

Consent Application RM230535, 332 Queen Street, Richmond

Review of Traffic Effects

20/6/2024

1. Scope of this Review

Affirm NZ Ltd has been engaged by Tasman District Council to carry out a review of the traffic matters of a resource consent application by Bekon Media Ltd to install a single sided 24.5m² digital billboard for off-site advertising on a building at 332 Queen Street in Richmond.

The application is a revised application to that initially lodged in August 2023, which was for a single sided 18m² static billboard at the same location. The main changes from the initial application are that the billboard is now proposed to be digital, and the billboard size increases from 18m² to 24.5m². The billboard location is the same as that for the initial application, mounted on the parapet of the building at 332 Queen Street, which is located on the southeast corner of the Queen Street/ Lower Queen Street/ Gladstone Road (State Highway 6) intersection

This review is intended to provide background information to the Council Planners Report on the consent application.

2. Documents Reviewed

For the purpose of this review, I have considered the following documents:

1. Application for Resource Consent prepared by Town Planning Group (NZ) Limited on behalf of Bekon Media Ltd, 21 May 2024, (the Application).
2. Proposed Digital Billboard, Queen Street, Richmond – Assessment of Transportation Matters, Carriageway Consulting, 21 May 2004 (the Carriageway report).
3. Urban Design & Visual Impact Assessment (DCM Urban), April 2024

3. Planning Context

Resource consent is required for a **Restricted Discretionary Activity** under the Tasman Resource Management Plan (TRMP) pursuant to Rule 16.1.4.2. Council's discretion is restricted to:

- (1) Location and legibility in relation to traffic safety.
- (2) Any amenity effect on the surrounding area, including size and duration.

4. Intersection Safety Assessment

The Carriageway report includes a review of the reported crash history at the intersection for the five-year period 2019 – 2023 and 2024 (to date). An analysis of the 21 crashes that occurred over this period on the two legs that would have visibility to the proposed billboard is also included in the report. The conclusion made in the Road Safety section in paragraph 2.3.2 of the Carriageway report is that *"it does not appear that there are any inherent road safety deficiencies at this location."*

The previous traffic effects review of the original static billboard application at this site (Affirm NZ, 7 December 2023), included an analysis of the respective Collective Risk, Personal Risk and Level of Safety Service (LoSS) of the intersection and provided comparisons to other signalised urban crossroads intersections nationally. That analysis also remains valid for this revised application.

To put the safety performance of the intersection into context in more local terms, a brief investigation has been carried out using reported crash data from the Waka Kotahi Crash Analysis System (CAS) for crashes coded only to intersections, at all urban intersections (maximum 50km/h regulatory speed limit) in the Nelson and Tasman regions for the five-year period 2019 – 2023. This covers all intersections within the main urban areas of both regions including Nelson, Richmond, Stoke, Motueka, Takaka, Wakefield and Brightwater.

Over this period the Queen Street/ Lower Queen Street/ Gladstone Road (SH6) intersection has both the highest total number of reported crashes as well as the highest number of reported all- injury crashes, of all the urban intersections throughout the Nelson and Tasman regions.

Further, there has been a noted increase in both the number and severity of crashes at the intersection, when comparing the most recent five-year crash history (2019-2023) to the previous five-year history (2013-2018). Over these respective periods, the total number of reported crashes has increased from 20 to 27 and reported all-injury crashes have increased from three to eight.

The assessment of the intersection crash risk (carried out by Affirm NZ for the traffic effects review of the initial static billboard application) showed the crash rate at the intersection is higher (worse) than that of 70% of similar intersections nationally. The more specific regional assessment outlined above, shows that this intersection has both the highest number of reported crashes and the highest number of reported all-injury crashes of any urban intersection across the Nelson and Tasman regions over the five-year period 2019-2023.

Based on these findings, we disagree with the conclusion made in the Carriageway report that *“it does not appear that there are any inherent road safety deficiencies at this location.”*

5. Carriageway Consulting Report

The Carriageway report includes a discussion on research papers on the road safety effects of digital billboards and provides summary information on New Zealand studies on crash rates at locations where billboards have been installed.

I agree with the statements in paragraph 3.3.1 of the Carriageway report that *‘the available literature is sometimes contradictory’* and that *‘it appears that digital billboards do attract driver attention to a greater extent than static billboards.’*

However, the referenced literature isn’t conclusive with regards to the effect of any increased distraction and whether that leads to an increase in the crash rate.

As part of the General Assessment of Road Safety Effects of Billboards section in the Carriageway report, there is reference to the Austroads Research Report AP-R420-13, *“Impact of Roadside Advertising on Road Safety”*, 2013. In referring to this document it is acknowledged that it is a research report and so doesn’t have the same status as Austroads guides that are typically given more weight in traffic engineering.

There are some direct quotes taken from the Austroads report that are included in the Carriageway report. Paragraph 3.2.2. 8 of the report includes excerpts from Section 5.3 - Summary of the Austroads report, with some of the lines bolded. However, the Carriageway report omits the text immediately following the quoted excerpt, which states:

“On the other hand, from a Safe System perspective it would be difficult to justify adding any infrastructure to the road environment that could result in increased distraction for drivers.”

Section 3.1 of the Carriageway report discusses the guidance provided in the Waka Kotahi Traffic Control Devices Manual (Part 3, Advertising Signs) and paragraph 7.2 in the Conclusions section of the Carriageway report states:

'The location of the billboard meets the recommendations of the Waka Kotahi Traffic Control Devices Manual (Part 3, Advertising Signs), other than in respect of the proximity to intersections, and to permanent warning / regulatory signs.'

The relevant Section 5.5 of the Traffic Control Devices Manual states:

'The location of advertising signs or devices in close proximity to traffic control devices may result in the advertising sign obscuring a traffic sign or otherwise detracting from the traffic sign's effectiveness. Traffic control devices place demands on a driver's attention and are often located at sites to warn of specific hazards or to control hazardous traffic movements. Distractions caused by advertising signs may result in road safety problems. To help avoid safety issues, advertising signs should not be located within 100m and 200m in urban and rural areas respectively of:

- intersections

While the proposed digital billboard does meet many of the recommendations for advertising outlined in the Traffic Control Devices Manual: Part 3, the non-compliance against the recommendation (on road safety grounds) that advertising signs shouldn't be located within 100m of urban intersections is a fundamental matter for consideration.

6. Review

The proposed digital billboard will be visible to traffic approaching the traffic signals on two legs of the Queen Street/ Lower Queen Street/ Gladstone Road (State Highway 6) intersection.

A review of crashes at all urban intersections in the Nelson and Tasman regions over the five-year period 2019- 2023 shows that this intersection has both the highest total number of reported crashes as well as the highest number of reported all- injury crashes, of all urban intersections throughout the Nelson and Tasman regions.

This indicates that there are existing safety deficiencies at the intersection, which is contrary to statements in both the Carriageway report and the Application with respect to traffic safety.

The purpose of roadside advertising, by its own definition, is to capture attention. This is undesirable from a traffic safety perspective as it could result in driver attention being side-tracked from the key driving tasks. Additional roadside distractions are also contrary to the Safe Systems Approach used in New Zealand for traffic and road safety work.

It is important that a motorist's attention be focussed on the road ahead when approaching intersections, as any distraction could be detrimental to their decision-making capacity. This is consistent with the guidance provided in Section 5.5 of the Traffic Control Devices Manual: Part 3, which recommends that advertising signs should not be located within 100m of intersections in urban environments.

The location of the proposed digital billboard, at the intersection with the poorest road safety performance of all urban intersection across the Nelson and Tasman regions and in conflict with a key recommendation from the Traffic Control Devices Manual: Part 3 with respect to location of advertising signage, has a likelihood of adverse effects on traffic safety that will be more than minor.

7. Summary and Recommendations

7.1 Conclusions

The proposed digital billboard will be visible to traffic approaching the traffic signals on two legs of the Queen Street/ Lower Queen Street/ Gladstone Road (State Highway 6) intersection.

A review of crashes at all urban intersections in the Nelson and Tasman regions over the five-year period 2019- 2023 shows that this intersection has both the highest total number of reported crashes as well as the highest number of reported all- injury crashes, of all the urban intersections throughout Nelson and Tasman regions.

The location of the billboard at the intersection is inconsistent to the guidance provided in Section 5.5 of the Traffic Control Devices Manual: Part 3, which recommends that advertising signs should not be located within 100m of intersections in urban environments.

The billboard has the potential to distract motorists attention, which could be detrimental to their decision making capacity in what is a demanding environment of a signalised intersection.

Based on this, we disagree with the conclusion of the Carriageway report that *“the digital billboard will not present any particular road safety concerns.”*

And for the same reasons we disagree with the conclusion in Section 5.4of the Application that *“any potential for adverse effects can be appropriately avoided, remedied, or mitigated, and will be less than minor in the context of the receiving environment”*.

Based on this review, this intersection is considered to be an unsuitable location for a digital billboard.

7.2 Recommendations

It is recommended that the consent application for the digital billboard on the building at 332 Queen Street in Richmond be declined due to likelihood of adverse effects on traffic safety that will be more than minor.



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Director Affirm NZ Ltd