Group	% of Day	Crashes	Casualties
Pedal Cycle Crash	1 5.6%	Other	0 0.0%	Overtaking; same direction	0 0.0%	00:01 - 02:59	2 11.1% 12.5%	3	2014 3
Pedestrian Crash	5 27.8%	Road Surface Condition		Hit parked vehicle	0 0.0%	03:00 - 04:59	1 5.6% 8.3%	3	2013 4
		Wet	2 11.1%	Hit railway train	0 0.0%	05:00 - 05:59	0 0.0% 4.2%	3	2012 3
		Dry	15 83.3%	Hit pedestrian	4 22.2%	06:00 - 06:59	0 0.0% 4.2%	6	2011 8
		Snow or ice	1 5.6%	Permanent obstruction on road	0 0.0%	07:00 - 07:59	1 5.6% 4.2%	3	2010 2
		Natural Lighting		Hit animal	1 5.6%	08:00 - 08:59	1 5.6% 4.2%		
		Dawn	0 0.0%	Off road, on straight	0 0.0%	09:00 - 09:59	2 11.1% 4.2%		
		Daylight	10 55.6%	Off road on straight, hit object	1 5.6%	10:00 - 10:59	1 5.6% 4.2%		
		Dusk	0 0.0%	Out of control on straight	0 0.0%	11:00 - 11:59	1 5.6% 4.2%		
		Darkness	8 44.4%	Off road, on curve	0 0.0%	12:00 - 12:59	0 0.0% 4.2%		
		Speed Limit		Off road on curve, hit object	0 0.0%	13:00 - 13:59	0 0.0% 4.2%		
		40 km/h or less	0 0.0%	Other crash type	1 5.6%	14:00 - 14:59	3 16.7% 4.2%		
		60 km/h zone	7 38.9%			15:00 - 15:59	1 5.6% 4.2%		
		80 km/h zone	9 50.0%			16:00 - 16:59	0 0.0% 4.2%		
		100 km/h zone	0 0.0%			17:00 - 17:59	0 0.0% 4.2%		
		110 km/h zone	0 0.0%			18:00 - 18:59	1 5.6% 4.2%		
		70 km/h zone	0 0.0%			19:00 - 19:59	1 5.6% 4.2%		
		School Travel Time Involvement				20:00 - 21:59	1 5.6% 8.3%		
		~07:30-09:30 or 14:30-17:00 on school days	~40km/h or less	0 0.0%	4 22.2%	22:00 - 24:00	2 11.1% 8.3%		
		Day of the Week				Street Lighting OFF/ON	% of Dark		
		Monday	2 11.1%	Wednesday	0 0.0%	Friday	4 22.2%	Sunday	2 11.1%
		Tuesday	5 27.8%	Thursday	3 16.7%	Saturday	2 11.1%	WEEKDAY	14 77.8%
		Holiday Periods							
		New Year	0 0.0%	Easter	1 5.6%	Queen's BD	0 0.0%	Christmas	1 5.6%
		Aust. Day	0 0.0%	Anzac Day	0 0.0%	Labour Day	0 0.0%	January SH	1 5.6%
								Easter SH	2 11.1%
								June/Oct. SH	0 0.0%
								September SH	1 5.6%
								December SH	1 5.6%

Crashid dataset 6659 - Reported crashes on William St between Forbes St & Darlinghurst Rd - 1 Jan 10 to 31 Dec 14
 Note: Crash self reporting, including self reported injuries began in Oct 2014. Trends from 2014 are expected to vary from previous years. More unknowns are expected in self reported data.
 Reporting years 2014 onwards contain uncategorised injury crashes.
 Percentages are percentages of all crashes. Unknown values for each category are not shown on this report.

Rep ID: REG01 Office: Sydney User ID: hornsbyb Page 1 of 1 Generated: 11/1/2015 11:22



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 March 2019

<p>Melbourne A Level 25, 55 Collins Street PO Box 24055 MELBOURNE VIC 3000 P +613 9851 9600 E melbourne@gja.com.au</p>	<p>Brisbane A Level 4, 283 Elizabeth Street BRISBANE QLD 4000 GPO Box 115 BRISBANE QLD 4001 P +617 3113 5000 E brisbane@gja.com.au</p>	<p>Adelaide A Suite 4, Level 1, 136 The Parade PO Box 3421 NORWOOD SA 5067 P +618 8334 3600 E adelaide@gja.com.au</p>	<p>Townsville A Level 1, 253 Vurt Street PO Box 1844 TOWNSVILLE QLD 4810 P +617 4722 2765 E townsville@gja.com.au</p>
<p>Sydney A Level 6, 15 Help Street CHATSWOOD NSW 2067 PO Box 6264 WEST CHATSWOOD NSW 1516 P +612 9446 1900 E sydney@gja.com.au</p>	<p>Canberra A Tower A, Level 5, 7 London Circuit Canberra ACT 2600 P +612 6243 4826 E canberra@gja.com.au</p>	<p>Gold Coast A Level 9, Corporate Centre 2 Box 37, 1 Corporate Court BUNDALL QLD 4217 P +617 5510 4800 P +617 5510 4914 E goldcoast@gja.com.au</p>	<p>Perth A Level 27, 44 St Georges Terrace PERTH WA 6000 P +618 6361 4634 E perth@gja.com.au</p>

www.gja.com.au

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 March 2019



20 February 2018

Our Reference: SYD18/00171
 Council Ref: M/2017/250

The General Manager
 Inner West Council
 PO Box 14
 PETERSHAM NSW 2049

Attention: Jamie Erken (Development Assessment Manager)

Dear Mr. Erken,

**PROPOSED DIGITAL CONVERSION OF ADVERTISING SIGN
 64-66 VICTORIA ROAD, ROZELLE NSW 2039**

Reference is made to Council's letter dated 22 January 2018, regarding the abovementioned application which was referred to the Roads and Maritime Services (Roads and Maritime) for concurrence in accordance with *State Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64)*.

Roads & Maritime Services has no approved proposal that requires any part of the subject property for road purposes.

Therefore there are no objections to the development proposal on property grounds provided all buildings and structures, together with any improvements integral to the future use of the site are wholly within the freehold property (unlimited in height or depth), along the Victoria Road boundary.

Roads and Maritime has reviewed the proposed development and would provide concurrence subject to Council's approval and the following being included in any conditions of consent:

1. That the colours red, green, orange, or yellow are not to be displayed, as the location in relation to the Gordon Street and Evans Street traffic lanterns may increase the risk that a vehicle may not stop at a red light. This may lead to an increase in vehicle collisions, including crashes involving pedestrians
2. At night, the brightness must be dimmed, particularly for any image displaying the colour white
3. Each advertisement shall be displayed in a completely static manner, without any motion or flash, for the approved dwell time of 24 hours.

Roads and Maritime Services

27-31 Argyle Street, Parramatta NSW 2150 |
 PO BOX 973 Parramatta NSW 2150 |

www.rms.nsw.gov.au | 13 22 13



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4. The display change shall occur between 3:00am and 4:00am:
 - i. Notwithstanding Condition 3 and 4, the advertising sign is permitted to operate with a minimum dwell time of 10 seconds for a trial period of 18 continuous months.
 - ii. Within 4 weeks of the trial period commencing, the Applicant shall provide Roads and Maritime with a written notice of the date upon which the trial period commenced.
 - iii. During the trial period, and any period thereafter during which the dwell time operates at a duration of less than 24 hours as provided in Condition 3, the Applicant must comply with all other conditions, and the following.
 - a. message sequencing designed to make a driver anticipate the next message is prohibited;
 - b. the amount of text and information supplied on a sign should be kept to a minimum, for example no more than a driver can read at a short glance;
 - c. each sign should be restricted to 6 units of information calculated as follows:
Words of up to 8 letters, inclusive = 1 unit
Numbers up to 4 digits, inclusive = 0.5 unit
Numbers of 5-8 digits = 1 unit
Symbol, picture, logo or abbreviation= 0.5 unit; and
 - d. all advertisements displayed must be in accordance with the RTA's Road Safety Advisory Guidelines for Sign Content, within Table 5 of the Department of Planning and Environment's Transport Corridor Outdoor Advertising and Signage Guidelines, dated July 2007 and as amended.
 - e. Advertisements displayed on the LED advertising screen must not display content that is overly distracting such as the use of sexualised images or text, or images that are not consistent with a General classification under the National Classification Scheme.
 - f. An electronic log of the sign's activity must be maintained by the operator for the duration of the development consent and be available to the consent authority and/or Roads and Maritime to allow a review of the sign's activity for any reason, including where a complaint has been made.
 - iv. Not less than 4 weeks before the conclusion of the trial period, the Applicant may seek Roads and Maritime's written satisfaction to continue to operate the advertising sign with the 10 second dwell time and the conditions specified in 4(iii)(a)-(f) above.
 - v. When seeking Roads and Maritime satisfaction in Condition 4(iv), the Applicant must provide to RMS a road safety audit report which considers the effects of the placement and operation of the sign during the trial period on road safety. The report must:
 - a. be prepared in accordance with Part 3 of the RMS Guidelines for Road Safety Audit Practices;
 - b. be prepared by an independent RMS accredited road safety auditor; and
 - c. assess the operation of the advertising sign during the Trial Period for a continual period of at least 12 months.
 - vi. If Roads and Maritime:
 - a. issues its written satisfaction in accordance with Condition 4(iv), the Applicant is to notify the Council of the Roads and Maritime's written satisfaction and may continue to operate the advertising sign with a dwell time of 10 seconds for the unexpired duration of this consent;

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- b. indicates in writing that it refuses to issue its written satisfaction in accordance with Condition 4(iv), the operation of the advertising sign must revert to the requirements of Conditions 3 and 4 of this consent.
- c. indicates in writing that it refuses to issue a written satisfaction because of recommendations made in the Report for conditions or changes that address any road safety concerns, the Applicant may lodge a modification application under section 96 of the *Environmental Planning and Assessment Act 1979* for the operation of the sign in accordance with those recommendations and during the period from receipt of the RMS refusal in writing in accordance with this paragraph until the approval of such modification, if any, the operation of the advertising sign must revert to the requirements of Conditions 3 and 4 of this consent;
- vii. In considering whether or not to grant written satisfaction, Roads and Maritime will take into consideration any information provided by the Applicant regarding the operation of the advertising sign during the trial period, as well as the relevant Adopted Signage Guidelines and any other matter considered relevant by Roads and Maritime, including any complaints received and changes in circumstances which has an impact on the operation of the road environment.
- viii. In the event that the Applicant lodges the request in accordance with clause 4(iv) prior to 4 weeks from the Trial Period concluding, then notwithstanding clause 4(i) the Applicant can continue to operate the sign beyond the end of the Trial Period and until it obtains RMS's response in writing in accordance with Condition 4(vi).
- 5. The images displayed must not be capable of being mistaken:
 - i. for a prescribed traffic control device because it has, for example, red, amber or green circles, octagons, crosses, triangles or other shapes or patterns that may result in the advertisement being mistaken for a prescribed traffic control device, or
 - ii. as text providing driving instructions to drivers.
- 6. The transition time between messages shall be no longer than 0.1 seconds.
- 7. Luminance levels for the sign must comply with the following requirements:

Luminance levels - Luminance means the objective brightness of a surface as measured by a photometer, expressed in candelas per square meter (cd/m²). Levels differ as digital signs will appear brighter when light levels in the area are low. Luminance levels should comply with Australian Standard AS4282 Control of the Obtrusive Effects of Outdoor Lighting at the following levels:

Lighting Condition	Zones 2 and 3
Full Sun on face of Signage	Maximum Output
Day Time Luminance	6000 cd/m ²
Morning and Evening Twilight and Inclement weather	700 cd/m ²
Night Time	350 cd/m ²

- 8. The images displayed on the sign must not otherwise unreasonably dazzle or distract drivers, without limitation to their colouring, or contain flickering or flashing content.

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Furthermore, the proponent should also be advised that the subject property is within:

1. The subject property is within a broad area currently under investigation for the proposed Western Harbour Tunnel and Beaches Link motorway. The actual alignment for the proposal has not yet been determined and at present Roads and Maritime advises that the subject property remains within an area of investigation. If built, the project is highly likely to be a deep tunnel in the vicinity of the subject property with no permanent surface impacts.

The design will be finalised following feedback and development of an environmental impact statement. Once Roads and Maritime has more certainty on the properties impacted by the final road design, it will directly advise the owners of those properties.

Further information about this project is available by contacting 1800 789 297 or motorwaydevelopment@rms.nsw.gov.au or by visiting the project website at <http://www.rms.nsw.gov.au/projects/sydney-north/western-harbour-tunnel-beaches-link/index.html>.

2. The subject property is within a broad area currently under investigation in relation to the proposed WestConnex Project (M4-M5). An indicative route has been proposed for the road proposal which includes a tunnel and at present Roads and Maritime advises that the subject property remains within an area of investigation.

Should you have any further inquiries in relation to this matter, please do not hesitate to contact the undersigned by email at development.sydney@rms.nsw.gov.au.

Yours sincerely,



Robert Rutledge
A/Senior Land Use Planner
Network Sydney Southeast Precinct

Attachment D - Lighting Assessment Report

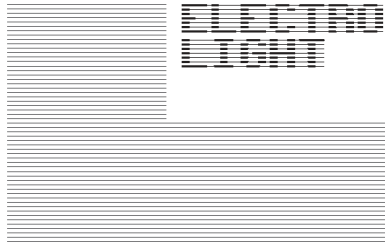
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Appendix D

Lighting Impact Assessment Report

prepared by Electrolight
Australia Pty Ltd

64-66 Victoria Road, Rozelle
oOh!media
March 2019



oOh! Media
of Urban Concepts

LIGHTING IMPACT ASSESSMENT -
OUTDOOR SIGNAGE AT 64 VICTORIA ROAD, ROZELLE, NSW

7th March 2019
Ref: 1973.1

Lighting Impact Assessment
Outdoor Signage at 64 Victoria Road, Rozelle, NSW

Electrolight Australia Pty Ltd
ABN: 44 600 067 392
info@electrolight.com
www.electrolight.com

DATE	REV	COMMENT	PREPARED BY	CHECKED BY
07/03/2019	REV D	For Information	AGA	RS

Suite 3.00
35-39 Liverpool Street
Sydney NSW 2000
T + 612 9267 4777

64-66 Victoria Road, Rozelle
oOh!media
March 2019

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1. INTRODUCTION

Electrolight have been appointed Urban Concepts on behalf of oOh! Media to undertake a Lighting Impact Assessment on the proposed digital signage at 64 Victoria Road, Rozelle, NSW. The objective of the assessment is to report on compliance with the State Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64), NSW Transport Corridor Outdoor Advertising and Signage Guidelines, and AS4282-2019 Control of the Obtrusive Effects of Outdoor Lighting.

2. DEFINITIONS

2.1 Illuminance

The physical measure of illumination is illuminance. It is the luminous flux arriving at a surface divided by the area of the illuminated surface. Unit: lux (lx); 1 lx = 1 lm/m².

(a) Horizontal illuminance (E_h) The value of illuminance on a designated horizontal plane

(b) Vertical illuminance (E_v) The value of illuminance on a designated vertical plane

Where the vertical illuminance is considered in the situation of potentially obtrusive light at a property boundary it is referred to as environmental vertical illuminance (E_{ve}).

2.2 Luminance

The physical quantity corresponding to the brightness of a surface (e.g. a lamp, luminaire or reflecting material such as the road surface) when viewed from a specified direction. SI Unit: candela per square metre (cd/m²) – also referred to as “nits”.

2.3 Luminous Intensity

The concentration of luminous flux emitted in a specified direction. Unit: candela (cd).

2.4 Obtrusive Light

Spill Light which, because of quantitative, directional or spectral attributes in a given context, gives rise to annoyance, discomfort, distraction or a reduction in the ability to see essential information.

2.5 Threshold Increment

The measure of disability glare expressed as the percentage increase in contrast required between a standard object and its background (the carriageway) for it to be seen equally as well with the source of glare present as with it absent, derived in the specified manner. This metric is directly related to Veiling Luminance.

NOTE: The required value is a maximum for compliance of the lighting scheme.

2.6 AGI32 Light Simulation Software

AGI32 (by U.S. company Lighting Analysts) is an industry standard lighting simulation software package that can accurately model and predict the amount of light reaching a designated surface or workplane. AGI32 is a has been independently tested against the International Commission On Illumination (CIE) benchmark, CIE 171:2006, Test Cases to Assess the Accuracy of Lighting Computer Programs.

2.7 Upward Light Ratio (ULR)

The ratio between the luminous flux emitted above the horizontal plane to the total flux emitted by a light source. The ULR is used as a measure to limit direct spill light to the sky.

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3. SITE DESCRIPTION AND SCOPE

The proposed digital signage is located at 64 Victoria Road, Rozelle, and faces Southeast. The total active display (illuminated) area of the proposed digital signage is 40.93 m². The signage is to be operated from 6am to 11pm daily. Refer Appendix A for proposed signage location plan and elevations.

The proposed digital signage is illuminated using LEDs installed within the front face. The brightness of the LEDs shall be controlled to provide upper and lower thresholds as required as well as automatically via a local light sensor to adjust to ambient lighting conditions.

For the purpose of this report the proposed manufacturer of the digital signage is noted as Daktronics, model type DVX-1500-13HD-252x952-230LT-MR-CNTRLM with performance parameters as outlined in Appendix B. The signage includes baffles which mitigate upward waste light, resulting in an Upward Light Ratio (ULR) of less than 50%. Alternative digital sign manufacturers may be used for this installation as long as they have equivalent lighting and performance characteristics and are commissioned as described in this report.

4. DESIGN GUIDELINES AND STANDARDS

The Lighting Impact Assessment will review the proposed digital signage against the following Criteria, Design Guidelines and Standards.

- State Environmental Planning Policy No. 64 – Advertising & Signage SEPP 64 (Refer Appendix C).
- Transport Corridor Outdoor Advertising & Signage Guidelines 2017
- AS 4282-2019 Control of the Obtrusive Effects of Outdoor Lighting.

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5. LUMINANCE ASSESSMENT

The maximum permissible night time luminance of the signage is determined by the existing lighting environment of its surroundings. AS4282 outlines maximum average luminances for different Environmental Zones as shown in Table 1 below:

TABLE 1 - MAXIMUM NIGHT TIME AVERAGE LUMINANCE FOR SIGNAGE		
Environmental Zone	Description	Max Average Luminance (cd/m2)
A4	High district brightness e.g. Town and city centres, commercial areas, and residential areas abutting commercial areas	350
A3	Medium district brightness e.g. suburban areas in towns and cities	250
A2	Low district brightness e.g. sparsely inhabited rural and semi-rural areas	150
A1	Dark e.g. relatively uninhabited rural areas. No Road Lighting	0.1
A0	Intrinsically Dark e.g. Major Optical Observatories. No Road Lighting	0.1

Note: Where the signage is viewed against a predominantly dark background (e.g. night sky) then the maximum applicable environmental zone is A2

Based on an assessment of the surrounding environment, the proposed signage is located within Environmental Zone A4 under AS4282, therefore the maximum night time luminance is 350 cd/m2.

AS4282 does not include limits for daytime operation of illuminated signage. However, the Transport Corridor Outdoor Advertising & Signage Guidelines outlines maximum permissible luminance limits for various lighting conditions, including daytime. Under the Guidelines, the proposed signage is classified as being within Zone 3, which is described as an area with generally medium off-street ambient lighting, e.g. small to medium shopping/commercial centres. The maximum night time luminance of a digital signage within Zone 3 is 350 cd/m2.

Table 2 outlines the luminance levels to comply with AS4282 and the Transport Corridor Outdoor Advertising & Signage Guidelines for the various lighting conditions below:

TABLE 2 - LUMINANCE LEVELS FOR DIGITAL ADVERTISEMENTS		
Lighting Condition	Max Permissible Luminance (cd/m2) #	Compliant
Full Sun on face of Signage	No Limit	✓
Day Time Luminance (typical sunny day)	6000	✓
Morning and Evening Twilight and Overcast Weather	700	✓
Night Time (Until 11pm)	158*	✓
Night Time (11pm-6am)	OFF*	✓

The signage is to be dimmed on site to ensure the maximum luminance nominated above is not exceeded.

* The maximum permissible luminance allowable under AS4282 and the Transport Corridor Outdoor Advertising &

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Signage Guidelines is actually 350 cd/m2. The luminance limit shown above was derived as a result of the calculation and assessment in Section 5 and 6, to ensure compliance with other criteria of AS4282 and any additional lighting requirements as described in this report.

It is our opinion that a signage that is illuminated to the maximum luminances outlined above would be visually consistent with the existing ambient lighting and suitable for the local area. A more detailed night time lighting assessment is provided in Section 6.0.

6. AS4282 ASSESSMENT

The proposed signage has been assessed against AS 4282-2019 Control of the Obtrusive Effects of Outdoor Lighting as outlined in Section 4.

AS4282 provides limits for different obtrusive factors associated with dark hours (night time) operation of outdoor lighting systems. Two sets of limiting values for spill light are given based on whether the lighting is operating before a curfew (known as "non-curfew" operation) or operating after a curfew (known as curfewed operation). Non-curfew spill lighting limits are higher than curfew values, on the understanding that spill light is more obtrusive late at night when residents are trying to sleep. Under AS4282, the curfew period is taken to be between 11pm and 6am daily. As it is intended that the digital signage be illuminated all night, the assessment will review the proposed signage under the more stringent curfew limits.

Illuminance Assessment

The AS4282 assessment includes a review of nearby residential dwellings and calculation of the amount of illuminance (measured in Lux) that the properties are likely to receive from the signage during night time operation.

The acceptable level of illuminance will in part be determined by the night time lighting environment around the dwellings. AS4282 categorises the night time environment into different zones with maximum lighting limits as shown in Table 3 below:

TABLE 3 - MAXIMUM VALUES OF LIGHT TECHNICAL PARAMETERS			
Environmental Zone	Max Vertical Illuminance (lx)		Description
	Pre-curfew	Post-curfew	
A0	0	0	Intrinsically Dark e.g. Major Optical Observatories. No Road Lighting
A1	2	0.1	Dark e.g. relatively uninhabited rural areas. No Road Lighting
A2	5	1	Low district brightness e.g. sparsely inhabited rural and semi-rural areas
A3	10	2	Medium district brightness e.g. suburban areas in towns and cities
A4	25	5	High district brightness e.g. Town and city centres, commercial areas, and residential areas abutting commercial areas

Based on an assessment of the surrounding areas, the nearest dwellings with potential views to the signage are at the following locations:

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Address	Zone
64 Victoria Road	A4
38 Victoria Road	A4
3-22 Prince St	A3
31-43 MacKenzie St	A3
26-44 MacKenzie St	A3
17-31 Harley St	A3
26-36 Harley St	A3

As such, the dwellings above will form the focus of the illuminance assessment.

The proposed signage (and surrounding environment) was modelled in lighting calculation program AGI32 to determine the effect (if any) of the light spill from the proposed signage. Photometric data for the screen was based on a diffused light panel (approximating a lambertian emitter) with luminances corresponding to the night time limits outlined in Section 5. Appendix D shows the lighting model and the results of the calculations.

The model shows that in the proposed operating night time condition, the maximum illuminance on the window that is setback on the veranda is 11.59 lux, which is below the allowable maximum illuminance of 25 lux. However, the illuminance on the window, consisting of 4 panels, which is located on the front facade of the residence at 64 Victoria Road directly adjacent to the proposed signage (refer Appendix E) would exceed 25 lx and would therefore not comply with the maximum limit in AS4282. To mitigate this, it is proposed that external operable louvres be installed on the front face of the non-complying windows of 64 Victoria Road (Refer Appendix E). The louvres are to have a minimum of 95% blackout. The louvers are to be closed during the night time operation of the signage (Dusk to 11pm). We recommend using a dark and non-reflective finish on the external louvres surface (facing the sign) to prevent high intensity reflections.

It can be seen from the lighting model, that after installation of operable blackout louvres, the maximum illuminance to dwellings in Zone A3 is 0.21 lux at 26-44 MacKenzie St, and to dwellings in Zone A4 is 11.59 lux at 64 Victoria Road. The illuminance levels above comply with the maximum AS4282 limits outlined in Table 3

Threshold Increment Assessment

The Threshold Increment was also calculated for traffic on Victoria Road. The calculation grid was located at 1.5m above ground level, with an approach viewing distance from 0 m up to 200 m from the signage. The calculation results show that the Threshold Increment does not exceed 0.66% along the Victoria Road, north-westbound approach (the allowable maximum under the standard is 20%).

Luminous Intensity

The luminous intensity limits nominated in the standard are not applicable for internally illuminated signage.

It can therefore be seen that the proposed digital signage complies with all relevant requirements of AS 4282-2019 Control of the Obtrusive Effects of Outdoor Lighting.

Additional Requirements:

The signage operator must ensure that the average luminance difference between successive images does not exceed 30% to ensure compliance with AS4282. The dwell time shall be 10 seconds or greater.

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7. SUMMARY

- The proposed signage to be installed at 64 Victoria Road, Rozelle, shall be commissioned on site to yield the following maximum luminances:

LUMINANCE LEVELS FOR DIGITAL ADVERTISEMENTS		
Lighting Condition	Max Permissible Luminance (cd/m2)	Compliant
Full Sun on face of Signage	No Limit	✓
Day Time Luminance (typical sunny day)	6000	✓
Morning and Evening Twilight and Overcast Weather	700	✓
Night Time (Until 11pm)	158	✓
Night Time (11pm-6am)	OFF	✓

- To ensure compliance with AS4282, external operable louvres are required to be installed on the window consisting of 4 panels, which is located on the front facade of the residence at 64 Victoria Road directly adjacent to the proposed signage (Refer Appendix E). Louvres are to have a minimum of 95% blackout.
- The signage operator must ensure that the average luminance difference between successive images does not exceed 30% to ensure compliance with AS4282. The dwell time shall be 10 seconds or greater.
- The proposed signage has been found to comply with all relevant requirements of AS 4282-2019 Control of the Obtrusive Effects of Outdoor Lighting
- In complying with the above requirements, the proposed signage should not result in unacceptable glare nor should it adversely impact the safety of pedestrians, residents or vehicular traffic. Additionally, the proposed signage should not cause any reduction in visual amenity to nearby residences or accommodation.

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8. DESIGN CERTIFICATION

The signage proposed to be installed at 64 Victoria Road, Rozelle, NSW, if commissioned according to this report, complies with the following criteria, guidelines and standards:

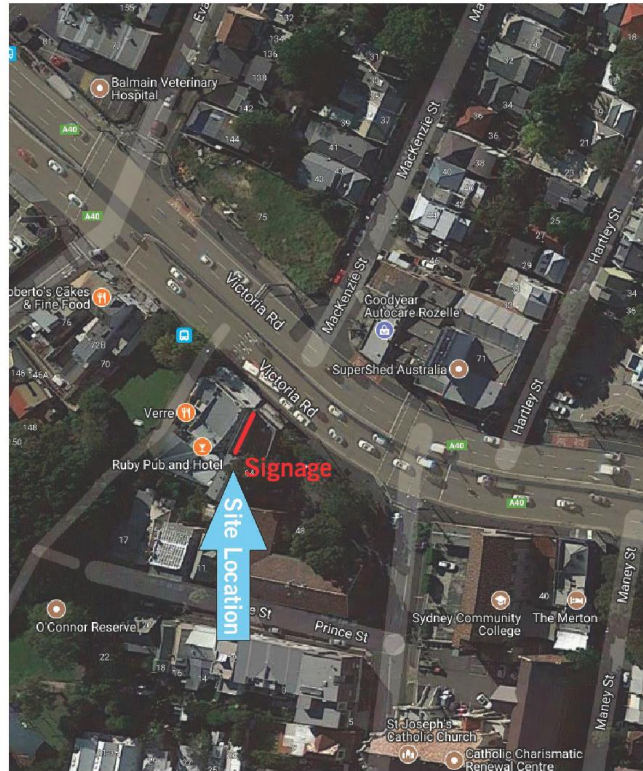
- State Environmental Planning Policy No. 64 – Advertising & Signage SEPP 64 (Refer Appendix B).
- Transport Corridor Outdoor Advertising & Signage Guidelines 2017.
- AS 4282-2019 Control of the Obtrusive Effects of Outdoor Lighting.



Ryan Shamier
Senior Lighting Designer
Electrolight Sydney
07/03/2019

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APPENDIX A
SIGNAGE LOCATION PLAN



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APPENDIX B
 DIGITAL SIGNAGE SPECIFICATION

DAKTRONICS PRODUCT SPECIFICATION

SERIES SPECIFICATION
DVX-1500-13HD

Pixel Configuration	1R, 1G, 1B LED
Line and Column Spacing	0.514 inches - 13.06 millimeters
Module Configuration - Pixels (RxCx)	28 x 28 pixels
Module Dimensions (HxW)	14.4 x 14.4 inches - 365.76 x 365.76 mm
Maximum Power per Module ¹	29.6352 Watts
Average Power per Module ¹	9 Watts
Display Weight per Module ²	15.8 pounds - 7.08 kilograms
Processing	22 bit Distributed
Color Capacity	16 bit (281 Trillion Colors)
Dimming	256 levels
Color Temperature	3,000 ^o -10,000 ^o kelvin (adjustable)
Calibration	Full depth, LED to LED
LED Refresh Rate	4800 hertz
LED Lifetime	100,000 hrs
Calibrated Intensity - Typical Nits	8500 nits (cd/sm)
Horizontal Viewing Angle	140 ^o
Vertical Viewing Angle (Up/Down)	+25/-40 ^o
Contrast Ratio	1200:1
Service Access	Front or Rear
Cabinet Depth	8.884 inches - 225.652 millimeters
Cabinet Construction	Steel and Aluminum (corrosion resistant)
Ingress Protection Rating	IP-66 Components
Working Temperature Rating ³	-40 ^o to 113 ^o F - -40 ^o to 45 ^o C
Ventilation	Fan, Vent Panel
Data Transmission to Display	Direct, Fiberoptic Cable Remote, Internet/Network (IP)

Note 1: Pixel draw varies depending on display ventilation.
 Note 2: Display Weight per Module factors in cabinet, but not the structure.
 Note 3: Temperature range is based on typical usage (100% daytime brightness, 50% content, 2000hrs solar, no wind). Display will operate above listed temp range but will see greater rates of dimming. Range is based on low-temp configuration.
 Note 4: Ventilation solution may require external supplemental A/C in some areas of the world. Please consult your Daktronics representative regarding your area.
 Note 5: Consistent with Daktronics policy of continuing product improvement, specifications shown on this document are subject to change without notice.

DISPLAY SPECIFICATION
DVX-1500-13HD-252x952-230LT-MR-CNTLRM

Active Screen Size (HxW)	10.8 feet x 40.8 feet - 3.29 meters x 12.44 meters
Active Screen Size (Square Dimensions)	440.84 square feet - 40.93 square meters
Number of Modules (HxW)	9 modules x 34 modules
Total Modules	306 modules
Matrix Size (HxW)	252 pixels x 952 pixels
Aspect Ratio	0.2847 (Reference - 16:9 = .5625 and 4:3 = .75)
Display Weight	4773.8 lb - 2166.48 kg
Display Weight per Square Dimension	11 lb/sq. ft. - 53 kg/sq. m
Total Average Power Consumed	2448 Watts
Total Maximum Power Consumed	9060 Watts
Maximum Power Consumption per Square Dimension	20.8 W/sq. ft. - 221.8W/sq. m
Current Draw	41.2 amps @ 220v 1P - 13.1 amps @ 380/415v 3P - 37.8 amps @ 120/240v - 25.2 amps @ 208V/120v 3P
Control Method	Rack Mount Control System

2011 Daktronics Dr PO Box 5128 Brookings, SD 57006-5128
 tel 800.325.8766 605.697.4300 fax 605.697.4700
 www.daktronics.com e-mail sales@daktronics.com
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APPENDIX C

State Environmental Planning Policy No. 64 - Advertising and Signage

Schedule 1 Assessment criteria

(Clauses 8, 13 and 17)

1. Character of the area

- Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?
- Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?

2. Special areas

- Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?

3. Views and vistas

- Does the proposal obscure or compromise important views?
- Does the proposal dominate the skyline and reduce the quality of vistas?
- Does the proposal respect the viewing rights of other advertisers?
-

4. Streetscape, setting or landscape

- Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?
- Does the proposal contribute to the visual interest of the streetscape, setting or landscape?
- Does the proposal reduce clutter by rationalising and simplifying existing advertising?
- Does the proposal screen unsightliness?
- Does the proposal protrude above buildings, structures or tree canopies in the area or locality?
- Does the proposal require ongoing vegetation management?

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5. Site and building

- Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?
- Does the proposal respect important features of the site or building, or both?
- Does the proposal show innovation and imagination in its relationship to the site or building, or both?

6. Associated devices and logos with advertisements and advertising structures

- Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?

7. Illumination

- Would illumination result in unacceptable glare?
- Would illumination affect safety for pedestrians, vehicles or aircraft?
- Would illumination detract from the amenity of any residence or other form of accommodation?
- Can the intensity of the illumination be adjusted, if necessary?
- Is the illumination subject to a curfew?

8. Safety

- Would the proposal reduce the safety for any public road?
- Would the proposal reduce the safety for pedestrians or bicyclists?
- Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?

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APPENDIX D
 OBTRUSIVE LIGHTING AND THRESHOLD INCREMENT CALCULATIONS

Calculation Summary Label	CalcType	Units	Max
17-31 Harley Street_Ill_Seg1	Obtrusive Light - Ill	Lux	0.00
17-31 Harley Street_Ill_Seg2	Obtrusive Light - Ill	Lux	0.02
26-36 Harley St_Ill_Seg1	Obtrusive Light - Ill	Lux	0.00
26-36 Harley St_Ill_Seg2	Obtrusive Light - Ill	Lux	0.00
26-44 McKenzie St_Ill_Seg1	Obtrusive Light - Ill	Lux	0.00
26-44 McKenzie St_Ill_Seg2	Obtrusive Light - Ill	Lux	0.21
31-43 McKenzie St_Ill_Seg1	Obtrusive Light - Ill	Lux	0.00
31-43 McKenzie St_Ill_Seg2	Obtrusive Light - Ill	Lux	0.02
3-22 Prince St_Illuminance	Obtrusive Light - Ill	Lux	0.00
38 Victoria Road_Illuminance	Obtrusive Light - Ill	Lux	0.00
64 Victoria Rd_Ill_Seg1	Obtrusive Light - Ill	Lux	11.59
64 Victoria Rd_Ill_Seg1	Obtrusive Light - Ill	Lux	0.00



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APPENDIX D
 OBTRUSIVE LIGHTING AND THRESHOLD INCREMENT CALCULATIONS

Calculation Summary			
Label	CalcType	Units	Max
Gordon St Threshold Increment	Obtrusive Light - TI	%	0
Victoria Rd Threshold Increment	Obtrusive Light - TI	%	0.66



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APPENDIX D
 OBTRUSIVE LIGHTING AND THRESHOLD INCREMENT CALCULATIONS

Obtrusive Light - Compliance Report

Custom
 Filename: 1973.1 64 Victoria Road Rozelle rev B - operable louvre
 4/03/2019 2:35:10 pm

Illuminance
 Maximum Allowable Value: 25 Lux

Calculations Tested (12):

Calculation Label	Test Results	Max. Illum.
38 Victoria Road_Illuminance	PASS	0.00
64 Victoria Rd_1_III_Seg1	PASS	11.59
64 Victoria Rd_III_Seg1	PASS	0.00
26-44 McKenzie St_III_Seg1	PASS	0.00
26-44 McKenzie St_III_Seg2	PASS	0.21
17-31 Harley Street_III_Seg1	PASS	0.00
17-31 Harley Street_III_Seg2	PASS	0.02
26-36 Harley St_III_Seg1	PASS	0.00
26-36 Harley St_III_Seg2	PASS	0.00
31-43 McKenzie St_III_Seg1	PASS	0.00
31-43 McKenzie St_III_Seg2	PASS	0.02
3-22 Prince St_Illuminance	PASS	0.00

Luminous Intensity (Cd) Per Luminaire
 Maximum Allowable Value: 25000 Cd
 Control Angle: 80 Degrees

Luminaire Locations Tested (306)
 Test Results: **PASS**

Luminous Intensity (Cd) At Vertical Planes
 Maximum Allowable Value: 2500 Cd

Calculations Tested (4):

Calculation Label	Test Results
38 Victoria Road_Luminance	PASS
64 Victoria Rd_1_Cd_Seg1	PASS
64 Victoria Rd_Cd_Seg1	PASS
3-22 Prince St_Luminance	PASS

Threshold Increment (TI)
 Maximum Allowable Value: 20 %

Calculations Tested (2):

Calculation Label	Adaptation Luminance	Test Results
Gordon St_Threshold Increment	10	PASS
Victoria Rd_Threshold Increment	10	PASS

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March 2019

APPENDIX E
OPERABLE LOUVRES DETAILS

Louvres opened (day time):



Louvres closed (night time):



Attachment E - RMS Concurrence Letter of 14 May 2019



14 May 2019

Our Reference: SYD19/00537
Council Ref: D/2019/119

The General Manager
Inner West Council
PO Box 14
Petersham NSW 2049

Attention: Brian Kirk

Dear Mr Deegan

**DIGITAL ADVERTISING PROPOSAL
64-66 VICTORIA ROAD, ROZELLE**

Reference is made to your letter dated 23 April 2019 with regard to the abovementioned development proposal, which was referred to Roads and Maritime Services (Roads and Maritime) in accordance with Clause 18 *State Environmental Planning Policy No.64* (SEPP 64).

Roads and Maritime has reviewed the application and would provide concurrence, subject to Council's approval and the following conditions being included in any consent issued by Council:

1. All works and signage structures are to be wholly within the freehold property (unlimited in height or depth) along the Victoria Road boundary.
2. Advertisements displayed shall not contain/use:
 - a. Flashing lights.
 - b. Animated display, moving parts or simulated movement.
 - c. A method of illumination that unreasonably distracts or dazzles.
 - d. Images that may imitate a prescribed traffic control device, for example red, amber or green circles, octagons or other shapes or patterns that may result in the advertisement being mistaken for a prescribed traffic control device.
 - e. Text providing driving instructions to drivers.
3. Luminance levels for the sign must comply with the requirements at **Attachment A**.
4. The transition time between messages shall be no longer than 0.1 seconds.
5. Construction and maintenance activities shall be undertaken wholly within the private property.
6. All works associated with the proposed sign, including maintenance activities, shall be at no cost to Roads and Maritime.

Roads and Maritime Services

27-31 Argyle Street, Parramatta NSW 2150 |
PO Box 973 Parramatta NSW 2150 |

www.rms.nsw.gov.au | 13 22 13

7. The applicant must provide Roads and Maritime with a road safety audit report which considers the effects of the placement and operation of the sign after 12 months of operation. The report must:
 - a. Be prepared in accordance with Part 3 of the Roads and Maritime Guidelines for Road Safety Audit Practices;
 - b. Be prepared by an independent Roads and Maritime accredited road safety auditor; and

In addition to the above, Roads and Maritime provides the following advisory comments for Council's consideration in the determination of the application:

1. The proponent should be advised that the subject property is within a broad area currently under investigation for the proposed Western Harbour Tunnel and Beaches Link motorway. Further information about this project is available by contacting 1800 931 189 or whtbl@rms.nsw.gov.au or by visiting the project website at <http://www.rms.nsw.gov.au/projects/sydney-north/westem-harbour-tunnelbeaches-link/index.html>.
2. The proponent should be advised that the subject property is within a broad area currently under investigation in relation to the proposed WestConnex Project (M4 — M5). Further information about this project is available by contacting the WestConnex Team on 1800 660 248 or info@westconnex.com.au, or by visiting the project website at www.westconnex.com.au.

If you have any further inquiries in relation to the subject application, please contact Kerry Ryan, Development Assessment Officer, on 8849 2008 or by email at Development.Sydney@rms.nsw.gov.au.

Yours sincerely



Brendan Pegg
Senior Land Use Planner
South East Precinct, Sydney Division

Attachment A:

Table: LUMINANCE LEVELS FOR DIGITAL ADVERTISEMENTS			
<p>LUMINANCE LEVELS - Luminance means the objective brightness of a surface as measured by a photometer, expressed in candelas per square meter (cd/m²). Levels differ as digital signs will appear brighter when light levels in the area are low. Luminance levels should comply with Australian Standard AS4282 Control of the Obtrusive Effects of Outdoor Lighting which recommends the following levels:</p>			
Lighting Condition	Zone 1	Zones 2 and 3	Zone 4
Full Sun on face of Signage	No Limit	Maximum Output	Maximum Output
Day Time Luminance		6000 cd/m ²	6000 cd/m ²
Morning and Evening Twilight and Inclement Weather		700 cd/m ²	500 cd/m ²
Night Time		350 cd/m ²	

Zone 1 covers areas with generally very high off-street ambient lighting, e.g. display centres similar to Kings Cross, central city locations.

Zone 2 covers areas with generally high off-street ambient lighting e.g. some major shopping/commercial centres with a significant number of off-street illuminated advertising devices and lights.

Zone 3 covers areas with generally Medium off-street ambient lighting e.g. small to medium shopping/commercial centres.

Zone 4 covers areas with generally low levels of off-street ambient lighting e.g. most rural areas, many residential areas.