

File Note



Date 8 August 2007
Project No AN00820.13
Subject **McDonalds Balmoral, Land Use Development Review**

Applicant:	McDonald's Restaurants (New Zealand) Ltd	Area	Balmoral
Applicants' Representative:	Jenny Hudson	Main Road:	Balmoral Road
Traffic Engineer:	Traffic Planning Consultants Ltd	Secondary Roads:	Wiremu Street
Traffic Impact Assessment Prepared:	Yes		

1. SKM Recommendation

Based on a review of the information provided by the Applicant, it is considered that the impact of the proposed McDonald's restaurant at 1-5 Wiremu Street, Balmoral on the surrounding road network is potentially significant, and until more detailed analysis is carried out, Auckland City Council (ACC) should oppose the consent for transport planning reasons.

Traffic modelling of the intersection of Wiremu Street and Dominion Road is required to determine any potential effects that the development traffic will have on its safe and efficient operation.

2. Site Location

The site is located at 1-5 Wiremu Street, Balmoral and is zoned Business 2 under the Operative ACC District Plan.

3. Proposed Use

McDonald's Restaurants New Zealand Ltd is proposing to redevelop the site at 1-5 Wiremu Street, Balmoral. The proposed redevelopment includes:

- Demolition of existing building on the site;
- Removal of one street tree and nine generally protected trees within the site;
- Construction of a single storey McDonald's family restaurant and McCafe, which incorporates a drive thru, children's enclosed playground and conservatory dining area, having a total gross floor area (GFA) of 545m²;
- Construction of parking areas to provide 63 car parking spaces in total;
- Construction of vehicle accesses on Wiremu Street and Dominion Road to provide access to the site.



4. Background Information

This file note is based on information from the following reports:

- Traffic Planning Assessment, “Proposed Restaurant Development, Balmoral Road, Auckland” prepared by Traffic Planning Consultants Ltd, July 2007.
- Resource Consent Application, “Proposed McDonald’s Restaurant and Drive Thru Takeaway, 1-5 Wiremu Street, Balmoral” prepared by Jenny Hudson, June 2007.

5. SKM Assessment of Proposed Development

The impact of the proposed development on the safe, efficient, and sustainable operation of the road network in the vicinity of the site was considered under the following headings:

- Trip generation;
- Parking provision;
- Access; and
- Safety.

5.1 Trip Generation

The Applicant’s traffic planning assessment adopts transaction records from McDonald’s restaurants to determine the traffic generated by the development. This information gives the following approximate generations:

- 180 vehicle trips in the PM peak hour on Friday;
- 270 vehicle trips in the peak hour (13:00 – 14:00) on Saturday.

The Roads and Traffic Authority (RTA) “*Guide to Traffic Generating Developments*” suggests a trip generation rate of 180 vehicle trips in the weekday PM peak hour for a McDonald’s restaurant. It also suggests a trip generation rate of 280 vehicle trips in the weekend peak hour.

The Transfund New Zealand Research Report No 209, “*Trips and Parking Related to Land Use*” provides typical trip generation rates for drive-through restaurant facilities in New Zealand and suggests a trip generation rate of 30 trips per 100m² GFA. This results in 164 trips in the peak hour.

The Institute of Transportation Engineers (ITE) provides a range of generation rates, both based on seats in the restaurant and GFA. It provides an average trip generation rate of 1 trip per seat or 37 trips per 100m² GFA in the PM peak hour and 2.4 trips per seat or 63 trips per 100m² GFA in the Saturday peak hour. These rates equate to between 160 - 200 trips in the weekday PM peak hour and between 340 - 380 vehicle trips in the Saturday peak hour.

This information is summarised below in [Table 5-1](#) to provide a tabulated comparison between the various sources of information.



■ **Table 5-1 Trip Generation Rates**

Source	Weekday PM Peak Hour Trip Rate	Saturday Peak Hour Trip Rate	Development Traffic – PM Peak Hour	Development Traffic – Saturday Peak Hour
RTA	180 vehicles trips	280 vehicle trips	180 vehicle trips	280 vehicle trips
Transfund	30 trips / 100m ² GFA	30 trips / 100m ² GFA	164 vehicle trips	164 vehicle trips
ITE	1 trip / seat	2.4 trips / seat	159 vehicle trips	381 vehicle trips
ITE	37 trips / 100m ² GFA	63 trips / 100m ² GFA	201 vehicle trips	343 vehicle trips
Applicant			180 vehicle trips	270 vehicle trips

From the information in **Table 5-1**, the Applicant’s adopted generated traffic appears reasonable.

The Applicant also assumes 35% of customers will be “pass by” trips. This means the actual additional traffic created by the development will only be 65% of that assumed. In this case that equates to:

- 117 vehicle trips in the PM peak hour on Friday;
- 176 vehicle trips in the Saturday peak hour.

This assumption is considered appropriate and is line with the RTA recommendation of 35% “pass by” trips.

5.2 Intersection Capacity Assessment

The volume of traffic generated is consistent with industry standards and as such appears reasonable; however the Applicant has not provided any details with regard to effects on the surrounding road network, in particular the intersection of Wiremu Street and Dominion Road.

The Applicant’s assessment notes that some delay will be experienced by those vehicles turning right out of Wiremu Street onto Dominion Road, but there is no quantification of this delay. We consider that this right turning delay could be significant at peak times. Also, delay for right turning vehicles from Dominion Road to Wiremu Street is also likely to be significant, resulting in queues that could potentially block back through the intersection with Balmoral Road.

Investigation is needed to determine the effects on the operation of this intersection and also the two vehicle access points on Balmoral Road and Wiremu Street. Traffic modelling software such as SIDRA could be used for this purpose.

This area of Dominion Road is particularly congested in PM peak periods, when the proposed McDonald’s restaurant would be near its busiest. Additional vehicles turning into and out of Wiremu Street would add to this congestion. Vehicles often queue back through the intersection at this time and this development has the potential to reduce the already constrained capacity. Further detailed analysis is essential to determine the effects.

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It is recommended that the Applicant undertake more detailed analysis of the effects of the generated traffic on the intersection of Wiremu Street and Dominion Road as well as the vehicle crossing points on Balmoral Road and Wiremu Street before the consent be approved. The level of traffic generated by this development is deemed appropriate for use in the analysis.

5.3 Parking Provision

The development intends to provide a total of 63 car parking spaces, which includes two “grill order” spaces, for vehicles waiting for any delayed drive thru orders and two mobility impaired parking spaces.

This number of parking spaces exceeds the ACC District Plan requirements of 55 parking spaces, using the provision of one space per 10m² GFA for restaurants from Section 12.8.1.1.

The two mobility impaired parking spaces do not meet the requirements of NZS 4121. For the first 50 car parks provided, at least two mobility impaired parking spaces need to be provided. Above a total of 50 provided parking spaces, at least one mobility impaired parking space must be provided for each additional 50 parking spaces, or part thereof. This means that for the 63 provided car parking spaces; a minimum of three mobility impaired parking spaces must be provided.

The drive thru facility, in accordance with the Section 12.8.1.1 of the ACC District Plan, must have queuing space for at least five vehicles. Queuing space for approximately seven vehicles is provided, exceeding the District Plan requirements.

The Applicant’s assessment of overall parking provision is considered appropriate, with the exception of the mobility impaired parking spaces. It is recommended that the Applicant incorporate an additional mobility impaired parking space in the car park, giving a total of three before consent be approved.

5.3.1 Loading

The use of the service lane running between Balmoral Road and Wiremu Street is proposed to be used for any loading and servicing taking place at the site. Plans provided with the Traffic Planning Assessment show space for an 11m truck to load and unload goods. This complies with Section 12.8.1.2 of the ACC District Plan and is deemed appropriate.

It is recommended that the consent not be opposed in terms of loading or servicing arrangements.

5.4 Access

The Applicant proposes a total of three entry and exit points for the development. On Wiremu Street, an entry / exit vehicle crossing is proposed and is 6m wide. On Balmoral Road, separate entry and exit crossings are proposed, each being 4m wide. The Balmoral Road crossings could be considered as one, as described in the Traffic Planning Assessment, with a separation in the form of a pedestrian refuge.



In terms of ACC District Plan compliance, Section 12.8.2 deals with access. The accesses meet the minimum widths of 6m for an entry / exit and 3m for a single entry or exit set out in Section 12.8.2.1a(ii).

Section 12.8.2.2 states that:

- (i) No more than two crossings will be permitted in respect of any site. Additional crossings may be approved as a restricted discretionary activity;
- (ii) The maximum width of any crossing at the road frontage boundary shall be 6m;
- (iii) In the case of any property having road frontage or access within any Defined Road Boundary, as specified in Clause 12.8.2.6 DEFINED ROAD BOUNDARY, a resource consent will be required. Refer Clause 12.9.1.1 RULE: DISCRETIONARY ACTIVITIES.

If it is assumed that the Balmoral Road accesses are defined as one crossing, then (i) is satisfied, but (ii) is not, as the combined width is 8m. If they are assumed separate, then (i) is not satisfied, as there are three crossings, but (ii) is satisfied.

The Applicant's Traffic Planning Assessment addresses this and the proposed accesses are deemed acceptable.

5.4.1 Defined Road Boundary

With respect to Section 12.8.2.2(iii), as stated above, the Traffic Planning Assessment notes that the Balmoral Road access is within the Defined Road Boundary as defined by Section 12.8.2.6(a). This means a resource consent will be required as stated in the Traffic Planning Assessment. The layout of the access, allowing only left in and left out traffic reduces the potential conflict points, making the access safer and is deemed appropriate from a traffic engineering perspective.

It is recommended that the consent not be opposed in relation to accesses allowing traffic movement to and from the development.

5.5 Safety

The Applicant's Traffic Planning Assessment briefly outlines the crash history surrounding the site. Of particular note is the intersection of Wiremu Street and Dominion Road where 14 crashes have occurred in the last five years. Six of these crashes involve vehicles turning right into and out of Wiremu Street. With the proposed development, the numbers of vehicles carrying out these movements is likely to increase significantly, which could increase the occurrence of crashes at this intersection.

ACC has classified the intersection of Wiremu Street and Dominion Road as a "black spot" with relation to road safety and there is concern that additional vehicle movements at this intersection will increase the current problem.

It is recommended that the consent be opposed on traffic safety issues until detailed analysis, as previously mentioned, is carried out to determine the operational effects that the development has on the intersection of Wiremu Street and Dominion Road. The consent should also be opposed until the effects that the development has on road safety are fully established.



6. Summary of Recommendations

The following recommendations have arisen from our analysis of the Applicant's proposal for this site:

- The proposed traffic volumes generated by the development are considered reasonable and alone should not be a reason to oppose the consent;
- The consent should be opposed until detailed analysis of the operation of the intersection of Wiremu Street and Dominion Road is carried out to determine the effect of the development. The vehicle access on Balmoral Road should also be analysed to ascertain any potential negative effects;
- It is recommended that the consent be opposed until a total of three mobility impaired car parking spaces are provided. With respect to other aspects of car parking, it is recommended that the consent not be opposed;
- It is recommended that the consent not be opposed in relation to loading or servicing;
- It is recommended that the consent not be opposed in relation to the proposed vehicle accesses;
- It is recommended that the consent be opposed on traffic safety issues until further detailed effects on road safety are determined.

7. Conclusions

This file note has considered the impact of the proposed additional operating capacity on the safe, efficient, and sustainable operation of the road network in the vicinity of the site.

Based on analysis in the traffic impact assessment provided by the Applicant it is our recommendation that the consent application is opposed in terms of transport planning reasons.

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